

2



AD-A263 508

7



# LIST OF PUBLICATIONS OF THE US ARMY ENGINEER WATERWAYS EXPERIMENT STATION

Volume I

Compiled and Indexed in

SPECIAL PROJECTS BRANCH, TECHNICAL INFORMATION DIVISION  
US Army Engineer Waterways Experiment Station  
PO Box 631, Vicksburg, Mississippi 39180-0631

December 1986

Approved For Public Release; Distribution Unlimited

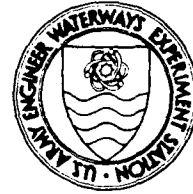
SDTIC  
ELECTE  
APR 21 1993  
S E D



93 4 20 100

93-08460





# LIST OF PUBLICATIONS OF THE US ARMY ENGINEER WATERWAYS EXPERIMENT STATION

Volume I

Compiled and Indexed in

SPECIAL PROJECTS BRANCH, TECHNICAL INFORMATION DIVISION  
US Army Engineer Waterways Experiment Station  
PO Box 631, Vicksburg, Mississippi 39180-0631

December 1986

Approved For Public Release; Distribution Unlimited

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
E	
D	
US	
OF	
A-1	

ORIGINALLY UNCLASSIFIED

## PREFACE

### Description of Contents

Publications issued through October 1986 by the U. S. Army Engineer Waterways Experiment Station (WES) are listed herein and indexed according to the key-word-out-of-context method. The publications are grouped according to the technical laboratories that prepared them\*; these laboratories and their primary fields of interest are as follows:

Coastal Engineering Research Center: Research on waves, wind, water levels, tides, currents and the resultant coastal processes; interaction of these forces and processes with shores, beaches, inlets, inner continental shelves, and coastal and offshore structures; shore and beach erosion control; flooding and storm protection; the location, design, construction, and operation of coastal harbors and coastal and offshore structures; and navigational improvements.

Concrete Laboratory: Research studies of concrete materials, methods, and equipment; laboratory and field investigations of concrete control, and of concrete, grouts, and grouting.

Environmental Effects Laboratory: Reports on research regarding the environmental impacts of activities of the Corps and other government agencies. Studies on environmental inventories and assessment of alternatives in constructing, operating, and maintaining authorized navigation channels; guidelines for recreation and roadside rest area waste treatment; feasibility of chemical fixation of hazardous waste; evaluation of overland flow mode of wastewater treatment; eco-system research and simulation; and results of the Dredged Material Research Program.

Hydraulics Laboratory: River, tidal, wave action, and structural hydraulics studies conducted by office analysis, laboratory experiment, mathematical modeling, and field measurement.

Mobility and Environmental Systems Laboratory: Field and laboratory studies of vehicle mobility, trafficability of soils, including methods of remote sensing of soil conditions, and studies to measure environmental aspects of terrain for military mobility and airfield construction purposes.

Soils and Pavements Laboratory: Geological investigations; laboratory testing and field exploration for design of earth structures and foundations; dynamic studies of soils; pavement design; development of expedient surfacings for military roads and airfields.

\* Because the "List of publications" was growing so large and because the WES report numbering system changed when WES was reorganized, a decision was made to print the list in two volumes. This volume, Volume I, consists of all reports published under the series numbers that existed prior to the reorganization and of all miscellaneous subject reports. Volume II includes all reports published under the series numbers established after the reorganization.

Weapons Effects Laboratory: Theoretical, analytical, and experimental studies of the design of protective structures and of underwater shock effects. Also, studies of use of explosives for excavation; emplacement of nuclear devices; crater dimensions, slopes, and throwout; safety and side effects of explosives; theoretical and model studies of hydraulic properties of explosive-excavated channels; finite element analysis of stress distributions beneath explosive-excavated channels; finite element analysis of stress distributions beneath explosive-excavated slopes; small-scale studies.

Certain reports on related subjects such as hydrology, instrumentation, etc., are listed under the heading "Miscellaneous Subjects." Reports of Potamology Investigations and reports that have been published and distributed by the Waterways Experiment Station for other agencies are also listed.

The general types of Waterways Experiment Station publications currently issued are Instruction Reports, Miscellaneous Papers, Research Reports, and Technical Reports (which have replaced the earlier Technical Memoranda). These are briefly identified as follows:

Instruction Reports are, as their designation indicates, publications containing instructions for conducting tests, operating equipment, or for a complete data-recording program at a construction project.

Miscellaneous Papers include reports of investigations of limited scope and/or interest; papers prepared for professional journals; interoffice and intraoffice memoranda of sufficient importance to warrant making of record; or memoranda containing technical information written for record purposes only. Editions of Miscellaneous Papers may consist of a single file copy or a sufficient number of copies for general distribution.

Research Reports are reports of basic (as opposed to applied) research studies. Technical Reports include preliminary or final reports of specific engineering investigations considered of interest and possible value to offices and agencies other than the sponsor, and reports of other major investigations of routine interest. Preliminary reports (which may also be designated as progress or interim reports) are usually unnumbered. Also, certain final reports describing studies of limited scope may be unnumbered. Technical Reports covering investigations of major importance or interest are numbered.

In addition, reports prepared under contract for the Waterways Experiment Station are listed as Contract Reports at the end of each laboratory's listing.

The Waterways Experiment Station formerly issued a series of publications designated Bulletins, which were serial publications on general subjects of current interest to the Corps of Engineers. Originally, these bulletins appeared in two series--the Hydraulic series and the Soil Mechanics series; later they were published in a single, combined series entitled "Waterways Experiment Station Bulletins." Publication of Bulletins has been discontinued. Early reports of the Waterways Experiment Station were published as Papers, a designation that has been supplanted by the present report formats.

### Distribution

Publications of the Waterways Experiment Station and other Corps of Engineers offices are distributed primarily to Department of Defense agencies and certain other agencies having an interest in the work reported. Copies remaining after the initial distribution will be furnished without charge to Federal Government agencies on request until the supply of the particular item is exhausted. Thereafter, copies can be obtained on loan from the Library Branch, Technical Information Division, Waterways Experiment Station.

A number of reports in this list are footnoted "Statement B. See Preface." Distribution or loan of reports so footnoted is limited to U. S. Government agencies only unless permission for release can be obtained in special cases from the controlling office.

### Library Loan

Library copies of all publications listed herein (except as otherwise noted), including out-of-print items and any other engineering literature on file in the Library Branch, are available to Department of Defense agencies on loan from the Library Branch.

The library loan privilege is also extended to other Federal and State agencies, scientific and educational institutions, and established engineering or industrial firms. In such cases, the loan period is usually limited to 30 days. Individuals not connected with the Department of Defense can usually arrange for library loan either through the main offices of their business concerns or through the inter-library loan services of their local libraries. Lending to persons outside the continental limits of the United States is not encouraged because of the extended time periods involved and risk of loss of publications in transit.

All matters concerning the distribution or loan of Waterways Experiment Station publications or of publications published and distributed by the Waterways Experiment Station for other agencies should be addressed to the Commander and Director, U. S. Army Engineer Waterways Experiment Station, ATTN: WESIM-T, P. O. Box 631, Vicksburg, MS 39180-0631.

### Purchase of Publications

With the exception of Handbook for Concrete and Cement (page C-1), Hvdraulic Design Criteria (page H-3), and Symposium on Nondestructive Test and Evaluation of Airport Pavement (page S-48), the Waterways Experiment Station no longer sells its publications. Orders for the excepted publications should be addressed to the Commander and Director, U. S. Army Engineer Waterways Experiment Station, ATTN: WESIM-TS, P. O. Box 631, Vicksburg, MS 39180-0631. Reports listed in this volume having AD numbers can be purchased from the National Technical Information Service, U. S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161; telephone (703) 487-4600. Costs of hard copies or microfiche copies of such reports are available from NTIS on request.

CONTENTS

	<u>Page</u>
PREFACE . . . . .	iii
REPORTS OF THE U. S. ARMY ENGINEER WATERWAYS EXPERIMENT STATION LABORATORIES	
COASTAL ENGINEERING RESEARCH CENTER	
Coastal Engineering Information Analysis Center Reports . . . . .	CERC-1
Coastal Engineering Technical Aids . . . . .	CERC-2
General Investigation of Tidal Inlets . . . . .	CERC-5
Miscellaneous Papers . . . . .	CERC-7
Miscellaneous Reports . . . . .	CERC-10
Reprints . . . . .	CERC-16
Shore Protection Manual . . . . .	CERC-24
Special Reports . . . . .	CERC-25
Technical Memoranda . . . . .	CERC-26
Technical Papers . . . . .	CERC-30
Technical Reports . . . . .	CERC-34
Beach Erosion Board	
Miscellaneous Papers . . . . .	CERC-36
Technical Memoranda . . . . .	CERC-37
CONCRETE LABORATORY	
Bulletins and Handbooks . . . . .	C-1
Miscellaneous Papers . . . . .	C-2
Technical Memoranda . . . . .	C-27
Technical Reports . . . . .	C-31
Concrete Technology Information Analysis Center Reports . . . . .	C-40
Contract Reports . . . . .	C-46
ENVIRONMENTAL EFFECTS LABORATORY	
Dredged Material Research Program	
Information Exchange Bulletins . . . . .	E-1
Miscellaneous Papers . . . . .	E-2
Technical Reports . . . . .	E-5
Contract Reports . . . . .	E-21
Dredged Material Research Program Synthesis of Research Results	
Technical Reports . . . . .	E-27
Environmental Studies	
Miscellaneous Papers . . . . .	E-29
Technical Reports . . . . .	E-32
Contract Reports . . . . .	E-34
Environmental and Water Quality Operational Studies	
Information Exchange Bulletins . . . . .	E-36
Reservoirs and Waterways	
Technical Reports . . . . .	E-37
Recreation Research Program	
Information Exchange Bulletins . . . . .	E-38
Technical Reports . . . . .	E-39
HYDRAULICS LABORATORY	
Bulletins . . . . .	H-1
Hvdraulic Design Criteria . . . . .	H-3

CONTENTS

HYDRAULICS LABORATORY (Cont)

Instruction Reports . . . . .	H-3
Miscellaneous Papers . . . . .	H-4
Mississippi Basin Model Reports . . . . .	H-21
Papers . . . . .	H-26
Research Reports . . . . .	H-27
Technical Memoranda . . . . .	H-30
Technical Reports . . . . .	H-42
Contract Reports . . . . .	H-70

MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Instruction Reports . . . . .	M-1
Miscellaneous Papers . . . . .	M-2
Technical Memoranda . . . . .	M-17
Technical Reports . . . . .	M-20
Pavements and Soil Trafficability Information Analysis Center Reports . . . . .	M-34
Contract Reports . . . . .	M-35
Aquatic Plant Control Research Program	
Information Exchange Bulletins . . . . .	M-46
Instruction Reports . . . . .	M-46
Miscellaneous Papers . . . . .	M-47
Technical Reports . . . . .	M-48
Contract Reports . . . . .	M-52

SOILS AND PAVEMENTS LABORATORY

Bulletins . . . . .	S-1
Instruction Reports . . . . .	S-2
Miscellaneous Papers . . . . .	S-4
Research Reports . . . . .	S-54
Technical Memoranda . . . . .	S-55
Technical Reports . . . . .	S-74
Translations . . . . .	S-97
Soil Mechanics Information Analysis Center Reports . . . . .	S-98
Contract Reports . . . . .	S-99

WEAPONS EFFECTS LABORATORY

Instruction Reports . . . . .	W-1
Miscellaneous Papers . . . . .	W-2
PNE (Peaceful Uses of Nuclear Energy) Reports . . . . .	W-14
Research Reports . . . . .	W-19
Technical Memoranda . . . . .	W-20
Technical Reports . . . . .	W-28
Contract Reports . . . . .	W-43

MISCELLANEOUS SUBJECTS

Bulletins (including those for Project ES-173, Development of Hydrologic Equipment) . . . . .	MS-1
Information Exchange Bulletins . . . . .	MS-2
Instruction Reports . . . . .	MS-3
Miscellaneous Papers . . . . .	MS-4
Technical Memoranda . . . . .	MS-10
Technical Reports . . . . .	MS-11
Annual Summary . . . . .	MS-12
Contract Reports . . . . .	MS-12

REPORTS OF POTAMOLOGY INVESTIGATIONS

P-1

CONTENTS

	<u>Page</u>
REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY U. S. ARMY ENGINEER WATERWAYS EXPERIMENT STATION FOR OTHER AGENCIES	
American Society of Civil Engineers, The Engineering Foundation, and others . . . . .	Z-1
International Training Administration . . . . .	Z-1
Joint Services Civil Engineering Research and Development Coordinating Group (JSCERDCG) . . . . .	Z-1
Mississippi River Commission . . . . .	Z-1
Office, Chief of Engineers, Department of the Army . . . . .	Z-1
Section 32 Program, Streambank Erosion Control Evaluation and Demonstration . . . . .	Z-3
U. S. Air Force Systems Command . . . . .	Z-7
U. S. Air Force Weapons Laboratory . . . . .	Z-7
U. S. Army Corps of Engineers Committee on Channel Stabilization . . . . .	Z-7
U. S. Army Corps of Engineers Committee on Tidal Hydraulics . . . . .	Z-9
U. S. Army Engineer Districts . . . . .	Z-13
U. S. Army Engineer Division, Lower Mississippi Valley . . . . .	Z-14
U. S. Army Research Office . . . . .	Z-14
U. S. Defense Nuclear Agency . . . . .	Z-14
U. S. Environmental Protection Agency . . . . .	Z-15
U. S. Environmental Protection Agency/Corps of Engineers Technical Committee on Criteria for Dredged and Fill Material . . . . .	Z-15
U. S. Federal Aviation Administration . . . . .	Z-16
U. S. Federal Highway Administration . . . . .	Z-17
U. S. Naval Weapons Center . . . . .	Z-18
U. S. Weather Bureau and Corps of Engineers, U. S. Army . . . . .	Z-18
INDEX . . . . .	1-INDEX



REPORTS OF  
U. S. ARMY ENGINEER WATERWAYS EXPERIMENT STATION

COASTAL ENGINEERING RESEARCH CENTER

## COASTAL ENGINEERING RESEARCH CENTER

COASTAL ENGINEERING INFORMATION ANALYSIS CENTERReport

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
Unnumbered	Dec 1981	Bibliography of Publications of the Coastal Engineering Research Center and the Beach Erosion Board, by Andre Szuwalski and Linda Clark	AD A115 251

## COASTAL ENGINEERING RESEARCH CENTER

Coastal Engineering Technical Aids

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
CDM 76-1	May 1976	A Simplified Method for Determining Vertical Breakwater Crest Elevation Considering Wave Height Transmitted by Overtopping, by W. N. Seelig	AD A027 098
CETA 77-1	Jul 1977	A Simple Computer Model for Evaluating Coastal Inlet Hydraulics, by W. N. Seelig	AD A046 822
CETA 77-2	Jul 1977	Prediction of Irregular Wave Runup, by J. Ahrens	AD A044 107
CETA 77-3	Aug 1977	Planting Guidelines for Marsh Development and Bank Stabilization, by P. L. Knutson	AD A046 547
CETA 77-4	Sep 1977	Planting Guidelines for Dune Creation and Stabilization, by P. L. Knutson	AD A046 170
CETA 77-5	Sep 1977	Wave Setup on a Sloping Beach, by J. R. Losnik	AD A047 355
CETA 77-6	Oct 1977	A Method for Estimating Wind-Wave Growth and Decay in Shallow Water with High Values of Bottom Friction, by F. E. Camfield	AD A047 828
CETA 77-7	Dec 1977	Prediction of Irregular Wave Overtopping, by J. Ahrens	AD A049 580
CETA 77-8	Dec 1977	Procedures for Preliminary Analysis of Tidal Inlet Hydraulics and Stability, by R. M. Sorensen	AD A049 831
CETA 78-1	Feb 1978	Acceleration and Impact of Structures Moved by Tsunamis or Flash Floods, by F. E. Camfield	AD A053 173
CETA 78-2	Jul 1978	Revised Wave Runup Curves for Smooth Slopes, by P. R. Stea	AD A053 407
CETA 79-1	Jul 1979	Wave Runup on Rough Slopes, by P. R. Stea	AD A075 354
CETA 79-2	May 1979	A Method for Estimating Long-Term Erosion Rates from a Long-Term Rise in Water Level, by J. R. Weggel	AD A072 489
CETA 79-3	Sep 1979	Sampling Macroinvertebrates on High-Energy Sand Beaches, by A. K. Humme, R. M. Jancy, and E. J. Pullen	AD A077 071
CETA 79-4	Sep 1979	Determination of Mooring Load and Transmitted Wave Height for a Floating Tire Breakwater, by M. L. Giles and J. W. Eckert	AD A077 905
CETA 79-5	Oct 1979	Estimating Nearshore Significant Wave Height for Irregular Waves, by W. N. Seelig	AD A077 906
CETA 79-6	Oct 1979	Estimation of Wave Transmission Coefficients for Permeable Breakwaters, by W. N. Seelig	AD A079 381
CETA 79-7	Nov 1979	Definition and Use of the Phi Grade Scale, by W. D. Hanson	AD A083 983
CETA 80-1	Feb 1980	Maximum Wave Heights and Critical Water Depths for Irregular Waves in the Surf Zone, by W. N. Seelig	AD A084 320

## COASTAL ENGINEERING RESEARCH CENTER

Coastal Engineering Technical Aids

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
CETA 80-2	Feb 1980	Planting Guidelines for Seagrasses, by R. C. Phillips	AD A085 592
CETA 80-3	Mar 1980	Computation of Longshore Energy Flux Using LEO Current Observations, by T. L. Walton, Jr.	AD A085 526
CETA 80-4	Mar 1980	Data Collection Methods for Sand Inventory-Type Surveys, by D. A. Prins	AD A087 260
CETA 80-5	Jul 1980	Interpretation of Wave Energy Spectra, by E. F. Thompson	AD A089 624
CETA 80-6	Apr 1980	A Guide for Estimating Longshore Transport Rate Using Four SPM Methods, by P. Vitale	AD A087 261
CETA 80-7	Dec 1980	Estimation of Wave Transmission Coefficients for Overtopping of Impermeable Breakwaters, by W. N. Seelig	AD A098 388
CETA 80-8	Dec 1980	Estimation of Flow Through Offshore Breakwater Gaps Generated by Wave Overtopping, by W. N. Seelig and T. L. Walton, Jr.	AD A097 986
CETA 81-1	Jan 1981	Wave Loading on Vertical Sheet-Pile Groins and Jetties, by J. R. Weggel	AD A098 059
CETA 81-2	Jan 1981	Seaward Limit of Significant Sand Transport by Waves: An Annual Zonation for Seasonal Profiles, by R. J. Hallermeier	AD A099 717
CETA 81-3	Jan 1981	A Model for the Distribution Function for Significant Wave Height, by E. F. Thompson	AD A097 983
CETA 81-4	Jan 1981	Predicting Adjustments in Shore and Offshore Sand Profiles on the Great Lakes, by E. B. Hands	AD A097 987
CETA 81-5	Mar 1981	The Littoral Environment Observation (LEO) Data Collection Program, by C. Schneider	AD A101 855
CETA 81-6	Jun 1981	A Method to Forecast Sedimentation Rates Resulting from the Settlement of Suspended Solids within Semi-enclosed Harbors, by C. H. Everts	AD A103 165
CETA 81-7	Jun 1981	Some Observations on the Economics of "Overdesigning" Rubble-Mound Structures with Concrete Armor, by J. R. Weggel	AD A107 240
CETA 81-8	Jul 1981	An Inexpensive, Portable Vibrating System for Shallow-Water and Land Application, by K. Finkelstein and D. Prins	AD A104 323
CETA 81-9	Jul 1981	Use of Vibratory Coring Samplers for Sediment Surveys, by E. P. Meisburger and S. J. Williams	AD A103 158
CETA 81-10	Jul 1981	Critical Wave Conditions for Sand Motion Initiation, by P. J. Hallermeier	AD A104 376
CETA 81-11	Aug 1981	Fast, Accurate Two-Person Beach Surveys, by W. A. Birkemeier	AD A107 285

## COASTAL ENGINEERING RESEARCH CENTER

Coastal Engineering Technical Aids

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
CETA 81-12	Aug 1981	Prediction of Wave Refraction and Shoaling Using Two Numerical Models, by J. M. Hubertz	AD A107 241
CETA 81-13	Oct 1981	Products from Two Computer Programs Which Process Digital Bathymetric Data, by B. E. Herchenroder	AD A108 757
CETA 81-14	Oct 1981	Effects of Currents on Waves, by B. E. Herchenroder	AD A110 486
CETA 81-15	Nov 1981	Guidelines for Establishing Coastal Survey Base Lines, by J. M. Hemsley	AD A110 738
CETA 81-16	Nov 1981	A Method for Estimating Depth-Limited Wave Energy, by C. L. Vincent	AD A112 521
CETA 81-17	Dec 1981	Irregular Wave Runup on Smooth Slopes, by J. P. Anrens	AD A113 648
CETA 82-1	Jan 1982	Hand-Held Calculator Algorithms for Coastal Engineering, by T. L. Walton, W. A. Birkemeier, and J. R. Weggel	AD A116 206
CETA 82-2	Feb 1982	Energy Losses of Waves in Shallow Water, by W. G. Grosskopf and C. L. Vincent	AD A116 274
CETA 82-3	Feb 1982	Shore Erosion Control with Salt Marsh Vegetation, by P. L. Knutson and M. K. Inskeep	AD A116 309
CETA 82-4	Nov 1982	Hand-Held Calculator Algorithms for Coastal Engineering (Second Series), by T. L. Walton	AD A123 965
CETA 82-5	Nov 1982	Use of High Resolution Seismic Reflection and Side-Scan Sonar Equipment for Offshore Surveys, by S. J. Williams	AD A126 497
CETA 82-6	Dec 1982	A Low-Cost Planting Technique for Eelgrass ( <u>Zostera marina</u> L.), by M. S. Fonseca, W. J. Kenworthy, and G. W. Thayer	AD A123 971
CETA 82-7	Dec 1982	Prediction of Nearshore Wave Transformation, by J. M. Hubertz	AD A125 104
CETA 83-1	Mar 1983	Calculation of Wave Shoaling with Dissipation Over Nearshore Sands, by R. J. Hallermeier	AD A128 933

## COASTAL ENGINEERING RESEARCH CENTER

General Investigation of Tidal Inlets

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
GITI 2	Jun 1975	Catalog of Tidal Inlet Aerial Photographs, by J. H. Barwis	AD A012 798
GITI 3	Feb 1976	Tidal Prism-Inlet Area Relationships, by J. T. Jarrett	AD A022 327
GITI 4	Jan 1976	Annotated Bibliography on the Geologic, Hydraulic, and Engineering Aspects of Tidal Inlets, by J. H. Barwis	AD A020 355
GITI 5	Feb 1976	Notes on Tidal Inlets on Sandy Shores, by M. P. O'Brien	AD A022 328
GITI 6	Jun 1977	Comparison of Numerical and Physical Hydraulic Models, Masonboro Inlet, North Carolina, by D. L. Harris and B. R. Bodine	AD A052 795
	Jun 1977	Appendix 1 Fixed-Bed Hydraulic Model Results, by R. A. Sager and W. C. Seabergh	AD A052 796
	Jun 1977	Appendix 2 Numerical Simulation of Hydrodynamics (WRE), by F. D. Masch, R. J. Brandes, and J. D. Reagan:	
	Jun 1977	Volume 1	AD A052 797
	Jun 1977	Volume 2	AD A052 798
	Jun 1977	Appendix 3 Numerical Simulation of Hydrodynamics (Tracor), by R. J. Chen and L. A. Hembree, Jr.	AD A052 799
	Jun 1977	Appendix 4 Simplified Numerical (Lumped Parameter) Simulation, by C. J. Huval and G. L. Wintergerst	AD A052 800
GITI 7	Jun 1975	Model Materials Evaluation; Sand Tests; Hydraulic Laboratory Investigation, by E. C. McNair	AD A026 699
GITI 8	Jan 1977	Hydraulics and Dynamics of New Corpus Christi Pass, Texas: A Case History, 1972-73, by E. W. Behrens, R. L. Watson, and C. Mason	AD A038 472
GITI 9	Sep 1976	Hydraulics and Dynamics of New Corpus Christi Pass, Texas: A Case History, 1973-75, by R. L. Watson and E. W. Behrens	AD A033 607
GITI 10	Sep 1976	Hydraulics and Dynamics of North Inlet, South Carolina, 1974-75, by R. J. Finley	AD A033 419
GITI 11	Apr 1977	Laboratory Investigation of Tidal Inlets on Sandy Coasts, by R. E. Mavor-Mora	AD A040 021
GITI 12	May 1977	A Case History of Port Mansfield Channel, Texas, by J. M. Kieslich	AD A042 651

## COASTAL ENGINEERING RESEARCH CENTER

General Investigation of Tidal Inlets

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
GITI 13	Aug 1977	Hydraulics and Stability of Tidal Inlets, by F. F. Escoffier	AD A045 523
GITI 14	Nov 1977	A Spatially Integrated Numerical Model of Inlet Hydraulics, by W. N. Seelig, D. L. Harris, and B. E. Herchenroder	AD A050 315
GITI 15	Nov 1977	Physical Model Simulation of the Hydraulics of Masonboro Inlet, North Carolina, by R. A. Sager and W. C. Seabergh	AD A055 523
GITI 16	Sep 1978	Hydraulics and Dynamics of North Inlet, South Carolina, 1975-76, by D. Nummedal and S. M. Humphries	AD A063 986
GITI 17	Feb 1979	An Evaluation of Movable-Bed Tidal Inlet Models, by S. C. Jain and J. F. Kennedy	AD A077 686
GITI 18	May 1980	Supplementary Tests of Masonboro Inlet Fixed-Bed Model: Hydraulic Model Investigation, by W. C. Seabergh and R. A. Sager	AD A088 761
GITI 19	Oct 1981	Tidal Inlet Response to Jetty Construction, by J. M. Kieslich	AD A112 448
GITI 20	May 1980	Geometry of Selected U. S. Tidal Inlets, by C. L. Vincent and W. D. Corson	AD A087 795
GITI 22	Feb 1982	Evaluation of Physical and Numerical Hydraulic Models, Masonboro Inlet, North Carolina, by J. E. McTamany	AD A116 110



## COASTAL ENGINEERING RESEARCH CENTER

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 1-64	Jan 1964	Concrete Block Revetment Near Benedict, Maryland, by J. V. Hall, Jr., and R. A. Jachowski	AD 440 882
MP 2-64	Apr 1964	Calculation Procedures for Sand Transport by Wind on Natural Beaches, by A. Kadib	AD 440 883
MP 3-64	Apr 1964	Summary of Capabilities, by A. C. Raynor and G. W. Simmons	AD 440 884
MP 4-64	May 1964	Land Against the Sea, by A. C. Raynor, ed.	AD 453 227
MP 5-64	Oct 1964	A Pictorial History of Selected Structures Along the New Jersey Coasts, by W. H. Vesper and M. G. Essick	AD 612 764
MP 6-64	Nov 1974	Beach Changes at Virginia Beach, Virginia, by W. Harrison and K. A. Wagner	AD 612 765
MP 1-66	Jan 1966	Interagency Conference on Continental Shelf Research, by N. E. Taney	AD 629 978
MP 1-67	Jan 1967	The Wave Record Program at CERC, by J. M. Darling and D. G. Dumm	AD 652 252
MP 2-67	Mar 1967	A Compilation of Longshore Current Data, by C. J. Galvin and R. A. Nelson	AD 652 253
MP 3-67	Jun 1967	A Feasibility Study of a Wave-Powered Device for Moving Sand, by F. F. Monroe	AD 655 259
MP 1-68	Jul 1968	Annotated Bibliography of BEB and CERC Publications, by R. H. Allen and E. L. Spooner	AD 673 721
MP 1-69	Apr 1969	Oolitic Aragonite and Quartz Sand; Laboratory Comparison Under Wave Action, by F. F. Monroe	AD 688 877
MP 2-69	May 1969	Radioisotopic Sand Tracer Study, Point Conception, California, by D. B. Duane and C. W. Judge	AD 690 804
MP 3-69	Sep 1969	Pipe Profile Data and Wave Observations from the CERC Beach Evaluation Program, January-March 1968, by H. D. Urban and C. J. Galvin	AD 697 715
MP 1-70	Jan 1970	Experimental Dunes of the Texas Coast, by B. O. Gage	AD 702 902
MP 2-70	Feb 1970	Littoral Environment Observation Program in California, Preliminary Report, by A. Szuwalski	AD 704 720
MP 3-70	May 1970	RAPLOT, A Computer Program for Data Processing and Graphical Display for Radioisotopic Sand Tracer Study, by P. A. Turner	AD 708 550
MP 4-70	Aug 1970	Tracing Sand Movement in the Littoral Zone: Progress in the Radioisotopic Sand Tracer (RIST) Study, July 1968-February 1969, by D. B. Duane	AD 713 001

## COASTAL ENGINEERING RESEARCH CENTER

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 1-71	Sep 1971	Longshore Sediment Transport Rates: A Compilation of Data, by M. M. Das	AD 734 891
MP 1-72	Apr 1972	GROINS: An Annotated Bibliography, by J. H. Balsillie and R. H. Bruno	AD 743 942
MP 2-72	Apr 1972	A Glossary of Coastal Engineering Terms, by R. H. Allen	AD 744 804
MP 3-72	Nov 1972	Coastal Imagery Data Bank: Interim Report, by A. Szuwalski	AD 755 508
MP 1-73	Jan 1973	Ecological Effects of Offshore Dredging and Beach Nourishment: A Review, by J. R. Thompson	AD 756 366
MP 2-73	May 1973	An Annotated Bibliography of Aerial Remote Sensing in Coastal Engineering, by D. B. Stafford, R. O. Bruno, and H. M. Goldstein	AD 766 720
MP 1-74	Feb 1974	Bed Form Development and Distribution Pattern, Parker and Essex Estuaries, Massachusetts, by J. C. Boothroyd and D. K. Hubbard	AD 777 911
MP 2-74	Mar 1974	A Glossary of Ecological Terms for Coastal Engineers, by A. K. Hurme	AD 777 764
MP 3-74	May 1974	Bolinas Lagoon Inlet, California, by J. W. Johnson	AD 785 747
MP 4-74	Jun 1974	Hydraulic Method Used for Moving Sand at Hyperion Beach Erosion Project, El Segundo, California, by J. Hurd	AD 785 552
MP 1-75	Jan 1975	A Primer of Basic Concepts of Lakeshore Processes, by D. B. Duane, et al.	AD A008 010
MP 2-75	Feb 1975	Guidelines for Monitoring Shore Protection Structures in the Great Lakes	AD A009 500
MP 3-75	Apr 1975	Features of Various Offshore Structures, by J. Peraino, et al.	AD A012 843
MP 4-75	Apr 1975	Concept Analysis: Offshore Breakwater-Oil Storage System, by J. Peraino and T. Plodowski	AD A010 348
MP 5-75	Apr 1975	A Selected Bibliography of the Nearshore Environment: Florida West Coast, by C. H. Saloman	AD A012 854
MP 6-75	Apr 1975	Establishment of Vegetation for Shoreline Stabilization in Galveston Bay, by J. D. Dodd and J. W. Webb	AD A012 839
MP 7-75	Jun 1975	Evaluation of Potential Use of Vegetation for Erosion Abatement Along the Great Lakes Shoreline, by V. L. Hall and J. D. Ludwig	AD A014 137
MP 8-75	Sep 1975	Effects of Engineering Activities on the Ecology of Pismo Clams, by J. Nybakken and M. Stephenson	AD A016 948

## COASTAL ENGINEERING RESEARCH CENTER

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 9-75	Sep 1975	Construction and Stabilization of Coastal Foredunes with Vegetation: Padre Island, Texas, by B. E. Dahl, et al.	AD A018 065
MP 10-75	Oct 1975	Beach Profile Changes: East Coast of Lake Michigan, 1970-72, by R. A. Davis, Jr., W. G. Fingleton, and P. C. Pritchett	AD A018 891
MP 11-75	Dec 1975	Sand Level Changes on Torrey Pines Beach, California, by C. E. Nordstrom and D. L. Inman	AD A019 833
MP 12-75	Dec 1975	Wave Runup on a 1 on 10 Slope, by J. Ahrens	AD A021 577

## COASTAL ENGINEERING RESEARCH CENTER

Miscellaneous Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MR 76-1	Jan 1976	Effects of Suspended Soils on Selected Estuarine Plankton, by J. A. Cherk, Jr., J. M. O'Connor, and D. A. Neumann	AD A022 653
MR 76-2	Jan 1976	An ERTS-1 Study of Coastal Features on the North Carolina Coast, by G. H. Miller and D. W. Berg	AD A022 536
MR 76-3	Feb 1976	Dune Stabilization with <u>Panicum amarum</u> Along the North Carolina Coast, by E. D. Seneca, W. W. Woodhouse, Jr., and S. W. Broome	AD A023 178
MR 76-4	Mar 1976	Simplified Design Methods of Treated Timber Structures for Shore, Beach, and Marina Construction, by J. Avers and R. Stokes	AD A022 337
MR 76-5	Mar 1976	Reflection and Transmission Characteristics of Porous Rubble-Mound Breakwaters, by O. S. Madsen and S. M. White	AD A023 382
MR 76-6	Apr 1976	Vegetative Study at the Duck Field Research Facility, Duck, North Carolina, by G. F. Levy	AD A025 178
MR 76-7	May 1976	Survey of Coastal Revetment Types, by B. L. McCartney	AD A026 255
MR 76-8	May 1976	Diurnal Variations in Visually Observed Breaking Waves, by P. C. Pritchett	AD A023 275
MR 76-9	Jun 1976	wave Attenuation by Artificial Seaweed, by J. Ahrens	AD A028 274
MR 76-10	Aug 1976	The Benthic Fauna and Sediments of the Nearsore Zone off Panama City Beach, Florida, by C. H. Saloman	AD A031 992
MR 76-11	Nov 1976	Measurement Techniques for Coastal Waves and Currents, by P. G. Teleki, F. R. Nusialowski, and D. A. Prins	AD A033 041
MR 77-1	Feb 1977	A Positive Displacement Oscillatory Water Tunnel, by K. E. B. Lofquist	AD A038 593
MR 77-2	Mar 1977	Marine Pipelines: An Annotated Bibliography, by G. L. Bowie and R. L. Wiegel	AD A035 747
MR 77-3	Mar 1977	Size Analysis of Sand Samples from Southern New Jersey Beaches, by M. D. Ramsey and C. J. Galvin, Jr.	AD A040 082
MR 77-4	Mar 1977	A Laboratory Study of the Stability of Sand-Filled Nylon Bag Breakwater Structures, by R. E. Rav	AD A039 265
MR 77-5	Mar 1977	Analysis of Short-Term Variations in Beach Morphology (and Concurrent Dynamic Processes) for Summer and Winter Periods, 1971-72, Plum Island, Massachusetts, by K. W. Abele, Jr.	AD A039 266
MR 77-6	Apr 1977	beach Fauna Study of the CERC Field Research Facility, Duck, North Carolina, by J. F. Matta	AD A040 593

## COASTAL ENGINEERING RESEARCH CENTER

Miscellaneous Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MR 77-7		Laboratory Effects in Beach Studies:	
	Jun 1977	Volume I Procedures Used in 10 Movable-Bed Experiments, by R. P. Stafford and C. B. Chesnutt	AD A043 370
	Aug 1977	Volume II Movable-Bed Experiments with $H_o/L_o = 0.021$ (1970), by C. B. Chesnutt and R. P. Stafford	AD A045 462
	Nov 1977	Volume III Movable-Bed Experiments with $H_o/L_o = 0.021$ (1971), by C. B. Chesnutt and R. P. Stafford	AD A049 871
	Dec 1977	Volume IV Movable-Bed Experiments with $H_o/L_o = 0.021$ (1972), by C. B. Chesnutt and R. P. Stafford	AD A051 872
	Dec 1977	Volume V Movable-Bed Experiments with $H_o/L_o = 0.039$ (1972), by C. B. Chesnutt and R. P. Stafford	AD A051 484
	Mar 1978	Volume VI Movable-Bed Experiments with $H_o/L_o = 0.004$ by C. B. Chesnutt and R. P. Stafford	AD A055 186
	Mar 1978	Volume VII Movable-Bed Experiments with $H_o/H_o = 0.013$ by C. B. Chesnutt and R. P. Stafford	AD A055 021
	Jun 1978	Volume VIII Analysis of Results from 10 Movable-Bed Experiments, by C. B. Chesnutt	AD A058 703
MR 77-8	Jul 1977	Monitoring of Foredunes on Padre Island, Texas, by B. E. Dahl and J. P. Goen	AD A043 375
MR 77-9	Aug 1977	The History of the Beach Erosion Board, U. S. Army Corps of Engineers, 1930-53, by M. L. Quinn	AD A045 469
MR 77-10	Oct 1977	Mathematical Modeling of Shoreline Evolution, by B. Le Mehaute and M. Soldate	AD A047 641
MR 77-11	Nov 1977	Sand Resources on the Inner Continental Shelf of the Cape Fear Region, North Carolina, by E. P. Meisburger	AD A049 132
MR 77-12	Dec 1977	Beach Erosion and Accretion at Virginia Beach, Virginia, and Vicinity, by V. Goldsmith, S. C. Strum, and G. R. Thomas	AD A049 565
MR 78-1	Jan 1978	Shoreline Plant Establishment and Use of a Wave-Stilling Device, by J. W. Webb and J. D. Dodd	AD A053 235
MR 78-2	May 1978	An Annotated Bibliography of CERC Coastal Ecology Research, by E. J. Pullen, et al.	AD A056 712

## COASTAL ENGINEERING RESEARCH CENTER

Miscellaneous Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MR 78-3	Sep 1978	Ecological Effects of an Artificial Island, Rincon Island, Punta Gorda, California, by G. F. Johnson and L. A. deWit	AD A062 065
MR 78-4	Dec 1978	Effects of Beach Replenishment on the Nearshore Sand Fauna at Imperial Beach, California, by T. Parr, D. Diener and S. Lacy	AD A067 308
MR 79-1	Feb 1979	An Annotated Bibliography on Detached Breakwaters and Artificial Headlands, by J. R. Lesnik	AD A068 981
MR 79-2	May 1979	Bank Erosion Control with Vegetation, San Francisco Bay, California, by C. L. Newcombe, et al.	AD A072 924
MR 79-3	Jul 1979	Sand Resources of Southeastern Lake Michigan, by E. P. Meisburger, S. J. Williams, and D. A. Prins	AD A073 817
MR 79-4	Jul 1979	Sediment Distribution Sand Resources, and Geologic Character of the Inner Continental Shelf Off Galveston County, Texas, by S. J. Williams, D. A. Prins, and E. P. Meisburger	AD A074 393
MR 79-5	Aug 1979	Beach Changes at Westhampton Beach, New York, 1962-73, by A. E. DeWall	AD A073 605
MR 79-6	Nov 1979	An Annotated Bibliography of Patents Related to Coastal Engineering, by R. E. Rav, M. D. Dickev, and A. M. Lyles	AD A080 914
		Appendix: Volume I	AD A080 795
		Volume II	AD A080 796
		Volume III	AD A080 797
MR 80-1		Ecological Evaluation of a Beach Nourishment Project at Hallandale (Broward County), Florida:	
	Feb 1980	Volume I Evaluation of Fish Population Adjacent to Borrow Areas of Beach Nourishment Project, Hallandale (Broward County), Florida, by W. R. Courtenav, Jr., B. C. Hartig, and G. R. Loisel	AD A083 595
	Mar 1980	Volume II Evaluation of Benthic Communities Adjacent to a Restored Beach, Hallandale (Broward County), Florida, by G. A. Marsh, et al.	AD A085 802
MR 80-2	Apr 1980	The Effect of Structures and Lake Level on Bluff and Shore Erosion in Berrien County, Michigan, 1970-74, by W. A. Birkemeier	AD A087 262
MR 80-3	May 1980	Beach and Inlet Changes at Ludlum Beach, New Jersey, by C. H. Everts, A. E. DeWall, and M. T. Czerniak	AD A087 796
MR 80-4	Jul 1980	Sand Resources on the Inner Continental Shelf of the Cape May Region, New Jersey, by E. P. Meisburger and S. J. Williams	AD A088 636

## COASTAL ENGINEERING RESEARCH CENTER

Miscellaneous Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MR 80-5	Jun 1980	An Annotated Bibliography of CERC Coastal Ecology Research, by E. J. Pullen, et al.	AD A088 585
MR 80-6	Jul 1980	A Numerical Model for Predicting Shoreline Changes, by B. Le Mehaute and M. Soldate	AD A090 133
MR 80-7	Sep 1980	An Annotated Bibliography of Seagrasses with Emphasis on Planting and Propagation Techniques, by D. B. Knight, P. L. Knutson, and E. J. Pullen	AD A092 584
MR 80-8	Oct 1980	Instrumentation at CERC's Field Research Facility, Duck, North Carolina, by H. C. Miller	AD A091 730
MR 80-9	Oct 1980	Beach Changes at Long Beach Island, New Jersey, 1962-73, by M. C. Miller, D. G. Aubrey, and J. Karpen	AD A101 844
MR 80-10	Nov 1980	Sand Resources of Southern Lake Erie, Conneaut to Toledo, Ohio - A Seismic Reflection and Vibrocore Study, by S. J. Williams, et al.	AD A097 984
MR 81-1	Jan 1981	Hydraulics and Stability of Five Texas Inlets, by C. Mason	AD A101 843
MR 81-2	Jan 1981	Coastal Changes, Eastern Lake Michigan, 1970-74, by W. A. Birkemeier	AD A097 985
MR 81-3	Mar 1981	Beach Changes at Atlantic City, New Jersey (1962-73), by D. P. McCann	AD A101 902
MR 81-4	Apr 1981	Movable-Bed Laboratory Experiments Comparing Radiation Stress and Energy Flux, Movable-Bed Modeling, Sediment Transport, by P. Vitale	AD A101 918
MR 81-5	Jun 1981	A Study of the Invertebrates and Fishes of Salt Marshes in Two Oregon Estuaries, by D. L. Higley and R. L. Holton	AD A106 973
MR 81-6	Jun 1981	Analysis of Coastal Sediment Transport Processes from Wrightsville Beach to Fort Fisher, North Carolina, by T. C. Winton, et al.	AD A103 168
MR 81-7	Oct 1981	A User's Guide to CERC's Field Research Facility, by W. A. Birkemeier	AD A110 602
MR 82-1	Jan 1982	Benthic Fauna of an Offshore Borrow Area in Broward County, Florida, by D. B. Turbeville and G. A. Marsh	AD A110 666
MR 82-2	Jan 1982	Long-Term Effects of Beach Nourishment on the Benthic Fauna of Panama City Beach, Florida, by J. K. Culter and S. Mahadevan	AD A115 212
MR 82-3	Mar 1982	Benthic Community Response to Dredging Borrow Pits, Panama City Beach, Florida, by C. H. Saloman, S. P. Naughton, and J. L. Taylor	AD A116 340
MR 82-4	Jul 1982	Field Experiences with Floating Breakwaters in the Eastern United States, by A. V. Baird and N. W. Ross	AD A119 476

## COASTAL ENGINEERING RESEARCH CENTER

Miscellaneous Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MR 82-5	Jul 1982	Floating Breakwater Field Experience, West Coast, by E. P. Richey	AD A121 557
MR 82-6	Aug 1982	Littoral Environment Observation (LEO) Data Summaries, Northern California, 1968-78, by C. Schneider and J. R. Weggel	AD A127 640
MR 82-7	Sep 1982	Surf Zone Currents, by D. R. Basco and R. A. Coleman: Volume I State of Knowledge Volume II Annotated Bibliography	AD A122 066 AD A121 585
MR 82-8	Sep 1982	A Lightweight Pneumatic Coring Device: Design and Field Tests, by J. A. Fuller and E. P. Meisburger	AD A121 556
MR 82-9	Oct 1982	Geological Character and Mineral Resources of South Central Lake Erie, by S. J. Williams and E. P. Meisburger	AD A123 085
MR 82-10	Oct 1982	Sand Resources on the Inner Continental Shelf off the Central New Jersey Coast, by E. P. Meisburger and S. J. Williams	AD A123 087
MR 82-11	Oct 1982	The Design, Development, and Evaluation of a Differential Pressure Gage Directional Wave Monitor, by K. R. Bodge	AD A123 950
MR 82-12	Nov 1982	Long-Term Changes in Beach Fauna at Duck, North Carolina, by R. J. Diaz and J. T. DeAlteris	AD A125 142
MR 82-13	Nov 1982	Effects of Beach Nourishment on the Nearshore Environment in Lake Huron at Lexington Harbor (Michigan), by R. T. Nester and T. P. Poe	AD A123 066
MR 82-14	Dec 1982	Effects of Beach Nourishment and Borrowing on Marine Organisms, by S. M. Naqvi and E. J. Pullen	AD A123 951
MR 82-15	Dec 1982	Regional Geology of the Southern Lake Erie (Ohio) Bottom: A Seismic Reflection and Vibracore Study, by C. H. Carter, S. J. Williams, J. A. Fuller, and E. P. Meisburger	AD A126 565
MR 82-16	Dec 1982	CERC Field Research Facility Environmental Data Summary, 1977-79, by C. H. Miller	AD A127 066
MR 83-1	Jan 1983	The Elevation and Duration of Wave Crests, by W. N. Seelig, J. P. Ahrens, and W. G. Grosskopf	AD A127 872
MR 83-2	Jan 1983	An Annotated Bibliography on the Biological Effects of Constructing Channels, Jetties, and other Coastal Structures, by J. C. Ford, A. K. Hurme, and E. J. Pullen	AD A128 080



## COASTAL ENGINEERING RESEARCH CENTER

Miscellaneous Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MR 83-3	Mar 1983	The Ecological Impact of Beach Nourishment with Dredged Materials on the Intertidal Zone at Bogue Bank, North Carolina, by F. J. Reilly and V. J. Bellis	AD A128 925
MR 83-4	Mar 1983	Reevaluation of Vegetational Characteristics at the CERC Field Research Facility, Duck, North Carolina, by R. L. Harris, G. F. Levv, and J. E. Perry	AD A127 137
MR 83-5	Mar 1983	Beach Changes at Holden Beach, North Carolina, 1970-74, by M. C. Miller	AD A127 986
MR 83-6	Mar 1983	Interaction of Waves and Currents, by D. H. Peregrine and I. G. Jonsson	AD A128 551
MR 83-7	Mar 1983	Annotated Bibliography on Wave-Current Interaction, by D. H. Peregrine, I. G. Jonsson, and C. J. Galvin	AD A127 225
MR 83-8	Mar 1983	Posthurricane Survey of Experimental Dunes on Padre Island, Texas, by B. E. Dahl, P. C. Cotter, D. B. Wester, and D. D. Drbal	AD A128 051
MR 83-10	May 1983	A Numerical Model to Simulate Sediment Transport in the Vicinity of Coastal Structures, by Marc Perlin and R. G. Dean (includes Appendixes A-E)	AD A130 197

## COASTAL ENGINEERING RESEARCH CENTER

Reprints

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
R 1-66	Feb 1966	An Ocean Wave Direction Gage, by L. C. Williams	AD 631 518
R 2-66	Feb 1966	Breakwaters with Vertical and Sloping Faces, by T. Saville, Jr., W. J. Garcia, and C. E. Leo	AD 631 519
R 3-66	Feb 1966	Factors Affecting Beach Nourishment Requirements, Presque Isle Peninsula, Erie, Pennsylvania, by D. W. Berg	AD 631 520
R 4-66	Jun 1966	A Tractor-Mounted Suspended Sand Sampler, by J. C. Fairchild	AD 636 951
R 1-67	Jan 1967	Coastal Processes and Beach Erosion, by J. M. Caldwell	AD 652 025
R 2-67	Aug 1967	Wave Tests of Revetment Using Machine-Produced Interlocking Blocks, by J. V. Hall, Jr.	AD 659 170
R 3-67	Aug 1967	Rock Movement in Large-Scale Tests of Riprap Stability Under Wave Action, by T. Saville, Jr.	AD 659 573
R 4-67	Sep 1967	Variations in Groin Design, by D. W. Berg and G. M. Watts	AD 659 172
R 1-68	Feb 1968	Surf Observations Along the United States Coasts, by J. M. Darling	AD 672 613
R 2-68	Aug 1968	Longshore Current Velocity: A Review of Theory and Data, by C. J. Galvin, Jr.	AD 672 614
R 3-68	Jun 1968	Breaker Type Classification on Three Laboratory Beaches, by C. J. Galvin, Jr.	AD 673 621
R 1-69	Apr 1969	Effect of Particle Size and Distribution on Stability of Artificially Filled Beach, Presque Isle Peninsula, Pennsylvania, by D. W. Berg and D. B. Duane	AD 694 204
R 2-69	Sep 1969	Prototype Investigation of Stability of Quadripod Cover Layer, Santa Cruz Harbor, California, by O. F. Weymouth and O. T. Magoon	AD 697 531
R 3-69	Sep 1969	Creation and Stabilization of Coastal Barrier Dunes, by R. P. S. Sage and W. W. Woodhouse, Jr.	AD 697 532
R 4-69	Sep 1969	Systematic Collection of Beach Data, by D. W. Berg	AD 697 533
R 1-70	Oct 1970	Shallow Structural Characteristics of Florida Atlantic Shelf as Revealed by Seismic Reflection Profiles, by E. P. Meisburger and D. B. Duane	AD 702 003
R 2-70	Oct 1970	Sand Inventory Program, by D. B. Duane	AD 703 583
R 3-70	Jun 1970	Coastal Regime, Recent U. S. Experience, by T. Saville, Jr.	AD 706 469
R 4-70	May 1970	Breaker Travel and Choice of Design Wave Height, by C. J. Galvin, Jr.	AD 712 652

## COASTAL ENGINEERING RESEARCH CENTER

Reprints

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
R 1-71	Sep 1971	The Analysis of Wave Records, by D. L. Harris	AD 732 606
R 2-71	Sep 1971	Comparison of Pressure and Staff Wave Gage Records, by D. C. Esteve and D. L. Harris	AD 732 637
R 3-71	Sep 1971	Bottom Boundary Shear Stresses on a Model Beach, by P. G. Teleki and M. W. Anderson	AD 732 643
R 4-71	Sep 1971	Waves Generated by a Piston-Type Wavemaker, by O. S. Madsen	AD 732 607
R 5-71	Sep 1971	Synoptic Observations of Sand Movement, by D. B. Duane	AD 732 645
R 6-71	Sep 1971	Processing and Analysis of Radioisotopic Sand Tracer (RIST) Study Data, by H. R. Brasher, et al.	AD 732 608
R 7-71	Sep 1971	A Class of Probability Models for Littoral Drift, by W. R. James	AD 732 646
R 8-71	Sep 1971	Effect on Long Period Waves on Hydrographic Surveys, by O. T. Magoon and W. O. Sarlin	AD 732 609
R 1-72	May 1972	A Wave Climatology for U. S. Coastal Waters, by E. F. Thompson and D. L. Harris	AD 746 365
R 2-72	Jul 1972	Marsh Building with Dredge Spoil in North Carolina, by W. W. Woodhouse, Jr., E. D. Seneca, and S. W. Broome	AD 755 178
R 3-72	Sep 1972	Regional Shelf Studies: A Guide to Engineering Design, by S. J. Williams and D. B. Duane	AD 754 869
R 4-72	Aug 1972	Use of Satellites in Coastal Engineering, by O. T. Magoon, J. W. Jarman, and D. W. Berg	AD 754 890
R 5-72	Sep 1972	Finite-Amplitude Shallow-Water Waves of Periodically Recurring Form, by C. J. Galvin, Jr.	AD 754 868
R 1-73	Aug 1973	Use of Dolos Armour Units in Rubble-Mound Structures in the Arctic, by O. T. Magoon and N. Shimizu	AD 757 973
R 2-73	Oct 1973	Characteristics of Wave Records in the Coastal Zone, by D. L. Harris	AD 757 974
R 3-73	Nov 1973	Maximum Breaker Height, by J. R. Weibel	AD 757 975
R 4-73	Mar 1973	Wave Breaking in Shallow Water, by C. J. Galvin, Jr.	AD 756 106
R 5-73	Apr 1973	Use of Earth Resources Technology Satellite (ERTS-1) in Coastal Studies, by O. T. Magoon	AD 766 378
R 6-73	Feb 1973	Design Considerations for a 3-D Laser Doppler Velocimeter for Studying Gravity Waves in Shallow Water, by R. J. Hallermeier	AD 766 379
R 7-73	Mar 1973	A Markov Model for Beach Profile Changes, by C. J. Sonu and W. R. James	AD 765 889

## COASTAL ENGINEERING RESEARCH CENTER

Reprints

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
R 8-73	Jul 1973	Maximum Breaker Height for Design, by J. R. Weggel	AD 770 190
R 9-73	Jul 1973	Time-Interval Photography of Littoral Phenomena, by D. W. Berg and E. F. Hawley	AD 774 269
R 10-73	Jul 1973	Character and Stability of a Natural Tidal Inlet, by C. Mason and R. Sorensen	AD 770 184
R 11-73	Jul 1973	Case History of Mission Bay Inlet, San Diego, California, by W. J. Herron, Jr.	AD 770 192
R 12-73	Jul 1973	A Gross Longshore Transport Rate Formula, by C. J. Galvin, Jr.	AD 770 181
R 13-73	Jul 1973	Suspended Sediment and Longshore Sediment Transport Data Review, by M. M. Das	AD 770 179
R 14-73	Jul 1973	Longshore Transport of Suspended Sediment, by J. C. Fairchild	AD 770 191
R 15-73	Jul 1973	State of Groin Design and Effectiveness, by J. H. Balsillie and D. W. Berg	AD 770 182
R 16-73	Jul 1973	Coastal Sand Mining in Northern California, U. S. A., by O. T. Magoon, J. C. Haugen, and R. L. Sloan	AD 770 178
R 17-73	Jul 1973	Remote Sensing in the Study of Coastal Processes, by O. T. Magoon and D. M. Pirie	AD 770 194
R 18-73	Jul 1973	Coastal Applications of the ERTS-A Satellite, by O. T. Magoon, D. M. Pirie, and J. W. Jarman	AD 770 183
R 19-73	Jul 1973	Wave Runup on Vertical Cylinders, by C. J. Galvin, Jr., and R. J. Hallermeier	AD 770 165
R 20-73	1973	An Introduction to Oceanic Water Motions and Their Relation to Sediment Transport, by J. R. Weggel	AD 770 177
R 21-73	1973	Wave Boundary Layers and Their Relation to Sediment Transport, by P. G. Teleki	AD 770 171
R 22-73	1973	Linear Shoals on the Atlantic Inner Continental Shelf, Florida to Long Island, by D. B. Duane, et al.	AD 770 172
R 23-73	1973	Wave Estimates for Coastal Regions, by D. L. Harris	AD 770 193
R 24-73	1973	Onshore Transportation of Continental Shelf Sediment: Atlantic Southeastern United States, by S. H. Pilkey and M. E. Field	AD 770 180
R 25-73	1973	Controlling Littoral Drift to Protect Beaches, Dunes, Estuaries, and Harbor Entrances, by G. M. Watts, L. Vallianos, and R. A. Jachowski	AD 773 930
R 26-73	1973	Report on Controlling Littoral Drift to Protect Beaches, Dunes, Estuaries and Harbor Entrances, by T. Saville, Jr.	AD 773 931

## COASTAL ENGINEERING RESEARCH CENTER

Reprints

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
R 1-74	Nov 1974	Particle Overpassing on Flat Granular Boundaries, by C. H. Everts	AD 775 650
R 2-74	Oct 1974	A Study of Oceanic Mixing with Dyes and Multispectral Photogrammetry, by P. G. Teleki, J. W. White, and D. A. Prins	AD 775 561
R 3-74	Oct 1974	On the Nearshore Circulation of the Gulf of Carpentaria, Australia--A Study in Uses of Satellite Imagery (ERTS) in Remotely Accessible Areas, by P. G. Teleki, G. A. Rabehevskv, and J. W. White	AD 775 651
R 4-74	1974	Littoral Environment Observation Program in the State of Michigan, by R. O. Bruno and L. W. Hiipakka	AD 777 706
R 5-74	Sep 1974	CERC Field Wave Gauging Program, by H. G. Peacock	AD A002 112
R 6-74	Sep 1974	Finite Spectrum Analyses of Wave Records, by D. L. Harris	AD A002 113
R 7-74	Sep 1974	Results from the CERC Wave Measurement Program, by E. F. Thompson	AD A002 114
R 8-74	Sep 1974	Development of a Shallow-Water Wave Direction Gage, by R. J. Hallermeier and W. R. James	AD A002 300
R 9-74	Aug 1974	Photogrammetric Experiments on Nearshore Mixing and Diffusion, by P. G. Teleki and D. A. Prins	AD A014 210
R 10-74	Aug 1974	Regime Equations and Tidal Inlets, by C. Mason	AD A003 778
R 11-74	Jun 1974	Lab Profile and Reflection Changes for $H_0/L_0 = 0.02$ , by C. B. Chesnutt and C. J. Galvin, Jr.	AD A010 751
R 12-74	Jun 1974	Behavior of Beach Fill at Atlantic City, New Jersey, by C. H. Everts, A. E. Dewall, and M. T. Czerniak	AD A010 752
R 13-74	Jun 1974	Beach Fill Stability and Borrow Material Texture, by W. R. James	AD A010 753
R 1-75	Dec 1975	The Coastal Engineering Research Center, by T. Saville, Jr., J. R. Weggel, and K. E. Fusen	AD A009 387
R 2-75	Aug 1975	Construction in the Coastal Zone: A Potential Use of Waste Material, by S. J. Williams and D. B. Duane	AD A009 388
R 3-75	Dec 1975	Laboratory Effects in Coastal Movable-Bed Models, by C. B. Chesnutt	AD A010 302
R 4-75	Dec 1975	Tests on the Equilibrium Profiles of Model beaches and the Effects of Grain Shape and Size Distribution, by J. I. Collins and C. B. Chesnutt	AD A010 311
R 76-1	Jun 1976	Shoaling Rate Prediction Using a Sedimentation Tank, by C. H. Everts	AD A029 725

## COASTAL ENGINEERING RESEARCH CENTER

Reprints

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
R 76-2	Jun 1976	Wave Period Effect on the Stability of Riprap, by J. P. Ahrens and B. L. McCartney	AD A029 726
R 76-3	Jun 1976	Data Acquisition Methods for Coastal Currents, by P. G. Teleki, F. R. Musialowski, and D. A. Prins	AD A029 739
R 76-4	Jun 1976	Channel Entrance Response to Jetty Construction, by J. M. Kieslich and C. Mason	AD A029 740
R 76-5	Sep 1976	Geotechnical Engineering in the Coastal Zone, by G. W. Callender, Jr.	AD A033 810
R 77-1	Feb 1977	Sedimentation in a Half-Tide Harbor, by C. H. Everts	AD A035 667
R 77-2	Mar 1977	Application of Wave Climatology and Data for Design, by T. Saville, Jr.	AD A036 679
R 77-3	Apr 1977	Nearshore Wave Direction Gage, by W. R. James and R. J. Hallermeier	AD A039 101
R 77-4	Apr 1977	Nonlinear Flow of Wave Crests Past a Thin Pile, by R. J. Hallermeier	AD A038 704
R 77-5	May 1977	Wave Entrainment of Sediment from Rippled Beds, by T. Nakato, et al.	AD A040 508
R 77-6	Jul 1977	Longshore Transport at a Total Littoral Barrier, by R. O. Bruno and C. G. Gable	AD A042 473
R 77-7	Jul 1977	Wave Overtopping Equation, by J. R. Weggel	AD A042 678
R 78-1	Feb 1978	Visual Surf Observations/Marineland Experiment, by C. Schneider	AD A051 570
R 78-2	Feb 1978	Designing for Bank Erosion Control with Vegetation, by P. L. Knutson	AD A051 571
R 78-3	Feb 1978	Sediment Budget Analysis, Wrightsville Beach to Kure Beach, N. C., by J. T. Jarrett	AD A051 572
R 78-4	Feb 1978	Beach and Nearshore Processes in Southeastern Florida, by A. E. Dewall and J. J. Richter	AD A051 573
R 78-5	Feb 1978	Evaluation of a Concrete Building Block Revetment, by M. L. Giles	AD A051 574
R 78-6	Feb 1978	Nearshore Disposal: Onshore Sediment Transport, by R. K. Schwartz and F. R. Musialowski	AD A051 575
R 78-7	Feb 1978	Implications of Submergence for Coastal Engineers, by E. B. Hands	AD A051 576
R 78-8	Feb 1978	Sediments Impounded by an Offshore Breakwater, by R. O. Bruno, G. M. Watts, and C. Gable	AD A051 577
R 78-9	Feb 1978	Spatial and Temporal Changes in New Jersey Beaches, by C. H. Everts and M. T. Czerniak	AD A051 578

## COASTAL ENGINEERING RESEARCH CENTER

Reprints

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
R 78-10	Feb 1978	Sediment Handling and Beach Fill Design, by R. D. Hobson	AD A051 579
R 73-11	Mar 1978	Some Data Points on Shoreline Retreat Attributable to Coastal Subsidence, by E. B. Hands	AD A051 796
R 78-12	Nov 1978	Planting Guidelines for Dune Creation and Stabilization, by P. L. Knutson	AD A062 304
R 78-13	Nov 1978	Design of Retention Structures for Marsh Habitats, by J. W. Eckert	AD A061 439
R 78-14	Nov 1978	Ecological Effects of an Artificial Island, by G. F. Johnson, et al.	AD A062 302
R 79-1	Mar 1979	Geologic Effects of Ocean Dumping on the New York Bright Inner Shelf, by S. J. Williams	AD A067 491
R 79-2	Jun 1979	The Effects of the 19 December 1977 Coastal Storm on Beaches in North Carolina and New Jersey, by W. A. Birkemeier	AD A070 554
R 79-3	Aug 1979	Beach Behavior in the Vicinity of Groins--Two New Jersey Field Examples, by C. H. Everts	AD A073 276
R 79-4	Aug 1979	Rubble-Mound Structures as Artificial Reefs, by A. K. Hurme	AD A073 277
R 79-5	Aug 1979	Wave Action on the Savannah Tide Gates, by J. R. Weggel, J. Roberts, and J. Hagar	AD A073 302
R 79-6	Aug 1979	Predicting Beach Planforms in the Lee of a Breakwater, by M. Perlin	AD A073 313
R 79-7	Sep 1979	Upper Quaternary Peat Deposits on the Atlantic Inner Shelf of the United States, by M. E. Field, et al.	AD A074 643
R 79-8	Nov 1979	The Use of Imaging Radar in Studying Ocean Waves, by M. G. Mattie and D. L. Harris	AD A077 230
R 79-9	Nov 1979	Importance of Handling Losses to Beach Fill Design, by R. D. Hobson and W. R. James	AD A077 228
R 79-10	Nov 1979	Numerical Model Investigation of Selected Tidal Inlet Bay System Characteristics, by W. N. Seelig and R. M. Sorensen	AD A077 231
R 79-11	Nov 1979	Uses for a Calculated Limit Depth to Beach Erosion, by R. J. Hallermeier	AD A077 232
R 79-12	Nov 1979	The Coastal Engineering Research Center's Field Research Facility at Duck, North Carolina, by C. Mason	AD A077 269
R 79-13	Nov 1979	Sand Bed Fraction Factors for Oscillatory Flows, by P. Vitale	AD A077 233
R 79-14	Jan 1980	Weir Jetties--Their Continuing Evolution, by N. E. Parker	AD A079 686

## COASTAL ENGINEERING RESEARCH CENTER

Reprints

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
R 80-1	Jun 1980	Shallow Water Surface Wave Elevation Distributions, by E. F. Thompson	AD A086 253
R 80-2	Oct 1980	Surging in the Shark River Boat Basin, by J. R. Weggel and R. M. Sorensen	AD A091 347
R 80-3	Nov 1980	Sand Motion Initiation by Water Waves: Two Asymptotes, by R. J. Hallermeier	AD A092 045
R 81-1	Mar 1981	SEASAT Detection of Waves, Currents, and Inlet Discharge, by M. G. Mattie and D. E. Lichy	AD A097 974
R 81-2	Apr 1981	Littoral Sand Transport from Longshore Currents, by T. E. Walton, Jr.	AD A097 976
R 81-3	Apr 1981	A Profile Zonation for Seasonal Sand Beaches from Wave Climate, by R. J. Hallermeier	AD A098 549
R 81-4	Jul 1981	Tracking of a Warm Water Ring, by D. E. Lichy, M. G. Mattie, and L. J. Mancini	AD A101 938
R 81-5	Sep 1981	Wave Direction Measured by Four Different Systems, by M. G. Mattie, S. V. Hsiao, and D. D. Evans	AD A104 193
R 81-6	Oct 1981	Barrier Island Sedimentation Studies Program, by E. Meisburger, et al.	AD A106 177
R 81-7	Oct 1981	Human Influence on the Sediment Budget of a Barrier Island, by C. H. Everts	AD A106 178
R 81-8	Oct 1981	Recent Geologic History of a Barrier Island, by R. D. Hobson, R. K. Schwartz, and F. R. Musialowski	AD A107 497
R 81-9	Nov 1981	Linearized Solution to Inlet Equation with Inertia, by T. L. Walton and F. F. Escoffier	AD A107 205
R 81-10	Nov 1981	Stability of Rubble Mound Breakwaters, by T. L. Walton and J. R. Weggel	AD A107 343
R 81-11	Jan 1982	Measurements of Oscillatory Drag on Sand Ripples, by K. E. B. Lofquist	AD A109 502
R 81-12	Dec 1981	Visually Observed Wave Data at Pt. Mugu, Calif., by C. Schneider and J. R. Weggel	AD A108 942
R 82-1	Feb 1982	Calculation of Trapped Reflected Waves, by F. E. Camfield	AD A115 261
R 82-2	Feb 1982	Long-Wave Energy Trapping, by F. E. Camfield	AD A115 240
R 82-3	Nov 1981	Bottom Smoothing to Prevent Numerical Instability, by F. E. Camfield	AD A115 309
R 82-4	Aug 1982	Wave Measurements in ARSLOE, by C. L. Vincent and D. E. Lichy	AD A118 729



## COASTAL ENGINEERING RESEARCH CENTER

Reprints

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
R 82-5	Aug 1982	Bedload and Wave Thrust Computations of Alongshore Sand Transport, by R. J. Hallermeier	AD A118 258
R 82-6	Nov 1982	Hindered Bedload Settling as a Model of Sand Bed Plantation by Water Waves, by R. J. Hallermeier	AD A121 712
R 83-1	Mar 1983	Oscillatory Bedload Transport: Data Review and Simple Formulation, R. J. Hallermeier	AD A126 503
R 83-2	Mar 1983	Wind-Wave Growth with High Friction, by F. E. Camfield	AD A127 008
R 83-3	Apr 1983	Biological Impacts on Beach Replenishment and Borrowing, by E. J. Pullen and S. M. Naqvi	AD A127 605
R 83-4	May 1983	Movable-Bed Modeling Law for Coastal Dune Erosion, by S. A. Hughes	AD A128 357
R 83-5	May 1983	Analysis Method for Studying Sedimentation Patterns, by J. R. Weggel	AD A128 314
R 83-6	May 1983	Design of Toe Protection for Coastal Structures, by J. W. Eckert	AD A129 003
R 83-7	May 1983	The Design of Weir Sand Bypassing Systems, by J. R. Weggel	AD A129 306
R 83-8	May 1983	Sand Transport Limits in Coastal Structure Designs, by R. J. Hallermeier	AD A128 929
R 83-9	May 1983	Wave Runup on Idealized Structures, by J. P. Ahrens	AD A129 230
R 83-10	May 1983	Shoreline Changes Downdrift of a Littoral Barrier, by C. H. Everts	AD A129 002
R 83-11	May 1983	Low-Cost Measurements of Shoreline Change, by R. M. Clancy, F. E. Camfield, and C. Schneider	AD A129 001
R 83-12	May 1983	Breakwaters for Beach Protection at Lorain, Ohio, by J. Pope and D. D. Rowen	AD A129 112
R 83-13	May 1983	Effects of CERC Research Pier on Nearshore Processes, by H. C. Miller, W. A. Birkemeier, and A. E. DeWall	AD A129 127
R 83-14	May 1983	Prediction of Wave Height in Shallow Water, by E. F. Thompson and C. L. Vincent	AD A129 000

CERC-24

COASTAL ENGINEERING RESEARCH CENTER

Shore Protection Manual

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
SPM	1977	U. S. Army, Corps of Engineers, Coastal Engineering Research Center, "Shore Protection Manual". (GPO Stock No. 008-022-00113-1)	

## COASTAL ENGINEERING RESEARCH CENTER

Special Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
SR 1		Evaluation and Development of Water Wave Theories for Engineering Application:	
	Nov 1974	Volume I Presentation of Research Results, by R. G. Dean (includes Appendixes I-III)	AD A048 881
	Nov 1974	Volume II Tabulation of Dimensionless Stream Function Theory Variables, by R. G. Dean	
SR 2	Dec 1974	Small-Craft Harbors: Design, Construction, and Operation, by J. W. Dunham and A. A. Finn	AD A048 883
SR 3	Sep 1978	Dune Building and Stabilization with Vegetation, by W. W. Woodhouse, Jr.	
SR 4	May 1979	Building Salt Marshes Along the Coast of the Continental United States, by W. W. Woodhouse, Jr.	
SR 5	May 1979	Coastal Hydraulic Models, by R. Y. Hudson, et al.	
SR 6	Feb 1980	Tsunami Engineering, by F. E. Camfield	
SR 7	Feb 1981	Tides and Tidal Datums in the United States, by D. L. Harris	
SR 8	Apr 1981	Weir Sand-Bypassing Systems, by J. R. Weggel	AD A102 491
SR 9	Jan 1983	Shore Stabilization with Salt Marsh Vegetation, by P. L. Knutson and W. W. Woodhouse	AD A128 723
SR 10	Jan 1983	Construction Materials for Coastal Structures, by Moffatt and Nichols, Engineers	AD A129 810

## COASTAL ENGINEERING RESEARCH CENTER

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 1	Jan 1964	Sand Movement by Wind, by P. Y. Belly	AD 429 735
TM 2	Feb 1964	Transportation of Bed Material Due to Wave Action, by G. Kalkanis	AD 440 378
TM 3	Mar 1964	A Thermistor Probe for Measuring Particle Orbital Speed in Water Waves, by P. S. Eagleson and W. P. van de Watering	AD 440 879
TM 4	Mar 1964	Wave-Height Prediction for Wave Generators in Shallow Water, by C. J. Galvin, Jr.	AD 440 880
TM 5	Apr 1964	Nearshore Tidal and Nontidal Currents, Virginia Beach, Virginia, by W. Harrison, M. L. Brehmer, and R. B. Stone	AD 440 381
TM 6	Oct 1964	Development of a Method for Numerical Calculation of Wave Refraction, by W. Harrison and W. S. Wilson	AD 453 226
TM 7	Dec 1964	Interactions of the Beach-Ocean-Atmosphere System at Virginia Beach, Virginia, by W. Harrison and W. C. Krumbein	AD 459 084
TM 8	Dec 1964	Sedimentation at an Inlet Entrance--Rudee Inlet--Virginia Beach, Virginia, by W. Harrison, W. C. Krumbein, and W. Wilson	AD 459 035
TM 9	Dec 1964	Dynamic Properties of Immersed Sand at Virginia Beach, Virginia, by W. Harrison and R. M. Alamo	AD 459 520
TM 10	Jan 1965	Experimental Study of Longshore Currents on a Plane Beach, by C. J. Galvin, Jr., and P. S. Eagleson	AD 615 790
TM 11	Feb 1965	Behavior of Beach Fill and Borrow Area at Seaside Park, Bridgeport, Connecticut, by W. H. Vesper	AD 615 791
TM 12	Mar 1965	Source and Distribution of Sediments at Brunswick Harbor and Vicinity, Georgia, by J. Neiheisel	AD 620 373
TM 13	Jul 1965	The Statistical Distribution of Ocean Wave Forces on Vertical Piling, by L. E. Borgman	AD 620 874
TM 14	Oct 1965	Sand Movement Along a Portion of the Northern California Coast, by J. S. Cherrv	AD 628 360
TM 15	Oct 1965	Analysis of Wave Forces on a 30-Inch Diameter Pile Under Confused Sea Conditions, by B. W. Wilson	AD 628 367
TM 16	Nov 1965	A Lognormal Size Distribution Model for Estimating Stability of Beach Fill Material, by W. C. Krumbein and W. K. James	AD 623 368
TM 17	Feb 1966	A Method for Calculating and Plotting Surface wave Rays, by W. S. Wilson	AD 636 771
TM 18	Nov 1966	Correlation of Littoral Transport with Wave Energy Along Shores of New York and New Jersey, by J. C. Fairchild	AD 647 213

## COASTAL ENGINEERING RESEARCH CENTER

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 19	Dec 1966	Budget of Littoral Sands in the Vicinity of Point Arguello, California, by A. J. Bowen and D. L. Inman	AD 647 214
TM 20	May 1967	Behavior of Beach Fill and Borrow Area at Sherwood Island State Park, Westport, Connecticut, by W. H. Vesper	AD 655 260
TM 21	Aug 1967	A Multi-Purpose Data Acquisition System for Instrumentation of the Nearshore Environment, by W. A. Koontz and D. L. Inman	AD 659 334
TM 22	Aug 1967	Dune Stabilization with Vegetation on the Outer Banks of North Carolina, by W. W. Woodhouse and R. E. Hanes	AD 659 341
TM 23	Sep 1967	A Model Study of the Entrance Channel, Depoe Bay, Oregon, by J. P. Ahrens	AD 662 000
TM 24	Oct 1967	Tables of the Statistical Distribution of Ocean Wave Forces and Methods of Estimating Drag and Mass Coefficients, by L. J. Brown and L. E. Borgman	AD 662 056
TM 25	May 1968	The Tsunami of the Alaskan Earthquake 1964; Engineering Evaluation, by B. W. Wilson and A. Torum	AD 683 491
TM 26	Feb 1969	Hurricane Surge Frequency: Estimated for the Gulf Coast of Texas, by B. R. Bodine	AD 684 894
TM 27	May 1969	Corrosion and Protection of Steel Piling in Seawater, by L. L. Watkins	AD 690 803
TM 28	Jun 1969	Bed Forms Generated in the Laboratory Under an Oscillatory Flow: Analytical and Experimental Study, by M. P. Carstens, F. M. Neilson, and H. D. Altinbilek	AD 693 867
TM 29	Nov 1969	Geomorphology and Sediments of the Nearshore Continental Shelf, Miami to Palm Beach, Florida, by D. B. Duane and E. P. Meisburger	AD 699 339
TM 30	Dec 1969	CERC Wave Gages, by L. C. Williams	AD 701 903
TM 31	Apr 1970	Measuring Directional Velocity in Water Waves with an Acoustic Flowmeter, by R. H. Multer	AD 707 417
TM 32	Oct 1970	Finite-Difference Schemes Compared for Wave-Deformation Characteristics in Mathematical Modeling of Two-Dimensional Long Wave Propagation, by R. J. Sobey	AD 715 720
TM 33	Nov 1970	Heavy Minerals in Beach and Stream Sediments as Indicators of Shore Processes between Monterey and Los Angeles, California, by C. W. Judge	AD 717 034
TM 34	Feb 1971	Geomorphology and Sediments of the Inner Continental Shelf, Palm Beach to Cape Kennedy, Florida, by E. P. Meisburger and D. B. Duane	AD 724 130

## COASTAL ENGINEERING RESEARCH CENTER

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 35	May 1971	Storm Surge on the Open Coast: Fundamentals and Simplified Prediction, by B. R. Bodine	AD 728 128
TM 36	Oct 1971	An Aerial Photographic Technique for Beach Erosion Surveys in North Carolina, by D. B. Stafford	AD 732 833
TM 37	Jun 1972	Riprap Stability on Earth Embankments Tested in Large- and Small-Scale Wave Tanks, by A. L. Thomsen, P. E. Wohlt, and A. S. Harrison	AD 748 414
TM 38	Jun 1972	Geomorphology and Sediments of the Chesapeake Bay Entrance, by E. P. Meisburger	AD 749 545
TM 39	May 1973	Ocean Dumping in the New York Bight: An Assessment of Environmental Studies, by G. Pararas-Carayannis	AD 766 721
TM 40	Jul 1973	Pleistocene-Holocene Sediments Interpreted by Seismic Refraction and Wash-Bore Sampling, Plum Island-Castle Neck, Massachusetts, by E. G. Rhodes	AD 768 791
TM 41	Feb 1974	Ecological Monitoring of Beach Erosion Control Projects, Broward County, Florida, and Adjacent Areas, by W. R. Courtenay, et al.	AD 778 733
TM 42	Mar 1974	Geomorphology and Sediments of the Inner Continental Shelf, Cape Canaveral, Florida, by M. E. Field and D. B. Duane	AD 779 513
TM 43	Mar 1974	Engineering and Ecological Evaluation of Artificial-Island Design, Rincon Island, Punta Gorda, California, by J. M. Keith and R. E. Skjei	AD 778 740
TM 44	Jun 1974	Spatial and Temporal Variations in Geometric and Material Properties of a Natural beach, by W. C. Krumbein and W. R. James	AD 785 572
TM 45	Jul 1974	Geomorphology and Sediments of the Inner New York Bight Continental Shelf, by S. J. Williams and D. B. Duane	AD 785 577
TM 46	Aug 1974	Propagation of <u>Spartina alterniflora</u> for Substrata Stabilization and Salt Marsh Development, by W. W. Woodhouse, Jr., E. D. Seneca, and S. W. Broome	AD 002 055
TM 47	Oct 1974	Wave Refraction Phenomena Over the Continental Shelf Near the Chesapeake Bay Entrance, by Y. Y. Chao	AD 002 056
TM 48	Jan 1975	The Use of Aerial Photography in the Study of Wave Characteristics in the Coastal Zone, by C. M. McClean and D. L. Harris	AD A008 011
TM 49	Mar 1975	Analysis and Interpretation of Littoral Environment Observation (LEO) and Profile Data Along the Western Panhandle Coast of Florida, by J. H. Balsillie	AD A009 755
TM 50	May 1975	Verification Study of a Bathymorphic Storm Surge Model, by G. Pararas-Carayannis	AD A012 799

## COASTAL ENGINEERING RESEARCH CENTER

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 51	May 1975	Large Wave Tank Tests of Riprap Stability, by J. P. Ahrens	AD A012 792
TM 52	Jun 1975	Salt Marsh Establishment and Development, by E. W. Garbisch, Jr., P. B. Woller, and R. J. McCallum	AD A014 136
TM 53	Jun 1975	Use of the Radioisotopic Sand Tracer (RIST) System, by C. W. Judge	AD A014 168
TM 54	Jul 1975	Geomorphology, Shallow Structure, and Sediments of the Florida Inner Continental Shelf, Cape Canaveral to Georgia, by E. P. Meisburger and M. E. Field	AD A015 022
TM 55	Oct 1975	Stability of Gobi Block Revetment to Wave Attack, by B. L. McCartney and J. P. Ahrens	AD A015 514
TM 56	Oct 1975	An Analysis of Drag Coefficient at Hurricane Windspeeds from a Numerical Simulation of Dynamical Water Level Changes in Lake Okeechobee, Florida, by R. W. Whitaker, R. O. Reid, and A. C. Vastano	AD A023 683
TM 57	Nov 1975	Effects of a Breakwater on Nearshore Currents Due to Breaking Waves, by P. L. Liu and C. C. Mei	AD A020 028
TM 58	Nov 1975	Surf Observations and Longshore Current Prediction, by J. H. Balsillie	AD A019 512
TM 59	Nov 1975	Simplified Method for Estimating Refraction and Shoaling Effects on Ocean Waves, by C. M. McClenan	AD A019 803
TM 60	Dec 1975	Techniques in Evaluating Suitability of Borrow Material for Beach Nourishment, by W. R. James	AD A019 936
TM 61	Dec 1975	Nature and Genesis of Some Storm Washover Deposits, by R. K. Schwartz	AD A021 057
TM 62	Dec 1975	An Effect of Permeability on Sand Transport by Waves, by K. E. B. Lofquist	AD A020 641

## COASTAL ENGINEERING RESEARCH CENTER

Technical Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TP 76-1	Mar 1976	Shoaling Rates and Related Data from Knik Arm Near Anchorage, Alaska, by C. H. Everts and H. E. Moore	AD A027 095
TP 76-2	Mar 1976	Geomorphology, Shallow Subbottom Structure, and Sediments of the Atlantic Inner Continental Shelf off Long Island, New York, by S. J. Williams	AD A025 467
TP 76-3	Apr 1976	Geomorphology and Sediments of Western Massachusetts Bay, by E. P. Meisburger	AD A025 444
TP 76-4	May 1976	Tests of Low-Density Marine Limestone for Use in Breakwaters, by D. M. Allison and R. P. Savage	AD A028 344
TP 76-5	May 1976	Wave Climate at Torrey Pines Beach, California, by S. S. Pawka, et al.	AD A026 223
TP 76-6	May 1976	Investigation of the Operating Characteristics of the Iowa Sediment Concentration Measuring System, by F. A. Locher, J. R. Glover, and T. Nakato	AD A027 026
TP 76-7	Jun 1976	Animal Colonization of Man-Initiated Salt Marshes on Dredge Spoil, by L. M. Cammen, E. D. Seneca, and B. J. Copeland	AD A028 345
TP 76-8	Jul 1976	Wave Reflection and Transmission at Permeable Breakwaters, by C. K. Sollitt and R. H. Cross III	AD A029 000
TP 76-9	Jul 1976	Statistical Properties of Fast Fourier Transform Coefficients Computed from Real-Valued, Covariance-Stationary, Period Random Sequences, by L. E. Borgman	AD A029 637
TP 76-10	Jul 1976	The Statistical Anatomy of Ocean Wave Spectra, by L. E. Borgman	AD A029 638
TP 76-11	Jul 1976	Grain Shape and Size Distribution Effects in Coastal Models, by J. I. Collins and C. B. Chesnutt	AD A031 814
TP 76-12	Aug 1976	Wind-Generated Waves for Laboratory Studies, by D. L. Harris	AD A029 639
TP 76-13	Aug 1976	Vegetation Establishment and Shoreline Stabilization: Galveston Bay, Texas, by J. W. Webb and J. D. Dodd	AD A030 169
TP 76-14	Sep 1976	Sampling Variation in Sandy Beach Littoral and Near-shore Meiofauna and Macrofauna, by J. L. Cox	AD A032 115
TP 76-15	Oct 1976	Effects of Dredging and Disposal on Some Benthos at Monterey Bay, California, by J. S. Oliver and P. N. Slattery	AD A032 684
TP 76-16	Oct 1976	Coastal Changes, Eastern Lake Michigan (1970-73), by R. A. Davis, Jr.	AD A033 297
TP 76-17	Oct 1976	Floating Breakwater Field Assessment Program, Friday Harbor, Washington, by B. H. Adey, E. P. Richey, and D. R. Christensen	AD A032 183



## COASTAL ENGINEERING RESEARCH CENTER

Technical Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TP 76-18	Oct 1976	Hydrodynamic Damping and "Added Mass" for Flexible Off-shore Platforms, by C. Petruskas	AD A034 534
TP 76-19	Dec 1976	Overlay of Large, Placed Quarrystone and Boulders to Increase Riprap Stability, by B. L. McCartney and J. P. Ahrens	AD A036 896
TP 76-20	Dec 1976	Lethal Effects of Suspended Sediments on Estuarine Fish, by J. M. O'Connor, D. A. Neumann, and J. A. Sherk, Jr.	AD A037 377
TP 77-1	Jan 1977	Beach Changes Caused by the Atlantic Coast Storm of 17 December 1970, by A. E. DeWall, P. C. Pritchett, and C. J. Galvin, Jr.	AD A037 378
TP 77-2	Jan 1977	Stilling Well Design for Accurate Water Level Measurement, by W. N. Seelig	AD A038 282
TP 77-3	Feb 1977	Sublethal Effects of Suspended Sediments on Estuarine Fish, by J. M. O'Connor, D. A. Neumann, and J. A. Sherk, Jr.	AD A040 646
TP 77-4	Apr 1977	Sediment Suspension and Turbulence in an Oscillating Flume, by T. C. MacDonald	AD A041 945
TP 77-5	May 1977	Suspended Sediment in the Littoral Zone at Ventnor, New Jersey, and Nags Head, North Carolina, by J. C. Fairchild	AD A042 061
TP 77-6	Jun 1977	Review of Design Elements for Beach-Fill Evaluation, by R. D. Hobson	AD A042 748
TP 77-7	Jul 1977	Evaluation of the Computation of Wave Direction with Three-Gage Arrays, by D. C. Esteve	AD A044 066
TP 77-8	Jul 1977	Hydraulics of Great Lakes Inlets, by W. N. Seelig and P. M. Sorensen	AD A044 074
TP 77-9	Sep 1977	Calculating a Yearly Limit Depth to the Active Beach Profile, by R. J. Hallermeier	AD A047 362
TP 77-10	Oct 1977	Littoral Environment Observations and Beach Changes Along the Southeast Florida Coast, by A. E. DeWall	AD A047 608
TP 77-11	Oct 1977	Forces Exerted by Waves on a Pipeline at or Near the Ocean Bottom, by G. L. Howle	AD A048 551
TP 77-12	Oct 1977	Wind-Wave Propagation Over Flooded, Vegetated Land, by F. E. Dettfield	AD A048 747
TP 77-13	Nov 1977	Development of Surge II Program with Application to the Sabine Pass Area for Hurricane Carla and Design Hurricanes, by R. C. Reid, A. C. Vastano, and T. J. Reid	AD A049 977
TP 78-1	Mar 1978	Wave Transformation at Isolated Vertical Piles in Shallow Water, by R. J. Hallermeier and R. E. Ray	AD A055 409

## COASTAL ENGINEERING RESEARCH CENTER

Technical Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TP 78-2	Mar 1978	Reanalysis of Wave Runup on Structures and Beaches, by P. N. Stoa	AD A055 562
TP 78-3	Apr 1978	Prototype Scale Mooring Load and Transmission Tests for a Floating Tire Breakwater, by M. L. Giles and R. M. Sorensen	AD A056 198
TP 78-4	Apr 1978	Geometry of Profiles Across Inner Continental Shelves the Atlantic and Gulf Coasts of the United States, by C. H. Everts	AD A055 876
TP 78-5	Aug 1978	Some Ripple Growth in an Oscillatory-Flow Water Tunnel, by K. E. B. Lofquist	AD A060 907
TP 79-1	May 1979	Relation Between Immersed Weight and Volume Rates of Longshore Transport, by C. J. Galvin	AD A072 524
TP 79-2	Jun 1979	Sediments, Shallow Subbottom Structure, and Sand Resources of the Inner Continental Shelf, Central Delmarva Peninsula, by M. E. Field	AD A074 022
TP 79-3	Sep 1979	Reconnaissance Geology of the Inner Continental Shelf, Cape Fear Region, North Carolina, by E. P. Meisburger	AD A076 974
TP 79-4	Dec 1979	Changes in Rates of Shore Retreat, Lake Michigan, 1967-76, by E. B. Hands	AD A081 863
TP 80-1	Feb 1980	Transport of Dredged Sediment Placed in the Nearshore Zone--Currituck Sand-Bypass Study (Phase I), by R. K. Schwartz and F. R. Musialowski	AD A084 186
TP 80-2	Feb 1980	Energy Spectra in Shallow U.S. Coastal Waters, by E. F. Thompson	AD A083 239
TP 80-3	Jun 1980	Estimating Nearshore Conditions for Irregular Waves, by W. N. Seelig and J. P. Ahrens	AD A091 174
TP 80-4	Jun 1980	The SPM Energy Flux Method for Predicting Longshore Transport Rate, by C. Galvin and C. R. Schweppe	AD A087 932
TP 80-5	Aug 1980	Experimental Dune Restoration and Stabilization, Nauset Beach, Cape Cod, Massachusetts, by P. L. Knutson	AD A092 110
TP 80-6	Aug 1980	A Method to Predict the Stable Geometry of a Channel Connecting an Enclosed Harbor and Navigable Waters, by C. H. Everts	AD A091 731
TP 80-7	Oct 1980	Prediction of Shore Retreat and Nearshore Profile Adjustments to Rising Water Levels on the Great Lakes, by E. B. Hands	AD A098 531
TP 80-8	Oct 1980	Calculation of Wave Attenuation Due to Friction and Shoaling: An Evaluation, by W. G. Grosskopf	AD A098 483

## COASTAL ENGINEERING RESEARCH CENTER

Technical Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TP 81-1	Feb 1981	Estimation of Wave Reflection and Energy Dissipation Coefficients for Beaches, Revetments, and Breakwaters, by W. N. Seelig and J. P. Ahrens	AD A101 879
TP 81-2	Apr 1981	Longshore Sand Transport Study at Channel Islands Harbor, California, by R. O. Bruno, et al.	AD A101 856
TP 81-3	May 1981	Sand Resources and Geological Character of Long Island Sound, by S. J. Williams	AD A104 082
TP 81-4	Nov 1981	Base Map Analysis of Coastal Changes in Aerial Photography, by C. H. Everts and D. C. Wilson	AD A110 497
TP 81-5	Dec 1981	Design of Riprap Revetments for Protection Against Wave Attack, by J. P. Ahrens	AD A115 220
TP 82-1	Jul 1982	Empirical Guidelines for Use of Irregular Wave Model to Estimate Nearshore Wave Height, by M. G. Mattie	AD A119 985
TP 82-2	Aug 1982	Computer Algorithm to Calculate Longshore Energy Flux and Wave Direction from a Two Pressure Sensor Array, by T. L. Walton and R. G. Dean	AD A119 990
TP 82-3	Aug 1982	Riprap Stability Scale Effects, by L. L. Broderick and J. P. Ahrens	AD A122 069
TP 82-4	Oct 1982	Wave Transmission and Mooring-Force Characteristics of Pipe-Tire Floating Breakwaters, by V. W. Harms, J. J. Westerink, R. M. Sorensen, and J. E. McTamany	AD A125 142
TP 83-1	Mar 1983	Forcing Regression Through a Given Point Using Any Familiar Computational Routine, by E. B. Hards	AD A127 868

## COASTAL ENGINEERING RESEARCH CENTER

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 76-1	Jan 1976	Observations of Barred Coastal Profiles Under the Influence of Rising Water Levels, Eastern Lake Michigan, 1967-71, by E. B. Hands	AD A023 191
TR 76-2	Aug 1976	Propagation and Use of <u>Spartina alterniflora</u> for Shoreline Erosion Abatement, by W. W. Woodhouse, Jr., E. D. Seneca, and S. W. Broome	AD A030 423
TR 76-3		Storm Surge Simulation in Transformed Coordinates:	
	Nov 1976	Volume I Theory and Application, by J. J. Wanstrath, et al.	AD A034 763
	Nov 1976	Volume II Program Documentation, by J. J. Wanstrath	AD A034 651
TR 77-1	Jan 1977	Wave Climate at Selected Locations Along U. S. Coasts, by E. F. Thompson	AD A037 904
TR 78-1	Oct 1978	An Evaluation of Two Great Lakes Wave Models, by E. F. Thompson	AD A063 935
TR 79-1	Sep 1979	A System for Using Radar to Record Wave Direction, by M. G. Mattie and D. L. Harris	AD A076 307
TR 80-1	Jun 1980	Two-Dimensional Tests of Wave Transmission and Reflection Characteristics of Laboratory Breakwaters, by W. N. Seelig	AD A089 603
TR 80-2	Aug 1980	Transformation of Monochromatic Waves from Deep to Shallow Water, by B. Le Mehaute and J. D. Wang	AD A098 538
TR 81-1	Oct 1981	Floating Breakwaters: State-of-the-Art Literature Review, by L. Z. Hales	AD A110 692
TR 82-1		Beach Profile Analysis System (BPAS):	
	Jun 1982	Volume I System Overview, by M. V. Fleming and A. E. DeWall	AD A119 447
	Jun 1982	Volume II BPAS User's Guide: The Editing Routines, EDIT 1 and EDIT 2, by M. V. Fleming and T. J. Lawler	AD A119 448
	Jun 1982	Volume III BPAS User's Guide: Analysis Module, SURVY 1, by M. V. Fleming and T. J. Lawler	AD A119 449
	Jun 1982	Volume IV BPAS User's Guide: Analysis Module, SURVY 2, by M. V. Fleming and T. J. Lawler	AD A119 450
	Jun 1982	Volume V BPAS User's Guide: Analysis Module, BEACH, by M. V. Fleming and T. J. Lawler	AD A119 451
	Jun 1982	Volume VI BPAS User's Guide: Analysis Module VOLCTR, by M. V. Fleming and T. J. Lawler	AD A119 452

## COASTAL ENGINEERING RESEARCH CENTER

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 82-1		Beach Profile Analysis System (BPAS):	
	Jun 1982	Volume VII BPAS User's Guide: Analysis Module ELVDIS, by M. V. Fleming, T. J. Lawler, and Diane French	AD A119 455
	Jun 1982	Volume VIII Supporting Appendixes for BPAS User's Guide, by M. V. Fleming and A. E. DeWall	AD A118 480
TR 82-2	Aug 1982	Nonrandom Behavior in Field Wave Spectra and Its Effect on Grouping of High Waves, by E. F. Thompson	AD A121 558
TR 82-3	Aug 1982	Depth-Limited Significant Wave Height: A Spectral Approach, by C. L. Vincent	AD A120 681
TR 82-4	Oct 1982	Performance of a Sand Trap Structure and Effects of Impounded Sediments, Channel Islands Harbor, California, by R. D. Hobson	AD A123 972

## BEACH EROSION BOARD

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 1-59	Apr 1959	Shore Erosion by Storm Waves, by J. M. Caldwell	AD 699 407
MP 2-59	May 1959	Behavior of Sand-Asphalt Groins at Ocean City, Maryland, by R. A. Jachowski	AD A037 880
MP 3-59	Sep 1959	Hurricane Surge Predictions for Chesapeake Bay, by C. L. Bretschneider	AD 699 408
MP 4-59	Nov 1959	Hurricane Surge Predictions for Delaware Bay and River, by C. L. Bretschneider	AD 699 904
MP 1-62	Jun 1962	A General Reconnaissance of Coastal Dunes of California, by R. P. Zeller	AD 699 905

## BEACH EROSION BOARD

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 1	1940	A Model Study of the Effect of Submerged Breakwaters on Wave Action, by W. C. Hall	AD 697 119
TM 2	Feb 1942	Abrasion of Beach Sand, by M. A. Mason	AD 697 120
TM 3	May 1944	Shore Processes and Beach Characteristics, by W. C. Krumbein	AD 697 121
TM 4	May 1944	Surface Features of Coral Reefs, by L. Dryden	AD 697 122
TM 5	May 1944	A Wave Method for Determining Depths Over Bottom Discontinuities, by M. A. Mason	AD 697 123
TM 6	Oct 1948	An Ocean Wave Measuring Instrument, by J. M. Caldwell	AD 697 124
TM 7	Sep 1944	Shore Currents and Sand Movement on a Model Beach, by W. C. Krumbein	AD 697 129
TM 8	Jul 1945	Depths of Offshore Bars, by G. H. Keulegan	AD 697 130
TM 9	Jul 1948	Proof Test of Water Transparency Method of Depth Determination, by J. V. Hall, Jr.	AD 697 131
TM 10	1948	Experimental Steel Sheet Pile Groins, Palm Beach, Florida, by BEB and C. W. Ross	AD 697 132
TM 11	Nov 1949	Reflection of Solitary Waves, by J. M. Caldwell	AD 699 389
TM 12	Feb 1952	Durability of Steel Sheet Piling in Shore Structures, by A. C. Ravner	AD 699 390
TM 13	Jan 1950	Longshore Current Observations in Southern California, by F. P. Shepard	AD 699 391
TM 14	Mar 1950	Report on Beach Study in the Vicinity of Mugu Lagoon, California, by D. L. Inman	AD 699 392
TM 15	Jan 1950	Longshore Bars and Longshore Troughs, by F. P. Shepard	AD 699 393
TM 16	May 1950	Accretion of Beach Sand Behind a Detached Breakwater, by J. W. Handin	AD 699 394
TM 17	Jun 1950	Test of Nourishment of the Shore by Offshore Deposition of Sand, by J. V. Hall, Jr.	AD 699 395
TM 18	Jul 1950	The Rayleigh Disk as a Wave Direction Indicator, by J. V. Hall, Jr.	AD 223 917
TM 19	Jul 1950	Submarine Topography and Sedimentation in the Vicinity of Mugu Submarine Canyon, California, by D. L. Inman	AD 699 396
TM 20	Jul 1950	Beach Cycles in Southern California, by F. P. Shepard	AD 699 397
TM 21	Nov 1950	The Interpretation of Crossed Orthogonals in Wave Refraction Phenomena, by W. J. Pierson, Jr.	AD 699 398

## BEACH EROSION BOARD

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 22	Mar 1951	The Source, Transportation, and Deposition of Beach Sediment in Southern California, by J. W. Handin	AD 699 399
TM 23	May 1951	The Use and Accuracy of the Emery Settling Tube for Sand Analysis, by D. W. Poole, W. S. Butcher, and R. L. Fisher	AD 699 400
TM 24	Apr 1951	The Accuracy of Present Wave Forecasting Methods with Reference to Problems in Beach Erosion on the New Jersey and Long Island Coasts, by W. J. Pierson, Jr.	AD 699 401
TM 25	Nov 1951	The Slope of Lake Surfaces Under Variable Wind Stresses, by B. Haurwitz	AD 699 402
TM 26	Nov 1951	Sand Movement on the Shallow Inter-Canyon Shelf at La Jolla, California, by F. P. Shepard and D. L. Inman	ATI 169 582
TM 27	Jun 1952	Wind Set-up and Waves in Shallow Water, by T. Saville, Jr.	AD 699 403
TM 28	Oct 1952	Source of Beach Sand at Santa Barbara, California, as Indicated by Mineral Grain Studies, by P. D. Trask	AD 699 404
TM 29	Dec 1952	Artificially Nourished and Constructed Beaches, by J. V. Hall, Jr.	AD 699 480
TM 30	Feb 1953	Annotated Bibliography on Tsunamis, by M. P. Cueller	AD 699 405
TM 31	Feb 1953	Laboratory Study of Wave Energy Losses by Bottom Friction and Percolation, by R. P. Savage	AD 011 564
TM 32	Mar 1953	Accuracy of Hydrographic Surveying in and Near the Surf Zone, by T. Saville, Jr., and J. M. Caldwell	AD 020 095
TM 33	Mar 1953	Laboratory Investigation of the Vertical Rise of Solitary Waves on Impermeable Slopes, by J. V. Hall, Jr., and G. M. Watts	AD 011 565
TM 34	Mar 1953	Development and Field Tests of a Sampler for Suspended Sediment in Wave Action, by G. M. Watts	AD 020 100
TM 35	Mar 1953	Analysis of Moving Fetches for Wave Forecasting, by K. Kaplan	AD 024 440
TM 36	Mar 1953	Wave and Lake Level Statistics for Lake Michigan, by T. Saville, Jr.	AD 020 097
TM 37	Mar 1953	Wave and Lake Level Statistics for Lake Erie, by T. Saville, Jr.	AD 020 093
TM 38	Mar 1953	Wave and Lake Level Statistics for Lake Ontario, by T. Saville, Jr.	AD 020 099
TM 39	Mar 1953	Areal and Seasonal Variations in Beach and Nearshore Sediments at La Jolla, California, by D. L. Inman	AD 020 041



## BEACH EROSION BOARD

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 40	Mar 1953	The Mechanics of Deep Water, Shallow Water, and Breaking Waves, by J. R. Morison	AD 020 096
TM 41	Aug 1954	Laboratory Study of Equilibrium Profiles of Beaches, by R. L. Rector	AD 046 515
TM 42	Oct 1953	A Study of Sand Movement at South Lake Worth Inlet, Florida, by G. M. Watts	AD 024 439
TM 43	Dec 1953	On Ocean Wave Spectra and a New Method of Forecasting Wind-Generated Sea, by G. Neumann	AD 026 444
TM 44	Jun 1954	Coast Erosion and the Development of Beach Profiles, by P. Bruun	AD 040 418
TM 45	Oct 1954	Modification of Wave Height Due to Bottom Friction, Percolation, and Refraction, by C. L. Bretschneider and R. O. Reid	AD 048 974
TM 46	Sep 1954	Field Investigations of Wave Energy Loss in Shallow Water Ocean Waves, by C. L. Bretschneider	AD 047 144
TM 47	Jul 1954	Stability of Oscillatory Laminar Flow Along a Wall, by Huon Li	AD 049 231
TM 48	Aug 1954	Sand Movement by Waves, by T. Scott	AD 049 232
TM 49	Aug 1954	Bore Hole Studies of the Naturally Impounded Fill at Santa Barbara, California, by P. D. Trask	AD 049 233
TM 50	Aug 1954	Statistical Significance of Beach Sampling Methods, by W. C. Krumbein	AD 046 516
TM 51	Oct 1954	Generation of Wind Waves Over a Shallow Bottom, by C. L. Bretschneider	AD 046 517
TM 52	Dec 1954	Laboratory Study of Effect of Tidal Action on Wave-Formed Beach Profiles, by G. M. Watts and R. F. Dearduff	AD 055 553
TM 53	Sep 1954	Laboratory Study of the Effect of Varying Wave Periods on Beach Profiles, by G. M. Watts	AD 046 518
TM 54	Nov 1954	Laboratory and Field Tests of Sounding Leads, by G. M. Watts	AD 077 006
TM 55	Nov 1954	North Atlantic Coast Wave Statistics Hindcast by Bretschneider--Revised Sverdrup-Munk Method, by T. Saville, Jr.	AD 060 737
TM 56	Oct 1954	An Electronic Wave Spectrum Analyzer and Its Use in Engineering Problems, by W. J. Pierson, Jr.	AD 046 975
TM 57	Feb 1955	North Atlantic Coast Wave Statistics Hindcast by Wave Spectrum Method, by G. Neumann and R. W. James	AD 060 738

## BEACH EROSION BOARD

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 58	Jul 1955	A Magnetic Tape Wave Recorder and Energy Spectrum Analyzer for the Analysis of Ocean Wave Records, by S. S. Chang	AD 109 838
TM 59	Feb 1955	Laboratory Study of Shock Pressures of Breaking Waves, by C. W. Ross	AD 060 789
TM 60	Jan 1955	Generalized Laboratory Study of Tsumani Run-up, by K. Kaplan	AD 090 790
TM 61	Aug 1955	Laboratory Study of Wind Tides in Shallow Water, by O. J. Sibul	AD 077 007
TM 62	Nov 1954	Restudy of Test-Shore Nourishment by Offshore Deposition of Sand, Long Branch, New Jersey, by R. L. Harris	AD 055 554
TM 63	Sep 1955	A Study of Sediment Sorting by Waves Shoaling on a Plane Beach, by A. T. Ippen	AD 077 008
TM 64	Oct 1955	Laboratory Data on Wave Runup and Overtopping on Shore Structures, by T. Saville, Jr.	AD 077 009
TM 65	Oct 1955	Sand Variation at Point Reyes Beach, California, by P. D. Trask and C. A. Johnson	AD 115 101
TM 66	Dec 1955	Factors Affecting the Economic Life of Timber in Coastal Structures, by R. A. Jachowski	AD 115 102
TM 67	Dec 1955	A Model Study of the Run-up of Wind-Generated Waves on Levees with Slopes of 1:3 and 1:6, by O. J. Sibul and E. G. Tickner	AD 074 529
TM 68	Feb 1956	Wave Action and Sand Movement Near Anaheim Bay, California, by J. M. Caldwell	AD 115 104
TM 69	Dec 1954	Wave Forces on Piles: A Diffraction Theory, by R. C. McCamy and R. A. Fuchs	AD 699 406
TM 70	Dec 1954	The Effect of Fetch Width on Wave Generation, by T. Saville, Jr.	AD 055 552
TM 71	Apr 1955	Re-Analysis of Existing Wave Force Data on Model Piles, by R. C. Crooke	AD 065 350
TM 72	Mar 1955	Laboratory Study of the Generation of Wind Waves in Shallow Water, by O. J. Sibul	AD 060 822
TM 73	Apr 1955	Graphical Approach to the Forecasting of Waves in Moving Fetches, by B. W. Wilson	AD 065 351
TM 74	May 1955	Water Surface Roughness and Wind Shear Stress in a Laboratory Wave Channel, by O. J. Sibul	AD 077 512
TM 75	Jun 1955	Mechanics of Bottom Sediment Movement Due to Wave Action, by M. Manohar	AD 077 513

## BEACH EROSION BOARD

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 76	Jun 1955	Movement of Sand Around Southern California Promontories, by P. D. Trask	AD 077 514
TM 77	Feb 1956	Behavior of Beach Fill at Ocean City, New Jersey, by G. M. Watts	AD 115 380
TM 78	Mar 1956	Hurricanes Affecting the Coast of Texas from Galveston to Rio Grande, by W. A. Price	AD 115 551
TM 79	Mar 1956	Orbital Velocity Associated with Wave Action Near the Breaker Zone, by D. L. Inman	AD 098 208
TM 80	Apr 1956	Model Study of Overtopping of Wind-Generated Waves on Levees with Slopes of 1:3 and 1:6, by O. J. Sibul and E. G. Tickner	AD 088 706
TM 81	Jun 1956	Laboratory Study of Short-Crested Wind Waves, by G. C. Ralls, Jr., and R. L. Wiegel	AD 071 976
TM 82	Jul 1956	Changes in Sand Level on the Beach and Shelf at La Jolle, California, by D. L. Inman and G. S. Rusnak	AD 114 828
TM 83	Jun 1956	Approximate Response of Water Level on a Sloping Shelf to a Wind Fetch Which Moves Directly Towards Shore, by R. O. Reid	AD 114 829
TM 84	Dec 1956	Wave Forecasting Relationships for the Gulf of Mexico, by C. L. Bretschneider	AD 132 762
TM 85	Sep 1956	Wave Statistics for the Gulf of Mexico off Brownsville, Texas, by C. L. Bretschneider and R. D. Gaul	AD 115 151
TM 86	Sep 1956	Wave Statistics for the Gulf of Mexico off Caplen, Texas, by C. L. Bretschneider and R. D. Gaul	AD 115 152
TM 87	Oct 1956	Wave Statistics for the Gulf of Mexico off Burrwood, Louisiana, by C. L. Bretschneider and R. D. Gaul	AD 115 153
TM 88	Oct 1956	Wave Statistics for the Gulf of Mexico off Apalachicola, Florida, by C. L. Bretschneider and R. D. Gaul	AD 115 154
TM 89	Oct 1956	Wave Statistics for the Gulf of Mexico off Tampa Bay, Florida, by C. L. Bretschneider and R. D. Gaul	AD 132 763
TM 90	Sep 1956	Relative Efficiency of Beach Sampling Methods, by W. C. Krumbein and H. A. Slack	AD 115 155
TM 91	Nov 1956	Changes in Configuration of Point Reyes Beach, California 1955-1956, by P. D. Trask	AD 111 323
TM 92	Mar 1957	Sand Bypassing at Port Huenemme, California, by R. P. Savage	AD 132 765
TM 93	Feb 1957	Modification of the Quadratic Bottom-Stress Law for Turbulent Channel Flow in the Presence of Surface Wind-Stress, by R. O. Reid	AD 132 766

## BEACH EROSION BOARD

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 94	May 1957	Preliminary Report: Laboratory Study of the Effect of Uncontrolled Inlet on the Adjacent Beaches, by T. Saville, Jr., J. M. Caldwell, and H. B. Simmons	AD 158 636
TM 95	May 1957	Effect of Bottom Roughness on Wind Tide in Shallow Water, by E. G. Tickner	AD 158 635
TM 96	Jun 1957	Factors Affecting the Durability of Concrete in Coastal Structures, by B. Mather	AD 158 634
TM 97	Jul 1957	Turbulent Flow Near an Oscillating Wall, by G. Kalkanis	AD 158 751
TM 98	Jun 1957	Hurricane Wave Statistics for the Gulf of Mexico, by B. W. Wilson	AD 158 633
TM 99	Sep 1957	Model Tests on a Triple-Bulkhead Type of Floating Breakwater, by C. W. Ross	AD 150 541
TM 100	Oct 1957	Wave-Generated Ripples in Nearshore Sands, by D. L. Inman	AD 150 542
TM 101	Oct 1957	Dune Formation and Stabilization by Vegetation and Plantings, by J. H. Davis	AD 150 543
TM 102	Oct 1957	A Method for Specification of Sand for Beach Fills, by W. C. Krumbein	AD 155 596
TM 103	Dec 1957	Model Study of Wave Refraction, by R. L. Wiegel and A. L. Arnold	AD 158 597
TM 104	Feb 1958	The Mechanics of the Motion of Discrete Spherical Bottom Sediment Particles Due to Shoaling Waves, by P. S. Eagleson, R. G. Dean, and L. A. Peralta	AD 158 595
TM 105	Mar 1958	Movement of bottom Sediment in Coastal Waters by Currents and Waves: Measurements with the Aid of Radioactive Tracers in the Netherlands, by J. J. Arlman, P. Santema, and J. W. Svasek	AD 203 936
TM 106	Aug 1958	Laboratory Study of Breaking Wave Forces on Piles, by H. A. Hall	AD 203 937
TM 107	Aug 1958	Behavior of Beach Fill and Borrow Area at Harrison County, Mississippi, by G. M. Watts	AD 216 606
TM 108	Nov 1958	Surf Statistics for the Coasts of the United States, by J. R. Helle	AD 216 609
TM 109	Mar 1959	Laboratory Data on Wave Runup on Roughened and Impermeable Slopes, by R. P. Savage	AD 216 610
TM 110	Apr 1959	Beaches Near San Francisco, California 1956-1957, by P. D. Trask	AD 216 771
TM 111	May 1959	Large-Scale Tests of Wave Forces on Piling (Preliminary Report), by C. W. Ross	AD 216 772

## BEACH EROSION BOARD

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 112	May 1959	The Propagation of Tidal Waves into Channels of Gradually Varying Cross-Section (Effects of a Frictional Resistance Over the Bed), by P. Perroud	AD 227 461
TM 113	Jun 1959	Behavior of Beach Fill at Virginia Beach, Virginia, by G. M. Watts	AD 227 462
TM 114	Jun 1959	Laboratory Study of the Effects of Groins on the Rate of Littoral Transport; Equipment Development and Initial Tests, by R. P. Savage	AD 227 463
TM 115	Jun 1959	Suspended Sediment Sampling in Laboratory Wave Action, by J. C. Fairchild	AD 227 464
TM 116	Jul 1959	On the Theory of the Highest Waves, by J. E. Chapplelear	AD 227 465
TM 117	Aug 1959	The Damping of Oscillatory Waves by Laminar Boundary Layers, by P. S. Eagleson	AD 227 466
TM 118	Aug 1959	Wave Variability and Wave Spectra for Wind-Generated Gravity Waves, by C. L. Bretschneider	AD 227 467
TM 119	Aug 1960	Sand Movement by Wind Action (On the Characteristics of Sand Traps), by K. Horikawa and H. W. Shen	AD 246 157
TM 120	Aug 1960	The Prediction of Hurricane Storm-Tides in New York Bay, by B. W. Wilson	AD 246 351
TM 120A	Apr 1961	Discussion of Technical Memorandum No. 120 (The Prediction of Hurricane Storm-Tides in New York Bay), by D. L. Harris and B. W. Wilson	AD 258 308
TM 121	Sep 1960	Development and Tests of a Radioactive Sediment Density Probe, by J. M. Caldwell	AD 246 158
TM 122	Nov 1960	Effects of Reefs and Bottom Slopes on Wind Set-up in Shallow Water, by E. G. Tickner	AD 252 729
TM 123	Jan 1961	Transient Wind Tides in Shallow Water, by E. G. Tickner	AD 252 646
TM 124	Mar 1961	Experimental Study on the Solitary Wave Reflection Along a Straight Sloped Wall at Oblique Angle of Incidence, by T. C. Chen	AD 258 442
TM 125	Mar 1961	On the Description of Short-Crested Waves, by J. E. Chapplelear	AD 258 443
TM 126	Jul 1961	Equilibrium Characteristics of Sand Beaches in the Offshore Zone, by P. S. Eagleson, B. Glennie, and J. A. Draup	AD 266 263
TM 127	Aug 1961	Behavior of Beach Fill and Borrow Area at Prospect Beach, West Haven, Connecticut, by W. H. Vesper	AD 266 262
TM 128	Sep 1961	Geomorphology of the South Shore of Long Island, New York, by N. E. Tanev	AD 266 264

## BEACH EROSION BOARD

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 129	Nov 1961	Littoral Materials of the South Shore of Long Island, New York, by N. E. Taney	AD 271 022
TM 130	Nov 1961	The Analysis of Observational Data from Natural Beaches, by W. C. Krumbein	AD 271 024
TM 131	Nov 1962	Littoral Studies Near San Francisco Using Tracer Techniques, by A. M. Kamel	AD 297 385
TM 132	Nov 1962	Waves in Inland Reservoirs (Summary Report on Civil Works Investigation, Projects CW-164 and CW-165), by OCE	AD 297 386
TM 133	Feb 1963	Higher Approximation to Nonlinear Water Waves and the Limiting Heights of Cnoidal, Solitary, and Stokes' Waves, by E. V. Laitone	AD 420 426
TM 134	Jun 1963	Beach Profile as Affected by Vertical Walls, by A. L. Kadib	AD 420 424
TM 135	Aug 1963	The Relationship between Watershed Geology and Beach Radioactivity, by J. R. Byerly	AD 420 425

CONCRETE LABORATORY

## CONCRETE LABORATORY

Bulletins

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
		<u>Combined Series</u>	
27	Dec 1946 Revised Jul 1947	Concrete Analyses, Testing and Research	
30	Nov 1947	Air Entrainment in Concrete Design	
34	Feb 1950	The Relation of Thermal Expansion of Aggregates to the Durability of Concrete	AD A950 073
39	Aug 1954	Aggregates for Mass Concrete	AD 100 933

Handbooks

Unnumbered	Aug 1949	Handbook for Concrete and Cement. (\$10.00. Supplements and revisions are issued quarterly at subscription rates of \$8.00 per year)	
------------	----------	--	--



## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-8	May 1952	Investigation of Ceramic Aggregate for Concrete	
MP 6-30	Apr 1953	Investigations to Develop a Test for Drying Shrinkage of Concrete	
MP 6-39	Jun 1953	Tests of Trief Cement and Laboratory-Ground, Water-Quenched, Blast-Furnace Slag Cement	AD 756 358
MP 6-41	Oct 1951 Revised Jun 1953	Basic Statistical Methods for the Concrete Laboratory	
	Apr 1954	Supplement 1 Statistical Methods in Concrete Research	
MP 6-48	Sep 1953	Comparative Tests of Soniscope for Ultrasonic Testing of Concrete	AD 756 329
MP 6-70	Jan 1954	Tests of Joint Sealing Materials	
MP 6-72	May 1954	Ultrasonic Investigation of Cracking in Kansas City Floodwall (Armourdale Unit)	AD B951 480
MP 6-80	Mar 1954	Tests on Form Lumber and Form Oil	
MP 6-108	Nov 1954	Comparison of Methods of Test for Coefficient of Linear Thermal Expansion of Concrete	
MP 6-109		Development of Nonfreezing Weathering Test for Concrete:	
	Nov 1954	Report 3 Supplementary Program: Correlation Tests WES & SWD	
MP 6-111	Nov 1954	Chemical Analysis of Portland Cement for Magnesium, Sodium, and Potassium Oxides, and Sulfur Trioxide	
MP 6-112	Dec 1954 Revised Dec 1957	Activities of the Waterways Experiment Station in Connection with Civil Works Investigations Relating to Concrete - Summary Report, November 1957	
MP 6-123		Investigation of Cement-Replacement Materials:	
	Apr 1955	Report 1 Preliminary Investigations (Phase A)	
	Jan 1956	Report 2 Effects on Flexural Strength (Preliminary Investigations - Phase A)	AD B951 481
	May 1956	Report 3 Effects of Three Chemical Admixtures on the Properties of Concrete	
	Apr 1956	Report 4 Preliminary Field Investigations (Phase B)	AD 756 300
	Mar 1957	Report 5 Performance of Various Materials in Mass Concrete, Laboratory Study (Phase C)	
	May 1957	Report 6 Performance of Various Materials in Mass Concrete, Field Study (Phase D)	

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-123 (Cont)	Oct 1958	Report 7 Comparative Tests of Compressive Strength of Mortars Containing Pozzolans	AD 757 137
	Aug 1959 Revised Mar 1962	Report 8 Tests of Samples of Fly Ash, Sutton Reservoir Project	AD 756 322
	Feb 1964	Report 9 Significance of Pulse-Velocity Data for Mass Concrete Blocks	AD 757 241
	Aug 1962	Report 10 Use of Large Amounts of Pozzolans in Lean Mass Concrete	AD 756 299
	Jun 1964	Report 11 Pulse Velocity and Compressive Strength at Advanced Ages of Phase D Concrete Blocks	AD 757 242
	Apr 1965	Report 12 Compressive Strength Development of 193 Concrete Mixtures During 10 Years of Moist Curing (Phase A), by Bryant Mather	AD 756 324
	Nov 1966	Report 13 Use of Water-Reducing and Water-Reducing, Retarding Admixtures in Mass Concrete, by W. O. Tynes	AD 756 131
	Oct 1966	Report 14 Use of Large Amounts of Pozzolans in Lean Mass Concrete (Second Phase), by W. O. Tynes	AD 756 185
	Nov 1967	Report 15 Temperature Rise of Mass Concrete Mixtures, by W. O. Tynes	AD 756 132
MP 6-132		Investigation of Creep in Concrete:	
	Jun 1955	Report 1 Review of Literature on Creep in Concrete	
	Nov 1957	Report 2 Evaluation of Equipment and Initial Tests	
	Jan 1958	Report 3 Creep of Mass Concrete	
	Oct 1967	Report 4 Effect of Specimen Size and Wet-Sieving to Remove Aggregate Larger than 1-1/2 In., by E. E. McCoy and H. T. Thornton	AD 661 294
MP 6-137	Jun 1955	Petrographic Examination of Hardened Concrete	
MP 6-158	Mar 1956	Report of Aggregate Tests, Devil's Kitchen Dam	
	May 1957	Report 2 Second Series of Tests	
MP 6-159	Feb 1956	Tensile Crack Exposure Tests of Stressed Reinforced Concrete Beams	
MP 6-165	Apr 1956	Tests of Concrete Cores from Devil's Kitchen Dam, Illinois	

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-166		Study of Variables in Moisture Loss Testing of Membrane-Forming Curing Compounds:	
	Apr 1956	Report 1 Effect of Batch Order, Temperature and Velocity	
MP 6-169	May 1956	Cement-Aggregate Reaction: What is the Problem?	
MP 6-173	Jun 1956	The Partial Replacement of Portland Cement in Concrete	
MP 6-174	Jun 1956	Application of Petrographic Procedures to Highway Engineering	
MP 6-177	Jun 1956 Revised Jul 1958	Exposure of Concrete Specimens at Treat Island, Maine	
MP 6-178	Jul 1956	Factors Affecting Time-Temperature Relations in Automatic Freezing-and-Thawing Tests of Concrete	
MP 6-183	Aug 1956	Resistance to Accelerated Laboratory Freezing and Thawing of Concrete Specimens Made with Expanded Lightweight Aggregates	
MP 6-184	Aug 1956	Report of Aggregate Tests, Cape Girardeau Floodwall	
MP 6-187	Nov 1956	A Brief Investigation of a Modified Penetration Apparatus for Determining Consistency of Freshly Mixed Concrete	
MP 6-188	Nov 1956	Study of Concrete Specimens Damaged by Electrolysis	
MP 6-189	Nov 1956	A Limited Investigation of the Chace Air Meter (AE-55 Air Indicator)	
MP 6-195	Jan 1957	An Investigation of Sanded Grouts Using Manufactured Sands	
MP 6-196	Feb 1957	Cooperative Sonic Tests of a Standard Specimen	
MP 6-198	Jan 1957	Laboratory Tests of Portland Blast-Furnace Slag Cements	
MP 6-201	Mar 1957	Comparison of Methods for Estimation of Tricalcium Aluminate Content of Portland Cement in Connection with the Evaluation of Potential Sulfate Resistance	
MP 6-209	Mar 1957	Cement with Anhydrite	
MP 6-211	Apr 1957	Concrete Research at U. S. Army Engineer Waterways Experiment Station	
MP 6-218	May 1957	Investigation of a Proposed Aggregate Degradation Test Method	
MP 6-223	Feb 1953	Correlation Between Laboratory Accelerated Freezing and Thawing and Weathering at Treat Island, Maine	

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-235	Aug 1957	Tests of Schokk beton Precast Concrete Units in Iceland	
MP 6-236	Oct 1957	Investigation of Deterioration of Concrete, Davis Air Force Base, Muskogee, Oklahoma	
	Feb 1958	Appendix A Cement, Sulfate, and Alkali Content and Additional Petrographic Examination of Samples of Concrete Cores	
MP 6-247	Dec 1957	Investigation of Pozzolanic and Other Materials to Replace Part of the Portland Cement in Mass Concrete Dams	AD B951 482
MP 6-251	Jan 1958	Report of Aggregate Tests, Alton Floodwall	
MP 6-254	Jan 1958	Petrographic Data on Seven Rock Samples Used in Pore-Structure Research	
MP 6-255	Feb 1958	Development of Concrete Tests for Mechanical Casting Plant, Greenville, Mississippi	
MP 6-256	Feb 1958	Effect of Entrained Air on Resistance to Accelerated Laboratory Freezing-and-Thawing of Concrete Specimens Made with Expanded Lightweight Aggregates	AD B951 483
MP 6-257	Feb 1958	Report of Concrete Mixture Design Studies, Devils Kitchen Dam	
MP 6-262	Mar 1958	Composition of Samples of Glacial Till from Otter Brook Dam, New Hampshire, and North Hartland Dam Site, Vermont	
MP 6-263	Mar 1958	Use of the Soniscope by Concrete Division, U.S. Army Engineer Waterways Experiment Station, Corps of Engineers	
MP 6-267	Jun 1958	Investigation of the Schmidt Concrete Test Hammer	AD B951 484
MP 6-270	Jun 1958	Laboratory Testing and Durability of Concrete	
MP 6-277	Jul 1958	Quality Materials for Highway Construction	
MP 6-278	Jul 1958	"Soundness" Tests of Concrete Aggregates	
MP 6-279	Aug 1958	The Relative Humidity Method of Test for Moisture Condition of Concrete Masonry Units	
MP 6-281	Aug 1958	Tests of Concrete Aggregates, Carlyle Reservoir, St. Louis District	
	Mar 1959	Appendix A Tests of Huelsman Quarry Stone for Suitability for Use as Riprap, Carlyle Dam	
MP 6-286	Oct 1958	High-Pressure Test for Determining Air Content of Hardened Concrete	AD 756 304

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-290	Oct 1958	Investigation of the Potential Sulfate Resistance of Ten Portland Cements	
MP 6-297	Dec 1958	Laboratory Tests of Concrete and Reinforcing Steel, Port Allen Lock	
MP 6-318	Jan 1959	Investigation of Causes and Determination of Methods to Prevent Formation of Incrustations on Perforated Cast-Iron Collector Pipe, New Orleans District	
MP 6-319	Jan 1959	The Mineralogical Properties of Aggregates and Their Significance	
MP 6-326	Mar 1959	Tests of Dust and Concrete Cores from Runway, Dow Air Force Base, Bangor, Maine	
MP 6-328	Mar 1959	Comparison of Methods of Measuring Drying Shrinkage of Concrete Masonry Units	
MP 6-329	Mar 1959	Tests of Construction Materials, Cooper Dam, New Orleans District	
MP 6-330	Mar 1959	Effects of Lignite in Sand on Compressive Strength of Mortar, Greenville Casting Plant, Vicksburg District	
MP 6-334	Apr 1959	Tests of Concrete Aggregates, St. Louis Flood Protection Project, St. Louis District	
MP 6-342	Oct 1959	Electronic Computation of Concrete Temperatures, Greers Ferry Dam, Arkansas	AD 756 298
MP 6-345	Jul 1959	Effectiveness of Mineral Admixtures in Preventing Excessive Expansion of Concrete Due to Alkali-Aggregate Reaction	
MP 6-351	Jul 1959	Investigation of Reinforcing Bars from Splitter Wall, Texarkana Dam	
MP 6-354	Aug 1959	Determination of Sulfate Ion in Soils and Water	
MP 6-384	Mar 1960	Research in Foundation Grouting with Cement	
MP 6-389	Apr 1960	Petrology of Concrete Aggregate	
MP 6-395	May 1960	Investigation of Compressive Strength of Molded Cylinders and Drilled Cores of Concrete Containing Crushed Limestone Aggregate	
MP 6-400	Jun 1960	Tests of Pumice, Lesser Antilles	
MP 6-405	Jul 1960	Tests of Aggregate Samples Proposed for Chain of Rocks, Low Water Dam No. 27	
MP 6-408	Sep 1960	Petrographic Data on Beach, Dune and River Sands	

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-409	Aug 1960	Project HOB0, Grouting Support	
MP 6-410	Sep 1960	Investigation of Sand-Cement Grouts	
MP 6-415	Dec 1960	Processing Aggregates for Corps of Engineers Dams	
MP 6-416	Mar 1961	An Investigation of Methods for Determining the Percentage of Free Moisture in Fine Aggregate	
MP 6-419	Mar 1961	Drilling and Grouting Support, Project COWBOY	
MP 6-420	Mar 1961	Concrete Research at U. S. Army Engineer Waterways Experiment Station	
MP 6-421	Mar 1961	Description of the Concrete Division, U. S. Army Engineer Waterways Experiment Station, Jackson Installation, Jackson, Mississippi	
MP 6-422	Mar 1961	Extremely Lean Mass Concrete with Pozzolans	
MP 6-425	Apr 1961	Project BUCKBOARD, Grouting Support	AD 756 350
MP 6-429	Apr 1961	Special Grouting Operations for Underground Nuclear Tests	
MP 6-431	May 1961	Significance of ASTM Designation C 265, Calcium Sulfate in Hydrated Portland Cement Mortar	
MP 6-433		Masonry Unit-Masonry Mortar Interaction:	
	Jun 1961	Report 1 Review of Literature	
MP 6-452	Sep 1961	Investigation of a Proprietary Rapid-Setting Cementitious Material	AD 756 301
MP 6-456	Oct 1961	Velocity Tests of Concrete, Riverside Wall, Ashley Street Plant, Union Electric Company, St. Louis, Missouri	
MP 6-460	Dec 1961	Pozzolan	
MP 6-467	Jan 1962	Optimum Air Content for Interior Mass Concrete	
MP 6-471	Jan 1962	Investigation of Cationic Admixtures in Concrete	
MP 6-473	Feb 1962	Fly Ash and Water-Reducing Admixtures for Articulated Concrete Mattress	
MP 6-476	Mar 1962	Comparative Compressive Strength of Rodded and Vibrated Cylinders	AD 757 382
MP 6-480	Mar 1962	Evaluation of Stone for Protection Work	

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-493		Investigation of Concrete in Eisenhower and Snell Locks, St. Lawrence Seaway:	
	May 1962	Report 1 Inspection and Repairs	
	Jul 1963	Report 2 Examination of Cores	
MP 6-510	Jul 1962	Investigation of Abnormal Stiffening of Concrete Containing Calcined Shale Pozzolan	AD A950 086
MP 6-514	Jul 1962	Project GNOME; Design, Testing, and Field Pumping of Grout Mixtures	
MP 6-517	Aug 1962	Method to Determine Height of Grout in a Deep Hole	
MP 6-520		High-Compressive-Strength Concrete:	
	Aug 1962	A Review of the State of the Art	
	Feb 1964	Report 2 Development of Concrete Mixtures	AD 433 651
	Sep 1965	Report 3 Summary Report, by K. L. Saucier, W. O. Tynes, and E. F. Smith	AD 622 445
MP 6-523	Sep 1962	Investigation of Aggregate Sources, Yazoo Backwater Project, Vicksburg District	AD 751 599
MP 6-527	Sep 1962	Velocity Tests of Concrete, Retaining Wall, South Amsterdam, New York	AD 751 600
MP 6-530	Sep 1962	Alkali-Silica and Alkali-Carbonate Reactivity of a South Dakota Sand	AD 751 601
MP 6-531	Sep 1962	Effect of Duration of Moist Curing on the Relative Durability of Concrete in Freezing and Thawing	AD 751 471
MP 6-533	Oct 1962	Effect of Added Gypsum on the One-Day Strength of Mortar	AD 751 754
MP 6-538	Nov 1962	Tests of Concrete Mixer Performance, Carlyle Reservoir Project, Carlyle, Illinois	AD 751 753
	Jan 1965	Errata Sheet	
MP 6-539	Nov 1962	Tests of Samples from Potential Riprap Sources, Shelbyville Reservoir, Kaskaskia River, Illinois	AD 751 752
MP 6-548	Dec 1962	Shale Samples, Waco Dam, Texas (includes Appendix A)	
MP 6-567	Feb 1963	High-Compressive-Strength Concrete, A Progress Report	AD 751 602
MP 6-568	Apr 1963	Research on Suitability of Locally Available Aggregates for Highway Construction	
MP 6-570	Jan 1963	Project DANNY BOY: Petrographic Examination and Physical Tests of Selected Cores	AD 751 755

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-573	May 1963	Composition and Constitution of Ten Samples of Glacial Till, St. Lawrence Seaway Project	AD 752 105
MP 6-575	Apr 1963	Operation NOUGAT, Shot HARD HAT Grouting Support	AD 423 237
MP 6-579	May 1963	Tests of Rock Cores from Diversion Tunnel Site, DeGray Dam, Caddo River, Arkansas	AD 752 181
MP 6-585	Jul 1963	Evaluation of Concrete by Ultrasonic Testing, F. E. Warren Auxiliary Sites, Squadron III	AD 752 182
MP 6-586	Jul 1963	Temperature Rise Tests of Mass Concrete for Locks and Dams 1 and 2, Arkansas Post Canal Route, Arkansas River, Arkansas	AD 752 104
MP 6-588	Jul 1963	Investigation of Concrete Aggregates, Shelbyville Reservoir Project	AD 752 109
MP 6-589	Jul 1963	Investigation of Concrete Aggregate and Riprap Stone for the Rend Lake Reservoir	AD 752 106
MP 6-591	Jul 1963	Petrographic Examination of Clays and Shales and Temperature Rise Test of Concrete, Amistad Dam, Texas	AD 752 108
MP 6-596	Aug 1963	Investigation of Concrete Materials and Riprap for Use at DeGray Dam	AD 752 419
MP 6-603	Oct 1963	Construction Materials, Columbia and Jonesville Locks and Dams, Vicksburg District	AD 752 802
MP 6-604	Oct 1963	Determining the Coordination Number of Aluminum Ions by X-ray Emission Spectroscopy	AD 752 259
MP 6-609	Nov 1963	Dynamic and Static Tests of Plain Concrete Specimens	AD 752 803
	Nov 1964	Report 2 Phase II: Flexure and Triaxial Compression, by R. L. Lundeen	AD 752 804
MP 6-611	Dec 1963	Durability and Behavior of Pretensioned-Prestressed Concrete Beams	AD 752 325
MP 6-613		Concrete Laboratory Studies, Dworshak (Bruce's Eddy) Dam, North Fork, Clearwater River, Near Orofino, Idaho:	
	Dec 1963	Report 1 Beam Tests	AD 752 805
	Dec 1964	Report 2 Creep Tests, by E. F. McCoy, J. K. Allgood, and H. T. Thornton	AD 752 806
	Dec 1964	Report 3 Additional Tests of Large Beams, by E. F. Smith and W. O. Tynes	AD 752 807
MP 6-616	Jan 1964	Evaluation of Asphaltic Waterproofing Systems for Concrete Structures	AD 752 110
MP 6-624	Feb 1964	The Strength of Portland-Cement Concrete as Affected by Air, Water, and Cement Content	AD 752 326



## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-628	Apr 1963	Operation SUN BEAM; Shot SMALL BOY; Design, Testing, and Field Pumping of Grout Mixtures	AD 411 344
MP 6-634	Mar 1964	Concrete Mixer Performance; Mattress Casting Fields, Caruthersville, Missouri, and Richardson Landing, Tennessee	AD 752 808
MP 6-635	Mar 1964	Concrete Mixer Performance, Vidalia Mattress Casting Plant, Vidalia, Louisiana	AD 752 809
MP 6-637	Mar 1964	Making and Curing Concrete Specimens	AD 753 163
MP 6-640	Apr 1964	Project DANNY BOY: Design, Testing, and Field Pumping of Grout Mixtures	AD 752 741
MP 6-643	Apr 1964	Investigation of the Feasibility of Manufacturing Aggregate by Nuclear Methods	AD 601 698
MP 6-646	Apr 1964	Alkali-Silica and Alkali-Carbonate Reactivity of Some Aggregates from South Dakota, Kansas, and Missouri	AD 752 810
MP 6-650	May 1964	Instruments for Determining the Elevation of Grout in Deep Holes	AD 483 992
	Apr 1966	Report 2 Further Investigations, by B. J. Houston	AD 483 901
MP 6-653	May 1964	Examination of Concrete, U. S. Military Academy, West Point, New York	AD 752 905
MP 6-658	Jun 1964	Tests of Shale and Coal Cores from Proposed Spillway Site, Shelbyville Reservoir, Kaskaskia River, Illinois	AD 753 521
MP 6-659	Jun 1964	Alkali-Carbonate Reaction in Concrete from Chickamauga Dam Powerhouse	AD 753 522
MP 6-660		Project Pre-SHOONER:	
	Jul 1964	Report 1 Stem Design (superseded by Report 2)	AD 752 878
	Jan 1965	Report 2 Stem Design and Shotcrete, Grout, and Concrete Support, by K. L. Saucier, J. C. Wines, and G. V. Marler	
MP 6-665	Jul 1964	Durability of Prestressed Concrete Beams	AD 752 879
MP 6-669	Aug 1964	Sodium Chloride in Estuary Models, by R. E. Richter	AD 753 523
MP 6-671	Aug 1964	Cooperative Investigation of Acceptance Test Methods for Chemical Analysis of Pozzolans for Major Oxides, by Leonard Pepper	AD 753 338
MP 6-674	Oct 1964	Research on Plain Concrete, by Bryant Mather	AD 753 524

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-681	Nov 1964	Effect of Load on Modulus of Elasticity, by D. A. Linger and E. E. McCoy	AD 739 562
MP 6-682	Nov 1964	Alkali Reactions with Carbonate Rock, by Bryant Mather	AD 739 561
MP 6-690	Dec 1964	Effects of Sea Water on Concrete, by Bryant Mather	AD 739 563
MP 6-692	Jan 1965	Evaluation of 16-cu-ft Laboratory Concrete Mixer, by K. L. Saucier	AD 739 564
MP 6-695	Jan 1965	Petrographic Examination of Samples from Buffalo Harbor, New York, by W. I. Luke and Katharine Mather	AD 740 283
MP 6-698	Jan 1965	High-Strength, High-Density Concrete, by Katharine Mather	AD 740 284
MP 6-700	May 1965	Project SHOAL, Laboratory and Field Grouting Support, Project 9.1, by J. E. McDonald and J. M. Polatty	AD 739 979
MP 6-705	Feb 1965	Design, Analysis, and Construction of Precast Elements with Bamboo Reinforcements, by E. F. Smith and K. L. Saucier	AD 740 285
MP 6-709	Feb 1965	Concrete from A to Z, by Bryant Mather	AD 739 980
MP 6-710	Feb 1965	Shape, Surface Texture, and Coatings of Aggregates, by Bryant Mather	AD 739 981
MP 6-715	Mar 1965	Investigation of Damage by Fire to Concrete, Ensley Pumping Station, Memphis, Tennessee, by A. D. Buck and T. B. Kennedy	AD 739 982
MP 6-716	Apr 1965	Laboratory Freezing-and-Thawing Tests of Concrete, by Bryant Mather	AD 630 066
MP 6-717	Apr 1965	Ultrasonic Testing of Concrete Minuteman Facilities, Grand Forks Air Force Base, North Dakota, by H. T. Thornton	AD 740 286
MP 6-719	Apr 1965	Application of Petrography to Radiation Shielding Concrete, by Katharine Mather	AD 740 660
MP 6-720	Apr 1965	Investigation of Procedures for Testing Grout Fluidifiers, by R. L. Curry	AD 740 279
MP 6-724	Jun 1965	Investigation of a Reaction Involving Nondolomitic Limestone Aggregate in Concrete, by A. D. Buck	AD 740 278
MP 6-727	Jun 1965	Admixtures for Concrete, by Bryant Mather	AD 740 661

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-729	Apr 1965	Project DUGOUT: Concrete, Grout, and Shotcrete Support, and Design and Postshot Evaluation of Stem, by K. L. Saucier	AD 740 662
MP 6-730	Aug 1965	Investigation of Concrete Aggregates and Riprap, Kaskaskia River, Illinois, Navigation Improvement, by A. D. Buck and B. J. Houston	AD 740 663
MP 6-731	Aug 1965	Study of Microcracking of Hardened Portland-Cement Grouts Induced by Dynamic Loading, by L. E. Fouche	AD 740 280
MP 6-732	Jul 1965	Aggregates, by Bryant Mather	AD 740 287
MP 6-737	Aug 1965	Partially Compacted Weight of Concrete as a Measure of Workability, by Bryant Mather	AD 740 974
MP 6-738	Aug 1965	Investigation of Concrete Materials for Felsenthal and Calion Locks and Dams, Ouachita and Black Rivers, Arkansas and Louisiana, by A. D. Buck and R. L. Curry	AD 740 976
MP 6-739	Sep 1965	Petrographic Examination of Hardened Concrete, by Katharine Mather	AD 740 947
MP 6-740	Feb 1965	Investigation of Manufacture of Aggregate and Riprap by Nuclear Means, by B. J. Houston, R. L. Stowe, and D. C. Banks	AD 697 666
MP 6-746	Oct 1965	A Resonant Vibration Technique for Laboratory Determination of Shear Wave Velocity, by E. E. McCoy	AD 740 998
MP 6-760	Nov 1965	Sonoscope Survey, Pad 39-A, Cape Kennedy, Fla., by H. T. Thornton	AD 740 977
MP 6-761	Dec 1965	Sonoscope Investigation of Elmendorf Air Force Base Hospital, Anchorage, Alaska, by H. T. Thornton	AD 740 978
MP 6-762	Nov 1965	Evaluation of an Instrument to Detect Presence, Size and Depth of Steel Embedded in Portland-Cement Concrete, by K. L. Saucier	AD 740 881
MP 6-771	Dec 1965	Strains in Concrete Cylinders Molded Horizontally and Loaded Vertically, by E. E. McCoy	AD 741 931
MP 6-772	Dec 1965	Concrete Aggregates, by Bryant Mather	AD 741 932
MP 6-773	May 1965	Project DRIBBLE, Salmon Event; Laboratory Design, Analysis, and Field Control of Grouting Mixtures Employed at a Nuclear Test in Salt, by J. M. Polatty and R. A. Bendinelli	AD 624 529
MP 6-779		Laboratory Investigation of Plastic-Glass Fiber Reinforcement for Reinforced and Prestressed Concrete:	
	Feb 1966	Report 1 Plain and Reinforced Concrete, by G. C. Hoff and J. C. Wines	AD 630 600

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-779 (Cont)	Jul 1966	Report 2 Prestressed Concrete, by J. C. Wines, R. T. Dietz, and J. L. Hawley	AD 637 266
MP 6-780	Jan 1966	Shock-Isolating Backpacking Materials; A Review of the State of the Art, by G. C. Hoff	AD 741 933
MP 6-782	Jan 1966	Investigation of a Reaction Involving Nondolomitic Limestone Aggregate in Concrete, by A. D. Buck and W. L. Dolch	AD 741 907
MP 6-793	Feb 1966	Sonoscope Investigation of Prestressed Concrete Piling, South Bulkhead, Manasquan Inlet, Manasquan River, N. J., by H. T. Thornton	AD 741 934
MP 6-795	Mar 1966	Concrete Deterioration, by Bryant Mather	AD 741 935
MP 6-796	Mar 1966	Symposium on Cracking of Concretes; Cracking Induced by Environmental Effects, by Bryant Mather	AD 741 908
MP 6-802	Mar 1966	Results of Laboratory Tests and Examinations of Concrete Cores, Carlyle Reservoir Spillway, Carlyle, Illinois, by B. J. Houston, W. O. Tynes, and W. I. Luke	AD 741 909
MP 6-803	Mar 1966	Investigation of a Proprietary Chemical Admixture for Concrete, by R. L. Curry	AD 742 273
MP 6-805	Mar 1966	Use of Laboratory Dynamic Triaxial Tests to Develop Criteria for Design of Concrete Stems for Field Cratering Tests, by K. L. Saucier	AD 742 047
MP 6-806	Mar 1966	Evaluation of the Sonoscope for Nondestructive Testing of Portland-Cement Concrete Pavements, by G. M. Pace and H. T. Thornton	AD 742 268
MP 6-807	Mar 1966	Materials for Use in Mitigating Blast Loads on Deeply Buried Protective Structures, by G. C. Hoff	AD 742 269
MP 6-833	Aug 1966	Selecting Appropriate Levels of Quality, by Bryant Mather	AD 742 270
MP 6-834	Nov 1965	Ferris Wheel Series, Flat Top I Event, Grouting Support, Project 9.1, by J. E. McDonald and Howard Sugiuchi	AD 742 048
MP 6-840	Sep 1966	Blast Attenuation Studies in Dividing Wall Protection Construction, by A. A. Bombich and B. R. Sullivan	AD 668 237
MP 6-845	Oct 1966	Factors Which Influence the Deterioration of Concrete in Dams and Measures for Prevention of Deterioration, by Bryant Mather	AD 742 049
MP 6-846	Oct 1966	Dynamic Properties of Granodiorite, Project PILE DRIVER, by R. L. Stowe	AD 742 050

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-849	Dec 1966	Investigation of a Vibrating Slope Method for Measuring Concrete Workability, by K. L. Saucier	AD 645 529
MP 6-851	Oct 1966	Stronger Concrete, by Bryant Mather	AD 742 271
MP 6-856	Nov 1966	Evaluation of Methods of Attenuating Blast Pressures on Walls, by A. A. Bombich and B. R. Sullivan	AD 668 238
MP 6-862	Dec 1966	Bond of Portland-Cement Grout to Large-Diameter Steel Casing, by R. A. Bendinelli and B. R. Sullivan	AD 742 272
MP 6-864	Nov 1966	Investigation of Plastic and Rubber-Based Coatings Used in Lieu of Rubbed Finishes on Formed Concrete Surfaces, by J. L. Hawley and B. J. Houston	AD 742 051
MP 6-866	Jan 1967	Deterioration of Concrete Sidewalks and Curbs, by A. D. Buck and Bryant Mather	AD 743 919
MP 6-867	Jan 1967	Brucite Formation in Carbonate Rock Prisms, by A. D. Buck and Katharine Mather	AD 743 163
MP 6-868	Jan 1967	Field Exposure Tests of Reinforced Concrete Beams, by E. C. Roshore	AD 743 149
MP 6-871	Mar 1967	Investigation of Use of Antifreeze Compounds in Concrete and Mortar, by C. F. Derrington	AD 743 166
MP 6-873	Jan 1967	Investigation of Soniscope Testing Procedure, by E. E. McCoy and H. T. Thornton	AD 743 920
MP 6-875	Feb 1967	Project Handcar/Painted Pony Project 9.1, Laboratory and Field Grouting and Material Support, by J. E. McDonald	AD 743 160
MP 6-890	Apr 1967	Unsolved Problems in Predicting the Behavior of Concrete, by Bryant Mather	AD 743 150
MP 6-900	May 1967	Deterioration of Concrete Sidewalks and Curbs, by Bryant Mather	AD 743 159
MP 6-906	Jun 1967	Laboratory Tests of Concrete Aggregate and Riprap for Clarence Canyon Reservoir, by B. J. Houston and W. I. Luke	AD 743 165
MP 6-911	Aug 1967	Influence of Reinforcing Details on Yield Line Pattern and Ultimate Load-Carrying Capacity of Reinforced Concrete Slabs, by H. G. Geymayer and J. E. McDonald	AD 658 293
MP 6-914	Apr 1967	Grouting in Support of Underground Nuclear Testing, by R. A. Bendinelli and W. L. Burnett	AD 743 323
MP 6-916	Aug 1967	Mineralogical and Grain-Sized Data on Selected Samples from the Forest Hill Formation in Western Mississippi, by B. D. Ainsworth	AD 743 372

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 6-922	Aug 1967	Field and Laboratory Studies of the Sulfate Resistance of Concrete, by Bryant Mather	AD 743 434
MP 6-925	Aug 1967	Project Pre-Schooner II, Design, Construction, and Postshot Evaluation of Concrete Stem for Access Hole, by K. L. Saucier and F. S. Stewart	AD 743 435
MP 6-926	Sep 1967	Design, Analysis, and Construction of Precast Concrete Elements with Bamboo Reinforcement, by K. L. Saucier and E. F. Smith	AD 743 436
MP 6-927	Sep 1967	Concrete Deterioration, by Bryant Mather	AD 743 437
MP 6-928	Sep 1967	Shock-Mitigating Materials, by G. C. Hoff	AD 743 438
MP 6-929	Sep 1967	Deterioration of Concrete in Eisenhower Lock, St. Lawrence Seaway, by Bryant Mather	AD 743 439
MP 6-934	Oct 1967	Development of Material for Modeling Rock, by K. L. Saucier	AD 662 705
MP 6-936	Oct 1967	Comparative Adiabatic Temperature-Rise Tests of Mass Concrete, by E. E. McCoy	AD 662 746
MP 6-938	Oct 1967	Investigation of Vacuum Mixing of Concrete, by W. O. Tynes	AD 662 271
MP 6-941	Oct 1967	Admixtures for Concrete, by Bryant Mather	AD 743 441
MP 6-943	Oct 1967	Effects of Granular Content of Sulfur-Silica Capping Compound on Compressive Strength, by R. L. Curry	AD 744 133
MP 6-958	Dec 1967	The Behavior of Concrete, by Bryant Mather	AD 744 128
MP 6-973	Feb 1968	Project Big Papa--Phase III, Cellular Concrete Fragmentation Acceptors, by A. A. Bombich, G. C. Hoff, and W. F. McCleese	AD 744 008
MP 6-975	Mar 1968	Evaluation of Spiral-Blade Concrete Mixer, Shelbyville Reservoir Project, Shelbyville, Illinois, by K. L. Saucier	AD 668 671
MP C-68-1	Jul 1968	Effect of Temperature on Air-Entraining Admixture Demand of Concrete With and Without Pozzolans, by W. O. Tynes	AD 674 659
MP C-68-2		X-ray Emission Analysis of Portland Cement:	
	Jul 1968	Report 1 Variances in Analysis, by Leonard Pepper	AD 673 692
MP C-68-3	Aug 1968	Effect of Rate of Loading on Strength and Young's Modulus of Elasticity of Rock, by D. L. Ainsworth and R. L. Stowe	AD 732 417

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP C-68-4	Aug 1968	Temperature Rise of Mass Concrete Mixtures, by W. O. Tynes	AD 732 220
MP C-68-5	Sep 1968	Investigation of Materials and Methods for Use in Removing Surface Layers of Oil on Water, by B. J. Houston	AD 732 221
MP C-68-6	Sep 1968	Investigation of Resistance of Preplaced-Aggregate Concrete to Freezing and Thawing, by J. E. McDonald and W. O. Tynes	AD 678 582
MP C-68-7	Sep 1968	Feasibility of Using Combustion-Titrimetric Apparatus and Procedure to Determine Sulfate Content in Portland Cements, by T. B. Husbands	AD 677 393
MP C-68-8	Oct 1968	Investigation of Methods for Removing Stains from Mortar and Concrete, by C. F. Derrington, R. L. Stowe, and W. G. Miller (also cited as CTIAC-7)	AD 680 321
MP C-68-9	Nov 1968	Dynamic Compaction of Porous Concrete, by B. R. Sullivan	AD 732 418
MP C-69-1	Jan 1969	Strength and Deformation Properties of Granite, Basalt, Limestone, and Tuff at Various Loading Rates, by R. L. Stowe	AD 684 358
MP C-69-2	Mar 1969	Tests on Concrete Sheet Piles with Plastic Interlock, by P. A. Calenzo and G. S. Orenstein	AD 732 419
MP C-69-3	Mar 1969	Tests of Rock Cores, Warren Siting Area, Wyoming, by D. L. Ainsworth and K. L. Saucier	AD 754 336
MP C-69-4	Apr 1969	Laboratory and Field Grouting Support for Project Scroll, by T. L. Ellis and D. M. Walley	AD 732 420
MP C-69-5	May 1969	Evaluation of a Ring Test for Determining the Tensile Strength of Mortars and Concrete, by G. C. Hoff	AD 712 296
MP C-69-6	Jun 1969	Concrete Cores from Dry Dock No. 2, Charleston Naval Shipyard, South Carolina, by A. D. Buck and Katharine Mather	AD 690 231
MP C-69-7	Mar 1969	Operation Flint Lock, Shot Pile Driver, Grouting and Materials Control, by G. C. Hoff, R. L. Stowe, and W. L. Burnett	AD 733 876
MP C-69-8	Jun 1969	Sulfate Soundness, Sulfate Attack, and Expansive Cement in Concrete, by Bryant Mather	AD 733 743
MP C-69-9	Jun 1969	Properties of Cedar City Tonalite, by K. L. Saucier	AD 690 235
MP C-69-10	Jun 1969	Temperature-Induced Dimensional Changes in Hardened Concrete, by H. G. Geymayer	AD 733 744
MP C-69-11	Jul 1969	Precision of Quartz Crystal and Mercury Differential Thermometers in Heat-of-Hydration Test, by Leonard Pepper	AD 692 794

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP C-69-12	Sep 1969	Tests of Rock Cores, Mountain Home, Idaho, and Fairchild, Washington, Areas, by K. L. Saucier	AD 737 957
MP C-69-13	Sep 1969	Tests on Concrete Sheet Piles with Plastic Interlock, by G. S. Orenstein	AD 731 875
MP C-69-14	Sep 1969	Equation of State Studies of Eight Rock Types and One Rock-Matching Epoxy Grout, by D. L. Ainsworth and B. R. Sullivan	AD 697 084
MP C-69-15	Oct 1969	Potential Alkali Reactivity of Carbonate Rock from Six Quarries, by A. D. Buck	AD 697 734
MP C-69-16	Oct 1969	Tests of Rock Cores, Castle Study Area, California, by R. W. Crisp and K. L. Saucier	AD 737 958
MP C-69-17	Nov 1969	Research on Concrete, by Bryant Mather	AD 733 872
MP C-69-18	Nov 1969	Method of Test for Concrete Dilation, by D. L. Ainsworth and A. M. Alexander	AD 733 745
MP C-70-1	Jan 1970	The Effect of Temperature on Creep of Concrete; A Literature Review, by H. G. Geymayer	AD 699 825
MP C-70-2	Jan 1970	Bamboo Reinforced Concrete, by H. G. Geymayer and F. B. Cox	AD A029 842
MP C-70-3	Jan 1970	Behavior of Concrete Exposed to the Sea, by Bryant Mather	AD A029 801
MP C-70-4	Feb 1970	Tests of Rock Cores, Bergstrom Study Area, Texas, by K. L. Saucier and A. D. Buck	AD A035 371
MP C-70-5	Mar 1970	Use of Atomic Absorption Spectrophotometer for Analysis of Cement, by H. H. Chang	AD 704 956
MP C-70-6	May 1970	Tests of Rock Cores, Scott Study Area, Missouri, by R. W. Crisp and C. R. Hallford	AD A030 954
MP C-70-7	Jun 1970	Tests of Rock Cores, Plattsburgh Study Area, New York, by R. W. Crisp	AD A035 372
MP C-70-8	May 1970	New Applications for Low-Density Concretes, by G. C. Hoff	AD A029 839
MP C-70-9	Jun 1970	Tests of Rock Cores, Duluth-Vermillion Study Area, Minnesota, by R. W. Crisp and K. L. Saucier	AD A035 373
MP C-70-10	Jun 1970	Tests of Rock Cores, Michigamme Study Area, Michigan, by R. W. Crisp	AD A030 950
MP C-70-11	Jul 1970	Tests of Rock Cores, Pease Study Area, New Hampshire, by R. W. Crisp	AD A035 374



## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP C-70-12	Jul 1970	Admixtures, by Bryant Mather	AD A030 951
MP C-70-13	Jul 1970	Model Tests of Steel Tunnel Supports, by G. S. Orenstein and H. G. Geymayer	AD 712 297
MP C-70-14	Aug 1970	Tests of Rock Cores, Pembine Study Area, Michigan and Wisconsin, by R. W. Crisp	AD A035 375
MP C-70-15	Sep 1970	An Experimental Study of Moisture Migration in Concrete, by J. E. McDonald	AD A030 952
MP C-70-16	Aug 1970	Tests of Rock Cores, Machias Study Area, Maine, by R. W. Crisp	AD A035 364
MP C-70-17	Sep 1970	Tests of Rock Cores, Warren II Study Area, Wyoming, by K. L. Saucier	AD A035 365
MP C-70-18	Sep 1970	Portland-Cement Concrete Research, Testing, and Performance, by Bryant Mather	AD A029 822
MP C-70-19	Sep 1970	Crack Extension Force Concept Applied to the Compressive Failure of Portland-Cement-Based Mortars, by G. C. Hoff	AD A029 821
MP C-70-20	Oct 1970	An Experimental Study of Multiaxial Creep in Concrete, by J. E. McDonald	AD A030 004
MP C-70-21	Oct 1970	Expansive Cements, by Bryant Mather	AD A030 953
MP C-70-22	Oct 1970	Nonmetallic Waterstops, by G. C. Hoff and B. J. Houston	AD A030 955
MP C-70-23	Nov 1970	Low-Density Concrete Backfills for Lined Tunnels, by G. C. Hoff	AD A029 820
MP C-70-24	Nov 1970	An Evaluation of the MSA Method for Determining Particle Size Distribution, by R. L. Curry	AD A029 819
MP C-71-1	Jan 1971	Comparison of In-Situ and Laboratory Test Results on Granite, by R. L. Stowe	AD A029 818
MP C-71-2	Feb 1971	The Influence of Variation in Grain Size and Minimal Variation in Rock Type on the Quality of Rock Property Correlations for Intact Igneous Rocks, by R. W. Crisp	AD A030 957
MP C-71-3	Feb 1971	Substitutions in Calcium Aluminates and Calcium Alumino-ferrites, by Katharine Mather	AD A029 828
MP C-71-4	May 1971	Results of In Situ Modulus of Deformation Test, Cannelton Lock and Dam, by R. L. Stowe	AD A029 827

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP C-71-5		Investigation of Expanding Grout and Concrete:	
	Jun 1971	Report 1 Summary of Field Mixture Test Results, July 1969 Through June 1970, by G. C. Hoff	AD 725 986
	Jan 1973	Report 2 Summary of Field Mixture Test Results, July 1970 Through June 1971, by G. C. Hoff	AD 756 362
MP C-71-6	Jun 1971	Strains Developed in Concrete During and Subsequent to Hardening, by A. M. Alexander and D. L. Ainsworth	AD A029 826
MP C-71-7	Jul 1971	Effect of Rate of Lifting of Slump Cone on Indicated Slump of Concrete, by H. K. Wilson and R. L. Stowe	AD 727 679
MP C-71-8	Sep 1971	Use of Concrete of Low Portland Cement Content in Combination with Pozzolans and Admixtures in Construction of Concrete Dams, by Bryant Mather	
MP C-71-9		Investigation of Sinking Methods for Removal of Oil Pollution from Water Surfaces:	
*	Feb 1971	Report 1 Phase I: Survey of the State-of-the-Art, by B. J. Houston	AD 725 617
*	Feb 1972	Report 2 Phase II: Methods of Test for Laboratory Evaluation of Oil Sinking Materials, by E. C. Roshore	AD 741 247
*	Apr 1972	Report 3 Tests and Evaluation of Oil Sinking Materials, by B. J. Houston, E. C. Roshore, and V. D. Edgerton	AD 750 853
MP C-72-1	Apr 1972	Porosity-Strength Considerations for Cellular Concrete, by G. C. Hoff	AD A029 835
MP C-72-2	Feb 1972	Quantitative Mineralogical Analysis of X-ray Diffraction, by A. D. Buck	AD A029 830
MP C-72-3	Mar 1972	Dynamic Strain Measurements with Carlson Strain Meters, by J. E. McDonald	AD 740 160
MP C-72-4	Mar 1972	Laboratory Tests of Concrete Aggregate and Riprap for New Lock and Dam No. 26, by W. D. Tynes and C. R. Hallford	AD A029 838
MP C-72-5	Apr 1972	Examination of Cement Pastes, Hydrated Phases, and Synthetic Products by X-ray Diffraction, by Katharine Mather	AD A030 958
* MP C-72-6	Apr 1972	Results of an Investigation to Develop a High-Density Fracturing Material, by R. L. Stowe	AD B013 379

\* Statement B. See Preface.

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP C-72-7	Apr 1972	Relating Materials Quality to Materials Performance to Structural Performance of Concrete, by Bryant Mather	AD A029 837
MP C-72-8		Cellular Concrete Studies, Project CAMPHOR:	
*	Apr 1972	Report 1 Laboratory Investigations, by G. C. Hoff	AD 894 998L
*	Jun 1973	Report 2 Field Construction, by G. C. Hoff	AD B013 380L
MP C-72-9	Apr 1972	Alkali-Carbonate Rock Reactions in Concrete: Developments in Specification and Control, by Bryant Mather	AD A030 959
MP C-72-10	Apr 1972	New Applications of Grout and Concrete as Shock Impedance Matching Materials for Geologic Formations, by D. L. Ainsworth (also cited as CTIAC-5)	AD A002 660
MP C-72-11	Apr 1972	Creep in Tension, Creep Rate, and Superposition; A Brief Literature Review, by E. E. McCoy and H. T. Thornton	
MP C-72-12	Apr 1972	Effect of Method of Preparation of Ends of Concrete Cylinders for Testing, by K. L. Saucier	AD 742 645
MP C-72-13	May 1972	Concrete for Reactor Vessels, by J. E. McDonald	AD A030 960
MP C-72-14	May 1972	Recycled Concrete, by A. D. Buck	AD 743 460
	Apr 1976	Report 2 Additional Investigations, by A. D. Buck	
MP C-72-15	Jun 1972	Rapid Repair of Bomb-Damaged Runways; Phase I: Preliminary Laboratory Investigation, by P. S. Bussone, B. J. Bottomley, and G. C. Hoff	AD A029 834
MP C-72-16	Jun 1962	Determination of Practical Ultimate Strength of Concrete, by K. L. Saucier	AD A029 813
MP C-72-17	Jul 1972	Tests on TVA Containment Concrete, by J. E. McDonald	AD A029 833
MP C-72-18	Aug 1972	Shock Compression of Porous Concrete, by B. R. Sullivan	AD A029 836
MP C-72-19	Aug 1972	Economic Aspects of Curing Mass Concrete, by Bryant Mather	AD A029 831
MP C-72-20	Aug 1972	Ultimate Strain Capacity and Temperature Rise Studies, Trumbull Pond Dam, by J. E. McDonald, A. A. Bombich, and B. R. Sullivan	AD 757 379
MP C-72-21	Sep 1972	Resin Concretes: A Literature Review, by J. E. Dennard	AD 750 101
MP C-72-22	Oct 1972	Expansive Cements and Their Use, by G. C. Hoff (also cited at CTIAC-8)	AD A030 961

\* Statement B. See Preface.

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP C-72-23	Dec 1972	Use of Recycled Concrete as Aggregate, by A. D. Buck (also cited as CTIAC-9)	AD A029 832
MP C-72-24	Dec 1972	Concrete Technology Information Analysis Center (CTIAC), Evaluation of Pilot Study, by Bryant Mather (also cited as CTIAC-11)	AD 755 837
MP C-73-1	Jan 1973	Fast Setting Cement; Literature Survey, by C. F. Derrington (also cited as CTIAC-1)	AD A030 962
MP C-73-2	Jan 1973	Waterproof Membrane Systems for Use on Concrete Bridge Decks, by C. F. Derrington (also cited as CTIAC-2)	
MP C-73-3	Jan 1973	Test Data on Aggregate Sources, New York State, by A. D. Buck (also cited as CTIAC-3)	
MP C-73-4	Jan 1973	Identification of Samples of Objects Recovered from Ocean Floor, by K. Mather (also cited as CTIAC-6)	AD A030 963
MP C-73-5	Mar 1973	Ultimate Strain Capacity Tests, Clarence Cannon Dam, St. Louis District, by J. E. McDonald	AD A029 816
MP C-73-6	May 1973	Multiaxial Creep in Concrete, by J. E. McDonald	AD A029 815
MP C-73-7	Jun 1973	Use of Microwave Oven to Determine Water Content of Fresh Concrete, by E. C. Roshore	AD A029 814
MP C-73-8	Aug 1973	Laboratory Tests of Concrete Cores from the New Second Lock, Sault Ste. Marie, Michigan, by A. D. Buck, K. Mather, and C. R. Hallford	AD 768 177
MP C-73-9	Oct 1973	Study of the Project Manager System of Management for Use in a Materials Laboratory, by K. L. Saucier	AD A029 829
MP C-73-10	Oct 1973	Feasibility Study of No-Slump Concrete for Mass Concrete Construction, by W. O. Tynes	AD A029 812
MP C-73-11	Nov 1973	Examination of Cores from Four Highway Bridges in Georgia, by K. Mather (also cited as CTIAC-12)	AD A030 964
MP C-73-12	Dec 1973	Propagation of Failure in a Circular Cylinder of Rock Subjected to a Compressive Force, by R. L. Stowe	AD 773 469
MP C-74-1	Feb 1974	Investigation of Accelerated Methods for the Determination of Available Alkali in Pozzolans, by W. G. Miller	AD A030 965
MP C-74-2	Feb 1974	Studies of Concrete for Farley Nuclear Containment Structure, by J. E. McDonald	AD A029 824
MP C-74-3	Feb 1974	Research and Development of Fiber-Reinforced Concrete in North America, by G. C. Hoff (also cited as CTIAC-10)	AD A029 823
MP C-74-4	Mar 1974	Development of In-House Capabilities for Determination of Quality of Water and Sediments, by C. F. Derrington, L. Pepper, and D. Bean	AD 777 541

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP C-74-5	Apr 1974	Condition Survey of Lock and Dam 52, Ohio River, by B. J. Houston	AD A029 804
MP C-74-6	Apr 1974	Technique for Determining Unloading Response of Rock, by B. R. Sullivan, D. L. Ainsworth, and A. A. Bombich	AD 779 447
MP C-74-7	May 1974	Condition Survey of Lock and Dam 53, Ohio River, by B. J. Houston	AD A029 817
MP C-74-8		Cellular Concrete Studies:	
*	Jun 1974	Report 1 Project DIDO QUEEN, Field Construction, by R. H. Denson	AD 920 276L
	Dec 1974	Report 2 Evaluation of Crushed Cellular Concrete, by G. C. Hoff	AD A003 172
MP C-74-9	Jun 1974	A Low-Modulus Internal Concrete Strain Meter, by A. M. Alexander	
MP C-74-10	Jun 1974	Development of Methods to Determine the Hugoniot Equation-of-State of Concrete, by A. A. Bombich	AD 782 940
MP C-74-11	Jun 1974	Feasibility Study for Building a Rapidly Constructed, Low-Cost, Inflatable-Formed, Steel Fiber-Reinforced Concrete Structure, by F. B. Cox	AD 781 342
MP C-74-12	Jun 1974	Pullout Resistance of Reinforcing Bars Embedded in Hardened Concrete, by R. L. Stowe	AD 781 972
MP C-74-13	Jul 1974	Static, Sustained, and Cyclic Load Tests of Steel Pile Connectors, New Orleans District, by E. F. O'Neil	AD 782 941
* MP C-74-14	Jul 1974	Low-Strength Concrete in the New Walter Reed Hospital, Washington, D. C., by R. L. Stowe	
MP C-74-15	Aug 1974	Cost and Feasibility Study; Alternate Designs to Permit Use of Slip Form and Other Techniques to Maximize Economics, Trumbull Lake Dam, Pequonnock River Basin, Connecticut, by J. F. Camellerie	
MP C-75-1	Mar 1975	Emplacement and Stemming Load Measurements; Project CANNIKIN, by D. L. Ainsworth and Dale Glass	AD A009 309
MP C-75-2	Apr 1975	Physical Property Tests of Rock Cores from the MIXED COMPANY Event III Site, by R. L. Stowe	AD A009 697
MP C-75-3	May 1975	New Concern Over Alkali-Aggregate Reaction, by Bryant Mather (also cited as CTIAC No. 17)	AD A010 641

\* Statement B. See Preface.

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP C-75-4	Jun 1975	Use of Fiber-Reinforced Concrete in Hydraulic Structures and Marine Environments, by G. C. Hoff (also cited as CTIAC No. 15)	AD A010 640
MP C-75-5	May 1975	Use of Regulated-Set Cement in Cold Weather Environments, by G. C. Hoff, B. J. Houston, and F. H. Sayles (also cited as CTIAC No. 16)	AD A011 265
MP C-75-6	Jun 1975	Investigation of High-Strength Frost-Resistance Concrete, by W. O. Tynes	AD A012 119
MP C-75-8	Jun 1975	Tests of Deteriorated Concrete Blocks from Fort Dix, N. J., by R. H. Denson and A. D. Buck (includes Appendixes A-B)	AD A955 007
MP C-75-9	Jun 1975	Rock Core Tests, Proposed Duplicate Lock - Phase II, Starved Rock Lock and Dam, Illinois River, Illinois, by R. L. Stowe and J. B. Warriner (includes Appendixes A-B)	AD A012 066
MP C-75-10	Sep 1975	Investigation of the Use of Resin-Based Membrane Curing and Bonding Compounds on Horizontal Construction Joints, by W. O. Tynes	AD A015 549
MP C-75-11		Cold Weather Construction Materials:	
	Dec 1975	Part 1 Regulated-Set Cement for Cold Weather Concreting, by B. J. Houston and G. C. Hoff	AD A021 658
	Sep 1981	Part 2 Regulated-Set Cement for Cold Weather Concreting; Field Validation of Laboratory Results, by B. J. Houston and G. C. Hoff (also cited as CTIAC No. 45) (includes Appendixes A-B)	AD 105 596
MP C-76-1	Apr 1976	Comparison of 4-1/2- and 7-in. (6-in. Nominal) Maximum Size Aggregate Mixtures for New Lock and Dam No. 26, Mississippi River, by W. O. Tynes	AD A023 968
MP C-76-2	Apr 1976	Recycled Concrete as a Source of Aggregate, by A. D. Buck (also cited as CTIAC No. 19)	AD A024 055
MP C-76-3	Jun 1976	Potential Alkali-Carbonate Rock Reactivity of Some of the Aggregate Used in Fishtrap Dam, by A. D. Buck	AD A025 761
MP C-76-4	Jun 1976	Investigation of the Resistance of Freshly Injected Grout to Erosion and Dilution by Flowing Water, by D. M. Wallev	AD A026 260
MP C-76-5	Jun 1976	Detection of Calcium Sulfates and Magnesium Oxide in Fly Ash by X-Ray Diffraction, by G. S. Wong and A. D. Buck	AD A026 181
MP C-76-6	Jun 1976	Selected Bibliography on Fiber-Reinforced Cement and Concrete, by G. C. Hoff, C. M. Fontenot, and J. G. Tom (also cited as CTIAC No. 21)	AD A032 082

## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP C-76-6 (Cont)	Sep 1977	Supplement No. 1, by G. C. Hoff (also cited as CTIAC No. 25)	AD A044 433
	Jul 1979	Supplement No. 2, by G. C. Hoff (also cited as CTIAC No. 39)	AD A075 064
	Sep 1980	Supplement No. 3, by G. C. Hoff (also cited as CTIAC No. 43)	AD A090 273
	Aug 1982	Supplement No. 4, by G. C. Hoff (also cited as CTIAC No. 48)	AD A122 237
* MP C-76-7	Jun 1976	Characterization of Tuff and Development of Grouts for Mighty Epic Structures Program, by S. W. Butters, R. L. Stowe, J. W. LaComb, and R. A. Bendinelli (also cited as CTIAC No. 20) (includes Appendixes A-B)	AD B012 430L
MP C-76-8	Aug 1976	Engineering Condition Survey and Structural Investigation of Emsworth Locks and Dam, Ohio River, by C. E. Pace	AD A029 844
MP C-76-9	Aug 1976	Engineering Condition Survey and Structural Investigation of Locks and Dam 3, Monongahela River, by C. E. Pace, R. L. Stowe, and A. D. Buck (includes Appendixes I-VII)	AD A029 904
MP C-76-10	Sep 1976	Structural Testing and Associated Data Reduction for a Guided Projectile Control Housing, by C. E. Pace	AD A029 905
MP C-76-11	Oct 1976	A New Cement for Cold Weather Construction, by G. C. Hoff	AD A026 042
MP C-77-1	Jan 1977	Engineering Condition Survey and Structural Investigation of Marsh Arch Bridge, Fort Riley, Kansas, by T. C. Liu (includes Appendixes A-B)	AD A035 675
MP C-77-2	Mar 1977	Engineering Condition Survey and Structural Investigation of Montgomery Locks and Dam, Ohio River, by C. E. Pace and J. T. Peatross, Jr.	AD A038 655
MP C-77-3	May 1977	Creep of Concrete Under Various Temperature, Moisture, and Loading Conditions, by J. E. McDonald (also cited as CTIAC No. 24)	AD A040 112
* MP C-77-4	May 1977	Additional Investigations of Nonshrink Grouts, by J. A. Boa, Jr. (includes Appendix A)	AD B018 814L
MP C-77-5	Jun 1977	An Investigation of Concrete Condition, William Bacon Oliver Lock and Spillway, by J. E. McDonald and R. L. Campbell (includes Appendixes A-G)	
	Nov 1977	Errata Sheet No. 1	
MP C-77-6	Jun 1977	Dynamic Properties of Mass Concrete, by K. L. Saucier (also cited as CTIAC No. 23)	AD A043 004
MP C-77-7	Jun 1977	Determination of Maximum Concrete Placement Temperatures for Martins Fork Dam, by A. A. Bombich	AD A042 637

\* Statement B. See Preface.

CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP C-77-8	Aug 1977	Concrete Temperature Control Studies - Tennessee-Tombigbee Waterway Projects, by A. A. Bombich, B. R. Sullivan, and J. E. McDonald	AD A046
MP C-77-9	Aug 1977	Acid Attack of Concrete Caused by Sulfur Bacteria Action, Piedmont and Clendening Lakes Outlet Tunnels, Muskingum Watershed, Ohio, by H. T. Thornton, Jr. (includes Appendix A)	AD A044
MP C-77-10	Aug 1977	The Effect of Alkalies on the Properties of Concrete, Edited by A. B. Poole (also cited as CTIAC No. 26)	AD A044
MP C-77-11		Development of Procedures for Nondestructive Testing of Concrete Structures:	
	Sep 1977	Report 1 Present Practices, by H. T. Thornton, Jr.	AD A046
	Apr 1980	Report 2 Feasibility of Sonic Pulse-Echo Technique, by A. M. Alexander	AD A085
	Nov 1981	Report 3 Feasibility of Impact Technique for Making Resonant Frequency Measurements, by A. M. Alexander (includes Appendix A)	AD A109
MP C-77-12	Oct 1977	Concrete Ships and Vessels - Past, Present, and Future, by T. C. Liu and J. E. McDonald (also cited as CTIAC No. 27)	AD A045
* MP C-77-13	Sep 1977	Evaluation of Aramid-Fiber Ropes for Antenna Guys, by T. C. Liu and C. J. Johnson (includes Appendix A)	AD B022
MP C-77-14		Identification of Candidate Zero Maintenance Paving Materials, by G. C. Hoff, L. N. Godwin, K. L. Saucier, A. D. Buck, T. B. Husbands, and K. Mather	
	May 1977	Volume I	AD A053
	May 1977	Volume II	AD A053
MP C-78-1		Borehole Plugging Program (Waste Disposal):	
	Jan 1978	Report 1 Initial Investigations and Preliminary Data, by J. A. Boa, Jr.	AD B024
	Sep 1981	Report 2 Petrographic Examination of Several Four-Year-Old Laboratory Developed Grout Mixtures, by J. E. Rhoderick and A. D. Buck	AD A105
MP C-78-2	Apr 1978	A Look at Type K Shrinkage-Compensating Cement Production and Specifications, by G. C. Hoff and Katharine Mather (also cited as CTIAC No. 29)	AD A053
MP C-78-3	Apr 1978	Tests of High-Range Water-Reducing Admixtures, by Bryant Mather (also cited as CTIAC No. 30)	AD A053
MP C-78-4	May 1978	Concrete and Rock Tests, Rehabilitation Work, Brandon Road Dam, Illinois Waterway, Chicago District, by R. L. Stowe	AD A055

\* Statement B. See Preface.



## CONCRETE LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP C-78-5	May 1978	Ultimate Strength of Fiber-Reinforced Concrete Under Cyclic Flexural Loading, by E. F. O'Neil	AD A055 414
MP C-78-6		Engineering Condition Survey and Evaluation of Troy Lock and Dam, Hudson River, New York:	
	May 1978	Report 1 Engineering Condition Survey, by C. E. Pace	AD A055 871
	Jan 1981	Report 2 Evaluation and Rehabilitation, by C. E. Pace, Roy Campbell, and Sam Wong (includes Appendix A)	AD A094 683
MP C-78-7	May 1978	Alkali-Silica Reaction Products from Several Concretes: Optical, Chemical, and X-ray Diffraction Data, by A. D. Buck and Katharine Mather (also cited as CTIAC No. 31)	AD A055 742
MP C-78-8	Jun 1978	Bibliography on Grouting (also cited as CTIAC No. 13)	AD A057 831
MP C-78-9	Aug 1978	Investigation of Methods for Extraction, Detection, and Identification of Water-Soluble Admixtures in Concrete, by D. L. Bean and T. B. Husbands	AD A059 345
MP C-78-10	Aug 1978	Alkali-Silica Reaction in Concrete from Hiwassee Dam, North Carolina, Tennessee Valley Authority, by A. D. Buck and J. P. Burkes (also cited as CTIAC No. 32)	AD A059 987
MP C-78-11	Aug 1978	Effects of Accelerated Curing on Hydration Products of Cement and Cement-Fly Ash Pastes, by Katharine Mather, J. P. Burkes, G. S. Wong, and R. E. Reinhold	AD A059 191
MP C-78-12	Sep 1978	Concrete and Rock Core Tests, Major Rehabilitation of Starved Rock Lock and Dam, Illinois Waterway, Chicago District, Phase I, Rehabilitation, by R. L. Stowe, B. A. Pavlov, and G. S. Wong (includes Appendixes A-F)	AD A061 711
MP C-78-13	Sep 1978	Alkali-Silica Reaction in Concrete from the New Savannah Bluff Lock and Dam, Georgia-South Carolina, by A. D. Buck (also cited as CTIAC No. 33)	AD A059 980
MP C-78-14	Sep 1978	Acid Attack of Concrete Caused by Sulfur Bacteria Action, by H. T. Thornton, Jr. (also cited as CTIAC No. 28)	AD A059 687
MP C-78-15	Sep 1978	Concrete for Earth-Covered Structures, by J. E. McDonald and T. C. Liu (also cited as CTIAC No. 34)	AD A061 469
MP C-78-16	Dec 1978	Tests of Brick-Veneer Walls and Closures for Resistance to Floodwaters, by C. E. Pace	AD A064 860
MP C-78-17	Dec 1978	Evaluation of a Drop Table for Consolidating 6-In.-Diameter Cylindrical Concrete Test Specimens, by S. A. Ragan (includes Appendixes A-B)	AD A064 173
MP C-78-18	Dec 1978	Stability and Stress Analyses of Brandon Road Dam, Illinois Waterway, by C. E. Pace and R. L. Campbell (includes Appendixes A-B)	AD A064 811
MP C-78-19	Dec 1978	Grouting of Scoured Foundation, Old River Low Sill Structure, Louisiana, by H. K. Wilson	AD A072 466

## CONCRETE LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
Unnumbered	Jun 1942	Cement Durability Program, First Interim Report	
Unnumbered	Jul 1942	John Martin Dam, Durability of Concrete Cores and Columns. Final Report	
Unnumbered	Oct 1943	Surface Scaling of Concrete Runways -- Rome Air Depot	
Unnumbered	Apr 1944	Compressive Strength at 28-Days Age of Job-Made Concrete Cylinders Containing Treated and Untreated Portland Cement	
Unnumbered	Jun 1944	Durability of Horizontal Joints in Mass Concrete	
Unnumbered	Jun 1944	Tests of Blends of Portland and Natural Cements	
Unnumbered	Jul 1945	Concrete Research. Second Interim Report	
TM 6-222	Nov 1946	Investigation of Aggregate Proposed for Use in Bull Shoals Dam	
TM 6-224	Oct 1946	Investigation of Reactivity Between Alkalies in Portland Cement and Aggregates Proposed for Use on Santee-Cooper Project, Moncks Corner, S. C.	
TM 6-225	Dec 1946	Investigation of Vacuum-Processed Concrete	
Unnumbered	Mar 1947	Concrete Investigation - Bull Shoals Dam. Progress Report	
TM 6-226	Aug 1947	Concrete Research. Third Interim Report. Durability of Concrete Exposed to Natural Weathering	
	Jun 1950	Supplement No. 1	
	May 1954	Report No. 5 Summary of Results 1936-1953	AD 688 518
TM 2-241	Dec 1947	Lateral Pressures of Tremie-Placed Concrete	AD 756 397
Unnumbered	Jul 1949	Jetcrete, Hydron-Formed and Conventional-Formed Concrete	
Unnumbered	Aug 1949	Disintegration of Concrete from Tuscaloosa Lock and Dam	
TM 6-307	Jan 1950	Effect of Sand Grading on the Properties of Mass Concrete	AD 672 061
Unnumbered	Jun 1950	Development of Non-freezing Weathering Test for Concrete. Interim Report	
Unnumbered	Jan 1951	Tests of Fine Aggregate for Organic Impurities and Compressive Strength in Mortars	
Unnumbered	Feb 1951	Evaluation of the Admixture "Hydropel"	
TM 6-327	Aug 1951	Tests of Air-Entraining Admixtures	AD 756 42
Unnumbered	Sep 1951	Laboratory Tests of Jetcrete	

## CONCRETE LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 6-330	Oct 1951	Investigation of the Suitability of Prepakt Concrete for Mass and Reinforced Concrete Structures	
	Aug 1954	Appendix A: Properties of Alfesil, and Tests of Permeability and Resistance to Natural Weathering of Prepakt Concrete; and Appendix B: Use of Prepakt in Field Operations	AD 756 434
TM 6-335	Dec 1951	Tests of Commercially Available Cementitious Materials	AD 756 430
TM 6-336	Feb 1952	Tests on Concrete and Mortar Surfaces Cast Against Various Types of Forms and Form Linings	AD 8951 668
Unnumbered	Mar 1952	Results of Special Investigation of Concrete Cores from Five Dams -- Petrographic Report	
Unnumbered	Mar 1952	Report of Investigation of Placing Procedures for Elimination of Excessive Air Pockets in Concrete Surfaces, Hickman Floodwall, Hickman, Kentucky	
TM 6-345	May 1952	Effect of Vibration on Air Content of Mass Concrete	AD 756 429
TM 6-352	Nov 1952	Investigation of Field Methods for Determining Air Content of Mass Concrete	
TM 6-353	Feb 1953	Investigation of Vacuum Treatment of Mass Concrete Surfaces	AD 8951 667
TM 6-359	May 1953	Tests of Blends of Portland Cement with Masonry Cement	AD 688 650
TM 6-368		Tests for Chemical Reactivity Between Alkalies and Aggregate:	
	Aug 1953	Report 1 Quick Chemical Test	
	Sep 1956	Report 2 Mortar-Bar Test	
	Oct 1967	Report 3 Further Investigation of the Mortar-Bar Test, by B. J. Houston	AD 662 706
TM 6-370	Sep 1953	Test Data -- Concrete Aggregates in Continental United States (Supplements are issued annually):	
		Vol I Western United States	
		Vol II North Central United States	
		Vol III South Central United States	
		Vol IV Southeastern United States	
		Vol V Eastern United States	
	Sep 1976	Vol VI Alaska	
TM 6-371	Oct 1953	Laboratory Investigation of Certain Limestone Aggregates for Concrete	AD A950 077

## CONCRETE LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 6-380	Mar 1954	Permeability and Triaxial Tests of Lean Mass Concrete	AD 690 232
TM 6-383		Field Soniscope Tests of Concrete:	
	Apr 1954	Report 1 1953 Tests	
	Mar 1958	Report 2 1953-1957 Tests	AD 687 369
	Mar 1967	Report 3 Ten-Year Summary of Results, by H. T. Thornton	AD 649 314
TM 6-385	Jun 1954	Tests of Membrane-Forming Compounds for Curing Concrete	AD 688 080
TM 6-390	Aug 1954	Effects of a Proprietary Chemical Admixture on the Properties of Concrete	AD B951 666
TM 6-395	Nov 1954	Cooperative Freezing-and-Thawing Tests of Concrete Specimens	
TM 6-399	Mar 1955	Tests of Anchors for Mass-Concrete Forms	AD B951 670
TM 6-407	May 1955	Tests of Weighing and Recording Equipment for Concrete Batching	AD 756 427
TM 6-410	Jul 1955	Heat of Hydration of Blends of a Portland and a Natural Cement	AD B950 196
TM 6-412		Tensile Crack Exposure Tests:	
	Jul 1955	Report 1 Tensile Crack Exposure Tests for Reinforced Concrete Beams	AD 688 879
	Nov 1964	Report 2 Results of Tests of Reinforced Concrete Beams, 1955-1963, by E. C. Roshore	AD 687 373
	Jan 1980	Report 3 Laboratory Evaluation of Series "A" Beams with Results from 1951 to 1975, by E. F. O'Neil	AD A081 307
	Mar 1984	Report 4 Statistical Analysis of the Long-Term Durability of Series "B" Beams, by H. T. Thornton, Jr. (includes Appendixes A-C) (also cited as CTIAC No. 59)	
TM 6-419		Tests of Sanded Grouts:	
	Oct 1955	Report 1 Influence of Chemicals and Mineral Fines on Pumpability	AD A950 00
	Oct 1955	Report 2 Influence of Sand Grading and Addition of Mineral Fines on Pumpability	AD A950 00
	Feb 1957	Report 3 Influence of Grading and Specific Gravity of Manufactured Sands on Pumpability	AD B951 76
	Oct 1958	Report 4 Influence of Manufactured Sands and Admixtures on Pumpability, and Evaluation of a Concrete Mixer	AD 757 405
	Apr 1963	Report 5 Effects of Fly Ash in Grouting Coarse Sands and Fine Gravels	AD B951 77

## CONCRETE LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 6-421		Plastic-Glass Fiber Reinforcement for Reinforced and Prestressed Concrete:	
	Nov 1955	Report 1 Summary of Information Available as of 1 July 1955	AD 845 377
	Nov 1959	Report 2 Summary of Information Available 1 July 1955 to 1 January 1959	

CONCRETE LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 6-437	Oct 1956	Pressure Grouting Fine Fissures	AD 660 3'
TR 6-440	Nov 1956	Requirements for Water for Use in Mixing or Curing Concrete	AD A078 8
TR 6-445	Dec 1956	Investigation of Portland Blast-Furnace Slag Cements	AD 756 44
	Sep 1965	Report 2 Supplementary Data	AD 756 26
TR 6-454	May 1957	Investigation of the Improved Carlson Stress Meter	AD 756 44
	Jul 1966	Report 2 Supplementary Tests, by E. E. McCoy	AD 637 74
TR 6-473	Feb 1958	Tests of Holding Strength of Form Anchors Embedded in Concrete Placed and Cast at Reduced Temperatures	AD 688 5'
TR 6-476	Mar 1958	Evaluation of Electric Meters for Determining Moisture Content of Fine Aggregate	
TR 6-481	Jul 1958	Effectiveness of Mineral Admixtures in Preventing Excessive Expansion of Concrete Due to Alkali-Aggregate Reaction	AD A078 8
TR 6-486	Jul 1958	Review of Available Information on Polyvinyl Acetate as an Admixture for Concrete	
TR 6-518	Jul 1959	Investigation of Methods of Preparing Horizontal Construction Joints in Concrete	
	Jul 1963	Report 2 Tests of Joints in Large Blocks	AD 688 0
	Jun 1966	Report 3 Effects of Iron Stain on Joints, by J. E. McDonald and E. F. Smith	AD 634 3
	Aug 1973	Report 4 Evaluation of High-Pressure Water Jet and Joint Preparation Procedures, by W. O. Tynes and W. F. McCleese	AD 766 6
TR 6-521		Epoxy Resins for Use on Civil Works Projects:	
	Aug 1959	Report 1 Summary of Data Available as of 1 Mar 1959	AD 478 9
TR 6-522	Aug 1959	Investigation of Compressive Strength of Molded Cylinders and Drilled Cores of Concrete	AD 751 1
TR 6-525	Oct 1959	Evaluation Tests of a Concrete Mixer of the Turbine Type	AD 751
TR 6-540	Apr 1960	An IBM-650 Program for the Computation of Thermal Gradients in Mass Concrete Structures	AD 751
TR 6-541	May 1960	Portland-Pozzolan Cement Made with Tennessee Valley Authority Fly Ash	AD 751

## CONCRETE LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 6-543	May 1960	Methods for Sampling and Determining Sieve Analysis of Aggregates Larger than One and One-Half Inch Sieve	AD 751 104
TR 6-544		Influence of Fine-Aggregate Grading on Properties of Concrete:	
	May 1960	Report 1 A Review of Literature	AD 751 105
	Oct 1962	Report 2 Laboratory Investigation	AD 751 106
TR 6-546		Investigation of Nonmetallic Waterstops:	
	May 1960	Report 1 Preliminary Laboratory and Field Exposure Tests	AD 666 203
	Mar 1961	Report 2 Evaluation of the Effect-of-Alkalies and Accelerated Extraction Tests	AD 751 107
	Jun 1963	Report 3 Progress Report of Laboratory and Field Exposure Tests	AD 751 108
	Dec 1965	Report 4 Water Retentivity and Tensile Strength of Splices	AD 751 176
	Jan 1971	Report 5 Water Retentivity of Labyrinth-Shaped Waterstops, by B. J. Houston	AD 718 226
	Jan 1968	Report 6 Effect of Exposure, by B. J. Houston	AD 666 203
	Aug 1970	Report 7 Preparation of Laboratory Test Samples from Finished Waterstops, by B. J. Houston	AD 714 219
	Jan 1972	Report 8 Effect of Specimen Size and Low Temperature on Waterstop Test Results, by B. J. Houston	AD 737 174
	Jun 1975	Report 9 Final Report of Effect of Exposure, by B. J. Houston	AD A012 118
TR 6-553		Investigation of Performance of Concrete and Concreting Materials Exposed to Natural Weathering (with periodic revisions):	
	Jun 1960	Volume 1 Active Investigations	AD A075 359
	Revised		AD A093 388
	Jun 1961	Volume 2 Completed Investigations	AD A075 360
TR 6-559	Dec 1960	Investigation of Methods of Finishing Formed Concrete Surfaces	AD 732 222
TR 6-562	Mar 1961	Development of Method of Test for Concrete Mixer Performance	AD 732 223
TR 6-569		Sulfate-Resistant Concrete:	
	May 1961	Report 1 Literature Review	AD 731 652

CONCRETE LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 6-570		Durability and Behavior of Prestressed Concrete Beams:	
	Jun 1961	Report 1 Pretensioned Concrete Investigation, Progress to July 1960	AD 731 6
	Mar 1967	Report 2 Posttensioned Concrete Investigation, Progress to July 1966, by E. C. Roshore	AD 650 7
	Oct 1971	Report 3 Laboratory Tests of Weathered Pretensioned Beams, by E. C. Roshore	AD 732 4
	Feb 1977	Report 4 Posttensioned Concrete Beam Investigation with Laboratory Tests from June 1961 to September 1975, by E. F. O'Neil	AD A038
	Jun 1976	Report 5 Laboratory Tests of Weathered Pretensioned Beams, by E. F. O'Neil	AD A025
	Oct 1984	Report 6 Posttensioned Concrete Beam Investigation, Supplemental Laboratory Tests of Beams Exposed from 1961 to 1982, by E. F. O'Neil and G. L. Odom	AD A148
TR 6-581		Study of Chert Popouts, Wolf River Floodwall, Memphis, Tennessee:	
	Nov 1961	Report 1 Initial Observations	AD 694 3
	Feb 1972	Report 2 Further Observations, by A. D. Bunk	AD 740 1
TR 6-583	Nov 1961	Nature and Distribution of Particles of Various Sizes in Fly Ash	AD 731 6
TR 6-584	Dec 1961	Investigation of Water-Reducing Admixtures for Concrete	AD 731 6
TR 6-593		Investigation of Gap Gradings of Concrete Aggregates:	
	Feb 1962	Report 1 Review of Available Information	AD 688 1
TR 6-596		Investigations of Concrete Masonry:	
	Mar 1962	Report 1 Uniform Concrete Masonry Testing Procedure	AD 731
TR 6-598		Investigation of Partially Compacted Weight of Concrete as a Measure of Workability:	
	Apr 1962	Report 1 Preliminary Tests	AD 688
	Aug 1963	Report 2 Tests of Large-Aggregate Concrete	AD 688
TR 6-606	Aug 1962	Investigation of Refrigerated Slurry	AD 688
TR 6-607	Aug 1962	Investigation of Shrinkage-Resistant Grout Mixtures	AD 806



## CONCRETE LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 6-614	Jan 1963	Project DRIBBLE, Petrographic Examination and Physical Tests of Cores, Tatum Salt Dome, Mississippi	AD 804 858
TR 6-627	Jun 1963	Influence of Alkali Content of Fly Ash on Effectiveness in Preventing Expansion of Concrete	AD 687 367
TR 6-629	Jun 1963	Aggregate Investigations, Milford Dam, Kansas, Examination of Cores from Concrete Structures	AD 732 224
TR 6-635	Nov 1963	High-Strength, High-Density Concrete	AD 450 625
TR 6-637	Dec 1963	Petrographic Examination of Concrete Cores, Chickamauga Dam Powerhouse - Unit 3, Tennessee Valley Authority	AD 732 421
TR 6-646	May 1964	Precast Concrete Elements with Bamboo Reinforcement	AD 701 189
TR 6-654		Investigation of Instruments for Measuring Pore Pressures in Concrete:	
	Aug 1964	Report 1 Literature Review and Preliminary Laboratory Tests	
	Mar 1970	Report 2 Instruments Installed at Hartwell Dam, Georgia, by E. C. Roshore	AD 704 718
TR 6-669		Determination of the Hugoniot Equation of State of Grout:	
	Jan 1965	Report 1 1963 Tests, by Howard Sugiuchi	AD 677 397
	Aug 1967	Report 2 1964 Tests, by Howard Sugiuchi and B. R. Sullivan	AD 674 646
TR 6-691		Investigation of Expanding Cements:	
	Sep 1965	Report 1 Summary of Information Available as of 1 July 1963, by Bryant Mather	
TR 6-706		Thermal Stabilization of Soils:	
	Nov 1965	Report 1 Exploratory Laboratory Studies, by D. E. Day	AD 626 654
	Feb 1969	Report 2 Stabilization in Place, by B. D. Ainsworth and Katharine Mather	
TR 6-717	Mar 1966	Effects on Concrete Quality of Fluctuations, Within Specification Limits, in Coarse Aggregate Grading, by W. O. Tynes	AD 631 239
TR 6-747	Dec 1966	Development of Methods of Testing Aggregate Larger Than 1-1/2 Inch, by R. L. Curry and A. D. Buck	AD 646 502
TR 6-748	Nov 1966	Comparison of Properties of Mass Concrete Containing 3- and 6-in. Maximum Size, Crushed Limestone Coarse Aggregate, by W. O. Tynes	AD 643 765
	Oct 1976	Errata Sheet	

CONCRETE LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Numt</u>
TR 6-763		Shock-Absorbing Materials:	
	Mar 1967	Report 1 Backpacking Materials for Deeply Buried Protective Structures, by G. C. Hoff	AD 654
	Jun 1971	Report 2 Cellular Concrete as a Backpacking Material, by G. C. Hoff	AD 726
	Apr 1968	Report 3 Selection of a Suitable Low-Density Concrete for Backpacking for a Proposed Field Test, by G. C. Hoff	AD 669
	Nov 1968	Report 4 Aging of Backpacking Materials, by G. C. Hoff, W. F. McCleese, and J. M. Holzer	AD 681
TR 6-764		Development of a Microcracking Technique for Measuring In Situ Stress and Strain:	
	Mar 1967	Report 1 Laboratory Tests, by R. L. Stowe	AD 650
	Mar 1967	Report 2 Field Tests, by R. L. Stowe	AD 650
TR 6-780		Study of Vibration of Concrete:	
	Jun 1967	Report 1 Review of Literature, by Howard Sugiuchi	AD 655
	Aug 1969	Report 2 Mechanical Impedance Measurements, by B. R. Sullivan	AD 695
	Sep 1977	Report 3 Mechanics of Motion of Fresh Concrete, by A. M. Alexander	AD A04
TR 6-782	Jun 1967	Freezing-and-Thawing Tests of Concrete of Various Strengths and Air Contents, by E. C. Roshore	AD 654
TR 6-784	Jul 1967	Investigation of Concrete in Eisenhower and Snell Locks, St. Lawrence Seaway, by A. D. Buck, Bryant Mather, and H. T. Thornton	AD 655
TR 6-785	Jul 1967	Deleterious Effects of Form Lumber on Concrete Surfaces, by Leonard Pepper and C. F. Derrington	AD 654
TR 6-787	Sep 1967	Cement Performance in Concrete, by Bryant Mather	AD 658
TR 6-788	Jul 1967	Methods of Reducing the Size and Number of Voids on Formed Concrete Surfaces, by B. J. Houston	AD 651
TR 6-802	Nov 1967	Shock Response of Rock at Pressures Below 30 Kilobars, by D. L. Ainsworth and B. R. Sullivan	AD 661
TR 6-804	Dec 1967	Investigation of Maximum Allowable Water-Cement Ratios for Mass Concrete, by K. L. Saucier and F. S. Stewart	AD 661

## CONCRETE LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 6-811		Strain Meters and Stress Meters for Embedment in Models of Mass Concrete Structures:	
	Jan 1968	Report 1 Summary of Information Available as of March 1967, by H. G. Geymayer	AD 666 182
	Jul 1972	Report 2 Evaluation of Microdot Embedment Strain Gage, by J. E. McDonald	AD A032 834
TR 6-816	Mar 1968	Evaluation of a Vibrating Spade to Eliminate Surface Voids on Formed Concrete Surfaces, by B. J. Houston	AD 667 967
TR 6-818		Static Tests of Reinforced Concrete Beams:	
	Mar 1968	Report 1 Development of Iterative Analysis Procedure and Tests of Beams Reinforced with Steel, Aluminum, and Fiber Glass, With and Without Helical Compressive Reinforcement, by H. G. Geymayer	AD 669 609
TR 6-819	Apr 1968	Effect of Fineness of Continuously Graded Coarse Aggregate on Properties of Concrete, by W. O. Tynes	AD 668 914
TR C-68-1	Jul 1968	Use of Membrane-Forming Curing Compounds on Concrete Surfaces That Are to be Painted, by B. J. Houston	AD 673 705
	Oct 1976	Report 2 Supplementary Tests, by B. J. Houston and E. C. Roshore (also cited as CTIAC No. 22)	AD A031 636
TR C-69-1	Feb 1969	Air Entrainment in Mass Concrete, by W. O. Tynes and Bryant Mather	AD 684 357
TR C-69-2	Mar 1969	Correlation of Hardened Concrete Test Methods and Results, by K. L. Saucier	AD 684 920
TR C-69-3		Expedient Reinforcement for Concrete for Use in Southeast Asia:	
	Feb 1969	Report 1 Preliminary Tests of Bamboo, by F. B. Cox and H. G. Geymayer	AD 685 824
	Mar 1970	Report 2 Preliminary Tests of Barbed Wire, Concertina Wire, Wire Rope, Landing Mat, and Landing Mat Tie Bars, by F. B. Cox and H. G. Geymayer	AD 706 846
	Dec 1970	Report 3 Additional Tests of Bamboo, by F. B. Cox and J. E. McDonald	AD A032 835
TR C-69-4	Mar 1969	Use of Epoxy or Polyester Resin Concrete in Tensile Zone of Composite Concrete Beams, by H. G. Geymayer	AD 684 922
TR C-69-5	Mar 1969	The Effect of Confining Reinforcement on the Ductility of Reinforced Concrete Beams, by J. E. McDonald	AD 685 809

CONCRETE LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Numb</u>
TR C-69-6		Effects of Duration of Moist Curing on Concrete Made with Blended Cements or Pozzolans:	
	May 1969	Report 1 Laboratory Investigations of 3/4-in.-Aggregate Concrete, by W. O. Tynes	AD 690
	Apr 1972	Report 2 Laboratory Investigations of 6-in.-Aggregate Concrete, by W. O. Tynes	AD 742
TR C-69-7	Jun 1969	Investigation of Colorless and Water-Based Concrete Curing Compounds, by C. F. Derrington	AD 689
TR C-69-8	Jul 1969	Effects of Axial Restraint on Length Change of Expanding Mortar Bars, by B. J. Houston	AD 692
TR C-69-9	Oct 1969	Accelerated Strength Tests of Pozzolans, by R. L. Curry	AD 697
TR C-70-1	Feb 1970	Short- and Long-Time Deflections of Reinforced Concrete Flat Slabs, by H. G. Geymayer and J. E. McDonald	AD 704
TR C-70-2		Investigation of Expanding Grout and Concrete:	
	May 1970	Report 1 Preliminary Studies, by B. J. Houston	AD 710
TR C-70-3	May 1970	A Study of the Feasibility of Methods for Increasing the Load-Carrying Capacities of Existing Concrete Beams, by F. B. Cox	AD 709
TR C-70-4	Sep 1970	Tests of Selected Insulating Materials for Mass Concrete, by E. C. Roshore and H. T. Thornton	AD 756
TR C-71-1	Jul 1971	Survey of Applications of Epoxy Resins for Civil Works Projects, by C. F. Derrington and Leonard Pepper	AD 728
TR C-71-2	Sep 1971	Effects of Water on Epoxy-Resin Systems, by T. B. Husbands, C. F. Derrington, and Leonard Pepper	AD 730
TR C-72-1	Jul 1972	Small-Scale Models for Studying Effects of Creep and Shrinkage on Long-Term Deflection of Reinforced Concrete Slabs, by F. B. Cox	AD 746
TR C-72-2	Aug 1972	Cement Durability Program, Long-Term Field Exposure of Concrete Columns; Final Report, by E. C. Roshore	AD 747
TR C-72-3	Sep 1972	Laboratory Investigation of 4-1/2-in. Aggregate Concrete Mixtures with High Water-Cement Ratios, by W. O. Tynes	AD 751
TR C-73-1	Feb 1973	Analyses of Check-Test Results of Pozzolan Samples, by L. Pepper	AD 757
* TR C-73-2	Aug 1973	Computer Study of Steel Tunnel Supports, by G. S. Orenstein	AD 913

\* Statement B. See Preface.

## CONCRETE LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR C-74-1	Mar 1974	Equipment and Test Procedure for Determining Multiaxial Tensile and Combined Tensile-Compressive Strength of Concrete, by K. L. Saucier	AD 777 784
TR C-74-2	Jun 1974	Correlation Between Tensile and Compressive Strengths for Lean Mass Concrete, by W. O. Tynes	AD 781 489
TR C-74-3	Jul 1974	Laboratory Investigation of Slipform Construction for Use in Mass Concrete Structures, by K. L. Saucier	AD 784 094
TR C-74-4	Sep 1974	Use of Belt Conveyors to Transport Mass Concrete, by K. L. Saucier	AD A010 327
TR C-74-5	Jul 1974	Investigation of Shotcrete, by W. O. Tynes and W. F. McCleese	AD 783 460
TR C-74-6		Use of Self-Stressing Expansive Cements in Large Sections of Grout, Mortar, and Concrete:	
	Aug 1974	Report 1 Pumpable Mortar Studies, by G. C. Hoff	AD 787 271
TR C-74-7		Crack-Arrest Techniques in Reinforced Concrete Structural Elements:	
	Nov 1974	Report 1 Laboratory Tests, by F. B. Cox	AD A002 661
TR C-75-1	May 1975	Moisture Migration in Concrete, by J. E. McDonald	AD A011 257
TR C-75-2	Jul 1975	A Concept for Rapid Repair of Bomb-Damaged Runways Using Regulated-Set Cement, by G. C. Hoff (includes Appendixes A-B)	AD A013 517
TR C-75-3	Sep 1975	Control of Reactive Carbonate Rocks in Concrete, by A. D. Buck	AD A016 355
TR C-75-4	Oct 1975	Time-Dependent Deformation of Concrete Under Multiaxial Stress Conditions, by J. E. McDonald (includes Appendixes A-C)	
TR C-76-1	Feb 1976	An Evaluation of Selected Instruments Used to Measure the Moisture Content of Hardened Concrete, by E. F. O'Neil and J. E. McDonald	AD A022 601
TR C-76-2	Aug 1976	Laboratory and Field Evaluation of Polymeric Cavitation Erosion-Resistant Materials on Concrete, by T. B. Husbands and Leonard Pepper	AD A029 843
TR C-76-3	Sep 1976	Evaluation of Admixtures for Use in Concrete to be Placed Underwater, by W. O. Tynes (includes Appendixes A-B)	AD A031 002
TR C-76-4	Oct 1976	Investigation of Frost Resistance of Mortar and Concrete, by A. D. Buck	AD A034 520

CONCRETE LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Num</u>
TR C-76-2	Aug 1976	Laboratory and Field Evaluation of Polymeric Cavitation Erosion-Resistant Materials on Concrete, by T. B. Husbands and Leonard Pepper	AD A02
TR C-76-3	Sep 1976	Evaluation of Admixtures for Use in Concrete to be Placed Underwater, by W. O. Tynes (includes Appendixes A-B)	AD A03
TR C-76-4	Oct 1976	Investigation of Frost Resistance of Mortar and Concrete, by A. D. Buck	AD A03
TR C-77-1	Apr 1977	Investigation of Proprietary Admixtures, by W. O. Tynes	AD A03
	Jan 1980	Report 2 1977-1978 Tests, by K. L. Saucier	
TR C-78-1	Feb 1978	Precast Concrete Elements for Structures in Selected Theaters of Operations, by J. E. McDonald and T. C. Liu (includes Appendixes A-I)	AD A05
TR C-78-2		Repair and Restoration of Paved Surfaces:	
*	Mar 1978	Report 1 Bomb Damage Repair Fields Trials, June 1975 - November 1976, by C. E. Collum, R. H. Denson, and G. C. Hoff (includes Appendix A)	AD B02
TR C-78-3	May 1978	Structural Integrity of Brick-Veneer Buildings, by C. E. Pace and R. L. Campbell	AD A05
TR C-78-4		Maintenance and Preservation of Concrete Structures	
	Sep 1978	Report 1 Annotated Bibliography, 1927-1977, by T. C. Liu, E. F. O'Neil, and J. E. McDonald	AD A06
	Apr 1980	Report 2 Repair of Erosion-Damaged Structures, by J. E. McDonald	AD A01
	Jul 1980	Report 3 Abrasion-Erosion Resistance of Concrete, by T. C. Liu (includes Appendixes A-C)	AD A0

\* Statement B. See Preface.

## CONCRETE LABORATORY

Concrete Technology Information Analysis CenterReports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
CTIAC-1	Jan 1973	Fast Setting Cement; Literature Survey, by C. F. Derrington (published as Miscellaneous Paper C-73-1)	AD A030 962
CTIAC-2	Jan 1973	Waterproof Membrane Systems for Use on Concrete Bridge Decks, by C. F. Derrington (published as Miscellaneous Paper C-73-2)	
CTIAC-3	Jan 1973	Test Data on Aggregate Sources, New York State, by A. D. Burk (published as Miscellaneous Paper C-73-3)	
CTIAC-4	May 1983	Investigation of Cement Pastes and Related Materials by Scanning Electron Microscopy and X-ray Diffraction, by Katharine Mather, C. R. Hallford, J. P. Burkes, and A. D. Burk (published as Miscellaneous Paper SL-83-6)	AD A130 586
CTIAC-5	Apr 1972	New Applications of Grout and Concrete as Shock Impedance Matching Materials for Geologic Formations, by D. L. Ainsworth (published as Miscellaneous Paper C-72-10)	AD A002 660
CTIAC-6	Jan 1973	Identification of Samples of Objects Recovered from Ocean Floor, by K. Mather (published as Miscellaneous Paper C-73-4)	AD A030 963
CTIAC-7	Oct 1968	Investigation of Methods for Removing Stains from Mortar and Concrete, by C. F. Derrington, R. L. Stowe, and W. G. Miller (published as Miscellaneous Paper C-68-8)	AD 680 321
CTIAC-8	Oct 1972	Expansive Cements and Their Use, by G. C. Hoff (published as Miscellaneous Paper C-72-22)	AD A030 961
CTIAC-9	Dec 1972	Use of Recycled Concrete as Aggregate, by A. D. Burk (published as Miscellaneous Paper C-72-23)	AD A029 832
CTIAC-10	Feb 1974	Research and Development of Fiber-Reinforced Concrete in North America, by G. C. Hoff (published as Miscellaneous Paper C-74-3)	AD A029 823
CTIAC-11	Dec 1972	Concrete Technology Information Analysis Center (CTIAC), Evaluation of Pilot Study, by Bryant Mather (published as Miscellaneous Paper C-72-24)	AD 755 837
CTIAC-12	Nov 1973	Examination of Cores from Four Highway Bridges in Georgia, by K. Mather (published as Miscellaneous Paper C-73-11)	AD A030 964
CTIAC-13	Jun 1978	Bibliography on Grouting (published as Miscellaneous Paper C-78-8)	AD A057 831
CTIAC-14	Jun 1974	Analysis of Hardened Concretes (Analyse des betons durcis), by the Chemical Commission of the Comite d'Etudes Techniques de l'Industrie du Ciment (Committee of Technical Studies of the Cement Industry) (published as WES Translation No. 74-10)	
CTIAC-15	Jun 1975	Use of Fiber-Reinforced Concrete in Hydraulic Structures and Marine Environments, by G. C. Hoff (published as Miscellaneous Paper C-75-4)	AD A010 640

CONCRETE LABORATORY

Concrete Technology Information Analysis Center

Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Num</u>
CTIAC-16	May 1975	Use of Regulated-Set Cement in Cold Weather Environments, by G. C. Hoff, B. J. Houston, and F. H. Savles (published as Miscellaneous Paper C-75-5)	AD A01
CTIAC-17	May 1975	New Concern Over Alkali-Aggregate Reaction, by Bryant Mather (published as Miscellaneous Paper C-75-3)	AD A01
* CTIAC-18	Apr 1976	Compaction: Present Trends (Le compactage: orientations actuelles), by E. Leflaive and G. Morel (published as Translation No. 76-1)	AD B06
CTIAC-19	Apr 1976	Recycled Concrete as a Source of Aggregate, by A. D. Buck (published as Miscellaneous Paper C-76-2)	AD A01
* CTIAC-20	Jun 1976	Characterization of Tuff and Development of Grouts for Mighty Epic Structures Program, by S. W. Butters, R. L. Stowe, J. W. LaComb, and R. A. Bendinelli (published as Miscellaneous Paper C-76-7) (includes Appendixes A-B)	AD B01
CTIAC-21	Jun 1976	Selected Bibliography on Fiber-Reinforced Cement and Concrete, by G. C. Hoff, C. M. Fontenot, and J. G. Tom (published as Miscellaneous Paper C-76-6)	AD A03
CTIAC-22	Oct 1976	Supplementary Tests, by B. J. Houston and E. C. Roshore (published as Technical Report C-68-1, Report 2)	AD A03
CTIAC-23	Jun 1977	Dynamic Properties of Mass Concrete, by K. L. Saucier (published as Miscellaneous Paper C-77-6)	AD A04
CTIAC-24	May 1977	Creep of Concrete Under Various Temperature, Moisture, and Loading Conditions, by J. E. McDonald (published as Miscellaneous Paper C-77-3)	AD A01
CTIAC-25	Sep 1977	Selected Bibliography on Fiber-Reinforced Cement and Concrete; Supplement No. 1, by G. C. Hoff (published as Miscellaneous Paper C-76-6, Suppl. No. 1)	AD A01
CTIAC-26	Aug 1977	The Effect of Alkalies on the Properties of Concrete, Edited by A. B. Poole (published as Miscellaneous Paper C-77-10)	AD A0
CTIAC-27	Oct 1977	Concrete Ships and Vessels - Past, Present, and Future, by T. C. Liu and J. E. McDonald (published as Miscellaneous Paper C-77-12)	AD AC
CTIAC-28	Sep 1978	Acid Attack of Concrete Caused by Sulfur Bacteria Action, by H. T. Thornton, Jr. (published as Miscellaneous Paper C-78-14)	AD AC

\* Statement B. See Preface.



## CONCRETE LABORATORY

Concrete Technology Information Analysis CenterReports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
CTIAC-29	Apr 1978	A Look at Type K Shrinkage-Compensating Cement Production and Specifications, by G. C. Hoff and Katharine Mather (published as Miscellaneous Paper C-78-2)	AD A053 997
CTIAC-30	Apr 1978	Tests of High-Range Water-Reducing Admixtures, by Bryant Mather (published as Miscellaneous Paper C-78-3)	AD A053 998
CTIAC-31	May 1978	Alkali-Silica Reaction Products from Several Concretes: Optical, Chemical, and X-ray Diffraction Data, by A. D. Buck and Katharine Mather (published as Miscellaneous Paper C-78-7)	AD A055 742
CTIAC-32	Aug 1978	Alkali-Silica Reaction in Concrete from Hiwassee Dam, North Carolina, Tennessee Valley Authority, by A. D. Buck and J. P. Burkes (published as Miscellaneous Paper C-78-10)	AD A059 987
CTIAC-33	Sep 1978	Alkali-Silica Reaction in Concrete from the New Savannah Bluff Lock and Dam, Georgia-South Carolina, by A. D. Buck (published as Miscellaneous Paper C-78-13)	AD A059 980
CTIAC-34	Sep 1978	Concrete for Earth-Covered Structures, by J. E. McDonald and T. C. Liu (published as Miscellaneous Paper C-78-15)	AD A061 469
CTIAC-35	Jan 1979	US-USSR Scientific Exchange Program in the Field of Polymer Concrete, by J. M. Scanlon (published as Miscellaneous Paper SL-79-3)	AD A065 318
CTIAC-36	Jan 1979	Quality Control During Hot and Cold Weather Concreting, by J. M. Scanlon (published as Miscellaneous Paper SL-79-4)	AD A066 989
CTIAC-37	May 1979	High-Strength Concrete, Past, Present, Future, by K. L. Saucier (published as Miscellaneous Paper SL-79-12)	AD A069 881
CTIAC-38	Aug 1979	Testing of 6-In.-Diameter Concrete Cores from Martin Dam, Alabama Power Company, by D. L. Ainsworth, A. D. Buck, S. A. Ragan, and Katharine Mather (published as Miscellaneous Paper SL-79-17)	AD A073 404
CTIAC-39	Jul 1979	Selected Bibliography on Fiber-Reinforced Cement and Concrete; Supplement No. 2, by G. C. Hoff (published as Miscellaneous Paper C-76-6, Suppl. No. 2)	AD A075 064
CTIAC-40	Jun 1979	Repair of Concrete Surfaces Subjected to Abrasion Erosion Damage, by J. E. McDonald and T. C. Liu (published as Miscellaneous Paper SL-79-15)	AD A073 085

## CONCRETE LABORATORY

Concrete Technology Information Analysis CenterReports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
CTIAC-41	Sep 1979	The 7.6-Angstrom Reaction Product in Smectite Clay-Lime Mixtures, by A. D. Buck and Katharine Mather (published as Miscellaneous Paper SL-79-22)	AD A075 351
CTIAC-42	Dec 1980	Concrete Deterioration in Spillway Warm-Water Chute, Ravstown Dam, Pennsylvania, by T. C. Holland, T. B. Husbands, A. D. Buck, and G. S. Wong (published as Miscellaneous Paper SL-80-19)	AD A094 246
CTIAC-43	Sep 1980	Selected Bibliography on Fiber-Reinforced Cement and Concrete; Supplement No. 3, by G. C. Hoff (published as Miscellaneous Paper C-76-6, Suppl. No. 3)	AD A090 273
CTIAC-44	Oct 1980	Factors Affecting Sulfate Resistance of Mortars, by Katharine Mather (published as Miscellaneous Paper SL-80-17)	AD A092 831
CTIAC-45	Sep 1981	Cold Weather Construction Materials; Part 2: Regulated-Set Cement for Cold Weather Concreting; Field Validation of Laboratory Results, by B. J. Houston and G. C. Hoff (published as Miscellaneous Paper C-75-11, Part 2) (includes Appendixes A-B)	AD A105 596
CTIAC-46	Jan 1981	Porous Portland Cement Concrete: The State of the Art, by Alfred Monahan (published as Miscellaneous Paper SL-81-10)	AD A098 177
CTIAC-47	Jul 1981	Characterization and Reactivity of Silica Fume, by A. D. Buck and J. P. Burkes (published as Miscellaneous Paper SL-81-13)	AD A103 369
CTIAC-48	Aug 1982	Selected Bibliography on Fiber-Reinforced Cement and Concrete; Supplement No. 4, by G. C. Hoff (published as Miscellaneous Paper C-76-6, Suppl. No. 4)	AD A122 237
CTIAC-49	Apr 1982	Durability of Reinforced Concrete Beams Exposed to Marine Environment, by E. F. O'Neil (published as Miscellaneous Paper SL-82-1)	AD A117 284
CTIAC-50	Apr 1982	Durability of Post-Tensioned Concrete Beams Exposed to Severe Natural Weathering, by E. F. O'Neil (published as Miscellaneous Paper SL-82-2)	AD A117 283
CTIAC-51	Jun 1982	Condition Survey of Depere Lock and Dam, Lower Fox River, Wisconsin, by R. L. Stowe and J. C. Ahlvin (published as Miscellaneous Paper SL-82-3) (includes Appendixes A-B)	AD A119 121

## CONCRETE LABORATORY

Concrete Technology Information Analysis CenterReports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
CTIAC-52	Jun 1982	Condition Survey of Cedars Lock and Dam, Lower Fox River, Wisconsin, by R. L. Stowe and J. C. Ahlvin (published as Miscellaneous Paper SL-82-4) (includes Appendixes A-B)	AD A119 696
CTIAC-53	Sep 1982	Evaluation of Concrete Cores from Waterbury Dam, Waterbury, VT., by C. E. Pace, R. L. Stowe, and G. S. Wong (published as Miscellaneous Paper SL-82-14)	AD A123 418
CTIAC-54	Sep 1982	Evaluation of Three State-of-the-Art Water-Jet Systems for Cutting/Removing Concrete, by C. E. Pace (published as Miscellaneous Paper SL-82-15)	AD A123 579
CTIAC-55	Jun 1982	Determination of Properties of Concrete Used in Thermal Studies for Lock and Dam No. 2, Red River Waterway, by T. C. Holland, T. C. Liu, and A. A. Bombich (published as Miscellaneous Paper SL-82-5) (includes Appendixes A-B)	AD A117 285
CTIAC-56	Jul 1982	Thermal Studies of HEMSS Cylindrical Test Beds Containing SRI-RMG-2C4 Grout, by A. A. Bombich (published as Miscellaneous Paper SL-82-9)	AD A118 993
CTIAC-57	Jul 1982	The HEMSS 3T Experiment, by A. A. Bombich (published as Miscellaneous Paper SL-82-10)	AD A120 669
CTIAC-58	Aug 1982	Optimization of High-Strength Concrete Mixture Proportions for the ANMCC Improvement Project, by A. A. Bombich and A. D. Magoun (published as Miscellaneous Paper SL-82-12) (includes Appendixes A-C)	AD A118 966
CTIAC-59	Mar 1984	Tensile Crack Exposure Tests; Report 4, Statistical Analysis of the Long-Term Durability of Series "B" Beams, by H. T. Thornton, Jr. (published as Technical Memorandum No. 6-412, Report 4) (includes Appendixes A-C)	
CTIAC-60	Sep 1982	Crack Survey and Gage Installation in Cross-Over Galleries, Kaskaskia Lock, Chester, Illinois, by R. H. Denson, G. S. Wong, and D. Bean (published as Miscellaneous Paper SL-82-16) (includes Appendixes A-C)	
CTIAC-61	Sep 1982	Six Candidate Shock Attenuating Material Systems for the Alternate National Military Command Center (ANMCC) Improvement Project - Omaha District, by R. H. Denson, W. B. Ledbetter, and Donald Savlak (published as Miscellaneous Paper SL-82-17) (includes Appendixes A-C)	
CTIAC-62	Sep 1982	Concrete Temperature Control Study for the Old River Auxiliary Structure, by A. A. Bombich (published as Miscellaneous Paper SL-82-18)	AD A120 419
CTIAC-63	May 1983	Studies of the Constitution of Fly Ash Using Selective Dissolution, by A. D. Buck, T. B. Husbands, and J. P. Burkes (published as Miscellaneous Paper SL-83-5) (includes Appendixes A-B)	AD A132 041

## CONCRETE LABORATORY

Concrete Technology Information Analysis CenterReports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
CTIAC-64	Sep 1983	Preventative Measures to Limit Stress Corrosion Cracking in Prestressed Concrete, by E. F. O'Neil (published as Miscellaneous Paper SL-83-14)	AD A136 665
CTIAC-65	Aug 1983	Alkali Reactivity of Strained Quartz as a Constituent of Concrete Aggregate, by A. D. Buck (published as Miscellaneous Paper SL-83-13)	AD A133 909
CTIAC-66	Sep 1983	Abrasion-Erosion Resistance of Concrete Made with Two Aggregates, Stonewall Jackson Dam, West Virginia, by T. C. Holland (published as Miscellaneous Paper SL-83-15)	AD A133 432
CTIAC-67	Sep 1983	Abrasion-Erosion Evaluation of Concrete Mixtures for Stilling Basin Repairs, Kinzua Dam, Pennsylvania, by T. C. Holland (published as Miscellaneous Paper SL-83-16) (includes Appendixes A-C)	AD A133 488
CTIAC-68	Feb 1984	Alkali-Silica Reaction in Concrete in a North Dakota Highway, by A. D. Buck (published as Miscellaneous Paper SL-84-2)	AD A140 098
CTIAC-70	Mar 1984	High-Strength Concrete for Pearekeeper Facilities, by K. L. Saucier (published as Miscellaneous Paper SL-84-3)	AD A140 510

## CONCRETE LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		THE DOW CHEMICAL COMPANY, Midland, Michigan	
CR C-71-1	May 1971	Latex Modification of Fast-Fix C-1 Cement for the Rapid Repair of Bomb-Damaged Runways, by R. D. Eash and G. M. Hart	AD 727 728
		SOUTHWEST RESEARCH INSTITUTE, San Antonio, Texas	
CR 6-87	May 1964	Feasibility of Foamed Sulfur as a Material for Shock-Isolating Large Underground Structures, by J. M. Dale, A. C. Ludwig, and G. E. Nevill	
		UNIVERSITY OF TEXAS, STRUCTURAL MECHANICS RESEARCH LABORATORY, Austin	
CR 6-83	Oct 1963	A Study of Vermiculite Concrete as a Shock-Isolating Material, by E. F. Smith and J. N. Thompson	AD 431 606
CR 6-126	Jul 1965	The Effects of Shape of Load Pulse on Shock-Mitigating Characteristics of a Styrofoam Plastic, by R. I. Carr, E. S. Perry, E. A. Ripperger, and J. N. Thompson	AD 623 317
CR 6-127	Jul 1965	A Study of the Interaction of Cushioning Materials and Structural Elements, by Mansour Nikkhah, N. H. Burns, and J. N. Thompson	AD 623 327
CR 6-160	Dec 1966	A Study of the Response of Backpacking Material Encasing a Tunnel Liner Subjected to a Dynamic Disturbance, by Salah Nousseir, E. S. Perry, and J. N. Thompson	AD 647 006

ENVIRONMENTAL EFFECTS LABORATORY

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramInformation Exchange Bulletins

<u>Volume</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
IEB D-76-1 through IEB D-76-8	May 1976 through Dec 1976	Dredged Material Research; Notes, News, Reviews, etc.	
IEB D-77-1 through IEB D-77-11	Jan 1977 through Dec 1977	Dredged Material Research, Notes, News, Reviews, etc.	
IEB D-78-1 through IEB D-78-9	Jan 1978 through Sep 1978	Dredged Material Research; Notes, News, Reviews, etc.	

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramMiscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP D-73-1 through MP D-73-7	Mar 1973 through Dec 1973	Dredged Material Research; Notes, News, Reviews, etc.	
MP D-73-8	Dec 1973	The Corps of Engineers Dredged Material Research Program, by R. L. Montgomery and F. H. Griffis, Jr.	
MP D-73-9	Dec 1973	An Overview of the Technical Aspects of the Corps of Engineers National Dredged Material Research Program, by C. J. Kirby, J. W. Keeley, and J. Harrison	
MP D-74-1 through MP D-74-10	Jan 1974 through Dec 1974	Dredged Material Research; Notes, News, Reviews, etc.	
MP D-74-11	Jan 1974	Engineering Challenges of Dredged Material Research, by R. M. Meccia, W. C. Allanach, Jr., and F. H. Griffis, Jr.	
MP D-74-12	Feb 1974	Problem Identification and Assessment for the Corps of Engineers Dredged Material Research Program, by J. Harrison, R. L. Montgomery, and F. H. Griffis, Jr.	
MP D-74-13	Nov 1974	Effects of Open-Water Disposal of Dredged Material on Bottom Topography Along Texas Gulf Coast, by D. F. Bastian	AD A002 659
MP D-74-14	Mar 1974	Discussion of Regulatory Criteria for Ocean Disposal of Dredged Materials; Elutriate Test Rationale and Implementation Guidelines, by J. W. Keeley and R. M. Engler	AD 775 826
Unnumbered	Mar 1974	Dredged Material Research Program; First Annual Report	AD 781 533
Unnumbered	Jan 1975	Dredged Material Research Program; Second Annual Report	AD A006 594
MP D-75-1 through MP D-75-12	Jan 1975 through Dec 1975	Dredged Material Research; Notes, News, Reviews, etc.	
MP D-75-13	Apr 1975	General Research Plan for the Field Investigations of Coastal Dredged Material Disposal Areas, by P. R. Becker, B. W. Holliday, S. E. Palmer, and R. M. Engler	AD A009 523
MP D-75-14	Oct 1975	Fourth Semiannual Interagency Briefing, February 1975, Washington, D. C., by R. T. Saucier and M. K. Vincent (editor) (includes Appendixes A-B)	AD A017 556
Unnumbered	Jan 1976	Dredged Material Research Program; Third Annual Report	AD A025 300



## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramMiscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP D-76-2	Feb 1976	Dredged Material Research; Notes, News, Reviews, etc.	AD A022 058
MP D-76-4	Apr 1976	Dredged Material Research; Notes, News, Reviews, etc.	AD A024 656
MP D-76-5	Jun 1976	Land Application of Waste Materials from Dredging, Construction, and Demolition Processes, by C. R. Lee, R. M. Engler, and J. L. Mahloch	AD A026 842
MP D-76-6	Sep 1976	A Bioassay Dilution Technique to Assess the Significance of Dredged Material Disposal, by R. H. Plumb, Jr.	AD A030 263
MP D-76-7	Sep 1976	Bioassessment of the Standard Elutriate Test, by P. J. Shuba, J. H. Carroll, and H. E. Tatem	AD A030 793
MP D-76-13	Mar 1976	Dredged Material as a Natural Resource -- Concepts for Land Improvement and Reclamation, by R. T. Saucier	AD A024 772
MP D-76-14	Feb 1976	Fifth Semiannual Interagency Briefing, August 1975, Washington, D. C., by R. T. Saucier, C. C. Calhoun, Jr., R. M. Engler, R. M. Meccia, and H. K. Smith (includes Appendixes A-B)	AD A022 377
MP D-76-15	Feb 1976	A New Concept for Dredged Material Disposal, by M. R. Palermo and R. L. Montgomery	AD A022 376
MP D-76-16	Apr 1976	First Steps Toward Achieving Disposal Area Reuse, By R. L. Montgomery and M. R. Palermo	AD A024 646
MP D-76-17	May 1976	Ecological Evaluation of Proposed Discharge of Dredged or Fill Material Into Navigable Waters: Interim Guidance for Implementation of Section 404(b)(1) of Public Law 92-500 (Federal Water Pollution Control Act Amendments of 1972) (includes Appendixes A-E)	AD A026 882
MP D-76-18	Jun 1976	Distribution of Manganese, Nickel, Zinc, Cadmium, and Arsenic in Sediments and in the Standard Elutriate, by J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt, and Isaac Smith	AD A026 355
MP D-76-19	Jul 1976	Sixth Semiannual Interagency Briefing, February 1976, Washington, D. C., by C. C. Calhoun, Jr., R. M. Engler, M. D. Malkasian, R. M. Meccia, and H. K. Smith (includes Appendixes A-B)	AD A029 187
Unnumbered	Jan 1977	Dredged Material Research Program; Fourth Annual Report	AD A043 409
MP D-77-1	Sep 1977	Pregermination Requirements and Establishment Techniques for Salt Marsh Plants, by P. K. Falco and F. J. Cali	AD A045 514

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramMiscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP D-77-2	Nov 1977	Field Study to Determine the Feasibility of Electro-Osmotic Dewatering of Dredged Material, by C. E. O'Bannon and U. S. Army Engineer District, Mobile	AD A048 566
MP D-77-3	Dec 1977	Feasibility of Pinto Island as a Long-Term Dredged Material Disposal Site, by T. A. Haliburton, P. A. Douglas, and Jack Fowler (includes Appendix A)	AD A050 331
MP D-77-4	Dec 1977	An Evaluation of Progressive Trenching as a Technique for Dewatering Fine-Grained Dredged Material, by M. R. Palermo (includes Appendixes A-E)	AD A052 687
MP D-77-5	Dec 1977	Review of Dredged Material Disposal Techniques to Identify Wildlife Habitat Development Factors, by Dames & Moore (on microfiche only)	AD A063 441
MP D-78-1	Jul 1978	A Survey of Potential Medical and Veterinary Diseases at Habitat Development Field Sites, by J. W. Simmers (on microfiche only)	AD A061 845
MP D-78-2	Aug 1978	Environmental Impact of Dredged Material Disposal on the Upper Mississippi River at Crosby Slough, by J. W. Held (on microfiche only)	AD A061 847
MP D-78-3	Aug 1978	Perimeter Dike Raising with Dewatered Fine-Grained Dredged Material at Upper Polecat Bay Disposal Area, Mobile, Alabama, by T. A. Haliburton, Jack Fowler, and J. P. Langan	AD A061 353
MP D-78-4	Aug 1978	Land Use of Dredged Material Containment Areas: Productive Use Examples, by Environmental Laboratory, Ogden Beeman, and A. P. Benkendorf (includes Appendix A)	AD A059 723
MP D-78-5	Sep 1978	A Selected Bibliography of the Life Requirements of Colonial Nesting Waterbirds and Their Relationship to Dredged Material Islands, by M. C. Landin	AD A061 643
MP D-78-6	Dec 1978	Field Bioassay Test for Detecting Contaminant Uptake from Dredged Material by Marsh Plants, by P. L. Wolf, J. L. Gallagher, and C. H. Pennington	AD A066 802
MP D-78-7	Dec 1978	Annotated Tables of Vegetation Growing on Dredged Material Throughout the United States, by M. C. Landin	AD A068 459

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-74-1	Mar 1974	Investigation of Mathematical Models for the Physical Fate Prediction of Dredged Material, by B. H. Johnson	AD 776 368
TR D-74-2	May 1974	Practices and Problems in the Confinement of Dredged Material on Corps of Engineers Projects, by W. L. Murphy and T. W. Zeigler	AD 780 753
TR D-76-1	Jan 1976	Mathematical Model for Predicting the Consolidation of Dredged Material in Confined Disposal Areas, by L. D. Johnson (includes Appendixes A-C)	AD A020 949
TR D-76-2	Feb 1976	Treatability of Dredged Material (Laboratory Study), by T. K. Moore and B. W. Newbry	AD A022 143
TR D-76-3	Jun 1976	Application of Ecosystem Modeling Methodologies to Dredged Material Research, by R. W. Hall, H. E. Westerdahl, and R. L. Eley	AD A027 207
TR D-76-4	Jun 1976	Feasibility of the Functional Use of Vegetation to Filter, Dewater, and Remove Contaminants from Dredged Material, by C. R. Lee, R. E. Hoeppe, P. G. Hunt, and C. A. Carlson (includes Appendixes A-E)	AD A028 336
TR D-76-5	Jun 1976	A Hydroponic Study of Heavy Metal Uptake by Selected Marsh Plant Species, by C. R. Lee, T. C. Sturgis, and M. C. Landin (includes Appendix A)	AD A033 224
TR D-76-6	Nov 1976	Feasibility Study for Dyke Marsh Demonstration Area, Potomac River, Virginia, by M. R. Palermo and T. W. Zeigler (includes Appendixes A-B)	AD A033 524
TR D-76-7	Dec 1976	Selective Analytical Partitioning of Sediments to Evaluate Potential Mobility of Chemical Constituents During Dredging and Disposal Operations, by J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt, and Isaac Smith (includes Appendixes A-C)	AD A035 247
TR D-77-1	Apr 1977	Low-Ground-Pressure Construction Equipment for Use in Dredged Material Containment Area Operation and Maintenance -- Equipment Inventory, by C. E. Green and A. A. Rula (includes Appendixes A-D)	AD A041 451
TR D-77-2	Mar 1977	Establishment and Growth of Selected Freshwater and Coastal Marsh Plants in Relation to Characteristics of Dredged Sediments, by J. W. Barko, R. M. Smart, C. R. Lee, and others	AD A039 495
	Feb 1978	Errata Sheet No. 1	

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-77-3	Mar 1977	Biological Assessment of the Soluble Fraction of the Standard Elutriate Test, by P. J. Shuba, J. H. Carroll, and K. L. Wong (includes Appendixes A-C)	AD A040 087
TR D-77-4	Apr 1977	State-of-the-Art Applicability of Conventional Densification Techniques to Increase Disposal Area Storage Capacity, by S. J. Johnson, R. W. Cunny, E. B. Perry, and Leslie Devay (includes Appendixes A-D, Appendixes A-C are on microfiche only)	AD A041 452
TR D-77-5	May 1977	Investigation of Subaqueous Borrow Pits as Potential Sites for Dredged Material Disposal, by J. D. Broughton	AD A043 052
TR D-77-6		Aquatic Disposal Field Investigations, Eatons Neck Disposal Site, Long Island Sound:	
	May 1978	An Environmental Inventory, by S. P. Cobb, J. R. Reese, M. A. Granat, and others	AD A055 217
	Sep 1977	Appendix A Investigation of the Hydraulic Regime and the Physical Characteristics of Bottom Sedimentation, by Henry Bokuniewicz, Michael Dowling, Jeffery Gebert, Robert Gordon, Peter Kaminsky, Carol Pilbeam, and Catherine Tuttle	AD A047 421
	Jan 1978	Appendix B Water-Quality Parameters and Physicochemical Sediment Parameters, by Marine Sciences Research Center, State University of New York, Stony Brook	AD A053 427
	Jun 1978	Errata Sheet No.1	
	Nov 1977	Appendix C Predisposal Baseline Conditions of Benthic Assemblages, by D. K. Serafy, D. J. Hartzband, and Marcia Bowen	AD A050 046
	Sep 1977	Appendix D Predisposal Baseline Conditions of Demersal Fish Assemblages, by R. J. Valenti and Stephen Peters	AD A045 720
	Sep 1977	Appendix E Predisposal Baseline Conditions of Zooplankton Assemblages, by R. I. Caplan	AD A045 310
	Sep 1977	Appendix F Predisposal Baseline Conditions of Phytoplankton Assemblages, by Robert Nuzzi	AD A045 313
TR D-77-7	Aug 1977	Low-Ground-Pressure Construction Equipment for Use in Dredged Material Containment Area Operation and Maintenance: Performance Predictions, by W. E. Willoughby (includes Appendix A on microfiche)	AD A044 209

ENVIRONMENTAL EFFECTS LABORATORY  
Dredged Material Research Program

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-77-9	Aug 1977	Design and Construction of Retaining Dikes for Containment of Dredged Material, by D. P. Hammer and E. D. Blackburn (includes Appendixes A-B)	AD A045 311
TR D-77-10	Sep 1977	Effects of Mechanical Agitation on Drying Rate of Fine-Grained Dredged Material, by T. A. Haliburton, G. N. Durham, K. W. Brown, R. E. Peters, and T. B. Delaney, Jr. (includes Appendixes A-C on microfiche)	AD A044 843
TR D-77-11	Sep 1977	Use of Dredged Material in Solid Waste Management, by M. J. Bartos, Jr. (includes Appendixes A-B)	AD A045 509
TR D-77-12	Oct 1977	Mathematical Model of Estuarial Sediment Transport, by Ranjan Ariathurai, R. C. MacArthur, and R. B. Krone (includes Appendixes A-F)	AD A047 202
TR D-77-13	Oct 1977	Detailed Design for Dyke Marsh Demonstration Area, Potomac River, Virginia, by M. R. Palermo and T. W. Zeilyer (includes Appendixes A-E; Appendixes A-D are on microfiche only)	AD A048 179
TR D-77-14	Nov 1977	A Laboratory Study of the Turbidity Generation Potential of Sediments to be Dredged, by B. A. Wechsler and D. R. Cogley (includes Appendixes A-H; Appendixes A-F are on microfiche only)	AD A055 646
TR D-77-15	Oct 1977	Oxygenation of Dredged Material by Direct Injection of Oxygen and Air During Open-Water Pipeline Disposal, by R. W. Neal, R. B. Pojasek, and J. C. Johnson (includes Appendixes A-E)	AD A046 482
TR D-77-16	Oct 1977	Freeze-Thaw Enhancement of the Drainage and Consolidation of Fine-Grained Dredged Material in Confined Disposal Areas, by E. J. Chamberlain and S. E. Blouin	AD A046 400
TR D-77-17	Oct 1977	Feasibility Study of General Crust Management as a Technique for Increasing Capacity of Dredged Material Containment Areas, by K. W. Brown and L. J. Thompson (includes Appendixes A-D)	AD A047 509
TR D-77-18	Sep 1977	Classification and Engineering Properties of Dredged Material, by M. J. Bartos, Jr. (includes Appendixes A-D)	AD A047 768
TR D-77-19	Oct 1977	Containment Area Management to Promote Natural Dewatering of Fine-Grained Dredged Material, by M. J. Bartos, Jr.	AD A047 514
TR D-77-20		Aquatic Disposal Field Investigations, Galveston, Texas, Offshore Disposal Site:	
	May 1978	Evaluative Summary, by T. D. Wright, D. B. Mathis, and J. M. Brannon	AD A061 844

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-77-20 (Cont)	Dec 1977	Appendix A Investigation of the Hydraulic Regime and Physical Nature of Sedimentation, by E. L. Estes and R. J. Scudato	AD A050 812
	Dec 1977	Appendix B Investigation of Water-Quality Parameters and Physicochemical Parameters, by G. F. Lee, Pinaki Bandyopadhyay, Jeannie Butler, and others	AD A053 102
**	May 1978	Appendix C Investigation of the Effects of Dredging and Dredged Material Disposal on Offshore Biota, by D. E. Harper, Jr.	
TR D-77-21	Oct 1977	Sizing of Containment Areas for Dredged Material, by S. E. Lacasse, T. W. Lambe, and W. A. Marr (includes Appendixes A-B)	AD A050 038
TR D-77-22	Nov 1977	Field Study of the Effects of Storms on the Stability and Fate of Dredged Material in Subaqueous Disposal Areas, by H. J. Bokuniewicz, Jeffery Gebert, R. B. Gordon, Peter Kaminsky, C. C. Pilbeam, Matthew Reed, and Catherine Tuttle	AD A049 978
TR D-77-23		Habitat Development Field Investigation, Windmill Point Marsh Development Site, James River, Virginia:	
	Aug 1978	Summary Report, by J. D. Lunz, T. W. Zeigler, R. T. Huffman, R. J. Diaz, and others	AD A066 224
***	Nov 1977	Appendix A Assessment of Vegetation on Existing Dredged Material Island, by G. M. Silberhorn and T. A. Barnard, Jr.	
***	Apr 1978	Appendix B Propagation of Vascular Plants, by E. W. Garbisch, Jr.	
	Nov 1977	Appendix C Environmental Impacts of Marsh Development with Dredged Material: Acute Impacts on the Macrobenthic Community, by R. J. Diaz and D. F. Boesch	AD A055 319
	Jun 1978	Appendix D Environmental Impacts of Marsh Development with Dredged Material: Botany, Soils, Aquatic Biology, and Wildlife, by Virginia Institute of Marine Science, Gloucester Point	AD A061 842

\*\* Reproduced on microfiche; no hard copies are available. Microfiche for this appendix is inclosed in a pocket inside the back cover of the Evaluative Summary.

\*\*\* Reproduced on microfiche; no hard copies are available. Microfiche for this appendix is inclosed in a pocket inside the back cover of the Summary Report.

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-77-23 (Cont)	Aug 1978	Appendix E Environmental Impacts of Marsh Development with Dredged Material: Metals and Chlorinated Hydrocarbon Compounds in Marsh Soils and Vascular Plant Tissues, by J. D. Lunz	AD A062 170
		Appendix F Environmental Impacts of Marsh Development with Dredged Material: Sediment and Water Quality:	
	Aug 1978	Volume I Characteristics of Channel Sediments Before Dredging and Effluent Quality During and Shortly After Marsh Habitat Development, by D. D. Adams, D. A. Darby, and R. J. Young	AD A061 917
	Aug 1978	Volume II Substrate and Chemical Flux Characteristics of a Dredged Material Marsh, by D. D. Adams, D. A. Darby, and R. J. Young	AD A062 841
TR D-77-24		Aquatic Disposal Field Investigations, Duwamish Waterway Disposal Site, Puget Sound, Washington:	
	Jun 1978	Evaluative Summary, by H. E. Tatem and J. H. Johnson	AD A058 445
	May 1978	Appendix A Effects of Dredged Material Disposal on Demersal Fish and Shellfish in Elliott Bay, Seattle, Washington, by J. R. Hughes, W. E. Ames, D. A. Misitano, and G. F. Slusser	AD A058 268
	Nov 1977	Appendix B Role of Disposal of PCB-Contaminated Sediment in the Accumulation of PCB's by Marine Animals, by V. F. Stout and L. G. Lewis	AD A055 218
	Nov 1977	Appendix C Effects of Dredged Material Disposal on the Concentration of Mercury and Chromium in Several Species of Marine Animals, by F. M. Teeny and A. S. Hall	AD A049 616
		Appendix D Chemical and Physical Analyses of Water and Sediment in Relation to Disposal of Dredged Material in Elliott Bay:	
	Jun 1978	Volume I February-June 1976, by D. J. Baumgartner, D. W. Schults, and J. B. Carkin	AD A058 000
	Jun 1978	Volume II September-December 1976, by S. Sugai, W. R. Schell, A. Nevissi, S. Olsen, and D. Huntamer	AD A058 001

ENVIRONMENTAL EFFECTS LABORATORY  
Dredged Material Research Program

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-77-24 (Cont)	Jan 1978	Appendix E Release and Distribution of Polychlorinated Biphenyls Induced by Open-Water Dredge Disposal Activities, by S. P. Pavlou, R. N. Dexter, Wilson Hom, A. J. Hafferty, and K. A. Kroglund	AD A061 987
**	Jun 1978	Appendix F Recolonization of Benthic Macrofauna Over a Deep-Water Disposal Site, by R. A. Harman and J. C. Serwold	AD A058 442
	Aug 1978	Appendix G Benthic Community Structural Changes Resulting from Dredged Material Disposal, Elliott Bay Disposal Site, by C. R. Bingham	AD A058 950
TR D-77-25	Nov 1977	An Evaluation of Oil and Grease Contamination Associated with Dredged Material Containment Areas, by Engineering-Science, Inc. (includes Appendix A)	AD A048 595
TR D-77-26	Nov 1977	Assessment and Significance of Sediment-Associated Oil and Grease in Aquatic Environments, by L. H. DiSalvo, H. E. Guard, N. D. Hirsch, and James Ng (includes Appendix A)	AD A050 044
TR D-77-27	Oct 1977	Patterns of Succession in Benthic Infaunal Communities Following Dredging and Dredged Material Disposal in Monterey Bay, by J. S. Oliver, P. N. Slattery, L. W. Hulberg, and J. W. Nybakken	AD A049 632
TR D-77-28	Dec 1977	Underground Biomass Dynamics and Substrate Selective Properties of Atlantic Coastal Salt Marsh Plants, by J. L. Gallagher, F. G. Plumley, and P. L. Wolf (includes Appendixes A-C on microfiche)	AD A055 761
TR D-77-29	Dec 1977	An Assessment of Problems Associated with Evaluating the Physical, Chemical, and Biological Impacts of Discharging Fill Material, by L. W. Canter, E. H. Klehr, J. W. Laguros, and others (includes Appendixes A-G)	AD A052 519
TR D-77-30		Aquatic Disposal Field Investigations, Columbia River Disposal Site, Oregon:	
	May 1978	Evaluative Summary, by C. G. Boone, M. A. Granat, and M. P. Farrell	AD A056 925
	Dec 1977	Appendix A Investigation of the Hydraulic Regime and Physical Nature of Bottom Sedimentation, by R. W. Sternberg, J. S. Creager, William Glassley, and Janice Johnson	AD A054 725

\*\* Reproduced on microfiche; no hard copies are available. Microfiche for this appendix is inclosed in a pocket inside the back cover of the Evaluative Summary.



## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-77-30 (Cont)	Jun 1978	Appendix B Water Column, Primary Productivity, and Sediment Studies, by R. L. Holton, N. H. Cutshall, L. I. Gordon, and L. F. Small	AD A058 433
	Dec 1977	Appendix C The Effects of Dredged Material Disposal on Benthic Assemblages, by M. D. Richardson, A. G. Carey, Jr., and W. A. Colgate	AD A054 561
**	Mar 1978	Appendix D Zooplankton and Ichthyoplankton Studies, by R. L. Holton and L. F. Small	
	Nov 1977	Appendix E Demersal Fish and Decapod Shellfish Studies, by J. T. Durkin and S. J. Lipovsky	AD A048 412
TR D-77-31	Nov 1977	The Flora of Dredged Material Sites in Navigation Pool 8 of the Upper Mississippi River, by S. R. Ziegler and S. H. Sohmer (includes Appendix A)	AD A050 778
TR D-77-32	Nov 1977	Identification of Alternative Power Sources for Dredged Material Processing Operations, by C. E. Parker, D. Pal, K. F. Vodraska, and J. B. Ciani (includes Appendixes A-F; Appendixes A-E on microfiche only)	AD A048 312
TR D-77-33	Nov 1977	Feasibility of Inland Disposal of Dewatered Dredged Material: A Literature Review, by SCS Engineers	AD A048 203
TR D-77-34	Nov 1977	Availability of Sediment-Absorbed Selected Pesticides to Benthos with Particular Emphasis on Deposit-Feeding Infauna, by M. W. Nathans and T. J. Bechtel (includes Appendixes A-B)	AD A055 506
TR D-77-35	Nov 1977	Modeling of Ecological Succession and Production in Estuarine Marshes, by J. C. Zieman and W. E. Odum (includes Appendixes A-C; Appendix B is on microfiche only)	AD A051 929
TR D-77-36	Nov 1977	Primary Productivity of Minor Marsh Plants in Delaware, Georgia, and Maine, by R. J. Reimold and R. A. Linthurst (includes Appendixes A-D on microfiche)	AD A051 164
	Feb 1978	Errata Sheet No. 1	
TR D-77-37	Dec 1977	Ability of Salt Marshes to Remove Nutrients and Heavy Metals from Dredged Material Disposal Area Effluents, by H. L. Windon (includes Appendixes A-E on microfiche)	AD A063 643

\*\* Reproduced on microfiche; no hard copies are available. Microfiche for this appendix is inclosed in a pocket inside the back cover of the Evaluative Summary.

ENVIRONMENTAL EFFECTS LABORATORY  
Dredged Material Research Program

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-77-38		Habitat Development Field Investigations, Miller Sands Marsh and Upland Habitat Development Site, Columbia River, Oregon:	
	Dec 1978	Summary Report, by E. J. Clairain, Jr., R. A. Cole, R. J. Diaz, A. W. Ford, R. T. Huffman, L. J. Hunt, and B. R. Wells	AD A074 872
***	Jun 1978	Appendix A Physical and Chemical Inventory, by Normal Cutshall and V. G. Johnson	AD A074 873
***	Jun 1978	Appendix B Inventory and Assessment of Predisposal and Postdisposal Aquatic Habitats, by R. J. McConnell, S. J. Lipovsky, D. A. Misitano, D. R. Craddock, and J. R. Hughes	AD A074 874
***	Mar 1978	Appendix C Inventory and Assessment of Prepropagation Terrestrial Resources on Dredged Material, by C. D. White, D. O. McKay, and A. D. Grant	AD A074 875
***	Dec 1978	Appendix D Propagation of Vascular Plants on Dredged Material, by W. E. Ternyik	AD A074 876
	Aug 1978	Appendix E Postpropagation Assessment of Botanical and Soil Resources on Dredged Material, by P. E. Heilman, D. M. Greer, S. E. Brauen, and A. S. Baker	AD A062 261
	May 1978	Appendix F Postpropagation Assessment of Wildlife Resources on Dredged Material, by J. A. Crawford and D. K. Edwards	AD A056 823
TR D-77-39	Dec 1977	Laboratory Study of Chemical Coagulation as a Means of Treatment for Dredged Material, by Chun-Ching Wang and K. Y. Chen (includes Appendixes A-B)	AD A050 596
TR D-77-40	Dec 1977	Trace and Toxic Metal Uptake by Marsh Plants as Affected by Eh, pH, and Salinity, by Center for Wetland Resources, Louisiana State University, Baton Rouge	AD A050 914
TR D-77-42		Aquatic Disposal Field Investigations, Ashtabula River Disposal Site, Ohio:	
	Jun 1978	Evaluative Summary, by R. A. Sweeney	AD A055 865
	Jan 1979	Errata Sheet No. 1	
	Jul 1978	Appendix A Planktonic Communities, Benthic Assemblages, and Fishery, by R. A. Sweeney	AD A061 317

\*\*\* Reproduced on microfiche; no hard copies are available. Microfiche for this appendix is included in a pocket inside the back cover of the Summary Report.

## ENVIRONMENTAL EFFECTS LABORATORY

## Dredged Material Research Program

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-77-42 (Cont)	Dec 1977	Appendix B Investigation of the Hydraulic Regime and Physical Nature of Bottom Sedimentation, by L. G. Danek, G. R. Alther, P. P. Paily, R. G. Johnson, F. de Libero, J. F. Yohn, and F. T. Lovorn	AD A051 217
	Jul 1978	Appendix C Investigation of Water-Quality and Sediment Parameters, by R. K. Wyeth and R. A. Sweeney	AD A057 461
	Nov 1978	Errata Sheet No. 1	
TR D-77-43		Case Studies and Comparative Analyses of Issues Associated with Productive Land Use at Dredged Materials Disposal Sites, by J. J. Gushue and K. M. Krueztiger:	
	Dec 1977	Volume I Main Text	AD A055 386
	Dec 1977	Volume II Appendixes A-R	AD A054 893
	Jun 1978	Errata Sheet No. 1	
TR D-77-44		Common Marsh Plant Species of the Gulf Coast Area:	
	Dec 1977	Volume I Productivity, by J. G. Gosselink, C. S. Hopkinson, Jr., and R. T. Parrondo (includes Appendixes A-C on microfiche)	AD A052 094
	Dec 1977	Volume II Growth Dynamics, by J. G. Gosselink, C. S. Hopkinson, Jr., and R. T. Parrondo (includes Appendixes A-G on microfiche)	AD A052 095
TR D-77-45	Dec 1977	Impact of Fluid Mud Dredged Material on Benthic Communities of the Tidal James River, Virginia, by R. J. Diaz and D. F. Boesch (includes Appendixes A-B)	AD A050 915
TR D-78-1	Jun 1978	Use of Dredged Material Islands by Colonial Seabirds and Wading Birds in New Jersey, by F. G. Buckley and C. A. McCaffrey (includes Appendixes A-D; Appendixes A and B are on microfiche)	AD A061 843
	Nov 1978	Errata Sheet	
TR D-78-2	Jan 1978	An Assessment of the Potential Impact of Dredged Material Disposal in the Open Ocean, by W. E. Pequegnat in collaboration with D. D. Smith, R. M. Darnell, and others (includes Appendixes A-B)	AD A053 183
TR D-78-3	Jan 1978	Mineral Cycling in Salt Marsh-Estuarine Ecosystems; Ecosystem Structure, Function, and General Compartmental Model Describing Mineral Cycles, by Douglas Gunnison (includes Appendix A)	AD A052 737

## ENVIRONMENTAL EFFECTS LABORATORY

## Dredged Material Research Program

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-78-4	Jan 1978	Seagrass Literature Survey, by J. C. Zieman, K. W. Bridges, and C. P. McRoy	AD A054 480
	Jun 1978	Errata Sheet No. 1	
TR D-78-5	Feb 1978	Feasibility Study of Vacuum Filtration Systems for Dewatering Dredged Material, by B. W. Long and D. J. Grana (includes Appendixes A-B)	AD A053 773
TR D-78-6	Feb 1978	Prediction of Heavy Metal Uptake by Marsh Plants Based on Chemical Extraction of Heavy Metals from Dredged Material, by C. R. Lee, R. M. Smart, T. C. Sturgis, R. N. Gordon, Sr., and M. C. Landin (includes Appendixes A-B)	AD A054 129
TR D-78-7		Field Study of the Mechanics of the Placement of Dredged Material at Open-Water Disposal Sites, by H. J. Bokuniewicz, Jeffrey Gebert, R. B. Gordon, and others:	
	Apr 1978	Volume I Main Text and Appendixes A-I	AD A055 647
	Apr 1978	Volume II Appendixes J-0	AD A055 648
TR D-78-8	Apr 1978	Use of Dredged Material Islands by Colonial Seabirds and Wading Birds in Texas, by A. H. Chaney, B. R. Chapman, J. P. Karges, and others (includes Appendixes A-I; Appendixes D-F are on microfiche only)	AD A056 785
TR D-78-9	May 1978	A Comparison of Plant Succession and Bird Utilization on Diked and Undiked Dredged Material Islands in North Carolina Estuaries, by J. F. Parnell, D. M. DuMond, and R. N. Needham (includes Appendixes A-D)	AD A056 000
TR D-78-10	May 1978	Colonial Birds Nesting on Man-Made and Natural Sites in the U.S. Great Lakes, by W. C. Scharf (includes Appendixes A-E; Appendixes C-E are on microfiche only)	AD A061 818
TR D-78-11		Habitat Development Field Investigations, Rennie Island Marsh Development Site, Grays Harbor, Washington:	
	Apr 1978	Summary Report, by M. K. Vincent (includes Appendixes A-D; Appendixes A-C are on microfiche only)	AD A056 909
TR D-78-12	May 1978	Investigation of Containment Area Design to Maximize Hydraulic Efficiency, by Brian J. Gallagher and Co. (includes Appendixes A-E)	AD A056 525
TR D-78-13	Apr 1978	An Aerial Survey of Waterbird Colonies Along the Upper Mississippi River and Their Relationship to Dredged Material Deposits, by D. H. Thompson and M. C. Landin (includes Appendixes A-B)	AD A056 059

ENVIRONMENTAL EFFECTS LABORATORY  
Dredged Material Research Program

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-78-14		Colonial Bird Use and Plant Succession on Dredged Material Islands in Florida:	
	Apr 1978	Volume I Sea and Wading Bird Colonies, by R. W. Schreiber and E. A. Schreiber (includes Appendixes A-B)	AD A056 086
	Apr 1978	Volume II Patterns of Plant Succession, by R. R. Lewis III and C. S. Lewis	AD A056 803
TR D-78-15		Habitat Development Field Investigations, Bolivar Peninsula, Marsh and Upland Habitat Development Site, Galveston Bay, Texas:	
	Aug 1978	Summary Report, by H. H. Allen, E. J. Clairain, Jr., R. J. Diaz, A. W. Ford, L. J. Hunt, and B. R. Wells	AD A063 780
***	Jun 1978	Appendix A Baseline Inventory of Water Quality, Sediment Quality, and Hydrodynamics, by J. D. Lunz	
***	May 1978	Appendix B Baseline Inventory of Terrestrial Flora, Fauna, and Sediment Chemistry, by J. D. Dodd	
	Jun 1978	Appendix C Baseline Inventory of Aquatic Biota, by J. M. Lyon and K. N. Baxter	
	Jun 1978	Appendix D Propagation of Vascular Plants and Post-propagation Monitoring of Botanical Soil, Aquatic Biota, and Wildlife Resources, by J. W. Webb, J. D. Dodd, B. W. Cain, and others	AD A063 781
TR D-78-16	May 1978	Characterization of Confined Disposal Area Influent and Effluent Particulate and Petroleum Fractions, by J. C. S. Lu, Bert Eichenberger, Miroslav Knezevic, and K. Y. Chen (includes Appendixes A-C)	AD A056 371
TR D-78-17	May 1978	Colonial Nesting Sea and Wading Bird Use of Estuarine Islands in the Pacific Northwest, by C. F. Peters, K. O. Richter, D. A. Manuwal, and S. G. Herman (includes Appendixes A-D)	AD A056 926
TR D-78-18	May 1978	Weir Design to Maintain Effluent Quality from Dredged Material Containment Areas, by T. M. Walski and P. R. Schroeder (includes Appendixes A-C)	AD A056 062

\*\*\* Reproduced on microfiche; no hard copies are available. Microfiche for this appendix is inclosed in a pocket inside the back cover of the Summary Report.

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-78-19	Jun 1978	A Methodology for Determining Land Value and Associated Benefits Created from Dredged Material Containment, by E. T. Conrad and A. J. Pack (includes Appendixes A-0 on microfiche)	AD A061 841
TR D-78-20	Jun 1978	A Study of Leachate from Dredged Material in Upland Areas and/or in Productive Uses, by J. L. Mang, J. C. S. Lu, R. J. Lofty, and R. P. Stearns (includes Appendix A)	AD A056 897
TR D-78-21	Jun 1978	Effects of Turbidity and Suspended Material in Aquatic Environments; Literature Review, by E. M. Stern and W. B. Stickle	AD A056 035
TR D-78-22	Jun 1978	Development of Procedures for Selecting and Designing Reuseable Dredged Material Disposal Sites, by T. E. Raster, H. S. Gill, D. C. Steuernagel, and D. J. Lipiro (includes Appendixes A-C)	AD A058 422
TR D-78-23	Jun 1978	Considerations in Conducting Bioassays, by D. R. Rosenberger, Edward Long, Raymond Bogardus, Elaine Farbenbloom, Robert Hitch, and Susan Hitch	AD A057 203
TR D-78-24	Jun 1978	Physical and Chemical Characterization of Dredged Material Influent and Effluent in Confined Land Disposal Areas, by R. E. Hoeppe, T. W. Myers, and R. M. Engler (includes Appendixes A-B)	AD A057 460
TR D-78-25		Habitat Development Field Investigations, Nott Island Upland Habitat Development Site, Connecticut River, Connecticut:	
	Aug 1978	Summary Report, by L. J. Hunt, B. R. Wells, and A. W. Ford	
***	Jul 1978	Appendix A Preliminary Terrestrial Ecological Survey, by R. S. Warren and W. A. Niering	
***	Jul 1978	Appendix B Survey of Terrestrial Ecology and Preliminary Botanical Monitoring, by R. S. Warren	
	Aug 1978	Appendix C Postpropagation Monitoring of Vegetation and Wildlife, by W. J. Barry, R. S. Warren, W. A. Niering, J. L. Tabachnick, and A. C. Carroll	AD A059 725
TR D-78-26		Habitat Development Field Investigations, Buttermilk Sound Marsh Development Site, Atlantic Intracoastal Waterway, Georgia:	
	Jul 1978	Summary Report, by R. A. Cole	AD A057 937

\*\*\* Reproduced on microfiche; no hard copies are available. Microfiche for this appendix is inclosed in a pocket inside the back cover of the Summary Report.

ENVIRONMENTAL EFFECTS LABORATORY  
Dredged Material Research Program

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-78-26 (Cont)	Jul 1978	Appendix A Propagation of Marsh Plants and Post-propagation Monitoring, by R. J. Reimold, M. A. Hardisky, and P. C. Adams	AD A062 867
TR D-78-27	Jun 1978	Needs and Areas of Potential Application of Disposal Area Reuse Management (DARM), by M. R. Palermo	AD A057 920
TR D-78-28	Jun 1978	Dredged Material Transport Systems for Inland Disposal and/or Productive Use Concepts, by P. S. Souder, Jr., Leo Tobias, J. F. Imperial, and F. C. Mushal (includes Appendixes A-B)	AD A058 432
TR D-78-29	Jul 1978	Effects of Suspended Dredged Material on Aquatic Animals, by R. K. Peddicord and V. A. McFarland (includes Appendixes A-C)	AD A058 489
TR D-78-30	Jul 1978	Field Investigations of the Nature, Degree, and Extent of Turbidity Generated by Open-Water Pipeline Disposal Operations, by J. R. Schubel, H. H. Carter, R. E. Wilson, W. M. Wise, N. G. Heaton, and M. G. Gross (includes Appendixes A-D; Appendixes B-D are on microfiche only)	AD A058 507
TR D-78-31	Jul 1978	Design Concepts for In-Water Containment Structures for Marsh Habitat Development, by J. W. Eckert, M. L. Giles, and G. M. Smith (includes Appendixes A-B)	AD A058 732
TR D-78-32	Aug 1978	Habitat Development Field Investigations, Apalachicola Bay Marsh Development Site, Apalachicola Bay, Florida: Summary Report, by W. L. Kruczynski, R. T. Huffman, and M. K. Vincent	AD A059 722
TR D-78-33	Jul 1978	Habitat Development Field Investigations, Port St. Joe Seagrass Demonstration Site, Port St. Joe, Florida: Summary Report, by R. C. Phillips, M. K. Vincent, and R. T. Huffman (includes Appendix A)	AD A058 733
TR D-78-34	Jun 1978	Flume Experiments on Sand, Silt, and Clay Mixtures from the Offshore Dredged Material Disposal Site, Galveston, Texas, by A. J. Moherek (includes Appendixes A-F)	AD A057 660
TR D-78-35	Jun 1978	Vertical Migration of Benthos in Simulated Dredged Material Overburdens: Volume I Marine Benthos, by D. L. Maurer, R. T. Keck, J. C. Tinsman, and others (includes Appendix A)	AD A058 725

## ENVIRONMENTAL EFFECTS LABORATORY

## Dredged Material Research Program

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-78-36	Jul 1978	The Agricultural Value of Dredged Material, by S. C. Gupta, W. E. Larson, R. G. Gast, S. M. Combs, and R. H. Dowdy (includes Appendixes A-C)	AD A061 298
TR D-78-37	Jul 1978	Handbook for Terrestrial Wildlife Habitat Development on Dredged Material, by Coastal Zone Resources Division, Ocean Data Systems, Inc. (includes Appendixes A-C)	AD A061 114
TR D-78-38	Jul 1978	The Effects of Smothering a <u>Spartina Alterniflora</u> Salt Marsh with Dredged Material, by R. J. Reimold, M. A. Hardisky, and P. C. Adams (includes Appendixes A-D on microfiche)	AD A063 366
TR D-78-39	Jul 1978	An Analysis of the Functional Capabilities and Performance of Silt Curtains, by JBF Scientific Corp. (includes Appendixes A-B)	AD A060 382
TR D-78-40	Jul 1978	A Field Study of Fluid Mud Dredged Material: Its Physical Nature and Dispersal, by M. M. Nichols, G. S. Thompson, and R. W. Faas (includes Appendix A)	AD A058 952
TR D-78-41	Aug 1978	Prediction of Volumetric Requirements for Dredged Material Containment Areas, by M. L. Hayden (includes Appendixes A-F; Appendixes C-D are on microfiche only)	AD A062 481
TR D-78-42	Aug 1978	Availability of Sediment-Adsorbed Heavy Metals to Benthos with Particular Emphasis on Deposit-Feeding Infauna, by J. W. Neff, R. S. Foster, and J. F. Slowey (includes Appendixes A-C)	AD A061 152
TR D-78-43	Aug 1978	Physical and Chemical Characterization of Dredged Material Sediments and Leachates in Confined Land Disposal Areas, by K. Y. Yu, K. Y. Chen, R. D. Morrison, and J. L. Mang (includes Appendixes A-L on microfiche)	AD A061 846
TR D-78-44	Aug 1978	Evaluation of the Submerged Discharge of Dredged Material Slurry During Pipeline Dredge Operations, by R. W. Neal, George Henry and S. H. Greene (includes Appendixes A-B)	AD A062 616
TR D-78-45		Evaluation of the Elutriate Test as a Method of Predicting Contaminant Release During Open-Water Disposal of Dredged Sediments and Environmental Impact of Open-Water Dredged Material Disposal:	
	Aug 1978	Volume I Discussion, by R. A. Jones and G. F. Lee (includes Appendix A)	AD A064 014
	Aug 1978	Volume II Data Report, by G. F. Lee, R. A. Jones, F. Y. Saleh, and others (includes Appendix A)	AD A061 710



## ENVIRONMENTAL EFFECTS LABORATORY

## Dredged Material Research Program

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-78-46	Aug 1978	Laboratory Investigation of the Dynamics of Mud Flows Generated by Open-Water Pipeline Disposal Operations, by George Henry, R. W. Neal, and S. H. Greene (includes Appendixes A-C)	AD A062 480
TR D-78-47	Aug 1978	Evaluation and Calibration of the Tetra Tech Dredged Material Disposal Models Based on Field Data, by E. H. Johnson and B. W. Holliday (includes Appendixes A-E)	AD A059 991
TR D-78-48	Aug 1978 Reprinted Sep 1982	An Investigation of Physical, Chemical, and/or Biological Control of Mosquitoes in Dredged Material Disposal Areas, edited by W. B. Ezell, Jr. (includes Appendixes A-F)	AD A061 311
TR D-78-49	Aug 1978	Long-Term Release of Contaminants from Dredged Material, by J. M. Brannon, R. H. Plumb, Jr., and Isaac Smith (includes Appendix A)	AD A060 814
TR D-78-50	Aug 1978	Biological Assessment Methods to Predict the Impact of Open-Water Disposal of Dredged Material, by P. J. Shuba, H. E. Tatem, and J. H. Carroll (includes Appendixes A-D)	AD A060 502
TR D-78-51	Aug 1978	Influence of Pregermination Conditions on the Viability of Selected Marsh Plants, by J. D. Maguire and G. A. Heuterman (includes Appendix A)	AD A059 629
TR D-78-52	Aug 1978	Design of Laboratory Microcosm for Evaluating Effects of Dredged Material Disposal on Marsh-Estuarine Ecosystems	AD A058 953
TR D-78-53	Aug 1978	Field Demonstration of Shrimp Mariculture Feasibility in Dredged Material Containment Areas, by J. A. Quick, D. J. Milligan, S. E. Hill, R. J. Hover, and W. F. McIlhenny (includes Appendix A)	AD A062 652
TR D-78-54	Sep 1978	Development and Application of Design and Operation Procedures for Coagulation of Dredged Material Slurry and Containment Area Effluent, by R. H. Jones, R. R. Williams, and T. K. Moore (includes Appendixes A-B)	AD A062 060
TR D-78-55	Sep 1978	Evaluation of Laws and Regulations Impacting the Land Use of Dredged Material Containment Areas, by James Cole and Michael Brainard (includes Appendixes A-I)	AD A063 905
TR D-78-56	Dec 1978	Methodology for Design of Fine-Grained Dredged Material Containment Areas for Solids Retention, by R. L. Montgomery	AD A073 226

ENVIRONMENTAL EFFECTS LABORATORY  
Dredged Material Research Program

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR D-78-57	Dec 1978	Habitat Development Field Investigations, Salt Pond No. 3, Marsh Development Site, South San Francisco Bay, California; Summary Report, by J. H. Morris, C. L. Newcombe, R. T. Huffman, and J. S. Wilson	AD A065 775
TR D-78-58	Dec 1978	Assessment of Certain European Dredging Practices and Dredged Material Containment and Reclamation Methods, by K. d'Angremond, J. Hoekstra, W. C. H. Kleinbloesem, L. Nederlof, and J. de Nekker (includes Appendixes A-J)	AD A074 219

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramContract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		AMERICAN TECHNICAL ASSISTANCE CORPORATION, McLean, Virginia	
CR D-74-7	Dec 1974	Legal, Policy, and Institutional Constraints Associated with Dredged Material Marketing and Land Enhancement, by R. C. Wakeford and Donald Macdonald	AD A006 595
		ARGONNE NATIONAL LABORATORY, Argonne, Illinois	
CR D-76-9	Aug 1976	Abatement of Malodors at Confined Dredged Material Disposal Sites, by W. Harrison, A. Dravnieks, R. Zussman, and R. Goltz (includes Appendixes A-B)	AD A030 597
	Feb 1978	Errata Sheet No. 1	
		ARTHUR D. LITTLE, INC., Cambridge, Massachusetts	
CR D-74-4	Sep 1974	Identification of Objectionable Environmental Conditions and Issues Associated with Confined Disposal Areas, by J. E. Harrison and L. C. Chisholm (includes Appendixes A-C)	AD A000 895
CR D-75-1	Jan 1975	A Feasibility Study of Lawn Sod Production and/or Related Activities on Dredged Material Disposal Sites	AD A006 609
		THE CENTER FOR THE ENVIRONMENT & MAN, INC., Hartford, Connecticut	
CR D-75-2	Apr 1975	Guidelines for Material Placement in Marsh Creation, by L. E. Johnson and W. V. McGuinness, Jr. (includes Appendixes A-E)	AD A010 725
		COASTAL ZONE RESOURCES CORPORATION, Wilmington, North Carolina	
CR D-76-2		Identification of Relevant Criteria and Survey of Potential Application Sites for Artificial Habitat Creation:	
	Oct 1976	Volume I Relevant Criteria for Marsh-Island Site Selection and Their Application	AD A033 525

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramContract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
CR D-76-2 (Cont)	Oct 1976	COASTAL ZONE RESOURCES CORPORATION, Wilmington, North Carolina (Cont) Volume II Survey of Potential Application Situations and Selection and Description of Optimum Project Areas (includes Appendix A)	AD A033 526
CR D-77-2	Mar 1977	A Comprehensive Study of Successional Patterns of Plants and Animals at Upland Disposal Areas (includes Appendixes A-E)	AD A040 464
CR D-74-5	Sep 1974	DAMES & MOORE, San Francisco, California Demonstration of a Methodology for Dredged Material Reclamation and Drainage, by C. W. Garbe, D. D. Smith, and Sri Amerasinghe	AD A000 896
CR D-75-6	Dec 1975	ENVIREX, INC., Environmental Sciences Division, Milwaukee, Wisconsin Laboratory Study of the Release of Pesticide and PCB Materials to the Water Column During Dredging and Disposal Operations, by Richard Fulk, David Gruber, and Richard Wullschlegel (includes Appendixes A-D)	AD A026 685
CR D-77-3	Apr 1977	ENVIRONMENTAL CONCERN, INC., St. Michaels, Maryland Recent and Planned Marsh Establishment Work Throughout the Contiguous United States -- A Survey and Basic Guidelines, by E. W. Garbisch, Jr. (includes Appendixes A-B; Appendix B on microfiche only)	AD A041 464
CR D-76-10	Dec 1976	ENVIRONMENTAL ENGINEERING CONSULTANTS, INC., Stillwater, Oklahoma Laboratory Study of Aeration as a Feasible Technique for Dewatering Fine-Grained Dredged Material	AD A035 673

ENVIRONMENTAL EFFECTS LABORATORY  
Dredged Material Research Program

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		GREEN ASSOCIATES, INCORPORATED, Towson, Maryland	
CR D-74-2		Regional Landfill and Construction Material Needs in Terms of Dredged Material Characteristics and Availability:	
	May 1974	Volume I Main Text, by R. Reikenis, V. Elias, and E. F. Drabkowski	AD 780 750
	May 1974	Volume II Appendixes A, B, C, and D, by R. Reikenis and E. F. Drabkowski	AD 780 751
		HITTMAN ASSOCIATES, INC., Columbia, Maryland	
CR D-74-6	Oct 1974	Containment Area Facility Concepts for Dredged Material Separation, Drying, and Rehandling, by C. W. Mallory and M. A. Nawrocki	AD A002 605
		JBF SCIENTIFIC CORPORATION, Burlington, Massachusetts	
CR D-76-3	Apr 1976	State-of-the-Art Survey and Evaluation of Open-Water Dredged Material Placement Methodology, by E. E. Johanson, S. P. Bowen, and George Henry (includes Appendixes A-B)	AD A027 024
		JOHN HUSTON, INC., Corpus Christi, Texas	
CR D-76-4	May 1976	Techniques for Reducing Turbidity Associated with Present Dredging Procedures and Operations, by J. W. Huston and W. C. Huston (includes Appendixes A-D)	AD A026 623
		LOUISIANA AGRICULTURAL EXPERIMENT STATION, LOUISIANA STATE UNIVERSITY, Baton Rouge	
CR D-77-4		Transformations of Heavy Metals and Plant Nutrients in Dredged Sediments as Affected by Oxidation Reduction Potential and pH:	
	May 1977	Volume I Literature Review, by R. A. Khalid, R. P. Gambrell, M. G. Verloo, and W. H. Patrick, Jr.	AD A041 468
	May 1977	Volume II Materials and Methods/Results and Discussion, by R. P. Gambrell, R. A. Khalid, M. G. Verloo, and W. H. Patrick, Jr. (includes Appendixes A-R)	AD A041 469

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramContract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		UNIVERSITY OF MICHIGAN, SCHOOL OF NATURAL RESOURCES, Ann Arbor	
CR D-74-9		State-of-the-Art Survey and Evaluation of Marsh Plant Establishment Techniques: Induced and Natural:	
	Dec 1974	Volume I Report of Research, by J. A. Kadlec and W. A. Wentz	AD A012 837
	Dec 1974	Volume II A Selected Annotated Bibliography on Aquatic and Marsh Plants and Their Management, by W. A. Wentz, R. L. Smith, and J. A. Kadlec	AD A012 837
		NORTHWESTERN UNIVERSITY, DEPARTMENT OF CIVIL ENGINEERING, THE TECHNOLOGICAL INSTITUTE, Evanston, Illinois	
CR D-76-8	Aug 1976	Investigation of Effluent Filtering Systems for Dredged Material Containment Facilities, by R. J. Krizek, J. A. FitzPatrick, and D. K. Atmatzidis (includes Appendixes A-D)	AD A031 468
	Feb 1978	Errata Sheet No. 1	
		OKLAHOMA STATE UNIVERSITY, OFFICE OF ENGINEERING RESEARCH, Stillwater	
CR D-73-1	Jul 1973	Feasibility Study of Hydrocyclone Systems for Dredge Operations, by W. G. Tiederman and M. M. Reischman	AD 766 212
		ROY MANN ASSOCIATES, INC., Cambridge, Massachusetts	
CR D-75-5	Dec 1975	Landscape Concept Development for Confined Dredged Material Sites, by Roy Mann, W. A. Niering, Robert Sabbatini, and Peter Wells	AD A026 684
		UNIVERSITY OF SOUTHERN CALIFORNIA, Los Angeles	
CR D-76-1	Feb 1976	Research Study on the Effect of Dispersion, Settling, and Resedimentation on Migration of Chemical Con- stituents During Open-Water Disposal of Dredged Materials, by K. Y. Chen, S. K. Gupta, A. Z. Sycip, J. C. S. Lu, Miroslav Knezevic, and W.-W. Choi	AD A022 144

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research ProgramContract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		TEKNEKRON, INC., Washington, DC	
CR D-77-1		Design Requirements for an Information Dissemination and Technology Transfer System for the Dredged Material Research Program, by D. M. Speaker and W. H. Weisgerber:	
	Feb 1977	Volume I Text and Appendix A	AD A038 886
	Feb 1977	Volume II Appendixes B through D	AD A038 887
		TETRA TECH, INCORPORATED, Pasadena, California	
CR D-76-5	May 1976	Development of Models for Prediction of Short-Term Fate of Dredged Material Discharged in the Estuarine Environment, by M. G. Brandsma and D. J. Divoky (includes Appendixes A-E)	AD A027 131
		TEXAS A&M UNIVERSITY, College Station	
CR D-74-8	Dec 1974	Assessment of the Factors Controlling the Long-Term Fate of Dredged Material Deposited in Unconfined Subaqueous Disposal Areas, by D. R. Basco, A. H. Bouma, and W. A. Dunlap	AD A009 127
		UNIVERSITY OF TEXAS AT DALLAS, INSTITUTE FOR ENVIRONMENTAL SCIENCES, Richardson	
CR D-74-1	Jun 1974	Literature Review on Research Study for the Development of Dredged Material Disposal Criteria, by G. F. Lee and R. H. Plumb	AD 780 755
CR D-75-4	Nov 1975	Research Study for the Development of Dredged Material Disposal Criteria, by G. F. Lee, M. D. Pivoni, J. M. Lopez, G. M. Mariani, J. S. Richardson, D. H. Homer, and Farida Saleh (includes Appendix A)	AD A019 953
		U. S. ARMY COLD REGIONS RESEARCH AND ENGINEERING LABORATORY, Hanover, New Hampshire	
CR D-76-7	May 1976	Effect of Sediment Organic Matter on Migration of Various Chemical Constituents During Disposal of Dredged Material, by B. E. Blom, T. F. Jenkins, D. C. Leggett, and R. P. Murrmann (includes Appendixes A-B)	AD A027 394

ENVIRONMENTAL EFFECTS LABORATORY  
Dredged Material Research Program

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		UNIVERSITY OF VIRGINIA, Charlottesville	
CR D-75-3	Nov 1975	Methods of Dissolved Oxygen Budget Analysis for Assessing Effects of Dredged Material Disposal on Biological Community Metabolism, by G. M. Hornberger and M. G. Kelly (includes Appendixes A-D)	AD A018 340
CR D-76-6	May 1976	Socioeconomic Aspects of Dredged Material Disposal: The Creation of Recreation Land in Urban Areas, by S. S. Skjei (includes Appendixes A-B)	AD A029 972



## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research Program Synthesis of Research ResultsTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR DS-78-1	Aug 1978	Aquatic Dredged Material Disposal Impacts, by T. D. Wright	AD A060 250
TR DS-78-2	Aug 1978	Processes Affecting the Fate of Dredged Material, by B. W. Holliday	AD A059 276
TR DS-78-3	Dec 1978	Predicting and Monitoring Dredged Material Movement, by B. W. Holliday, B. H. Johnson, and W. A. Thomas	AD A063 878
TR DS-78-4	Aug 1978	Water Quality Impacts of Aquatic Dredged Material Disposal (Laboratory Investigations), by S. A. Burks and R. M. Engler (includes Appendix A)	AD A059 735
TR DS-78-5	Aug 1978	Effects of Dredging and Disposal on Aquatic Organisms, by M. D. Hirsch, L. H. DiSalvo, and Richard Peddicord	AD A058 989
TR DS-78-6	Aug 1978	Evaluation of Dredged Material Pollution Potential, by J. M. Brannon	AD A059 724
TR DS-78-7	Oct 1978	Confined Disposal Area Effluent and Leachate Control (Laboratory and Field Investigations), by K. Y. Chen, J. L. Mang, Bert Eichenberger, and R. E. Hoeppe1	AD A062 882
TR DS-78-8	Dec 1978	Disposal Alternatives for Contaminated Dredged Material as a Management Tool to Minimize Adverse Environmental Effects, by R. P. Gambrell, R. A. Khalid, and W. H. Patrick, Jr.	AD A073 158
TR DS-78-9	Jul 1978	Assessment of Low-Ground-Pressure Equipment for Use in Containment Area Operation and Maintenance, by W. E. Willoughby (includes Appendixes A-B)	AD A058 501
TR DS-78-10	Dec 1978	Guidelines for Designing, Operating, and Managing Dredged Material Containment Areas, by M. R. Palermo, R. L. Montgomery, and M. E. Poindexter (includes Appendixes A-E)	AD A073 138
TR DS-78-11	Sep 1978	Guidelines for Dewatering/Densifying Confined Dredged Material, by T. A. Haliburton (includes Appendix A)	AD A060 405
TR DS-78-12	Dec 1978	Guidelines for Dredged Material Disposal Area Reuse Management, by R. L. Montgomery, A. W. Ford, M. E. Poindexter, and M. J. Bartos (includes Appendixes A-B)	AD A069 630
TR DS-78-13	Aug 1978	Prediction and Control of Dredged Material Dispersion Around Dredging and Open-Water Pipeline Disposal Operations, by W. D. Barnard (includes Appendix A)	AD A059 573
TR DS-78-14	Dec 1978	Treatment of Contaminated Dredged Material, by W. D. Barnard and T. D. Hand	AD A074 553

## ENVIRONMENTAL EFFECTS LABORATORY

Dredged Material Research Program Synthesis of Research ResultsTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR DS-78-15	Dec 1978	Upland and Wetland Habitat Development with Dredged Material: Ecological Considerations, by J. D. Lunz, R. J. Diaz, and R. A. Cole	AD A067 828
TR DS-78-16	Dec 1978	Wetland Habitat Development with Dredged Material; Engineering and Plant Propagation (includes Appendixes A-C)	AD A073 493
TR DS-78-17	Dec 1978	Upland Habitat Development with Dredged Material: Engineering and Plant Propagation, by L. J. Hunt, M. C. Landin, A. W. Ford, and B. R. Wells (includes Appendixes A-C)	AD A072 409
TR DS-78-18	Dec 1978	Development and Management of Avian Habitat on Dredged Material Islands, by R. F. Soots, Jr, and M. C. Landin (includes Appendixes A-B)	AD A066 903
TR DS-78-19	Dec 1978	An Introduction to Habitat Development on Dredged Material, by H. K. Smith	AD A067 202
TR DS-78-20	Dec 1978	Productive Land Use of Dredged Material Containment Areas: Planning and Implementation Considerations, by M. R. Walsh and M. D. Malkasian (includes Appendixes A-B)	AD A072 321
TR DS-78-21	Dec 1978	Guidance for Land Improvement Using Dredged Material, by P. A. Spaine, J. L. Llopis, and E. R. Perrier (includes Appendixes A-C)	AD A067 195
	Mar 1979	Errata Sheet No. 1	
TR DS-78-22	Dec 1978	Executive Overview and Detailed Summary, by R. T. Saucier, C. C. Calhoun, Jr., R. M. Engler, T. R. Patin, and H. K. Smith	AD A074 531
TR DS-78-23	Apr 1980	Publication Index and Retrieval System	AD A087 279

## ENVIRONMENTAL EFFECTS LABORATORY

Environmental StudiesMiscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP Y-72-1	Mar 1972	Disposal of Vault Wastes, Lake Ouachita and Lake Greeson, Arkansas, by John Harrison	AD 739 917
MP Y-72-2	Mar 1972	Physical Modeling Applied to Coastal Zone Pollution Problems, by H. B. Simmons, John Harrison, R. A. Boland, and D. B. Mathis	
MP Y-72-3	Apr 1972 Revised Nov 1973	Study Plan for an Environmental Inventory and Assessment of the Mississippi River 9-Ft Channel Project Between St. Louis, Missouri, and Cairo, Illinois, by W. P. Emge	AD 786 144
MP Y-74-1	Apr 1974	Environmental Inventory and Assessment, Illinois Waterway; 12-Foot Channel Navigation Project, by W. P. Emge, H. H. Allen, G. H. Hughes, G. S. Wilhelm, and J. H. Zimmerman	
MP Y-74-2	Jul 1974	Wastewater Treatment on Soils of Low Permeability; Interim Report, by R. E. Hoeppel, P. G. Hunt, and T. B. Delaney, Jr.	AD A008 370
MP Y-74-3	Aug 1974	Overland Flow Treatment of Wastewater, by C. A. Carlson, P. G. Hunt, and T. B. Delaney, Jr.	AD A008 371
MP Y-74-4	Sep 1974	Nitrogen Transformations in Wetland Soils, by R. E. Hoeppel	AD A000 610
MP Y-74-5	Oct 1974	Physical, Biological, and Chemical Inventory of Twenty-Three Side Channels and Four River Border Areas, Middle Mississippi River, by W. P. Emge, R. C. Solomon, J. H. Johnson, C. R. Bingham, B. K. Colbert, and R. W. Hall	AD A000 608
	Oct 1974	Appendixes A-G	AD A000 602
	Oct 1974	Appendixes H-AI	AD A003 122
MP Y-74-6	Nov 1974	Physical, Biological, and Chemical Inventory and Analysis of Selected Dredged and Disposal Sites, Middle Mississippi River, by R. C. Solomon, J. H. Johnson, C. R. Bingham, and B. K. Colbert	AD A001 726
MP Y-75-1	Jan 1975	Inventory of Physical and Cultural Elements, Middle Mississippi River Floodplain (River Reach - St. Louis, Missouri, to Cairo, Illinois), by J. K. Stoll and R. D. Brown	AD A005 008
MP Y-76-1	Jan 1976	Water Usage and Wastewater Characterization at a Corps of Engineers Recreation Area, by N. R. Francingues, Jr., and A. J. Green, Jr. (includes Appendix A)	AD A021 584

## ENVIRONMENTAL EFFECTS LABORATORY

Environmental StudiesMiscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP Y-76-2	Feb 1976	Feasibility of Transplantation, Revegetation, and Restoration of Eelgrass in San Diego Bay, California, by C. G. Boone and R. E. Hoeppel (includes Appendixes A-B)	AD A021 484
MP Y-76-3	Jul 1976	Feasibility of Using Historic Disposal Areas, Upper Mississippi River, to Evaluate Effects of Dredged Material Disposal on Community Structure of Benthic Organisms, by J. H. Johnson (includes Appendixes A-G)	AD A028 221
MP Y-76-4	Sep 1976	Sensitivity Analysis of the Water Quality for River-Reservoir Systems Model, by K. W. Thornton and A. S. Lessem	AD A032 382
MP Y-76-5	Oct 1976	Preliminary Evaluation of Water Quality of Proposed LaFarge Lake, Kickapoo River, Vernon County, Wisconsin, by K. W. Thornton, D. E. Ford, and D. L. Robey (includes Appendix A)	AD A031 415
MP Y-76-6	Nov 1976	Highlights of Research on Overland Flow for Advanced Treatment of Wastewater, by C. R. Lee, P. G. Hunt, R. E. Hoeppel, C. A. Carlson, T. B. Delaney, Jr., and R. N. Gordon, Sr.	AD A033 864
MP Y-76-7	Dec 1976	Predictive Analysis of Dissolved Oxygen in Dickey Lake, Maine, by K. W. Thornton (includes Appendix A)	AD A033 819
MP Y-77-1	Jan 1977	The Northern Gulf Coast During the Farmdalian Substage: A Search for Evidence, by R. T. Saucier	AD A035 759
MP Y-77-2	May 1977	Preliminary Water-Quality Evaluation of a Lower Pool Elevation for Proposed LaFarge Lake, Wisconsin, by D. E. Ford, K. W. Thornton, and D. L. Robey	AD A040 822
MP Y-77-3	Jul 1977	Arcadia Lake Water-Quality Study, Summary Report, by R. W. Hall, Jr., R. L. Eley, and D. L. Robey	AD A043 722
MP Y-77-4	Jul 1977	Preliminary Evaluation of Water Quality of Proposed Fountain Lake, Colorado, by R. W. Hall, Jr., and D. L. Robey (includes Appendix A)	AD A043 434
MP Y-77-5	Nov 1977	The Role of Sewage Lagoons at Corps of Engineers Recreation Areas, by T. D. Hand and R. R. Williams (includes Appendix A)	AD A047 833
MP Y-78-1	Feb 1978	Preliminary Field Test of the Water Resources Assessment Methodology (WRAM); Tensas River, Louisiana, by S. E. Richardson, W. J. Hansen, R. C. Solomon, and J. C. Jones	AD A050 833
MP Y-78-2	Jun 1978	Profile and Measurement of Social Well-Being Indicators for Use in the Evaluation of Water and Related Land Management Planning, by P. K. Guseman and K. T. Dietrich	AD A057 137

## ENVIRONMENTAL EFFECTS LABORATORY

Environmental StudiesMiscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP Y-78-3	Jun 1978	Preliminary Evaluation of the Water Quality of Proposed Towanda Lake, Kansas (includes Appendix A)	AD A057 074

## ENVIRONMENTAL EFFECTS LABORATORY

Environmental StudiesTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR Y-74-1	Nov 1974	Environmental Analysis and Assessment of the Mississippi River 9-Ft Channel Project Between St. Louis, Missouri, and Cairo, Illinois, by J. H. Johnson, R. C. Solomon, C. R. Bingham, B. K. Colbert, W. P. Emge, D. B. Mathis, and R. W. Hall, Jr.	AD A031 041
TR Y-75-1	Nov 1975	Environmental Inventory and Assessment of Navigation Pools 24, 25, & 26, Upper Mississippi and Lower Illinois Rivers; Summary Report, by R. C. Solomon, D. R. Parsons, D. A. Wright, B. K. Colbert, Cathy Ferris, and J. E. Scott	AD A017 865
TR Y-75-2	Dec 1975	Environmental Inventory and Assessment of Navigation Pools 24, 25, & 26, Upper Mississippi and Lower Illinois Rivers; An Aquatic Analysis; Final Report, by B. K. Colbert, J. E. Scott, J. H. Johnson, and R. C. Solomon (includes Appendixes A-J)	AD A021 750
TR Y-76-1	May 1976	Effects of Tow Traffic on the Resuspension of Sediments and on Dissolved Oxygen Concentrations in the Illinois and Upper Mississippi Rivers Under Normal Pool Conditions, by J. H. Johnson	AD A025 617
TR Y-76-2		Data Evaluations and Recommendations for Comprehensive Planning for the Yazoo River Basin, Mississippi:	
	Aug 1976	Volume I, by F. W. Suggitt, T. J. Wood, J. R. Clark, and P. R. Becker	AD A029 360
	Jun 1977	Errata Sheet No. 1	
	Aug 1976	Volume II, by C. R. Kolb, C. R. Bingham, B. K. Colbert, E. J. Clairain, Jr., J. R. Clark, Elray Nixon, S. E. Richardson, and F. W. Suggitt	AD A029 391
	Jun 1977	Errata Sheet No. 1	
TR Y-77-1	Feb 1977	Water Resources Assessment Methodology (WRAM) -- Impact Assessment and Alternative Evaluation, by R. C. Solomon, B. K. Colbert, W. J. Hansen, S. E. Richardson, L. W. Canter, and E. C. Vlachos (includes Appendixes A-D)	AD A036 677
TR Y-77-2	Apr 1977	Arcadia Lake Water-Quality Evaluation, by R. W. Hall, Jr., R. H. Plumb, Jr., K. W. Thornton, and others (includes Appendixes A-D)	AD A039 492
TR Y-77-3	May 1977	Water-Quality Evaluation of a Lower Pool Elevation for Proposed Arcadia Lake, Oklahoma, by K. W. Thornton, D. E. Ford, R. W. Hall, and others	AD A040 003

## ENVIRONMENTAL EFFECTS LABORATORY

Environmental StudiesTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR Y-77-4	Sep 1977	Laboratory and Pilot Plant Evaluation of Intermittent Loading on Small-Scale Extended Aeration Biological Systems, by J. L. Mahlock, D. E. Averett, and Marcia Headstream (includes Appendixes A-C)	AD A050 751
TR Y-77-5	Nov 1977	Investigation of Remote Water-Quality Monitoring Systems for Use with GOES or ERTS Water Data Transmitter, by A. W. Ford	AD A047 795
TR Y-78-1	Jan 1978	Evaluation of Ultraviolet/Ozone Treatment of Rocky Mountain Arsenal (RMA) Groundwater (Treatability Study), by R. E. Buhts, P. G. Malone, and D. W. Thompson	AD A052 339
TR Y-78-2	Feb 1978	Preliminary Guide to Wetlands of Peninsular Florida; Major Association and Communities Identified (includes Appendixes A-C)	AD A054 191
TR Y-78-3	Apr 1978	Preliminary Guide to Wetlands of Puerto Rico; Major Associations and Communities Identified (includes Appendixes A-C)	AD A055 114
TR Y-78-4	Apr 1978	Preliminary Guide to Wetlands of the West Coast States; Major Associations and Communities Identified (includes Appendix A-C)	AD A055 106
TR Y-78-5	May 1978	Preliminary Guide to Wetlands of the Gulf Coastal Plain; Major Associations and Communities Identified (includes Appendix A-C)	AD A055 705
TR Y-78-6	May 1982	Preliminary Guide to the Onsite Identification and Delineation of the Wetlands of the Interior United States (includes Appendix A)	AD A117 874
TR Y-78-7	May 1982	Preliminary Guide to the Onsite Identification and Delineation of the Wetlands of the South Atlantic United States, by R. T. Huffman, G. E. Tucker, J. W. Wooten, and others (includes Appendix A)	AD A117 846
TR Y-78-8	May 1982	Preliminary Guide to the Onsite Identification and Delineation of the Wetlands of the North Atlantic United States, by R. T. Huffman, G. E. Tucker, J. W. Wooten, and others (includes Appendix A)	AD A117 804
TR Y-78-9	Feb 1984	Preliminary Guide to the Onsite Identification and Delineation of the Wetlands of Alaska, by R. T. Huffman and G. E. Tucker (includes Appendixes A-B)	
TR Y-78-10	Aug 1978	Water Quality Evaluation of Proposed Trexler Lake, Jordan Creek, Pennsylvania, by D. E. Ford, K. W. Thornton, A. S. Lessem, and Connie Sturgis (includes Appendixes A-D)	AD A060 080
TR Y-78-11	Aug 1978	Mechanisms That Regulate the Intensity of Oxidation-Reduction in Anaerobic Sediments and Natural Water Systems, by J. M. Brannon, Douglas Gunnison, P. L. Butler, and Isaac Smith, Jr.	AD A059 445

## ENVIRONMENTAL EFFECTS LABORATORY

Environmental StudiesContract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		COLORADO STATE UNIVERSITY, ENGINEERING RESEARCH CENTER, Fort Collins	
CR Y-74-2	Jul 1974	Geomorphology of the Middle Mississippi River, by D. B. Simons, S. A. Schumm, and M. A. Stevens	AD 783 424
CR Y-75-3	Jul 1975	Environmental Inventory and Assessment of Navigation Pools 24, 25, and 26, Upper Mississippi and Lower Illinois Rivers; A Geomorphic Study, by D. B. Simons, S. A. Schumm, M. A. Stevens, Y. H. Chen, and P. F. Lagasse (includes Appendixes A-B)	AD A012 845
		MISSOURI BOTANICAL GARDEN, St. Louis	
CR Y-75-1	Apr 1975	Environmental Inventory and Assessment of Navigation Pools 24, 25, and 26, Upper Mississippi and Lower Illinois Rivers; A Vegetational Study, by W. M. Klein, R. H. Daley, and Joanne Wedum (includes Appendixes A-C)	AD A009 065
		MISSOURI DEPARTMENT OF CONSERVATION, Jefferson City	
CR Y-74-1	Mar 1974	Evaluation of Three Side Channels and the Main Channel Border of the Middle Mississippi River as Fish Habitat, by D. V. Ragland	AD 786 142
		RIVER RESEARCH LABORATORY, ILLINOIS NATURAL HISTORY SURVEY, Havana, Illinois	
CR Y-75-4	Dec 1975	Environmental Inventory and Assessment of Navigation Pools 24, 25, and 26, Upper Mississippi and Lower Illinois Rivers; An Electrofishing Survey of the Illinois River, by R. E. Sparks	AD A020 069
		SOUTHERN ILLINOIS UNIVERSITY, COOPERATIVE WILDLIFE RESEARCH LABORATORY, Carbondale	
CR Y-74-3	Aug 1974	A Survey of the Fauna and Flora Occurring in the Mississippi River Floodplain Between St. Louis, Missouri, and Cairo, Illinois, by V. A. Terpening, L. J. Hunt, D. K. Evans, S. J. Bleiweiss, and R. C. Zoanetti	



## ENVIRONMENTAL EFFECTS LABORATORY

Environmental StudiesContract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		SOUTHERN ILLINOIS UNIVERSITY, COOPERATIVE WILDLIFE RESEARCH LABORATORY, Carbondale (Cont)	
CR Y-75-2	Apr 1975	Environmental Inventory and Assessment of Navigation Pools 24, 25, & 26, Upper Mississippi and Lower Illinois Rivers; Floodplain Animals and Their Habitats, by V. A. Terpening, J. R. Nawrot, M. J. Sweet, and D. L. Damrau (includes Appendixes A-H)	AD A009 781
		SOUTHERN ILLINOIS UNIVERSITY, FISHERIES RESEARCH LABORATORY, Carbondale	
CR Y-74-4	Aug 1974	Study of Importance of Backwater Chutes to a Riverine Fishery, by H. L. Schramm, Jr., and W. M. Lewis	AD 786 544
		U. S. DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE, Fayetteville, Arkansas	
CR Y-77-1	Jun 1977	The Development of Fishery Compartments and Population Rate Coefficients for Use in Reservoir Ecosystem Modeling, by G. R. Leidy and R. M. Jenkins (includes Appendixes A-0)	AD A044 550

## ENVIRONMENTAL EFFECTS LABORATORY

Environmental and Water Quality Operational StudiesInformation Exchange Bulletins

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
IEB E-78-1 through IEB E-78-5	Mar 1978 through Dec 1978	Environmental & Water Quality Operational Studies (EWQOS)	

## ENVIRONMENTAL EFFECTS LABORATORY

Reservoirs and WaterwaysTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR E-78-1	Jul 1978	Identification and Assessment of Environmental Quality Problems and Research Program Development, by J. W. Keeley, J. L. Mahloch, J. W. Barko, Douglas Gunnison, and J. D. Westhoff	AD A060 729

ENVIRONMENTAL EFFECTS LABORATORY

Recreation Research Program

Information Exchange Bulletins

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
IEB R-77-1	Oct 1977	Recnotes	
IEB R-78-1 through IEB R-78-3	Jan 1978 through Oct 1978	Recnotes	

## ENVIRONMENTAL EFFECTS LABORATORY

Recreation Research ProgramTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR R-78-1	Oct 1978	Modeling Recreation Use in Water-Related Parks, by R. E. Coughlin, David Berry, and Pat Cohen (includes Appendixes A-C)	AD A071 898
TR R-78-2	Oct 1978	Development of Improved Decision-Oriented Recreation User Information System, by R. M. Mischon and R. C. Wyatt (includes Appendixes A-B)	AD A062 795

HYDRAULICS LABORATORY

## HYDRAULICS LABORATORY

Bulletins

<u>Vol.</u>	<u>No.</u>	<u>Date</u>	<u>Contents</u>	<u>AD Number</u>
1	1	Jun 1938	Hydraulic Research Center; Increasing the Capacity of Pipe Lines Transporting Solids; Manning's "n" for Urban Areas; Ohio River Problem Analyzed by Model; The Mayersville Sediment Survey; Permeability of Model Jetties	
1	2	Oct 1938	The U. S. Waterways Experiment Station; Model Analysis of a Mississippi River Problem; Velocity Comparison Between Model and Prototype; Thijsse on Wind Effects; Shoaling in Galveston Bay Investigated by Model	
1	3	Dec 1938	Matthes on Roughness Coefficients; Discharges Through and Over Chanoine Wicket Dams; Definition of Model Verification; Demonstration Based on Model Results; Model Analysis of a Spillway; Effects of Wave Action Attempting to Simulate Natural Phenomena	
2	1	Feb 1939	Rifling in Dredge Pipe Lines; Spoil Areas Determined from Model; Model Analysis of an Entrance to a Harbor; Model Roughness; Schrontz on Wind Effects; Progress of Galveston Bay Model Study	
2	2	Apr 1939	Structure Studies; River Navigation Studies; River Flood Control Studies; Tidal Studies; Research Studies	
2	3	Jul 1939	Model Study of an Outer Bar; Marked Tree Siphon; Development of a Delta; Mississippi River Channel Changes; Elements of a Movable Bed Model; Backwater Effects of Bridges; Model Study of Channel Improvements; Model-Prototype Confirmations; Bibliography on Locks; Model Appurtenances; Establishment of Research Centers' Motion Picture Library	
2	4	Aug 1939	Description of Recently Accomplished Model Studies Pertaining to Spillways and Outlet Structures; Studies for the Muskingum Watershed Project; Scale Effects in Spillway Models; Erosion Below Stilling Basins; Confirmation of Model Indications; Jaenicher on Side-Channel Spillways; Informal Study of a Spillway Section; Pressures Below Atmospheric	
3	1	Feb 1940	Model Confirmation -- Grand Tower, Mississippi River; Spray-Wall Pressures; Model Appurtenances; Measurement of Littoral Currents; Model Study of Similitude of Wave Action	
3	2	Jun 1940	Model and Prototype Comparison; Model Study of Power-Tunnel Transitions; Model Appurtenances and Devices; Measurement of Dredge Production; Automatic Measurement of Waves	

## HYDRAULICS LABORATORY

BulletinsHydraulic Series

<u>Vol.</u>	<u>No.</u>	<u>Date</u>	<u>Contents</u>	<u>AD Number</u>
4	1	May 1941	Principles of Similitude for Wave Action; Wave Action Problems; Model Study Procedure; Solutions of Wave Action Problems; Wave Model Appurtenances	
5	1	Oct 1942	Mississippi River Flood-Control Model	

Combined Series

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
28	Mar 1947	Practical Application of Experimental Hydraulics	AD A950 072
31	Apr 1948	Empirical Verification of Transference Equations in Laboratory Study of Breakwater Stability	
32	Jun 1948	Laboratory Research Applied to the Hydraulic Design of Large Dams	
37	Jun 1951	Hydraulic Models as an Aid to the Development of Design Criteria	



## HYDRAULICS LABORATORY

Hydraulic Design Criteria

<u>Number</u>	<u>Date</u>	<u>Contents</u>	<u>AD Number</u>
1-17	Jan 1952 to date	Hydraulic design guides related to the design of facilities for spillways, outlet works, gates and valves, navigation locks and dams, artificial channels, riprap protection and storm drain outlets. Over 240 design charts with explanation sheets and example problems comprise a two-volume set. (\$10.00 per set)	AD A092 237 AD A092 238

Instruction Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
IR H-77-1	Sep 1977	Guidelines for Monitoring and Reporting Demonstration Projects; Section 32 Program, Streambank Erosion Control Evaluation and Demonstration Act of 1974, by E. B. Pickett and B. J. Brown	AD A046 397
IR H-78-1	Aug 1978	Guidelines for the Design, Adjustment and Operation of Models for the Study of River Sedimentation Problems, by J. J. Franco (includes Appendixes A-C)	AD A061 386

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 2-1	Mar 1952	Correlation of Model and Prototype Data, Marked Tree Siphon, Arkansas	
MP 2-13	Jul 1952	Proposed Alternate Levee Plans for the Miller City Area, Illinois; Model Investigation	
MP 2-31	May 1953	Pressure and Air Demand Tests in Flood-Control Conduit, Denison Dam, Red River, Oklahoma and Texas	
MP 2-35	Sep 1953	Flume Investigation of Prototype Revetment	
MP 2-65	Aug 1949	Theory of Wind Tides	
MP 2-75	Feb 1954	Vibration, Pressure and Air-Demand Tests in Flood-Control Sluice, Pine Flat Dam, Kings River, California	AD 756 320
MP 2-77	Feb 1954	Pressure Cell Tests, Bull Shoals Dam Stilling Basin	AD 757 390
MP 2-97	Mar 1952	Analysis of Model and Prototype Data for Hydraulic Design Criteria	
MP 2-114	Jan 1955	Proposed Access Channel to Delaware City, Delaware; Delaware River Model Tests	
MP 2-115	Jan 1955	Potential Use of Radioisotopes by Waterways Experiment Station	
MP 2-125	May 1955	Effects of Circulation of Cooling Water on Temperature at Intake of Proposed Delaware City Plant; Delaware River Model Tests	
MP 2-133	Jun 1955	An Investigation of the Adaptability of Electronic Computers to Waterways Experiment Station Projects	
MP 2-139	Jul 1955	Facilities for Wave Research at Waterways Experiment Station	
MP 2-143	Sep 1955	Report of Model Study, Old River Outlet Channel, Spoil Bank Locations	
MP 2-146	Nov 1955	Prototype Tests of Filling and Emptying Systems, McNary Dam Lock, Washington, October 1955	
MP 2-149	Jun 1952	Memorandum on Hydraulic Friction Factors for Concrete Flood-Control Conduits and Tunnels	
MP 2-153	Feb 1949	Interim Report on Pilot Model Study of Southwest Pass, Mississippi River (Reprinted Apr 1956)	
MP 2-154	Mar 1956	Cavitation at Baffle Piers	
MP 2-155	Feb 1956	Comments on the Shoaling Problem in Southwest Pass, Mississippi River	

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 2-156	Sep 1955	Instrumentation for Hydraulic Research (Model and Prototype)	
MP 2-160	Mar 1956	The Effect of Artificial Stimulation of the Turbulent Boundary Layer in Rectangular Conduits	
MP 2-164	Apr 1956	Report on Attendance at Sixth Congress of International Association for Hydraulic Research, The Hague, Netherlands, 30 August-6 September 1955, and Visits to Hydraulic Laboratories in France and England	
MP 2-171	Apr 1956	Stability of Crescent City Harbor Breakwater, Crescent City, California	
MP 2-204	Mar 1957	Laboratory Investigations of Outlet Works	
MP 2-206	Mar 1957	Hydraulic Laboratory Investigations of Spillways	
MP 2-222	May 1957	DuPont Plants Effluent Dispersion in Delaware River; Hydraulic Model Investigation	AD 706 216
MP 2-224	Jun 1957	Laboratory Investigation of Rubble-Mound Breakwaters	
MP 2-229	Jun 1957	Model Studies of Remedial Works for Niagara Falls	
MP 2-234	Aug 1957	Field Investigations of Spillways and Outlet Works	
MP 2-239	Oct 1957	Report on Attendance at Seventh Congress of IAHR, Lisbon, Portugal, and Visits to Hydraulic Laboratories in Europe and England	
MP 2-242	Nov 1957	Papers on Wave Model Laboratory Apparatus	
MP 2-264	Apr 1958	Spillway for McGee Bend Dam, Angelina River, Texas; Hydraulic Model Investigation	
MP 2-265	Apr 1958	Velocity Forces on Submerged Rocks	
MP 2-266	Apr 1958	Prototype Spillway Crest Pressures, Chief Joseph Dam, Columbia River, Washington	
MP 2-275	Jun 1958	Model-Prototype Confirmation, Chain of Rocks Canal, Mississippi River	
MP 2-276	Jul 1958	Protective Cover Layers for Rubble-Mound Breakwaters; Studies Completed Through March 1957	
MP 2-283	Aug 1958	The Value of Prototype Tests to Hydraulic Design	
MP 2-291	Oct 1958	Index to Hydraulic Articles, <u>Civil Engineering</u> , 1930-1955	AD 756 293
MP 2-293	Nov 1958	Outlet Works Stilling Basin, East Barre Dam, Winooski River, Vermont; Hydraulic Model Investigation	

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 2-296	Jan 1959	Design of Tribar and Tetrapod Cover Layers for Rubble-Mound Breakwaters	
MP 2-299	Dec 1958	Prototype Confirmation of Model Investigation, Charleston Harbor, South Carolina; First Interim Report	
MP 2-320	Feb 1959	Considerations of Various Factors Entering Into the Evaluation of Intake Losses from Experimental Measurements	
MP 2-331	Mar 1959	Distribution of Ungaged Flows for 1949, 1950, and 1951 Floods, Van Buren-to-Little Rock Reach, Arkansas River and Tributaries	
MP 2-332		Contamination Dispersion in Estuaries:	
	Apr 1959	Report 1 Delaware River; Hydraulic Model Investigation	
	Apr 1959	Report 2 Narragansett Bay; Hydraulic Model Investigation	
	Jan 1961	Report 3 New York Harbor; Hydraulic Model Investigation	
	Aug 1962	Report 4 San Francisco Bay; Hydraulic Model Investigation	
MP 2-337	Apr 1959	Effect of PASNY Intake Structure, Niagara River; Hydraulic Model Investigation	
MP 2-340	May 1959	A Quarter-Century Assessment of Experimental Prediction in Hydraulics	
MP 2-349	Jul 1959	Summary of Best Plans for Reducing Shoaling, Southwest Pass, Mississippi River; Hydraulic Model Investigation	
MP 2-358	Sep 1959	Effects of Salt-Water Barriers Across the Delaware River; Preliminary Hydraulic Model Investigation	
MP 2-372	Jan 1960	Design of Quadripod Cover Layers for Rubble-Mound Breakwaters; Hydraulic Laboratory Investigation	AD 762 185
MP 2-377	Feb 1960	Designs for Rubble-Mound Breakwater Repairs, Nawiliwili Harbor, Nawiliwili, Hawaii; Hydraulic Model Investigation	AD 762 184
MP 2-381	Feb 1960	Navigation Model Studies of New Ohio River Locks	
MP 2-401	Jun 1960	Report on Attendance at International Organization for Standards Meeting, Paris, France, and Visits to Hydraulic Laboratories in Europe and England	AD 762 182
MP 2-403	Jul 1960	Everett Dam Spillway and Discharge Channel, Piscataquog River, New Hampshire; Hydraulic Model Investigation	AD 762 183
MP 2-406	Jul 1960	Fixed-Bed River Models	AD 762 187
MP 2-407	Aug 1960	Cooling Water Canal Shoaling Study, Delaware River Model Tests	

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 2-413	Jan 1961	Channel Improvements, Canacadea Creek, Hornell, New York; Hydraulic Model Investigation	AD 756 309
MP 2-414	Dec 1960	Vibration Problems in Hydraulic Structures	AD 762 186
MP 2-417	Mar 1961	Construction and Performance of the Grouted Cutoff, Rocky Reach Hydroelectric Project	AD 762 834
MP 2-434	Jun 1961	Report on Attendance at International Organization for Standardization Meeting, New Delhi, India, and Visits to Indian Hydraulic Laboratories	AD 763 054
MP 2-453	Sep 1961	Wave Forces on Rubble-Mound Breakwaters and Jetties	AD 763 053
MP 2-464	Dec 1961	Exchange Visit of U. S. Hydraulic Laboratory Directors to USSR, September 1961	AD 763 055
MP 2-465	Jan 1962	Design of Riprap Cover Layers for Railroad Relocation Fills, Ice Harbor and John Day Lock and Dam Projects; Hydraulic Model Investigation	AD 748 163
MP 2-468	Dec 1961	Swellhead Effect of Navigation Structures	AD 748 821
MP 2-472	Nov 1965	Radioactive Sediment Tracer Tests Near the North and South Jetties; Galveston Harbor Entrance, by L. F. Ingram, R. S. Cummins, and H. B. Simmons	AD 748 815
MP 2-484	Apr 1962	Fluctuation of Control Gates	AD 748 950
MP 2-485	May 1962	Problems Created by Cavitation Phenomena	AD 748 951
MP 2-496	Jun 1962	Types of Flow in Open Channels	AD 748 952
MP 2-502	Jun 1962	Seiches and Currents in Duluth-Superior Harbor, June-November 1958; Analytical Investigation	AD 748 817
MP 2-522	Sep 1962	Report on Ninth Congress of International Association for Hydraulic Research, Dubrovnik, Yugoslavia, 3-7 September 1961, and Conference Excursion	AD 748 818
MP 2-536	Oct 1962	Energy Dissipator, Mississinewa Dam Outlet Conduit, Mississinewa River, Indiana; Hydraulic Model Investigation	AD 748 953
MP 2-541	Nov 1962	Contribution of Matagorda Bay Model to Design of Matagorda Bay Deep Draft Navigation Project	AD 748 954
MP 2-543	Nov 1962	Technical Assistance to the Government of Colombia, Department of Public Works, on Equipping and Operating a Hydraulic Laboratory	
MP 2-552	Jan 1963	Riprap Requirements for Overflow Embankments	AD 733 949

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 2-558	Feb 1963	Pollution Studies for Interstate Sanitation Commission, New York Harbor Model; Hydraulic Model Investigation	AD 733 746
MP 2-560	Mar 1963	Estimate of Wave Action Conditions and Selection of Optimum Plan for Proposed Harbor of Refuge, Kelleys Island, Ohio; Analytical Investigation	AD 735 692
MP 2-563	Mar 1963	Model and Prototype Observations of Gate Oscillations	AD 733 950
MP 2-564	Mar 1963	The Use of Radioisotopes in Sediment Transport Studies	AD 733 951
MP 2-578	May 1963	Visits to Hydraulic Laboratories in England and France, March 1963	AD 733 774
MP 2-587	Jul 1963	Turbulent Boundary Layer Development on Spillways	AD 733 952
MP 2-590	Jun 1963	Demonstration of the Electric Analog Model of the Kansas River at the University of California in Berkeley	AD 733 953
MP 2-597	Aug 1963	Meltwater Gaging Program, Project No. 1, Approach Roads, Tuto Area, Greenland	AD 733 954
MP 2-601	Sep 1963	Nonuniform Flow Functions, Circular Section	AD 733 866
MP 2-606	Oct 1963	Discharge Rating Curves for Vertical Lift Gates on Spillway Crests	AD 733 955
MP 2-607	Oct 1963	Review and Evaluation of Hydraulic Problems at the Hydraulic Research and Experimental Station, Delta Barrage, United Arab Republic	AD 733 956
MP 2-622	Feb 1964	Emergency Gate Performance, McAlpine Lock, Ohio River, Kentucky; Hydraulic Prototype Tests	AD 733 868
MP 2-625	Feb 1964	An Investigation of Spillway Bucket and Toe Curve Pressures	AD 734 089
MP 2-633	Mar 1964	Pollution Studies, Savannah Harbor; Hydraulic Model Investigation	AD 734 090
MP 2-641	Apr 1964	Effects of Proposed Runway Extensions at La Guardia Airport on Tides, Currents, Shoaling, and Dye Dispersion; Hydraulic Model Investigation	AD 734 091
MP 2-642	Apr 1964	A Study of Spillway Energy Losses During Development of the Turbulent Boundary Layer	AD 733 843
MP 2-648	May 1964	Twin-Log Floating Breakwater, Small-Poat Basin No. 2, Juneau, Alaska; Hydraulic Model Investigation	AD 733 845
MP 2-649	May 1964	Radioactive Sediment Tracer Tests, Cape Fear River, North Carolina	AD 733 846

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 2-699	Jan 1965	Friction Factors for Hydraulic Design of Corrugated Metal Pipe, by J. L. Grace	AD 734 092
MP 2-721	Apr 1965	Discharge Characteristics of Hurricane Barrier, East Passage, Narragansett Bay, Rhode Island; Hydraulic Model Investigation, by G. A. Pickering and J. L. Grace	AD 733 847
MP 2-723	Jun 1965	Effects of Proposed Dikes and Sediment Traps on Shoaling and Currents in Tidewater's Delaware City Channels; Hydraulic Model Investigation, by W. H. Bobb	AD 734 093
MP 2-734	Jul 1965	Report on Attendance, International Standards Organization Technical Committee Meeting, London, 1965, and Hydraulics Laboratory Visits, by F. B. Campbell	AD 734 094
MP 2-765	Dec 1965	Model Tests of Enlarged Navigation Channel at Miller Sands Bar, Columbia River Estuary, by F. A. Herrmann	AD 734 095
MP 2-774	Dec 1965	Frequency Spectrum Analysis of the Old River Control Structure Vibration, by R. A. Yates	AD 734 096
MP 2-777	Feb 1966	Hydraulic Design of Rock Riprap, by F. B. Campbell	AD 734 097
MP 2-794	Feb 1966	Lock Culvert Outlet Basins; Hydraulic Model Investigation, by J. H. Ables and M. B. Boyd	AD 733 848
MP 2-797	Feb 1966	Plans for Protection of Paulsboro Refinery Docking Area from Tidal Currents; Hydraulic Model Investigation, by W. H. Bobb	AD 734 098
MP 2-799	Mar 1966	Stability Tests of Proposed Rubble-Mound Breakwaters, Nassau Harbor, Bahamas; Hydraulic Model Investigation, by R. Y. Hudson and R. A. Jackson	AD 734 099
MP 2-812	Apr 1966	Flushing Studies, Victoria Channel, Victoria, Texas; Hydraulic Model Investigation, by R. A. Boland	AD 734 100
MP 2-821	May 1966	Adequacy of Submerged Rock Weirs to Withstand Propeller Wash, St. Clair River, Michigan; Hydraulic Model Investigation, by J. L. Grace	AD 733 871
MP 2-841	Aug 1966	Designs for Rubble-Mound Breakwater, Noyo Harbor, California; Hydraulic Model Investigation, by R. A. Jackson	AD 733 849
MP 2-843	Sep 1966	Status Report on the Gastineau Channel Model Study, by F. A. Herrmann	AD 734 101
MP 2-848	Oct 1966	A Momentum Approach to Open Channel Transitions, by J. W. Patterson	AD 735 776
MP 2-857	Nov 1966	Prototype Performance and Model-Prototype Relationship, by F. B. Campbell and E. B. Pickett	AD 735 850

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 2-860	Nov 1966	Laboratory Research on Design of Dikes for River Regulation, by J. J. Franco	AD 735 846
MP 2-876	Feb 1967	Stilling Basin, Huntington Reservoir Spillway, Wabash River, Indiana; Hydraulic Model Investigation, by E. S. Melsheimer and T. E. Murphy	AD 735 843
MP 2-883	Apr 1967	A Review of the Experimental Data Relative to the Pilot Model Study for the Design of Hilo Harbor Tsunami Model, by G. H. Keulegan	AD 735 844
MP 2-887	Mar 1967	Results of Hydraulic and Shoaling Studies in Marcus Hook-Schuylkill Reach of Delaware River; Hydraulic Model Investigation, by W. H. Bobb	AD 735 777
MP 2-912	Sep 1966	Effects of a Proposed 35-Foot Channel to Richmond on Currents and Salinities Over the Seed Oyster Beds in James River; Hydraulic Model Investigation, by W. H. Bobb, N. J. Brogdon, and H. B. Simmons	AD 735 849
MP 2-951	Dec 1967	Dye Dispersion Patterns for Three Outfall Locations for the Warwick River Sewage Treatment Plant; Hydraulic Model Investigation, by W. H. Bobb and N. J. Brogdon	AD 735 778
MP 2-952	Dec 1967	Effects of Arthur Kill-Kill Van Kull Channel Deepening on Tides, Currents and Shoaling; Hydraulic Model Investigation, by W. H. Bobb	AD 735 688
MP 2-953	Dec 1967	Effects of Removal of Shooters Island and Shore Modifications on Tides, Currents, and Shoaling in the Kill Channels; Hydraulic Model Investigation, by W. H. Bobb	AD 735 779
MP 2-988	Apr 1968	Pressure Tests in Flood-Control Conduits, Summersville Dam, Gauley River, West Virginia, by E. D. Hart	AD 735 767
MP H-68-1	Jun 1968	Riprap Protection for Subimpoundment Dams, Rend Lake Reservoir, Illinois; Hydraulic Model Investigation, by N. R. Oswalt	AD 724 532
MP H-68-2	Sep 1968	Entrance Loss and Boundary Development in Smooth- and Rough-Walled Rectangular Conduits, by G. H. Keulegan	AD 724 533
MP H-68-3	Sep 1968	Head Losses in Subcritical Flow Channel Transitions, by Y. H. Chu	AD 724 534
MP H-68-4	Oct 1968	Evaporation from Lake and Land Pans at the U. S. Army Engineer Waterways Experiment Station, January 1941 through December 1945, by R. G. Cox	AD 724 535
MP H-68-5	Dec 1968	Boundary Effects of Uniform Size Roughness Elements in Two-Dimensional Flow in Open Channels, by B. J. Brown and Y. H. Chu	AD 723 984



## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP H-69-1	Jan 1969	Trends in Baffled, Hydraulic Jump, Stilling Basin Designs of the Corps of Engineers Since 1947, by D. R. Basco	AD 724 536
MP H-69-2	Mar 1969	Radioactive Sediment Tracer Tests, Houston Ship Channel, Houston, Texas, by E. D. Hart	AD 724 068
MP H-69-3	Jun 1969	Characteristic Pressure Distribution in Conduit Inlets of Earth Dam Flood Control Outlet Works, by Y. H. Chu	AD 724 537
MP H-69-4	Apr 1969	A Note on Channel Junction Design, by G. H. Keulegan	AD 724 538
MP H-69-5	May 1969	Hydraulic Characteristics of Nuclear Excavated Channels, by R. A. Sager, E. C. McNair, and G. H. Keulegan	AD 687 371
MP H-69-6	May 1969	Canal Density Currents, by R. A. Sager	AD 687 372
MP H-69-7	Apr 1969	Effects of Temporary and Permanent Blankets on Tides and Currents in East River; Hydraulic Model Investigation, by W. H. Bobb and T. C. Hill	AD 724 539
MP H-69-8	Sep 1969	Characteristic Pressure Distribution in Outlet Works Inlets, by R. G. Cox and Y. H. Chu	AD 725 426
MP H-69-9	Sep 1969	The Quasi-Permanent Regime of Rivers and the Prediction of Floods, by G. H. Keulegan and G. W. Patterson	AD 725 427
MP H-69-10	Sep 1969	An Analytical Model to Predict Ship Transit Capacities of Sea-Level Canals, by John Harrison, H. B. Simmons, B. G. Stinson, and F. M. Anklam	AD 728 096
MP H-69-11	Sep 1969	Stability and Transmission Tests of Tribar Breakwater Section Proposed for Monterey Harbor, California; Hydraulic Model Investigation, by D. D. Davidson	AD 728 097
MP H-69-12	Dec 1969	A Statistical Model to Predict the Transit Capacity of Sea-Level Canals, by B. G. Stinson, J. W. Brown, and John Harrison	AD 725 428
MP H-69-13	Dec 1969	Effects of Proposed Elizabeth River Dike on Tides, Currents, Salinities, and Shoaling; Hydraulic Model Investigation, by R. A. Boland and W. H. Bobb	AD 728 098
MP H-70-1		Investigation of Proposed Dike Systems on the Mississippi River:	
	Apr 1970	Report 1 Baleshed-Ajax Bar Reach; Hydraulic Model Investigation, by J. J. Franco, T. J. Pokrefke, and J. E. Glover	
	Apr 1981	Report 2 New Madrid Bar Reach; Hydraulic Model Investigation, by T. J. Pokrefke, Jr., and J. J. Franco	AD A101 529

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP H-70-2	Apr 1970	Insights Gained from River Sedimentation Models, by J. J. Franco	
MP H-70-3	Jun 1970	Tidal Prism Measurements at Mouth of Columbia River; Hydraulic Model Investigation, by F. A. Herrmann	
MP H-70-4	May 1970	An Experimental Study of Drag Force and Other Performance Criteria of Baffle Blocks in Hydraulic Jumps, by D. R. Basco	
MP H-70-5	May 1970	Capabilities of Hydraulic Models, by E. P. Fortson	
MP H-70-6	May 1970	Boundary Effects of Graded Roughness Elements in Two-Dimensional Flow in Open Channels, by B. J. Brown	
MP H-70-7	Jun 1970	Review and Evaluation of Work Performed by Stevens Institute of Technology for the Atlantic-Pacific Inter-oceanic Canal Study Commission, by John Harrison	
MP H-71-1	Jan 1971	Salamonie Dam Flip Bucket Prototype Tests, Salamonie River, Indiana, by D. F. Bastian	
MP H-71-2	Jan 1971	Hydraulic Models for the Solution of River Training Problems, by J. E. Glover	
MP H-71-3	Jan 1971	Development of Alluvial Streams for Navigation, by J. J. Franco	
MP H-71-4	Feb 1971	Calcasieu Saltwater Barrier Prototype Sector Gate Tests, by D. F. Bastian	
MP H-71-5	Mar 1971	Control of Scour at Hydraulic Structures, by T. E. Murphy	AD 756 152
MP H-71-6	Apr 1971	Predicting Construction Effects by Tidal Modeling, by H. B. Simmons, John Harrison, and C. J. Huval	
MP H-71-7	Apr 1971	Prototype Observations of Snettisham Project Diversion Tunnel, Long Lake, Alaska, by T. E. Munsey and F. M. Neilson	AD 756 156
MP H-71-8	Jun 1971	Random-Length Pipe Mobile Breakwater for Expedient Military Cargo Docking and Unloading Facility, by C. E. Chatham	
MP H-71-9	Aug 1971	Lock and Dam No. 4 Cofferdam Diversion Study, Arkansas River; Hydraulic Model Investigation, by J. J. Franco	
MP H-71-10	Sep 1971	Guide for the Use of Hourly Tidal Data Plotting Program, by L. L. Daggett	AD 757 389
MP H-72-1	Apr 1972	Physical Model Studies of Proposed Hurricane Surge Protection Schemes, by N. J. Brogdon and F. A. Herrmann	

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP H-72-2	Mar 1972	Summary Report; Model Studies of Shrewsbury Inlet, by E. C. McNair and T. C. Hill	
MP H-72-3	Apr 1972	Evaluation of Coastal Zone Management Plans Through Model Techniques, by R. W. Whalin and F. A. Herrmann	
MP H-72-4	Apr 1972	Estuaries, by F. A. Herrmann	
MP H-72-5	May 1972	Practical Guidance for Estimating and Controlling Erosion at Culvert Outlets, by B. P. Fletcher and J. L. Grace	AD 743 461
MP H-72-6		Hydrological Research, U. S. Army Engineer Waterways Experiment Station Lake Watershed, 1939-1946, by E. B. Lipscomb and E. E. Moorhead:	
	Jun 1972	Volume I	
	Jun 1972	Volume II	
MP H-72-7	Jun 1972	Pertinent Data on Spillway Tainter Gates for Corps of Engineers Projects, by R. G. Cox	AD 745 883
MP H-72-8	Jun 1972	Effects of Proposed Extension of Craney Island Disposal Area on Tides, Currents, and Salinities; Hydraulic Model Investigation, by R. A. Boland	
MP H-72-9	Aug 1972	Sea-Land Navigation Studies; Hydraulic Model Investigation, by W. H. Bobb	AD 756 157
MP H-72-10	Aug 1972	Effects of Proposed Dock Expansion at Newport News on Tides, Currents, and Shoaling; Hydraulic Model Investigation, by R. A. Boland	
MP H-73-1	Jan 1973	Resistance Losses in Noncircular Flood Control Conduits and Sluices, by R. G. Cox	AD 755 821
MP H-73-2	Feb 1973	Effective Hydraulic Roughness for Channels Having Bed Roughness Different from Bank Roughness; A State-of-the-Art Report, by R. G. Cox	AD 757 138
MP H-73-3	Jun 1973	Flood Routing Procedure for the Lower Ohio River, by B. H. Johnson and P. K. Senter	
MP H-73-4	Jun 1973	Spillway Water-Surface Profiles, by R. G. Cox	AD 762 128
MP H-73-5	Dec 1973	Spillway Crest Design, by T. E. Murphy	AD 774 802
MP H-73-6	Jun 1973	Drainage and Erosion Control Facilities; Field Performance Investigation, by J. L. Grace, Jr., C. C. Calhoun, Jr., and D. N. Brown	AD 762 537

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP H-73-7	Aug 1973	Cellular-Block-Lined Grade Control Structure; Hydraulic Model Investigation, by B. P. Fletcher and J. L. Grace, Jr.	AD 766 692
MP H-73-8	Sep 1973	Hulah Dam Emergency Bulkhead Prototype Closure Tests, by W. C. Blanton, J. E. Hall, and D. F. Bastian	AD 767 235
MP H-74-1	Jan 1974	Similitude Conditions in Free-Surface Vortex Formations, by L. L. Daggett and G. H. Keulegan	AD 775 405
MP H-74-2	Jan 1974	Concrete Armor Units for Protection Against Wave Attack; Report of Ad Hoc Committee on Artificial Armor Units for Coastal Structures, edited by R. Y. Hudson	AD 774 800
MP H-74-3	Mar 1974	A Note on the Gravity Head Viscometer, by G. H. Keulegan and L. L. Daggett	
MP H-74-4	Mar 1974	Analysis of Tow Entry, Locking, and Exit Times at Lock and Dam 51, Ohio River, by L. L. Daggett, R. W. McCarley, and J. E. Stinehour	
* MP H-74-5	May 1974	WATSIM IV Logic Manual, by L. L. Daggett and J. A. Eiland	AD 920 012L
* MP H-74-6	May 1974	Determination of Summary Statistics of Lock Performance Using the Lock Data Analysis Program: LOKDAP, by J. A. Eiland and L. L. Daggett	AD 920 013L
MP H-74-7	Aug 1974	STA-POD Stability Tests; Hydraulic Model Investigation, by D. D. Davidson	
MP H-74-8	Aug 1974	Models and Methods Applicable to Corps of Engineers Urban Studies, by J. W. Brown, M. R. Walsh, R. W. McCarley, A. J. Green, Jr., and H. W. West	AD 786 516
MP H-74-9	Aug 1974	Neches River Saltwater Barrier, by C. J. Huval	
MP H-74-10	Sep 1974	Mathematical Model Study of a Flow Control Plan for the Chesapeake and Delaware Canal, by B. H. Johnson	AD A054 296
MP H-74-11	Dec 1974	Effects of a Steady Nonuniform Current on the Characteristics of Surface Gravity Waves, by L. Z. Hales and J. B. Herbich	AD A005 005
MP H-75-1	Jan 1975	Evaluation of Disposal Areas in James River; Hydraulic Model Investigation, by R. A. Boland, Jr., and W. H. Bobb	AD A054 082
MP H-75-2	Apr 1975	Norton Point Dike Study, Coney Island, New York; Hydraulic Model Investigation, by R. F. Athow, Jr., W. H. Bobb, and R. A. Sager	AD A054 083
MP H-75-4	May 1975	Scale Effects in Rubble-Mound Breakwater Stability Models Caused by Variations in the Specific Gravity of the Armor Units and Underlayer Stones, by R. Y. Hudson	AD A012 069

\* Statement B. See Preface.

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP H-75-5	Jun 1975	Reliability of Rubble-Mound Breakwater Stability Models, by R. Y. Hudson	AD A011 266
MP H-75-6	May 1975	River Point Directory for the Mississippi River-Gulf Coast Inland Waterways System, by L. L. Daggett and R. W. McCarley	AD A011 267
MP H-75-7	Jul 1975	Lock Design, Sidewall Port Filling and Emptying System, by T. E. Murphy	AD A013 985
MP H-75-8	Nov 1975	Westport Small-Boat Basin Revision Study; Hydraulic Model Investigation, by N. J. Brogdon, Jr.	AD A018 422
MP H-75-9	Dec 1975	Determination of Lock Capacities Using Simulation Modeling, by L. L. Daggett and T. D. Ankeny	AD A054 086
MP H-75-10	Dec 1975	Masonboro Inlet, North Carolina: Movable-Bed Hydraulic Model Study; Effects of Temperature and Experimental Procedures, by R. A. Sager and N. W. Hollyfield	AD A019 266
MP H-76-1	Jan 1976	Chesapeake Bay Radioactive Tracer Study, by A. R. Tool	AD A020 539
MP H-76-2	Jan 1976	Waterway Point Directory for the Great Lakes, Atlantic, and Pacific Areas, by L. L. Daggett and R. W. McCarley (includes Appendixes A-D)	AD A054 090
		Appendix E Waterway Point Directory for the Great Lakes Area	AD A054 087
		Appendix F Waterway Point Directory for the Atlantic Coast Area	AD A054 088
		Appendix G Waterway Point Directory for the Pacific Coast Area	AD A054 089
MP H-76-3		Lake Erie International Jetport Model Feasibility Investigation:	
	Feb 1976	Report 17-7 Results of Numerical Steady-State, Wind-Driven Circulation Analysis, by D. L. Durham and H. L. Butler (includes Appendixes A-C)	AD A036 242
	Feb 1976	Appendix D	
	Oct 1976	Report 17-8 Results of Numerical Time-Dependent Three-Dimensional, Storm Surge Analysis, by D. L. Durham, H. L. Butler, and D. C. Raney (includes Appendixes A-F)	AD A036 243
	Oct 1976	Appendix G	

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP H-76-3 (Cont)	Jan 1978	Report 17-9 Results of Numerical Three-Dimensional Wind-Driven Circulation Analysis for Thermally Stratified Lake Conditions, by D. L. Durham and D. C. Raney	AD A050 614
MP H-76-4		Numerical Analysis of Tidal Circulation for Long Beach Harbor:	
	Sep 1976	Report 1 Existing Conditions and Alternate Plans for Pier J Completion and Tanker Terminal Study, by D. C. Raney	AD A031 174
	Mar 1976	Report 2 Tidal Circulation Velocity Patterns for Existing Conditions and Alternate Master Plan Pier-J Configurations for Sohio Project, by D. C. Raney	AD A046 914
	Sep 1976	Report 3 Existing Conditions and Alternate Plans for Pier J Completion and Tanker Terminal Study with -82 ft Channel, by D. C. Raney	AD A031 178
	May 1976	Report 4 Tidal Circulation Velocity Patterns for Existing Conditions and Alternate Master Plan Pier-J Configurations with -82-ft Channel, by D. C. Raney	AD A064 469
MP H-76-5	Mar 1976	Cooper River Rediversion Project, Bushy Park Water Supply Tests; Hydraulic Model Investigation, by H. A. Benson and W. H. Bobb	AD A022 805
MP H-76-6	Apr 1976	Falls Lake Water-Quality Study; Hydraulic Laboratory Investigation, by Bruce Loftis and D. C. Fontane	AD A023 754
* MP H-76-7	Apr 1976	A Simulation Model of Tow Traffic on the Gulf Intra-coastal Waterway, by T. D. Ankeny and L. L. Daggett	AD B010 692L
MP H-76-8	Apr 1976	Stability of Rubble-Mound Breakwater, Lahaina Harbor, Hawaii; Hydraulic Model Investigation, by R. D. Carver	AD A024 773
MP H-76-9	May 1976	Effects of 40-Foot Charleston Harbor Project on Tides, Currents, and Salinities; Hydraulic Model Investigation, by H. A. Benson	AD A024 524
MP H-76-10	May 1976	Transmission of Wave Energy Through and Overtopping of the Long Beach, California, Breakwater; Hydraulic Model Investigation, by L. Z. Hales	AD A025 175
MP H-76-11	May 1976	New Techniques and Materials for Constructing Hydraulic Models, by N. R. Oswalt and G. A. Pickering	AD A026 095
MP H-76-12	Jun 1976	Estimation of Winds Over the Great Lakes, by D. T. Resio and C. L. Vincent	AD A028 022

\* Statement B. See Preface.

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP H-76-13	Jun 1976	Lock Filling and Emptying--Symmetrical Systems, by M. T. Hebler and F. M. Neilson	AD B012 621L
MP H-76-14	Jun 1976	Interim Report on Masonboro Inlet, North Carolina, Movable-Bed Model Tests, by N. W. Hollyfield	AD A026 399
MP H-76-15	Jun 1976	Development of Navigation with Locks and Dams, by J. J. Franco	AD A029 355
MP H-76-16	Aug 1976	A Variational Approach to Nonlinear Wave Theory, by R. W. Whalin	AD A030 144
MP H-76-17	Sep 1976	Enlargement of Marcus Hook Anchorage, Delaware River; Hydraulic Model Investigation, by R. F. Athow, Jr.	AD A030 541
MP H-76-18	Sep 1976	Effects of Construction of Liberty State Park on Hydraulic Characteristics of New York Harbor; Hydraulic Model Investigation, by R. F. Athow, Jr., and R. A. Boland, Jr.	AD A030 471
MP H-76-19	Sep 1976	Convex Chutes in Converging Supercritical Flow, by F. M. Neilson	AD A033 733
MP H-76-20		Long Beach Harbor Numerical Analysis of Harbor Oscillations:	
	Sep 1976	Report 1 Existing Conditions and Proposed Improvements, by J. R. Houston	AD A031 171
	Sep 1976	Report 2 Alternate Plans for Pier J Completion and Tanker Terminal Project, by J. R. Houston	AD A031 172
	Sep 1976	Report 3 Alternate Plans for Pier J Completion and Tanker Terminal Project (62- and 82-ft Depths), by J. R. Houston	AD A031 173
	Feb 1977	Report 4 Alternate Plans for Pier J Completion and Tanker Terminal Project (No Landfill), by J. J. Wanstrath	AD A037 066
MP H-76-21	Mar 1977	Seasonal Variations in Great Lakes Design Wave Heights: Lake Erie, by D. T. Resio, R. M. Brooks, and C. L. Vincent	AD A039 153
MP H-76-22	Nov 1976	Igloo Wave Absorber Tests for Port Washington Harbor, Wisconsin; Hydraulic Model Investigation, by R. R. Bottin, Jr.	AD A032 572
MP H-77-1	Feb 1977	Capacity Studies of Winfield Locks, Kanawha River, West Virginia, by L. L. Daggett and R. W. McCarley	AD A037 382
MP H-77-2	Feb 1977	Los Angeles Harbor Numerical Analysis of Harbor Oscillations, by J. R. Houston	AD A037 155

\* Statement B. See Preface.

## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP H-77-3	Mar 1977	Dispersion of Proposed Theodore Industrial Park Effluents in Mobile Bay; Hydraulic Model Investigation, by R. C. Berger, Jr., and M. J. Trawle	AD A038 656
MP H-77-4	May 1977	Charleston Harbor Navigation Study, South Carolina, Verification Tests; Hydraulic Model Investigation, by H. A. Benson	
MP H-77-5	May 1977	Pressure Tests in Flood-Control Conduit, Melvern Dam, Kansas, by T. L. Fagerburg	AD A041 291
MP H-77-6	May 1977	Numerical Model Results of Dredged Material Disposal at Ten Proposed Ocean Disposal Sites in the Hawaiian Islands, by B. H. Johnson and B. W. Holliday	AD A040 605
MP H-77-7	Jun 1977	Effect of Loss of Valley Storage in the Cannelton Pool on Ohio River Flood Heights, by B. H. Johnson and P. K. Senter	AD A041 670
MP H-77-8	Aug 1977	Tillamook Bay Entrance Refraction Study, Tillamook, Oregon, by L. Z. Hales	AD A043 721
MP H-77-9		A Numerical Hindcast Model for Wave Spectra on Water Bodies with Irregular Shoreline Geometry:	
	Aug 1977	Report 1 Test of Nondimensional Growth Rates, by D. T. Resio and C. L. Vincent	AD A044 051
	Dec 1978	Report 2 Model Verification with Observed Wave Data, by D. T. Resio and C. L. Vincent	AD A064 992
MP H-77-10	Aug 1977	A Consultant's Review of the Los Angeles-Long Beach Harbors Study, by R. O. Reid, R. G. Dean, and L. E. Borgman	AD A043 734
MP H-77-11	Sep 1977	Dauphin Island Littoral Transport Calculations, by A. W. Garcia	AD A044 662
MP H-77-12	Sep 1977	A Computer-Aided Aerial Photographic Analysis of Fire Island Inlet Geomorphology, by J. H. Barwis, F. C. Perry, and V. E. LaGarde	AD A045 187
MP H-77-13	Nov 1977	Model Study of Cool Water Discharge from Proposed LNG Facility, Los Angeles Harbor, California, by W. H. McAnally, Jr.	AD A050 023
MP H-77-14	Nov 1977	Dispersion of Proposed Effluent Discharges and Salt-water Intrusion in Cooper River; Hydraulic Model Investigation, by H. A. Benson and R. A. Boland, Jr.	AD A051 928
MP H-78-1	Jan 1978	Enhancement of Releases from a Stratified Impoundment by Localized Mixing, Okatibbee Lake, Mississippi, by M. S. Dortch and S. C. Wilhelms	AD A051 794



## HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP H-78-2	Jan 1978	Preliminary Evaluation of Wind and Wave Effects at Potential LNG Terminal Sites, State of California, by L. Z. Hales	AD A049 883
	Apr 1978	Appendix A An Evaluation of the Relative Wave Climate at Five Onshore LNG Sites Considering Island Influences and Topographic Effects, by L. Z. Hales	AD A054 130
	Jul 1978	Appendix B An Evaluation of the Relative Wave Climate at Six Offshore LNG Sites Considering Island Influences and Topographic Effects, by L. Z. Hales	AD A057 426
MP H-78-3	Jan 1978	Automation Techniques for Physical Hydraulic Models, by D. L. Durham and G. C. Downing	AD A051 865
MP H-78-4	Jan 1978	Stability Tests of Nawiliwili Breakwater Repair, by D. D. Davidson	AD A051 620
MP H-78-5		An Open-Coast Mathematical Storm Surge Model with Coastal Flooding for Louisiana:	
	Feb 1978	Report 1 Theory and Application, by J. J. Wanstrath	AD A053 365
*	Feb 1978	Report 2 Program Documentation, by J. J. Wanstrath	AD B026 600L
MP H-78-6		Georgetown Harbor, South Carolina:	
	Feb 1978	Report 1 Hydraulic, Salinity, and Shoaling Verification; Hydraulic Model Investigation, by M. J. Trawle	AD A052 340
	May 1979	Report 2 Effects of Various Channel Schemes on Tides, Currents, and Shoaling; Hydraulic Model Investigation, by M. J. Trawle and R. A. Boland, Jr.	AD A071 316
MP H-78-7	Jun 1978	Practical Riprap Design, by S. T. Maynard	AD A058 837
MP H-78-8	Aug 1978	Coastal Processes Study of the Oceanside, California, Littoral Cell, by L. Z. Hales	AD A068 316
MP H-78-9	Sep 1978	A Discussion of Boundary-Fitted Coordinate Systems and Their Applicability to the Numerical Modeling of Hydraulic Problems, by B. H. Johnson and J. F. Thompson	AD A059 192
MP H-78-10	Sep 1978	Single-Valve Prototype Tests, Main Lock, Locks and Dam 26, Mississippi River, Alton, Illinois, by E. D. Hart	AD A061 174
MP H-78-11	Sep 1978	Feasibility Study of a Numerical Tow Model, by T. D. Ankeny, C. J. Huval, and L. L. Daggett	AD A062 727

\* Statement B. See Preface.

H-20

HYDRAULICS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP H-78-12	Oct 1978	South Jetty Stability Study, Masonboro Inlet, North Carolina; Hydraulic Model Investigation, by R. D. Carver and D. G. Markle	AD A062 132

## HYDRAULICS LABORATORY

Mississippi Basin Model Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MBM 1-1	Oct 1942	Preliminary Report on Proposed Reservoir Operation Model, Mississippi River and Tributaries	
MBM 1-2	Oct 1942	Report on Proposed Site	
MBM 1-3	Apr 1943	Definite Project Report	
MBM 1-4	Jul 1951	Description of Mississippi Basin Model	
MBM 1-5	Nov 1955	Automatic Instrumentation of the Mississippi Basin Model	
MBM 1-6	Aug 1971	History and Description of the Mississippi Basin Model, by J. E. Foster	
MBM 2-1	Oct 1945	Report of First Meeting of Mississippi Basin Model Board	
MBM 2-2	Mar 1947	Report of Second Meeting of Mississippi Basin Model Board	
MBM 2-3	May 1948	Report of Third Meeting of Mississippi Basin Model Board	
MBM 2-4	Aug 1948	Report of Fourth Meeting of Mississippi Basin Model Board	
MBM 2-5	Jun 1949	Report of Fifth Meeting of Mississippi Basin Model Board	
MBM 2-6	Mar 1950	Report of Sixth Meeting of Mississippi Basin Model Board	
MBM 2-7	Mar 1951	Report of Seventh Meeting of Mississippi Basin Model Board	
MBM 2-8	Aug 1952	Report of Eighth Meeting of Mississippi Basin Model Board	
MBM 2-9	Sep 1953	Report of Ninth Meeting of Mississippi Basin Model Board	
MBM 2-10	Oct 1954	Report of Tenth Meeting of Mississippi Basin Model Board	
MBM 2-11	Oct 1955	Report of Eleventh Meeting of Mississippi Basin Model Board	
MBM 2-12	May 1956	Report of Twelfth Meeting of Mississippi Basin Model Board	
MBM 2-13	May 1957	Report of Thirteenth (Fiscal Year 1957) Meeting of Mississippi Basin Model Board	
MBM 2-14	May 1958	Report of Fourteenth (Fiscal Year 1958) Meeting of Mississippi Basin Model Board	
MBM 2-15	May 1959	Report of Fifteenth (Fiscal Year 1959) Meeting of Mississippi Basin Model Board	
MBM 2-16	Jun 1960	Report of Sixteenth Meeting of Mississippi Basin Model Board, Fiscal Year 1960	
MBM 2-17	Sep 1960	Special Report of the Mississippi Basin Model Board on Curtailment of Model Limits (Seventeenth Meeting of the Board)	

## HYDRAULICS LABORATORY

Mississippi Basin Model Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MBM 2-18	Jul 1961	Report of Eighteenth Meeting of Mississippi Basin Model Board, Fiscal Year 1961	
MBM 2-19	Jul 1962	Report of Nineteenth Meeting of Mississippi Basin Model Board	
MBM 2-20	Aug 1963	Report of Twentieth Meeting of Mississippi Basin Model Board	
MBM 2-21	Apr 1964	Report of Twenty-First Meeting of Mississippi Basin Model Board	
MBM 2-22	Apr 1965	Report of Twenty-Second Meeting of Mississippi Basin Model Board	
MBM 2-23	May 1966	Report of Twenty-Third Meeting of Mississippi Basin Model Board	
MBM 2-24	Jun 1967	Report of Twenty-Fourth Meeting of Mississippi Basin Model Board	
MBM 2-25	Jun 1968	Report of Twenty-Fifth Meeting of Mississippi Basin Model Board	
MBM 2-26	Jun 1969	Report of Twenty-Sixth Meeting of Mississippi Basin Model Board	
MBM 2-27	Jun 1970	Report of Twent-Seventh Meeting of Mississippi Basin Model Board	
MBM 3-1	May 1951 Revised Apr 1958	The Mississippi Basin Model, published in "The Military Engineer"	
MBM 12-1	Apr 1952	Verification of Sioux City-to-Hermann Reach, Missouri River and Tributaries, 1950 and 1947 Floods	
MBM 12-2	Jun 1962	Verification of Sioux City-to-Mouth Reach, Missouri River and Tributaries, 1952 and 1951 Floods	
MBM 13-1	Dec 1960	Verification of the Pickwick Dam-Kentucky Dam Reach, Tennessee River and Tributaries, 1950 and 1948 Floods	
MBM 14-1	Jul 1951	Verification of Tulsa-to-Van Buren Reach, Arkansas River and Tributaries, Spring 1941 and 1943 Floods	
MBM 14-2	Nov 1952	Verification of Van Buren-to-Pine Bluff Reach, Arkansas River and Tributaries, Spring 1941 and 1943 Floods	
MBM 15-1	Aug 1951	Verification of Hannibal-to-St. Louis Reach, Mississippi River and Tributaries, 1947, 1944, and 1943 Floods	

## HYDRAULICS LABORATORY

Mississippi Basin Model Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MBM 18-2	May 1957	Verification of Hannibal-to-Thebes Reach, Mississippi River and Tributaries, 1947, 1944, and 1943 Floods	
MBM 23-1	Jun 1965	Effects of Reservoirs and Results of Steady-Flow Tests, Cumberland River; Hydraulic Model Investigation	
MBM 23-2	Jul 1965	Kentucky Reservoir Steady Flow Profiles and Effects of Pickwick Discharge Duration on Downstream Stages; Hydraulic Model Investigation	
MBM 23-3	May 1969	Effects of Cheatham and Barkley Reservoirs and Coordinated Operation of Barkley and Kentucky Reservoirs, Cumberland and Tennessee Rivers; Hydraulic Model Investigation	
MBM 24-1	Apr 1961	Flood-Routing and Reservoir Operation Study, Tulsa-to-Van Buren Reach, Arkansas River and Tributaries	
MBM 29-1	Nov 1971	Comprehensive Testing Program; Hydraulic Model Investigation, by J. E. Foster and S. J. Ruff	
	Jun 1971	Appendix A 1927 Flood and Hypothetical Floods 52A, 56, and 58A	
	Jun 1971	Appendix B 1937 Flood	
	Jun 1971	Appendix C 1943 Flood	
	Jun 1971	Appendix D 1945 Flood	
	Jun 1971	Appendix E 1950 Flood	
	Jun 1971	Appendix F Hypothetical Flood M 52-A	
	Jun 1971	Appendix G Hypothetical Flood M 56	
	Jun 1971	Appendix H Hypothetical Flood M 58-AOR	
MBM 31-1	Jul 1957	Operation of the Birds Point-New Madrid Floodway	
MBM 31-2	Apr 1957	Adequacy of Project Levee in Hannibal-to-Thebes Reach, Mississippi River and Tributaries. In 2 volumes	
MBM 31-3	Jan 1960	Proposed Alignments for Columbia Bottoms Levee, St. Louis Industrial Park	
MBM 31-4	Sep 1962	Mississippi River Hypothetical Flood 52A	
MBM 31-5	Jun 1977	Flowline Study, Mississippi and Illinois Rivers; Hydraulic Model Investigation, by J. E. Foster	AD A041 695
MBM 31-6	Apr 1978	Birds Point-New Madrid Floodway Operation; Hydraulic Model Investigation	AD A055 030

## HYDRAULICS LABORATORY

Mississippi Basin Model Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MBM 31-7	Apr 1979	Test of Birds Point New Madrid Floodway; Hydraulic Model Investigation, by J. E. Foster and J. V. Allen	
MBM 31-8	Nov 1980	Effects of Closing Wax Lake Outlet and Constructing Management Unit and Channel Training Levees in the Atchafalava River Basin, by J. E. Foster and J. V. Allen	AD A093 415
MBM 31-9	Oct 1984	Effects of Various Levee Alignments and Grades on 1973 and Project Design Flow Lines in the Red-Ouachita-Black River Basin; Hydraulic Model Investigation, by J. E. Foster, J. V. Allen, and J. E. Glover	AD A151 548
MBM 32-1	May 1955	Effects of Agricultural Levees on Design Flood Profiles for Kansas City Local Protection	
MBM 32-2	Dec 1959	Tests for Re-evaluation of Missouri River Agricultural Levees in the Kansas City District	
MBM 32-3	May 1960	Tests for Re-evaluation of Missouri River Agricultural Levees in the Omaha District	
MBM 34-1	Jun 1956	Effects of Project Levees Along Point Remove Creek, Tributary of Arkansas River	
MBM 34-2	Apr 1957	Adequacy of Project Levee Grades Without and With Reservoir Modification, Van Buren to Pine Bluff, Arkansas River	
MBM 38-1	Nov 1971	Effects of Height and Alignment of Levees at Confluence of Missouri and Mississippi Rivers; Hydraulic Model Investigation, by J. E. Foster	
MBM 42-1	Oct 1956	Hypothetical Storms Over the Iowa Tributaries	
MBM 43-1	Feb 1962	The Ohio River Hypothetical Flood OR-1	
MBM 44-1	Jun 1956	Determination of Discharge Hydrographs for Arkansas River and Tributaries, April 1927 Flood	
MBM 52-1	Oct 1954	Tests of Channel Realignment Near St. Joseph, Missouri	
MBM 81-1	Jan 1959	Effects of Proposed Highway Fill Across Chouteau Island	
MBM 81-2	Sep 1959	Effects of Proposed Chain of Rocks Dam, Mississippi River, Mile 190.1	
MBM 81-3	Dec 1967	Effects of Roadway Construction on Mississippi River Flow, Lake County, Tennessee; Hydraulic Model Investigation	
MBM 81-4	Mar 1972	Report of Model Study, Effects of Modifying Operation of Old River Control Structure on 1945, 1961, 1967, and 1968 Flood Flows; Hydraulic Model Investigation	
	Mar 1972	Appendix A Additional Hydrographs	

## HYDRAULICS LABORATORY

Mississippi Basin Model Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MBM 81-5	Dec 1973	Report of Model Study, Effects of Ultimate Channel Development in the Atchafalava Basin; Hydraulic Model Investigation	
MBM 81-6	Jun 1979	Effects of Overbank Vegetation on Mississippi River Stages in the St. Louis-to-Thebes Reach, by J. E. Foster and J. V. Allen	
MBM 86-1	Jul 1966	Effects of Roadway Embankment and Waterway Openings of Proposed Interstate Highway 155 on Mississippi River Floods; Hydraulic Model Investigation, by H. C. McGee and N. W. Hollvfield	
MBM 86-2	Apr 1972	Effects of Southwind Maritime Centre on Ohio River Flow Conditions at Mount Vernon, Indiana; Hydraulic Model Investigation	
MBM 91-1	Feb 1986	MRT Flow Line and Lorrain Lake Cutoff, Red River: Hydraulic Model Investigation, by J. E. Foster, J. V. Allen, and J. E. Glover	
MBM 92-1	Oct 1955	Effects on Flood Heights of Levee, Railroad, and Highway Fills in the Flood Plain of the Missouri River	

## HYDRAULICS LABORATORY

Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
Paper H	Jul 1930	Sediment Investigations on the Mississippi River and Its Tributaries Prior to 1930	
Paper Y	Feb 1931	Experiment to Determine the Limit of Backwater Influence in the Illinois River	
Paper D	May 1931	Hydraulic Studies of Proposed Dam No. 37, Ohio River	
Paper R	May 1931	Experiments to Determine the Erosive Effects of Floodwaters on Railroad Embankments	
Paper A	May 1931	Experiment to Determine the Effects of the Several Proposed Levee Extensions South of Eagle Lake, Mississippi	
Paper U	Dec 1931	Sediment Investigations on the Mississippi River and Its Tributaries, 1930-31	
Paper L	Jan 1932	Model Study of Effects of Dikes on the River Bed at Walkers Bar, Ohio River	
Paper I	Apr 1932	Experiment to Determine the Effects of Proposed Dredged Cutoffs in the Mississippi River	
Paper C	Dec 1932	Model Study of Effects of Operating Birds Point-New Madrid Floodway	
Paper 10	Jan 1933	Experiment to Determine the Effects of Mississippi River Backwater on the Red River	
Paper 11	Jun 1933	Model Studies of Dike Location	
Paper 12	Jul 1933	Investigations of Certain Proposed Methods of Bank and Embankment Protection	
Paper 13	Aug 1933	Model Study of Shoaling Below Starved Rock Lock and Dam, Illinois River	
Paper 14	Sep 1933	Model Studies of Spillways for St. Lucie Canal, Martin County, Florida	
Paper 15	Jan 1934	Model Studies for Channel Stabilization, Mississippi River	
Paper 16	Apr 1934	Experiments to Determine the Backwater Effects of Submerged Sills in the St. Clair River	
Paper 17	Jan 1935	Studies of River Bed Materials and Their Movement, with Special Reference to the Lower Mississippi River	AD A950 029
Paper 18	Jun 1937	Model Study of Maintenance Works at Ballona Creek Outlet, Venice, California	



## HYDRAULICS LABORATORY

Research Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
RR 2-1		Hydraulic Effects of Model Distortion:	
	Sep 1957	Report 1 Triangular-Flume Study of Distortion Effects	AD 756 370
RR 2-2	Jul 1958	Design of Quarry-Stone Cover Layers for Rubble-Mound Breakwaters; Hydraulic Laboratory Investigation	AD 780 896
RR 2-3	Mar 1965	Pilot Model Study for the Design of Hilo Harbor Tsunami Model; Hydraulic Model Investigation, by J. G. Housley	AD 646 501
RR 2-5	Jun 1965	Selection and Design of a Bore Generator for the Hilo Harbor Tsunami Model; Hydraulic Model Investigation, by C. C. Shen	AD 646 509
RR 2-7	Apr 1966	The Approximate Theories of Pneumatic Wave Generators; Hydraulic Laboratory Investigation, by G. H. Keulegan	AD 733 776
RR 2-8	Oct 1966	Selection of Scale for Riprap Model of In-Shore Harbor, Site X; Analytical Investigation, by A. M. Kamel	AD 733 775
RR 2-9	Dec 1966	Methodology - Tidal Computations for a Sea-Level Canal, by G. H. Keulegan	AD 733 957
RR 2-10	Feb 1968	Water Wave Pressures on Seawalls and Breakwaters, by A. M. Kamel	AD 667 354
RR 2-11	Jun 1968	Design of Cover Layers for Rubble-Mound Breakwaters Subjected to Nonbreaking Waves; Hydraulic Laboratory Investigation, by R. A. Jackson	AD 671 634
RR 2-12	Mar 1968	Wave Damping Effects of Screens; Hydraulic Model Investigation, by G. H. Keulegan	AD 668 236
RR H-68-1	Sep 1968	An Experimental Study of Breaking-Wave Pressures, by K. J. Garcia	AD 680 319
RR H-68-2	Sep 1968	Shock Pressures Caused by Waves Breaking Against Coastal Structures, by A. M. Kamel	AD 680 318
RR H-69-1	Oct 1969	Water Wave Transmission Through and Reflection by PerVIOUS Coastal Structures; Hydraulic Laboratory Investigation, by A. M. Kamel	AD 733 873
RR H-69-2	Dec 1969	Scale Effect Tests for Rubble-Mound Breakwaters; Hydraulic Model Investigation, by Y. B. Dai and A. M. Kamel	
RR H-70-1	Jan 1970	Investigations of Various Shapes of the Upstream Quadrant of the Crest of a High Spillway; Hydraulic Laboratory Investigation, by E. S. Melsheimer and T. E. Murphy	AD 756 109
RR H-70-2	Jan 1970	Erosion and Riprap Requirements at Culvert and Storm-Drain Outlets; Hydraulic Laboratory Investigation, by J. P. Bohan	AD 702 247

## HYDRAULICS LABORATORY

Research Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
RR H-71-1	Apr 1971	Evaluation of Three Energy Dissipators for Storm-Drain Outlets; Hydraulic Laboratory Investigation, by J. L. Grace and G. A. Pickering	AD 756 110
RR H-71-2		Model Studies of Outfall Systems for Desalination Plants: Part I Flume Study of the Mixing Characteristics of Dense Jets Discharged Into a Flowing Fluid:	
	Aug 1971	Volume 1 Main Text; Appendix A: Notation; Appendix B: Conductivity Probe Calibration and Data Reduction	AD A032 703
	Aug 1971	Volume 2 Appendix C: Jet Geometry Sketches; Appendix D: Dilution Contour Plots	AD A032 766
		Part II Tests of Effluent Dispersion in Selected Estuary Models:	
	Sep 1971	Volume 1 Main Text	AD A032 710
	Sep 1971	Volume 2 Appendix A: Tabulations of Model Data	AD A032 711
RR H-71-3	Dec 1971	The Limit of Applicability of Linear Wave Refraction Theory in a Convergence Zone, by R. W. Whalin	AD A032 767
RR H-72-1	Jun 1972	Evaluation of Flared Outlet Transitions; Hydraulic Model Investigation, by B. P. Fletcher and J. L. Grace	AD 745 882
RR H-72-2	Sep 1972	Wave Damping Effects of Fibrous Screens; Hydraulic Model Investigation, by G. H. Keulegan	AD 751 133
RR H-72-3	Dec 1972	Simultaneous Multiple-Level Release from Stratified Reservoirs; Hydraulic Laboratory Investigation, by J. P. Bohan and T. L. Gloriod	AD 754 536
RR H-73-1	Feb 1973	Wave Transmission Through Rock Structures; Hydraulic Model Investigation, by G. H. Keulegan	AD 757 147
RR H-73-2	Mar 1973	Mathematical Simulation of the Turbidity Structure Within an Impoundment; Hydraulic Laboratory Investigation, by D. G. Fontane, J. P. Bohan, and J. L. Grace, Jr.	AD 757 594
RR H-73-3	Apr 1973	Reflection Characteristics of Screen Wave Absorbers; Hydraulic Model Investigation, by G. H. Keulegan	AD 761 090
RR H-73-4		Mixing of Salinity-Stratified Water by Pneumatic Barriers:	
	Jun 1973	Report 1 Preliminary Investigations; Hydraulic Model Investigation, by W. H. McAnally	AD 762 132

## HYDRAULICS LABORATORY

Research Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
RR H-74-1	Sep 1974	Criteria for Use of Ripple Tanks: Refraction Scale Effects, by R. W. Whalin and H. L. Butler	AD 787 270
RR H-74-2	Dec 1974	Problem Definition and Modeling Techniques for the Study of Kaneohe Bay, Oahu, Hawaii, by W. H. McAnally, Jr., J. D. Lunz, D. C. Raney, R. Y. Hudson, and J. V. Letter, Jr.	AD A004 033
RR H-75-1	Feb 1975	A Numerical Model for Predicting the Effects of Landslide-Generated Water Waves, by D. C. Raney and H. L. Butler	AD A006 537
RR H-75-2		Heat Dispersion in Physical Estuarine Models:	
	Jun 1975	Report 1 State of the Art, by V. L. Zitta and G. W. Douglas	AD A012 651
	Feb 1976	Report 2 Experiments in the Delaware River Model, by M. J. Trawle	AD A021 952
RR H-75-3		Physical Hydraulic Models: Assessment of Predictive Capabilities:	
	Jun 1975	Report 1 Hydrodynamics of the Delaware River Estuary Model, by J. V. Letter, Jr., and W. H. McAnally, Jr.	AD A012 766
	Nov 1977	Report 2 Movable-Bed Model of Galveston Harbor Entrance, by J. V. Letter, Jr., and W. H. McAnally, Jr.	AD A047 988
	Sep 1981	Report 3 Model Study of Shoaling, Brunswick Harbor, Georgia, by J. V. Letter, Jr., and W. H. McAnally, Jr.	AD A106 549
RR H-75-4	Jul 1975	Effect of Source Orientation and Location in the Aleutian Trench on Tsunami Amplitude Along the Pacific Coast of the Continental United States, by J. R. Houston, R. W. Whalin, A. W. Garcia, and H. L. Butler	AD A014 145
	Jun 1978	Errata Sheet No. 1	
RR H-76-1	Jul 1976	Numerical Modeling of Resonant Oscillations in Deep Draft Harbors, by J. R. Houston	AD A028 051
RR H-76-2	Sep 1976	Effect of Source Orientation and Location in the Peru-Chile Trench on Tsunami Amplitude Along the Pacific Coast of the Continental United States, by A. W. Garcia	AD A032 991
RR H-77-1	Jun 1977	Geometric Parameters that Influence Floodplain Flow, by Maurice James and B. J. Brown	AD A041 641

## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 0-2	Feb 1931	Experiment to Determine the Erosion at Upper Ends of the Dredge Borrow Pits in the Bonnet Carre Floodway	
TM 4-1	Sep 1932	An Experiment to Determine the Action of Tractively Transported Sedimentary Material at a Stream Fork	
TM 4-4	Mar 1933	Study of the Bed Load Movement in a Forked Flume	
TM 20-2	Jan 1933	Experiments to Determine the Effectiveness of Concrete Tetrahedral Blocks as Revetment	
TM 57-1	Jan 1935	Model Study for Channel Improvement of the Savannah River (Miles 188.0 to 178.5)	AD 060 788
TM 57-2	Jun 1935	Model Study for Channel Improvement of the Savannah River (Miles 188.0 to 178.5)	
TM 61-1	Sep 1935	Model Experiment to Determine the Directive Energy of a River	AD 071 975
TM 61-2	Sep 1935	Effect of Rate of Sand Feed on Developments in Directive Energy Flume	
TM 61-3	Sep 1935	Consolidation and Grain Sorting in the Bed of the Directive Energy Flume	
TM 61-4	Oct 1935	Effect of Rate of Sand Feed on Development in Directive Energy Flume	
TM 64-1	Dec 1934	Model Study for the Improvement of Navigation Conditions in the Ohio River Below Dam No. 36	
TM 64-2	Jun 1935	Model Study for the Improvement of Navigation Conditions in the Ohio River Below Dam No. 36	
TM 64-3	Sep 1935	Model Study for the Improvement of Navigation Conditions in the Ohio River Below Dam No. 36	
TM 81-1	Jun 1937	Model Study of Plans for the Elimination of Shoaling in Mare Island Strait, California. In 2 parts	
TM 89-1	May 1936	Model Study of Plans for Channel Improvement of the Mississippi River at Memphis Depot	
TM 89-2	Aug 1936	Model Study of Plans for Channel Improvement of the Mississippi River at Memphis Depot	
TM 93-1	Jun 1936	Model Study of Plans for the Elimination of Shoaling in the Delaware River Entrance to the Chesapeake and Delaware Canal	
TM 93-3	Jul 1940	Model Study of Plans for the Elimination of Shoaling in the Delaware River Entrance to the Chesapeake and Delaware Canal	

## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 96	Mar 1935	Effect of Distortion on the Content and Distribution of Kinetic Energy in Model Streams	AD 158 634
TM 99-1	Dec 1936	Flume Tests Made to Develop a Synthetic Sand Which Will Not Form Riffles When Used in Movable Bed Models	
TM 100-1	Dec 1936	Model Study of Maintenance Works at Ballona Creek Outlet, Venice, California	AD 150 542
TM 102-1	Sep 1936	Model Study of Proposed Plans for the Protection of the Kansas Citys from the Floods of the Missouri and Kansas Rivers	AD 158 596
TM 102-2	Feb 1937	Model Study of Additional Plans for the Protection of the Kansas Citys from Floods of the Missouri and Kansas Rivers	
TM 104-1	Nov 1939	Model Study of Plans for Channel Improvement in the Chain of Rocks Reach, Mississippi River	
TM 105-1	Jul 1936	Model Tests of Conchas Dam Stilling Basin	
TM 106-1	Dec 1938	Model Study of Channel Improvements at Outer Bar, Lake of Maracaibo, Venezuela. In 3 volumes	
TM 107-1	Sep 1938	Model Study of Channel Improvement and Stabilization in the Pryors Island Reach of the Ohio River. In 2 folders (only folder 1 available)	
TM 109-1	Apr 1938	Model Study of Plans for Channel Improvement at Dogtooth Bend, Mississippi River. In 3 folders (only folder 1 available)	
TM 110-1	Dec 1938	Model Study of Plans for Channel Improvement at Swiftsure Towhead, Mississippi River	
TM 111-1	Oct 1936	Model Studies of the Spillway and Stilling Basin for the Possum Kingdom Dam	
TM 111-2	Nov 1936	Additional Model Studies of the Stilling Basin for the Possum Kingdom Dam	
TM 111-3	Jan 1937	Model Study of Baffles for the Spillway Apron of the Possum Kingdom Dam	
TM 112-1	Sep 1936	Model Study to Determine the Paths of Travel of Bed Load Material in the Channels Which Enclose Cow Island, Atchafalaya River	
TM 114-1	Aug 1937	Model Study of Plans for Channel Improvement at Grand Tower Reach, Mississippi River	
TM 115-1	Jan 1937	Studies of Pipe Line Mixers	

## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 115-2	Apr 1937	Studies of Pipe Line Mixers	
TM 121-1	Apr 1937	Model Study of Hydraulic Conditions Caused by Lock and Dam No. 6. In 2 parts	
TM 123-2	Nov 1937	Model Study of the Proposed Outlet Structures for Sardis Dam	
TM 125-1	Sep 1937	Model Study of Tidal Currents, East River, New York	
TM 125-3	Apr 1939	Model Study of Tidal Currents in East River, New York; Final Report	
TM 127-1	Aug 1940	Model Study of Plans for Elimination of Shoaling in Galveston Channel and Connecting Waterways, Galveston Bay, Texas	
TM 132-1	May 1938	Model Study of the Proposed Spillway for Sardis Dam Near Sardis, Mississippi	
TM 132-2	May 1938	Model Study of a Section of the Proposed Spillway for Sardis Dam Near Sardis, Mississippi	
TM 133-1	Apr 1938	Study of Permeability of Rock Jetty Models	
TM 134-1	Aug 1938	Model Study of the Outlet Structures for the Wappapello Dam	
TM 137-1	Sep 1938	Study of Channels with Changing Sections	
TM 146-1	Oct 1938	Model Study of the Spillway for the Wappapello Dam	
TM 147-1	Sep 1938	Model Study of the Stilling Basin for the Outlet of the Bayou des Glaises Drainage Culvert	
TM 148-1	Dec 1938	Model Study of the Spillway for the Great Salt Plains Dam	
TM 153-1	Jun 1939	Model Study of the Spillway for New Lock and Dam No. 1, St. Lucie Canal, Florida	
TM 159-1	May 1940	Model Study of Plans for Channel Improvement in the Vicinity of Boston Bar, Mississippi River	
TM 160-1	Aug 1940	Model Study of Intake Structure (Plan A) for the Fort Peck Dam, Missouri River	
TM 161-1	Apr 1940	Hydraulic Model Studies of the Control Structures for the Denison Dam, Red River	
TM 165-1	Apr 1941	Model Study of Structures for Future Power Development for the Franklin Falls Dam, Pemigewasset River, New Hampshire	

## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 166-1	Dec 1940	Model Study of Spillway and Stilling Basin, John Martin (Caddoa) Dam, Arkansas River	
TM 167-1	Dec 1940	Model Study of Outlet Structures for Arkabutla Dam, Coldwater River	
TM 168-1	Aug 1940	Model Study of the Spillway for the Santee River Dam	
TM 169-1	Jan 1941	Model Study of the Spillway and Stilling Basin for the Arkabutla Dam, Coldwater River	
TM 170-1	Jul 1941	Model Study of Plans for Improvement of the Channels of Canisteo River and Canacadea Creek, Hornell, New York	
TM 173-1	Dec 1940	Model Study of Locations for a Proposed Breakwater in San Juan Harbor, Puerto Rico	
TM 174-1	Dec 1940	Model Study of the Intake for Bayou Bodcau Outlet Structures	
TM 177-1	Dec 1941	Model Study of the Spillway for Denison Dam, Red River	
TM 178-1	Jul 1941	Model Study of Plans for the Elimination of Shoaling in Richmond (Virginia) Harbor, James River	
TM 181-1	Oct 1941	Model Study of Plans for Elimination of Shoaling in the Vicinity of Manchester Islands, Ohio River	
TM 185-1	Nov 1941	Model Study of Hydraulic Characteristics of Power Tunnel, Fort Peck Dam	
TM 186-1	Dec 1941	Model Study of Plans for Reduction of Wave Action in Grand Marais Harbor, Minnesota	
TM 186-2	Dec 1944 Revised Jun 1953	Model Study of Plans for Reduction of Wave Action in Grand Marais Harbor, Minnesota; Second Phase	
Unnumbered	Mar 1942	Model Study of Wave Force Against Breakwaters; Interim Report	
TM 188-1	Jun 1942	Model Study of Mill Creek Flood-Control Project, Cincinnati, Ohio	
TM 189-1	Apr 1942	Model Study of the Pump Suction Chamber for Dry Dock No. 4, Puget Sound Navy Yard	
TM 190-1	Aug 1942	Model Studies of the Spillway and Integral Sluices for the Canton Dam, North Canadian River, Oklahoma	
TM 191-1	Dec 1942	Model Study of Spillway for Dewey Dam, Johns Creek, Kentucky	

## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 192-1	Jan 1943	Model Study of Spillway for Fort Gibson Dam, Grand River, Oklahoma	
TM 193-1	Nov 1942	Model Study of Spillway for the Berlin Dam, Mahoning River, Ohio	
TM 194-1	Aug 1942	Model Study of Plans for Elimination of Shoaling in Wilmington Harbor, Delaware	
TM 197-1	Dec 1942	Model Study of Regulating Sluices for Dale Hollow Dam, Obey River, Tennessee	
TM 200-1	Jun 1943	Model Study of Flood Protection Project, Prattville, Alabama, Autauga Creek	
TM 201-1	Jan 1944	Model Studies of Spillway and Regulating Sluices for Wolf Creek Dam, Cumberland River, Kentucky	
TM 202-1	Aug 1946	Model Studies of Spillway and Bucket for Center Hill Dam, Caney Fork River, Tennessee	
TM 203-1	Dec 1943	Model Study of Wave Action in Agate Bay Harbor, Minnesota	
TM 204-1	Sep 1943	Model Study of Plans for Elimination of Shoaling in Absecon Inlet, New Jersey	
Unnumbered	Nov 1943	Model Study of Wave Action on Cellular Caisson Breakwaters; Interim Report	
Unnumbered	Jan 1944	Model Study of Wave Action on Triangular and Cellular Caisson Breakwaters	
TM 205-1	Feb 1944	Model Study of Stilling Basin, Delaware Dam, Mentangy River, Ohio	
TM 206-1	May 1944	Field Pressure Measurements, Fort Peck Power House Penstock, Fort Peck, Montana	
TM 207-1	Mar 1944	Model Study of the Proposed Breakwater System for Roosevelt Roads Naval Base, Vieques, Puerto Rico	
TM 208-1	Jul 1944	Model Study of Plans for Improvement of Navigation at the Upstream Entrance to St. Marys Falls Canal, Michigan	
TM 209-1	Oct 1944	Model Study of Stilling Basin, Narrows Dam, Little Missouri River, Arkansas. Revised	
TM 214-1	Oct 1944	Model Study of Spillway, Allatoona Dam, Etowah River, Georgia	
TM 214-2	Nov 1948	Sluices and Diversion Scheme for Allatoona Dam, Etowah River, Georgia; Model Investigation	



## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 215-1	Mar 1945	Model Study of Pontons and Pneumatic Floats	
Unnumbered	Oct 1941	Study of the Meandering of Model Streams; Preliminary Report of Progress to September 1, 1941	
Unnumbered	May 1945	Laboratory Study of the Meandering of Alluvial Rivers (Studies Conducted from 1942 to 1944)	
TM 216-1	Oct 1945	Model Study of Armored Ends for Morganza Fuse-Plug Levee	
TM 218-1	Apr 1946	Model Study of Power Penstocks, Norfork Dam, North Fork River, Arkansas	
TM 219-1	Jun 1946	Model Study of Shoaling Elimination in Basin of Navy Department Floating Dry Dock YFD-15 at Charleston, South Carolina	
TM 220-1	Jun 1946	Model Study of Power Penstocks, Bluestone Dam, New River, West Virginia	
TM 221-1	Jun 1946	Model Studies of Water Requirements and Salt-Water Intrusion, Intracoastal Waterway, New York Bay-Delaware River Section	
TM 2-223	Mar 1947	Model Study of Spillway, Enid Dam, Yocona River, Mississippi	
TM 2-227	Dec 1946	Model Study of Sluice Outlet for Bluestone Dam, New River, West Virginia	
TM 2-228	Jan 1947	Supplementary Model Study of Stilling Basin for Spillway and Sluices, Fort Gibson Dam, Grand River, Oklahoma	
TM 2-229	Feb 1947	Model Study of Bucket-Type Energy Dissipator, Clark Hill Dam, Savannah River, South Carolina and Georgia	
TM 2-230	Mar 1947	Model Study of Sluices for Fall River Dam, Fall River, Kansas	
TM 2-231	May 1947	Model Study of Plans for Elimination of Shoaling in Deepwater Point Range, Delaware River	
TM 2-232	Jun 1947	Model Study of Suction Head, Dredge Jadwin	
TM 2-233	Jun 1947	Model Study for the Improvement of the Galop Rapids Reach of St. Lawrence River. In 2 volumes	
TM 2-234	Jun 1947	Model Studies of Conduits and Stilling Basin, Pull Shoals Dam, White River, Arkansas	
TM 2-236	Sep 1947	Model Study of Spillway and Stilling Basin, Harlan County Dam, Republican River, Nebraska	

## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 2-237	Sep 1947	Model Study of Wave and Surge Action, Naval Operating Base, Terminal Island, San Pedro, California	
TM 2-238	Nov 1947	Wave and Surge Action, Point Fermin Naval Supply Depot, San Pedro, California; Model Investigation	
TM 2-239	Sep 1947	Model Study of Spillway and Bucket, Stewarts Ferry Dam, Stones River, Tennessee	
	Jur. 1963	J. Percy Priest (Formerly Stewarts Ferry) Dam, Stones River, Tennessee; Appendix A: Revised Spillway Bucket; Hydraulic Model Investigation	
TM 2-242	Dec 1947	Breakwater Location, U. S. Naval Air Station, Alameda, California; Model Investigation	
TM 2-243	Mar 1948	A Laboratory Development of Cavitation-Free Baffle Piers, Bluestone Dam, New River, West Virginia	AD 757 408
TM 2-244	Dec 1947	Plans for the Improvement of the St. Johns River, Jacksonville to the Atlantic Ocean; Model Investigation. Appendix A: Model Study of Plans for Prevention of Pollution in the St. Johns River at Jacksonville, Florida	
TM 2-251	Feb 1948	Entrance Channel Currents, Naval Operating Base, Midway Islands; Model Investigation	AD 757 398
TM 2-252	Apr 1948	Spillway and Lock Approach Currents, Demopolis Lock and Dam, Tombigbee River, Alabama; Model Investigation	
TM 2-253	Mar 1948	Sluices, Hulah Dam, Caney River, Oklahoma; Model Investigation	
TM 2-255	May 1948	Wave and Surge Action, Anaheim Bay, California; Model Investigation	
TM 2-256	Jun 1948	Improvement of Freeboard Conditions on Pontons in High-Velocity Flow; Model Investigation	
TM 2-258	Jul 1948	Widths of Openings, Morganza Floodway Control Structure, Mississippi River; Model Investigation	
TM 2-259	Aug 1948	Plans for Elimination of Shoaling in New Castle-Finns Point Ranges, Delaware River; Model Investigation	
TM 2-260	Sep 1948	Spillway for Detroit Dam, North Santiam River, Oregon; Model Investigation	
TM 2-261	Oct 1948	Spillway for Osceola Dam, Osage River, Missouri; Model Investigation	
TM 2-262	Oct 1948	Irrigation Tunnel for St. Mary Dam, St. Mary-Milk River Project, Alberta, Canada; Model Investigation	

## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 2-263	Oct 1948	Spillway Design for Whitney Dam, Brazos River, Texas; Model Investigation	
TM 2-264	Nov 1948	Spillway for Dillon Dam, Licking River, Ohio; Model Investigation	
TM 2-265	Sep 1949	Wave and Surge Action, Long Beach Harbor, Long Beach, California; Model Investigation	
TM 2-268	Mar 1949	Plans for Improvement of Navigation Conditions and Elimination of Shoaling in Savannah Harbor, Georgia, and Connecting Waterways; Model Investigation. In 2 volumes	
TM 2-269	Mar 1949	Spillway for Benbrook Dam, Clear Fork of the Trinity River, Texas; Model Investigation	
TM 2-270	Mar 1949	Flood Protection Plans for Brady, Texas; Model Investigation	
TM 2-272	Apr 1949	Spillway and Sluices for Conemaugh Dam, Conemaugh River, Pennsylvania; Model Investigation	
TM 2-275	May 1949	Combined Control Structure and High-Level Crossing -- Morganza Floodway; Model Investigation	
TM 2-277	May 1949	Plans for Reduction of Shoaling at the Entrance to Umpqua River, Oregon; Model Investigation	
TM 2-281	Jun 1949	Bucket-Type Energy Dissipator, Buggs Island Dam, Roanoke River, Virginia and North Carolina; Model Investigation	
TM 2-282	Jun 1949	Vacuum Tank Tests of Model Tainter Valve for McNary Dam	
TM 2-290	Jul 1949	High-Level Crossings, Morganza Floodway, Louisiana; Model Investigation	
TM 2-291	Jul 1949	Wave Action and Breakwater Location, Oswego Harbor, New York; Model Investigation	
TM 2-294	Jul 1951	Conduits and Howell-Bunger Valves, Narrows Dam, Little Missouri River, Arkansas; Model Investigation	
TM 2-295	Jul 1949	Wave Action and Breakwater Location, East Beaver Bay Harbor, Lake Superior, Minnesota; Model Investigation	
TM 2-295-1	Oct 1951	Wave Action and Breakwater Location, East Beaver Bay Harbor, Lake Superior, Minnesota; Supplementary Model Investigation	
TM 2-296	Jul 1949	Breakwater Stability, East Beaver Bay Harbor, Lake Superior, Minnesota; Model Investigation	

## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 2-300	Aug 1949	Method of Operation of the Birds Point-New Madrid Floodway, Missouri; Model Investigation	
TM 2-301	Sep 1949	Wave and Surge Action, Monterey Harbor, Monterey, California; Model Investigation	AD 756 399
TM 2-302	Oct 1949	Flood-Control Conduits for Detroit Dam, North Santiam River, Oregon; Model Investigation	
TM 2-303	Nov 1949	Flood-Control Project for Johnstown, Pennsylvania; Model Investigation	
TM 2-309	Apr 1951	Filling Characteristics, Algiers Lock, Intracoastal Waterway, Gulf Section, Louisiana; Model Investigation	
TM 2-310	Apr 1950	Salt Water Intrusion, Calcasieu River, Louisiana, and Connecting Waterways; Model Investigation	
TM 2-313	Jun 1950	Study of Butterfly Valves for Pearl River Locks; Model Investigation	
TM 2-320	Dec 1950	Memphis Harbor, Mississippi River; Model Investigation	
TM 2-321	Dec 1950	Spillway for Philpott Dam, Smith River, Virginia; Model Investigation	
TM 2-325	Jul 1951	Spillway and Outlet Works, East Branch Reservoir, Clarion River, Pennsylvania; Model Investigation	
TM 2-326	Aug 1951	Morganza Floodway Control Structure, Mississippi River; Hydraulic Model Investigation	
TM 2-334	Nov 1951	Wave Action and Breakwater Location, Port Washington Harbor, Wisconsin; Model Investigation	
TM 2-337		Delaware River Model Study:	
	May 1956	Report 1 Hydraulic and Salinity Verification	AD 709 741
	Jun 1954	Report 2 Salinity Tests of Existing Channel	AD 709 742
	Jan 1952	Report 3 Effects of Proposed Channel Enlargement Between Philadelphia and Trenton	AD 709 743
	Jan 1959	Appendix A Tests of Alternate Alignments of Specific Reaches and Closure of Burlington Island Back Channel	AD 756 283
	May 1964	Report 4 Dike Rehabilitation	AD 706 215
TM 2-338		Flood Control Project, Hoosic River, North Adams, Massachusetts:	

## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 2-338 (Cont)	Feb 1952	Report 1 Phase 1: Model Investigation of Stilling Basin and Junction	
	Jun 1962	Report 2 Flood-Control Project, Hoosic River, North Adams, Massachusetts; Hydraulic Model Investigation (includes Report 1)	AD 757 403
TM 2-339		Flood Control Project, Hoosic River, Adams, Massachusetts:	
	Feb 1952	Report 1 Model Investigation of Phase 1 of Improvement Works	
	Feb 1957	Report 2 Model Investigation of Phase 2 of Improvement Works	AD 756 398
TM 2-340	May 1952	Spillway and Lock Approach, Jim Woodruff Dam, Apalachicola River, Florida; Model Investigation	
TM 2-342	Mar 1952	Plans for Reduction of Shoaling in Raritan River, New Jersey; Model Investigation	
TM 2-346	Jun 1952	Outlet Works Stilling Basin for Texarkana Dam, Sulphur River, Texas; Hydraulic Model Investigation	
TM 2-347	Jun 1952	Flood-Control Outlet Works for Blakely Mountain Dam, Ouachita River, Arkansas; Hydraulic Model Investigation	
TM 2-348	Jul 1952	Lynnhaven Bay and Inlet, Virginia; Model Investigation	
TM 2-350	Oct 1952	Flood-Control Stilling Basin, Buford Dam, Chattahoochee River, Georgia; Hydraulic Model Investigation	
TM 2-351	Oct 1952	Spillway for Genegantslet Dam, Genegantslet Creek, New York; Hydraulic Model Investigation	AD 756 395
TM 2-355	Feb 1953	Channel Improvements, Farm Creek, Illinois; Hydraulic Model Investigation	
TM 2-356	Feb 1953	Plans for Elimination of Shoaling in the Vicinity of Head of Passes, Mississippi River; Hydraulic Model Investigation	
TM 2-358	Apr 1953	Upstream Emergency Dam, Cheatham Lock, Cumberland River, Tennessee; Hydraulic Model Investigation	
TM 2-363	Apr 1953	Spillway for Belton Dam, Leon River, Texas; Hydraulic Model Investigation	
TM 2-364		Roughness Standards for Hydraulic Models:	
	Jun 1953	Report 1 Study of Finite Boundary Roughness in Rectangular Flumes	AD 050 414

## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 2-365	Jun 1953	Stability of Rubble-Mound Breakwaters; Hydraulic Model Investigation	AD 021 075
TM 2-366	Jun 1953	Plans for Improvement of Navigation Conditions at Greenville Bridge, Mississippi River; Model Investigation	
TM 2-367	Jun 1954	Surges in Southern Outfall Sewer and Flow Conditions in State Fairgrounds (Western Parkway) Pumping Plant, Louisville, Kentucky; Hydraulic Model Investigation	
TM 2-369	Aug 1953	Spillway for Folsom Dam, American River, California; Hydraulic Model Investigation	
TM 2-374		Tidal Flushing of Estuaries:	
	Apr 1953 Revised Dec 1953	Report 1 Proposed Program of Investigations for Fiscal Years 1953 and 1954	AD 020 050
TM 2-375	Dec 1953	Spillway and Conduits for Pine Flat Dam, Kings River, California; Hydraulic Model Investigation	
TM 2-376	Dec 1953	Flood-Control Project for Allentown, Pennsylvania; Hydraulic Model Investigation	AD B951 669
TM 2-378	Jan 1954	Spillway for Savage River Dam, Savage River, Maryland	
TM 2-381	Apr 1954	Submergible-Type Tainter Gate for Spillway, Cheatham Lock and Dam, Cumberland River, Tennessee; Hydraulic Model Investigation	
TM 2-382	Apr 1954	Plans for Improvement of Navigation Conditions in Corral Bay and the Valdivia River, Chile; Hydraulic Model Investigation	
TM 2-386	Jul 1954	Spillway for New Cumberland Dam, Ohio River, West Virginia; Hydraulic Model Investigation	
TM 2-387	Jun 1954	Tainter Gate Tests, Norfork Dam, North Fork River, Arkansas; Model and Prototype Investigations	
TM 2-388	Jun 1954	Old River Control Structure Sediment Diversion; Hydraulic Model Investigation	
	Oct 1957	Report 2 Second Phase	
TM 2-389	Jul 1954	Slide Gate Tests, Norfork Dam, North Fork River, Arkansas; Model and Prototype Investigations	
TM 2-393	Aug 1954	Sluice Outlet Portal and Spillway Flip Bucket, Hartwell Dam, Savannah River, Georgia; Hydraulic Model Investigation	

## HYDRAULICS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 2-396	Dec 1954	Flood-Control Outlet Structures for Tuttle Creek Dam, Big Blue River, Kansas; Hydraulic Model Investigation	
TM 2-402	Apr 1955	Hydraulic Prototype Tests, Control Shaft 4, Fort Peck Dam, Missouri River, Montana	
TM 2-403	Apr 1955	Shoaling in Downstream Navigation Entrance to Chain of Rocks Canal, Mississippi River; Hydraulic Model Investigation	
TM 2-404	May 1955	Spillway for Gavins Point Dam, Missouri River, Nebraska; Hydraulic Model Investigation	
TM 2-405	May 1955	Wave Action and Breakwater Location, Taconite Harbor (Two Islands), Lake Superior, Minnesota; Hydraulic Model Investigation	
TM 2-411	Jul 1955	Preservation and Enhancement of Niagara Falls; Hydraulic Model Investigation (includes Appendix A)	AD 757 406
	Sep 1960	Appendix B Restudy of Niagara Remedial Control Dam	AD 756 410
TM 2-413	Jun 1955	Design of Tetrapod Cover Layer for a Rubble-Mound Breakwater, Crescent City Harbor, Crescent City, California; Hydraulic Model Investigation	
TM 2-417	Nov 1955	Plans for the Improvement of Grays Harbor and Point Chehalis, Washington; Hydraulic Model Investigation	
TM 2-428		Entrances to Conduits of Rectangular Cross Section:	
	Mar 1956	Report 1 Investigation of Entrance Flared in Four Directions	
	Jun 1959	Report 2 Investigation of Entrances Flared in Three Directions and in One Direction	
TM 2-429	Mar 1956	Hydraulic Capacity of Meandering Channels in Straight Floodways; Hydraulic Model Investigation	
TM 2-431	Mar 1956	Outlet Works and Spillway for Garrison Dam, Missouri River, North Dakota; Hydraulic Model Investigation	AD 756 396

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-434	Jun 1956	Flood-Control Project for Northwest Branch, Anacostia River, District of Columbia and Maryland; Hydraulic Model Investigation	
TR 2-435	Jun 1956	Vibration and Pressure-Cell Tests, Flood-Control Intake Gates, Fort Randall Dam, Missouri River, South Dakota	AD 756 374
TR 2-444	Apr 1957	Investigation for Reduction of Maintenance Dredging in Charleston Harbor, South Carolina; Summary Report of Model Investigation	
	Apr 1957	Appendix 1 Subsidiary Model Tests	
	Apr 1957	Appendix 2 Data Plots	
	Apr 1957	Appendix 3 Flow-Pattern Photographs	
TR 2-446	Jan 1957	Navigation Conditions at Markland Locks and Dam, Ohio River; Hydraulic Model Investigation	
TR 2-447		Old River Low-Sill Control Structure; Hydraulic Model Investigation:	
	Dec 1956	Report 1 Downpull Forces on Vertical-Lift Gates	
	Jul 1957	Report 2 Studies of Riprap Placement Plans	AD 756 437
	Jun 1959	Report 3 Study of Over-all Performance	
TR 2-448	Jan 1957	Flood Protection Plans for Cumberland, Maryland, and Ridgeley, West Virginia; Hydraulic Model Investigation	
TR 2-449	Jan 1957	Wave Run-Up and Overtopping, Levee Sections, Lake Okeechobee, Florida; Hydraulic Model Investigation	AD 756 438
TR 2-456	Jun 1957	Plans for Regulation of Levels of Lake Erie; Hydraulic Model Investigation	
TR 2-457	Jun 1957	Dispersion of Effluent in Delaware River from New Jersey Zinc Company Plant; Hydraulic Model Investigation	
TR 2-465	Oct 1957	Flood-Control Project for Kalamazoo River at Battle Creek, Michigan	
TR 2-468	Dec 1957	Blackstone River Flood-Control Project at Woonsocket, Rhode Island; Hydraulic Model Investigation	
TR 2-469	Jan 1958	Navigation Conditions at Greenup Locks and Dam, Ohio River; Hydraulic Model Investigation	AD 756 326
TR 2-485	Jul 1958	Stilling Basin for Warrior Dam, Warrior River, Alabama; Hydraulic Model Investigation	AD 756 445



## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-488	Nov 1958	Stilling Basin Modifications, Bull Shoals Dam, White River, Arkansas; Hydraulic Model Investigation	
TR 2-489	Nov 1958	Surges in the Intermediate Pool of Long Sault Canal, St. Lawrence River; Hydraulic Model Investigation	
TR 2-491	Feb 1959	Old River Overbank Structure, Forces on Panel Gates; Hydraulic Model Investigation	
TR 2-494	Mar 1959	Effects of Proposed Closure of Southwest Pass on the Regimen of Vermilion Bay, Louisiana; Hydraulic Model Investigation	
TR 2-496	Mar 1959	Old River Project; Rock-Fill Initial Closure Dam; Hydraulic Model Investigation	
TR 2-497	Apr 1959	Filling and Emptying Characteristics of Calumet River Lock, Calumet-Sag Project, Illinois; Hydraulic Model Investigation	
TR 2-498	Apr 1959	Spillway and Outlet Works, Townshend Dam and Reservoir, West River, Vermont; Hydraulic Model Investigation	AD 756 444
TR 2-500	May 1959	Filling and Emptying System, Port Allen Navigation Lock, Gulf Intracoastal Waterway, Louisiana; Hydraulic Model Investigation	AD 760 937
TR 2-504	Jun 1959	Spillway and Conduits for Table Rock Dam, White River, Missouri; Hydraulic Model Investigation	AD 756 439
TR 2-509	Jun 1959	Location and Design of Wave Absorber, Gary Harbor, Indiana; Hydraulic Model Investigation	AD 760 936
TR 2-510	Jun 1959	Prototype Hydraulic Tests of Flood-Control Conduit, Enid Dam, Yocona River, Mississippi	AD 760 933
TR 2-511	Jun 1959	Prototype Tests of Spillway Crest and Flip Bucket, Pine Flat Dam, Kings River, California	AD 760 934
TR 2-513	Jun 1959	Outlet Works for Abiquiu Dam, Rio Chama, New Mexico; Hydraulic Model Investigation	AD 756 375
TR 2-517	Jul 1959	Navigation Conditions at Troy Lock and Dam, Hudson River, New York; Hydraulic Model Investigation	AD 756 332
	Sep 1960	Appendix A Results of Supplemental Tests	
TR 2-519	Aug 1959	Walter F. George Lock and Dam, Chattahoochee River, Alabama and Georgia; Hydraulic Model Investigation	AD 760 935
TR 2-520	Jul 1959	Modifications of Control Shaft, Fort Peck Dam Tunnel 4, Missouri River, Montana; Hydraulic Model Investigation	AD 756 277

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-523	Sep 1959	Wave Action and Breakwater Location, Harbor of Refuge for Light-Draft Vessels, Barcelona, New York; Hydraulic Model Investigation	AD 760 938
TR 2-527	Oct 1959	Emergency Gate, Greenup Locks, Ohio River, Kentucky; Hydraulic Model Investigation	AD 760 940
TR 2-528	Oct 1959	Spillway and Outlet Works, Fort Randall Dam, Missouri River, South Dakota; Hydraulic Model Investigation	AD 760 939
TR 2-531	Jan 1960	Spillways and Stilling Basins, Jackson Dam, Tombigbee River, Alabama; Hydraulic Model Investigation	AD 757 411
TR 2-532	Jan 1960	Navigation Conditions at Jackson Lock and Dam, Tombigbee River, Alabama; Hydraulic Model Investigation	AD 757 413
TR 2-535	Feb 1960	Navigation Conditions at New Richmond Locks and Dam, Ohio River; Hydraulic Model Investigation	AD 760 435
TR 2-536	Feb 1960	Proposed Relocation of North Entrance Channel, Buffalo Harbor, Buffalo, New York; Hydraulic Model Investigation	AD 756 279
TR 2-537	Jun 1961	Culvert Tainter Valves, New Lock No. 19, Mississippi River; Hydraulic Model Investigation	AD 757 412
TR 2-549	Jun 1960	Filling and Emptying System, Old River Navigation Lock, Louisiana; Hydraulic Model Investigation	AD 757 410
TR 2-551	Jul 1960	Outlet Works, Black Butte Dam, Stony Creek, California; Hydraulic Model Investigation	AD 760 941
TR 2-552	Jun 1960	Hydraulic Prototype Tests of Tainter Valve, McNary Lock, Columbia River, Washington	AD 760 942
TR 2-555	Aug 1960	Spillway, Stilling Basin, and Flood-Control Conduits, Keystone Dam, Arkansas River; Hydraulic Model Investigation	AD 760 944
TR 2-556	Aug 1960	Filling and Emptying Characteristics of Barge Canal Lock, Sacramento River Deep-Water Ship Channel Project, California; Hydraulic Model Investigation	AD 760 943
TR 2-557	Sep 1960	Outlet Works, Oahe Dam, Missouri River, South Dakota; Hydraulic Model Investigation	AD 756 275
TR 2-558	Dec 1960	Dardanelle Lock and Dam, Arkansas River, Arkansas; Hydraulic Model Investigation	AD 756 280
TR 2-561	Apr 1961	Filling and Emptying System, New Poe Lock, St. Marys River, Sault Ste. Marie, Michigan; Hydraulic Model Investigation	AD 756 276
TR 2-566	May 1961	Spillway for Markland Locks and Dam, Ohio River, Kentucky and Indiana; Hydraulic Model Investigation	AD 761 725

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-567	May 1961	Designs for Rubble-Mound Breakwater Repair, Morro Bay Harbor, California; Hydraulic Model Investigation	AD 756 278
TR 2-568	Jun 1961	Carlyle Dam, Kaskaskia River, Illinois; Hydraulic Model Investigation	AD 756 284
TR 2-571	Jul 1961	Navigation Conditions, Columbia Lock and Dam, Chattahoochee River, Georgia and Alabama; Hydraulic Model Investigation	AD 761 724
TR 2-572	Jul 1961	Spillway, Greenup Locks and Dam, Ohio River, Kentucky and Indiana; Hydraulic Model Investigation	AD 761 723
TR 2-573	Jul 1961	Intake Studies, Dardanelle Lock, Arkansas River, Arkansas; Hydraulic Model Investigation	AD 761 722
TR 2-575	Jul 1961	Eufaula Dam Spillway, Canadian River, Oklahoma; Hydraulic Model Investigation	AD 761 721
TR 2-576	Aug 1961	Navigation Improvements in Barnhart Island-Cornwall Island Reach, St. Lawrence River; Hydraulic Model Investigation	AD 761 720
TR 2-577	Aug 1961	Navigation Conditions at Pike Island Locks and Dam, Ohio River; Hydraulic Model Investigation	AD 723 947
TR 2-578	Oct 1961	Spillway and Stilling Basin, Columbia Dam, Chattahoochee River, Alabama and Georgia; Hydraulic Model Investigation	AD 724 925
TR 2-579	Oct 1961	Spillway Stilling Basins for Maxwell and Opekiska Locks and Dams, Monongahela River, Pennsylvania and West Virginia; Hydraulic Model Investigation	AD 724 926
TR 2-580		Savannah Harbor Investigation and Model Study:	
		Volume III Results of Model Investigations:	
	Oct 1961	Section 1 Model Verification and Results of General Studies	AD 724 927
	Oct 1961	Section 2 Tests of Improvement Plans	AD 724 928
	Nov 1963	Section 3 Results of Supplemental Tests	AD 724 929
	Mar 1965	Section 4 Results of Tests of Increased Channel Dimensions, by H. J. Rhodes and H. B. Simmons	AD 724 930
	Apr 1965	Section 5 Wilmington River Pollution, by H. J. Rhodes and H. B. Simmons	AD 724 931
	Oct 1965	Section 6 Results of Bank Erosion in North Channel, by H. J. Rhodes and H. B. Simmons	AD 724 932

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-580 (Cont)	Sep 1979	Volume IV Reanalysis of Freshwater Control Plan; Numerical Model Study, by C. J. Huval, R. H. Multer, P. K. Senter, and M. B. Boyd	AD A075 328
TR 2-585	Nov 1961	Spillway for New Cumberland Locks and Dam (Final Design), Ohio River, West Virginia; Hydraulic Model Investigation	AD 724 933
TR 2-586	Dec 1961	Spillway Stilling Basin for Pike Island Locks and Dam, Ohio River, Ohio and West Virginia; Hydraulic Model Investigation	AD 724 934
TR 2-605	Jun 1962	Spillway for Big Bend Dam, Missouri River, South Dakota; Hydraulic Model Investigation	AD 723 945
TR 2-608	Aug 1962	Development and Maintenance of Navigation Channel, Arkansas River, Arkansas and Oklahoma; Hydraulic Model Investigation	AD 723 946
TR 2-611	Nov 1962	Spillway for John Redmond Dam, Grand (Neosho) River, Kansas; Hydraulic Model Investigation	AD 854 674
TR 2-616	Jan 1963	Wave Action and Breakwater Location, Superior Entry, Duluth-Superior Harbor, Superior, Wisconsin; Hydraulic Model Investigation	AD 728 095
TR 2-617	Jan 1963	Improvement of Navigation Conditions, Conneaut Harbor, Ohio; Hydraulic Model Investigation	AD 724 140
TR 2-620	Mar 1963	Impact-Type Energy Dissipator for Storm-Drainage Outfalls, Stilling Well Design; Hydraulic Model Investigation	AD 710 996
TR 2-621	Mar 1963	Spillway and Sluices, Allegheny Dam, Allegheny River, Pennsylvania and New York; Hydraulic Model Investigation	AD 717 972
TR 2-623	Apr 1963	Navigation and Sedimentation Conditions at Typical Lock and Dam, Arkansas River, Arkansas and Oklahoma; Hydraulic Model Investigation	AD 717 973
TR 2-626	Jun 1963	Flow Characteristics in Flood-Control Tunnel 10, Fort Randall Dam, Missouri River, South Dakota; Hydraulic Prototype Tests	AD 717 974
TR 2-628	Jun 1963	Detached Breakwater and Improved Navigation Entrance, Lorain Harbor, Lorain, Ohio; Hydraulic Model Investigation	AD 717 975
TR 2-631	Jul 1963	Stability of South Jetty, Siuslaw River, Oregon; Hydraulic Model Investigation	AD 717 976

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-633	Sep 1963	Typical Spillway Structure for Central and Southern Florida Water-Control Project; Hydraulic Model Investigation	AD 717 977
TR 2-636	Nov 1963	Effects on Lake Pontchartrain, Louisiana, of Hurricane Surge Control Structures and Mississippi River-Gulf Outlet Channel; Hydraulic Model Investigation	AD 717 978
TR 2-640	Jan 1964	Design for Rubble-Mound Breakwater Construction, Tsoying Harbor, Taiwan; Hydraulic Model Investigation	AD 879 946
TR 2-643	Feb 1964	Spillway, Millers Ferry Lock and Dam, Alabama River, Alabama; Hydraulic Model Investigation	AD 717 979
TR 2-644	Feb 1964	Designs for Rubble-Mound Breakwater Repair, Kahului Harbor, Maui, Hawaii; Hydraulic Model Investigation	AD 717 980
TR 2-645	Mar 1964	Spillway for Proctor Dam, Leon River, Texas; Hydraulic Model Investigation	AD 717 981
TR 2-650	Jun 1964	Stability of Riprap and Discharge Characteristics, Overflow Embankments, Arkansas River, Arkansas; Hydraulic Model Investigation	AD 717 873
TR 2-651	Jun 1964	Operating Forces on Miter-Type Lock Gates	AD 718 219
TR 2-653	Aug 1964	Spillway for Amistad Dam, Rio Grande, Mexico and United States; Hydraulic Model Investigation	AD 718 223
TR 2-655	Sep 1964	Spillway for Typical Low-Head Navigation Dam, Arkansas River, Arkansas; Hydraulic Model Investigation, by J. L. Grace	AD 718 218
	Oct 1965	Appendix A Gate Sills and Stilling Basins for Locks and Dams Nos. 5 and 7; Hydraulic Model Investigation, by R. S. Cummins and J. L. Grace	AD 718 224
TR 2-657	Sep 1964	Spillway for Oahe Dam, Missouri River, South Dakota; Hydraulic Model Investigation, by E. S. Melsheimer and A. D. Rooke	AD 718 222
Unnumbered		Model Study of Narragansett Bay:	
	Feb 1957	Interim Report Protection of Narragansett Bay from Hurricane Tides; Hydraulic Model Investigation	
	Jan 1959	Interim Report 2 Effects of Lower Bay Barriers on Salinities, Shoaling and Pollution in Narragansett Bay; Hydraulic Model Investigation	

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
Unnumbered (Cont)	Sep 1959	Interim Report 3 Effects of Fox Point Barrier on Water Temperatures	AD 950 208
	Sep 1959	Interim Report 4 Effects of Cooling-Water Channel on Temperatures of Cooling Water for Power Stations	AD 950 207
TR 2-662	Oct 1964	Protection of Narragansett Bay from Hurricane Surges; Summary Report; Hydraulic Model Investigation, by H. B. Simmons	AD 718 220
TR 2-663	Oct 1964	Discharge Characteristics of Hurricane Barriers, Wareham-Marion, Massachusetts; Hydraulic Model Investigation, by E. C. McNair and J. L. Grace	AD 756 282
TR 2-667	Jan 1965	Spillway Modifications, Miraflores Dam, Panama Canal Zone; Hydraulic Model Investigation, by T. E. Murphy and R. S. Cummins	AD 718 801
TR 2-668	Jan 1965	Wave Action and Breakwater Location, Half Moon Bay Harbor, Half Moon Bay, California; Hydraulic Model Investigation, by H. B. Wilson	AD 718 678
TR 2-671	Jan 1965	Selection of Optimum Plan for Reduction of Wave Action in Marina del Rey, Venice, California; Hydraulic Model Investigation, by C. W. Brasfield	AD 718 684
TR 2-672	Jan 1965	Navigation Conditions at Maxwell Locks and Dam, Monongahela River; Hydraulic Model Investigation, by J. J. Franco and C. D. McKellar	AD 718 679
TR 2-673	Mar 1965	Spillway and Sluices, Red Rock Dam, Des Moines River, Iowa; Hydraulic Model Investigation, by D. R. Bucci and T. E. Murphy	AD 718 680
TR 2-678	Jun 1965	Filling and Emptying System, Jonesville Lock, Ouachita-Black Rivers, Louisiana; Hydraulic Model Investigation, by N. R. Oswalt, J. H. Ables, M. B. Boyd, and T. E. Murphy	AD 718 681
TR 2-683	Jul 1965	Spillway for Stockton Dam, Sac River, Missouri; Hydraulic Model Investigation, by E. S. Melsheimer	AD 718 682
TR 2-684	Jul 1965	Outlet Works, DeGray Dam, Caddo River, Arkansas; Hydraulic Model Investigation, by D. R. Bucci	AD 718 683
TR 2-685	Aug 1965	Prototype Hawser-Force Measurements, Jackson Lock, Tombigbee River, Alabama, by J. V. Dawsey, C. J. Huval, and W. C. Blanton	AD 719 169
TR 2-687	Aug 1965	Spillway for Belleville Locks and Dam, Ohio River, Ohio and West Virginia; Hydraulic Model Investigation, by G. A. Pickering	AD 719 170

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-689	Aug 1965	Tests of Structure Orientation, Spillway, and Lock Emergency Gate, Barkley Lock and Dam, Cumberland River, Kentucky; Hydraulic Model Investigation, by T. E. Murphy and R. S. Cummins	AD 719 171
TR 2-690	Aug 1965	Plans for Reducing Shoaling, Southwest Pass, Mississippi River; Hydraulic Model Investigation, by H. B. Simmons and H. J. Rhodes	AD 719 172
TR 2-692	Sep 1965	Model Study of Bessie Cutoff, Mississippi River; Hydraulic Model Investigation, by J. J. Franco and J. E. Glover	AD 719 173
TR 2-694	Sep 1965	Hudson River Channel, New York and New Jersey; Plans to Reduce Shoaling in Hudson River Channels and Adjacent Pier Slips, by H. B. Simmons and W. H. Bobb	AD 720 971
TR 2-696	Oct 1965	Selection of Optimum Plan for Improvements in Nassau Harbor, Nassau, New Providence, Bahamas; Hydraulic Model Investigation, by C. W. Brasfeild	AD 719 238
TR 2-697	Oct 1965	Stability of Rubble-Mound Breakwaters, Nassau Harbor, Nassau, New Providence, Bahamas; Hydraulic Model Investigation, by R. A. Jackson	AD 719 816
TR 2-698	Nov 1965	Lock Filling and Emptying System, Holt Lock and Dam, Warrior River, Alabama; Hydraulic Model Investigation, by T. E. Murphy and J. H. Ables	AD 719 680
TR 2-705	Nov 1965	Outlet Works, Cochiti Dam, Rio Grande, New Mexico; Hydraulic Model Investigation, by D. R. Bucci and T. E. Murphy	AD 719 681
TR 2-708	Dec 1965	U. S. Navy Ship Mooring Facility, West Coast of Point Loma, San Diego, California; Hydraulic Model Investigation, by C. W. Brasfeild and C. E. Chatham	AD 719 682
TR 2-709	Dec 1965	Drop Structure, Cayuga Inlet, Cayuga Lake, New York; Hydraulic Model Investigation, by E. S. Melsheimer and T. E. Murphy	AD 719 683
TR 2-710	Dec 1965	Spillway for Cannelton Locks and Dam, Ohio River, by J. L. Grace and G. A. Pickering	AD 719 684
TR 2-711	Jan 1966	Matagorda Ship Channel Model Study, Matagorda Bay, Texas; Hydraulic Model Investigation, by H. J. Rhodes and H. B. Simmons	AD 719 685
TR 2-713	Feb 1966	Filling and Emptying System, Cannelton Main Lock, Ohio River, and Generalized Tests of Sidewall Port Systems for 110- by 1200-Ft Locks; Hydraulic Model Investigation, by J. H. Ables and M. B. Boyd	AD 719 686

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-715	Feb 1966	Resistance Coefficients for Structural Plate Corrugated Pipe; Hydraulic Model Investigation, by J. L. Grace	AD 631 004
TR 2-716	Apr 1966	Flow in Chute Spillway at Fort Randall Dam; Hydraulic Prototype Tests, by C. J. Huval	AD 719 687
TR 2-718	Mar 1966	Filling and Emptying Systems, Millers Ferry and Jones Bluff Locks, Alabama River, Alabama; Hydraulic Model Investigation, by J. H. Ables and M. B. Boyd	AD 720 192
TR 2-719	Jun 1966	Spillway and Outlet Works, Shelbyville Dam, Kaskaskia River, Illinois; Hydraulic Model Investigation, by D. R. Bucci and J. L. Grace	AD 720 186
TR 2-724	Jun 1966	Design for Optimum Wave Conditions, Dana Point Harbor, Dana Point, California; Hydraulic Model Investigation, by H. B. Wilson	AD 720 190
TR 2-725	Jun 1966	Designs for Rubble-Mound Breakwaters, Dana Point Harbor, California; Hydraulic Model Investigation, by Yin-Ben Dai and R. A. Jackson	AD 720 189
TR 2-728	May 1966	Stability of Seawall, Texas City; Hydraulic Model Investigation, by R. A. Jackson	AD 720 188
TR 2-730	Jun 1966	Drop Structures for Walnut Creek Project, Walnut Creek, California; Hydraulic Model Investigation, by G. A. Pickering	AD 720 187
TR 2-731	Jun 1966	Spillway, Hannibal Locks and Dam, Ohio River, Ohio and West Virginia; Hydraulic Model Investigation, by G. A. Pickering	AD 720 191
TR 2-733	Jul 1966	Reduction of Shoaling in Charleston Harbor and Navigation Improvement of Cooper River, South Carolina; Hydraulic Model Investigation, by W. H. Bobb and H. B. Simmons	AD 720 193
TR 2-734	Jul 1966	Culvert Pressures, Greenup Lock, Ohio River, Kentucky; Hydraulic Prototype Tests, by P. M. Smith and R. A. Yates	AD 720 544
TR 2-735		Model Studies of Navigation Improvements, Columbia River Estuary:	
	Dec 1968	Report 1 Hydraulic and Salinity Verification, by F. A. Herrmann	AD 720 545
		Report 2 Entrance Studies:	
	Aug 1966	Section 1 Fixed-Bed Studies of South Jetty Rehabilitation, by F. A. Herrmann and H. B. Simmons	AD 720 546
	Nov 1966	Section 2 Fixed-Bed Studies of North Jetty Rehabilitation, by F. A. Herrmann and H. B. Simmons	AD 720 547



## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-735 (Cont)	Apr 1972	Section 3 Fixed-Bed Studies of Disposal Areas C and D, by F. A. Herrmann	AD 742 274
	Jul 1974	Section 4 Jetty A Rehabilitation, Jetty B, and Outer Bar Channel Relocation, by F. A. Herrmann, Jr.	
		Report 3 40-Ft Channel Studies:	
	Feb 1971	Section 1 Wauna-Lower Westport Bar, by F. A. Herrmann	
TR 2-736	Aug 1966	Navigation Conditions at Locks and Dam No. 4, Monongahela River, Pennsylvania; Hydraulic Model Investigation, by C. D. McKellar and J. J. Franco	AD 720 548
TR 2-738	Sep 1966	Navigation Conditions at Belleville Locks and Dam, Ohio River; Hydraulic Model Investigation, by J. J. Franco and L. J. Shows	AD 720 549
TR 2-739	Sep 1966	Filling and Emptying System, Cordell Hull Navigation Lock, Cumberland River, Tennessee; Hydraulic Model Investigation, by N. R. Oswalt and M. B. Boyd	AD 720 977
TR 2-740		Investigation of In-Shore Harbor, Site X:	
	Sep 1966	Report 1 Design for Optimum Wave Conditions; Hydraulic Model Investigation, by H. B. Wilson	AD 720 973
	Sep 1966	Report 2 Designs of Riprap Cover Layers; Hydraulic Model Investigation, by R. A. Jackson	AD 720 982
TR 2-742	Oct 1966	Steady-Flow Stability Tests of Navigation Opening Structures, Hilo Harbor Tsunami Barrier, Hilo, Hawaii; Hydraulic Model Investigation, by N. R. Oswalt and M. B. Boyd	AD 720 981
TR 2-743	Nov 1966	Filling and Emptying Systems, Low-Lift Locks, Arkansas River Project; Hydraulic Model Investigation, by J. H. Ables and M. B. Boyd	AD 720 975
TR 2-745	Oct 1966	Spillway and Navigation Conditions, Holt Lock and Dam, Warrior River, Alabama; Hydraulic Model Investigation, by E. S. Melsheimer and T. E. Murphy	AD 720 979
TR 2-746	Oct 1966	Navigation Conditions at Lock and Dam No. 4, Arkansas River; Hydraulic Model Investigation, by J. J. Franco and C. D. McKellar	AD 720 984
TR 2-749	Nov 1966	Navigation Conditions at McAlpine Locks and Dam, Ohio River; Hydraulic Model Investigation, by J. J. Franco and C. D. McKellar	AD 722 219

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-751	Jan 1967	Comparison Tests of Plain and Rifled Dredge Discharge Pipe, by E. B. Pittard, J. E. Glover, and A. G. Davis	AD 722 215
TR 2-752	Dec 1966	Fremont Drop Structure and Friction Channel, Sandusky River, Ohio; Hydraulic Model Investigation, by E. S. Melsheimer and J. L. Grace	AD 721 986
TR 2-754	Jan 1967	Effects of Hurricane Barrier on Navigation Conditions in East Passage, Narragansett Bay, Rhode Island; Hydraulic Model Investigation, by J. G. Housley	AD 721 985
TR 2-755	Jan 1967	Model Study of Hopper Dredges; Hydraulic Model Investigation, by J. J. Franco	AD 722 214
TR 2-756	Feb 1967	Navigation Conditions at Columbia Lock and Dam, Ouachita River, Louisiana; Hydraulic Model Investigation, by J. J. Franco and L. J. Shows	AD 722 220
TR 2-760	Feb 1967	Drop Structure for Gering Valley Project, Scottsbluff County, Nebraska; Hydraulic Model Investigation, by T. E. Murphy	AD 722 226
TR 2-761	Feb 1967	Selection of Optimum Alignment, Length and Height of Breakwaters, New Buffalo Harbor, Michigan; Hydraulic Model Investigation, by Y. B. Dai and H. B. Wilson	AD 722 229
TR 2-762	Feb 1967	Control Structure, Little Sioux River, Iowa; Hydraulic Model Investigation, by T. E. Murphy	AD 722 210
TR 2-765	Mar 1967	Turtle Creek, Pennsylvania, Channel Improvement; Hydraulic Model Investigation, by J. E. Glover and J. J. Franco	AD 722 212
TR 2-766	Mar 1967	Stability of Proposed Breakwater, Burns Waterway Harbor, Indiana; Hydraulic Model Investigation, by R. A. Jackson	AD 722 218
TR 2-767	Apr 1967	Magic Island Complex, Including Kewalo Basin and Ala Wai Boat Harbor, Honolulu, Oahu, Hawaii; Hydraulic Model Investigation, by C. W. Brasfield and C. E. Chatham	AD 722 227
TR 2-774	Apr 1967	Outlet Structure for Eau Galle Reservoir, Eau Galle River, Wisconsin; Hydraulic Model Investigation, by E. S. Melsheimer	AD 722 208
TR 2-775	Apr 1967	Navigation Conditions at Millers Ferry Lock and Dam, Alabama River, Alabama; Hydraulic Model Investigation, by J. J. Franco and L. J. Shows	AD 722 211
TR 2-776	May 1967	Willow Springs and Sag Junction Diversions, Chicago Sanitary and Ship Canal, Illinois; Hydraulic Model Investigation, by T. E. Murphy	AD 722 230
TR 2-778	May 1967	Modernization of Filling and Emptying System, Existing McAlpine Lock (Old No. 41), Ohio River, Louisville, Kentucky; Hydraulic Model Investigation, by J. H. Ables and T. E. Murphy	AD 722 209

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-792	Aug 1967	Stability of Rubble-Mound Tsunami Barrier, Hilo Harbor, Hawaii; Hydraulic Model Investigation, by A. M. Kamel	AD 721 961
TR 2-795	Sep 1967	Arkansas River Navigation Entrancce; Hydraulic Model Investigation, by J. J. Franco, L. J. Shows, and J. E. Foster	AD 722 213
TR 2-796	Sep 1967	Navigation Conditions at Hannibal Locks and Dam, Ohio River, Ohio and West Virginia; Hydraulic Model Investi- gation, by J. J. Franco and J. E. Glover	AD 723 944
TR 2-799	Nov 1967	Wave Action and Breakwater Location, Noyo Harbor, Cali- fornia; Hydraulic Model Investigation, by H. B. Wilson	AD 723 951
TR 2-805	Dec 1967	Expansion of Santa Barbara Harbor, California; Hydraulic Model Investiation, by J. W. Ball and C. W. Brasfeild	AD 723 938
TR 2-806	Dec 1967	Expansion and Revision of Kawaihae Harbor, Hawaii; Hydraulic Model Investigation, by C. W. Brasfeild and C. E. Chatham	AD 723 937
TR 2-809	Jan 1968	Spillway for Kaysinger Bluff Dam, Osage River, Missouri; Hydraulic Model Investigation, by G. A. Pickering	AD 723 982
TR 2-810	Jan 1968	Acoustic Flowmeter Prototype Evaluation Tests, by E. B. Pickett	AD 723 983
TR 2-815	Mar 1968	Spillway for West Point Dam, Chattahoochee River, Alabama and Georgia; Hydraulic Model Investigation, by J. L. Grace and E. S. Melsheimer	AD 723 407
TR 2-817	Mar 1968	Navigation Conditions at Lock and Dam No. 9, Arkansas River; Hydraulic Model Investigation, by J. J. Franco and L. J. Shows	AD 723 962
TR H-68-1	Nov 1968	Prototype Measurements of Hydro-Power Plant Transients, Garrison and Oahe Dams, Missouri River, North and South Dakota, by E. B. Pickett	AD 723 956
TR H-68-2	Jun 1968	Hydraulic Characteristics of Mobile Breakwaters Composed of Tires or Spheres; Hydraulic Laboratory Investigation, by A. M. Kamel and D. D. Davidson	AD 835 673
TR H-68-3	Jun 1968	Limiting Heights of Breaking and Nonbreaking Waves on Rubble-Mound Breakwaters; Hydraulic Model Investigation, by R. A. Jackson	AD 673 129
TR H-68-4	Sep 1968	Effect of Valve Position in a Sidewall Port Filling System, Newburgh Lock, Ohio River; Hydraulic Model Investigation, by J. O. Farrell and J. H. Ables	AD 724 108
TR H-68-5	Sep 1968	Navigation Conditions at Robert S. Kerr Lock and Dam, Arkansas River; Hydraulic Model Investigation, by J. J. Franco and J. E. Glover	AD 723 953

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-68-6	Sep 1968	Design for Optimum Wave Conditions, Crescent City Harbor, Crescent City, California; Hydraulic Model Investigation, by P. K. Senter and C. W. Brasfeild	AD 723 955
	Jun 1971	Appendix A Results of Supplemental Tests; Hydraulic Model Investigation, by P. K. Senter	
TR H-68-7	Sep 1968	Navigation Conditions in Fort Smith Reach, Arkansas River; Hydraulic Model Investigation, by J. J. Franco and L. J. Shows	AD 723 975
TR H-68-8	Sep 1968	Navigation Conditions at Lock and Dam No. 3, Arkansas River, Arkansas and Oklahoma; Hydraulic Model Investigation, by J. J. Franco and C. D. McKellar	AD 723 973
TR H-68-9	Sep 1968	Wave and Surge Conditions After Proposed Expansion of Monterey Harbor, Monterey, California; Hydraulic Model Investigation, by C. E. Chatham	AD 723 954
TR H-68-10	Nov 1968	Navigation Conditions at Ozark Lock and Dam, Arkansas River; Hydraulic Model Investigation, by J. J. Franco and C. D. McKellar	AD 723 952
TR H-69-1	Jan 1969	Kaskaskia River Navigation Project, Illinois; Hydraulic Model Investigation, by J. J. Franco and C. D. McKellar	AD 723 959
TR H-69-2	Feb 1969	Model Study of Galveston Harbor Entrance, Texas; Hydraulic Model Investigation, by H. B. Simmons and R. A. Boland	AD 723 949
TR H-69-3	Feb 1969	Navigation Conditions at Lock and Dam No. 7, Arkansas River; Hydraulic Model Investigation, by J. J. Franco and C. D. McKellar	AD 723 967
TR H-69-4	Apr 1969	Ansonia-Derby Local Protection Project, Naugatuck and Housatonic Rivers, Connecticut; Hydraulic Model Investigation, by G. A. Pickering and T. E. Murphy	AD 723 969
TR H-69-5	Apr 1969	Filling and Emptying System, Dardanelle Lock, Arkansas River; Hydraulic Model Investigation, by J. H. Ables and M. B. Boyd	AD 723 958
TR H-69-6	Apr 1969	Design for Expansion of Port San Luis, California; Hydraulic Model Investigation, by C. E. Chatham and C. W. Brasfeild	AD 723 966
TR H-69-7	May 1969	Spillway for Rend Lake Reservoir, Big Muddy River, Illinois; Hydraulic Model Investigation, by B. P. Fletcher and J. L. Grace	AD 723 957
TR H-69-8	Jun 1969	Wave Action in Mission Bay Harbor, California; Hydraulic Model Investigation, by J. W. Ball and C. W. Brasfeild	AD 723 968

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-69-9	Jun 1969	Theoretics in Design of the Proposed Crescent City Harbor Tsunami Model, by G. H. Keulegan, J. Harrison, and M. J. Mathews	AD 723 965
TR H-69-10	Jul 1969	Mechanics of Flow from Stratified Reservoirs in the Interest of Water Quality; Hydraulic Laboratory Investigation, by J. P. Bohan and J. L. Grace	AD 723 976
TR H-69-11	Aug 1969	Webbers Falls Lock and Dam, Arkansas River Navigation Project; Hydraulic Model Investigation, by J. J. Franco and J. E. Glover	AD 724 107
TR H-69-12		Galveston Bay Hurricane Surge Study:	
	Sep 1969	Report 1 Effects of Proposed Barriers on Hurricane Surge Heights; Hydraulic Model Investigation, by N. J. Brogdon	AD 709 587
	Mar 1973	Appendix A Calibration Tests; Hydraulic Model Investigation, by R. A. Sager and E. C. McNair, Jr.	AD 759 119
	Jul 1970	Report 2 Effects of Proposed Barriers on Tides, Currents, Salinities, and Dye Dispersion for Normal Tide Conditions, by W. H. Bobb and R. A. Boland	AD 756 125
	Jul 1970	Appendix A Dye Time-Concentration Curves	
	Mar 1973	Appendix B Calibration Tests; Hydraulic Model Investigation, by R. A. Sager and E. C. McNair, Jr.	AD 759 120
	Jul 1970	Report 3 Effects of Plan 2 Alpha and Plan 2 Gamma Barriers on Tides, Currents, Salinities, and Dye Dispersion for Normal Tide Conditions; Hydraulic Model Investigation, by W. H. Bobb and R. A. Boland, Jr.	AD 756 134
	Jul 1970	Appendix A Dye Time-Concentration Curves	
TR H-69-13	Oct 1969	Low-Water Weirs on Boeuf and Tensas Rivers, Bayou Macon, and Big and Colewa Creeks, Arkansas and Louisiana; Hydraulic Model Investigation, by J. H. Ables and M. B. Boyd	AD 723 939
TR H-69-14	Oct 1969	Outlet Works for New Hope Reservoir, Cape Fear River Basin, N. C.; Hydraulic Model Investigation, by E. S. Melsheimer and N. R. Oswalt	AD 723 941
TR H-69-15	Nov 1969	Spillway for Hugo Dam, Kiamichi River, Oklahoma; Hydraulic Model Investigation, by B. P. Fletcher and J. L. Grace	AD 723 979

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-69-16	Nov 1969	Channel Improvement, Fire Island Inlet, New York; Hydraulic Model Investigation, by W. H. Bobb and R. A. Boland	AD 709 588
TR H-69-17	Dec 1969	Jones Bluff Lock and Dam, Alabama River Navigation Project; Hydraulic Model Investigation, by J. J. Franco, J. E. Glover, and B. K. Melton	AD 723 943
TR H-69-18	Dec 1969	Outlet Works for Beltzville Dam, Pohopoco Creek, Pennsylvania; Hydraulic Model Investigation, by E. S. Melsheimer	AD 723 942
TR H-70-1	Feb 1970	Water Temperature Control Weir for Meramec Park Dam, Meramec River, Missouri; Hydraulic Model Investigation, by J. P. Bohan	AD 756 144
TR H-70-2	Mar 1970	Operating Forces on Sector Gates Under Reverse Heads; Hydraulic Model Investigation, by N. R. Oswalt	AD 756 137
	Dec 1971	Appendix A Results of Supplemental Tests; Hydraulic Model Investigation, by N. R. Oswalt and T. E. Murphy	AD 734 890
TR H-70-3	Apr 1970	Considered Lake Erie-Lake Ontario Waterway; Hydraulic Model Investigation, by T. E. Murphy	AD 756 114
TR H-70-4	Apr 1970	Spillway for Alum Creek Dam, Alum Creek, Ohio; Hydraulic Model Investigation, by G. A. Pickering	AD 756 115
TR H-70-5	May 1970	Wave Action and Breakwater Location, Vermilion Harbor, Ohio; Hydraulic Model Investigation, by C. W. Brasfeld	AD 756 148
TR H-70-6	May 1970	Estuary Entrance, Umpqua River, Oregon; Hydraulic Model Investigation, by G. M. Fisackerly	AD 756 116
TR H-70-7	Jun 1970	Spillway and Outlet Works, Rowlesburg Dam, Cheat River, West Virginia; Hydraulic Model Investigation, by J. H. Ables and M. B. Boyd	AD 756 138
TR H-70-8	Jul 1970	Lock and Dam No. 13, Arkansas River Navigation Project; Hydraulic Model Investigation, by J. J. Franco and L. J. Shows	AD 756 139
TR H-70-9	Jul 1970	Spillway for Copan Dam, Little Caney River, Oklahoma; Hydraulic Model Investigation, by B. P. Fletcher	AD 756 140
TR H-70-10	Jul 1970	Spillway and Outlet Works, Tocks Island Dam, Delaware River, Pennsylvania, New Jersey, and New York; Hydraulic Model Investigation, by E. S. Melsheimer	AD 756 117
TR H-70-11	Sep 1970	Design for Flood Control and Wave Protection, Chagrin River, Eastlake, Ohio; Hydraulic Model Investigation, by C. E. Chatham	AD 756 118

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-70-12	Sep 1970	Development of Navigation at Lock and Dam No. 17, Arkansas River Project; Hydraulic Model Investigation, by J. J. Franco, J. E. Glover, and B. K. Melton	AD 756 141
TR H-70-13	Nov 1970	Spillway for Oakley Dam, Sangamon River, Illinois; Hydraulic Model Investigation, by E. S. Melsheimer	AD 756 142
	Dec 1972	Appendix A Type 2 (Revised) Spillway; Hydraulic Model Investigation, by E. S. Melsheimer	AD 754 535
TR H-70-14	Dec 1970	Spillway for Kaw Dam, Arkansas River, Oklahoma; Hydraulic Model Investigation, by B. P. Fletcher and J. L. Grace	AD 756 149
TR H-70-15	Dec 1970	Gated Spillway for Raystown Reservoir, Juniata River, Pennsylvania; Hydraulic Model Investigation, by N. R. Oswalt and T. E. Murphy	AD 756 209
TR H-71-1	Feb 1971	Lock and Dam No. 14, Arkansas River Navigation Project; Hydraulic Model Investigation, by J. J. Franco and L. J. Shows	AD 756 150
TR H-71-2	Feb 1971	Design of Proposed Crescent City Harbor, California, Tsunami Model; Hydraulic Model Investigation, by P. K. Senter	
TR H-71-3	Apr 1971	Wave Transmission and Mooring Force Tests of Floating Breakwater, Oak Harbor, Washington; Hydraulic Model Investigation, by D. D. Davidson	AD 756 210
TR H-71-4	Jun 1971	Selective Withdrawal Characteristics of Weirs; Hydraulic Laboratory Investigation, by J. L. Grace	AD 756 211
TR H-71-5	Jun 1971	Spillway Gate Vibrations on Arkansas River Dams, Arkansas and Oklahoma; Hydraulic Model Investigation, by G. A. Pickering	AD 756 151
TR H-71-6	Sep 1971	Howell-Bunger Valve Vibration, Summersville Dam Prototype Tests, by F. M. Neilson	AD 731 491
TR H-71-7	Oct 1971	Spillway for Clarence Cannon Reservoir, Salt River, Missouri; Hydraulic Model Investigation, by B. P. Fletcher	AD 732 867
TR H-71-8	Nov 1971	Proposed Jetty-Head Repair Sections, Humboldt Bay, California; Hydraulic Model Investigation, by D. D. Davidson	AD 756 212
TR H-72-1	Jan 1972	Outlet Works for Branched Oak and Cottonwood Springs Dams, Oak Creek, Nebraska, and Cottonwood Springs Creek, South Dakota; Hydraulic Model Investigation, by J. L. Grace	AD 736 855

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-72-2		Grays Harbor Estuary, Washington:	
	Apr 1972	Report 1 Verification and Base Tests; Hydraulic Model Investigation, by N. J. Brogdon	AD 743 169
	May 1973	Appendix A Supplementary Base Test Data; Hydraulic Model Investigation, by N. J. Brogdon, Jr., and G. M. Fisackerly	
	Sep 1972	Report 2 North Jetty Study; Hydraulic Model Investigation, by N. J. Brogdon	AD 748 813
	Sep 1972	Report 3 Westport Small-Boat Basin Study; Hydraulic Model Investigation, by N. J. Brogdon	AD 748 814
	Sep 1972	Report 4 South Jetty Study; Hydraulic Model Investigation, by N. J. Brogdon	AD 749 257
	Oct 1975	Report 5 Maintenance Studies of 35-Ft-Deep (MSL) Navigation Channel; Hydraulic Model Investigation, by N. J. Brogdon, Jr.	AD A017 561
	Apr 1976	Report 6 45-Ft MSL (40-Ft MLLW) Navigation Channel Improvement Studies; Hydraulic Model Investigation, by N. J. Brogdon, Jr.	AD A024 983
TR H-72-3	Apr 1972	Navigation Conditions in the Little Rock Reach, Arkansas River; Hydraulic Model Investigation, by J. J. Franco and L. J. Shows	AD 743 168
TR H-72-4	Aug 1972	Effects of Submerged Sills in the St. Clair River; Hydraulic Model Investigation, by J. J. Franco and J. E. Glover	AD 748 393
TR H-72-5	Sep 1972	Plans for Reduction of Shoaling in Brunswick Harbor and Jekyll Creek, Georgia; Hydraulic Model Investigation, by F. A. Herrmann and I. C. Tallant	AD 751 749
TR H-72-6	Sep 1972	Navigation Conditions and Filling and Emptying System, New Bankhead Lock, Black Warrior River, Alabama; Hydraulic Model Investigation, by N. R. Oswalt, J. H. Ables, and T. E. Murphy	AD 750 573
TR H-72-7	Nov 1972	Shoaling Conditions, St. Louis Harbor, Mississippi River; Hydraulic Model Investigation, by J. J. Franco	AD 752 421
TR H-72-8	Nov 1972	Disposal of Dredge Spoil; Problem Identification and Assessment and Research Program Development, by M. B. Boyd, R. T. Saucier, J. W. Keeley, and others	AD 757 599
TR H-72-9	Nov 1972	Navigation Channel Improvement, Gastineau Channel, Alaska; Hydraulic Model Investigation, by F. A. Herrmann	AD 753 337



## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-73-1	Feb 1973	Channel Conditions, Devil's Island Reach, Mississippi River, Missouri and Illinois; Hydraulic Model Investigation, by J. J. Franco and C. D. McKellar, Jr.	AD 756 442
TR H-73-2	Mar 1973	Navigation Conditions at Confluence of Arkansas, Verdigris, and Grand Rivers; Hydraulic Model Investigation, by J. J. Franco and C. D. McKellar, Jr.	AD 757 598
TR H-73-3	Feb 1973	Outlet Works, Warm Springs Dam, Dry Creek, Russian River Basin, Sonoma County, California; Hydraulic Model Investigation, by J. H. Ables, Jr., and G. A. Pickering	AD 757 596
TR H-73-4	Mar 1973	Selective Withdrawal from Man-Made Lakes; Hydraulic Laboratory Investigation, by J. P. Bohan and J. L. Grace, Jr.	AD 757 595
TR H-73-5	Apr 1973	Outlet Works Stilling Basin for Tallahala Dam, Tallahala Creek, Mississippi; Hydraulic Model Investigation, by N. R. Oswalt	AD 759 905
TR H-73-6	Jun 1973	Outlet Works Stilling Basins, Clinton and Fort Scott Dams, Wakarusa and Marmaton Rivers, Kansas; Hydraulic Model Investigation, by E. S. Melsheimer	AD 762 553
TR H-73-7	Jun 1973	Model Study of Trotters Shoals Spillway; Hydraulic Model Investigation, by R. P. Fletcher and J. L. Grace, Jr.	AD 762 539
TR H-73-8	Jun 1973	Study of Beach Widening by the Perched Beach Concept, Santa Monica Bay, California; Hydraulic Model Investigation, by C. E. Chatham, Jr., D. D. Davidson, and R. W. Whalin	AD 765 433
TR H-73-9	Jun 1973	Port Construction in the Theater of Operations, by A. A. Clark, R. J. Lacavich, D. N. Brown, W. K. Dornbusch, R. W. Whalin, and F. B. Cox	AD 763 175
	Jun 1973	Errata Sheet No. 1	
TR H-73-10	May 1973	Lock and Dam No. 8, Arkansas River Navigation Project; Hydraulic Model Investigation, by J. J. Franco and C. D. McKellar, Jr.	AD 763 174
TR H-73-11	Jun 1973	Energy Dissipator for Santa Paula Creek, Santa Clara River, California; Hydraulic Model Investigation, by J. H. Ables, Jr.	AD 762 540
TR H-73-12		Houston Ship Channel, Galveston Bay, Texas:	
	Aug 1973	Report 1 Hydraulic and Salinity Verification; Hydraulic Model Investigation, by W. H. Bobb, R. A. Boland, Jr., and A. J. Banchetti	AD 766 693
TR H-73-13	Aug 1973	Wave Action and Breakwater Design, Hamlin Beach Harbor, New York; Hydraulic Model Investigation, by C. W. Brasfield	AD 766 738

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-73-14	Sep 1973	Selective Withdrawal from Beech Fork Lake, Beech Fork River, West Virginia; Hydraulic Model Investigation, by T. L. Gloriod and J. P. Bohan	AD 768 777
TR H-73-15	Oct 1973	Spillway for Lock and Dam 26, Mississippi River, Missouri and Illinois; Hydraulic Model Investigation, by N. R. Oswalt and G. A. Pickering	AD 768 780
TR H-73-16	Oct 1973	Enlargement of the Chesapeake and Delaware Canal; Hydraulic and Mathematical Model Investigation, by M. B. Boyd, W. H. Bobb, C. J. Huval, and T. C. Hill	AD 768 779
TR H-73-17	Oct 1973	Outlet Works for Site 16, Papillion Creek and Tributaries, Nebraska; Hydraulic Model Investigation, by B. P. Fletcher	AD 770 398
TR H-74-1	Mar 1974	Navigation Channel Improvements, Barnegat Inlet, New Jersey; Hydraulic Model Investigation, by R. A. Sager and N. W. Hollyfield	AD 778 191
TR H-74-2	Apr 1974	South Ellenville Flood Control Project, Rondout Creek Basin, New York; Hydraulic Model Investigation, by E. S. Melsheimer	AD 778 716
TR H-74-3	May 1974	Type 16 Flood Insurance Study: Tsunami Predictions for Pacific Coastal Communities, by J. R. Houston and A. W. Garcia	AD 785 533
		Instructive Addendum	
	Jun 1978	Errata Sheet No. 1	
TR H-74-4	Jun 1974	Remedial Plans for Prevention of Harbor Shoaling, Port Orford, Oregon; Hydraulic Model Investigation, by M. L. Giles and C. E. Chatham, Jr.	AD 781 483
TR H-74-5	Jun 1974	Use of Tow Sequencing Procedures to Increase the Capacity of Existing Lock Facilities, by L. L. Daggett, R. W. McCarley, and J. A. Stinehour	AD 781 482
TR H-74-6		Lake Erie International Jetport Model Feasibility Investigation:	
	Jul 1974	Report 1 Scope of Study and Review of Available Data, by D. L. Durham and D. G. Outlaw	AD 783 463
	Apr 1975	Report 17-2 Physical Model Feasibility Study, by D. G. Outlaw, D. L. Durham, D. D. Davidson, and R. W. Whalin	AD A009 729
	Sep 1975	Report 17-3 Longshore Wave Energy Analyses, by D. G. Outlaw and D. L. Durham	AD A016 900

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-74-6 (Cont)	Apr 1977	Report 17-4 Numerical Model Feasibility Study, by D. C. Raney, D. L. Durham, and H. L. Butler	AD A038 972
	Jan 1978	Report 17-10 Nontechnical Summary of Project, by D. C. Raney, D. L. Durham, and R. W. Whalin	AD A050 749
TR H-74-7	Jul 1974	Van Buren Reach, Arkansas River Navigation Project; Hydraulic Model Investigation, by L. J. Shows and J. J. Franco	AD 784 091
TR H-74-8	Sep 1974	Unsteady Flow Computations on the Ohio-Cumberland-Tennessee-Mississippi River System, by B. H. Johnson	AD A000 611
TR H-74-9	Oct 1974	Practical Guidance for Design of Lined Channel Expansions at Culvert Outlets; Hydraulic Model Investigation, by B. P. Fletcher and J. L. Grace, Jr.	AD A000 612
TR H-74-10	Oct 1974	Spillway for Aliceville Lock and Dam, Tombigbee River, Alabama; Hydraulic Model Investigation, by N. R. Oswalt	AD A001 724
TR H-74-11	Nov 1974	Tillamook Bay Model Study; Hydraulic Model Investigation, by G. M. Fisackerly	AD A002 658
TR H-74-12	Nov 1974	San Diego Bay Model Study; Hydraulic Model Investigation, by G. M. Fisackerly	AD A002 632
TR H-74-13	Nov 1974	Spillway for Columbus Lock and Dam, Tombigbee River, Alabama; Hydraulic Model Investigation, by N. R. Oswalt and G. A. Pickering	AD A002 657
TR H-74-14	Dec 1974	Richard B. Russell Lake Water Quality Investigation; Hydraulic Model Investigation, by D. G. Fontane and J. P. Bohan	AD A004 000
TR H-74-15	Dec 1974	Potential Landslide-Generated Water Waves, Libby Dam and Lake Koocanusa, Montana; Hydraulic Model Investigation, by D. D. Davidson and R. W. Whalin	AD A003 914
TR H-74-16	Dec 1974	Design of an Interisland Barge Harbor for the Island of Tau, American Samoa; Hydraulic Model Investigation, by L. G. Crosby	AD A005 009
TR H-75-1	Jan 1975	Design of Agana Small-Boat Harbor, Territory of Guam; Hydraulic Model Investigation, by C. E. Chatham, Jr.	AD A005 146
TR H-75-2	Jan 1975	Turbulent Flow in Rectangular Outlet Conduit, Rend Lake Dam, Big Muddy River, Illinois, by C. A. Pugh	AD A005 150
TR H-75-3	Jan 1975	Waimano Stream Flood Control Project, Pearl City, Hawaii; Hydraulic Model Investigation, by P. E. Saunders	AD A006 020

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-75-4		Los Angeles and Long Beach Harbors Model Study:	
	Jun 1975	Report 1 Prototype Data Acquisition and Observations, by E. B. Pickett, D. L. Durham, and W. H. McAnally	AD A012 147
	Jan 1975	Report 2 Observations of Ship Mooring and Movement, by L. G. Crosby and D. L. Durham	AD A005 149
	Jul 1976	Report 3 Analyses of Wave and Ship Motion Data, by D. L. Durham, J. K. Thompson, D. G. Outlaw, and L. G. Crosby	AD A029 646
	Feb 1977	Report 4 Model Design, by D. G. Outlaw, D. L. Durham, C. E. Chatham, and R. W. Whalin	AD A037 154
	Feb 1978	Errata Sheet No. 1	
	Sep 1975	Report 5 Tidal Verification and Base Circulation Tests, by W. H. McAnally, Jr. (includes Appendix A)	AD A016 904
	Sep 1975	Appendix B Surface-Current Pattern Mosaics, by W. H. McAnally, Jr.	AD A046 914
	Aug 1979	Report 6 Resonant Response of the Modified Phase I Plan, by D. G. Outlaw	AD A075 728
TR H-75-5	Mar 1975	Spillway for Burnsville Dam, Little Kanawha River, West Virginia; Hydraulic Model Investigation, by B. P. Fletcher	AD A008 372
TR H-75-6	Apr 1975	Navigation Conditions at Cannelton Locks and Dam, Ohio River; Hydraulic Model Investigation, by J. J. Franco and C. D. McKellar	AD A009 489
TR H-75-7	Apr 1975	Flood Control Project on Lytle and Warm Creeks and Santa Ana River, California; Hydraulic Model Investigation, by J. H. Ables, Jr., and G. A. Pickering	AD A009 493
TR H-75-8	Apr 1975	Expansion of Port Hueneme, California; Hydraulic Model Investigation, by L. G. Crosby, D. L. Durham, and C. E. Chatham, Jr.	AD A010 324
TR H-75-9	May 1975	Navigation Conditions at Uniontown Locks and Dam, Ohio River; Hydraulic Model Investigation, by L. J. Shows and J. J. Franco	AD A010 639
TR H-75-10	May 1975	Outlet Works for Beltzville Dam, Pohopoco Creek, Pennsylvania; Prototype Tests, by E. D. Hart and C. A. Pugh	AD A010 636
TR H-75-11	Jun 1975	Barkley Lock Prototype Tests, Cumberland River, Kentucky, by F. M. Neilson	AD A012 767

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-75-12	Aug 1975	Outlet Works for Taylorsville Lake, Salt River, Kentucky; Hydraulic Model Investigation, by M. S. Dortch	AD A014 974
TR H-75-13		Mobile Bay Model Study:	
	Sep 1975	Report 1 Effects of Proposed Theodore Ship Channel and Disposal Areas on Tides, Currents, Salinities, and Dye Dispersion, by R. J. Lawing, R. A. Boland, and W. H. Bobb (includes Appendixes A-B)	AD A015 475
	Sep 1975	Appendix C Dye Time-Concentration Curves for Plan 1D and Plan 1G (Modified); Appendix D: Dye Time-Concentration Curves for Plan 1E (Modified), by R. J. Lawing, R. A. Boland, and W. H. Bobb	
	Oct 1975	Errata Sheet	
	Mar 1979	Report 2 Effects of Enlarged Navigation Channel on Tides, Currents, Salinities, and Dye Dispersion, Mobile Bay, Alabama; Hydraulic Model Investigation, by R. C. Berger, Jr., and R. A. Boland, Jr. (includes Appendix A)	AD A068 322
TR H-75-14	Sep 1975	Design of Entrance Channel Improvements for Ludington Harbor, Michigan; Hydraulic Model Investigation, by L. G. Crosby and C. E. Chatham, Jr.	AD A016 148
TR H-75-15	Sep 1975	Wave and Current Conditions for Various Modifications of Kewalo Basin, Honolulu, Oahu, Hawaii; Hydraulic Model Investigation, by M. L. Giles	AD A016 149
TR H-75-16	Nov 1975	Shore Effect Model, Atlantic Generating Station; Hydraulic Model Investigation, by R. D. Carver, D. D. Davidson, R. W. Whalin, and J. H. Barwis	AD A017 793
TR H-75-17	Nov 1975	Type 16 Flood Insurance Study: Tsunami Predictions for Monterey and San Francisco Bays and Puget Sound, by A. W. Garcia and J. R. Houston	AD A018 421
TR H-75-18	Nov 1975	Design for Wave Protection, Flood Control, and Prevention of Shoaling, Cattaraugus Creek Harbor, New York; Hydraulic Model Investigation, by R. R. Bottin, Jr., and C. E. Chatham, Jr.	AD A019 024
TR H-75-19	Dec 1975	Fourmile Run Local Flood-Control Project, Alexandria and Arlington County, Virginia; Hydraulic Model Investigation, by N. R. Oswalt, J. F. George, and G. A. Pickering	AD A019 826
TR H-76-1		Design Wave Information for the Great Lakes:	
	Jan 1976	Report 1 Lake Erie, by D. T. Resio and C. L. Vincent	AD A020 345

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
H-76-1 (Cont)	Mar 1976	Report 2 Lake Ontario, by D. T. Resio and C. L. Vincent	AD A023 210
	Nov 1976	Report 3 Lake Michigan, by D. T. Resio and C. L. Vincent	AD A036 029
	Sep 1977	Report 4 Lake Huron, by D. T. Resio and C. L. Vincent	AD A046 414
	Jun 1978	Report 5 Lake Superior, by D. T. Resio and C. L. Vincent	AD A057 127
TR H-76-2	Jan 1976	Design of Jubail Harbor, Saudi Arabia, Royal Saudi Naval Expansion Program; Hydraulic Model Investigation, by M. L. Giles and C. E. Chatham, Jr.	AD A020 917
TR H-76-3	Feb 1976	B. Everett Jordan Lake Water-Quality Study, by Bruce Loftis, P. E. Saunders, and J. L. Grace, Jr.	AD A021 682
TR H-76-4		Improvements for Masonboro Inlet, North Carolina; Hydraulic Model Investigation, by W. C. Seabergh	
	Apr 1976	Volume I	AD A024 434
	Apr 1976	Volume II	AD A024 435
TR H-76-5	Apr 1976	Tioga Outlet Works, Tioga and Hammond Lakes, Susquehanna River Basin, Pennsylvania; Hydraulic Model Investigation, by N. R. Oswalt	AD A026 262
TR H-76-6	Apr 1976	Connecting Channel for Tioga and Hammond Lakes, Tioga River and Crooked Creek, Pennsylvania; Hydraulic Model Investigation, by N. R. Oswalt and G. A. Pickering	AD A026 116
TR H-76-7	May 1976	Bay Springs Lake Water-Quality Study; Hydraulic Laboratory Investigation, by S. C. Wilhelms	AD A025 023
TR H-76-8	May 1976	Wainae Small-Boat Harbor, Oahu, Hawaii, Design for Wave Protection; Hydraulic Model Investigation, by R. R. Bottin, Jr., C. E. Chatham, Jr., and R. D. Carver	AD A026 134
TR H-76-9	Jul 1976	Ice Flushing from St. Lawrence Seaway Locks; Hydraulic Model Investigation, by N. R. Oswalt	AD A028 021
TR H-76-10	Oct 1976	North Fork Lake Spillway, San Gabriel River, Texas; Hydraulic Model Investigation, by E. D. Rothwell	AD A078 855
TR H-76-11	Aug 1976	Effects of Flood Flows on Water Quality of Tioga-Hammond Lakes; Hydraulic Model Investigation, by M. S. Dortch	AD A029 143
TR H-76-12	Aug 1976	Chute Spillway for Cowanesque Dam, Cowanesque River, Pennsylvania; Hydraulic Model Investigation, by B. P. Fletcher	AD A030 644

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-76-13		Beach Nourishment Techniques:	
	Sep 1976	Report 1 Dredging Systems for Beach Nourishment from Offshore Sources, by T. W. Richardson	AD A030 645
	Oct 1976	Report 2 A Means of Predicting Littoral Sediment Transport Seaward of the Breaker Zone, by A. W. Garcia and F. C. Perry	AD A032 349
	May 1981	Report 3 Typical U. S. Beach Nourishment Projects Using Offshore Sand Deposits, by R. D. Hobson	AD A102 385
	Apr 1981	Report 4 Wave Climates for Selected U. S. Offshore Beach Nourishment Projects--Main Text, by D. L. Durham, L. Z. Hales, and T. W. Richardson	AD A100 472
	Apr 1981	Appendixes A-K, by D. L. Durham, L. Z. Hales, and T. W. Richardson	AD A102 376
TR H-76-14	Sep 1976	Effects of Hurricane Surge Barrier on Hydraulic Environment, Jamaica Bay, New York; Hydraulic Model Investigation, by R. F. Athow, Jr.	AD A030 638
TR H-76-15	Sep 1976	Prototype Tests, Old River Low-Sill Control Structure, April 1973-June 1975, by F. M. Neilson and A. R. Tool	AD A030 971
TR H-76-16	Sep 1976	Hydraulic Characteristics of Rigolets Pass, Louisiana, Hurricane Surge Control Structures; Hydraulic Model Investigation, by R. C. Berger, Jr., and R. A. Boland, Jr. (includes Appendix A)	AD A031 756
	Nov 1976	Errata Sheet No. 1	
TR H-76-17	Oct 1976	Sluice Pressures, Gate Vibrations and Stilling Basin Wall Pressures, Libby Dam, Kootenai River, Montana, by E. D. Hart and A. R. Tool	AD A032 665
TR H-76-18	Oct 1976	Divide Cut Drainage Structures, Tennessee-Tombigbee Waterway, Mississippi and Alabama; Hydraulic Model Investigation, by J. H. Ables, Jr.	AD A032 666
TR H-76-19	Nov 1976	Entrance to Upstream Approach Canal, Gainesville Lock, Tombigbee River, Mississippi and Alabama; Hydraulic Model Investigation, by L. J. Shows and J. J. Franco	AD A033 539
TR H-76-20	Dec 1976	Stability of Rubble-Mound Breakwater, Jubail Harbor, Saudi Arabia; Hydraulic Model Investigation, by R. D. Carver and D. D. Davidson	AD A034 815
TR H-76-21	Dec 1976	Center Sluice Investigation, Libby Dam, Kootenai River, Montana; Hydraulic Model Investigation, by M. S. Dortch	AD A034 805

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-76-22	Dec 1976	Dickey-Lincoln School Lakes Hydrothermal Model Study; Hydraulic Laboratory Investigation, by M. S. Dortch, Bruce Loftis, D. G. Fontane, and S. C. Wilhelms	AD A034 538
TR H-77-1	Feb 1977	Design for Small-Boat Harbor Improvements, Port Washington Harbor, Wisconsin; Hydraulic Model Investigation, by R. R. Bottin, Jr.	AD A037 088
TR H-77-2	Feb 1977	Old River Existing Low-Sill Control Structure, Louisiana; Hydraulic Model Investigation, by E. D. Rothwell and J. L. Grace, Jr.	AD A036 996
TR H-77-3	Mar 1977	Flow Conditions at Pumping Stations, Cairo, Illinois; Hydraulic Model Investigation, by B. P. Fletcher and J. L. Grace, Jr.	AD A038 051
TR H-77-4	Mar 1977	Lake Dardanelle, Arkansas River; Hydraulic Model Investigation, by J. E. Foster and J. J. Franco	AD A039 066
TR H-77-5		Marysville Lake Hydrothermal Study:	
	Apr 1977	Report 1 900-MW Project; Hydraulic and Mathematical Model Investigation, by D. G. Fontane, M. S. Dortch, C. H. Tate, Jr., and Bruce Loftis	AD A042 556
	Feb 1978	Report 2 2250-MW Project; Hydraulic and Mathematical Model Investigation, by M. S. Dortch	AD A052 655
TR H-77-6	Apr 1977	Spillway Vibration, Pressure, and Velocity Measurements, Ozark Lock and Dam, Arkansas River, Arkansas, by C. A. Pugh	AD A040 132
* TR H-77-7	Apr 1977	Filling and Emptying System for Medium-Lift Locks, Trinity River, Texas; Hydraulic Model Investigation, by N. R. Oswalt	AD B018 810L
TR H-77-8	Apr 1977	Powerhouse Intake Gate Catapult Study, Big Bend Dam, South Dakota, and Stockton, Harry S. Truman, and Clarence Cannon Dams, Missouri; Hydraulic Model Investigation, by J. F. George and G. A. Pickering	AD A043 876
TR H-77-9	May 1977	Literature Survey and Preliminary Evaluation of Streambank Protection Methods, by M. P. Keown, N. R. Oswalt, E. B. Perry, and E. A. Dardeau, Jr.	AD A042 052
TR H-77-10	May 1977	Positioning Techniques and Equipment for U. S. Army Corps of Engineers Hydrographic Surveys, by E. D. Hart and G. C. Downing	AD A041 062
TR H-77-11	May 1977	Navigation Conditions at Columbus Lock and Dam, Tombigbee River, Mississippi and Alabama; Hydraulic Model Investigation, by J. J. Franco and L. J. Shows	AD A042 027

\* Statement B. See Preface.



## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-77-12	May 1977	Pumping Stations for Drainage District No. 17, Mississippi County, Arkansas; Hydraulic Model Investigation, by P. E. Saunders	AD A042 892
TR H-77-13	Jun 1977	Red River Waterway, La., Tex., Ark., and Okla., Mississippi River to Shreveport, La., Reach, Lock and Dam No. 1; Hydraulic Model Investigation, by N. R. Oswalt	AD A041 642
TR H-77-14	Jul 1977	Reaeration Tests, Outlet Works, Beltzville Dam, Pohopoco Creek, Pennsylvania, by E. D. Hart and S. C. Wilhelms	AD A043 291
TR H-77-15	Aug 1977	Imperial Beach, California, Design of Structures for Beach Erosion Control; Hydraulic Model Investigation, by C. R. Curren and C. E. Chatham, Jr.	AD A044 108
TR H-77-16	Aug 1977	Tsunami-Wave Elevation Frequency of Occurrence for the Hawaiian Islands, by J. R. Houston, R. D. Carver, and D. G. Markle	AD A045 023
		Supplement	AD A073 012
TR H-77-17	Sep 1977	Nearshore Numerical Storm Surge and Tidal Simulation, by J. J. Wanstrath	AD A047 994
TR H-77-18	Oct 1977	A Mathematical Model for Unsteady-Flow Computations Through the Complete Spectrum of Flows on the Lower Ohio River, by B. H. Johnson	AD A047 242
TR H-77-19	Nov 1977	Dolos Armor Units Used on Rubble-Mound Breakwater Trunks Subjected to Nonbreaking Waves with No Overtopping, by R. D. Carver and D. D. Davidson	AD A048 434
TR H-77-20	Nov 1977	Port Ontario Harbor, New York, Design for Wave Protection and Prevention of Shoaling; Hydraulic Model Investigation, by R. R. Bottin, Jr.	AD A049 246
TR H-77-21	Nov 1977	Improvements for Little River Inlet, South Carolina; Hydraulic Model Investigation, by W. C. Seabergh and E. F. Lane	AD A049 639
TR H-77-22	Dec 1977	Breakwater Stability Study, Imperial Beach, California; Hydraulic Model Investigation, by D. G. Markle and R. D. Carver	AD A048 036
TR H-78-1	Jan 1978	Temperature Analysis and Selective-Withdrawal Design Study, Tallahala Creek Lake, Mississippi; Mathematical Model Investigation, by S. T. Maynard, Bruce Loftis, and D. G. Fontane	AD A052 620
TR H-78-2	Apr 1978	Navigation Conditions at Aliceville Lock and Dam, Mississippi and Alabama, Tombigbee River; Hydraulic Model Investigation, by L. J. Shows and J. J. Franco	AD A054 414

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-78-3	May 1978	Model Studies of the Portugues and Bucana Rivers Channelization, Puerto Rico; Hydraulic Model Investigation, by N. R. Oswalt	AD A055 441
TR H-78-4	Apr 1978	Improvements for Murrells Inlet, South Carolina; Hydraulic Model Investigation, by Maj. F. C. Perrv, Jr., W. C. Seabergh, and E. F. Lane	AD A054 242
TR H-78-5		Effects of Depth on Dredging Frequency:	
	May 1978	Report 1 Survey of District Offices, by M. J. Trawle and J. A. Boyd, Jr.	AD A056 042
	Jul 1981	Report 2 Methods of Estuarine Shoaling Analysis, by M. J. Trawle	AD A102 892
	Apr 1985	Report 3 Evaluation of Advance Maintenance Projects, by R. C. Berger, Jr., and J. A. Boyd, Jr.	AD A156 635
TR H-78-6	May 1978	Capacity Studies of Gallipolis Locks, Ohio River, West Virginia, by L. L. Daggett and R. W. McCarley	AD A056 026
TR H-78-7	Jun 1978	Shoaling Conditions in Sawyer Bend and Lower Entrance to Chain of Rocks Canal, Mississippi River; Hydraulic Model Investigation, by J. E. Foster, C. M. Noble, and J. J. Franco	AD A058 731
TR H-78-8	Jun 1978	Indian Creek Pumping Station, Mankato, Minnesota; Hydraulic Model Investigation, by B. P. Fletcher	AD A056 687
TR H-78-9	Jun 1978	Bay Springs Canal Surge Study, Tennessee-Tombigbee Waterway, Mississippi and Alabama; Hydraulic Model Investigation, by C. H. Tate, Jr.	AD A058 604
TR H-78-10	Jun 1978	Navigation Conditions, Suck Bend Reach, Chattahoochee River, Alabama and Georgia; Hydraulic Model Investigation, by B. K. Melton and J. J. Franco	AD A056 704
TR H-78-11	Jun 1978	Numerical Simulation of Tidal Hydrodynamics, Great Egg Harbor and Corson Inlets, New Jersey, by H. L. Butler (includes Appendixes A-E; Appendix E is on microfiche only)	AD A063 080
TR H-78-12	Jun 1978	Navigation Conditions at Aberdeen Lock and Dam, Tombigbee River, Mississippi and Alabama; Hydraulic Model Investigation, by L. J. Shows and J. J. Franco	AD A058 605
TR H-78-13	Jul 1978	An Estimate of Channel Roughness of Interoceanic Canals, by G. H. Keulegan	AD A058 706
TR H-78-14	Jul 1978	Walnut Creek Channel Improvement Project, Contra Costa County, California; Hydraulic Model Investigation, by J. F. George	AD A059 428
TR H-78-15	Oct 1978	Outlet Structure for Meramec Lake, Meramec River, Missouri; Hydraulic Model Investigation, by B. P. Fletcher	AD A062 109

## HYDRAULICS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR H-78-16	Sep 1978	Filling and Emptying System, New Ship Lock, Mississippi River-Gulf Outlet, Louisiana; Hydraulic Model Investigation, by J. H. Ables, Jr.	AD A062 074
TR H-78-17		River Tow Behavior in Waterways:	
	Oct 1978	Report 1 Exxon Test Program, by R. M. Schulz	AD A062 503
	Oct 1978	Report 2 Second Exxon Test Program, by R. M. Schulz	AD A062 504
TR H-78-18	Nov 1978	Design for Harbor Entrance Improvements, Wells Harbor, Maine; Hydraulic Model Investigation, by R. R. Bottin, Jr.	AD A063 272
TR H-78-19	Nov 1978	Filling and Emptying System for Bay Springs Lock, Tennessee-Tombigbee Waterway, Mississippi; Hydraulic Model Investigation, by J. H. Ables, Jr.	AD A063 267
	Jan 1979	Errata Sheet No. 1	
TR H-78-20	Sep 1978	Numerical Analysis of Harbor Oscillations for Barbers Deep Point Deep-Draft Harbor, by D. L. Durham	AD A063 795
TR H-78-21	Nov 1978	Typical Tennessee-Tombigbee Canal Section Spillways A and B; Hydraulic Model Investigation, by B. P. Fletcher	AD A063 730
TR H-78-22	Dec 1978	Numerical Simulation of the Coos Bay-South Slough Complex, by H. L. Butler	AD A063 698
TR H-78-23	Dec 1978	Terminal Island Sewage Treatment Plant Outfall, Los Angeles Harbor, California; Hydraulic Model Investigation, by W. H. McAnally, Jr.	AD A063 247
TR H-78-24	Dec 1978	Navigation Conditions in Alexandria Reach, Red River Navigation Project, Louisiana; Hydraulic Model Investigation, by L. J. Shows and J. J. Franco	AD A064 397
* TR H-78-25	Dec 1978	An Analytical Approach for Computing Lock Capacity, by L. L. Daggett and T. D. Ankeny	AD B033 097L
TR H-78-26	Dec 1978	Type 16 Flood Insurance Study: Tsunami Predictions for the West Coast of the Continental United States, by J. R. Houston and A. W. Garcia	AD A063 663

---

\* Statement B. See Preface.

## HYDRAULICS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		CALIFORNIA INSTITUTE OF TECHNOLOGY, W. M. KECK LABORATORY OF HYDRAULICS AND WATER RESOURCES, Pasadena	
CR 2-131	Oct 1965	Wave-Induced Oscillations of Small Moored Vessels, by Fredric Raichlen	
CR H-68-2	Aug 1968	Motions of Small Boats Moored in Standing Waves, by Fredric Raichlen	AD 756 143
CR H-69-2	Dec 1969	Wave Induced Oscillations in Harbors of Arbitrary Shape, by Jiin-Jen Lee	AD A032 587
CR H-71-2	Aug 1971	Wave Induced Oscillations in Harbors with Connected Basins, by Jiin-Jen Lee and Fredric Raichlen	AD A032 589
		FRANK B. CAMPBELL, Consultant, Vicksburg, Mississippi	
Unnumbered	May 1969	Report on Spillway Vibration Studies	
		CASE WESTERN RESERVE UNIVERSITY, DEPARTMENT OF EARTH SCIENCES, Cleveland, Ohio	
CR H-75-1		Lake Erie International Jetport Model Feasibility Investigation:	
	Oct 1975	Report 17-5 The Wind-Driven Currents and Contaminant Dispersion in the Near-Shore of Large Lakes, by Yea-Yi Peter Sheng	AD A017 694
	Mar 1976	Report 17-6 Application of Three-Dimensional Hydrodynamic Model to Study Effects on Proposed Jetport Island on Thermocline Structure in Lake Erie, by J. F. Paul and W. J. Lick	AD A022 588
		A. H. GLENN AND ASSOCIATES, New Orleans, Louisiana	
CR H-74-1	Mar 1974	Wind, Wave, Water Level, and Ice Conditions Affecting Design and Construction of the Proposed Lake Erie International Jetport, Cleveland, Ohio	AD 776 975

## HYDRAULICS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		GULF COAST RESEARCH LABORATORY, Ocean Springs, Mississippi	
CR H-73-3	Dec 1973	Salinity Problems of Organisms in Coastal Areas Subject to the Effect of Engineering Works, by G. Gunter, B. S. Ballard, and A. Venkataramaiah	AD 775 761
CR H-74-2	Mar 1974	Studies of the Effects of Salinity and Temperature on the Commercial Shrimp, <u>Penaeus Aztecus</u> Ives, With Special Regard to Survival Limits, Growth, Oxygen Consumption and Ionic Regulation, by A. Venkataramaiah, G. J. Lakshmi, and G. Gunter	AD 777 794
CR H-77-1	Sep 1977	Studies on the Time Course of Salinity and Temperature Adaptation in the Commercial Brown Shrimp <u>Penaeus Aztecus</u> Ives, by A. Venkataramaiah, G. J. Lakshmi, Patricia Biesiot, J. D. Valleau, and Gordon Gunter	AD A045 674
		UNIVERSITY OF IOWA, IOWA INSTITUTE OF HYDRAULIC RESEARCH, Iowa City	
CR 2-124	Aug 1965	Resistance to Flow Over Boundaries with Small Roughness Concentrations, by E. M. O'Loughlin	
CR 2-151	Oct 1952	Instruments for Measuring Large-Scale Turbulence in Water, by P. G. Hubbard, D. W. Appel, and S. C. Ling	
CR H-69-1	Feb 1969	Some Aspects of Flow-Induced Vibrations of Hydraulic Control Gates, by F. A. Locher	AD 689 457
CR H-71-1	Feb 1971	Some Characteristics of Pressure Fluctuations on Low-Ogee Crest Spillways Relevant to Flow-Induced Structural Vibrations, by F. A. Locher	AD 728 115
		ARTHUR T. IPPEN, Consulting Engineer, Cambridge, Massachusetts	
CR 2-46	Nov 1961	The Feasibility of a Dynamic Model of Lake Michigan, by D. R. F. Harleman, E. R. Holley, J. A. Hoopes, and R. R. Rumor	AD A008 932
		UNIVERSITY OF MICHIGAN, ENGINEERING RESEARCH INSTITUTE, Ann Arbor	
CR 2-5	Sep 1950	Model Study for Harbor of Refuge for Light Draft Vessels at Hammond Bay, Michigan, by E. F. Brater	
CR 2-7	Jun 1951	Model Study for Harbor of Refuge for Light-Draft Vessels at Harrisville, Michigan, by E. F. Brater and L. D. Stair	

## HYDRAULICS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		UNIVERSITY OF MISSOURI, Columbia	
CR 2-116	May 1965	Analytical Study of Flow Characteristics for Flow Over a Curved Spillway Bucket, by J. J. Cassidy	
	Sep 1968	Appendix A Spillway Bucket Analysis, by J. J. Cassidy	
CR H-68-1	Sep 1968	Analytical Study of Flow Over a Spillway Toe Curve, by J. J. Cassidy	AD A054 192
		NATIONAL ENGINEERING SCIENCE COMPANY, Pasadena, California	
CR 2-50		Design of Wave Tanks:	
	Apr 1962	Final Report	AD A054 080
	Jun 1962	Addenda to Final Report, Variable Stroke Mechanism for Wave Flume Facility	AD A054 081
CR-2-60	Mar 1963	Tsunami Model for Hilo Bay, Hawaii, by B. W. Wilson	
CR 2-122	Jun 1965	Wave Absorbers in Harbors, by Bernard LeMehaute	AD 704 721
		NATIONAL MARINE CONSULTANTS, Anaheim, California	
CR 2-104	Apr 1964	Technical Proposal; Theoretical Study of the Velocity Field Due to Waves Reflected from a Breakwater	
CR 2-109	Jan 1964	A Solution for the Wave Velocity Field Existing on an Underwater Portion of an Impervious Sloping Breakwater, by Anthony Trampus and R. W. Whalin	
CR 2-117		A Numerical Solution for the Wave Velocity Field Existing on an Underwater Portion of an Impervious Sloping Breakwater:	
	Jul 1965	Volume I, by Anthony Trampus	
	Jul 1965	Volume II Computer Output, by Joseph Jaime	

## HYDRAULICS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		SCIENCE ENGINEERING ASSOCIATES, San Marino, California	
CR 2-136	Oct 1965	Feasibility Study for a Surge-Action Model of Monterey Harbor, California, by B. W. Wilson, J. A. Hendrickson, and R. E. Kilmer	AD 684 953
		SCRIPPS INSTITUTION OF OCEANOGRAPHY, UNIVERSITY OF CALIFORNIA, La Jolla, California	
CR H-76-1	May 1976	Study and Evaluation of Remedial Sand Bypassing Procedures, by R. W. Harris, D. L. Inman, J. A. Bailard, and R. L. Oda	AD A026 480
		TEXAS A&M UNIVERSITY, RESEARCH FOUNDATION, DEPARTMENT OF BIOLOGY, College Station	
CR H-73-1	Jun 1973	The Brackish Water Clam <u>Rangia Cuneata</u> as Indicator of Ecological Effects of Salinity Changes in Coastal Waters, by S. H. Hopkins, J. W. Anderson, and K. Horvath	AD 763 176
CR H-73-2	Aug 1973	Annotated Bibliography on Effects of Salinity and Salinity Changes on Life in Coastal Waters, by S. H. Hopkins	AD 767 562
		U. S. NATIONAL BUREAU OF STANDARDS, Washington, DC	
CR 2-1		Model Laws for Density Currents:	
	Apr 1946	First Progress Report	
	Aug 1946	Second Progress Report	The Problem of Salt Water Intrusion in Canal Locks and the Sufficient Conditions for Adequate Model Experiments
	Dec 1946	Third Progress Report	The Problem of Salt Water Intrusion in Rivers and the Sufficient Conditions for Adequate Model Experiments
	Oct 1949	Fourth Progress Report	The Determination of Salinities in Tests on Density Currents
	Oct 1951	Fifth Progress Report	Distorted Models in Density Current Phenomena, by G. H. Keulegan

## HYDRAULICS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		U. S. NATIONAL BUREAU OF STANDARDS (Cont)	
CR 2-1 (Cont)	Jun 1952	Sixth Progress Report      Effectiveness of Salt Barriers in Rivers, by G. H. Keulegan	
	Jun 1955	Seventh Progress Report      Interface Mixing in Arrested Saline Wedges, by G. H. Keulegan	
	Aug 1955	Eighth Progress Report      Significant Stresses of Arrested Saline Wedges, by G. H. Keulegan	
	Jun 1954	Ninth Progress Report      An Example of Density Current Flow in Permeable Media, by G. H. Keulegan	
	Nov 1955	Tenth Progress Report      An Experimental Study of Internal Solitary Waves, by G. H. Keulegan	
	Oct 1957	Eleventh Progress Report      Form Characteristics of Arrested Saline Wedges, by G. H. Keulegan	
	Apr 1958	Twelfth Progress Report      The Motion of Saline Fronts in Still Water, by G. H. Keulegan	
	Mar 1957	Thirteenth Progress Report      An Experimental Study of the Motion of Saline Water from Locks Into Fresh Water Channels, by G. H. Keulegan	
	Jan 1960	Fourteenth Progress Report      Mixing Effect of Wind Induced Waves, by G. H. Keulegan and Victor Brame	
		Y. S. YU and J. S. McNOWN, University of Kansas, Lawrence	
CR 2-66	Feb 1963	Runoff from Impervious Surfaces, by Y. S. Yu and J. S. McNown	AD 730 732



MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Instruction Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
Unnumbered	Oct 1961	Tropical Soil Studies; Plan of Tests	
Unnumbered	Jan 1962	Tropical Soil Studies in Panama and Puerto Rico; Plan of Tests	
IR 6		Environmental Data Collection Manual:	
	Sep 1965	Volume V Surface Microgeometry (Information in this no longer valid)	
Unnumbered	Apr 1968	Instruction Manual for WES Tunnel Explorer Locator System, by B. R. Davis, P. A. Smith, and R. E. Riley	
IR 10		Environmental Data Collection Methods:	
		Volume IV Vegetation:	
	May 1968	Instructional Manual 1 Vegetation Structure	AD 671 663
* IR M-75-1	Jun 1975	Automated Procedure for Airfield Site Evaluation, by M. P. Keown, J. A. Parks, and J. K. Stoll	AD FJ04 845L
IR M-76-1		Automated Procedure for Evaluating Sites for Suit- ability as Helicopter Landing Zones:	
	Jun 1976	Volume I Descriptions and Instructions for Use of Computer Programs, by J. A. Parks	AD A030 173
*	Jun 1976	Volume II Listings of Computer Programs, by J. A. Parks	AD B013 638L
IR M-78-1	Jan 1978	Guide for Airborne Infrared Root Moisture Surveys, by L. E. Link, Jr.	AD A052 035
IR M-78-2		Guidance for Application of Remote Sensing to Environmental Management:	
	Mar 1978	Appendix A Sources of Available Remote Sensor Imagery, by J. R. May	AD A053 673
	Mar 1978	Appendix B Sources of New Imagery Missions, by J. R. May	AD A053 673

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-18	Nov 1952	Airfield Reconnaissance, Vieques Airfield, Puerto Rico	AD 010 354
MP 4-19	Nov 1952	Report on Trafficability Conditions and Airfield Site Selection in an Area in Norfolk County, East Anglia, England	
MP 4-101	Nov 1954	Trafficability Survey of Selected Areas, Camp Stewart, Georgia	
MP 4-117	Mar 1955	Field Tests of Nuclear Instruments for the Measurement of Soil Moisture and Density	AD 073 388
MP 4-135	Jul 1955	The Development of Methods for Predicting Soil Moisture Content, Report on the Fairbanks, Alaska, Extension	AD 747 826
MP 4-147	Jan 1956	Vehicle Mobility on Soft Soils	AD 841 344
MP 4-230		Stresses Under Moving Vehicles:	
	Jul 1957	Report 1 A Pilot Study of WFS Earth Pressure Cell Action in Comparatively Soft Soil (See TR 3-545 for subsequent reports in this series)	AD 841 345
MP 4-238	Nov 1957	Statistical Occurrence of Soil Strength	AD B951 475
MP 4-241	Oct 1957	Vehicle Mobility	AD 841 346
MP 4-282	Aug 1958	Comparison of Performance Characteristics in Snow of the Polecat and Weasel	
MP 4-284	Aug 1958	A Limited Study of Factors That Affect Soil Strength	
MP 4-298	Jan 1959	Meteorological and Trafficability Data, U. S.-Canadian Arctic Weather Stations	AD 756 305
MP 4-300	Jan 1959	Aerial Penetrometer Demonstration at Fort Rucker, Alabama	AD 625 601
MP 4-322	Feb 1959	A Limited Study of Snap-Tracs	AD 756 291
MP 4-327	Mar 1959	Effect of Mold Size and Other Factors on Laboratory Cone Index Measurements	AD 841 347
MP 4-338	Apr 1959	Prediction of Soil Moisture from Soil and Weather Records	AD A006 496
MP 4-350	Jul 1959	Pilot Study to Evaluate the Squeeze Test for Use in Vehicle-Mobility Research	AD 841 348
MP 4-355		Trafficability Predictions in Tropical Soils:	
	Sep 1959	Report 1 Four Soils in the Panama Canal Zone	AD A006 520

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-355 (Cont)	Feb 1960	Report 2 Puerto Rico Study	AD A032 705
	Aug 1966	Report 3 Panama Study No. 2 (October 1961-September 1963), by A. R. McDaniel	AD 801 321
*	Nov 1967	Report 4 Columbia Study (July 1962-July 1963), by A. R. McDaniel	AD 824 734L
*	Dec 1967	Report 5 Costa Rica Study No. 1 (January 1963-January 1965), by A. R. McDaniel	AD 824 882L
	Nov 1968	Report 6 Puerto Rico Study No. 2 (March 1962-November 1963), by J. G. Kennedy and T. E. Hicks	AD 845 616
	Nov 1970	Report 7 Hawaii Study, by C. A. Carlson, W. P. Bohnert, and M. P. Meyer	AD 877 577
*	Aug 1971	Report 8 Costa Rica Study No. 2 (January 1964-September 1965), by A. R. McDaniel and M. H. Smith	AD 888 001L
MP 4-362	Oct 1959	Preliminary Study of Stresses Under Off-Road Vehicles	AD 841 349
MP 4-371	Jan 1960	Laboratory Tests of Liquid Nitrogen Soil-Moisture Samplers	AD 756 311
MP 4-404	Jul 1960	The Army Mobility Research Center Testing Facility	
MP 4-412	Nov 1960	A Limited Study of the Performance of the 2-Ton Meili Flex-Trac	AD 756 321
MP 4-438	Jul 1961	Trafficability Tests with Jumbo Truck on Organic and Coarse-Grained Mineral Soils	AD 756 331
MP 4-439	Aug 1961	Trafficability Tests with the Airoll on Organic and Mineral Soils	AD A006 497
MP 4-441	Aug 1961	Measurement and Estimation of the Trafficability of Fine-Grained Soils	
MP 4-442	Aug 1961	Soil Trafficability Classification Scheme	
MP 4-443	Aug 1961	The Behavior of Sand Under Pneumatic Tires	
MP 4-444	Aug 1961	Classification of Terrain for Mobility Purposes	AD 666 222
MP 4-446	Aug 1961	Comparison of Trafficability of Muskeg with Trafficability of Other Soft Soil Terrains	AD 754 332
MP 4-447	Aug 1961	Properties of Surface Soils in the Wet Season	AD 754 335
MP 4-457	Nov 1961	Some Factors Affecting Moisture Content-Density-Cone Index Relations	AD 753 641

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-461	Dec 1961	A Technique for Mapping Trafficability	AD 754 334
MP 4-462	Dec 1961	Measuring Soil Trafficability Characteristics	AD 754 333
MP 4-463	Dec 1961	Stresses in Yielding Soils Under Moving Wheels and Tracks	
MP 4-469	Feb 1962	Distribution of Stresses on an Unyielding Surface Beneath a Pneumatic Tire	
MP 4-477	Apr 1962	Trafficability Tests with the 5-Ton GOER (XM520) on Fine- and Coarse-Grained Soils	AD 646 591
MP 3-482	Apr 1962	Predicting Soil-Moisture Distribution in Areas of Seasonal Frost, Feasibility Study	AD 756 302
MP 4-497	May 1962	Deflection of a Moving Tire on Firm to Soft Surfaces	
MP 4-505	Aug 1962	Operation Wheeltrack, Camp A. P. Hill, Virginia, 25-30 April 1962	
MP 4-513	Jul 1962	Airroll Performance in Snow	AD 744 463
MP 3-521	Aug 1962	Classification of Landscape Geometry for Military Purposes	AD 744 223
Unnumbered	Aug 1962	Report of Mobility Consultants Conference, Waterways Experiment Station, Vicksburg, Mississippi, 13-15 June 1962	
MP 4-528	Sep 1962	Documentation of Conditions Attendant to Army Tactical Mobility Requirements (Howze) Board Testing	AD 744 213
MP 4-535	Oct 1962	A Technique for Estimating the Slope-Climbing Ability of Wheeled Vehicles in Sand	AD 744 214
MP 4-547	Jan 1963	Identifying Soil Parameters with an Infrared Spectrophotometer	AD 744 220
* MP 4-549	Feb 1963	Evaluation of Airstrip at Binh Hung, South Vietnam	AD 908 325L
MP 4-556	Jan 1963	Visit to Swamp Fox II Operation	
MP 3-592	Jul 1963	Terrain Evaluation for Mobility Purposes	AD 744 216
MP 4-594	Aug 1963	Visit to University of Illinois to Discuss Tropical Soils Studies	AD 744 217
MP 4-602	Oct 1963	Study of the Characteristics of Rice Fields in the United States	AD 744 215
MP 3-610	Dec 1963	Military Evaluation of Geographic Areas, Reports on Activities to April 1963	AD 450 616

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-621	Jul 1963	Speed Tests Conducted in Canada During Muskeg Trafficability Test Program, August 1962	AD 744 219
MP 4-623	Feb 1964	Comments on Mobility Research	AD 744 221
MP 4-626	Feb 1964 Revised Sep 1964	Theory for a Towed Wheel in Soil	AD 744 132
MP 4-629	Feb 1964	Normal Stresses at the Tire-Soil Interface in Yielding Soils	AD 744 224
MP 4-630	Feb 1964	Terrain Reconnaissance with Electromagnetic Sensors	
MP 4-638	Apr 1964	The Terrain-Vehicle Programs of the U. S. Army Engineer Waterways Experiment Station	AD 744 218
MP 4-647	Apr 1964	Variation in the Trafficability of Sands	
MP 4-651	May 1964	Tracks Versus Wheels in Soft Soil and Snow	AD 744 222
MP 4-652	May 1964	A Comparison of Quantitative Versus Nonquantitative Terrain Descriptive Systems for Mobility Analysis	AD 745 148
MP 4-670	Aug 1964	Report of Second Meeting of ARPA Advisory Committee on Mobility Environmental Research Study (24-26 February 1964, Vicksburg, Mississippi)	AD 478 994
MP 4-687	Dec 1964	Retention of Detail in Map Generalization, by E. E. Addor and W. E. Grabau	AD 745 149
MP 4-702	Feb 1965	Vicksburg Mobility Exercise A, Vehicle Analysis for Remote-Area Operation, by S. J. Knight	AD 613 366
MP 4-713	Mar 1965	Trafficability of Snow in Arctic and Subarctic Regions, by B. G. Schreiner	AD 745 150
MP 4-726		Mobility Environmental Research Study:	
	Jun 1965	Report 1 Selection and Description of Test Areas, U. S. Military Reservations, by H. K. Woods and J. H. Shamburger	AD 745 151
MP 4-743	Oct 1965	Tests to Evaluate the Mobility of Jiger and Fisher Vehicles, by M. P. Meyer	AD 901 950
MP 4-750	Nov 1965	Center-line Deflection of Pneumatic Tires Moving in Dry Sand, by D. R. Freitag and M. E. Smith	AD 745 152
MP 4-751	Nov 1965	Trafficability Tests with the Marsh Screw Amphibian, by S. J. Knight, E. S. Rush, and B. G. Stinson	AD 745 153
MP 4-757	Nov 1965	A Study of the Effects of Wet Surface Soil Conditions on the Performance of a Single Wheel, by J. L. Smith	AD 745 154

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-758	Dec 1965	Mechanics of Wheels on Soft Soils; A Method for Presenting Test Results, by E. M. Leflaive	AD 746 399
MP 4-766	Jan 1966	Tests with the CH-47A Chinook Helicopter in Soft Clay Soil, by E. S. Rush	AD 627 377
MP 4-767	Jan 1966	Effects of Air Surcharge on the Bearing Capacity of Soft Cohesive Soils, by L. J. Lanz	AD 630 804
MP 4-769	Dec 1965	Traffic Tests to Determine the Benefits of Vegetation in Increasing Traffic Coverages, by L. M. Womack	AD 746 622
MP 4-791	Feb 1966	Report of Conference of the Board of Consultants on Remote Terrain Analysis by Electromagnetic Means; Waterways Experiment Station, 18-19 November 1965	AD 747 095
MP 4-822	May 1966	Effects of Soil Layering on the Use of VHF Radio Waves for Remote Terrain Analysis, by H. J. Nikodem	AD 747 096
MP 4-823	May 1966	Laboratory Investigations of the Gamma-Ray Spectral Region for Remote Determination of Soil Trafficability Conditions, by A. N. Williamson	AD 747 097
MP 4-828	Jul 1966	Development of a Formula for Towing Resistance for a Wheel in Soft Soil, by J. L. McRae	AD 746 400
MP 4-829	Aug 1966	Comparison of Ground Mobility Characteristics of Land-Marine Interfaces of Florida and Thailand, by E. E. Garrett	AD 800 075
MP 4-835	Aug 1966	A Dimensional Analysis of the Performance of Pneumatic Tires on Clay, by D. R. Freitag	AD A032 707
MP 4-836	Aug 1966	A Dimensional Analysis of the Performance of Pneumatic Tires on Sand, by D. R. Freitag	AD 716 341
MP 4-838	Aug 1966	Variation in Trafficability of Four Loess Soils, by J. R. Bassett, A. R. McDaniel, and S. J. Knight	AD 800 144
MP 4-854	Nov 1966	Concepts for Vehicles for Off-Road Use in Remote Areas, by A. A. Rula, D. R. Freitag, and S. J. Knight	AD 746 401
MP 4-870	Feb 1967	Theory for Predicting Performance of a Wheel in Soft Soil, by J. L. McRae	
MP 4-879	Mar 1967	Trafficability Tests in Fine-Grained Soils with Two Vehicles with 9- to 10-Ton Wheel Loads, by E. S. Rush and R. G. Temple	AD 811 217
Unnumbered	Apr 1967	Report of Conference on Soil Trafficability Prediction, U. S. Army Engineer Waterways Experiment Station, 29-30 November 1966	AD A019 176

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-893	May 1967	Bumps and Grinds: Study in Body Motions, by W. G. Shockley	AD 747 098
MP 4-899	May 1967	Aerial Cone Penetrometer for Measuring the Trafficability of Soils, by S. J. Knight	AD 746 402
MP 4-909	Jul 1967	Special Site Description, Panama Canal Zone, by W. E. Grabau and B. O. Benn	AD 817 593
MP 4-917	Aug 1967	Trafficability Tests with a Two-Wheel-Drive Industrial Tractor, by E. S. Rush and B. G. Stinson	AD 819 857
MP 4-919	Aug 1967	Environmental Characteristics of Tunnels in South Vietnam, by E. E. Addor	AD 657 599
MP 4-921	Aug 1967	A Suggested Procedure for the Selection and Description of Reference Test Areas, by W. E. Grabau	AD 658 659
* MP 4-940	Oct 1967	Soil Buildup Between Wheels and Sponson of XM759 Logistical Carrier, by E. S. Rush	AD 902 843L
MP 4-942	Oct 1967	Effects of Tread Pattern on the Surface Traction of Terra-Tires, by J. L. Smith	AD 747 099
MP 4-944	Nov 1967	A Qualitative Approach to the Pneumatic Tire-Soft Soil System, by L. M. Kraft	AD 823 995
MP 4-949	Dec 1967	Expedient Surface-Soil Sampling, by S. J. Knight and C. A. Blackmon	AD 746 350
MP 4-950	Dec 1967	A Limited Study of Effects of Soil Strength on Walking Speed, by E. S. Rush and A. A. Rula	AD 746 403
MP 4-959	Jan 1968	Application of Trafficability Analysis to Forestry, by D. R. Freitag and B. Y. Richardson	AD 746 404
MP 4-960	Jan 1968	Penetration Tests for Soil Measurements, by D. R. Freitag	AD A032 708
MP 4-961	Jan 1968	Summary of Comparison of Engineering Properties of Selected Temperate and Tropical Surface Soils, by M. P. Meyer	AU 746 757
MP 4-979	Mar 1968	Report of Second Meeting, Vicksburg Mobility Exercise A, Design of Field Test Program (8-10 February 1967, Vicksburg, Mississippi)	AD A019 174
MP 4-982	Mar 1968	A Quantitative Description of Vegetation on Two Sites in the Rain Forest of Puerto Rico, by W. N. Rushing	AD 833 734
MP 4-986	Apr 1968	Gamma-Ray Measurements to Evaluate Soil Properties, by A. N. Williamson	AD A032 709

\* Statement B. See Preface.



## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP M-68-1	Aug 1968	Effects of Test Techniques on Wheel Performance, by N. R. Murphy and A. J. Green	AD 746 758
MP M-68-2	Aug 1968	Description and Comparison of Tire Performance in Sand in Terms of Energy Parameters, by E. M. Leflaive	AD 746 759
MP M-68-3	Sep 1968	A Computer Method for Determining Upper Canopy Closure at El Verde, Puerto Rico, by A. P. Desmarais	AD 841 803
MP M-68-4	Sep 1968	Trafficability Tests with Major/Minor Wheel Vehicle Equipped with 16x14.5-6 Tires, by J. H. Robinson and E. S. Rush	AD 841 855
MP M-68-5	Dec 1968	Simulating Dynamic Ride Characteristics of Pneumatic Tires, by A. S. Lessem	AD A032 894
MP M-68-6	Dec 1968	Stress-Displacement Relations and Terrain-Vehicle Mechanics: A Critical Discussion, by K. W. Wiendieck	AD A040 177
MP M-68-7	Dec 1968	A Mathematical Model for Traversal of Rigid Obstacles by a Pneumatic Tire, by A. S. Lessem and A. J. Green	AD A032 896
MP M-68-8	Dec 1968	A Theoretical Evaluation of the Shear-to-Normal Stress Ratio at the Soil-Wheel Interface, by K. W. Wiendieck	AD A040 176
MP M-69-1	Jan 1969	Trafficability Tests with a Rubber-Tired Log Skidder, by J. H. Robinson, R. P. Smith, and B. Y. Richardson	AD 848 416
MP M-69-2	Jun 1969	Vehicle Dynamics Research at Waterways Experiment Station, by A. J. Green and G. G. Switzer	AD 746 760
MP M-69-3	Aug 1969	Effects of Cesium <sup>137</sup> Irradiation on Vegetation Structure and Optical Density at El Verde, Puerto Rico, by A. P. Desmarais and B. T. Helmuth	AD 860 631
MP M-69-4	Sep 1969	Limited Trafficability Tests with Major/Minor Wheel Vehicle Equipped with 20x14-10 Tires, by R. P. Smith and J. H. Robinson	AD 859 719
MP M-69-5		Utility Carrier Development Program:	
	Oct 1969	Report 1 Limited Study of Effects of Jungle Trail Characteristics on Performance of Selected Self-Propelled Vehicles, by E. S. Rush	AD 753 427
*	Oct 1969	Report 2 Limited Study of Effects of Vegetation Characteristics on Performance of Selected Self-Propelled Vehicles, by T. D. Hutto, J. L. Decell, and A. A. Rula	AD 902 842L
MP M-69-6	Dec 1969	The Role of Ground Crawling Vehicles in the Ocean, by K. W. Wiendieck and D. R. Freitag	AD A032 898

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP M-69-7	Dec 1969	Effects of Cone Velocity and Size on Soil Penetration Resistance, by G. W. Turnage and D. R. Freitag	AD A032 899
MP M-69-8	Dec 1969	A General Theory of Stresses and Displacements in Elastic and Viscoelastic Layered Systems, by Yu-Tang Chou	AD A032 900
MP M-70-1	Mar 1970	A Comparison of Environments of Rain Forests in Dominica and Puerto Rico, by M. Soriano-Ressy, A. P. Desmarais, and J. W. Perez	AD A032 901
* MP M-70-2	Apr 1970	Worldwide Strength Conditions of Surface Materials, by W. P. Bohnert and M. P. Meyer	AD 869 490L
MP M-70-3	May 1970	Aerial Infrared Survey of the Walter F. George Lock and Dam, Chattahoochee River, Alabama-Georgia, by L. E. Link	AD A032 902
MP M-70-4	May 1970	Performance Evaluation of Wheels for Lunar Vehicles (Summary Report), by D. R. Freitag, A. J. Green, and K.-J. Melzer	AD 705 570
* MP M-70-5	May 1970	Environmental Characteristics of Border Security Sites in Puerto Rico, by M. Soriano-Ressy, J. R. Lundien, and W. N. Rushing	AD 8017 262L
MP M-70-6	May 1970	Effect of Pressure Distribution Under Pneumatic Tires on Stresses and Displacements in the Supporting Elastic Media, by Y. T. Chou	AD A032 903
MP M-70-7	Sep 1970	A Plan for Quantitative Evaluation of the Cross-Country Performance of Prototype Vehicles, by W. E. Grabau, J. K. Stoll, and B. G. Stinson	AD 877 016
MP M-70-8	Dec 1970	Tests with an Experimental Wheel on Clay, by K. W. Wiendieck	AD A032 904
* MP M-70-9	Dec 1970	Limited Performance Tests of the XM759, 1-1/2-Ton Logistical Carrier, Amphibious, by B. G. Schreiner and E. S. Rush	AD 879 172L
MP M-70-10	Dec 1970	Effects of Soil Surface Conditions on Drawbar Pull of a Wheeled Vehicle, by E. S. Rush	AD A032 961
MP M-71-1	Feb 1971	Standard Penetration Test and Relative Density, by K.-J. Melzer	AD A032 962
MP M-71-2	Feb 1971	Evaluating Penetration Tests in Clay from Measured Soil Particle Movements, by Y. T. Chou	AD A032 591

---

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP M-71-3	Feb 1971	The Performance of Two Boeing-GM Wheels (GM VII and GM VIII) for the Manned Lunar Rover Vehicle, by A. J. Green and K.-J. Melzer	AD A032 963
MP M-71-4	Mar 1971	Event Dial Pack; Project LN309: Effectiveness of Craters as Barriers to Mobility, by C. A. Blackmon and A. A. Rula	AD 720 986
MP M-71-5	Jun 1971	Utilization of Synthetic Soils in Engineering Research, by A. J. Green	AD A006 519
Unnumbered	Aug 1971	Report of Conference on Seismic Propagation Study, U. S. Army Engineer Waterways Experiment Station, 22 June 1971	AD 755 909
MP M-71-7	Nov 1971	Automation of Cross-Country Locomotion Model, by J. A. Parks and J. K. Stoll	AD A032 964
* MP M-72-1	Mar 1972	Automation of Model for Predicting the Clearing of Vegetation by Explosives for Helicopter Landing Zones (HLZ Model), by M. H. Smith	AD B007 718L
MP M-72-2	Apr 1972	Effect of Design Changes on Vehicle Performance; A Limited Study of the M35A2 (Modified) and the M113A1	AD A017 725
MP M-72-3	Apr 1972	Operations and Maintenance Manual for a Scale-Model Lunar Roving Vehicle, by A. S. Lessem	AD 757 392
MP M-72-4	Apr 1972	Effects of Environment on Seismic Intrusion Detector Performance; A Preliminary Report, by B. O. Benn and L. E. Link	AD 894 404
MP M-72-5	May 1972	Evaluation of Surface Shear Strength Measurements for Use in Laboratory Mobility Studies, by T. R. Patin	AD 743 167
Unnumbered	May 1972	Report of Second Conference on Seismic Propagation Study, U. S. Army Research Office, 15 December 1971	
MP M-72-6	Jul 1972	A Method for Producing Quantitatively Based Military Geographic Intelligence Products for an Airmobile Division, by J. L. Decell, W. E. Grabau, B. O. Benn, J. K. Stoll, and B. G. Stinson	AD 756 191
MP M-72-7	Oct 1972	A System for Measuring Tree or Stand Productivity for Use in the Management of Forest Lands, by H. H. Allen and H. W. West	AD 757 388
MP M-72-8	Nov 1972	Ground Truth Requirements for Remote Sensor Data Acquisition and Analysis, by L. E. Link	AD 752 420
	Nov 1972	Errata Sheet No. 1	
	Jan 1973	Errata Sheet No. 2	

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP M-72-9	Dec 1972	Overt Ecologic Effects of Ejecta from Nuclear Excavation, Proposed Interoceanic Canal Route 25, by E. E. Addor	
MP M-73-1	Jan 1973	Automation of a Model for Predicting Soil Moisture and Soil Strength (SMSP Model), by M. H. Smith and M. P. Meyer	AD 755 095
MP M-73-2	Apr 1973	Power Requirements for Wheels Operating in Fine-Grained Soils, by K.-J. Melzer	AD 759 501
MP M-73-3	Apr 1973	Site Characterization of Vehicle Signature Study Sites, General Motors Proving Grounds, Milford, Michigan, by J. R. Curro, Jr.	AD 760 431
MP M-73-4	May 1973	Suggested Method for Application of the WES VCI/RCI Criteria to Helicopters and Related Ground Support Equipment, by E. S. Rush	AD A017 731
MP M-73-5	Jun 1973	Event Mixed Company III; Project LN305: Effectiveness of Craters as Barriers to Mobility, by C. E. Green	AD 910 627
MP M-73-6	May 1973	Project DIAMOND ORE; Phase IIA: Effectiveness of Craters as Barriers to Mobility, by C. A. Blackmon and C. E. Green	AD A017 726
MP M-73-7	May 1973	Analysis of the Ability of a Laser Profilometer System to Evaluate Unprepared Landing Sites, by L. E. Link, Jr.	AD 763 180
MP M-73-8	Jun 1973	Characterizing Vegetation from Existing Source Material for Predicting Munition Height of Burst in Inaccessible Areas, by H. H. Allen and J. G. Collins	AD 763 179
MP M-73-9	Jun 1973	Environmental Characteristics at Line Sensor Sites, Woodbridge and Fort Belvoir, Virginia, by C. A. Miller	AD A012 631
* MP M-73-10	Jun 1973	Munition Burst Probability as Related to Vegetation, Fuze, and Munition Trajectory Characteristics, by J. G. Collins and H. H. Allen	AD 911 691L
MP M-73-11	Aug 1973	The Use of Remote Sensing Techniques for Detection and Identification of Pollutant Discharges, by L. E. Link, Jr.	AD A017 727
MP M-73-12	Sep 1973	Generation and Propagation of Microseismic Signals from Footsteps, by J. R. Lundien and B. O. Benn	AD A029 380
MP M-73-13	Sep 1973	Water Hyacinth Research in Puerto Rico, by W. N. Rushing	AD A032 970
* MP M-73-14	Sep 1973	Vehicle Mobility Assessment of Munitions Transfer Truck on Selected Areal Terrains, by B. G. Schreiner and W. E. Willoughby	AD B007 716L

---

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* Unnumbered	Nov 1973	Report of Third Program Review of Seismic Sensor Systems Investigation	AD A017 728
MP M-73-15	Dec 1973	The Effect of Military Transportation Activities on the Environment, by A. J. Green, D. D. Randolph, and A. A. Rula	AD A032 971
MP M-73-16	Dec 1973	Prediction of Aircraft Ground Performance by Evaluation of Ground Vehicle Rut Depths, by G. W. Turnage and D. N. Brown	AD 775 744
Unnumbered	Mar 1974	Terrain Analysis for the Armored Reconnaissance Scout Vehicle Test Program, by D. D. Randolph and C. A. Blackmon	AD 776 387
MP M-74-1	Apr 1974	A Limited Study of the Performance of an Interim 3/4-Ton Wheel/Track Convertible Test Rig, Houghton, Michigan, and Vicksburg, Mississippi, by W. E. Willoughby	AD A032 972
MP M-74-2	May 1974	Remote-Sensing Practice and Potential, by A. N. Williamson, W. K. Dornbusch, and W. E. Grabau	AD A035 977
* MP M-74-3	May 1974	A Preliminary Study of Scale-Model Bulldozer Blades	AD B017 264L
Unnumbered	May 1974	Report of Symposium on the Design, Testing, and Deployment of Unattended Ground Sensors, U. S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi, 11-12 September 1973	AD 780 752
* MP M-74-4	Jun 1974	Experimental Study of Tripline Deployments in Selected Environments at Jefferson Proving Ground, Indiana, by H. W. West and V. E. LaGarde	AD 920 453L
MP M-74-5	Sep 1974	Beach Trafficability Testing with Off-Road Materials Handling Equipment, Anzio Beach, Little Creek, Virginia, by E. S. Rush	AD A017 723
* MP M-74-6	Aug 1974	Mobility Validation Test Results for the Armored Reconnaissance Scout and Comparison Vehicles, by W. E. Willoughby and B. G. Schreiner	AD B003 764L
MP M-74-7	Sep 1974	Characterization of Selected Road Sections in Western United States, by A. A. Rula and J. H. Robinson	AD A018 289
MP M-74-8	Oct 1974	Mapping of Selected ARSV Test Courses at Fort Knox, Kentucky, and Comparison with Other Selected Terrains, by D. D. Randolph	AD A001 520
MP M-75-1	Jan 1975	A Possible Decision Structure for Environmental Management, by W. E. Grabau and B. O. Benn	AD A005 147
MP M-75-2	Jan 1975	A Guide for Collecting Seismic, Acoustic, and Magnetic Data for Multiple Uses, by B. O. Benn and P. A. Smith (includes Appendix A)	AD A005 148

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP M-75-3	Apr 1975	PROJECT ESSEX I, Phase 1, Mobility Experiments, by C. E. Green	AD A011 493
* MP M-75-4	May 1975	Terrain Description, Vehicle Mobility, and Cover and Concealment Characteristics for the Bushmaster Middle East and Europe Scenarios: A Qualitative Assessment, by H. W. West and B. G. Schreiner	AD B005 325L
MP M-75-5	Jun 1975	Comparison of the Ride Qualities of Standard M60A1 and Hybrid (Tube-Over-Bar) M60A1E3 Tanks, by N. R. Murphy, Jr., and J. H. Robinson (includes Appendix A)	AD A013 986
* MP M-75-6	May 1975	An Experiment in Fixed-Installation Camouflage, Aircraft Shelter Complex at Eglin Air Force Base, Florida, by T. L. Engdahl and W. N. Rushing (includes Appendix A)	AD B005 510L
MP M-75-7	Jun 1975	WES Papers Presented at 5th International Conference, International Society for Terrain-Vehicle Systems, June 2-6, 1975, Detroit-Houghton, Michigan	AD A012 653
MP M-75-8	Aug 1975	Estimating the Performance Capability of 50,000-Lb-Capacity Container Handler on Beach and Desert Sands, by E. S. Rush and G. N. Durham (includes Appendix A)	AD A014 273
* MP M-75-9	Sep 1975	Terrain Characteristics Data Acquisition Study at Fort Bragg, North Carolina, by T. L. Engdahl (includes Appendix A)	AD B014 780L
MP M-75-10	Nov 1975	Rationale and Plan for Field Data Acquisition Required for the Rational Design and Evaluation of Seismic and Acoustic Classifying Sensors, by B. O. Benn	AD A018 346
MP M-76-1	Feb 1976	Preliminary Tests of Gloss-Reduction and Coloring Agents for Camouflage of Polyvinyl Acetate Dust-Control Film, by C. R. Styron III and E. E. Addor	AD A021 652
* MP M-76-2	Feb 1976	Limited Evaluation of Vertical-Cut Belt Loader in Overburden Removal and Surface Mining of Coal, by E. S. Rush and J. R. Sargeant	AD B009 657L
MP M-76-3	Feb 1976	Terrain Constraints on the Design, Testing, and Deployment of the GATOR Mine, by J. R. Lundien (includes Appendix A)	AD B010 050
Unnumbered	Feb 1976	Dictionary of Unique Terms of Remotely Monitored Battlefield Sensor System (REMBASS) and Related Sensor Systems	AD A021 583
MP M-76-4	Mar 1976	Feasibility of Using Large Tractor Dozers in the Surface Mining of Coal and the Reclamation of Mined Areas, by E. S. Rush and W. E. Willoughby (includes Appendixes A-D)	AD A022 852

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP M-76-5	Apr 1976	Computer-Calculated Tank-Defender Intervisibility on Hunter-Liggett Military Reservation Sites Alpha and Bravo, by V. E. LaGarde and T. D. Hutto	AD A023 211
MP M-76-6	Mar 1976	Comparison of the Ride and Mobility Characteristics of Selected Commercial 1/4- to 3/4-Ton Vehicles and the Military M151A2 Utility Truck, by D. D. Randolph (includes Appendixes A-B)	AD A022 853
* MP M-76-7	Mar 1976	Project ESSEX I, Phase 2, Mobility Experiments, by C. E. Green	AD B010 489L
MP M-76-8	Apr 1976	Air-Photo Analysis of Armor Stones on Cleveland Dikes, by L. E. Link, Jr. (includes Appendix A)	AD A024 066
MP M-76-9	May 1976	Pixel Problems, by W. E. Grabau	AD A026 598
MP M-76-10	May 1976	Feasibility of Monitoring Flow Patterns and Sediment and Pollutant Dispersion of Water Bodies with 24-Channel Spectral Data, by M. H. Smith	AD A025 333
* MP M-76-11	Jun 1976	Terrain Description, Cover and Concealment Calculations, and Vehicle Speed Predictions for AMORES, by T. D. Hutto and H. W. West	AD B011 942L
MP M-76-12	Jun 1976	A Concept for Constructing Vegetation Physiognomy, by W. E. Grabau	AD A026 261
MP M-76-13	Jun 1976	Seismic Methods of Locating Military Ground Targets, by D. H. Cress (includes Appendixes A-C)	AD A027 369
MP M-76-14	Jun 1976	Demonstration of a New Technique for Rapidly Surveying Roof Moisture, by L. E. Link, Jr.	AD A026 722
MP M-76-15	Aug 1976	A Study of Impact and Penetration of the Gator Mine in Earth Materials, by J. R. Lundien and C. A. Miller	AD B012 007
* MP M-76-16	Jul 1976	A Technique for Achieving Geometric Accordance of LANDSAT Digital Data, by J. G. Kennedy and A. N. Williamson (includes Appendixes A-C)	AD B013 354L
MP M-76-17	Aug 1976	Performance of Towed Wheels Operating in Turned Mode on Soft Soils--A Pilot Study, by K.-J. Melzer	AD A028 909
* MP M-76-18	Oct 1976	Preliminary Evaluation of the Ability of the C-12A Aircraft to Operate Safely on Substandard Airstrips, by G. M. Durham and N. R. Murphy, Jr. (includes Appendixes A-B)	AD B014 711L
* MP M-76-20	Nov 1976	Constraints of Terrain on Deployment of Patriot Systems, by M. M. Culpepper	AD B015 851L

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP M-76-21	Dec 1976	Camouflage Materials for Fixed-Installation Concealment, by T. L. Engdahl (includes Appendixes A-C)	AD A033 933
MP M-76-22	Dec 1976	Water-Quality and Rainfall Data Collected with Automated Field Station, Fort McClellan, Alabama, by M. H. Smith, H. M. Floyd, and H. W. West	AD A035 825
MP M-77-1	Jan 1977	Mobility Performance of Towed and Self-Propelled Artillery and Related Vehicles, by D. D. Randolph and J. H. Robinson (includes Appendixes A-G)	AD A036 188
MP M-77-2	Jan 1977	Roof Moisture Surveys at Pease AFB, New Hampshire, and Offutt AFB, Nebraska, by L. E. Link, Jr.	AD A036 090
* MP M-77-3	Mar 1977	Ride and Shock Test Results for the Leopard 2 AV Tank, by B. G. Schreiner	AD B017 429L
* MP M-77-4	Mar 1977	Mobility Test Results for the West German 7-Ton MAN 6X6 Cargo Truck and 10-Ton MAN 8X8 Cargo Truck, by B. G. Schreiner	AD B017 533L
MP M-77-5	Apr 1977	Environmental Data Collected with Automated Field Station at the Upper Blakeley Island Disposal Area, Mobile, Alabama, by M. H. Smith, H. M. Floyd, and H. W. West	AD A040 004
MP M-77-6	Apr 1977	Characterization of Selected Areas for Evaluation of Performance of the XM718/741 Remote Anti-Armor Mine System (RAAMS), by A. A. Rula and Behzad Rohani (includes Appendixes A-B)	
MP M-77-8	Jun 1977	Soil/Terrain Evaluation of Representative Test Areas, Hunter-Liggett Military Reservation, California, by A. A. Rula	AD A042 523
* MP M-77-9	Jul 1977	Ride and Shock Test Results for the M60A1, XM-1 Chrysler, and XM-1 General Motors Tanks, by B. G. Schreiner	AD B020 475L
MP M-77-10	Jul 1977	Survey of Relative Hardness of Selected Impact Areas, Yuma Proving Ground, Arizona, by A. A. Rula and Behzad Rohani	AD A042 310
MP M-77-11	Sep 1977	Description of Terrain to be Used in Evaluating the Lofted Mine Concept, by E. E. Addor and E. E. Garrett	AD A046 157
MP M-77-12	Sep 1977	Event DICE THROW Mobility Experiments, by C. E. Green	AD A046 146
MP M-77-13	Sep 1977	Terrain Characteristics at Gator Mine Impact and Penetration Test Sites, Aberdeen Proving Ground, Maryland, by C. E. Green	AD A046 540

\* Statement B. See Preface.



## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* Unnumbered	Oct 1977	Report of Second Symposium on the Design, Testing, and Deployment of Unattended Ground Sensors, U. S. Army Engineer Waterways Experiment Station, Vicksburg, Miss., 11-12 May 1976	AD B023 097L
MP M-77-14	Nov 1977	An Example of Applying Remote Sensing to a Corps of Engineers Archeological Problem, by L. E. Link, Jr.	AD A048 106
MP M-78-1	Jan 1978	Status Report for Selection of Sites for Background Noise Signature Data Base Development, by M. A. Zappi	AD A051 316
* MP M-78-2	Feb 1978	Experimental and Analytical Study of Tripline Performances, by H. W. West and V. E. LaGarde	AD B026 148L
* MP M-78-3	Feb 1978	A Limited Study of Surface Treatments to Impede Vehicle Mobility, by B. G. Schreiner	AD B026 017L
MP M-78-4	Feb 1978	Innovations in Digital Image Processing, by A. N. Williamson	AD A082 048
MP M-78-5	Mar 1978	Limited Evaluation of Experimental and Standard Tractor Dozer Blades, by E. S. Rush, B. G. Schreiner, and W. E. Willoughby (includes Appendixes A-B)	AD A053 767
MP M-78-6	Jun 1978	Preinstallation Survey Guide for Maid-Miles System, by C. A. Miller (includes Appendix A)	AD A056 703
* MP M-78-7	Jun 1978	Comparative Evaluation of Ride Associated with Normal, Prone, and Supine Seating in a Light Combat Vehicle, by G. G. Switzer	AD B027 949L
* MP M-78-8	Jul 1978	Mobility Performance Evaluations of Three Off-Road Materials Handling Vehicles, Anzio Beach, Little Creek, Virginia, by J. H. Robinson	AD B033 601L
MP M-78-9	Aug 1978	Mobility Performance of Selected 1-1/4- to 5-Ton Cargo Trucks in the HIMO West Germany Study Area (TACV Excursion), by D. D. Randolph (includes Appendixes A-C)	AD A060 324
MP M-78-10	Nov 1978	Mobility Performance of 1/4- to 10-Ton Tactical Trucks and Cargo Carriers in the HIMO West Germany Study Area (TACV Study), by D. D. Randolph (includes Appendixes A-C)	AD A062 455

---

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
Unnumbered	Sep 1945	Trafficability of Soils	
TM 3-240	Nov 1947	Trafficability of Soils; Pilot Tests, Self-Propelled Vehicles	AD 108 278
	Mar 1948	Supplement 1 Laboratory Tests to Determine Effects of Moisture Content and Density Variations	AD 108 279
	Aug 1948	Supplement 2 Trafficability Studies - Fort Churchill, Summer 1947	AD 108 280
	Oct 1948	Supplement 3 Development of Testing Instruments	AD 108 451
	Apr 1949	Supplement 4 Tests on Self-Propelled Vehicles, Yuma, Arizona, 1947	AD 108 452
	May 1949	Supplement 5 Analysis of Existing Data	AD 108 453
	Sep 1949	Supplement 6 Tests on Self-Propelled Vehicles, Vicksburg, Mississippi, 1947	AD 038 092
	Jun 1950	Supplement 7 Tests on Towed Vehicles, 1947-1948	AD 108 454
	May 1951	Supplement 8 Slope Studies	AD 108 455
	May 1951	Supplement 9 Vehicle Classification	
	Jan 1954	Supplement 10 Tests on Natural Soils with Self-Propelled Vehicles, 1949 and 1950	AD 034 076
	Aug 1954	Supplement 11 Superseded by Supplement 16	
	Nov 1954	Supplement 12 Tests on Natural Soils with Self-Propelled Vehicles, 1951-1953	AD 052 206
	Nov 1955	Supplement 13 Pilot Study, Tests on Coarse-Grained Soils	AD 082 187
	Dec 1956	Supplement 14 A Summary of Trafficability Studies Through 1955	AD 121 975
	Jun 1959	Supplement 15 Tests on Coarse-Grained Soils with Self-Propelled and Towed Vehicles, 1956 and 1957	AD 218 089
	Aug 1961	Supplement 16 Soil Classification	AD 265 743
	May 1963	Supplement 17 Tests on Coarse-Grained Soils with Self-Propelled and Towed Vehicles, 1958-1961	AD 409 691

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 3-240 (Cont)	Mar 1968	Supplement 18 Development of Revised Mobility Index Formula for Self-Propelled Wheeled Vehicles in Fine-Grained Soils, by J. G. Kennedy and E. S. Rush	AD 832 912
	Apr 1971	Supplement 19 Effects of Surface Conditions on Draw-bar Pull of a Wheeled Vehicle, by E. S. Rush and J. H. Robinson	AD 723 406
	Apr 1974	Supplement 20 Development of Vehicle Performance Prediction Equations and Classification System for Coarse-Grained Soils, by J. G. Kennedy	AD 778 717
TM 3-331		Forecasting Trafficability of Soils:	
	Oct 1951	Report 1 Meteorological and Soil Data, Vicksburg, Mississippi, 1948-1949	
	Jun 1952	Report 2 Meteorological and Soil Data, Vicksburg, Mississippi, 1949-1951	AD A950 030
		Report 3 The Development of Methods for Predicting Soil Moisture Content:	
	Oct 1954	Volume 1 Summary Report	AD 053 867
	Oct 1954	Volume 2 Prediction Sites at Vicksburg, Miss.	AD 053 868
	Oct 1954	Volume 3 Prediction Sites at Other Locations and Related Studies	AD 053 869
	Oct 1954	Appendix Special Studies and Records of Soil Moisture and Weather	AD 053 870
	Feb 1957	Report 4 Information for Predicting Moisture in the Surface Foot of Various Soils	AD A950 084
	Jun 1959	Report 5 Development and Testing of Some Average Relations for Predicting Soil Moisture	AD 218 088
		Report 6 Airphoto Approach:	
	Jun 1963	Volume I	AD 409 916
	Jun 1963	Volume II	AD 410 212
	Jun 1964	Report 7 A Pilot Study of Soils Subjected to Freezing and Thawing	AD 450 626
	Dec 1967	Report 8 Variability of Physical Properties of Loess Soils, Warren County, Mississippi, by C. A. Carlson and A. R. McDaniel	AD 824 443

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 3-331 (Cont)	Jul 1968	Report 9 Water Table Study at Crossett, Arkansas, by J. R. Bassett and M. P. Meyer	AD 838 517
	Jul 1971	Report 10 Relations of Strength to Other Properties of Fine-Grained Soils and Sands with Fines, by J. G. Collins	AD 728 814
TM 3-414		Trafficability of Snow:	
	Aug 1955	Report 1 Vehicles in Snow: A Critical Review of the State of the Art	
	Aug 1955	Report 2 Greenland Studies, 1954	AD 082 188
	May 1960	Report 3 Greenland Studies, 1955 and 1957	AD 239 552 AD 756 111
	Dec 1960	Report 4 Tests on Subarctic Snow	AD 266 508 AD A950 085

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-462		Studies of Aerial Cone Penetrometer:	
	Jul 1957	Report 1 Laboratory Study of Mechanical Principles	AD 138 265
	Apr 1958	Report 2 Field Tests	AD 161 067
	Aug 1963	Report 3 Field Tests in Fine-Grained Soils, 1960	AD 450 613
	Jun 1970	Report 4 Impact Velocity-Impact Force Investigations, 1968, by J. G. Kennedy	AD 871 005
TR 3-505		Approach Roads:	
	Jun 1959	Report 1 Greenland 1955 Program	AD 712 512
	Apr 1963	Report 2 Greenland 1956-1957 Program	AD 404 483
TR 3-516		Deflection of Moving Tires:	
	Jul 1959	Report 1 A Pilot Study on a 12x22.5 Tubeless Tire	AD 219 384
	Aug 1961	Report 2 Tests with a 12.00-22.5 Tubeless Tire on Asphaltic Concrete, Sand, and Silt, 1959-1960	AD 265 742
	May 1965	Report 3 Center-line Deflection Studies Through July 1963, by M. E. Smith and D. R. Freitag	AD 615 510
TR 3-545		Stresses Under Moving Vehicles:	
		Report 1 in this series was published as Miscellaneous Paper No. 4-230	
	May 1960	Report 2 Wheeled Vehicles (M135), Lean and Fat Clay, 1957	AD 238 973
	Jul 1960	Report 3 Tracked Vehicles (M29C, D4, and D7) on Fat Clay, 1956	AD 241 537
	Jul 1964	Report 4 Distribution of Stresses on an Unyielding Surface Beneath Stationary and Towed Pneumatic Tires	AD 450 620
	Jul 1965	Report 5 Distribution of Stresses Beneath a Towed Pneumatic Tire in Air-Dry Sand, by A. J. Green and N. R. Murphy	AD 468 723
TR 3-565		Tests with Rigid Wheels:	
	May 1961	Report 1 Tests in Fat Clay, 1958	AD 266 510
TR 3-609	Aug 1962	Operation Swamp Fox I, Terrain and Soil Trafficability Observations	AD 290 529

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 5-625	May 1963	Environmental Factors Affecting Ground Mobility in Thailand; Preliminary Survey	AD 411 528
	May 1963	Appendix A Results of Survey of Existing Data and Literature	AD 411 530
	May 1963	Appendix B Soil Classification	AD 411 533
	May 1963	Appendix C Soil Trafficability	AD 411 534
	May 1963	Appendix D Vegetation	AD 411 531
	May 1963	Appendix E Surface Geometry	AD 411 529
	May 1963	Appendix F Hydrologic Geometry	AD 413 984
	May 1963	Appendix G Weather and Climate	AD 411 532
	May 1963	Appendix H Evaluation of Road Observations	AD 411 535
TR 3-639	Jan 1964	Strength-Moisture-Density Relations of Fine-Grained Soils in Vehicle Mobility Research	AD 450 623
TR 3-641	Jan 1964	Trafficability Tests with the Marsh Screw Amphibian on Coarse-Grained and Fine-Grained Soils	AD 450 621
TR 3-652		Measuring Soil Properties in Vehicle Mobility Research:	
	Aug 1964	Report 1 Strength-Density Relations of an Air-Dry Sand	AD 450 614
	Oct 1965	Report 2 An Evaluation of the Rectangular Hyperbola for Describing the Load-Deformation Response of Soils, by N. R. Murphy	AD 625 737
	Nov 1970	Report 3 Effects of Velocity, Size and Shape of Probes on Penetration Resistance of Fine-Grained Soils, by G. W. Turnage	AD 878 789
	Jul 1971	Report 4 Relative Density and Cone Penetration Resistance, by K.-J. Melzer	AD 729 367
	Jun 1973	Report 5 Resistance of Fine-Grained Soils to High-Speed Penetration, by G. W. Turnage	AD 763 184
	Jul 1974	Report 6 Resistance of Coarse-Grained Soils to High-Speed Penetration, by G. W. Turnage	AD 781 991
	Jun 1975	Report 7 Behavior of Fine-Grained Soils Under High-Speed Tire Loads, by G. W. Turnage	AD A012 146
TR 3-656		Trafficability Tests on Confined Organic Terrain (Muskeg):	
	Sep 1964	Report 1 Summer 1961 Tests, by N. W. Radforth and E. S. Rush	AD 450 618

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-656 (Cont)		Report 2 Summer 1962 Tests, by E. S. Rush, B. G. Schreiner, and N. W. Radforth	
	Dec 1965	Volume I	AD 629 522
	Dec 1965	Volume II	AD 735 773
TR 3-666		Performance of Soils Under Tire Loads:	
	Jan 1965	Report 1 Test Facilities and Techniques, by J. L. McRae, C. J. Powell, and R. D. Wismer	AD 456 426
	Aug 1965	Report 2 Analysis of Tests in Yuma Sand Through August 1962, by C. J. Powell and A. J. Green	AD 621 045
	Feb 1966	Report 3 Tests in Clay Through November 1962, by R. D. Wismer	AD 631 029
	Feb 1966	Report 4 Analysis of Tests in Sand from September 1962 Through November 1963, by G. W. Turnage and A. J. Green	AD 632 245
	Jul 1967	Report 5 Development and Evaluation of Mobility Numbers for Coarse-Grained Soils, by A. J. Green	AD 817 122
	Oct 1967	Report 6 Effects of Test Techniques on Wheel Performance, by N. R. Murphy	AD 823 500
	Apr 1972	Report 7 Extension of Mobility Prediction Procedures to Rectangular-Cross-Section Tires in Coarse-Grained Soil, by T. R. Patin	AD 741 770
	Sep 1972	Report 8 Application of Test Results to Tire Selection for Off-Road Vehicles, by G. W. Turnage	AD 751 750
TR 3-670	Jan 1965	Wheels on Soft Soils; An Analysis of Existing Data, by D. R. Freitag	AD 457 877
TR 3-681		Mobility Environmental Research Study:	
	Jun 1965	Report 1 A Literature Survey of Environmental Factors in Thailand, by J. D. Broughton, J. H. Shamburger, and D. B. Del Mar	AD 620 030
TR 3-688	Aug 1965	A Dimensional Analysis of the Performance of Pneumatic Tires on Soft Soils, by D. R. Freitag	AD 621 955
TR 3-693		Terrain Analysis by Electromagnetic Means:	
	Oct 1965	Report 1 Laboratory Investigations in the 0.76- to 5.00-Micron Spectral, by B. R. Davis, E. B. Lipscomb, and S. J. Knight	AD 472 873

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-693 (Cont)	Sep 1966	Report 2 Radar Responses to Laboratory Prepared Soil Samples, by J. R. Lundien	AD 802 104
	Nov 1967	Report 3 Laboratory Investigations in the 0- to 2.82-Mev Gamma-Ray Spectral Region, by J. R. Lundien	AD 825 172
	May 1967	Report 4 Laboratory Investigations of the Infrared Emissivity of Soils Below a Wavelength of 7.7 Microns, by N. J. Lavecchia, A. N. Williamson, and H. J. Nikodem	AD 815 453
	Feb 1971	Report 5 Laboratory Measurement of Electromagnetic Propagation Constants in the 1.0- to 1.5-GHz Microwave Spectral Region, by J. R. Lundien	AD 881 799
TR 3-702	Dec 1965	Characteristics of U. S. Rice Fields and Their Effects on Ground Mobility, by J. G. Kennedy and E. S. Rush	AD 628 734
TR 3-703	Nov 1965	A Study of the Effects of Wet Surface Soil Conditions on the Performance of a Single Pneumatic-Tired Wheel, by J. L. Smith	AD 625 390
TR 3-726		Mobility Environmental Research Study: A Quantitative Method for Describing Terrain for Ground Mobility:	
	May 1968	Volume I Summary, by J. H. Shamburger and W. E. Grabau	AD 835 392
	Jan 1968	Volume II Surface Composition, by R. C. Wright and J. R. Burns	AD 827 289
	Sep 1967	Volume III Surface Geometry, by W. K. Dornbusch	AD 820 788
	Mar 1968	Volume IV Vegetation, by J. D. Broughton and E. E. Addor	AD 830 134
	Nov 1967	Volume V Hydrologic Geometry, by E. E. Garrett and J. H. Shamburger	AD 827 290
	May 1966	Volume VI Selected Air-Photo Patterns of Terrain Features, by R. E. Frost, P. L. Johnson, R. D. Leighty, V. H. Anderson, A. C. Poulin, and J. N. Rinker	AD 484 656
	Apr 1968	Volume VII Development of Factor-Complex Maps for Ground Mobility, by W. K. Dornbusch	AD 833 829
	Jun 1966	Volume VIII Terrain Factor-Family Maps of Selected Areas	AD 487 500



## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-727	Apr 1966	Feasibility Study of the Use of Radar to Detect Surface and Ground Water, by B. R. Davis, J. R. Lundien, and A. N. Williamson	AD 483 864
TR 3-729	Jun 1966	Mechanics of Wheels on Soft Soils; A Method of Analyzing Test Results, by E. M. Leflaive	AD 485 854
	Nov 1967	Report 2 Effect of Width on Rigid Wheel Performance, by E. M. Leflaive	AD 824 232
TR 3-732	Jun 1966	Comparison of Engineering Properties of Selected Temperate and Tropical Surface Soils, by M. P. Meyer	AD 486 478
TR 3-744		Trafficability Tests on Unconfined Organic Terrain (Muskeg):	
	Nov 1966	Report 1 Summer 1963 Tests, by E. S. Rush and B. G. Schreiner	AD 865 328
TR 3-753	Jan 1967	Trafficability Classification of Thailand Soils, by M. P. Meyer	AD 808 540
TR 3-769	Mar 1967	Feasibility Study of the Use of Very High Frequency Radio Imaging Techniques for Detection of Tunnels, by H. J. Nikodem	AD 381 811
TR 3-783		An Analytical Model for Predicting Cross-Country Vehicle Performance:	
	Jul 1967	Appendix A Instrumentation of Test Vehicles, by B. O. Benn and Malcolm Keown	AD 817 532
		Appendix B Vehicle Performance in Lateral and Longitudinal Obstacles (Vegetation):	
	Dec 1968	Volume I Lateral Obstacles, by C. A. Blackmon and J. K. Stoll	AD 846 257
	Jul 1968	Volume II Longitudinal Obstacles, by C. A. Blackmon and D. D. Randolph	AD 838 872
	Feb 1972	Appendix C Vehicle Performance in Vertical Obstacles (Surface Geometry), by C. A. Blackmon and N. R. Murphy	AD 737 687
	Feb 1970	Appendix D Performance of Amphibious Vehicles in the Water-Land Interface (Hydrologic Geometry), by C. A. Blackmon, B. G. Stinson, and J. K. Stoll	AD 866 165
	Apr 1971	Appendix E Quantification of the Screening Effects of Vegetation on Driver's Vision and Vehicle Speed, by B. G. Stinson	AD 724 070
	Aug 1970	Appendix F Soil-Vehicle Relations on Soft Clay Soils (Surface Composition), by C. A. Blackmon	AD 875 612

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-790	Jul 1967	Pilot Study of Response of CV-2 Aircraft to Irregular Terrain, by A. J. Green and E. S. Rush	AD 818 980
TR 3-791		Moisture-Strength Characteristics of Selected Soils in Thailand:	
	Aug 1967	Volume I Analyses and Application of Data, by J. G. Kennedy, J. G. Collins, and M. H. Smith	AD 820 220
	Aug 1967	Volume II Basic Data, by J. G. Kennedy, J. G. Collins, and M. H. Smith	AD 820 221
* TR 3-808	Jan 1968	Evaluation of the Performance of the XM759 Logistical Carrier, by B. G. Schreiner and A. A. Rula	AD 826 114L
TR M-68-1		Dynamics of Wheeled Vehicles:	
	May 1968	Report 1 A Mathematical Model for the Traversal of Rigid Obstacles by a Pneumatic Tire, by A. S. Lessem (includes Appendix A)	AD 834 324
	Aug 1969	Appendix B Digital Implementation of Segmented Tire Model, by N. R. Murphy	AD 857 163
	Mar 1971	Report 2 Implementation of Wiener-Bose Theory and Application to Ride Dynamics, by A. S. Lessem	AD 723 403
	Apr 1971	Report 3 A Statistical Analysis of Terrain-Vehicle-Speed Systems, by N. R. Murphy	AD 723 405
	Mar 1972	Report 4 A Statistical Analysis of Obstacle-Vehicle-Speed Systems, by G. G. Switzer	AD 739 916
TR M-68-2	May 1968	Contribution to the Mechanics of Rigid Wheels on Sand, by K. W. Wiendieck	AD 833 871
TR M-69-1	Jan 1969	Vegetation Structural Characteristics at Selected Sites in the Panama Canal Zone and Thailand, by H. W. West	AD 848 404
TR M-69-2	May 1969	Improved Wheel Performance on Sand by Controlled Circumferential Rigidity, by K. W. Wiendieck	AD 688 876
TR M-69-3		Evaluation of Construction Munitions for Clearing Helicopter Landing Zones in Forested Areas, Project Combat Trap:	
*	Aug 1969	Report 1 Effects of Bomb Blast on Trees, by B. O. Benn, J. G. Collins, W. N. Rushing, and E. W. Eckard	AD 505 295L

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR M-70-1	Mar 1970	The Basic Sinkage Equations and Bearing Capacity Theories, by M. J. Hvorslev	AD 869 015
TR M-70-2	Mar 1970	Performance Evaluation of Wheels for Lunar Vehicles, by D. R. Freitag, A. J. Green, and K.-J. Melzer	AD 702 246
TR M-70-3	Mar 1970	Evaluation of WES Analytical Model in Selected Terrains (XM559E1 GOER Tests at Camp Gagetown, New Brunswick, Canada), by B. G. Stinson	AD A032 764
TR M-70-4	Mar 1970	Relative Off-Road Mobility Performance of Six Wheeled and Four Tracked Vehicles in Selected Terrain, by J. K. Stoll, D. D. Randolph, and A. A. Rula	AD A040 175
TR M-70-5	Apr 1970	Performance of Riverine Utility Craft (RUC) in Riverine Environments, by B. G. Schreiner, R. P. Smith, and C. E. Green	AD 869 011
TR M-70-6	Apr 1970	Quantitative Description of Selected West German Terrain for Ground Mobility, by H. K. Woods and J. H. Shamburger	AD A040 174
TR M-70-7		Evaluation of the Relative Off-Road Performance of 15 Vehicles in Synthalogous Theaters of Operation (STOP) Terrain Factor Complexes:	
	May 1970	Volume I Application of an Analytical Model for Predicting and Evaluating Vehicle Performance in STOP Terrain Factor Complexes; and Appendix A: Analytical Model for Predicting Cross-Country Vehicle Performance, by D. D. Randolph	AD A032 765
	May 1970	Volume II Appendix B: Vehicle Performance Predictions in Tropical Climate Theater; Appendix C: Vehicle Performance Predictions in Arid Climate Theater; Appendix D: Vehicle Performance Predictions in Temperature Climate Theater, by D. D. Randolph and R. H. Johnson	AD A032 836
TR M-70-8	Jul 1970	A Preliminary Study of Seafloor Trafficability and Its Prediction, by K. W. Wiendieck	AD 710 965
TR M-70-9	Jun 1970	A Mathematical Model for Predicting the First-Collision Probabilities of Spheres on Tree Branches and Stems, by H. J. Nikodem and H. W. West	AD 872 254
* TR M-70-10	Jul 1970	Relative Off-Road Mobility of MBT70 and M60A1E1 Tanks in Selected Terrains in West Germany, by A. A. Rula, C. A. Blackmon, B. G. Stinson, and J. K. Stoll	AD 511 150L

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR M-70-11		Mobility Exercise A (MEXA) Field Test Program:	
	Mar 1971	Report 2 Volume 1, Performance of MEXA and Three Military Vehicles in Soft Soil, by B. G. Schreiner	AD 883 199
	Jul 1970	Report 3 Performance of MEXA and Three Military Vehicles in Lateral Obstacles, by J. L. Decell	AD 875 940
	Jan 1974	Report 4 Performance of Selected MEXA and Military Vehicles in Vertical Obstacles, by N. R. Murphv, Jr., and A. A. Rula	AD A032 769
TR M-70-12		European Waterways Study; A Procedure for Describing Tactical Gaps, by R. R. Friesz, A. P. Desmarais, K. S. Fife, W. G. Willis, and W. E. Grabau:	
*	Jul 1970	Volume 1	AD 875 511L
*	Jul 1970	Volume 2	AD 875 512L
*	Jul 1970	Volume 3	AD 875 546L
TR M-70-13		Intratheater Transportation Requirement Study, a Procedure for Constructing Synthalogous Environments:	
*	Sep 1970	Volume 1 Rationale, by W. E. Grabau and J. H. Shamburger	AD 876 345L
	Sep 1970	Volume 2 Maps	AD 876 382
TR M-70-14		Penetration Resistance of Soils:	
	Nov 1970	Report 1 Tests with Circular Footings in Air-Drv Sands, by A. J. Green	AD 715 979
	Nov 1970	Report 2 Gamma-Ray Techniques for Nondestructive Measurements of Soil Density and Density Profile, by A. N. Williamson	AD 715 980
	Jul 1971	Report 3 Tests with Circular Footings in Cohesive Soils, by A. J. Green	AD 726 968
TR M-70-15	Oct 1970	Performance of Boeing-GM Wheels in a Lunar Soil Simulant (Basalt), by A. J. Green and K.-J. Melzer (superseded by M-71-10, Report 1)	
* TR M-71-1	May 1971	Performance Evaluation of a First-Generation Elastic Loop Mobility System, by K.-J. Melzer and A. J. Green	AD B007 715L

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR M-71-3		Environmental Characterization of Munitions Test Sites:	
	Jul 1971	Volume I Techniques and Analyses of Data, by H. W. West, R. R. Friesz, E. A. Dardeau, Jr., G. F. Brown, L. E. Couch, and J. A. Parks	AD 887 926
	Jul 1971	Volume II Data I, by H. W. West, R. R. Friesz, E. A. Dardeau, Jr., G. F. Brown, L. E. Couch, and J. A. Parks	AD 887 927
	Jul 1971	Volume III Data II, by H. W. West, R. R. Friesz, E. A. Dardeau, Jr., G. F. Brown, L. E. Couch, and J. A. Parks	AD 887 928
	Jun 1972	Volume IV Supplementa; Characterizations, by E. A. Dardeau, Jr., R. R. Friesz, H. W. West, G. F. Brown, L. E. Couch, and J. A. Parks	AD 745 411
TR M-71-4	Jul 1971	An Analysis of Ground Mobility Models (ANAMOB), by A. A. Rula and C. J. Nuttall	AD 886 513
TR M-71-5		Performance of Soils Under Track Loads:	
	Jul 1971	Report 1 Model Track and Test Program, by G. W. Turnage	AD 728 496
	Nov 1971	Report 2 Prediction of Track Pull Performance in a Desert Sand, by G. W. Turnage	AD 733 926
	May 1976	Report 3 Track Mobility Number for Coarse-Grained Soils, by G. W. Turnage	AD A026 721
TR M-71-6	Sep 1971	Prediction of the Slope-Climbing Capability of Elastic-Rim Wheels, by K. W. Wiendieck	AD 731 205
TR M-71-7	Oct 1971	Effect of Yaw Angle on Steering Forces for the Lunar Roving Vehicle Wheel, by A. J. Green	AD A006 518
TR M-71-8	Nov 1971	Performance of Dual-Wheel Configurations in Coarse-Grained Soil, by K.-J. Melzer	AD 732 864
TR M-71-9	Dec 1971	A Technique for Quantifying Forest Stands for Management Evaluations, by H. W. West and H. H. Allen	AD 735 784
TR M-71-10		Performance of the Boeing LRV Wheels in a Lunar Soil Simulant:	
	Dec 1971	Report 1 Effects of Wheel Design and Soil, by A. J. Green and K.-J. Melzer (supersedes Technical Report M-70-15)	AD 756 213
	Dec 1971	Report 2 Effects of Speed, Wheel Load, and Soil, by K.-J. Melzer	AD A006 498
TR M-72-1	Jun 1972	Studies of the Dynamics of Tracked Vehicles, by A. S. Lessem and N. R. Murphv	AD 743 464

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR M-72-2		Seismic and Environmental Characteristics of the Sensor Test Areas in the Panama Canal Zone:	
	Jun 1972	Report 1 Dry-Season Conditions, by L. E. Link, H. W. West, and B. O. Benn	AD 907 867
	May 1973	Report 2 Wet-Season Conditions, by W. F. Marcuson III and R. E. Leach	AD A017 724
TR M-72-3	Aug 1972	A Mathematical Model for Preliminary Evaluations of Candidate Reservoir Systems, by J. L. Decell	AD 756 119
TR M-72-4	Nov 1972	Determining Presence, Thickness, and Electrical Properties of Stratified Media Using Swept-Frequency Radar, by J. R. Lundien	AD 752 509
TR M-73-1	Sep 1972	Vehicle Mobility Assessment for Project Wheels Study Group (with Addenda), by A. A. Rula, C. J. Nuttall, Jr., and H. J. Dugoff	AD A008 286
TR M-73-2		Effects of Environment on Microseismic Wave Propagation Characteristics in Support of SID Testing at Fort Bragg, N. C.:	
*	Jun 1973	Report 1 Dry-Season Conditions, by H. W. West	AD B008 460L
*	Dec 1974	Report 2 Comparison of Summer- and Winter-Season Conditions, by T. L. Engdahl and H. W. West	AD B009 250L
TR M-73-3	Jun 1973	Effects of Terrain on the Propagation of Microseismic Waves and Implantation Characteristics of Air-Delivered Sensors at Fort Huachuca, Arizona; Wet- and Dry-Season Conditions, by H. W. West and B. Rohani	AD B005 327
TR M-73-4	Jun 1973	A Mathematical Model for Predicting Microseismic Signals in Terrain Materials, by J. R. Lundien and H. Nikodem	AD A012 632
* TR M-73-5	Aug 1973	A Numerical Model of the Ride Dynamics of a Vehicle Using a Segmented Tire Concept, by W. F. Ingram	AD 913 281L
TR M-73-6	Nov 1973	Detection Capability of a Strain-Sensitive Cable Sensor, by R. A. Weiss	AD 771 901
TR M-74-1	Jan 1974	Helicopter Movement on Unimproved Terrain, by E. S. Rush and C. E. Green	AD 780 698
TR M-74-2	Feb 1974	Application of Remote Sensors to Army Facility Management, by L. E. Link, Jr., and J. H. Shamburger (includes Appendix A)	AD 775 407

---

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR M-74-2 (Cont)	Jan 1975	Appendix B Validation of Environmental Maps Produced Through Air-Photo Interpretation, by J. H. Shamburger and H. K. Woods	AD A005 556
* TR M-74-3	Apr 1974	A Variable-Stress Vehicle Reliability Model, by A. S. Lessem	AD 919 333L
TR M-74-4		Analytical Study of Ground-Surface Shielding Characteristics of Selected Road Terrains:	
	Jun 1974	Volume I Development of Shielding Model and Analyses of Results, by H. W. West, P. L. Doiron, and J. A. Parks	AD 781 491
	Jun 1974	Volume II Output of Shielding Model, by H. W. West, P. L. Doiron, and J. A. Parks	AD A040 173
TR M-74-5		Computer-Calculated Geometric Characteristics of Middle-Mississippi River Side Channels:	
	Jun 1974	Volume I Procedure and Results, by V. E. LaGarde and S. J. Winfrey	AD A031 773
	Jun 1974	Volume II Side-Channel Contour Maps, by V. E. LaGarde and S. J. Winfrey	AD A031 771
TR M-74-6		A User-Accessed Computer Information System for Environmentally Sensitive Wildlife:	
	Jun 1974	Volume I, by E. F. Addor and V. E. LaGarde	AD 787 258
	Jun 1974	Volume II, by E. E. Addor, J. K. Stoll, and V. E. LaGarde	AD 787 259
	Jun 1974	Volume III, by E. E. Addor, J. K. Stoll, H. K. Woods, and V. E. LaGarde	AD 787 260
	Jan 1975	Errata Sheet No. 1	
TR M-74-7	Jun 1974	Performance Evaluation of a Second-Generation Elastic Loop Mobility System, by K.-J. Melzer and G. D. Swanson	AD A031 772
TR M-74-8		The Use of Remote Sensing Systems for Acquiring Data for Environmental Management Purposes:	
	Nov 1974	Report 1 A Procedure for Predicting Image Contrasts in Photographic Remote Sensor Systems, by L. E. Link, Jr.	AD A002 070

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR M-74-8 (Cont)	May 1976	Report 2 Application of Photographic Remote Sensors to an Environmental Management Problem, by D. H. Cress and L. E. Link, Jr.	AD A025 616
	May 1976	Report 3 A Nomogram for Computing Optical Density Contrast, by L. E. Link, Jr., and J. R. Stabler	AD A026 718
TR M-75-1	Jun 1975	Small-Scale Mobility Tests in Fine-Grained Layered Soils, by G. D. Swanson and T. R. Patin	AD A013 491
TR M-75-2		Selected Legally Protected Animals:	
	Jun 1975	Report 1 Inventory for Use by United States Army Installations and Major Activities in the Continental United States, by V. E. LaGarde, A. M. B. Rekas, P. D. Lazarine, and J. K. Stoll (includes Appendixes A-C)	AD A015 572
	Jun 1975	Report 2 Inventory for Use by Corps of Engineers Division and District Offices in the Contiguous United States, by A. M. B. Rekas, V. E. LaGarde, P. D. Lazarine, and J. K. Stoll (includes Appendixes A-B)	AD A015 578
TR M-75-3	Oct 1975	Development of Procedure for Airfield Site Evaluation, by M. P. Keown, J. A. Parks, and J. K. Stoll (includes Appendixes A-B)	AD A017 853
* TR M-76-1	Jan 1976	AMC-74 Vehicle Dynamics Module, by N. R. Murphy, Jr., and R. B. Ahlvin (includes Appendixes A-D)	AD B009 205L
TR M-76-2	Jan 1976	Experimental Verification of a Theoretical Loading Function Describing Momentum Transfer from an Explosion to a Tree Stem, by M. P. Keown, J. K. Stoll, and Hansjoerg Nikodem (includes Appendixes A-B)	AD A021 188
TR M-76-3	Feb 1976	Mobility Analyses of Standard- and High-Mobility Tactical Support Vehicles (HIMO Study), by C. J. Nuttall, Jr., and D. D. Randolph (includes Appendixes A-G)	AD A020 986
* TR M-76-4	Feb 1976	Heavy Equipment Transporter (HET) Mobility Performance Evaluations, by J. H. Robinson and A. A. Rula (includes Appendixes A-B)	AD B009 810L
TR M-76-5	Mar 1976	Validation of the AMC-71 Mobility Model, by B. G. Schreiner and W. E. Willoughby	AD A023 609
	Mar 1976	Appendix A: Vehicle Data; Appendix B: Location and Description of Test Sites; Appendix C: Definitions of Terrain Terms and Procedures Used to Collect Terrain Data for Validation Tests; Appendix D: Basic Terrain Data	AD A023 608

\* Statement B. See Preface.



## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR M-76-6	Jun 1976	Use of Automated Remote Sensing Techniques to Define the Movement of Tow-Generated Suspended Material Plumes on the Illinois and Upper Mississippi Rivers, by L. E. Link, Jr., and A. N. Williamson, Jr.	AD A025 733
* TR M-76-7	Jun 1976	A Comparative Analysis of Selected Seismic and Seismic-Acoustic Target Classifiers, by D. H. Cress (includes Appendixes A-H)	AD B012 041L
TR M-76-8	Aug 1976	Procedures for the Systematic Evaluation of Remote Sensor Performance and Quantitative Mission Planning, by L. E. Link, Jr. (includes Appendixes A-E)	AD A030 728
TR M-76-9	Sep 1976	Powered Wheels in the Turned Mode Operating on Yielding Soils, by G. N. Durham (includes Appendixes A-C)	AD A030 701
TR M-76-10	Sep 1976	Baseline Elements and Information Sources for Environmental Quality Management of Military Installations, by M. P. Keown and M. R. Weathersby (includes Appendixes A-C)	AD A033 117
TR M-76-11	Nov 1976	An Automated System for Collecting, Processing, and Displaying Environmental Baseline Data, by H. W. West and H. M. Floyd	AD A033 359
* TR M-76-12	Dec 1976	Computer Procedure for Calculating and Displaying the Boundaries of a Watershed, by V. E. LaGarde and M. H. Smith	AD B016 195L
TR M-77-1	Mar 1977	Inventory of Sediment Sample Collection Stations in the Mississippi River Basin, by M. P. Keown, E. A. Dardeau, Jr., and J. G. Kennedy (includes Appendix A)	AD A039 571
TR M-77-2		Acquisition of Terrain Information Using Landsat Multi-spectral Data:	
	Jun 1977	Report 1 Correction of Landsat Multispectral Data for Extrinsic Effects, by Horton Struve, W. E. Grabau, and H. W. West	AD A042 999
	Sep 1977	Report 2 An Interactive Procedure for Classifying Terrain Types by Spectral Characters, by Horton Struve, W. E. Grabau, and H. W. West	AD A045 871
	Sep 1980	Report 3 Application of an Interactive Classification Procedure in South Louisiana, by M. H. Smith and Horton Struve	AD A092 807
TR M-77-3		An Automated Procedure for Slope Map Construction:	
	Oct 1977	Volume I Description and Instruction for Use of the Automated Procedure, by Horton Struve	AD A047 794

\* Statement B. See Preface.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* TM M-77-3 (Cont)	Oct 1977	Volume II Listing and Glossary for Program SLOPEMAP, by Horton Struve	AD B023 657L
TR M-77-4		Environmental Baseline Descriptions for Use in the Management of Fort Carson Natural Resources:	
	Oct 1977	Report 1 Development and Use of Wildlife and Wildlife Habitat Data, by A. M. B. Rekas (includes Appendixes A-D)	AD A048 656
	Sep 1977	Report 2 Water-Quality, Meteorologic, and Hydrologic Data Collected with Automated Field Stations, by H. W. West and H. M. Floyd (includes Appendix A)	AD A046 827
	Apr 1978	Report 3 Inventory and Assessment of Current Methods for Rangeland Conservation and Restoration, by A. M. B. Rekas and W. L. Kirk (includes Appendixes A-D)	AD A053 975
	Feb 1978	Report 4 Analysis and Assessment of Soil Erosion in Selected Watersheds, by M. P. Keown and H. W. West	AD A052 347
	Sep 1977	Report 5 General Geology and Seismicity, by E. A. Dardeau, Jr., and M. A. Zappi	AD A046 828
TR M-78-1	May 1978	Terrain Considerations and Data Base Development for the Design and Testing of Devices to Detect Intruder- Induced Ground Motion, by D. H. Cress (includes Appendixes A-G)	AD A055 602
TR M-78-2	Aug 1978	Movement of Suspended Particles and Solute Concentra- tions with Inflow and Tidal Action, by A. N. Williamson (includes Appendixes A-C)	AD A062 684
TR M-78-3	Dec 1978	Study and Parametric Analysis of Trafficability, Running Gear, and Stability Considerations for Nearshore Bottom- Crawling Vehicles, by G. W. Turnage and W. C. Seabergh (includes Appendixes A-D)	AD A063 733

---

\* Statement B. See Preface.

MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY  
Pavements and Soil Trafficability Information Analysis Center

Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
PSTIAC-1	Apr 1975	Microthesaurus of Vehicle Mobility, Environment, and Pavement Terms	AD A011 269
PSTIAC-2	Nov 1975	Bibliography of Papers Presented at Meetings or in Technical Journals on Studies of the Mobility and Environmental Systems Laboratory, by M. P. Meyer	AD A018 290
PSTIAC-3	Aug 1976	A Bibliography with Abstracts of U. S. Army Engineer Waterways Experiment Station Publications Related to Vehicle Mobility, by M. P. Meyer	AD A031 524
PSTIAC-4	Jun 1977	A Bibliography with Abstracts of U. S. Army Engineer Waterways Experiment Station Publications Related to Terrain, by M. P. Meyer	AD A043 789
PSTIAC-5		A Bibliography with Abstracts of U. S. Army Engineer Waterways Experiment Station Publications Related to Pavements:	
	Aug 1977	Volume I List of Reports and Indexes, by M. P. Meyer and Virginia Dale	AD A045 024
	Aug 1977	Volume II Report Document Page Data, Part 1: Bulletins, Instruction Reports, Miscellaneous Papers, by M. P. Meyer and Virginia Dale	AD A045 025
	Aug 1977	Volume III Report Document Page Data, Part 2: Technical Memoranda, Technical Reports, Pavements and Soil Trafficability Information Analysis Center Reports, Contract Reports, by M. P. Meyer and Virginia Dale	AD A045 026

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		CHRYSLER CORPORATION, Detroit, Michigan	
CR 3-114		A Study of the Vehicle Ride Dynamics Aspect of Ground Mobility:	
	Mar 1965	Volume I Summary, by B. D. Van Deusen	AD 467 024
	Mar 1965	Volume II Human Response to Vehicle Vibration, by B. D. Van Deusen	AD 467 025
	Apr 1965	Volume III Theoretical Dynamics Aspects of Vehicle Systems, by B. D. Van Deusen	AD 467 026
	Apr 1965	Volume IV Field Measurements, by B. D. Van Deusen and C. H. Hoppe	AD 467 027
		COLORADO STATE UNIVERSITY, Fort Collins	
CR 3-154	Jun 1966	Instrumentation for Vehicle Mobility Testing in a Tropical Environment, by S. J. Clark	AD A032 585
		CORNELL UNIVERSITY, Ithaca, New York	
CR 3-15	May 1955	An Environmental Analysis of the Fort Churchill, Manitoba, Region, by T. A. Cheney and D. K. B. Beckel	
		Text I	
		Text II	
		Folio	
		DREXEL INSTITUTE OF TECHNOLOGY, Philadelphia, Pennsylvania	
CR 3-78	Jun 1961	A System for Describing, Classifying, Mapping and Comparing Surface-Water Bodies for Military Purposes; Preliminary Report, by Irwin Remson, R. C. Stiefel, and R. V. Giles	AD 474 157
	Jun 1962	Some Systems for Describing, Classifying, Mapping and Comparing Surface-Water Bodies for Military Purposes; Annual Report Number II, by Irwin Remson, R. V. Giles, R. L. Drake, and others	

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		FMC CORPORATION, ORDNANCE ENGINEERING DIVISION, San Jose, California	
CR 3-33	Sep 1964	A Research Study Concerning the Application of a Fourier Series Description to Terrain Geometries Associated with Ground Mobility and Ride Dynamics. Phase I: Terrain and Vehicle Models	
CR 3-155	Feb 1966	A Computer Analysis of Vehicle Dynamics While Traversing Hard Surface Terrain Profiles	AD 803 194
		THE FLORIDA STATE UNIVERSITY, Tallahassee	
Unnumbered	Jul 1964	A Study to Develop Methods for the Analysis of the Fine Structure of Sea-Land Boundary Zones, by R. E. Stevenson and others	
	Jul 1964	Appendix A Photographs	
	Jul 1964	Appendix B Maps and Overlays	
	Jul 1964	Appendix C Profiles	
	Jul 1964	Appendix D Trafficability Data	
	Jul 1964	Appendix E Vegetation Data	
	Jul 1964	Appendix F Vegetation Data	
Unnumbered	Aug 1965	Environmental Studies of Protected Sea-Land Boundary Zones Along the West Coast of Florida, by R. E. Stevenson and D. A. Warnke	
		THE GEORGE WASHINGTON UNIVERSITY, Washington, DC	
CR 3-13	Dec 1954	Coding Handbook (revised edition)	
CR 3-24	Sep 1957	Historical Records Project, Final Report:	
		Section 1 Introduction, Evaluation, and Recommendations	
		Section 2 The Environmental Element in Military Operations	
		Section 3 Military Operations as Characterized by the Effects of Environment	
		Section 4 The Impact of Environment on Military Operations	

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		THE GEORGE WASHINGTON UNIVERSITY (Cont)	
CR 3-24 (Cont)		Section 5 The Nine-Coordinate Probability Model Describing Environment-Military Operations Relationships	
		Section 6 The Military Region: A Mathematical Model	
		Section 7 Evaluation of the Factor Analysis in a Study of the Effects of Environment on Military Operations	
		Section 8 Delineation of the Military Region	
		KASETSART UNIVERSITY, Bangkok, Thailand	
CR 3-150	Jun 1966	Great Soil Group Survey of Selected Study Areas in Thailand, by Santhad Rojanasoonthon:	
		Volume 1 Summary Report	AD 488 314
		Volume 2 Appendixes A through G	AD 488 315
		MARSHALL UNIVERSITY, Huntington, West Virginia	
CR 3-72		Quantitative Physiognomic Analysis of the Vegetation of the Florida Everglades	AD 450 738
CR 4-103		The Physiognomy of Vegetation: A Quantitative Approach to Vegetation Geometry Based Upon the Structural Cell Concept as the Minimum Sample Size:	
	May 1964	Concepts and Analytical Methods	AD 617 727
	May 1964	Appendix Field Data, Structural Diagrams and Sampling Area Locations of the Vegetation of Camp McCoy, Wisconsin	AD 617 728
		MISSOURI SCHOOL OF MINES AND METALLURGY, Rolla	
CR 3-64	Jun 1962	Test of Quantitative Terrain Description Systems at Fort Leonard Wood, Missouri, by James C. Maxwell	AD 653 631

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		UNIVERSITY OF MONTREAL, Canada	
CR 3-31	Apr 1958	A Universal System for Recording Vegetation, by Pierre Dansereau	AD 206 414
	May 1959	Part II The Special Case of Aquatic Vegetation--An Example in Southern Quebec, by Pierre Dansereau	
		NEW YORK BOTANICAL GARDEN, Bronx, New York	
CR 3-163	Nov 1966	A Methodological Critique of Vegetation Recording Systems, by Pierre Dansereau, P. F. Buell, and Ronald Dagon	AD 813 749
CR 3-164	Nov 1966	Studies on the Vegetation of Puerto Rico, by Pierre Dansereau and P. F. Buell	AD 813 748
		NORTH CAROLINA STATE COLLEGE, Raleigh	
CR 3-18	Jul 1956	Terrain Study of the Panama Canal Zone with Specific Reference to the Ft. Sherman Area and Vicinity, by C. R. McCullough	AD 111 676
		OREGON STATE UNIVERSITY, Corvallis	
CR M-70-1		Characterization of Water Tables in Oregon Soils with Reference to Trafficability:	
	May 1970	Volume I Data, by Larry Boersma and G. H. Simonson	AD 870 793
	May 1970	Volume II Analysis, by Larry Boersma, G. H. Simonson, and D. G. Watts	AD 870 796
		PURDUE UNIVERSITY, ENGINEERING EXPERIMENT STATION, Lafayette, Indiana	
CR 4-6		Application of Airphoto Pattern Analysis to Soil Trafficability Studies:	
	Jun 1951	Book One, by O. W. Mintzer, E. J. Yoder, and J. R. Shepard	
	Jun 1951	Book Two Glacial Patterns	

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		PURDUE UNIVERSITY, ENGINEERING EXPERIMENT STATION (Cont)	
CR 4-6 (Cont)		Book Three Alluvial Patterns	
	Dec 1952	Book Three (Second Edition) Water Deposited Materials	
	Jun 1951	Book Four Miscellaneous Patterns	
	Feb 1954	Book Five Wind Deposited Soils	
	Jun 1954	Book Six Residual Materials (in 2 parts)	
	Sep 1956	Supplement No. 1 Prepared by R. D. Miles and R. D. Leighty	
	Dec 1957	Supplement No. 2 Glacial Deposited Materials, prepared by R. D. Miles and D. G. Shurig	
CR 4-12A	Oct 1954	Effect of Soil Moisture and Other Natural Variables on Aerial Photo Gray Tones	
CR 3-14	Mar 1955	Terrain Study of the Yuma Test Station Area, Arizona	AD 626 500
CR 4-20	Sep 1956	Techniques for Predicting Soil Trafficability Information from Aerial Photographs, by R. D. Miles	
CR 3-108	Nov 1953	Statistical Analyses of Trafficability Data, by Paul Irick	
		RICE UNIVERSITY, DEPARTMENT OF GEOLOGY, Houston, Texas	
Unnumbered	Dec 1970	Development of Remote Methods for Obtaining Soil Information and Location of Construction Material Using Gamma Ray Signatures for Project THEMIS (in 2 volumes)	AD 718 519
		Appendix 1 Engineering Drawings	
Unnumbered	Jun 1971	Development of Remote Methods for Obtaining Soil Information and Location of Construction Materials Using Gamma Ray Signatures for Project THEMIS	AD 885 986
Unnumbered	Dec 1971	Development of Remote Methods for Obtaining Soil Information and Location of Construction Materials Using Gamma Ray Signatures for Project THEMIS	AD 737 717
Unnumbered	Jun 1972	Development of Remote Methods for Obtaining Soil Information and Location of Construction Materials Using Gamma Ray Signatures for Project THEMIS	AD 901 555
Unnumbered	Dec 1972	Development of Remote Methods for Obtaining Soil Information and Location of Construction Materials Using Gamma Ray Signature for Project THEMIS	AD 909 670



## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		THE UNIVERSITY OF SOUTH CAROLINA, Columbia	
CR 3-36 Part 1	May 1959	Coding Handbook (Second Revised Edition)	AD 759 498
CR 3-36 Part 2	May 1959	Environmental Stresses and Effects on Military Activities; Final Report, by D. O. Bushman and J. J. Petty	AD A006 597
		UNIVERSITY OF SOUTHERN CALIFORNIA, Los Angeles	
CR 3-80	Nov 1962	Mapping, Classification, and Quantitative Expression of Microrelief Features	
CR 3-82	Oct 1963	A Study of Microrelief; Its Mapping, Classification, and Quantification by Means of a Fourier Analysis, by R. O. Stone and James Dugundji	AD 450 828
		SYRACUSE UNIVERSITY RESEARCH INSTITUTE, Syracuse, New York	
CR 3-34		A Methodology for Military Evaluation and Comparison of Tropical Terrain:	
	May 1959	Volume 1, by H. V. B. Kline, V. G. Mazzucchelli, and D. C. Bennett	AD A006 598
	May 1959	Volume 2 A Methodology for Recording Vegetation Descriptions, with Comparisons of Vegetation Types of the Panama Canal Zone and Other Tropical Areas, by C. C. Larson	AD 226 311
	May 1959	Addendum An Application of a Methodology for Military Evaluation of Tropical Terrain to the Panama Canal Zone, by H. V. B. Kline, V. G. Mazzucchelli, and D. C. Bennett	
CR 3-56	May 1958	A Comparison of the Terrain Characteristics and Vegetation of Tropical Africa and Panama, by H. V. B. Kline, D. C. Bennett, and C. C. Larson	AD 716 976
CR 3-57	Jun 1958	A Methodology for Tropical Terrain Comparisons; Final Report, First Phase, by H. V. B. Kline, D. C. Bennett, and C. C. Larson	AD 201 154

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		UNIVERSITY OF TENNESSEE, Knoxville	
CR 3-70		Environmental Descriptions of Ranger Training Areas:	
	Jun 1963	Part 1 Mountain Training Area, North Georgia	AD 466 271
	Aug 1964	Part 2 Eglin Field Area, Florida	AD 466 272
		Vegetation Diagrams, Eglin Air Force Base, Florida	AD 466 275
	Aug 1964	Part 3 Fort Benning Area, Georgia	AD 466 273
		Vegetation Diagrams, Fort Benning, Georgia	AD 466 274
		TEXAS INSTRUMENTS INCORPORATED, Dallas	
CR 4-96		Phase I System Analysis for a Waterways Experiment Station Terrain Analysis Radar (Project WESTAR); Final Report	
	Jan 1963	Phase II System Implementation, Waterways Experiment Station Terrain Analysis Radar (Project WESTAR); Final Report and Engineering Handbook	AD 465 402
	Jan 1965	Phase III Analysis of Results, Waterways Experiment Station Terrain Analysis Radar (Project WESTAR); Final Report	AD 465 403
CR 4-100	Mar 1964	Final Report Waterways Experiment Station Terrain Analysis Gamma (Project WESTAG)	
		ROYAL THAI GOVERNMENT, SOIL SURVEY DIVISION, LAND DEVELOPMENT DEPARTMENT, Bangkok, Thailand	
CR 3-156	Oct 1966	Soil Series Survey of Selected Study Areas in Thailand, Summary Report, by F. R. Moormann, F. J. Dent, and Lek Moncharoen	AD 807 704
	Oct 1966	Appendix A Soil Survey of the Nakhon Sawan Area, by Lek Moncharoen and Manu Omakupt	AD 807 699
	Aug 1966	Appendix B Soil Survey of the Lop Buri Area, by F. J. Dent and Mana Cheutongdee	AD 489 699
	Aug 1966	Appendix C Soil Survey of Chiang Mai Area, by F. J. Dent and Manu Omakupt	AD 489 700

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		ROYAL THAI GOVERNMENT (Cont)	
CR 3-156 (Cont)	Aug 1966	Appendix D Soil Survey of the Pran Buri Area, by Lek Moncharoen, Suraphon Charoenpong, and F. J. Dent	AD 489 701
	Oct 1966	Appendix E Soil Survey of the Khon Kaen Area, by Lek Moncharoen, D. A. Libby, and Mana Cheutongdee	AD 807 703
	Aug 1966	Appendix F Soil Survey of the Chanthaburi Area, by Lek Moncharoen and F. J. Dent	AD 489 702
		U. S. ARMY ENGINEER OHIO RIVER DIVISION LABORATORIES, Cincinnati	
CR 3-118	Aug 1965	Photoelastic Studies for Vehicle Mobility Research, by F. M. Mellinger, J. H. Hubbard, and R. L. Peters	AD 621 221
		U. S. ARMY QUARTERMASTER RESEARCH & ENGINEERING CENTER, Natick, Massachusetts	
CR 3-11		Analogs of Yuma Climate:	
	Mar 1954	In the Middle East; Yuma Analogs No. 1	
	Aug 1954 Revised Sep 1957	In Northeast Africa; Yuma Analogs No. 2	
	Mar 1955	In Northwest Africa; Yuma Analogs No. 3	
	Jun 1955	In South Central Asia (India, Pakistan, Afghanistan, Iran); Yuma Analogs No. 4	
	Sep 1955	In Soviet Middle Asia; Yuma Analogs No. 5	
	Dec 1955	In Chinese Inner Asia; Yuma Analogs No. 6	
	Apr 1956	In East Central Africa; Yuma Analogs No. 7	
	Jan 1957	In North America; Yuma Analogs No. 8	
CR 3-27		Climatic Analogs of Fort Greely, Alaska, and Fort Churchill, Canada:	
	Dec 1957	In Eurasia	
	May 1959	In North America	

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		U. S. ARMY QUARTERMASTER RESEARCH & ENGINEERING CENTER (Cont)	
CR 3-30		Analogs of Canal Zone Climate:	
	Apr 1958	In Middle America; Canal Zone Analogs I	
	Jun 1958	In India and Southeast Asia; Canal Zone Analogs II	
	Jun 1958	In East Central Africa; Canal Zone Analogs III	
	Jul 1958	In West Central Africa; Canal Zone Analogs IV	
	Jul 1958	In South Central Africa and Madagascar; Canal Zone Analogs V	
	Sep 1958	In South America; Canal Zone Analogs VI	
	Jun 1959	In Indonesia, the Philippines, and Borneo; Canal Zone Analogs VII	
	Jul 1959	In Australia and New Guinea; Canal Zone Analogs VIII	
	Oct 1960	In the Far East; Canal Zone Analogs IX	
	Nov 1960	In the Pacific Islands; Canal Zone Analogs X	
		U. S. ARMY SNOW ICE AND PERMAFROST RESEARCH ESTABLISHMENT, Wilmette, Illinois	
CR 3-43	Jul 1960	Photo-Interpretation of Vegetation; Literature Survey and Analysis, by V. P. Finley	
		U. S. ARMY TANK AUTOMOTIVE CENTER, LAND LOCOMOTION LABORATORY, Warren, Michigan	
CR 3-143	Jan 1965	Mobility Environmental Research Study One-Pass Program, by P. W. Haley	AD 467 165
CR 3-153	Feb 1966	Mobility Environmental Research Study, Mobility Testing Procedures, by R. A. Liston, T. Czako, P. W. Haley, and others	AD 800 462

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		U. S. FOREST SERVICE	
CR 4-8		The Development of Methods for Predicting Soil Moisture Content: Progress Report I:	
	Nov 1951	Volume I, by E. J. Dortignac and H. W. Lull	
	Nov 1951	Volume II, by E. J. Dortignac and H. W. Lull	
	Jul 1952	Progress Report II	
		U. S. GEOLOGICAL SURVEY, MILITARY GEOLOGY BRANCH, Washington, DC	
CR 3-22		Terrain Study of the Army Test Area, Fort Greely, Alaska	
	1957	Volume 1 Text, by G. W. Holmes and W. S. Benninghoff	AD 147 108
	1957	Volume 2 Maps	AD 147 109
CR 3-25	Nov 1957	Techniques for Determination of Terrain Analogs, by G. E. Stoertz	AD 716 975
CR 3-37		Analogs of Fort Greely and Fort Churchill Terrain:	
	Jun 1959	Analogs of Fort Greely and Fort Churchill Terrain in Alaska: Evaluation of Present Test Areas and Recommendation of Alternative and Supplementary Test Areas in Alaska, by G. E. Stoertz	AD 229 476
		Plates	
	Jan 1961	Analogs of Fort Greely and Fort Churchill Terrain in Central East Greenland, by G. E. Stoertz	AD 254 050
		VANDERBILT UNIVERSITY, Nashville, Tennessee	
CR 3-23	Jul 1964	The Description and Classification of Hydrologic Characteristics for Military Purposes, by P. A. Krenkel, P. B. Hoadley, and J. A. Carpenter	AD 489 876
	Dec 1964	Supplement, by P. A. Krenkel, J. A. Carpenter, and P. C. Chen	

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		VANDERBILT UNIVERSITY (Cont)	
CR 3-68	Jun 1963	Application of Macrogeometry and Vegetation Descriptive Techniques to Fort Knox, Kentucky	
CR 4-86	Mar 1963	Manual; A Technique for Macrogeometry Terrain Analysis	AD 658 655
CR 3-94	Apr 1962	Application of Terrain Descriptive Techniques to Fort Knox Kentucky	AD 672 498
		WILSON, NUTTALL, RAIMOND ENGINEERS, INC., Chestertown, Maryland	
CR 4-16	Oct 1955	Vehicle Mobility Research: A Preliminary Review of Major Accomplishments and Current Activities in the Field, by C. J. Nuttall	
CR 4-17	Mar 1956	Vehicle Mobility Research, 1956: A Review and a Suggested Program, by C. J. Nuttall	
CR 3-112	May 1965	Observing, Analyzing, and Forecasting the State of the Ground, by W. C. Grenke	AD 616 616
CR 3-119	Nov 1964 through Jun 1965	Summary of Trafficability Tests Through 1963 (in 11 volumes)	
CR 3-120	Mar 1965	An Exploratory Study of the Effects of Terrain Surface Obstacles on Vehicle Performance; Final Draft, by G. T. Cohron and R. A. Werner	AD A032 584
CR 3-130	Dec 1965	A Dimensionless Consolidation of WES Data on the Performance of Sand Under Tire Loads, by C. J. Nuttall	AD 626 993
CR 3-152	Jul 1966	One-Pass Performance of Vehicles on Fine-Grained Soils, by C. J. Nuttall, C. W. Wilson, and R. A. Werner	AD 487 446
CR 3-162	May 1967	Ground-Crawling: 1966; The State-of-the-Art of Designing Off-Road Vehicles, by C. J. Nuttall	AD 816 577

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Aquatic Plant Control Research Program

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
<u>Information Exchange Bulletins</u>			
Volume			
IEB A-77-1		Aquatic Plant Control Research Program	
IEB A-78-1	Jan 1978	Aquatic Plant Control Research Program	
IEB A-78-2	Mar 1978	Aquatic Plant Control Research Program	

Instruction Reports

IR A-77-1	Jan 1977	Test Plan for the Large-Scale Operations Management Test of the Use of the White Amur to Control Aquatic Plants, by E. E. Addor and R. F. Theriot	AD A036 197
-----------	----------	---	-------------

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Aquatic Plant Control Research ProgramMiscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* Unnumbered	Jun 1972	Proceedings, Research Planning Conference on Aquatic Plant Control Project, 12 January 1972	AD 745 895
* Unnumbered	Aug 1974	Proceedings, Research Planning Conference on Integrated Systems of Aquatic Plant Control, 29-30 October 1973	AD 787 302
MP A-76-1	Dec 1976	Proceedings, Research Planning Conference on the Aquatic Plant Control Program, 22-24 October 1975, Charleston, S. C. (includes Appendixes A-C)	AD A036 072
MP A-77-1	Jun 1977	A Concept for the Development of Long-Term Management Plans for Aquatic Plant Control, by D. R. Sanders and J. L. Decell	AD A041 301
MP A-77-2	Jun 1977	A Management Procedure for the Introduction of Biological Agents for Control of Aquatic Plants, by W. E. Grabau	AD A041 302
MP A-77-3	Aug 1977	Proceedings, Research Planning Conference on the Aquatic Plant Control Program, 19-22 October 1976, Atlantic Beach, Fla.	AD A044 590
MP A-78-1	Aug 1978	Proceedings, Research Planning Conference on the Aquatic Plant Control Program, 3-6 October 1977, New Orleans, La.	AD A060 779

\* These reports were published prior to WES's being designated as primary manager of the Aquatic Plant Control Research Program.



## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Aquatic Plant Control Research ProgramTechnical Reports

<u>Number</u>	<u>Date</u>	<u>No.</u>	<u>Title</u>	<u>AD Number</u>
			Aquatic Plant Control Program:	
* Unnumbered	Oct 1972	1	Controlled Release Herbicides, by E. O. Gangstad, R. H. Scott, and R. G. Cason	AD 750 223
Unnumbered	Dec 1972	2	Response of Aquatic Weeds to Laser Radiation, by Richard Couch	AD 754 590
Unnumbered	Apr 1973	3	Biological Control of Alligator Weed	AD 759 500
Unnumbered	Jun 1973	4	Herbivorous Fish for Aquatic Plant Control	AD 765 437
Unnumbered	Oct 1973	5	Aquatic-Use Pattern for Silvex	AD 769 583
Unnumbered	Jan 1974	6	Biological Control of Water Hyacinth with Insect Enemies	AD 775 408
Unnumbered	Nov 1974	7	Aquatic-Use Patterns for 2,4-D Dimethylamine and Integrated Control	AD A002 568
Unnumbered	Nov 1974	8	Aquatic Weed Control with Plant Pathogens	AD A002 567
Unnumbered	Mar 1975	9	Integrated Control of Alligator Weed and Water Hyacinth in Texas, by E. O. Gangstad, Clifford Novosad, et al	AD A008 980
Unnumbered	Jun 1975	10	Integrated Program for Alligator Weed Management, by E. O. Gangstad, R. D. Blackburn, et al	AD A012 008
Unnumbered	Nov 1975	11	Effects of CO <sub>2</sub> Laser on Water Hyacinth Growth, by K. S. Long and P. A. Smith	AD A018 866
Unnumbered	Mar 1976	12	Butoxyethanol Ester of 2,4-D for Control of Eurasian Water Milfoil, by E. O. Gangstad, Frederick Fish, R. A. Stanley, and others	AD A024 105
Unnumbered	Sep 1976	13	Aquatic Use Pattern for Diquat for Control of Egeria and Hydrilla, by R. D. Blackburn, E. O. Gangstad, R. R. Yeo, and others	AD A034 202

\* These reports were published prior to WES's being designated as primary manager of the Aquatic Plant Control Research Program.

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Aquatic Plant Control Research ProgramTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR A-77-1		Evaluation of Herbicide Application Platforms for Use in Aquatic Plant Control:	
	Feb 1977	Report 1 Evaluation of the Marsh Screw Amphibian (MSA), by E. S. Rush and W. E. Willoughby (includes Appendixes A-B)	AD A036 970
TR A-77-2		A Field Test of Selected Insects and Pathogens for Control of Waterhyacinths:	
	Sep 1977	Report 1 Preliminary Results for the 1975-76 Season, by E. E. Addor (includes Appendixes A-B)	AD A044 392
TR A-78-1	Jan 1978	Development and Evaluation of Controlled Release Herbicides, by G. A. Janes, S. M. Bille, and N. F. Cardarelli	AD A053 029
TR A-78-2		Large-Scale Operations Management Test of Use of the White Amur for Control of Problem Aquatic Plants:	
		Report 1 Baseline Studies:	
	Jun 1978	Volume I The Aquatic Macrophytes of Lake Conway, Florida, by L. E. Nall and J. D. Schardt (includes Appendixes A-G on microfiche)	AD A057 345
	Dec 1979	Volume II The Fish, Mammals, and Waterfowl of Lake Conway, Florida, by Vincent Guillory	AD A081 132
	May 1979	Volume III The Plankton and Benthos of Lake Conway, Florida, by Roger Conlev, E. C. Blancher II, Floor Kooijman, Charles Ferrick, J. L. Fox, and T. L. Crisman	AD A072 392
	Jun 1979	Volume IV Interim Report on the Nitrogen and Phosphorus Loading Characteristics of the Lake Conway, Florida, Ecosystem, by E. C. Blancher II and C. R. Fellows	AD A072 393
	Jun 1981	Volume V The Herpetofauna of Lake Conway, Florida, by J. S. Godlev, R. W. McDiarmid, and G. T. Bancroft (includes Appendix A)	AD A102 744
	Nov 1981	Volume VI The Water and Sediment Quality of Lake Conway, Florida, by H. D. Miller, P. B. Ragsdale, James Adams, and R. T. Kaleel	AD A109 492
	Apr 1979	Volume VII A Model for Evaluation of the Response of the Lake Conway, Florida, Ecosystem to Introduction of the White Amur, by K. C. Ewel and T. D. Fontaine III	AD A069 897
	May 1982	Volume VIII Summary of Baseline Studies and Data, by E. C. Blancher II and E. G. Buglewicz (includes Appendix A)	AD A117 385

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Aquatic Plant Control Research ProgramTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR A-78-2 (Cont)		Report 2 First Year Poststocking Results:	
	Feb 1982	Volume II The Fish, Mammals, and Waterfowl of Lake Conway, Florida, by Scott Hardin, Roy Land, Gary Morse, and Mike Spelman (includes Appendix A)	AD A113 853
	Nov 1981	Volume III The Plankton and Benthos of Lake Conway, Florida, by T. L. Crisman and F. M. Kooijman	AD A109 516
	Aug 1982	Volume IV Nitrogen and Phosphorus Dynamics of the Lake Conway Ecosystem: Loading Budgets and a Dynamic Hydrologic Phosphorus Model, by E. C. Blanche II and C. R. Fellows (includes Appendixes A-B)	AD A118 700
	Jul 1983	Volume V The Herpetofauna of Lake Conway, Florida: Community Analysis, by R. W. McDiarmid, G. T. Bancroft, and J. S. Godley (includes Appendixes A-B)	AD A134 341
	Feb 1982	Volume VI The Water and Sediment Quality of Lake Conway, Florida, by H. D. Miller	AD A113 854
	Nov 1981	Volume VII A Model for Evaluation of the Response of the Lake Conway, Florida, Ecosystem to Introduction of the White Amur, by K. C. Ewel and T. D. Fontaine III (includes Appendix A)	AD A109 493
		Report 3 Second Year Poststocking Results:	
	Jul 1983	Volume V The Herpetofauna of Lake Conway, Florida: Community Analysis, by R. W. McDiarmid, G. T. Bancroft, and J. S. Godley (includes Appendixes A-B)	AD A134 341
	Aug 1982	Volume VI The Water and Sediment Quality of Lake Conway, Florida, by H. D. Miller and Rick Potts	AD A118 701
		Report 4 Third Year Poststocking Results:	
	Jan 1983	Volume VI The Water and Sediment Quality of Lake Conway, Florida, by H. D. Miller and James Boyd	AD A124 443
	Jun 1984	Report 5 Synthesis Report, by A. C. Miller and R. H. King (includes Appendixes A-C)	AD A145 988

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Aquatic Plant Control Research ProgramTechnical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR A-78-3		Mechanical Harvesting of Aquatic Plants: Report 1 Field Evaluation of the Aqua-Trio System, by M. M. Culpepper and J. L. Decell:	
	Oct 1978	Volume I (includes Appendixes A-E)	AD A063 932
	Oct 1978	Volume II Appendix F	AD A063 960
	Jun 1980	Report 2 Evaluation of Selected Handling Functions of Mechanical Control, by P. A. Smith (includes Appendixes A-G)	AD A088 635
	May 1984	Report 3 Evaluation of the Limnos System, by J. L. Smith (includes Appendixes A-B)	

## MOBILITY AND ENVIRONMENTAL SYSTEMS LABORATORY

Aquatic Plant Control Research Program

## Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		UNIVERSITY OF FLORIDA, DEPARTMENT OF PLANT PATHOLOGY, Gainesville	
CR A-76-2	Oct 1976	Biological Control of Aquatic Weeds with Plant Pathogens, by T. E. Freeman, R. Charudattan, K. E. Conway, and F. W. Zettler	AD A032 862
		SYRACUSE RESEARCH CORPORATION, Syracuse, New York	
CR A-77-2	May 1977	Fate of 2,4-D in Fish and Blue Crabs, by H. C. Sikka	AD A040 678
		U. S. DEPARTMENT OF THE INTERIOR, FISH FARMING EXPERI- MENTAL STATION, Stuttgart, Arkansas	
CR A-76-1	Oct 1976	Production of Monosex White Amur for Aquatic Plant Control, by J. G. Stanley (includes Appendix A)	AD A033 911
		WRIGHT STATE UNIVERSITY, DEPARTMENT OF CHEMISTRY, Dayton, Ohio	
CR A-77-1	Apr 1977	Characterization and Evaluation of Polymers Containing Herbicides as Pendent Side Chains, by F. W. Harris	AD A038 507

SOILS AND PAVEMENTS LABORATORY

## SOILS AND PAVEMENTS LABORATORY

Bulletins

<u>Vol.</u>	<u>Number</u>	<u>Date</u>	<u>Contents</u>	<u>AD Number</u>
<u>Soil Mechanics Series</u>				
1	1-9	Mar 1939	Information About the Engineer Department Research Center and Type of Information Available; Notes on Other Soil Mechanics Laboratories and Progress of Work; Soil Testing Equipment; Characteristics of Bentonite-Treated Sands; New Chemical Grouting Processes. (Second Printing)	
	10	Nov 1938	Efficacy of Bentonite for Control of Seepage; Tri-axial Compression Machine; Seismograph Demonstration in Ohio River Division; Motorized Drill Rig; Lateral Pressures Exerted by Impounded Debris	
	11	Mar 1939	Terzaghi Lectures in Texas (Review of Lecture); Drainage Wells for Levee Foundations; Tri-axial Notes; Specific Viscosity Correction Factors; Flood Wall Foundation Photoelastic Studies; Compaction of Canal Lining	
	Unnum- bered	Aug 1939	Tri-axial Compression Testing	
	12	Sep 1939	Internal Drainage of Pervious Levees; Bentonite Grout Tests; Tri-axial Notes; Costs of Motorized Drill Rig; Study of Silt Samplers; Field Installation of Test Apparatus; Large Consolidometers	
	13	Jun 1940	Mobile Rotary Drill Rig barge-Mounted; Critical Void Ratio; Soil-bentonite Mixtures; Field Permeability Tests; Computagram Scale Speeds Sieve Analyses; Form for Loose Triaxial Specimens; Hinged Iwan-Type Auger	
	14	Feb 1942	Relations Between the Behavior of Clay Minerals with Respect to Water and the Physical Properties of Cohesive Soils; Permeability Characteristics of Mud Mountain Impervious Core Material	
	15	Jul 1942	German-English Vocabulary of Soils Terms (compiled by H. B. Edwards)	AD A950 071
<u>Combined Series</u>				
	29	Jun 1947	Certain Considerations in the Design of Flexible Pavements, Bases and Subgrade	AD 077 625
	33	Sep 1949	Electrical Resistivity Exploration	
	35	Jun 1950	Undisturbed Sand Sampling below the Water Table	
	36	Apr 1951	Time Lag and Soil Permeability in Ground-water Observations	AD A950 075
	38	May 1952	Torsion Shear Apparatus and Testing Procedures	AD A950 076

## SOILS AND PAVEMENTS LABORATORY

Instruction Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
IR 1	Apr 1956	Instructions for Use of Field In-place California Bearing Ratio Apparatus	AD 4950 083
IR 2	Apr 1957	Field Density Determinations by Sand Volume and Drive Cylinder Methods	
IR 3	Dec 1957	Instructions for Installation and Observations of Engineering Measurement Devices; Port Allen Lock, Gulf Intracoastal Waterway, Plaquemine-Morgan City Route	
IR 4	Nov 1959	Developing a Set of CBR Design Curves	AD 658 075
IR 5	Nov 1959	Instructions for Installation and Observations of Engineering Measurement Devices, Old River Navigation Lock	
IR 7	Oct 1965	Description and Application of Airfield Cone Penetrometer, by W. B. Fenwick	AD 800 746
IR S-69-1	Mar 1969	Wet Track Abrasion Test for Design of Asphalt Slurry Seals	AD 739 999
IR S-69-2	Apr 1969	Use of Polypropylene-Asphalt Membrane as an Expedient Surfacing Material in the Theater of Operations, by C. D. Burns and V. C. Barber	AD 744 872
IR S-69-3	Jul 1969	Installation of XM18 Extruded Aluminum Airfield Landing Mat, by D. W. White	AD 856 700
IR S-69-4	Jul 1969	Installation of XM19 Airfield Landing Mat and Ancillary Items, by H. L. Green and D. A. Ellison (includes Appendix A)	AD 856 534
	Jun 1973	Appendix B Placement of XM19 Special Surfacing Landing Mat, by G. L. Carr	AD 762 137
IR S-69-5	Jun 1969	Membrane-Enveloped Soil Layers as Base Courses for Airfields, by C. D. Burns and W. N. Brabston	AD 739 505
IR S-69-6	Jun 1969	Landing Mat Overlays on Deteriorated Landing Mat or Pavements, by C. D. Burns and W. N. Brabston	AD 739 506
IR S-70-1	Apr 1970	Rapid Assessment of Soil Strength at Aircraft Landing Sites, by G. M. Hammitt	AD 705 572
IR S-70-2	May 1970	Criteria for Inspection, Evaluation, Classification, and Reuse of Used Airfield Landing Mat, by P. J. Veuros and D. H. Brown	AD 705 591
IR S-70-3	Jun 1970	Restoration of Landing-Mat-Surfaced Subgrades by Spouting Methods, by C. D. Burns and V. C. Barber	AD 8032 703



## SOILS AND PAVEMENTS LABORATORY

Instruction Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
IR S-70-4	Jun 1970	Description, Placement Maintenance and Recovery Instructions for XW18 Membrane, by S. G. Tucker and R. H. Grau	AD 756 369
IR S-70-5	Dec 1970	Computer Method for Aggregate Blending, by B. E. Lutter and T. D. White	AD 756 127
IR S-71-1	Feb 1971	Techniques for Rapid Road Construction Using Membrane-Enveloped Soil Layers, by A. H. Joseph and S. L. Webster	AD 720 194
IR S-71-2	Mar 1971	Maintenance and Repair Practices for Pavements	
IR S-72-1	Mar 1972	Geometric Design of Military Roads in the Theater of Operations (Interim Procedure), by V. C. Barber and D. N. Brown	AD 739 915
IR S-72-2	Apr 1972	Blasting Guide	
IR S-72-3	Sep 1972	Emplacement and Maintenance of Dust-Control Materials, by M. M. Culpepper	AD 756 179
IR S-73-1	May 1973	Evaluation and Maintenance of Expedient-Surfaced Airfield Facilities, by P. J. Vedros, Jr.	AD 762 126
IR S-74-1	Apr 1974	Determination of In-Place Moisture and Density by Nuclear Methods, by S. L. Webster	AD 779 422
	Jun 1974	Errata Sheet No. 1	
IR S-74-2	May 1974	Installation of Heavy-Duty Truss-Web Extruded Aluminum Airfield Landing Mat, by D. W. White, Jr.	AD 779 423
	Jun 1974	Errata Sheet No. 1	
IR S-74-3	Sep 1974	Stabilization of Soil and Aggregate Materials for Forward Area Operations, by R. W. Grau	AD A001 521
IR S-75-1	Jun 1975	Slurry Seal Surface Treatments, by L. N. Godwin (includes Appendixes A-C)	AD A014 164
IR S-76-1	Apr 1976	Research and Development Management Analysis System (RDMAS), by S. F. Rutz (includes Appendixes A-E)	AD A025 447
IR S-77-1	Jun 1977	Procedures for Development of CBR Design Curves, by A. Taboza Pereira (includes Appendix A)	AD A043 447
IR S-77-2	Jul 1977	Heater-Planer, Heater-Scarifier, and Heater-Remix-Overlay Maintenance Procedures for Bituminous Pavements, by R. W. Grau (includes Appendix A)	AD A043 270
IR S-77-3	Nov 1977	Procedure for Upgrading Deteriorated Theater of Operations (TO) Pavement Facilities, by C. D. Burns	AD A047 630

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 3-2	Apr 1952	Analysis of Design, Drainage Structures Below Morgan City, Franklin, Centerville, Maryland, North Bend, Ellerslie and Gordy; Foundation Investigation	
MP 4-3		Condition Survey:	
	Apr 1952	Report 1 Sewart Air Force Base, Smyrna, Tennessee	
	Oct 1952	Report 2 Pope Air Force Base, Fort Bragg, North Carolina	AD 010 210
	Nov 1952	Report 3 Lawson Air Force Base, Fort Benning, Georgia	AD 010 351
	Mar 1953	Report 4 Ardmore Air Force Base, Ardmore, Oklahoma	AD 010 352
	Jun 1953	Report 5 Eglin Air Force Base, Valparaiso, Florida	
	Jun 1953	Report 6 Bolling Air Force Base, Washington, D. C.	
	Sep 1954	Report 7 Kirtland Air Force Base, Albuquerque, New Mexico, Surveys of 1945-1952	
MP 3-4	Apr 1952	Construction and Testing of the Cone Sounding Device	
MP 3-5	Apr 1952	Pumping Tests on Pressure Relief Well System, Outlet Structure Excavation, Grenada Dam	
MP 3-6	May 1952	Field Observations on Texas and Pacific Main Line Railroad Embankment, Morganza Floodway, Louisiana	
MP 3-9	Aug 1952	Potomology Barrel Samples	
MP 3-10	Sep 1952	Torsion Shear Study	AD B951 469
MP 3-12	Aug 1952	Study of Variability of Sand Deposits	
MP 3-14	Aug 1952	Tentative Design Curves for Military Vehicular Traffic	
MP 3-15	Sep 1952	Freezing Test on Soil	AD 010 353
MP 4-16	Oct 1952	Development of Tentative CBR Curves for Airplane Wheels on Unsurfaced Soils	AD 010 355
MP 3-17	Sep 1952	Review of Soils Design and Construction of Bayou Rapides Drainage Structure	AD B951 469
MP 4-29	Dec 1952	Development of Tentative CBR Design Curves for Landing Mats	AD 008 639
MP 4-32	Nov 1952	Experimental Pavements at Presque Isle Air Force Base, Maine	

SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-34	Apr 1953	Jet Operations on Parking Aprons at Eglin, MacDill, and Pinecastle Air Force Bases and Recommended Test Procedure to Simulate the Operations	
MP 3-37	Jun 1953	Review of Soils Design and Construction of East and West Calumet Floodgates	
MP 4-38	Feb 1954	Collection of Available Data on Shell Aggregate for Bituminous Paving Mixes	
MP 3-40	Oct 1952	Review of Soils Design and Construction of Walker Lake Canal Pumping Plant	
* MP 4-43	Jul 1953	Report of Limited Laboratory Tests on Baromix	
MP 4-44	Jul 1953	Limited Investigation of Use of Emulsified Asphalt in Hot-Mix Asphaltic Concrete	
MP 4-45	Jul 1953	Study of Effect of Asphalt Content on Bituminous Pavement Durability	
MP 4-46	Aug 1953	Tentative Changes in Voids Criteria for Bituminous Paving Mixes When Using 'Bulk-Impregnated' Specific Gravity	
MP 4-47	Aug 1953	Subgrade Preparation for Overlay, Test Track No. 2, Sharonville, Ohio	
MP 3-50	Oct 1953	Investigation of Underseepage, Sections 6 and 7, Wolf River Levee, Memphis, Tennessee	
MP 4-51	Oct 1953	Rolling Resistance Tests on Landing Mat	AD 126 281
MP 3-52	Oct 1953	Instructions Concerning Borings and Installations of Piezometers and Pressure Relief Wells	
MP 3-53	Nov 1953	Review of Soils Design and Field Observations of Bayou Cocodrie Drainage Structure	
MP 4-54	Oct 1953	Traffic Tests on Metal and Vinyl Membranes	
MP 4-57	Oct 1952	An Investigation of the Water Permeability and Jet-Fuel Resistance of a Bituminous Concrete Paving Mix at Various Degrees of Density	
MP 3-59	Jan 1952	Seismic Survey of Grand Island	
MP 3-60	Jan 1952	Seismic Survey of Dam Sites in Upstate New York	
MP 4-51	Jun 1951	Collection of Letter Reports on Flexible Pavement Design Curves	
MP 4-52	Jan 1950	Evaluation of Pavements, Eielson Air Force Base, Fairbanks, Alaska	

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 3-64	Aug 1951	Seismic Survey of the Spokane River Valley	
* MP 4-71	Dec 1953	Summary of Investigations at the Proposed Cameri Air Base Site, Cameri, Italy	
MP 4-73	Sep 1954	A Study of Moisture-Content Determinations on Selected Soils	AD 041 085
MP 3-78	Feb 1954	DeLong Pier Foundation Tests	
* MP 4-79	Nov 1952	Laboratory Investigation of the Use of Tar and Tar-Rubber Blends for Binders for Flexible Pavements to Resist Jet Fuel and Jet Blasts	
MP 4-81	Apr 1954	Asphaltic Concrete Binder Course with Shell Aggregate, Eglin Field No. 9	
MP 4-84	Apr 1954	Relative Stress Distributing Efficiency of Pavement Layers	
MP 3-86		Corrosion Tests of Metals, Sardis Dam, Mississippi:	
	Apr 1954	Report 1 Results of Three and One-half Years Exposure	
MP 4-88	May 1954	Investigation of the Penetration of Asphalt Into Porous Aggregates as Related to and Affecting the Specific Gravity of the Aggregate	
MP 3-90	Jun 1954	Plastic Pipe for Relief Well Risers	
MP 4-91	Jul 1954	Effect of Exhaust of F-100A Aircraft on Airfield Pavements; Summary of Results of Tests at Davis-Monthan Air Force Base, Arizona	AD 756 327
* MP 4-92	Aug 1954	Investigation of Formula VL as a Protective Treatment for Asphaltic-Concrete Surfaces	
MP 4-93		Condition Surveys of Soil-Cement Construction:	
	Sep 1954	Report 1 Turner Air Force Base, Albany, Georgia	
	Nov 1954	Report 2 Moody Air Force Base, Valdosta, Georgia	
MP 4-95	Sep 1953	Effect of Addition of Sodium Tetraphosphate to Vicksburg Lean Clay	
MP 4-98	Mar 1952	Jet-Blast and Fuel-Spillage Tests at Hunter Air Force Base, Georgia	
MP 4-100	Mar 1955	Construction Index	AD A950 379
MP 4-102	Oct 1954	The Computation of Stress and Strain in a Two-Layer System	

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP 4-104	Mar 1955	Evaluation of Forward Airstrip Criteria for Soil Strength	AD 112 973L
MP 3-106	Aug 1950	Shellperm Process for Impermeabilizing Sand	
MP 4-110	Nov 1954	Plane Operations on Unprepared Landing Strip at Eglin Air Force Base, Florida	AD 756 112
MP 4-113	Feb 1955	Analytical Studies of Orthotropic Landing Mats for Forward Airfields	
MP 4-118	Feb 1955	Tests on an Absorptive Aggregate to Study Effect of Absorption and Gradation on Voids in Compacted Bituminous Paving Mix	
MP 4-121	Mar 1955	Procedures for Establishing Family of Voids Curves for Hot-Mix Bituminous Pavement	
MP 3-122		Summary Review of Soil Stabilization Processes:	
	Apr 1955	Report 1 Summary Review of Lignin and Chrome-Lignin Processes for Soil Stabilization	AD B951 470
	Jan 1956	Report 2 Calcium Acrylate Treatment	AD 085 062
	Sep 1956	Report 3 Soil-Cement	AD 107 687
	Nov 1956	Report 4 Bituminous Treatment	AD 113 306
	Aug 1957	Report 5 Hydrated Lime and Quicklime	
	May 1961	Report 6 Mixing Principles, Techniques and Equipment	AD 653 533
	Oct 1961	Report 7 Electrical Stabilization of Fine-Grained Soils	
MP 4-124	Apr 1955	Laboratory Investigation of Rubber Waterstop Failures in Concrete Structures Caused by Differential Movements of Adjacent Monoliths	AD 756 306
MP 3-126	May 1955	Geologic Conditions at the Low-Sill Structure, Old River Control Site	
MP 4-127	May 1955	Field Compaction Tests with Impact Compactor	
MP 4-129	Oct 1954	Present Status of Soil Stabilization	
MP 4-130	Oct 1954	Present Status of Studies Related to Airhead Construction	
MP 3-131	May 1955	Control of Underseepage, Mississippi River Levees, St. Louis District, Corps of Engineers	
MP 4-134	Jun 1955	Test of Congercote as a Jet-Fuel-Resistant Coating	
MP 4-136	Jul 1955	Investigation of Shell and Sand-Shell Mixes for base Courses	AD 084 318

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 3-138	May 1956	Operational Suitability Test of Mobile Materials Laboratory M-2	AD A006 527
MP 3-140	Aug 1955	Memphis, Wolf River, and Nonconnah Creek, Tennessee Project, Section 1-B Floodwall; Investigation of Failure of Wolf River Bank and Preliminary Investigation of Alternate Wall Alignment	
MP 4-142	Aug 1955	Fuel-Spillage Tests on Tar-Rubber Paving, Homestead Air Force Base, Florida	
MP 4-144	Sep 1955	Report of Trip to Savannah District and Hunter, Pinecastle, and MacDill Air Force Bases in Connection with Drainpipe Study	
MP 3-145	Sep 1955	Preliminary Investigation of Chrome-Lignin as a Stabilizing Agent in Vicksburg Loess Soil	AD B951 471
MP 3-148	Jan 1956	Pile Loading Tests, Low-Sill Structure - Old River Control	
MP 4-150	Jan 1956	Waterways Experiment Station Large Triaxial Device	
MP 3-151	Feb 1956	A Quaternary Ammonium Salt as a Stabilizing Agent in Vicksburg Loess Soil	AD B951 472
MP 4-152	Feb 1956	Cooperative Study of Bulk Impregnated Specific Gravity	
MP 3-157	Feb 1956	Foundation Studies for DeLong Piers in the Norfolk, Virginia, Area	
MP 4-162	Mar 1956	Specific Gravity and Voids Relationships in Bituminous Pavement Mix Design	
MP 4-170		Weathering Tests on Bituminous Pavement Samples:	
	May 1956	Report 1 Observations of Effects Through 1954	
	Mar 1962	Report 2 Observations of Effects Through November 1959	AD 756 294
MP 4-172	Jun 1956	Laboratory Report of Tests on Harmon Air Force Base Asphalt and Asphalt Pavement	
MP 4-175	Jun 1956	Moisture Conditions Under Flexible Airfield Pavements	
MP 3-176	Jul 1956	Review of Materials and Methods for Dustproofing and Waterproofing Soils	AD 105 203
MP 4-179	Jul 1956	Laboratory Investigation of Use of Volcanic Cinders for Bituminous Paving for Lajes Air Force Base, Azores	
MP 4-180	Aug 1956	A Study of the Effects of H-21 Helicopter Operations on Flexible Pavements	

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 3-181	Sep 1956	Air Photo Interpretation of Alluvial Soils in the Valley of the Lower Mississippi River and Their Engineering Significance	
MP 3-182	Sep 1956	Air Photo Interpretation in Marshland Areas as Exemplified by Central Coastal Louisiana, U. S. A.	
MP 3-185	Sep 1956	Mississippi River and Tributaries, Old River Control, Low-Sill Structure; Pumping Tests on Deep Well System for Dewatering Excavation	
* MP 4-186	Nov 1956	Experiments in Destabilizing Soils with Chemicals	AD A006 525
MP 4-190	Dec 1956	Field Compaction Tests with Jay (Model J-12) Plate-Type Vibratory Compactor	
MP 4-194	Mar 1957	Limited Investigation of Stresses and Strains Produced within a Mass of Sand Confined in a Rigid Cylinder	
MP 4-197	Jan 1957	A Study of In-place Density Determinations for Base Courses and Soils	
MP 4-199	Mar 1957	Study of Nuclear Probes for Determination of Airfield Densities and Moistures	
MP 3-200	Mar 1957	Dewatering Excavation, Low Sill Structure, Old River, Louisiana	
MP 4-202	Mar 1957	Effects of H-21 Helicopter Landing Gear Loadings on Flexible Pavements	
MP 3-205	Mar 1957	Underseepage and Its Control -- Mississippi River Levees	
MP 4-207	Mar 1957	Tests on Asphalt Paving for Frobisher, N. W. T.	
MP 3-208	Mar 1957	Mississippi Valley Geology, Its Engineering Significance	
MP 4-210	Mar 1957	Compaction of Bituminous Concrete	
MP 4-213		Condition Surveys of Pavement Subjected to Channelized Traffic:	
	Apr 1957	Report 1 Davis-Monthan AFB, Tucson, Arizona	AD 756 295
	Jun 1958	Report 2 March Air Force Base, Riverside, California	AD 756 296
	Nov 1958	Report 3 McCoy Air Force base, Orlando, Florida	AD 756 297
	Dec 1959	Report 4 Walker Air Force Base, Roswell, New Mexico	
MP 3-215	May 1957	Geology of the Proposed Lower Auxiliary Channel, Yazoo River Basin	

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-216	Apr 1957	Laboratory Tests on Aggregate and Preliminary Bituminous Mix for Sondrestromfjord, Greenland	
MP 4-220	May 1957	Relationship Between Tire Pressure and Marginal-Road Deterioration, Pilot Tests	
MP 4-221	May 1957	Possible Auxiliary Uses of Extruded T11 Aluminum and T8 Magnesium Landing Mats	AD 756 303
MP 4-225	May 1957	Effects of Jet Blast and Fuel Spillage on Bituminous Pavements	
MP 4-228	Jul 1957	Evaluation of McConaughav (Model HTD-500) Asphalt Patch Plant	
MP 4-232	Aug 1957	Placement of Cold-Mixed Asphaltic Pavements in the Caribbean Area	
MP 4-233	Aug 1957	Interim Report on Study of Porpoising	
MP 4-240	Oct 1957	Effect of Tire Pressures and Lift Thicknesses on Compaction of Soil with Rubber-Tired Rollers	
MP 4-243	Nov 1957	Development of Multiple-Wheel CBR Design Criteria	
MP 4-244	Nov 1957	Asphalt Mix Design for Different Climatic Regions	AD B951 476
MP 4-245	Dec 1957	Laboratory Investigation of the Use of Various Elastomers with Tar as a Binding Agent for Jet-Fuel- and Jet-Blast-Resistant Pavements	
MP 4-246	Nov 1957	Dry-Ice Freezing of a Small Unprepared Soil Area	AD B951 477
MP 4-252	Jan 1958	Notes on the Corps of Engineers' CBR Design Procedures	
MP 4-253	Jan 1958	Study of Soil-Cement base Courses on Military Airfields	
MP 3-258	Mar 1958	Geological Reconnaissance, Cooper Dam Site, South Sulphur River, Texas	
MP 3-259	Feb 1958	Geological Investigation of the Mississippi River-Gulf Outlet Channel	
MP 4-260	Mar 1958	Failure Criteria for Flexible Airfield Pavements	
MP 4-261	Mar 1958	Progress Report on the Corps of Engineers' Kneading Compactor for Bituminous Mixtures	
MP 4-269	Jun 1958	Index of Compaction Characteristics	
* MP 4-271	Jun 1958	Field Compaction Tests with Terrapac Vibratory Roller	
* MP 4-272	Jun 1958	Field Compaction Tests with Duo-Pactor	

\* Statement B. See Preface.



## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP 4-273	Jun 1958	Field Compaction Tests with Dynapactor	
* MP 4-287	Oct 1958	Fuel-Spillage and Traffic Tests on Jennite J-16 Seal-Coat Material	
MP 4-288	Oct 1958	Laboratory Investigation of Asbestos Fibers with Emulsified Seal-Coat Materials for Rubberized-Tar Concrete	
MP 4-292	Nov 1958	Laboratory Study for Improvement of Rubberized-Tar Specifications	
MP 4-294	Nov 1958	Evaluation of the California Extractor for Bituminous Pavement	
MP 4-301	Feb 1959	Use of Nonflammable Solvents in Determining the Water Content of Bituminous Mixtures	
MP 4-302	Jan 1959	Laboratory Tests for Bituminous Seal-Coat Materials Specifications	
MP 4-303	Jan 1959	Accelerated Proof-Tests of Runway Pavement, Columbus Air Force Base, Mississippi	
MP 4-304	Feb 1959	Performance of Rubberized-Tar Concrete Pavements on Airfield Facilities	
MP 4-305	Dec 1957	Airfield Pavement Evaluation; Goodfellow Air Force Base, Auxiliary Field No. 6, Van Court, Texas	
MP 4-306	Mar 1958	Airfield Pavement Evaluation; Goodfellow Air Force Base, San Angelo, Texas	
MP 4-309	Apr 1958	Airfield Pavement Evaluation; Dyess Air Force Base, Abilene, Texas	
MP 4-310	May 1958	Airfield Pavement Evaluation; James Connally Air Force Base, Waco, Texas	
MP 4-311		Airfield Pavement Evaluation:	
	May 1958	Report 6 on McClellan Air Force Base, Sacramento, California	
	Dec 1959	Report 7 on McClellan Air Force Base, Sacramento, California	
	Feb 1960	Report 8 on McClellan Air Force Base, Sacramento, California	
MP 4-312	Jun 1958	Airfield Pavement Evaluation, Travis Air Force Base, Fairfield, California	
MP 4-313	Jun 1958	Airfield Pavement Evaluation, Gray Air Force Base, Killeen, Texas	

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP 4-314	Jul 1958	Airfield Pavement Evaluation, Moody Air Force Base, Valdosta, Georgia	
MP 4-315	Sep 1958	Airfield Pavement Evaluation, Bergstrom Air Force Base, Austin, Texas	
MP 4-316	Jan 1959	Airfield Pavement Evaluation, Report 7 on Mather Air Force Base, Sacramento, California	
MP 4-317	Jan 1959	Laboratory Investigation of Moment-Transferring End Joints for Airplane Landing Mat	
MP 4-321	Feb 1959	Airfield Pavement Evaluation, Report 8 on Mather Air Force Base, Sacramento, California	
MP 4-325	Mar 1959	Measurements of Ground Blast, Redstone Missile	
MP 4-333	Apr 1959	Theory and Application of a Gyrotory Testing Machine for Hot-Mix Bituminous Pavement	
** MP 4-335	Apr 1959	Effects of Asbestos Fibers in Asphaltic Concrete Paving Mixtures	
MP 3-336	Apr 1959	Review of Report, "Navigation Feature, Arkansas River Multiple-Purpose Plan of Improvement Route Below Pine Bluff, Arkansas"	
MP 3-339	Apr 1959	Design Memorandum, Construction Materials for Cooper Dam	
MP 3-341	Jun 1959	Sources of Pertinent Geologic Data for Lower Mississippi Valley Division Engineers	
MP 3-346	Jul 1959	Liquid Limit Results from Various Types of Grooving Tools	
MP 4-347	Jul 1959	Measurement of Effects of Traffic with the Shell Road Vibration Machine	
MP 4-348	Jul 1959	Dynamic Testing of Pavements	
MP 4-352	Aug 1959	Airfield Pavement Evaluation, Altus Air Force Base, Altus, Oklahoma	
MP 4-353	Aug 1959	Airfield Pavement Evaluation, Altus Air Force Base, Altus, Oklahoma (Detailed Report Complete with Supporting Data)	
MP 4-356	Sep 1959	Airfield Pavement Evaluation, Davis Field, Muskogee, Oklahoma	
MP 4-357	Sep 1959	Comparison of Compaction Data Developed by Various Types of Mechanical and Hand Compaction Hammers	AD B951 478

\* Department of Defense Use Only.  
 \*\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 3-359	Oct 1959	Microstudy of Boring Samples, Cooper Dam Site, South Sulphur River, Texas	
MP 3-360	Oct 1959	Critical Elements of Design and Construction of Heavy-Duty Flexible Pavements	
MP 3-361	Oct 1959	Summary of Rotary Cone Penetrometer Investigations	AD B951 473
MP 4-364	Nov 1959	Investigation of Effects of 50,000-lb Wheel-Load Traffic on a Shallow-Buried Flexible Pipe	AD A006 522
MP 4-365	Nov 1959	Traffic Evaluation Tests of Rogers Dry Lake, California	
MP 4-366	Nov 1959	Airfield Pavement Evaluation; Sheppard Air Force Base, Wichita Falls, Texas	
* MP 4-367	Dec 1959	Airfield Pavement Evaluation; Robins Air Force Base, Warner Robins, Georgia	
MP 3-368	Jul 1952	Preliminary Investigation of Multiple-Stage-Loading Triaxial Shear Tests	
MP 4-369	Jan 1960	Study of Lateral Distribution of Aircraft Traffic on Runways	
MP 4-373	Jan 1960	Nondestructive Testing of Pavements	
MP 4-375	Jan 1960	Airfield Pavement Evaluation; Reese Air Force Base, Lubbock, Texas, and Appendix A: Studies Made for Evaluation	
MP 4-376	Jan 1960	Airfield Pavement Evaluation; James Connally Air Force Base, Waco, Texas, and Appendix A: Studies Made for Evaluation	
* MP 4-379	Feb 1960	Airfield Pavement Evaluation; Hunter Air Force Base, Savannah, Georgia, and Appendix A: Studies Made for Evaluation	
MP 4-380	Feb 1960	Summary of Results of Compaction Studies Conducted by Road Research Laboratory, England	
MP 3-383	Mar 1960	Compaction of Embankments	
MP 4-385	Mar 1960	Life Expectancy of Sand-Asphalt Mixes for Upper-Bank Revetments	
MP 3-387	Apr 1960	Shore-Line Fluctuations in the Vicinity of Freshwater Bayou, Louisiana	AD A006 525
MP 4-388	Apr 1960	Evaluation Tests of Epon-Asphalt Pavement	
MP 4-390	May 1960	Duplication of Prototype Stress-Strain Relations by Laboratory Tests	

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP 4-391	Jun 1960	Field Tests of Divided Bathtub-Type Blast Deflector, Nike-Ajax Missile	
* MP 4-392	Jun 1960	Blast Deflector Field Tests, Corporal Missile	
MP 4-393	Jun 1960	Stresses and Deflections in Homogeneous Soil Masses	
MP 4-394	May 1960	Strength Requirements in Unsurfaced Soils for Aircraft Operations	
MP 4-396	Jul 1960	Preliminary Investigation of a Fiber-Resin Depositor for Expedient Ground Surfacing	
MP 4-397	Jun 1960	Airfield Pavement Evaluation; Perrin Air Force Base, Sherman, Texas, and Appendix A: Studies Made for Evaluation	
MP 4-398	Jun 1960	Airfield Pavement Evaluation; Webb Air Force Base, Big Spring, Texas, and Appendix A: Studies Made for Evaluation	
MP 4-411	Sep 1960	Army Airfield Pavement Evaluation; Lawson Army Airfield, Fort Benning, Georgia, and Appendix A: Studies Made for Evaluation	AD 756 328
MP 3-418	Mar 1961	Theoretical Study of the Displacement of Long Footings by Dynamic Loads	AD 255 054
MP 4-427	Apr 1961	Airfield Pavement Evaluation; Reese Air Force Base Auxiliary Airfield, Terry County, Texas, and Appendix A: Studies Made for Evaluation	AD 756 310
MP 3-428	Jan 1961	Physical Components of the Shear Strength of Saturated Clays	
* MP 4-430	May 1961	Blast Deflector Field Tests, Honest John Rocket	AD 465 808L
MP 3-432	Jun 1961	Calibration and Installation of Electrical Measuring Devices and Wall Deflection Pipes, Port Allen Lock	AD A006 521
MP 4-436	Jul 1961	Interim Report of Experimental Crack Sealing in Asphaltic Concrete Pavements, Thule Air Base, Greenland, 8-24 August 1960	
MP 3-437	Jun 1961	Results of Tests on Concrete Cylinders and Sand Back-fill, Port Allen Lock	AD 756 357
MP 4-440	Aug 1961	Effect of Heavy Wheel Loads on 12-In.-Diameter Rigid Pipe Under Various Depths of Cover	
MP 3-445	Aug 1961	Dynamic Loading Machine and Results of Preliminary Small-Scale Footing Tests	

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 3-449	Aug 1961	Soils Team for Inspection of ICBM Facilities	
MP 4-451	Sep 1961	Condition Survey of NE-SW Runway and Parallel Taxiway, Foss Field, Sioux Falls, South Dakota	
MP 3-454	May 1962	Development of Underreamer for Small Spherical Cavities	AD A006 534
MP 3-455	Oct 1961	Investigations with Rotary Cone Penetrometer	
MP 4-459	Dec 1961 Revised Jul 1965	Ground Flotation Requirements for Aircraft Landing Gear	AD 620 312
MP 4-466	Jan 1962	Construction of Epoxy-Asphalt Concrete Pavement, Patrick Air Force Base, Florida	AD 756 306
MP 4-470	Feb 1962	Critical Problems Affecting Quality of Heavy-Duty Flexible Pavements	
MP 3-474	Feb 1962	Feasibility Study of the Gyrotory Machine for Testing Soils	
MP 3-478		Evaluation of Soil Mechanics Laboratory Equipment:	
	Nov 1958	Report 1 Warlam Triaxial Apparatus for 6-In.-Diameter Samples	AD A032 586
	May 1960	Report 2 Evaluation of Karol-Warner Conbel Consolidation Loading Device	AD A032 588
	Apr 1961	Report 3 Evaluation of Available Liquid Limit Devices	AD A032 590
	Apr 1961	Report 4 Determination of Liquid and Plastic Limits of Soils by the Cone Penetration Method	AD A032 643
	Feb 1962	Report 5 Comparison of Speed of Various Balances	AD A032 644
	Oct 1963	Report 6 Sieve Analyses of Granular Soils for Division Laboratories	AD A032 645
	Feb 1965	Report 7 The FTCO Consolidation Device, by J. E. Mitchell	AD A032 646
	Jun 1964	Report 8 Evaluation of the Beckman Model 930 Air Comparison Pycnometer, by J. E. Mitchell	AD A032 647
	Feb 1968	Report 9 Comparison of Controlled-Stress and Controlled-Strain Direct Shear Tests on Two Compacted Soils, by J. E. Mitchell	AD A032 648
*	Dec 1967	Report 10 Pore Water Pressure Measuring Devices for Triaxial Compression Testing of Soils, by J. R. Compton, D. M. Vick, and J. E. Mitchell	AD B015 262L

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 3-478 * (Cont)	Jan 1970	Report 11 Anteus Back-Pressure Consolidation Apparatus, Model A, by Leslie Devay	AD 908 494L
	Jun 1971	Report 12 Modified Berkeley Pneumatic Tamper for Compacting Test Specimens of Cohesive Soils, by B. N. MacIver and R. T. Donaghe	AD 756 184
	Aug 1974	Report 13 Feasibility Study, Microwave Oven Used for Rapid Determination of Soil Water Contents, by P. A. Gilbert	
MP 4-479	Mar 1962	Load-Carrying Evaluation of Alkali Flat Area, White Sands Missile Range, New Mexico	AD 672 493
MP 3-481	Apr 1962	Distribution and Engineering Significance of Sediments Bordering the Mississippi from Donaldsonville to the Gulf	AD A006 536
MP 4-483	Apr 1962	Preliminary Investigation of Effects of Skydrol on Epoxy Asphalt Concrete Pavement	
MP 4-486	Apr 1962	Controlled Tests of Mixed Loads on Flexible Pavements	
MP 4-487	Apr 1962	Design of Flexible Pavements Considering Mixed Loads and Traffic Volume	
MP 3-488	Apr 1962	Comparison of Results of Liquid Limit Tests by Standard and One-Point Methods	
MP 3-489	Jul 1962	Review of McGee Bend Dam Design	
MP 3-492	May 1962	Investigation of Vicksburg Limestone for Initial Closure of Old River	
MP 4-494	May 1962	Gyratory Compaction Method for Determining Density Requirements for Subgrade and Base of Flexible Pavements	
MP 4-495	May 1962	A Study of Surface-Type Nuclear Instruments for Determining Soil Moisture and Density	
MP 4-496	Jun 1962	Traffic Testing of Pipe Beneath Heavy-Load Rigid Pavement	
MP 3-499	Jul 1962	Review of Beaver Dam Design	
MP 4-501	Jun 1962	Development of CBR Design Curve for M9M2 Landing Mat	
MP 3-503	Jul 1962	Seepage Analysis for Columbia Lock and Dam	
MP 3-504	Jul 1962	Results of Investigations of Slide Area at Mint Springs Bayou Bridge, Vicksburg National Military Park	
MP 3-507	Jul 1962	Ouachita River, General Geology	

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 3-508	Jul 1962	Project Otter: Data Collection and Instrumentation Plan	
MP 3-509	Jul 1962	Plan for Surface Storage of Salt, Tatum Dome, Lamar County, Mississippi	AD 757 391
MP 3-518	Aug 1962	Geologic Aspects of Site Selection, Columbia Lock and Dam, Ouachita River, Louisiana	
MP 4-519	Aug 1962	Visit to Detachment 1, 445th Troop Carrier Wing, Assault, USAF, Memphis Municipal Airport, Memphis, Tennessee, 9 May 1962	
MP 4-525	Aug 1955	Construction and Fuel-Spillage Tests, Firestone Panels 512 and 510B	
MP 4-526	Aug 1962	Bomb-Crater Repair Study, Fort Bragg, N. C., 23 June-3 July 1962	AD A032 893
MP 3-532	Oct 1962	Results of Laboratory Tests on Foundation and Borrow Soils, Beech River Dam	
MP 3-534	Sep 1962	Waterstop Failure in Tunnel at Complex 1-C, Larson Air Force Base, Titan I Facility	
MP 4-537	Sep 1962	Goose Air Base, Labrador, Epoxy-Asphaltic Pavement Project, 14 July-11 August 1962	
MP 4-540	Oct 1962	Investigation of Possible Damages to Ole Miss Airport at Oxford, Mississippi, 26 October 1962	
MP 3-544	Nov 1962	Review of Stability Analysis, Table Rock Dam	
MP 4-545	Nov 1962	Visit to Fort Bragg, N. C., and Charleston AFB, S. C., 17 October 1962	
MP 3-546	Dec 1962	Lower Ouachita and Black Rivers, Arkansas and Louisiana, General Geology	AD A006 535
MP 4-550	Jan 1963	Important Considerations Resulting from Corps of Engineers' Flexible Pavement Experience	
MP 3-554	Jan 1963	Calibration and Installation of Electrical Measuring Devices and Results of Tests on Concrete and Sand Back-fill, Old River Lock	
MP 3-555	Feb 1963	General Geology, Lower St. Francis River, Arkansas	
MP 4-557	Feb 1963	Preliminary Examination of Space-Vehicle Launch Facility Foundation Data	AD A006 528
MP 4-559	Feb 1963	Importance of Compaction and Quality of Crushed-Stone Bases	

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 3-561	Mar 1963	Methodology and Paleogeographic Interpretation of Flysch Formations; A Summary of Studies in the Maritime Alps	AD A006 529
MP 3-562	Mar 1963	Distribution and Lateral Variability of Heavy Minerals in the Annot Sandstones	
MP 4-565	Mar 1963	Visit to Fort Campbell, Ky., to Construct T15 Membrane-Surfaced Runway and Helicopter Landing Pad, 17-24 September 1962	
MP 3-566	Mar 1963	Vertical Petrographic Variability in Annot Sandstone Turbidities: Some Preliminary Observations and Generalizations	AD A006 532
MP 3-569	Apr 1963	Site Geology, Columbia Lock and Dam, Ouachita River, Louisiana	
MP 3-571	Apr 1963	Geologic Aspects of Site Selection, Jonesville Lock and Dam, Black River, Louisiana	
MP 3-572	Apr 1963	Dynamic Bearing Capacity of Soils--Field Test--The Response of Impulsively Loaded Square Footings on Frenchman Flat Silt	
MP 3-574	May 1963	Stability of Crater Slopes, Project Sedan (superseded by Miscellaneous Paper 3-662)	
MP 4-576	May 1963	Investigation of Foundations for Launch Facilities for Space Vehicles, Cape Canaveral, Florida	AD A006 531
MP 4-577	Jun 1963	A Procedure for Determining Elastic Moduli of Soils by Field Vibratory Techniques	AD 409 826
MP 4-580	Jun 1963	Effect of Antenna Operation on Structure and Foundation Behavior TTR Tower, White Sands Missile Range, New Mexico	AD 756 292
MP 4-581	Jul 1963	Evaluation of M9M1 Landing Mat	AD A006 530
MP 3-582	Jun 1963	Review of Greers Ferry Dam Design	AD 749 988
MP 4-584	Jul 1963	Nondestructive Dynamic Testing of Proposed Radar Sites, White Sands Missile Range, New Mexico	AD 749 992
MP 3-595	Aug 1963	Geologic Aspects of Site Selection, Haleside Pumping Station, Lower St. Francis River, Arkansas	AD 749 989
MP 4-599	Sep 1963	Development of CBR Design Curves for AM1 Landing Mat	AD 749 993
MP 4-600	Sep 1963	Improved Beach Matting Tests at Onslow Beach, N. C., 20-25 May 1963	AD 749 994
MP 3-605	Oct 1963	Soil Stabilization Requirements for Military Roads and Airfields in the Theater of Operations	AD 450 617
MP 4-614	Dec 1963	Report of Trip to Griffiss Air Force Base, 7-13 October 1963	



## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-615	Jan 1964	Development of CBR Design Curves for Harvey Aluminum Landing Mat	AD 749 467
MP 4-617	Jan 1964	Dynamic Tests, Proposed Navy X-Band Antenna Site, Waldorf, Maryland	AD 749 995
MP 3-618	Jan 1964	Project PRE-SCHOONER, Geological Investigations for Test Site Selection, Gold Meadows Area, Nevada Test Site	AD 749 466
MP 4-620	Feb 1964	Construction of Membrane-Surfaced Runway and Helicopter Launching Pad, Ft. Benning, Georgia	AD 749 996
MP 4-636	Mar 1964	Vibration Tests, Nevada Test Site, Mercury, Nevada, 11-16 February 1964	AD 749 997
MP 3-639	Apr 1964	Additional Site Exploration, Vacuum Solar Telescope Site, Sacramento Peak, New Mexico	AD 749 990
MP 4-645	Apr 1964	Dynamic Tests, Frenchman Flat, Nevada Test Site, Mercury, Nevada	AD 750 274
MP 4-655	Jun 1964	Development of CBR Design Curve for Modified AML Landing Mat	AD 749 810
MP 4-656	Jun 1964	Evaluation of Convair Landing Mat	AD 749 812
MP 4-657	Jul 1964	WES Investigational Project - Soil Infiltration Studies of Corrugated Steel Pipe	AD 845 375
MP 3-661	Jun 1964	Field Vane Shear Investigation, Willow Point, Louisiana	AD 749 811
MP 3-662	Jul 1964	Project SEDAN, Stability of Crater Slopes (supersedes Miscellaneous Paper 3-574)	AD 749 991
MP 3-664	Jul 1964	Effect of Large-Size Particles on the Shear Strength of a Saturated Clay Gravel	
MP 4-666	Jan 1965	Dynamic Soils Investigations, PROJECT BUGGY, Buckboard Mesa, Nevada Test Site, Mercury, Nevada, by Z. B. Fry	AD 751 099
MP 3-675	Sep 1964	Stratigraphic-Sedimentological Investigation of Mississippi River Bank Failure, Fort Jackson, Louisiana, by D. J. Stanley	AD 751 174
MP 3-676	Oct 1964	Compaction Tests on Gravelly Soils with Cohesive Soil Matrix, by R. W. Cunny and W. E. Strohm	AD 752 713
MP 4-679	Nov 1964	Performance of C-130 Ramp Kit on Various Soil Conditions, by W. B. Fenwick	AD 751 100
MP 3-683	Aug 1964	Upper Ouachita River, Arkansas and Louisiana, General Geology, by E. L. Krinitzsky	AD 751 096
MP 3-684	Nov 1964	Site Geology, Jonesville Lock and Dam, Black River, Louisiana, by R. T. Saucier	AD 751 097

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 3-686	Nov 1964	Effects of Vibratory Loads on Piles, by A. A. Maxwell and Z. B. Fry	AD 751 098
MP 4-688	Jan 1965	Airfield Pavement Evaluation, Turner Air Force Base, Albany, Georgia, September 1963, and Appendix A: Studies Made for Evaluation, by P. J. Vedros	AD 751 366
MP 4-691	Dec 1964	Determination of Soil Shear Moduli at Depths by In-Situ Vibratory Techniques, by R. F. Ballard	AD 692 861
MP 4-694	Dec 1964	Effect of Antenna Operation on Structure and Foundation Behavior, FPS-26 Towers, Bellefontaine Air Force Station, Ohio, and Keesler Air Force Base, Mississippi, by R. F. Ballard and Jack Fowler	AD 751 175
MP 3-696	Jan 1965	Geologic Aspects of Site Selection, Felsenthal Lock and Dam, Ouachita River, Arkansas, by R. T. Saucier	AD 735 780
MP 4-697	Jan 1965	Army Airfield Pavement Evaluation, Robert Gray Army Airfield, Fort Hood, Texas, by P. J. Vedros	AD 735 695
MP 4-701	Aug 1965	F5A Austere Field Test, Landing Strip Evaluation, by W. B. Fenwick	AD 735 694
MP 3-703	Feb 1965	Preshot Geologic Investigations, Project SULKY, Buckboard Mesa, Nevada Test Site, by R. C. Nugent and D. C. Banks	AD 735 848
MP 4-704	Feb 1965	Behavior of Epoxy-Asphalt Airfield Pavements, 1963 Inspections, by A. H. Joseph	AD 735 701
MP 4-707	Nov 1964	Construction of Firestone Tar-Rubber Test Pavement at Selfridge Air Force Base, Michigan, by W. H. Larson	AD 735 847
MP 4-712	Feb 1965	Tests with a C-130E Aircraft on Unsurfaced Soils, by L. M. Womack	AD 613 170
MP 4-714	Feb 1965	Visit to Ft. Benning, Georgia, for Construction of Fiber Glass Membrane Surfacing, December 1964, and Inspections of Surfacing, January 1965, by S. G. Tucker	AD A032 649
MP 4-722		Phase I Field Tests of T17 Membrane Surfacing and Dust Palliatives:	
	Apr 1965	Report 1 Fort Bragg, N. C., 13-15 January 1965, by S. G. Tucker and R. C. Eaves	AD A032 650
	May 1965	Report 2 Dyess Air Force Base, Texas, 26-28 January 1965, by R. H. Grau and R. C. Eaves	AD A032 651
	Jun 1965	Report 3 Eglin Air Force Base, Fla., 9-26 February 1965, by R. H. Grau and R. C. Eaves	AD A032 652
	Jun 1965	Report 4 Langley Air Force Base, Va., 22-26 March and 1-3 April 1965, by R. H. Grau and R. C. Eaves	AD A032 706

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-728	Jul 1965	Effects of Methyl Bromide Treatment on Response of a Soil to Stabilization with Cement and Lime, by J. D. Stouffer	AD 736 125
MP 4-735	Jul 1965	Investigation of WESTCO D-1 and D-2 Mud Control Additives, by G. R. Kozan	AD 735 689
MP 4-747	Oct 1965	Evaluation of Harvey Modified AM2 Landing Mat, by W. B. Fenwick	AD 735 851
MP 3-749	Nov 1965	Statistical Evaluation of Cone-Penetration-Test Data, by J. K. Poplin	AD 736 121
MP 4-753	Nov 1965	Evaluation of Washington Aluminum Company AM2 Landing Mat, by W. B. Fenwick	AD 736 126
MP 4-756	Nov 1965	Guide Manual for Selection and Use of Dust Palliatives and Soil Waterproofers in the Theater of Operations, by G. R. Kozan and R. A. Pimental	AD 475 186
MP 4-759	Nov 1965	Evaluation of U. S. Steel Type 4.5 Air-Dek Landing Mat, by H. L. Green and G. L. Carr	AD 735 910
MI 3-763	Dec 1965	Properties of Foundation Materials, Vacuum Solar Telescope Site, Sacramento Peak, New Mexico, by A. L. Mathews, R. T. Saucier, and R. F. Ballard	AD 735 911
MP 3-768	Dec 1965	Tentative Placement Technique for Cylinders Buried in Clay Specimens, by E. B. Perry	AD 736 122
MP 3-775	Dec 1965	Geologic Aspects of Site Selections, Calion Lock and Dam, Ouachita River, Arkansas, by R. T. Saucier	AD 736 123
MP 4-776	Jan 1966	Investigation of Expedient Ground Surfacing with a Glass Fiber-Resin Mixture by a Spray-Deposition Technique, by Robert Turner	AD 735 913
MP 3-781	Jul 1965	Visit to U. S. Army Engineer District, Little Rock, Ark., and to Arkansas River Lock No. 2, Lock No. 3, and Dam No. 2, 24-26 May 1965	AD A032 704
MP 3-783	Sep 1965	Preshot Investigations for Project PRE-SCHOONER, Buckboard Mesa, Nevada Test Site, by R. C. Nugent and D. C. Barks	AD 736 124
MP 4-784	Jan 1966	Field Tests of Ceramic-Coated Aluminum Blast Panels with Hawk Missile, by G. W. Leese	AD 735 912
MP 4-785	Jan 1966	Statistical Analysis of Data from a Comparative Laboratory Test Program Sponsored by ACIL, by G. M. Hammitt	AD 736 624
MP 4-786	Jan 1966	Evaluation of Various Sizes of Harvey Aluminum AM2 Landing Mat, by W. B. Fenwick	AD 736 727

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-787	Jan 1966	Evaluation of Various Sizes of Butler AM1 Landing Mat, by C. D. Burns and W. B. Fenwick	AD 736 643
MP 4-788	Jan 1966	Evaluation of AM2 Landing Mat Replacement Panels and Keylock Assemblies, by W. B. Fenwick	AD 735 728
MP 4-789	Feb 1966	Evaluation of Butler AM2 Landing Mat, by W. B. Fenwick and M. J. Mathews	AD 736 642
MP 3-798	Mar 1966	Subgrade Stabilization with Portland Cement and Hydrated Lime Under Modified T11 Landing Mat, by W. N. Brabston and R. A. Pimental	AD 630 561
MP 4-801	Mar 1966	Meeting at WES with Representatives of Pipe Manufacturing Industry to Discuss Culvert Research, 8-9 February 1966, by C. C. Calhoun	AD 736 729
MP 4-804		Rocket-Blast-Resistant Materials:	
	Apr 1966	Report 1 Rocket Engine Blast Tests on Expedient Surfacing Materials, by G. W. Leese	AD 633 264
MP 4-811	Apr 1966	Report of Conferences on Dust Control, January 1966, by W. L. McInnis	AD 736 626
MP 3-813	Apr 1966	Preliminary Analysis of Results of Division Laboratory Tests on Standard Soil Samples, by W. E. Strohm	AD 736 725
MP 4-815	May 1966	Condition Survey, Vance Air Force Base, Enid, Oklahoma, by P. J. Vedros	AD 483 707
MP 4-816	May 1966	Airfield Pavement Evaluation, Opalocka Airport, Florida, by P. J. Vedros	AD 736 730
MP 4-817	May 1966	Development of CBR Design Curves for Runways to be Surfaced with M8A1 (Formerly T10) Steel Landing Mat, by C. D. Burns and W. B. Fenwick	AD 484 220
MP 3-818	May 1966	Review of Needs for Geological Research in Fine-Grained Deposits of the Lower Mississippi Valley, by E. L. Krinitzsky	AD 736 726
MP 4-819		Dust Alleviators:	
	Jun 1966	Report 1 Resin- and Latex-Base Concrete Curing Compounds, by J. L. Decell	AD 486 704
MP 4-820	May 1966	Field Tests of AM3 Landing Mat, by H. L. Green	AD 737 272
MP 4-824	May 1966	Collection of Documents Pertinent to Development of Military Soil Stabilization Objectives and Requirements (1956-1959), by G. R. Kozan and J. D. Stouffer	AD 737 393

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP 4-827	Jul 1966	A Survey of the Use of Nuclear Instruments for In Situ Soils Measurements Within the Corps of Engineers, by L. M. Womack	AD 891 959L
MP 3-832	Sep 1966	Rotary Cone Penetrometer Investigations in Clay, by W. E. Strohm and Leslie Devay	AD 737 273
* MP 4-839	Aug 1966	Investigation of Thiokol Pavement Coating, by V. Cassino	AD 891 955L
* MP 3-842	Sep 1966	Geology and Soils Data, Seabrook Lock, Lake Pontchartrain, Louisiana	
MP 4-844	Sep 1966	XV5A Aircraft Flight Tests Landing Strip Evaluations, by W. B. Fenwick	AD 737 274
MP 4-847	Oct 1966	Heat-Strength Tests on Membranes, by J. L. Decell	AD 802 402
MP 4-850	Oct 1966	Evaluation of Guide Rail in Conjunction with Kaiser and Harvey Landing Mat (AM2), by C. D. Burns and W. R. Barker	AD 737 275
MP 4-852	Nov 1966	Evaluation of Harvey Two-Piece Landing Mat (AM2), by C. D. Burns and W. R. Barker	AD 738 348
MP 4-855	Oct 1966	Service Tests of T17 Membrane and WX18 Membrane Surfacing, Fort Campbell, Ky., 9-12 May, 2-3 June, and 15-30 June 1966, and Inspections of the Surfacing 10-23 July and 8-12 August 1966, by R. H. Grau	AD 738 349
MP 4-858	Nov 1966	Dynamic Foundation Investigation, Roi-Namur, Kwajalein Atoll, Marshall Islands, by R. F. Ballard and D. R. Casagrande	AD 737 771
MP 4-859	Dec 1966	Frequency Spectrum Method for Analyzing Ground-Motion Data Produced by Single and Multiple Vibratory Sources, by R. F. Ballard and R. E. Leach	AD 645 479
MP 3-861	Dec 1966	Terrain Evaluation of a Portion of the Fort Greely Automotive Test Course; Final Report, by J. H. Shamburger, C. R. Kolb, and H. K. Woods	AD 806 538
MP 3-865	Nov 1966	Project DANNY BOY, Engineering-Geologic Investigations, by R. C. Nugent and D. C. Banks	AD 738 346
MP 3-869	Feb 1967	A Technique for Delineating Subsurface Fracture Zones Resulting from High-Yield Detonation, by R. F. Ballard	AD 648 407
MP 4-872	Dec 1966	Traffic Tests on "Ho-Mat", by H. L. Green	AD 737 768
MP 4-878	Feb 1967	Dynamic Foundation Investigations, TAA-2A Radar Site, Cape Kennedy, Florida, by R. F. Ballard and D. R. Casagrande	AD 737 765

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP 4-880	Mar 1967	Airfield Pavement Evaluation, Iwo Jima Air Force Base, Volcano Islands, and Appendix A: Studies Made for Evaluation, by P. J. Vedros and J. H. Shamburger	AD 909 243L
MP 4-881	Mar 1967	Kaiser Landing Mat Failure Study (MX-19), by L. W. Heller	AD 738 351
MP 4-882	Mar 1967	Forklift Operations on T17 Membrane Surfacing on Sand Subgrade in Open-Storage Areas; Engineer Tests, by S. G. Tucker and T. W. Vollar	AD 812 811
MP 4-884	Apr 1967	Tests of Lightweight Waterproofing Membranes for Use Beneath AM1 Landing Mat, by S. G. Tucker and R. H. Grau	AD 813 986
MP 4-886	Apr 1967	Evaluation of Three-Piece AM2 Aluminum Landing Mat, by W. N. Brabston	AD 737 767
MP 4-888	Apr 1967	In Situ Investigations of Foundation Soils at Two Building Sites, Detroit Arsenal, by R. F. Ballard	AD 737 766
* MP 4-891	Apr 1967	Pavement Condition Survey Report, Pease Air Force Base, Portsmouth, New Hampshire, by P. J. Vedros	AD 908 327L
MP 4-892	Apr 1967	Refraction Seismic Investigations, Oakley Dam Site, Decatur, Ill., by J. R. Curro	AD 738 352
MP 3-894	Nov 1966	Project Sulky, Geologic and Engineering Properties Investigations, by R. J. Lutton and F. E. Girucky	AD 724 163
MP 3-895	May 1967	Preshot Geological and Engineering Conditions at the Project Flivver Site, Nevada Test Site, by W. D. Carter, D. M. Bailey, and R. W. Hunt	AD 737 770
MP 4-897	Aug 1967	Evaluation of Kaiser Aluminum Honeycomb Landing Mat, by Robert Turner and G. L. Carr	AD 820 223
MP 4-898	May 1967	Condition Survey, Loring Air Force Base, Limestone, Maine, by P. J. Vedros	AD 737 769
MP 3-902	Jun 1967	Chukar Mesa Investigation; Exploration of Areas for a Possible Hard-Rock Cratering Site, by R. J. Lutton and R. W. Hunt	AD 737 772
MP 4-903	Jun 1967	Rocket Engine Jet Blast Attenuation in Water, by G. W. Leese	AD 654 507
MP 3-904	Jun 1967	Soil Tests for Bomb Penetration Study, Hill AFB, Utah, by J. L. Gatz	AD 680 898
MP 4-907	Jun 1967	Boundary Layer Investigation in the Impingement Area of Rocket Engine Blast, by J. T. Knight	AD 738 353
* MP 4-908	Jul 1967	V/STOL Aircraft Characteristics Affecting Behavior of Supporting Surfaces, by T. D. White	AD 892 485L

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-910	Jul 1967	Dynamic Soils Investigation for Ground Radius Effects Study, Redstone Arsenal, Alabama, by D. R. Casagrande	AD 738 613
MP 3-915	Apr 1967	Project Pre-Schooner, Geologic and Engineering Properties Investigation, by R. J. Lutton, F. E. Girucky, and R. W. Hunt	AD 657 638
MP 3-918	Aug 1967	X-Radiography of Unopened Soil Cores, by M. C. Haase	AD 692 474
MP 4-920	Aug 1967	Lance Missile Launcher Stability Tests, by G. W. Leese and J. L. Decell	AD 824 442
MP 4-923	Aug 1967	Flotation Requirements for Aircraft, by R. G. Ahlvin and D. N. Brown	AD 739 551
MP 4-924	Sep 1967	Condition Survey, Bicycle Army Airfield, Ft. Irwin, California, by P. J. Vedros	AD 738 374
MP 4-931	Oct 1967	XC-142A Aircraft Flight Tests Landing Strip Evaluations, by W. B. Fenwick	AD 738 376
MP 4-932	Aug 1967	Project Pre-GONDOLA I, Structures Instrumentation, by R. F. Ballard	AD 735 668
MP 4-933	Oct 1967	A Procedure for Determining Elastic Moduli of In Situ Soils by Dynamic Techniques, by A. A. Maxwell and Z. B. Fry	AD 739 136
MP 4-935	Sep 1967	Evaluation of M8A1 Landing Mat with Various Fix Attachments, by H. L. Green	AD 824 212
MP 4-937	Oct 1967	Investigation of Dynamic Behavior of the Navy X-Band Antenna at Waldorf, Maryland, by Jack Fowler and R. E. Leach	AD 662 062
MP 4-945	Nov 1967	Evaluation of Republic Steel Ground Mat for Use in Depot Open-Storage Areas, by H. L. Green and G. L. Carr	AD 738 838
* MP 4-948	Sep 1967	Ground-Flotation Investigation of Model Wide Tire, by J. E. Watkins and W. J. Hill	AD 822 345L
MP 4-954	Dec 1967	Comparative Performance Tests of AM2 Mat from Various Extruders and Fabricators, by C. D. Burns and W. R. Barker	AD 739 506
MP 4-955	Dec 1967	Effect of Antenna Operation on Structure and Foundation Behavior, AMRAD and RAMPART Radar Towers, White Sands Missile Range, New Mexico, by R. F. Ballard and Jack Fowler	AD 664 764
	Mar 1969	Appendix A Transient Motion Measurements at AMRAD Facility, February 1969, by R. F. Ballard	AD 756 128

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 4-966	Feb 1968	Tests of Expedient Ramps to Carry Over-the-Beach Traffic, by V. C. Barber	AD 741 615
MP 4-967	Feb 1968	Engineering and Laboratory Tests of M8A1-A Steel Landing Mat, by D. W. White	AD 830 088
MP 4-968	Mar 1968	Stabilization of Shifting Sand, by G. R. Kozan	AD 829 653
MP 4-969	Feb 1968	Gelatin Modeling Methods for the Study of Foundation Dynamics, Ground Motion, and Seismic Phenomena, by Y. K. Pack and L. W. Heller	AD 712 301
MP 4-970	Feb 1968	In Situ Site Survey, Vibratory and Seismic Techniques, Brown's Ferry Nuclear Plant, Decatur, Alabama, by J. R. Curro	AD 738 778
MP 4-971	Feb 1968	Preshot, In Situ Site Investigation, Vibratory and Seismic Techniques, Pre-Gondola II, Fort Peck, Montana, by J. R. Curro	AD 738 779
MP 3-974	Feb 1968	Settlement of Fallback Materials, by W. C. Sherman	AD 739 305
MP 4-976	Mar 1968	Condition Survey, Michael Army Airfield, Dugway Proving Ground, Dugway, Utah, by P. J. Vedros	AD 757 136
* MP 4-977	Mar 1968	Dust-Cloud Sampling During Operation Distant Plain, by G. W. Leese and P. J. Vedros	AD 828 979L
MP 3-978	Mar 1968	Results of Second Division Laboratory Testing Program on Standard Soil Samples, by M. M. Johnston and W. E. Strohm	AD 739 306
MP 4-980	Jul 1968	Factors That Influence the Development of Soil Constitutive Relations, by J. G. Jackson	AD 695 619
MP 3-981	Mar 1968	Survey of Slope Failures in Reservoirs, by W. C. Sherman	AD 739 643
MP 4-983	Mar 1968	Structure and Foundation Behavior During Antenna Operation, TAA-2A Vero Beach, Florida and TAA-3 Merritt Island, Florida, by Jack Fowler and R. E. Leach	AD 669 239
MP 3-985	Apr 1968	Borehole Television Examination, Meramec Park Reservoir, Meramec River, Missouri, by J. L. Gatz	AD 739 644
MP 4-989	Apr 1968	Condition Survey, Robert Gray Army Airfield, Fort Hood, Texas, by P. J. Vedros	AD 739 296
MP 3-990	Apr 1968	Soil Survey and Support Activities, Operation Distant Plain Event 6, by J. L. Gatz	AD 669 616
MP 3-991	Oct 1967	A Study of Selected Rock Excavations as Related to Large Nuclear Craters, by R. J. Kley and R. J. Lutton	AD 737 737
MP S-68-1	May 1968	Condition Survey, Sheridan Army Airfield, Ft. Sheridan, Illinois, by P. J. Vedros	AD 730 917

\* Statement B. See Preface.



## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-68-2	May 1968	Condition Survey, Liberty Army Airfield, Ft. Stewart, Georgia, by P. J. Vedros	AD 730 918
MP S-68-3	May 1968	Application of Finite Element Method in Determining Stability of Crater Slopes; Preliminary Report, by D. C. Banks and J. B. Palmerton	AD 676 836
MP S-68-4		Laboratory Tests of Relief Well Filters:	
	May 1968	Report 1 Wells Along Mississippi River Levees, Alton to Gale, Illinois, by Frederick Mitronovas	AD A036 368
* MP S-68-5	May 1968	Subsurface Investigation for HEST V, by F. L. Smith and J. L. Gatz	AD 834 823L
MP S-68-7	Jun 1968	Evaluation and Design of Helicopter Revetments, by W. B. Fenwick	AD 734 313
MP S-68-8	Jul 1968	Selected Methods for Analyzing the Stability of Crater Slopes, by D. C. Banks	AD 673 997
MP S-68-9	Jul 1968	Evaluation of Dow Chemical Extruded Landing Mat, by H. L. Green and G. L. Carr	AD 838 926
MP S-68-10	Jul 1968	Evaluation of Load-Distributing Capability of T17 Membrane in Road Construction, by C. D. Burns and J. L. McCall	AD 837 424
MP S-68-11	Jul 1968	Evaluation of May Two-Piece AM2 Landing Mat, by R. W. Grau	AD 730 728
MP S-68-12	Jul 1968	Application of Radiography to the Study of Small-Scale Footing Tests in Clay, by E. B. Perry	AD 673 130
MP S-68-13	Jul 1968	Membrane-Envelope Technique for Waterproofing Soil Base Courses for Airstrips; Bare Base Support, by C. D. Burns and W. N. Brabston	AD 684 356
MP S-68-14	Jul 1968	Project Altair, Kwajalein, Marshall Islands, Static and Dynamic Response of a Ring-Beam Antenna Foundation, by D. R. Casagrande	AD 673 706
MP S-68-15	Aug 1968	Compaction of Cohesionless Materials, by J. R. Compton and W. E. Strohm	AD 730 729
MP S-68-16	Feb 1968	Project Dugout, Geologic and Engineering Properties Investigations, by R. J. Lutton	
MP S-68-17	Sep 1968	Uniaxial Strain Testing of Soils for Blast-Oriented Problems, by J. G. Jackson	AD 730 733
MP S-68-18	Oct 1968	Site Selection Investigation for the Mine Shaft Series, by W. J. Farrell and J. R. Curro	AD 842 301

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-68-19	May 1968	Project Pre-GONDOLA II Structures Instrumentation, by R. J. Ballard	AD 730 734
MP S-68-20	Oct 1968	Evaluation of Thin Steel Membranes, by J. E. Watkins	AD 846 175
MP S-68-21	Oct 1968	Project Palanquin Preshot Geologic and Engineering Properties Investigations, by R. C. Nugent and F. E. Girucky	AD 730 735
MP S-68-22	Nov 1968	A Study of the Condition of Piezometers in the 1949 Installation at Reid-Bedford, Louisiana, by J. L. McCall	AD 730 730
* MP S-68-23	Nov 1968	Soil Property Investigation for HEST Test V, Supplementary Report, by J. G. Jackson and R. G. Burlingame	AD 863 378L
MP S-68-24	Oct 1968	Preshot Geological Engineering Investigations for Project Cabriole, Pahute Mesa, Nevada Test Site, by R. W. Hunt, D. M. Bailey, and L. D. Carter	
MP S-68-25	Nov 1968	An Investigation of the Cement Requirements for Soil Cement Compacted to Modified Maximum Density, by J. E. Windham	AD 730 736
MP S-68-26	Nov 1968	Condition Survey, Davison Army Airfield, Fort Belvoir, Virginia, by P. J. Vedros	AD 730 919
MP S-68-27	Dec 1968	Missile Bases: Design and Construction Problems, by W. J. Turnbull and A. J. Hendron	AD 703 838
MP S-68-28	Dec 1968	Field Performance Investigation, Subsurface Drainage Facilities, Little Rock Air Force Base, Arkansas, 4-6 November 1968, by C. C. Calhoun	AD 888 290
MP S-69-1	Jan 1969	Materials Investigated for Dust-Control Program (South-east Asia), by D. W. White and J. L. Decell	AD 848 430
MP S-69-2	Jan 1969	Engineering Tests of Harvey 1- by 6-ft Landing Mat with Integral End Connectors, by C. T. McCormick	AD 849 108
MP S-69-3	Jan 1969	Evaluation of Washington Aluminum Company, Inc., Production AM2 Landing Mat, by C. D. Burns and D. P. Wolf	AD 730 731
MP S-69-4	Feb 1969	Evaluation of Dow Chemical Extruded Aluminum Landing Mat (Modified MX18-B), by L. R. Lenzner	AD 849 107
MP S-69-5	Jan 1969	Evaluation of Mo-Mat Ground Cover for Use in Army Depot Open-Storage Areas, by H. L. Green and C. J. Gerard	AD 848 114
MP S-69-6	Feb 1969	Vibro/Seismic Survey and Crater Disturbance Zone Delineation, Pre-GONDOLA I, Fort Peck, Montana, by D. R. Casagrande	AD 684 340
MP S-69-7	Mar 1969	Soils Engineering in the Design and Performance of Artillery Foundations, by J. K. Poplin	AD 849 018

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP S-69-9	Feb 1969	Investigation of Enzymatic Materials for Soil Stabilization, by G. R. Kozan, J. H. Ables, and J. D. Stouffer	AD 850 629L
MP S-69-10	Mar 1969	Evaluation of Surfacing Materials for Firm Base Tactical Airfields; Bare Base Support, by C. D. Burns and W. N. Brabston	AD 685 826
MP S-69-11		Expedient Surfacing and Drainage of Roads, Streets, and Parking and Storage Areas in Theater of Operations:	
*	Mar 1969	Report 1 Tests Conducted Between July 1966 and August 1968, by C. D. Burns and V. C. Barber	AD 850 667L
	Feb 1971	Report 2 Tests Conducted Between August 1968 and July 1969, by C. D. Burns and V. C. Barber	AD 907 934
MP S-69-12	Apr 1969	Variation in Angle of Internal Friction with Confining Pressure, by D. C. Banks and B. N. MacIver	AD 688 078
MP S-69-13	Apr 1969	Evaluation of Harvey Electron Beam Welded AM2 Landing Mat (AM 2 MOD 2), by C. D. Burns and D. P. Wolf	AD 730 741
MP S-69-14	Mar 1969	Lower Bound Estimates to Allowable Dynamic Loads on Mortar Baseplates, by P. F. Hadala	AD 888 307
MP S-69-15	Apr 1969	Evaluation of Nuclear Methods of Determining Surface In Situ Soil Water Content and Density, by T. B. Rosser and S. L. Webster	AD 688 079
MP S-69-16	Apr 1969	Analysis of Laboratory Test Data to Derive Soil Constitutive Properties, by J. G. Jackson	AD 699 326
MP S-69-17	May 1969	Evaluation of Modified T11, Dow, U. S. Steel Alcoa T11, and Fenestra Landing Mats, by G. L. Carr	AD 853 531
* MP S-69-18	May 1969	Evaluation of Equipment Used for Emplacement of Earth Anchors, by C. J. Gerard	AD 853 865
MP S-69-19	May 1969	Condition Survey, Lawson Army Airfield, Ft. Benning, Georgia, by A. H. Joseph and P. J. Vedros	AD 888 292
MP S-69-20	May 1969	Apparatus and Tests for Determining Negative Pore Water Pressure Characteristics of Desiccated Clays, by C. A. Carlson	AD 730 742
MP S-69-21	Jun 1969	Foundation Precompression with Vertical Sand Drains, by S. J. Johnson	AD 730 737
MP S-69-22	Jun 1969	History of Dow Chemical Extruded Medium-Duty Mat, by D. W. White	AD 730 743
MP S-69-23	Jun 1969	Precompression for Improving Foundation Soils, by S. J. Johnson	AD 731 111

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-69-24	Jun 1969	Review of Literature on Expansive Clay Soils, by L. D. Johnson	AD 709 583
MP S-69-25		Ground Wash Flow Over Deflecting Walls:	
	Jun 1969	Report 1 Feasibility Study, by G. W. Leese	AD 731 199
MP S-69-26	Apr 1969	Field Performance Investigation, Subsurface Drainage Facilities, Robert Gray Army Airfield, Fort Hood, Texas, 17-19 March 1969, by C. C. Calhoun	AD 731 112
MP S-69-27	Jun 1969	Landing Mat Overlay on Deteriorated Pavement, Bare Base Support, by C. D. Burns and W. N. Brabston	AD 690 801
MP S-69-28	Jul 1969	Evaluation of XM20 Landing Mat Under Medium-Duty Load, by C. J. Gerard	AD 856 826
MP S-69-29	Jul 1969	Evaluation of Harvey Nonwelded Aluminum Landing Mat, by C. D. Burns and R. W. Grau	AD 731 200
MP S-69-30	Jul 1969	Development of a Vibropacker System for Inducing Polarized Shear Waves and Compression Waves at Depths, by R. F. Ballard and R. E. Leach	AD 731 453
MP S-69-31	Jul 1969	Field Investigation of Selected Foundation Piezometers, by C. R. Furlow	AD 735 702
* MP S-69-32	Aug 1969	Acoustic Subbottom Profiling Survey, Walter F. George Reservoir, Alabama-Georgia, by R. T. Saucier	AD 888 504L
MP S-69-33	Aug 1969	Flexible Pavement for Tomorrow's Major Airports, by D. N. Brown, G. M. Hammitt, and D. M. Ladd	AD 731 113
MP S-69-34	Aug 1969	Seepage Characteristics of Explosively Produced Craters in Soil and Rock, by W. C. Sherman and D. C. Banks	AD 731 454
MP S-69-35	Sep 1969	Jet Engine Exhaust Blast Tests on Kaiser XM19 Medium-Duty Landing Mat Panels, by J. W. Carr	AD 860 358
MP S-69-36	Sep 1969	Jet Engine Exhaust Blast Tests on Goodyear Aluminum Mat Panels, by J. W. Carr	AD 860 084
MP S-69-37	Aug 1969	Condition Survey, Hunter Army Airfield, Savannah, Georgia, by A. H. Joseph, P. J. Vedros, and W. B. Abbott	AD 731 641
* MP S-69-38	Aug 1969	Airfield Pavement Evaluation, Robert Gray Army Airfield, Fort Hood, Texas, by A. H. Joseph and W. B. Fenwick	AD 890 782L
*	Jun 1970	Supplement, by P. J. Vedros	
MP S-69-39	Sep 1969	Evaluation of XM20 Aluminum Landing Mat, by C. D. Burns and R. W. Grau	AD 735 768

---

\* Statement R. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-69-40	Sep 1969	Evaluation of Dow XM18-E and Alcoa AM2 Landing Mat, by C. D. Burns and D. P. Wolf	AD 735 769
MP S-69-41	Sep 1969	Evaluation of Harvey and Kaiser Production AM2 Landing Mat, by C. D. Burns and R. W. Grau	AD 890 515
MP S-69-42	Apr 1969	Project Buggy, Preshot Geologic and Engineering Properties Investigations, by R. J. Lutton, R. W. Hunt, and R. E. Rowland	AD 735 845
MP S-69-43	Sep 1969	Airfield Pavement Evaluation Report, Hirsch Auxilary Field, Laredo, Texas, by P. J. Vedros and W. B. Fenwick	AD 890 784
MP S-69-44	Sep 1969	Airfield Pavement Evaluation Report, Laredo Air Force Base, Texas, by P. J. Vedros and W. B. Fenwick	AD 890 783
MP S-69-45	Sep 1969	Airfield Pavement Evaluation Report, Keesler Air Force Base, Biloxi, Mississippi, by A. H. Joseph and J. W. Hall	AD 890 785
* MP S-69-46	Oct 1969	Summary of Information from Questionnaires on Uses of Filter Cloths in the Corps of Engineers, by C. C. Calhoun	AD 890 981L
MP S-69-47	Oct 1969	Condition Survey, Simmons Army Airfield, Ft. Bragg, North Carolina, by P. J. Vedros and W. B. Abbott	AD 860 556
MP S-69-48	Oct 1969	Comparison of Results of Dynamic In Situ and Laboratory Tests for Determination of Soil Moduli, by R. W. Cunny, S. S. Cooper, and Z. B. Fry	AD 735 852
MP S-69-49	Dec 1969	Evaluation of Goodyear All-Bonded Aluminum Honeycomb Landing Mat, by C. T. McCormick and G. L. Carr	AD 865 408
* MP S-69-50	Dec 1969	Reconstruction of Landing-Mat Test Facility and Its Performance During C-141A Flight Test Program, Dyess Air Force Base, Texas, by C. D. Burns and R. W. Grau	AD 863 821L
MP S-69-51	Dec 1969	Evaluation of Dow Chemical Extruded Aluminum Landing Mat (XM18E1), by D. W. White and C. J. Gerard	AD 865 599
MP S-69-52	Dec 1969	Pavement Tests to Provide for the Jumbo Jets, by R. G. Ahlvin	AD 735 781
MP S-69-53	Dec 1969	Preliminary Finite Element Analysis, Atchafalaya Basin Protection Levees, Test Section 3, by J. B. Palmerton	AD 735 782
MP S-70-1	Jan 1970	Motion of Rifle Gap Dam, Rifle, Colorado; Project Rulison Underground Nuclear Detonation, by Jack Fowler	
* MP S-70-2	Jan 1970	Interim Report; Investigation of Plastic Filter Cloths, by C. C. Calhoun, Jr.	AD 919 000L

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-70-3		Seepage in Mississippi River Banks:	
	Feb 1970	Report 1 Analysis of Transient Seepage Using Viscous Flow Model and Numerical Methods, by C. S. Desai	AD 757 396
MP S-70-4	Feb 1970	Evaluation of Harvey New-Profile AM2 Landing Mat, by C. D. Burns, V. C. Barber, and R. W. Grau	AD A032 965
MP S-70-5	Feb 1970	Evaluation of Modifications of AM2 and XM18 Landing Mat, by C. D. Burns and D. P. Wolf	AD 757 383
MP S-70-6	Feb 1970	Evaluation of XM20 Production Landing Mat, by C. D. Burns and R. W. Grau	AD 757 385
MP S-70-7		Shear Strength Characteristics of Earth-Rock Mixtures:	
	Feb 1970	Report 1 Survey and Evaluation of Existing Laboratory Apparatus for Large-Scale Testing of Compacted Rock and Earth-Rock Mixtures, by A. H. Feese	AD A035 017
MP S-70-8		Effects of Strain Rate in Consolidated-Undrained Tri-axial Compression Tests of Cohesive Soils:	
	Feb 1970	Report 1 Vicksburg Silty Clay (CL), by R. F. Esquivel-Diaz and J. R. Compton	AD A032 966
	May 1971	Report 2 Vicksburg Buckshot Clay (CH), by R. T. Donaghe	AD 756 192
MP S-70-9	Mar 1970	M8A1 Steel Landing Mat Comparison Tests, by D. W. White and D. A. Ellison	AD 866 224
MP S-70-10	Mar 1970	Pavement Failure Report, Ramey Air Force Base, Puerto Rico, by A. H. Joseph and W. B. Abbott	AD A032 967
MP S-70-11	Apr 1970	Investigation of a Proprietary Chemical Agent for Soil Stabilization, by G. R. Kozan and J. D. Stouffer	AD 873 019
MP S-70-12	Apr 1970	Hard Rock Silo Prototype Test Site Selection Investigations, by C. R. Kolb, W. J. Farrell, and J. R. Curro	AD 756 323
MP S-70-13		Analysis of Field Compaction Data:	
	Apr 1970	Report 1 Perry Dam, Delaware River, Kansas, by V. H. Torrey	AD A032 968
	Dec 1970	Report 2 Littleville Dam, Westfield River, Massachusetts, by V. H. Torrey	AD 756 196
MP S-70-14	May 1970	Evaluation of Soil Strength of Unsurfaced Forward-Area Airfields by Use of Ground Vehicles, by G. M. Hammitt	AD 709 589
MP S-70-15	May 1970	Origin of the St. Francis Sunk Lands, Arkansas and Missouri, by R. T. Saucier	AD A032 969

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-70-16	May 1970	Origin and Chronologic Significance of Late Quaternary Terraces, Ouachita River, Arkansas and Louisiana, by R. T. Saucier and A. R. Fleetwood	AD A033 142
MP S-70-17	May 1970	Geoelectrical Survey Performance and Evaluation, Walter F. George Reservoir, Alabama-Georgia, by R. T. Saucier	AD A035 985
Unnumbered	Jun 1970	Proceedings, Seismic Instrumentation Conference on Earth and Concrete Dams, November 1969	AD 777 498
MP S-70-18	Jun 1970	The Influence of End Restraint and Method of Consolidation on the Drained Triaxial Compressive Strength of Crushed Napa Basalt, by M. M. Al-Hussaini	AD A033 143
MP S-70-19	Jun 1970	Restoration of Landing-Mat-Surfaced Subgrades by Grouting Methods, by C. D. Burns and V. C. Barber	AD 710 962
MP S-70-20	May 1970	Dynamic Behavior of Launch Facility Foundation and Surrounding Areas, by R. F. Ballard	
MP S-70-21	Jul 1970	Evaluation of Kaiser XM19 All-Bonded Aluminum Honeycomb Landing Mat, by H. L. Green and C. J. Smith	AD 875 981
MP S-70-22	Aug 1970	Operation Mine Shaft; Geological Investigation of the Mine Shaft Sites, Cedar City, Utah, by C. R. Kolb, W. J. Farrell, R. W. Hunt, and J. R. Curro	AD 876 514
MP S-70-23	Sep 1970	Techniques for Overlaying Deteriorated Landing Mat, Bare Base Support; Project 3782-63, by C. D. Burns and W. N. Brabston	AD 756 197
MP S-70-24	Sep 1970	Soil Strength Criteria for Operation of Fighter Aircraft on Unsurfaced Airfields; Bare Base Support; Project 3782-65, by D. M. Ladd	AD 756 158
MP S-70-25	Nov 1970	The Effects of Geological Features on Soil Strength, by E. L. Krinitzsky	AD 756 159
MP S-70-26	Nov 1970	Evaluation of Alcoa Brazed AM5 Landing Mat, by C. D. Burns and D. P. Wolf	AD 757 384
MP S-70-27	Nov 1970	Dust Control by Thermal Methods, by B. D. Ainsworth and Katharine Mather	AD 878 791
MP S-70-28	Dec 1970	Theoretical Investigation of the Half Wavelength Theory, by G. Y. Baladi	AD A033 144
MP S-70-29	Aug 1970	Geological Observations of the Origin, Nature and Distribution of Mudlumps, Barrier Islands, and Oyster Reefs of Coastal Louisiana, by C. R. Kolb and R. T. Saucier (Revised)	

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP S-70-30	Sep 1970	Development of Landing Mat Ground Flotation Evaluation Criteria, by D. M. Ladd	AD 878 066L
MP S-71-1	Jan 1971	Airfield Pavement Evaluation Report, Godman Army Airfield, Fort Knox, Kentucky, by A. H. Joseph, P. J. Vedros, and R. D. Jackson	AD A006 517
MP S-71-2	Jan 1971	Geological Investigation, HRS Prototype Test Site Investigation, Laramie Range, Wyoming, by R. W. Hunt, R. E. Leach, J. R. Curro, J. L. Gatz, and R. L. Stowe	AD 756 319
MP S-71-3	Jan 1971	Thickness Requirements for Soils Beneath Landing Mats; Bare Base Support; Project 3782-64, by H. H. Ulery and D. P. Wolf	AD 756 198
* MP S-71-4	Feb 1971	History of Kaiser Medium-Duty Aluminum Sandwich Mat, by G. L. Carr	AD 908 324L
MP S-71-5	Jan 1971	Airfield Pavement Requirements for Multiple-Wheel Heavy Gear Loads, by D. N. Brown and J. L. Rice	AD 721 530
MP S-71-6	Mar 1971	Free-Field Code Predictions Versus Field Measurements: A Comparative Analysis for the Prairie Flat Event, by J. S. Zelasko and G. Y. Baladi	AD 722 403
MP S-71-7	Mar 1971	Evaluation of Kaiser Production Aluminum Honeycomb Landing Mat, by C. T. McCormick	AD 883 189
MP S-71-8	Feb 1971	Extraction Procedure for Rubberized-Tar Paving Mixtures, by T. D. White	AD 881 757
MP S-71-9	May 1971	Calculation of Stress and Strain from Triaxial Test Data on Undrained Soil Specimens, by J. Q. Ehrgott	AD 724 619
MP S-71-10	May 1971	The Influence of Construction Step Sequence and Non-linear Material Behavior on Cracking of Earth and Rock-Fill Dams; Preliminary Study, by W. F. Strohm and S. J. Johnson	AD A033 145
MP S-71-11	Apr 1971	Condition Survey, Libby Army Airfield, Ft. Huachuca, Arizona, by P. J. Vedros	AD 724 069
MP S-71-12		Fragment and Projectile Penetration Resistance of Soils:	
*	Jul 1971	Report 1 Literature Review and Preliminary Theoretical Study of Soils as a Fortification Material, by G. N. Reeves and B. Rohani	AD 886 828L
*	Jun 1973	Report 2 High-Velocity Fragment Penetration Into Laboratory-Prepared Soil Targets, by B. Rohani	AD 911 768L

\* Statement B. See Preface.



## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-71-13	Dec 1971	Some Theoretical and Experimental Implications of Constant Shear Modulus Constitutive Models, by Behzad Rohani and J. G. Jackson	AD 735 343
* MP S-71-14	Mar 1971	Pavement Design for Various Levels of Traffic Volume, by D. L. Cooksey and D. M. Ladd	AD 882 234L
MP S-71-15	May 1971	Investigation of Pavement Surface Cracking, Amedee Army Airfield, Herlong, California, by P. J. Vedros	AD 725 533
MP S-71-16	May 1971	Summary of Special Equipment for Laboratory Soils Testing at U. S. Army Corps of Engineers Division Laboratories	AD A034 668
MP S-71-17		Earthquake Resistance of Earth and Rock-Fill Dams:	
	May 1971	Report 1 Discussions by Professors H. B. Seed and R. V. Whitman, by R. W. Cunny and J. E. Ahlberg	AD A055 598
	Jun 1972	Report 2 Analysis of Response of Rifle Gap Dam to Project Rulison Underground Nuclear Detonation, by J. E. Ahlberg, Jack Fowler, and L. W. Heller	AD 744 420
	Sep 1972	Report 3 Feasibility of Simulating Earthquake Effects on Earth and Rock-Fill Dams Using Underground Nuclear Events	AD 748 816
	Jan 1975	Report 4 Transient Two-Dimensional Analysis of Soils by Latticework Method, Lopez Dam Case Study, by E. B. Wylie, V. L. Streeter, C. N. Papadakis, and F. E. Richart, Jr.	AD A006 587
	Nov 1977	Report 5 Permanent Displacements of Earth Embankments by Newmark Sliding Block Analysis, by A. G. Franklin and F. K. Chang	AD A048 346
MP S-71-18	Jun 1971	Deflection-Coverage Relationship for Flexible Pavements, by A. H. Joseph and J. W. Hall	AD 725 992
MP S-71-19	Jun 1971	Investigation of Fiber Glass Reinforced Resins for Stabilization of Missile Launching Sites, by G. W. Leese	AD A006 511
* MP S-71-21	Aug 1971	Theoretical Landing Mat Analysis, by T. D. White	AD 887 547L
MP S-71-22	Oct 1971	Study of Clay Shale Slopes, by D. C. Banks	AD A035 018
MP S-71-23	Oct 1971	Settlement of Large Hydraulic Structures, by R. I. Kaufman and W. C. Sherman	AD A033 146
MP S-71-24	Nov 1971	Evaluation of Foamed Plastics for Use as Structural Supporting Layers in Pavements and Foundations, by A. H. Joseph, R. D. Jackson, and T. B. Rosser	AD 733 874

---

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-71-26	Oct 1971	Vibro-Seismic Survey, High-Stability AEC Structure, Oak Ridge, Tennessee, by Jack Fowler and P. F. Hadala	AD A033 147
MP S-71-27	Dec 1971	Design of Unsurfaced Soil Facilities for Operations of C-5A Aircraft, by D. M. Ladd and V. C. Barber	AD 735 344
MP S-71-28	Dec 1971	Evaluation of Dow Chemical Company Extruded Aluminum, Two-Piece 2- by 12-ft Landing Mat (MX18-D), by D. W. White	AD 735 345
MP S-71-29	Dec 1971	Evaluation of Harvey Aluminum 1- by 12-ft Extruded Light-Duty Landing Mat with Overlap/Underlap End Connectors, by H. L. Green and C. T. McCormick	AD 735 783
MP S-72-1	Jan 1972	X-Ray Measurement of Soil Densities in Models, by E. L. Krinitzsky	AD 736 850
MP S-72-2	Jan 1972	Application of Finite Element Method in Determining Stability of Crater Slopes, by J. B. Palmerton and D. C. Banks	AD 737 178
MP S-72-3	Jan 1972	Three-Dimensional Seepage Model Study, Oakley Dam, Sangamon River, Illinois, by C. L. McAnear and C. C. Trahan	AD A033 148
MP S-72-4	Feb 1972	Evaluation of Kaiser XM19 Waterproof Aluminum Honeycomb Landing Mat with D and D1 Connectors, by G. L. Carr	AD 738 840
MP S-72-5	Feb 1972	Evaluation of MO-MAT 158 as Light-Duty Landing Mat, by C. J. Smith	AD 738 137
MP S-72-6	Feb 1972	Feasibility of Using Membrane-Enveloped Soil Layers as Pavement Elements for Multiple-Wheel Heavy Gear Loads, by C. D. Burns, W. N. Brabston, and R. W. Grau	AD 738 839
MP S-72-7	Mar 1972	Application of Model Theory to Design and Evaluation of Airfield Pavement, by Y. T. Chou and O. O. Thompson	AD 741 368
MP S-72-8	Mar 1972	Condition Survey, Hunter Army Airfield, Savannah, Georgia, by R. D. Jackson and P. J. Vedros	AD 757 387
MP S-72-9	Mar 1972	Notes on Proving Rings and Frames for Soil Testing Equipment, by M. J. Hvorslev	AD 756 199
* MP S-72-10	Mar 1972	Observation of C-5A Operations on Landing Mat Test Facility, Dyess Air Force Base, Texas, by H. L. Green	AD 919 835L
MP S-72-11		Damping Capacity of Soil During Dynamic Loading:	
	Apr 1972	Report 1 Review of Mathematical Material Models, by Behzad Rohani	AD 742 647
	May 1973	Report 2 Review of Laboratory Methods of Determining Damping, by W. F. Marcuson III	AD 762 129

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-72-12	Apr 1972	Investigation of Full-Depth Asphaltic Concrete Overlays on Highways, by G. M. Hammitt	AD A033 149
MP S-72-13	Apr 1972	Constitutive Property Studies to Support In-Cell Incident Investigation at Big Black Test Site, by C. J. Schexnayder and P. F. Hadala	AD 742 231
MP S-72-14	Jun 1972	Engineer Design Tests of Dust-Control Materials and Emplacement Equipment, by M. M. Culpepper and W. A. Wilvert	AD 745 086
* MP S-72-15	May 1972	Static Finite Element Study of Soil Stresses and Displacements Under a Perimeter Acquisition Radar Building, by C. J. Schexnayder	AD 894 928L
MP S-72-16	May 1972	Evaluation of Ancillary Items for XM18 and XM19 Landing Mats, by G. L. Carr	AD 743 161
MP S-72-17	May 1972	Geology of Boring 93 UES, Test Section III, Atchafalaya Levee System, Louisiana, by E. L. Krinitzsky and J. T. Lewis	AD A033 150
MP S-72-19	Jun 1972	Condition Survey, Campbell Army Airfield, Fort Campbell, Kentucky, by P. J. Vedros and S. J. Alford	AD 743 462
MP S-72-20	Jun 1972	Condition Survey, Davison Army Airfield, Fort Belvoir, Virginia, by P. J. Vedros and R. D. Jackson	AD 743 463
MP S-72-21	Jun 1972	Investigation of Relief Wells, Mississippi River Levees, Alton to Gale, Illinois, by R. L. Montgomery	AD 757 395
MP S-72-22	Jun 1972	Condition Survey, Forney Army Airfield, Fort Leonard Wood, Missouri, by P. J. Vedros and R. D. Jackson	AD 743 856
MP S-72-23	Jun 1972	Condition Survey, Redstone Army Airfield, Huntsville, Alabama, by P. J. Vedros and S. J. Alford	AD 743 857
MP S-72-24	Jun 1972	Condition Survey, Fort Polk Army Airfield, Fort Polk, Louisiana, by P. J. Vedros	AD 743 858
MP S-72-25	Jun 1972	Condition Survey, Sherman Army Airfield, Fort Leavenworth, Kansas, by P. J. Vedros and R. D. Jackson	AD 743 912
MP S-72-26	Jun 1972	Condition Survey, Butts Army Airfield, Fort Carson, Colorado, by P. J. Vedros and R. D. Jackson	AD 743 859
MP S-72-27	Jun 1972	Erosion Control at the ARES Facility, Kirtland Air Force Base, New Mexico, by C. R. Styron	AD 744 783
* MP S-72-28	Jun 1972	Literature Review of Skid-Measuring Equipment and Techniques, by A. H. Joseph and R. A. Andress	AD 901 528L
MP S-72-29	Jun 1972	Comparisons of Vibrated Density and Standard Compaction Tests on Sands with Fines, by F. C. Townsend	AD A033 141

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP S-72-30	Aug 1972	Interim Analysis of Data from Instrumentation Program, Columbia Lock, by R. L. Montgomery and A. L. Sullivan	AD 908 322L
MP S-72-31	Aug 1972	IH-1H Downwash Velocity Measurements, by G. W. Leese	AD A034 667
MP S-72-32	Aug 1971 Revised Aug 1972	Second Program of Special Shear Tests of East Atchafalaya Basin Protection Levee Foundation Soils, by P. C. Horz and G. P. Hale	
* MP S-72-33	Aug 1972	Theoretical Study of the Penetration of an Antipersonnel Mine Projectile Into Earth Materials, by Behzad Rohani	AD B017 263L
* MP S-72-34	Nov 1972	Relative Surfacing Requirements for Container-Handling Vehicles, by D. N. Brown, A. A. Clark, R. J. Lacavich, and E. S. Rush	AD 905 195L
MP S-72-35	Sep 1972	Hydrostatic and Shear Responses of Two Tuff Materials Under Various Rates of Stress, by J. Q. Ehr Gott	AD 749 256
MP S-72-36	Jun 1972	Vibroseismic Survey, Railroad Test Embankment, Aikman, Kansas, by J. R. Curro	AD 757 386
MP S-72-37	Sep 1972	Movement of Variable-Density Inclusions in Wet Sand Under Blast Loading, by E. B. Perry	AD 750 572
MP S-72-38	Oct 1972	Evaluation of Harvey Aluminum 1- by 12-ft Extruded Light-Duty Landing Mat with Symmetrical Butt-Type End Connectors, by H. L. Green	AD 752 079
MP S-72-39	Dec 1972	Evaluation of XM20 and XM20E1 Landing Mats Under Heavy-Duty Load, by C. J. Smith	AD 753 935
MP S-72-40	Dec 1972	Evaluation of Dow Chemical Extruded Truss-Web Landing Mat, by D. W. White	AD 753 921
MP S-72-41	Dec 1972	Geological and Seismological Factors for Design Earthquakes, Patoka Damsite, Indiana, by E. L. Krinitzsky	AD A035 984
MP S-72-42	Dec 1972	Earthquake Liquefaction Potential at Patoka Dam, Indiana, by W. F. Marcuson and P. A. Gilbert	AD 921 576
Unnumbered	Dec 1972	Trip to European Research Institutions Relative to Work of Soils and Pavements Laboratory	
MP S-72-43	Aug 1972	Strengthening of Keyed Longitudinal Construction Joints in Rigid Pavements, by R. W. Grau	AD 759 570
MP S-72-44	Oct 1972	Construction of Fibrous Reinforced Concrete Overlay Test Slabs, Tampa International Airport, Florida, by F. Parker, Jr.	AD 760 638

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-73-1		State-of-the-Art for Assessing Earthquake Hazards in the United States:	
	Jan 1973	Report 1 Design Earthquakes for the Central United States, by O. W. Nuttli	AD 756 447
	May 1974	Report 2 Fault Assessment in Earthquake Engineering, by E. L. Krinitzsky	AD 780 686
	Jun 1974	Report 3 Factors in the Specification of Ground Motions for Design Earthquakes in California, by R. B. Hofmann	AD 781 490
	Sep 1975	Report 4 Earthquake Intensity and the Selection of Ground Motions for Seismic Design, by E. L. Krinitzsky and F. K. Chang	AD A015 550
	Mar 1976	Report 5 Plate Tectonics and Earthquake Assessment, by J. L. Walper	AD A023 967
	May 1977	Report 6 Faults and Earthquake Magnitude, by D. B. Slemmons	AD A040 870
	Dec 1977	Report 7 Specifying Peak Motions for Design Earthquakes, by E. L. Krinitzsky and F. K. Chang	AD A048 309
	Dec 1977	Report 8 Duration, Spectral Content, and Predominant Period of Strong Motion Earthquake Records from Western United States, by F. K. Chang and E. L. Krinitzsky	AD A050 750
		Report 9 Catalogue of Strong Motion Earthquake Records:	
	Apr 1978	Volume I Western United States, 1933-1971, by F. K. Chang	AD A055 971
	Jul 1978	Errata Sheet No. 1	
	Jul 1978	Report 10 Attenuation of High Frequency Seismic Waves in the Central Mississippi Valley, by O. W. Nuttli and J. J. Dwyer	AD A059 073
	Dec 1978	Report 11 Imagery in Earthquake Analysis, by C. E. Glass and D. B. Slemmons	AD A065 739
	Mar 1979	Errata Sheet No. 1	
	Dec 1978	Report 12 Credible Earthquakes for the Central United States, by O. W. Nuttli and R. B. Herrmann	AD A064 832
	Jul 1979	Report 13 Probabilistic Seismic Hazard Analysis, by M. K. Yegian	AD A075 400
	Aug 1979	Report 14 Representation of Earthquake Ground Motion: Scaled Accelerograms and Equivalent Response Spectra, by E. H. Vanmarcke	AD A075 401
	Nov 1979	Report 15 Tsunamis, Seiches, and Landslide-Induced Water Waves, by J. R. Houston	AD A079 917
	Nov 1979	Report 16 The Relation of Sustained Maximum Ground Acceleration and Velocity to Earthquake Intensity and Magnitude, by O. W. Nuttli	AD A079 918
	Jan 1982	Errata Sheet No. 1	

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-73-1 (Cont)	Oct 1981	Report 17 Interpretation of Strong Ground Motion Records, by B. A. Bolt (includes Appendixes A-B)	AD A108 615
	Jan 1982	Report 18 Errors in Probabilistic Seismic Hazard Analysis, by Daniele Veneziano	AD A110 619
	Jun 1982	Report 19 The Evidence for Reservoir-Induced Macroeathquakes, by R. B. Meade	AD A116 449
	Aug 1983	Report 20 The Contribution of Directivity Focusing to Earthquake Intensities, by B. A. Bolt (includes Appendixes A-B)	AD A132 696
	Aug 1986	Report 21 Seismic Source Zones of the Eastern United States and Seismic Zoning of the Atlantic Seaboard and Appalachian Regions	AD A172 473
MP S-73-2	Feb 1973	Condition Survey, Gray Army Airfield, Fort Lewis, Washington, by P. J. Vedros and R. D. Jackson	AD 756 446
MP S-73-3	Feb 1973	Vibro seismic Survey, High Reynolds Number Tunnel Site, Arnold Engineering Development Center, Arnold Air Force Station, Tennessee, by J. Fowler	AD A035 982
MP S-73-4	Mar 1973	Study of Behavior of Bituminous-Stabilized Pavement Layers, by C. D. Burns, R. H. Ledbetter, and R. W. Grau	
MP S-73-5	Feb 1973	Rapid Road Construction Using Membrane-Enveloped Soil Layers, by A. H. Joseph, R. D. Jackson, and S. L. Webster	AD 757 397
* MP S-73-6	Feb 1973	C-5A Aircraft Live Flight Support Test Operations, Harper Lake, California, by R. W. Grau	AD 907 989L
MP S-73-7	Mar 1973	Test Fills for Rock-Fill Dams, by D. P. Hammer and V. H. Torrey III	AD A035 981
MP S-73-8	Mar 1973	Evaluation of Goodvear Medium-Duty Aluminum Honeycomb Landing Mat, by G. L. Carr	AD 758 444
MP S-73-9	Mar 1973	Evaluation of Dow Chemical Company Extruded Aluminum 4-Piece 4- by 4-ft Landing Mat (MX18-E), by D. W. White, Jr.	AD 758 445
MP S-73-10	Mar 1973	Condition Survey, Biggs Army Airfield, Fort Bliss, Texas, by P. J. Vedros and R. D. Jackson	AD 758 446
MP S-73-11	Mar 1973	Evaluation of Kaiser MX19-B and MX19-C Aluminum Honeycomb Landing Mat, by G. L. Carr and D. A. Ellison	AD 758 840
MP S-73-12	Apr 1973	Condition Survey, Ellsworth Air Force Base, South Dakota, by P. J. Vedros	AD A032 885
MP S-73-13	Apr 1973	Condition Survey, Wurtsmith Air Force Base, Michigan, by P. J. Vedros and H. T. Thornton, Jr.	AD A032 886
MP S-73-14	Apr 1973	Condition Survey, Altus Air Force Base, Oklahoma, by R. D. Jackson	AD A032 887

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-73-15	Apr 1973	Condition Survey, K. I. Sawyer Air Force Base, Michigan, by H. T. Thornton, Jr., and S. J. Alford	AD A032 912
MP S-73-16	Apr 1973	Condition Survey, Robert Gray Army Airfield, Fort Hood, Texas, by P. J. Vedros and R. D. Jackson	AD A032 888
MP S-73-17	Apr 1973	Influence of Suction on Heave of Expansive Soils, by L. D. Johnson	AD 752 903
MP S-73-18	Apr 1973	Condition Survey, Beale Air Force Base, California, by P. J. Vedros	AD A032 889
MP S-73-19	Apr 1973	Condition Survey, Castle Air Force Base, California, by P. J. Vedros	AD A032 890
MP S-73-20	Apr 1973	Rayleigh-Wave Dispersion Technique for Rapid Subsurface Exploration, by F. K. Chang and R. F. Ballard, Jr.	AD A035 980
MP S-73-21	Apr 1973	Results of Two Free-Field Code Calculations Versus Field Measurements for the Distant Plain 1A Event, by B. R. Phillips and G. Y. Baladi	AD 760 432
MP S-73-22	Apr 1973	Condition Survey, Malmstrom Air Force Base, Montana, by R. D. Jackson	AD A032 892
MP S-73-23	Apr 1973	Condition Survey, Minot Air Force Base, North Dakota, by P. J. Vedros	AD A032 913
MP S-73-24	May 1973	Tensile Testing of Soils - A Literature Review, by M. M. Al-Hussaini and F. C. Townsend	AD 760 433
MP S-73-25		Compaction Characteristics of Earth-Rock Mixtures:	
	May 1973	Report 1 Vicksburg Silty Clay and DeGray Dam Clayey Sandy Gravel, by R. T. Donaghe and F. C. Townsend	AD A035 979
	Aug 1975	Report 2 Blended Material, by R. T. Donaghe and F. C. Townsend	AD A014 894
MP S-73-26	May 1973	Evaluation of Structural Layers in Flexible Pavement, by R. W. Grau	AD 762 131
* MP S-73-27	May 1973	Design of Landing-Mat-Surfaced Airfields for Operation of C-5A Aircraft, by D. N. Brown and V. C. Barber	AD 911 509L
MP S-73-28		Properties of Expansive Clay Soils:	
	May 1973	Report 1 Jackson Field Test Section Study, by L. D. Johnson	AD 761 084
	Apr 1975	Report 2 A Numerical Procedure for Predicting Heave with Time, by L. D. Johnson and C. S. Desai	AD A009 492

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-73-29	May 1973	Condition Survey, McConnell Air Force Base, Kansas, by R. D. Jackson	AD A032 915
MP S-73-30	May 1973	Condition Survey, Kincheloe Air Force Base, Michigan, by H. T. Thornton, Jr., and P. J. Vedros	AD A032 916
MP S-73-31	May 1973	Condition Survey, Mather Air Force Base, California, by P. J. Vedros	AD A032 917
MP S-73-32	May 1973	Investigation of the Static Uniaxial Strain and Triaxial Shear Response of Cellular Concrete, by J. O. Ehrgott	AD 763 178
MP S-73-33	May 1973	Condition Survey, Glasgow Air Force Base, Montana, by R. D. Jackson	AD A032 918
MP S-73-34	May 1973	Condition Survey, Pease Air Force Base, New Hampshire, by R. D. Jackson	AD A032 919
MP S-73-35	Jun 1973	Missile-Site Ground Cover, by J. W. Carr	AD 762 136
MP S-73-36		Rapid Subsurface Exploration:	
	May 1973	Report 1 Review of Selected Geophysical Techniques, by R. F. Ballard, Jr., and F. K. Chang	AD A035 978
MP S-73-37	Jun 1973	Investigation of Gage-Placement Effects on a Stress Gage Embedded in Grout, by J. O. Ehrgott	AD 763 182
MP S-73-38	Jun 1973	Condition Survey, March Air Force Base, California, by R. D. Jackson	AD A032 920
MP S-73-39	Jun 1973	Condition Survey, Carswell Air Force Base, Texas, by R. D. Jackson	AD A032 927
MP S-73-40	Jun 1973	Detection of Subsurface Cavities, by E. R. Bates	AD 762 538
MP S-73-41	Jun 1973	Condition Survey, Westover Air Force Base, Massachusetts, by R. D. Jackson	AD A032 928
MP S-73-42	Jun 1973	Condition Survey, Grand Forks Air Force Base, North Dakota, by P. J. Vedros and H. T. Thornton, Jr.	AD A087 441
MP S-73-43	Jun 1973	Condition Survey, Dyess Air Force Base, Texas, by R. D. Jackson	AD A087 439
MP S-73-44	Jun 1973	Condition Survey, Forbes Air Force Base, Kansas, by R. D. Jackson	AD A032 929
MP S-73-45	Jun 1973	Condition Survey, Whiteman Air Force Base, Missouri, by P. J. Vedros and S. J. Alford	AD A032 930
MP S-73-46	Jun 1973	Condition Survey, Plattsburgh Air Force Base, New York, by R. D. Jackson	AD A032 931



## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-73-47	Jun 1973	Condition Survey, Ft. Devens Army Airfield, Ft. Devens, Massachusetts, by R. D. Jackson and P. J. Vedros	AD A032 932
MP S-73-48	Jun 1973	Uniaxial Strain Response of a Sawdust-Sand Mixture, by B. F. Wright and J. Q. Ehr Gott	AD 763 183
MP S-73-49	Jun 1973	Effect of Variation in Conventional Soil Properties on Dynamic Constrained Modulus for Several Glacial Till, by H. M. Taylor, Jr.	AD 765 434
MP S-73-50	Jun 1973	Condition Survey, Laguna Army Airfield, Yuma Proving Ground, Arizona, by P. J. Vedros, R. D. Jackson, and S. J. Alford	AD A032 933
MP S-73-51	Jun 1973	Condition Survey, Loring Air Force Base, Maine, by R. D. Jackson	AD A032 934
MP S-73-52	Jun 1973	Condition Survey, Bangor International Airport, Bangor, Maine, by R. D. Jackson	AD A032 935
MP S-73-53	Jun 1973	Environmental Effects on Microseismic Wave Propagation, by W. F. Marcuson III	AD A031 329
MP S-73-54	Jun 1973	Condition Survey, Lockbourne Air Force Base, Ohio, by R. D. Jackson	AD A032 936
MP S-73-55	Jun 1973	Condition Survey, Wright-Patterson Air Force Base, Ohio, by R. D. Jackson	AD A032 937
MP S-73-56	Jul 1973	Lateral Distribution of Aircraft Traffic, by D. N. Brown and O. O. Thompson	AD 765 435
MP S-73-57	Jun 1973	Radiographic, Petrographic, and SEM Evaluation of Ballistically Loaded Clay, by D. M. Patrick	AD 764 229
* MP S-73-58	Jun 1973	Theoretical Study of Impact and Penetration of a Remotely Emplaced Antitank Mine Projectile Into Earth Materials, by B. Rohani	AD 911 692L
MP S-73-59	Jun 1973	Constitutive Property Tests on Tuff to Determine Rate Effects, by J. Q. Ehr Gott	AD 766 163
MP S-73-60	Jul 1973	Comparison of Undrained Shear Strength in Anisotropically and Isotropically Consolidated Clay, by R. T. Donaghe and C. L. McAnear	AD 771 145
MP S-73-61	Jun 1973	Surface Velocities and Temperature Changes for C-130, C-141, and C-5A Exhaust Blasts and C-5A Wing-Tip Vortex, by J. W. Carr	AD 764 228
MP S-73-62	Oct 1973	Preshot Material Property Investigation for the Mixed Company Site: Summary of Subsurface Exploration and Laboratory Test Results, by J. Q. Ehr Gott	AD 769 580

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-73-63	Oct 1973	Flexible Pavement Analysis by the Three-Dimensional Finite Element Method, by J. B. Palmerton	AD 770 383
MP S-73-65	Nov 1973	Development of Minimum Pipe-Cover Requirements for C-5A and Other Aircraft Loadings, by C. C. Calhoun, Jr., and H. H. Ulery, Jr.	AD 771 174
MP S-73-66	Jul 1973	The Behavior of Flexible Airfield Pavements Under Loads -- Theory and Experiments, by Y. T. Chou and R. H. Ledbetter	AD 766 480
MP S-73-67	Dec 1973	Engineer Design Tests of Modified Dust-Control Materials and Prototype Equipment, by M. M. Culpepper and R. Osmond	AD 772 961
MP S-73-68	Dec 1973	Effect of Loading Rate on the Stress-Strain Characteristics of a Clay Shale in Unconsolidated-Undrained Triaxial Compression, by R. A. Knott	AD 771 926
MP S-73-69	Oct 1973	An Investigation of the Structural Properties of Stabilized Layers in Flexible Pavement Systems, by W. R. Barker, W. N. Brabston, and F. C. Townsend	AD 769 292
MP S-73-70	Dec 1973	Investigation of Dust-Control Materials, by C. R. Styron III and R. C. Eaves	AD 774 834
MP S-74-1	Jan 1974	Material Properties for Postshot Mixed Company Analyses: Recommendations Based on Recent Laboratory and In Situ Test Data, by J. Q. Ehrigott and J. G. Jackson, Jr.	AD 774 801
MP S-74-3	Feb 1974	Small Aperture Testing for Airfield Pavement Evaluation, by J. W. Hall, Jr., and D. R. Elsea	AD 775 406
MP S-74-4	Feb 1974	Use of Concentration Index for Pavement Design, by R. G. Ahlvin, Y. T. Chou, and H. H. Ulery, Jr.	AD A035 976
MP S-74-5	Apr 1974	Cyclic Triaxial Compression Tests, Center Hill Dam, Dekalb County, Tennessee, by W. F. Marcuson III and S. A. Collins	AD 778 714
MP S-74-6	Mar 1974	Evaluation of Dow Chemical Production Extruded Truss-Web Landing Mat, by D. W. White, Jr.	AD A032 884
MP S-74-7	Mar 1974	Geology and Material Property Comparisons for the MIDDLE GUST Test Sites, by J. E. Windham, R. A. Knott, and J. S. Zelasko	AD 778 163
MP S-74-8	May 1974	Postshot In Situ Material Property Tests at the Mixed Company Site, Colorado, by J. B. Palmerton and J. B. Warriner	AD 779 424
MP S-74-9	Apr 1974	Cyclic Triaxial Compression Tests, Watts Bar Nuclear Power Plant Site, Southeast Tennessee, by P. A. Gilbert and S. A. Collins	AD 778 713

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-74-10	Jun 1974	Investigation of Tensile Testing of Compacted Soils, by M. M. Al-Hussaini and F. C. Townsend	AD 781 481
MP S-74-11	Apr 1974	Evaluation of the O'Neil Shear-O-Meter for Performing Constant-Volume Direct Shear Tests, by P. A. Gilbert	AD 778 715
MP S-74-12	May 1974	Engineer Design Test of Modified XM19 Special Surfacing Landing Mat, by G. L. Carr	AD 781 480
MP S-74-13	May 1974	Construction of MESL Demonstration Road at Fort Hood, Texas, May 1972, by S. L. Webster	AD 780 756
MP S-74-14	May 1974	Evaluation of XM18Q Extruded Aluminum Landing Mat, by C. J. Smith and D. W. White, Jr.	AD A032 938
MP S-74-15	May 1974	Lectures and Discussions by Prof. N. N. Ambraseys on Engineering Seismology and Earthquake Engineering, U. S. Army Engineer Waterways Experiment Station, April-May 1973, by S. J. Johnson and L. W. Heller	AD A032 942
MP S-74-16	May 1974	Field Tests of the Cucaracha Formation, Panama Canal, 1942-1946, by C. K. Smith and R. J. Lutton	AD A032 943
MP S-74-17	Jun 1974	Helicopter Downwash Data, by G. W. Leese and J. T. Knight, Jr.	AD 780 754
MP S-74-18	Jun 1974	A Simple Elastic Constitutive Equation for Granular Material, by M. M. Al-Hussaini	AD 781 487
MP S-74-19	Jun 1974	Psychrometric Measurement of Total Suction in a Tri-axial Compression Test, by L. D. Johnson	AD 781 488
MP S-74-20	Jun 1974	Correlation of Engineering Properties of Cohesive Soils Bordering the Mississippi River from Donaldsonville to Head of Passes, La., by R. L. Montgomery	AD A035 019
MP S-74-21	Jun 1974	Residual Strength Test, Paraitinga and Paraibuna Dams, Brazil, by F. C. Townsend and P. A. Gilbert	AD A032 891
MP S-74-22	May 1974	Continuously Reinforced Concrete Airfield Pavement, by H. J. Treybig, B. F. McCullough, and W. R. Hudson:	
		Volume I Tests on Existing Pavements and Synthesis of Design Methods	AD 780 511
		Volume II Design Manual for Continuously Reinforced Concrete Overlay Pavements	AD 779 953
		Volume III Design Manual for Continuously Reinforced Concrete Pavements	AD 780 953
		Volume IV Guide Specification	AD 780 513

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-74-23	Sep 1974	Soil Stabilization for Roads and Airfields in the Theater of Operations, by W. N. Brabston and G. M. Hammitt II	AD 787 257
MP S-74-24	Sep 1974	Analysis of Data from Instrumentation Program, Columbia Lock, by A. L. Sullivan, Jr.	AD A027 058
MP S-74-25	Nov 1974	Investigation of Tar-Rubber Pavement Overlays, by P. J. Vedros, Jr., and R. D. Jackson	AD A032 944
MP S-74-26	Nov 1974	One-Dimensional Wave-Propagation Analysis, Patoka Dam, Indiana, by W. F. Marcuson III	AD A003 167
MP S-74-27	Nov 1974	Condition Survey, Felker Army Airfield, Fort Eustis, Virginia, by R. D. Jackson	AD A003 168
MP S-74-28	Dec 1974	Use of Loess Soil for Modeling Rock Mechanics, by R. J. Lutton	AD A003 813
MP S-74-29	Dec 1974	Cyclic Triaxial Compression Tests, Newburgh Lock and Dam, Ohio River, Indiana and Kentucky, by W. F. Marcuson III and P. A. Gilbert	AD A003 169
MP S-74-30	Dec 1974	Concrete Strength Relationships, by G. M. Hammitt II	AD A003 170
* MP S-74-31	Dec 1974	Penetration Performance of a Remotely Emplaced Anti-tank Mine Projectile at Jefferson Proving Ground: Analyses Based on Both Field Test Results and Theoretical Calculations, by D. C. Creighton	AD B001 095L
MP S-75-1	Jan 1975	Review of Construction Equipment and Methods for Pavements, by C. L. Rone	AD A005 007
MP S-75-2	Feb 1975	Evaluation of Resonant Column Dynamic Testing Devices, by G. R. Skoglund, W. F. Marcuson III, and R. W. Cunny	AD A005 554
MP S-75-3	Feb 1975	Analysis and Design Relating to Embankments; A State-of-the-Art Review, by S. J. Johnson	AD A005 555
MP S-75-4	Feb 1975	In Situ Seismic Investigation, Fort Peck Dam, Montana, by J. R. Curro, Jr., J. E. Horn, and R. F. Ballard, Jr.	AD A006 510
* MP S-75-5	Mar 1975	User's Manual, Finite Element Codes for General Seepage, by C. S. Desai	AD B003 154L
MP S-75-6	Jun 1975	Geophysical Investigation, Prado Dam and Mentone Damsite, California, by J. R. Curro, Jr., G. R. Skoglund, and R. F. Ballard, Jr.	AD A011 268
MP S-75-7	Apr 1975	Evaluation and Analyses of Some Finite Element and Finite Difference Procedures for Time-Dependent Problems, by C. S. Desai, J. T. Oden, and L. D. Johnson	AD A009 739

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-75-8	Mar 1975	Evaluation of Vertical Sand Drains for St. Charles Parish Lakefront Levee, Lake Pontchartrain, New Orleans, La., by C. L. McAnear	AD A009 310
MP S-75-9	Apr 1975	Engineer Design Test of Dow's 4- by 4-1/2-ft Truss Web Heavy-Duty Landing Mat, by C. J. Smith	AD A009 738
MP S-75-10	Apr 1975	Seismic Field Methods for In Situ Moduli, by R. F. Ballard, Jr., and F. G. McLean	AD A009 488
MP S-75-11	May 1975	Scanning Electron Microscope Evaluation of Fabric in Impact-Compacted Kaolinite, by D. M. Patrick	AD A010 325
MP S-75-12	Feb 1975	Porous Friction Surface Course, by T. D. White	AD A009 012
MP S-75-13	May 1975	Engineer Design Tests of Dow Truss Web Landing Mats with Waterproofable Connectors and Seals, by G. L. Carr	AD A012 068
MP S-75-14	Jun 1975	Landing Mat Over Membrane-Enveloped Soil Layers, by C. D. Burns and G. L. Regan	AD A012 142
MP S-75-15	Jun 1975	Evaluation of Empirical and Analytical Procedures Used for Predicting the Rigid Body Motion of an Earth Penetrator, by P. F. Hadala	AD A012 143
MP S-75-16	Jun 1975	M19 Landing Mat Uplift, by G. W. Leese	AD A012 652
MP S-75-17	Jun 1975	Improvement of Core Drill Methods, by J. L. Gatz	AD A012 141
MP S-75-18	Jun 1975	Airfield Pavement Construction - Slipform Paving Method, by Frazier Parker, Jr.	AD A012 769
MP S-75-19	Jun 1975	Materials Evaluation for Aircraft Blast and Helicopter Downwash Protection, by G. W. Leese and J. W. Carr	AD A121 761
MP S-75-20	Jun 1975	Development of a 1.22-m-Diam Dynamic Air Overpressure Soil Test Facility, by S. S. Cooper and R. C. Sloan	AD A013 391
Unnumbered	Jun 1975	A Review of Engineering Experiences with Expansive Soils in Highway Subgrades, by D. R. Snethen, F. C. Townsend, L. D. Johnson, D. M. Patrick, and P. J. Vedros	AD A020 309
MP S-75-21	Jul 1975	Jet Blast Tests on Fiberglass-Reinforced DCA-1295, by C. R. Styron III	AD A013 515
MP S-75-22	Aug 1975	Geologic Control of Sand Boils Along Mississippi River Levees, by C. R. Kolb	AD A014 274
MP S-75-23	Oct 1975	Evaluation of a Nuclear Asphalt Content Gage, by G. L. Regan	AD A016 854
MP S-75-24	Sep 1975	Identifying Flow Patterns, Sedimentation Concentrations, and Seepage from Remote Imagery, by H. K. Woods, J. R. May, J. D. Broughton, and J. H. Shamburger	

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-75-25	Sep 1975	Analysis of Projectile Penetration Into Concrete and Rock Targets, by Behzad Rohani	AD A016 909
MP S-75-26	Sep 1975	Design and Potentials of the Californium-252 Radiation Facility at WES, by J. T. Lewis and E. L. Krinitzsky	AD A016 787
MP S-75-27	Oct 1975	Development of a High-Velocity Powder Gun and Analysis of Fragment Penetration Tests Into Sand, by D. K. Butler	AD A017 056
Unnumbered		MX Valley Studies Program:	
	Feb 1976	Subsurface Boring Logs and Soil Sample Classifications for Three Selected Areas Within the White Sands Missile Range, by A. E. Jackson, Jr.	
	Jun 1976	Subsurface Boring Logs and Soil Sample Classifications for Four WSMR and Five LBGR Locations, by A. E. Jackson, Jr.	
	Sep 1976	Laboratory Test Results for Materials Obtained from Three Selected Areas Within White Sands Missile Range, by A. E. Jackson, Jr.	
MP S-76-1	Mar 1976	An Empirical Interpretation of the Effects of Topography on Ground Motion of the San Fernando, California, Earthquake, 9 February 1971, by F. K. Chang	AD A024 056
MP S-76-2	Apr 1976	Tables for Determining Isotropic and Anisotropic Shear Strengths from Consolidated, Undrained Triaxial Compression Tests, by S. J. Johnson and Yu-Shih Jeng	AD A024 025
* MP S-76-3	Apr 1976	Modification and Evaluation of HONDO: A Dynamic, Axisymmetric, Finite Element Code, by J. O. Curtis (includes Appendixes A-C)	AD B010 466L
MP S-76-4	Apr 1976	Case Histories of Liquefaction Failures, by P. A. Gilbert	AD A025 378
MP S-76-5	Apr 1976	Effects of Specimen Reconstitution on Cyclic Triaxial Results, by W. F. Marcuson III and F. C. Townsend	AD A024 917
MP S-76-6	Apr 1976	The Effects of Cyclic Triaxial Testing Techniques on the Liquefaction Behavior of Monterey No. 0 Sand, by J. P. Mullis, R. C. Horz, Jr., and F. C. Townsend	AD A026 454
Unnumbered	May 1976	Symposium on Nondestructive Test and Evaluation of Airport Pavement, 18-20 November 1975, Vicksburg, Mississippi (also available from USAEWES at \$30.00 per copy)	AD A025 442
MP S-76-7	May 1976	Shear Strength Properties for the Antelope Lake Target, Tonopah Test Range, Nevada, by R. W. Peterson and P. F. Hadala	AD A025 332

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-76-8	Apr 1976	Investigation of the Liquefaction Potential at the W. G. Huxtable Pumping Plant Site, by W. F. Marcuson III (includes Appendixes A-C)	AD A025 497
MP S-76-9	Jun 1976	Centrifuge Model Testing of Soils: A Literature Review, by M. M. Al-Hussaini	AD A027 432
MP S-76-10	Jun 1976	Vibratory Compaction of Bituminous Concrete Pavements, by C. D. Burns	AD A026 843
* MP S-76-11	Jun 1976	Prediction of the Shear Strength and Compaction Characteristics of Compacted Fine-Grained Cohesive Soils, by Yu-Shih Jeng and W. E. Strohm, Jr. (includes Appendixes A-E)	AD B012 226L
* MP S-76-12	Jun 1976	Evaluation of Some Inclinometers, Related Instruments, and Data Reduction Techniques, by R. E. Leach (includes Appendix A)	AD B012 490L
* Unnumbered	Jun 1976	Material Property Investigation for Pre-DICE THROW I and II: Results from the Subsurface Exploration Programs, by A. E. Jackson, Jr., R. F. Ballard, Jr., and J. R. Curro, Jr.	AD B012 880L
MP S-76-13	Apr 1976	Field Performance of Porous Friction Surface Course, by T. D. White	AD A025 245
MP S-76-14	Aug 1976	Investigation of Fabrics and Bituminous Surfaces for Use in MESL Construction, by S. L. Webster and R. A. Andress	AD A030 540
MP S-76-15	Aug 1976	Consolidated-Undrained Triaxial Creep Tests of St. Charles Parish Lakefront Foundation Clays, by L. D. Johnson (includes Appendixes A-B)	AD A028 590
MP S-76-16	Aug 1976	Compaction Study of Zero-Slump Concrete, by C. D. Burns	AD A030 906
Unnumbered	Aug 1976	Notes on Earthquake Shaking in Soils, Guatemala Earthquake of 4 February 1976, by E. L. Krinitzsky and S. B. Bonis; Appendix A: Analysis of Sands, by D. M. Patrick	AD A028 585
MP S-76-17	Sep 1976	Effects of Depth of Burst and Geology on Calculated SBM Peak Stress Environments, by G. Y. Baladi, J. S. Zelasko, M. E. George, and R. E. Wahl	AD A030 238
MP S-76-18	Sep 1976	Use of Californium-252 in Laboratory Testing for Moisture and Density of Soils, by J. T. Lewis	AD A033 042
MP S-76-19	Sep 1976	Recommended Design for Rigid-Flexible Airfield Pavement Junctures, by E. C. Odom	AD A031 351
* MP S-76-20	Oct 1976	Evaluation of Salviacim Pavement, by C. L. Rone (includes Appendix A)	AD B015 023L

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-76-21	Oct 1976	Finite Element Method for Analysis and Design of Files, by C. S. Desai (includes Appendix A)	
MP S-76-22	Nov 1976	Airfield Pavement Evaluation, Butts Army Airfield, Fort Carson, Colorado, by P. J. Vedros	AD A033 702
MP S-76-23	Nov 1976	Skid Tests on XM18, XM19, and T11 Landing Mats Placed in Contact with Soil and Placed on Membrane on Soil, by G. L. Carr	AD A033 994
* Unnumbered	Nov 1976	Material Property Investigation for Pre-DICE THROW I and II: Results from the Laboratory Testing Programs, by A. E. Jackson, Jr., and R. W. Peterson	AD B015 694L
MP S-76-24	Dec 1976	Usage of Landing Mat as Overlay on Asphalt Runway During Military Field Exercises, by H. L. Green (includes Ap- pendixes A-D)	AD A033 914
MP S-76-25	Dec 1976	One-Dimensional Wave-Propagation Analysis, Newburgh Locks and Dam, Ohio River, Indiana and Kentucky, by W. F. Marcuson III	AD A035 326
MP S-76-26	Dec 1976	A Preliminary Study of Natural Construction Materials on St. Croix, U. S. Virgin Islands, by D. M. Patrick, D. M. Hyman, J. H. Shamburger, A. D. Buck, and W. B. Hall (includes Appendixes A-C)	
MP S-77-1	Jan 1977	Summary of Buckling and Tension Tests of Landing Mats as Related to C-5A Aircraft Bow Wave Problems, by H. L. Green and C. J. Smith (includes Appendixes A-B)	AD A037 000
MP S-77-2	Jan 1977	Earthquake Investigations at the Dickey-Lincoln School Damsites, Maine, by E. L. Krinitzsky and D. M. Patrick	AD A037 068
MP S-77-3	Jan 1977	Reservoirs and Induced Seismicity at Corps of Engineers Projects, by S. J. Johnson, E. L. Krinitzsky, and N. A. Dixon	AD A036 309
* MP S-77-4	Jan 1977	Evaluation of Mechanical and Manual Compactors in Standard Effort Compaction Tests, by G. N. Durham and G. P. Hale (includes Appendixes A-B)	AD B016 729L
	Mar 1977	Errata Sheet No. 1	
MP S-77-5	Feb 1977	Effects of the New Madrid Earthquake Series in the Mis- sissippi Alluvial Valley, by R. T. Saucier	AD A036 471
MP S-77-6	Mar 1977	Hydraulic Fracturing of Soils; A Literature Review, by R. E. Leach	AD A038 443
MP S-77-7	Apr 1977	Torque Transmission Through Rock Bolts, by G. H. Bragg, Jr.	AD A039 838

\* Statement B. See Preface.



## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-77-8	May 1977	Definition of "Active Fault," by D. B. Slemmons and Roy McKinney	AD A040 295
MP S-77-9	May 1977	Preliminary Investigation of General-Purpose Mat/Panel Materials, by H. L. Green, D. W. White, Jr., and G. L. Carr	AD A047 241
MP S-77-10	Jul 1977	A Probabilistic Analysis of Embankment Stability Problems, by L. W. Gilbert	AD A043 579
Unnumbered	Jul 1977	Trip Report: Study Tour, England, France, Russia, and Japan, Centrifuge Installations and Modeling Techniques in Structure Foundation Design, 13 June - 13 July 1977	AD A045 764
MP S-77-11	Aug 1977	Material Response Characterization, by J. G. Jackson, Jr.	AD A044 045
MP S-77-12	Aug 1977	Earthquake Generated SH Waves in the Near Field and Near-Regional Field, by R. B. Herrmann	AD A045 668
* MP S-77-13	Sep 1977	Swell Behavior of NAF-II Sigonella Foundation Soil, by L. D. Johnson (includes Appendixes A-F)	AD B021 492L
MP S-77-14	Sep 1977	The Influence of Polymers on the Engineering Properties of Cement-Stabilized Soil, by J. C. Oldham (includes Appendix A)	AD A044 514
MP S-77-15	Sep 1977	Materials Evaluated as Potential Soil Stabilizers, by J. C. Oldham, R. C. Eaves, and D. W. White, Jr. (includes Appendix A)	AD A045 470
Unnumbered	Oct 1977	Symposium on Detection of Subsurface Cavities, 12-15 July 1977	AD A046 823
MP S-77-16	Nov 1977	Empirical Analysis of Projectile Penetration in Rock, by R. S. Bernard (includes Appendix A)	AD A047 989
MP S-77-17		Assessment of Terrain Input Data to Engineer Horizontal Construction Effort Model:	
	Sep 1977	Volume I Main Text, by J. H. Shamburger	AD A046 396
MP S-77-18	Sep 1977	Use of Borehole Geophysical Methods in Determining In Situ Bulk Densities and Water Contents in Unconsolidated Materials, by R. W. Hunt	AD A046 114
MP S-77-19	Sep 1977	Mechanical Constitutive Models for Engineering Materials, by Behzad Rohani (includes Appendix A)	AD A048 071
* MP S-77-20	Nov 1977	Title I Design Foundation Investigation for Static Loading, Gaseous Diffusion Add-On Plant, Portsmouth, Ohio, by H. M. Taylor, Jr., R. D. Bennett, R. C. Horz, R. W. Hunt, R. J. Lutton, and G. B. Mitchell	AD B023 170L

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP S-77-21	Nov 1977	Contribution to the Engineering Soil Classification of Cohesionless Soils, by M. M. Al-Hussaini (includes Appendix A)	AD A048 658
MP S-77-22	Nov 1977	In Situ Stress Measurements, Park River Project, Hartford, Connecticut, by Mysore Nataraja	AD A048 049
MP S-77-23	Nov 1977	Numerical Analyses of Penetration Dynamics in Support of Investigations of Scaling Relations for Earth Penetrators, by M. H. Wagner and C. C. Fulton	AD A048 644
MP S-77-24	Dec 1977	Subsurface Exploration in Alluvial Terrain by Surface Geophysical Methods, by W. L. Murphy	AD A049 125
MP S-77-25	Dec 1977	Dynamic Techniques for Detecting and Tracing Tunnel Complexes, by R. F. Ballard, Jr.	AD A048 415
MP S-77-26	Dec 1977	Observations of Portland Cement Concrete and Porous Friction Course Pavement Construction, by Frazier Parker, Jr., R. C. Gunkel, and T. D. White	AD A052 282
MP S-78-1	Jan 1978	Geophysical Survey of Cavernous Areas, Patoka Dam, Indiana, by S. S. Cooper and W. A. Bieganousky	AD A053 174
MP S-78-2	Feb 1978	Bank Distress of Low Water Weirs on Big Creek, La., by S. P. Miller	AD A052 558
MP S-78-3	Mar 1978	A Review of the Physical and Engineering Properties of Raw and Retorted Oil Shales from the Green River Formation, by D. R. Sneath, W. J. Farrell, and F. C. Townsend (includes Appendix A)	AD A053 999
MP S-78-4	Apr 1978	Seismic Attenuation Tests at the Portsmouth, Ohio Gaseous Diffusion Add-On Site, by J. R. Curro, Jr., P. F. Hadala, and G. B. Landers	AD A054 350
MP S-78-5		Reports 1-17 published as Potamology Investigation Reports	
	Apr 1978	Report 18 Verification of Empirical Method for Determining Riverbank Stability, Report 12-23 - 1972 and 1973 Data, by A. R. Gann (includes Appendix A)	AD A056 580
	Feb 1981	Report 19 Verification of Empirical Method for Determining Riverbank Stability, Report 12-24 - 1974 Through 1977 Data, by A. R. Gann (includes Appendix A)	AD A097 710
MP S-78-6	Jul 1978	Resonant Column Test, by V. P. Ornevich	AD A058 902
MP S-78-7	Jul 1978	Nondestructive Evaluation Procedure for Military Airfields, by J. W. Hall, Jr. (includes Appendixes A-C)	AD A058 736

## SOILS AND PAVEMENTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP S-78-8	Jul 1978	CROSSHOLE: An Interpretive Computer Code for Cross-hole Seismic Test Results, Documentation, and Examples, by D. K. Butler, G. R. Skoglund, and G. B. Landers (includes Appendixes A-B)	AD B030 453L
MP S-78-9	Aug 1978	Optimum Station Distribution and Determination of Hypocenters for Small Seismographic Networks, by B. A. Bolt, Paul Okubo, and R. A. Uhrhammer (includes Appendix A)	AD A058 662
MP S-78-10	Aug 1978	Feasibility Study for Railroad Embankment Evaluation with Radar Measurements, by J. R. Lundien	AD A058 387
MP S-78-11	Aug 1978	Instrumentation Observations from the U-Frame Lock of the Arkansas River Lock and Dam 5, by R. E. Leach	AD A061 073
MP S-78-12	Aug 1978	In Situ and Laboratory Determinations of Shear and Young's Moduli for the Portsmouth, Ohio, Gaseous Diffusion Add-On Site, by J. R. Curro, Jr., and W. F. Marcuson III (includes Appendixes A-B)	AD A059 988
* MP S-78-13	Aug 1978	EOS User's Manual: A Computer Program for the Static and Dynamic Analysis of Earth Slopes by the Sarma Method, by M. E. Hynes (includes Appendixes A-D)	AD B031 531L
MP S-78-14	Aug 1978	An Elastic-Plastic Constitutive Relation for Transverse-Isotropic Three-Phase Earth Materials, by G. Y. Baladi (includes Appendixes A-D)	AD A059 683
MP S-78-15	Sep 1978	Summary of Numerical Analyses of the Effect of W/A in Earth Penetration, by M. H. Wagner and C. C. Fulton	AD A060 424
MP S-78-16	Nov 1978	In Situ Seismic Investigation, Isabella Project, California, by G. B. Landers and J. R. Curro, Jr.	AD A063 168
	Dec 1978	Errata Sheet No. 1	
MP S-78-17	Dec 1978	True Load-Deformation Relationships for Coated and Uncoated Fabrics, by T. W. Vollar	AD A065 488

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Research Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
RR S-69-1	Aug 1969	Fractures and Failure Mechanics in Loess and Applications to Rock Mechanics, by R. J. Lutton	AD 695 616
RR S-72-1	Dec 1972	Three-Dimensional Behavior of a Central Core Dam, by J. B. Palmerton and G. Lefebvre	AD 756 443
RR S-76-1	Oct 1976	Laboratory Investigation of Undisturbed Sampling of Cohesionless Material Below the Water Table, by S. S. Cooper	AD A032 350
RR S-76-2		Liquefaction Potential of Dams and Foundations:	
	Oct 1976	Report 1 Laboratory Standard Penetration Tests on Reid Bedford Model and Ottawa Sands, by W. A. Bieganousky and W. F. Marcuson III	AD A033 337
	Feb 1977	Report 2 Laboratory Standard Penetration Tests on Platte River Sand and Standard Concrete Sand, by W. A. Bieganousky and W. F. Marcuson III	AD A039 828
	Feb 1977	Report 3 Development of an Elastic-Plastic Constitutive Relationship for Saturated Sand, by G. Y. Baladi and Behzad Rohani	AD A037 192
	Aug 1977	Report 4 Determination of In Situ Density of Sands, by W. F. Marcuson III	AD A044 262
	Aug 1978	Report 5 Development of a Constitutive Relation for Simulating the Response of Saturated Cohesionless Soil, by G. Y. Baladi and Behzad Rohani (includes Appendixes A-B)	AD A061 039
	Mar 1979	Report 6 Laboratory Strength of Sands Under Static and Cyclic Loadings, by F. C. Townsend and J. P. Mulilis (includes Appendixes A-C)	AD A070 362
	Nov 1980	Report 7 Geotechnical Earthquake Engineering, State of the Art - 1980, by W. F. Marcuson III, A. G. Franklin, and P. F. Hadala	AD A093 247

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 8-1	Jun 1931	Experiment to Determine the Comparative Stability of a Sluiced Levee and a Dry Fill Levee	
TM 8-2	Nov 1931	Experiment to Determine Effect of Impervious Walls in Levees	
TM 8-4	Jul 1933	Shear Tests of Buckshot from Borrow Pits of the Wilman New Levee	
TM 17-1	Mar 1933	Analyses, Bed Load Samples from Cottonwood Bar	
TM 17-2	Apr 1933	Tractive Force Data on Samples from Cottonwood Bar, About Mile 555	
TM 39-1	Dec 1933	Identification and Determination of the Source of Soil in the Montgomery Cut-Off Near the Mouth of White River	
TM 41-1	Feb 1934	Investigation of Soil Samples Nos. 1 and 2 from Fort Peck Dam Site	
TM 48-1	Jun 1934	Sediment Investigation in the Atchafalaya Basin	
TM 52-1	Jun 1934	Investigation of the Levee and Borrow-Pit Material in the Vicinity Immediately East of the Big Lake Reservation in Arkansas	
TM 53-1	Jul 1934	Tests to Determine Some of the Physical Properties and Condition of Soil in Fidler New Levee Unit and Beulah-Lake Vermillion Levee Unit	
TM 62-1	1934	Comparison of Bed Materials from Mississippi River with Those of Certain Tributaries	
TM 62-2	Jan 1935	Petrographic Character of Bed Materials from the Mississippi River, Cairo to the Gulf	
TM 65-1	Nov 1934	Investigation of the Soil Available for the Construction of a Levee in Mauvais Terre Levee and Drainage District, Scott County, Illinois	
TM 70-1	Jan 1935	Report on the Design of the Supplementary Dam and the Sub-soil Exploration in the Vicinity of the Proposed Dam Site at the Waterways Experiment Station	
TM 73-1	Mar 1935	Soils Tests of Material from Site of Proposed West Monroe Levee Wall	
TM 77-1	May 1935	Report on the Distribution of Grain Sizes in Samples of Soil from Alton, Illinois	
TM 80-1	Jun 1935	Report on the Foundations and Recommended Design of a Levee in the Clear Creek Drainage and Levee District, Union County, Illinois	

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 80-2	Aug 1937	Report on the Redesign of a Levee in the Clear Creek Drainage and Levee District, Union County, Illinois	
TM 90-1	Jan 1936	An Investigation of a Soil to Determine the Stable Slope for a Graded Embankment Formed by It at the Site of the U. S. Marine Hospital, Memphis, Tennessee	
TM 94-1	Apr 1937	Preliminary Report of Investigation of Lateral Pressure Exerted by Mining Debris Against Dams in Central California	
TM 94-2	Apr 1938	Final Report on Laboratory Studies of Lateral Pressures Exerted Against Dams by Submerged Debris	
TM 97-1	Jun 1936	Report on Tests of Soil and Rock for the Conchas Dam Project	
TM 101-1	Aug 1936	Report of Experiments and Investigations to Determine the Efficacy of Sub-levees and Berms in the Control of Seepage	
TM 101-2	Jul 1937	Report of Additional Investigations to Determine the Efficacy of Sub-levees in the Control of Seepage	
TM 108-1	Aug 1936	Report on Investigation of Condition of and Materials in the Murray Dam, Near Ardmore, Oklahoma	
TM 113-1	Oct 1936	Report on Tests of Foundation Materials, Possum Kingdom Dam	
TM 113-2	Nov 1936	Report on Tests of Proposed Core Materials for the Possum Kingdom Dam Project	
Unnumbered	Nov 1936	Laboratory Procedure in Testing Soils and Sediment	
TM 116-1	Mar 1937	Studies in Connection with Stability of the Hydraulic Fill at Yerba Buena Island, San Francisco Bay, California	
TM 117-2	Oct 1937	Preliminary Report on Foundation Investigation, Proposed Additional Lock at Hastings, Minnesota	
TM 118-1	Feb 1937	Report on Soil Tests and Design of Dike, Lake Traverse Project	
TM 124-1	May 1937	Analyses of Samples from Route of Proposed Ship Channel, Lake Charles, Louisiana	
TM 131-1	Dec 1938	Foundation Investigation; Lock Site No. 2, Proposed Pearl River Improvement	
TM 135-1	Oct 1938	Experiments to Determine the Efficacy of Bentonite in Reducing Seepage Through and Under Levees	

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 138-1	Aug 1938	Report of Soils Tests of Foundation Material for Dam on the Warrior River, Tuscaloosa, Alabama	
TM 140-1	Jul 1938	Report of Tests on Foundation and Overburden Material, Proposed Lock and Dam, Demopolis, Alabama	
TM 142-1	Dec 1938	Investigation of Mellwood (Arkansas) Levee Unit	
TM 145-1	Aug 1938	Report on Investigation of the Foundation Medium, Proposed Railway Bridge Over Wax Lake Outlet, Calumet, Louisiana	
TM 149-1	Feb 1939	Soil Investigation, Proposed Tennessee-Tombigbee Waterway, Tombigbee Route	
TM 150-1	Dec 1938	Report on Investigation of a Portion of Levee System, Lake Okeechobee, Florida	
TM 150-2	Mar 1939	Report on Investigation of a Portion of Levee System, Lake Okeechobee, Florida	
TM 151-1	Feb 1939	Efficacy of Systems of Drainage Wells for the Relief of Subsurface Hydrostatic Pressures	
TM 154-1	Jun 1939	Investigation of Levee Unit, East Side Levee and Sanitary District, East St. Louis, Illinois	
TM 155-1	Jun 1939	Model Study of Internal Drainage Systems in Pervious Levees	
TM 156-1	Aug 1939	Investigation of the Proposed Mill Creek Dam, Walla Walla, Washington	
TM 156-2	Feb 1940	Results of Triaxial Compression Tests of Loess from Foundation and Abutments of Mill Creek Dam, Walla Walla, Washington	
TM 163-1	Dec 1939	Investigation of Foundation and Design of Levee Unit, Clear Creek Drainage and Levee District, Alexander and Union Counties, Illinois	
TM 164-1	Dec 1939	Results of Soil Tests on Material from Proposed Mud Mountain Dam, White River, Washington	
TM 172-1	Jan 1941	Study of Foundation of Test Section, Pendleton New Levee, Arkansas River, Arkansas	
TM 175-1	Mar 1941	Soil Mechanics Fact Finding Survey: Seepage Studies; Progress Report	
TM 176-1	Mar 1941	Soil Mechanics Fact Finding Survey: Permeability Testing; Progress Report	
TM 179-1	Jul 1941	Investigation of Foundation and Design, Little Grassy Dam, Carbondale, Illinois	

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 182-1	Oct 1941	Seepage Model of Greenville Front Levee, Greenville, Mississippi	
TM 183-1	Nov 1941 Revised Dec 1941	Investigation of Filter Requirements for Underdrains	
TM 184-1	Oct 1941	Investigation of Underseepage, Lower Mississippi River Levees	
TM 187-1	Feb 1942	Investigation of the Unconfined Compressive Strength of Soil-Cement Mixtures	
Unnumbered	Jul 1942	Pressure Cell Installation, Arkabutla Dam; Interim Report	
TM 195-1	Oct 1942	Field and Laboratory Investigation of Design Criteria for Drainage Wells	
TM 196-1	Nov 1942	Investigation of Soil Stabilization with Vinsol Resin	
TM 198-1	Jan 1943	Seismic and Resistivity Geophysical Exploration Methods	
TM 199-1	Feb 1943	Critical Study of Shallow Seismic Exploration in the Limestone Areas of the Ozark Highlands	
Unnumbered	Sep 1943	Results of California Bearing Ratio Tests Performed on Undisturbed and Remolded Samples of Soil Obtained from Service Behavior Test Section, Barksdale Field, Louisiana	
Unnumbered	Jan 1944	Pavement Failure Study of Morristown Airport, Morristown, New Jersey	
TM 210-1	Jul 1944	Soil Mechanics Fact Finding Survey: Soil Pressure Cell Investigation; Interim Report	
TM 211-1	Jul 1944	Field Tests on Prefabricated Bituminous Surfacing; Final Report	
Unnumbered	Nov 1944	Performance of Woven Wire Landing Mat During Traffic Tests	
Unnumbered	Nov 1944	Performance of Latisteel Airplane Landing Mat During Traffic Tests	
Unnumbered	Dec 1944	Performance of Laminated Wood Airplane Landing Mat During Traffic Tests	
Unnumbered	Dec 1944	Performance of General Electric Airplane Landing Mat During Traffic Tests	
Unnumbered	Dec 1944	Performance of Steel Pierced Plank Mat with "T" Connectors During Traffic Tests	



## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
Unnumbered	Dec 1944	Performance of Thaden Articulated Wood Slat Airplane Landing Mat During Traffic Tests	
TM 211-2	Jan 1945	Behavior of Prefabricated Bituminous Surfacing Under Pierced Plank Landing Mat During Traffic Tests	
Unnumbered	Jan 1945	Performance of Irving Grid Landing Mat During Traffic Tests	
Unnumbered	Jan 1945	Performance of Standard Heavy Bar and Rod Airplane Landing Mat During Traffic Tests	
Unnumbered	Feb 1945	Performance of Standard Pierced Plank Airplane Landing Mat Under Traffic Tests	
Unnumbered	Mar 1945	Performance of Heavy Bar and Rod Airplane Landing Mat with New Connectors Under Traffic Tests	
Unnumbered	Mar 1945	Rigid Plate Bearing Test Investigation	
Unnumbered	Apr 1945	Conference on Control of Underseepage, Cincinnati, Ohio, 13-14 June 1944	
TM 211-3	May 1945	Behavior of Prefabricated Bituminous Surfacing Under Airplane Landing Mat, During Traffic Tests with 20,000-lb Wheel Load	
TM 211-4	Oct 1945	Tests on Methods of Employing Pierced Plank Landing Mat with Prefabricated Bituminous Surfacing	
TM 211-5	Oct 1945	Soil Mattress Construction for Runways with Prefabricated Bituminous Surfacing	
TM 211-5A	Mar 1946	Subgrade Moisture Protection with Prefabricated Bituminous Surfacing; Supplemental Report	
TM 212-1	Aug 1944	Results of Traffic Tests on Various Combinations of Light Bar and Rod Airplane Landing Mats and Base Courses; Final Report	
TM 212-2	Sep 1944	Airplane Landing Mat Investigation	
TM 212-3	Oct 1944	Tests on Steel Pierced Plank Airplane Landing Mats, with Integral Locking Lugs and Overlapping Turned-Down Ends; Final Report	
TM 212-4	Oct 1944	Comparative Traffic Tests on Various Methods of Laying Pierced Plank Airplane Landing Mat; Final Report	
TM 212-5	Nov 1944	Pierced Plank Airplane Landing Mat with Integral Locking Lugs; Final Report	

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 212-6	Apr 1945	Comparative Traffic Tests on Standard Pierced Plank and Model 2-T6 (Wichert) Pierced Plank Airplane Landing Mat	
TM 212-7	May 1945	Traffic Tests on Aluminum Alloy Pierced Plank Mat with Reduced Vertical Bayonet Clearance	
TM 212-8	May 1946	Traffic Test on Airplane Landing Mat, Steel, Pierced Type M-6	
TM 213-1	Jul 1945	The California Bearing Ratio Test as Applied to the Design of Flexible Pavements for Airports	
Unnumbered	Jul 1945	Laboratory Study of Asphalt Paving Mixtures for Upper Bank Protection	
Unnumbered	Aug 1945	Certain Requirements for Flexible Pavement Design for B-29 Planes	AD A950 005
Unnumbered	Aug 1945	Rigid Pavement Tests, Marietta, Georgia	AD A950 041
TM 217-1	May 1946	Resinous Water Repellents for Soils; Interim Report	
Unnumbered	Aug 1946	Investigation and Design of Texas and Pacific Railroad (Port Allen Branch Line) and Louisiana State Highway No. 30 Joint Embankment, Morganza Floodway Crossing, Morganza, Louisiana. In 2 volumes (only Volume 1 available)	
Unnumbered	Sep 1946	Investigation of Foundation, Bayou Sorrel Lock	
Unnumbered	Oct 1946	Investigation and Review of Design of the Proposed Texas and Pacific Railroad Main Line Embankment, Morganza Floodway, McKneely to Red Cross, Louisiana	
Unnumbered	Jan 1947	Woodlawn Bridge - Foundation Investigation	
Unnumbered	Feb 1947	Accelerated Traffic Tests; Summary Report	
Unnumbered	Mar 1947	Foundation Investigation of the East Calumet and West Calumet Floodgates, St. Mary Parish, Louisiana	
Unnumbered	Apr 1947	Soil Mechanics Fact Finding Survey: Triaxial Shear Research and Pressure Distribution Studies on Soils; Progress Report	
Unnumbered	May 1947	Flexible Pavement Behavior Studies; Interim Report 2	
Unnumbered	Jul 1947	Fine Grained Alluvial Deposits and Their Effects on Mississippi River Activity. In 2 volumes	
Unnumbered	Jul 1947	St. Johns Bayou Floodgate Structure Drainage System, New Madrid, Missouri	

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
Unnumbered	Jul 1947	Cooper Dam, South Sulphur River, Paris, Texas; Soils Investigation - Survey Report	
Unnumbered	Aug 1947	Investigation of Foundation Borrow Materials and Embankment Design for New Orleans, Texas and Mexico Railroad, West Atchafalaya Floodway Crossing	
Unnumbered	Nov 1947	Soils Study of Military Reservation, Fort Benning, Georgia	
TM 3-245	Jan 1948	Laboratory Investigation of Filters for Enid and Grenada Dams	
TM 3-246	Dec 1947	Investigation of Solvent Resistant Treatments for Bituminous Pavements	
TM 3-247		Study of Relief Well Installations at Wolf River and Nonconnah Creek Projects, Memphis, Tennessee	
	Dec 1947 Revised Feb 1952	Volume 1	AD 757 402
	Dec 1947 Revised Feb 1952	Volume 2 Plates	
TM 3-248	Dec 1947	Filter Stability Tests on Mud Mountain Dam Transition and Core Material	
TM 3-249	Jan 1948	Catfish Point Control Structure Foundation Investigation	
TM 3-250	Feb 1948	Investigation of Wooden Well Screens for Grenada, Enid, and Sardis Dams	AD 845 376
Unnumbered	Mar 1948	Foundation Investigation - Schooner Bayou Control Structure	
Unnumbered	Mar 1948	Foundation Investigation of Sump and Water Tower, Mississippi Basin Model, Clinton, Mississippi	
Unnumbered	May 1948	Meeker Control Structure, Foundation Investigation	
TM 3-254		Investigation of the Design and Control of Asphalt Paving Mixtures:	
	May 1948	Volume 1 Summary Report, Inclosure I: Formulas, and Inclosure II: Procedures	AD A012 503
	May 1948	Volume 2 Appendix A: Selection of Design and Control Method; Appendix B: Presentation of Initial Laboratory Test Data; and Appendix C: Design and Construction of Test Section	AD A012 504

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 3-254 (Cont)	May 1948	Volume 3 Appendix D: Traffic Tests; and Appendix E: Final Laboratory Correlation Tests	AD A006 523
Unnumbered	Aug 1948	Investigation of Embankment and Cut Slopes, Illinois Central Railroad Relocation, Grenada Reservoir	
TM 3-266	Dec 1948	Airplane Landing Mat Investigation, Tests on Steel, Pierced Type, M7	
TM 3-267	Jan 1949	Efficacy of Partial Cutoffs for Controlling Underseep- age Beneath Levees	AD 757 399
Unnumbered	Mar 1949	Walker Lake Canal Pumping Plant, Greenwood, Mississippi; Foundation Investigation	
TM 3-271		Soil Compaction Investigation:	
	Apr 1949	Report 1 Compaction Studies on Clayey Sands	
	Jul 1949	Report 2 Compaction Studies on Silty Clay	
	Oct 1949	Report 3 Compaction Studies on Sand Subgrades	
	Feb 1950	Report 4 Subgrade Compaction Studies	
	Jun 1950	Report 5 Miscellaneous Laboratory Tests	
	Jun 1954	Report 6 Effect of Size of Feet on Sheepsfoot Roller	AD 052 540
	Jun 1956	Report 7 Effect on Soil Compaction of Tire Pressure and Number of Coverages of Rubber-Tired Rollers and Foot-Contact Pressure of Sheeps- foot Rollers	AD 105 204
	Oct 1957	Report 8 Effect of Lift Thickness and Tire Pressure	AD 145 865
	Oct 1963	Report 9 Compaction of a Graded Crushed-Aggregate Base Course	AD 450 615
	Mar 1968	Report 10 Evaluation of Vibratory Rollers on Three Types of Soils, by J. W. Hall	AD 667 966
Unnumbered	Jan 1949	Plate Bearing Tests - Outlet Works Stilling Basin, Bayou Bodcau Dam	
TM 3-273	May 1949	Geological Investigation of Gravel Deposits in the Lower Mississippi Valley and Adjacent Uplands	
TM 3-274	Apr 1949	Tests on Soils Samples from Overseas Air Bases	AD 757 115
TM 3-278	May 1949	Combined Morganza Floodway Control Structures, Texas and Pacific Railroad and Louisiana State Highway No. 30; Soils Investigation	

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 3-279	Jul 1948	Blakely Mountain Dam, Investigation of Foundation, Borrow Materials, and Embankment Design; Interim Report 1	
	Jul 1949	Blakely Mountain Dam, Embankment, Foundation and Borrow Areas; Interim Report 2. In 2 volumes	
TM 3-284	Jun 1949	Investigation of Foundation, Borrow Materials, and Embankment Design for the Relocation of U. S. Highways 190 and 71 - West Atchafalaya Floodway Crossing	
TM 3-285	Jun 1949	Engineering Tests of Aggregate Dryer, Barber-Greene Company Model 837, Single Drum	AD 757 400
TM 3-286		Correlation of Soil Properties with Geologic Information:	
	Jun 1949	Report 1 Simplification of the Liquid Limit Test Procedure	AD 707 462
	Dec 1951	Report 2 Correlation of Liquid Limit and Mechanical Analysis	AD B951 762
TM 3-287	Jun 1949	Corrosion of Drainage Wells at Sardis Dam, Mississippi	
TM 3-288	Jun 1949	Geological Investigation of Mississippi River Activity, Memphis, Tennessee, to Mouth of Arkansas River	
TM 3-289	Jul 1949	Foundation and Soils Investigation, Bayou Cocodrie Drainage Structure	
Unnumbered	Jul 1949	Progress Report, Civil Works Investigation, Development of Velocity Meter for Relief Wells (CW 462-F)	
TM 3-292	Aug 1949	Lecompte Control Structure, Foundation Investigation	
TM 3-293	Feb 1949 Revised Jul 1949	Texarkana Dam, Terrace Section, Foundation and Borrow Investigation and Embankment Design; Interim Report 1. In 2 volumes	
TM 3-297	Aug 1949	Foundation Investigation, Wolf River Floodwall, Section 1A, Memphis, Tennessee	
TM 3-298	Aug 1949	The Entrenched Valley of the Lower Red River	
TM 3-299	Aug 1949	Field Permeability Tests, Commerce Landing, Mississippi, and Wilson Point, Louisiana	
TM 3-304	Nov 1949	Relief Well Systems for Dams and Levees on Pervious Foundations; Model Investigation	
TM 3-306	Dec 1949	Preservation of Sliced Soil Samples	
TM 3-308	Jan 1950	Pile Loading Tests, Combined Morganza Floodway Control Structure	AD B951 758

SOILS AND PAVEMENTS LABORATORYTechnical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
Unnumbered	Jan 1950	Jonesville Floodwall and Pumping Plant; Foundation Investigation	
Unnumbered	Mar 1950	Mississippi Basin Model Foundation Investigation. In 2 volumes (only Volume 1 available)	
TM 3-311	May 1950	Geological Investigation of Faulting in the Lower Mississippi Valley	
TM 3-312	May 1950	Investigation of Effects of Traffic with High-Pressure Tires on Asphalt Pavements	
TM 3-314	Jun 1950	Effects of Traffic with Small High-Pressure Tires on Asphalt Pavements	
Unnumbered	Jun 1950	Bayou Lamourie Control Structure, Foundation Investigation	
Unnumbered	Jun 1950	Minutes of Conference on Soil Mechanics, 21, 22 June 1950	
TM 3-315	Jun 1950	Undisturbed Sampling of a Clay Using Vacuum- and Piston Type Samplers	AD 756 373
TM 3-316	Jun 1950	Investigation of Underseepage and Its Control by Relief Wells, Commerce and Trotters, Mississippi. In 2 volumes	
TM 3-317	Jun 1950 Revised Aug 1950	Determination of Required Pile Lengths, Combined Morganza Floodway Control Structure	
TM 3-318	Sep 1950	Bank Caving Investigations, Morville Revetment, Mississippi River	
TM 3-319	Sep 1950	Geology of the Lower Red River	
Unnumbered	Oct 1950	Morganza Control Structure, Review of Use of Long and Heavily Loaded Piles	
Unnumbered	Oct 1950	Analysis of Design, Bayou Boeuf Lock, Soils and Foundation Investigation	
TM 3-322	Jan 1951	Investigation of Heaving of Floor Slabs of Building, Fort Gulick, Panama Canal Zone	
Unnumbered	Feb 1951	Analysis of Design, Wolf River Floodwall, Section 1-C, Memphis, Tennessee; Foundation Investigation	
Unnumbered	Mar 1951	Design of Closure Section and Pressure-Relief System for Outlet Structure Excavation, Grenada Dam	

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 3-323		Investigations of Pressures and Deflections for Flexible Pavements:	
	Mar 1951	Report 1 Homogeneous Clayey-Silt Test Section	AD A950 002
	Oct 1951	Report 2 Pilot Tests on New Four-Gage Cell	AD A006 499
	Sep 1953	Report 3 Theoretical Stresses Induced by Uniform Circular Loads	AD 021 652
	Dec 1954	Report 4 Homogeneous Sand Test Section	AD 052 207
	Dec 1960	Report 5 Development of Representative Soil Strengths from Laboratory Tests	AD 265 628
Unnumbered	Apr 1951	Analysis of Design, Wolf River Floodwall, Section 1-E, Memphis, Tennessee; Foundation Investigation	
TM 3-324	May 1951	Airplane Landing Mat Investigation, Engineering Tests on Steel, Pierced Type, M8 and Aluminum, Pierced Type, M9	AD 780 299
TM 3-328	Aug 1951	Torsion Shear Tests on Atlantic Muck, The Panama Canal	AD B951 761
TM 3-329	Aug 1951	Investigation of Mass Placement of Sand Asphalt for Underwater Protection of River Banks	AD 757 407
Unnumbered	Sep 1951	Head Loss Through Steel Sheet Piling, Hickman Floodwall, Reach No. 1, Hickman, Kentucky	
TM 3-332	Oct 1951	Geology of the Lower Arkansas River Alluvial Valley, Pine Bluff, Arkansas, to Mouth	AD 756 413
TM 3-333	Oct 1951	Field Penetration Tests for Selection of Sheepsfoot Rollers	AD 120 973
Unnumbered	1952	Poisson's Ratio Factor for Earth Pressure at Rest; Progress Report	
	Jan 1955	Coefficient of Earth Pressure at Rest and Poisson's Ratio; Progress Report 2	
TM 3-341	Apr 1952	Control of Underseepage by Relief Wells, Trotters, Mississippi. In 2 volumes (includes Appendix A)	
	Feb 1954	Appendix B Analysis of 1952 Well Flow and Piezometric Data; and Appendix C: 1953 Pumping Tests. In 2 volumes	AD 756 425
	Jun 1957	Appendix D Analysis of 1955 Well Flow and Piezometric Data; and Appendix E: 1957 Pumping Tests	AD 757 409
	Jun 1960	Appendix F 1959 Pumping Tests	

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 3-341 (Cont)	Jul 1962	Appendix G Analysis of 1961 Well Flow and Piezometric Data; and Appendix H: 1961 Pumping Tests, Chemical Analyses and Well Repairs	
	Apr 1964	Appendix I 1963 Pumping Tests	AD 756 411
	Jul 1968	Appendix J 1965 Pumping Tests	AD 756 201
	Sep 1970	Appendix K 1969 Pumping Tests, by C. C. Trahan	AD 756 208
	Dec 1972	Appendix L 1971 Pumping Tests, by C. C. Trahan	
Unnumbered	Jul 1952	Study of Effect of Current-Type Jet Aircraft on Airfield Pavements; Interim Report on Heat and Blast Effects on Pavements	
TM 3-343		Limited Reconnaissance for Pavement Evaluation and Soil Type-Serial Photograph Ties:	
*	Dec 1952	Report 1 Keflavik and Patterson Airfields, Iceland	
*	Jan 1953	Report 2 Torbay Airfield, Newfoundland	
*	Dec 1952	Report 3 Harmon Air Force Base, Stephenville, Newfoundland, Canada	
*	Jan 1953	Report 4 BW-8 Airfield, Sondre Stromfjord, Greenland	
*	Jan 1953	Report 5 BW-1 Airfield, Narsarssauk, Greenland	
*	Nov 1952	Report 6 Goose Bay Airfield, Labrador, Canada	
*	Jan 1953	Report 7 Gander Airport, Gander, Newfoundland	
*	Aug 1952	Report 8 Reykjavik Airfield, Reykjavik, Iceland	
*	Feb 1953	Report 9 Cazes Airport, Casablanca, French Morocco	
*	Mar 1953	Report 10 Khouribga Airfield, Khouribga, French Morocco	
*	Feb 1953	Report 11 Oujda Airfield, Oujda, French Morocco	
*	Mar 1953	Report 12 Rabat-Sale Airfield, Rabat, French Morocco	
*	Dec 1952	Report 13 Roberts Field, Liberia	
*	Mar 1953	Report 14 Marrakech Airfield, French Morocco	
*	Mar 1953	Report 15 Meknes Airfield, Meknes, French Morocco	
*	Mar 1953	Report 16 Santa Maria Airport, Santa Maria Island, Azores	

---

\* Statement B. See Preface.



## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 3-343 * (Cont)	Mar 1953	Report 17 Lages Air Force Base, Terceira, Azores	
*	Apr 1953	Report 18 Evreux-Fauville Air Base, Evreux, France	
*	May 1953	Report 19 Toul-Rosieres Air Base, Toul-Rosieres, France	
*	May 1953	Report 20 Chaumont Air Base, Chaumont, France	
*	May 1953	Report 21 Laon-Couvron Air Base, Laon, France	
*	Jun 1953	Report 22 Bordeaux-Merignac Air Base, Bordeaux, France	
*	Jul 1953	Report 23 Bitburg I Air Base, Bitburg, Germany	
*	Jun 1953	Report 24 Bitburg II Air Base, Spangdahlem, Germany	
*	Jun 1953	Report 25 Hahn Air Base, Hahn, Germany	
*	Aug 1953	Report 26 Landstuhl Air Base, Landstuhl, Germany	
*	Aug 1953	Report 27 Sembach Air Base, Sembach, Germany	
*	Aug 1953	Report 28 Tempelhof Air Base, Berlin, Germany	
*	Aug 1953	Report 29 Wiesbaden Air Base, Wiesbaden, Germany	
*	Aug 1953	Report 30 Erding Air Base, Erding, Germany	
*	Aug 1953	Report 31 Neubiberg Air Base, Neubiberg, Germany	
*	Aug 1953	Report 32 Furstenfeldbruck Air Base, Furstenfeldbruck, Germany	
*	Oct 1953	Report 33 Stuttgart Airport, Stuttgart, Germany	
*	Oct 1953	Report 34 Giebelstadt Airfield, Giebelstadt, Germany	
*	Oct 1953	Report 35 Kitzingen Airfield, Kitzingen, Germany	
*	Oct 1953	Report 36 Rhein-Main Air Base, Frankfurt am Main, Germany	
*	Oct 1953	Report 37 Ciampino Airport, Rome, Italy	
*	Oct 1953	Report 38 Capodichino Airfield, Naples, Italy	
*	Oct 1953	Report 39 Foggia-Main Airfield, Foggia, Italy	
*	Oct 1953	Report 40 Foggia-Amendola Airfield, Foggia, Italy	
*	Oct 1953	Report 41 Treviso I Airfield, Treviso, Italy	
*	Oct 1953	Report 42 Treviso II Air Base, Treviso, Italy	

---

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 3-343 * (Cont)	Oct 1953	Report 43 Aviano Air Base, Aviano, Italy	
*	Nov 1953	Report 44 Ghedi Air Base, Ghedi, Italy	
*	Nov 1953	Report 45 Montichiari Air Base, Montichiari, Italy	
*	Nov 1953	Report 46 Orio Al Serio Airfield, Bergamo, Italy	
*	Nov 1953	Report 47 Pisa San Giusto Airfield, Pisa, Italy	
*	Feb 1954	Report 48 Investigation of Calcareous Soils in French Morocco	
*	Jan 1954	Report 49 Phalsbourg Air Base, Phalsbourg, France	
*	Jan 1954	Report 50 Chateauroux-Deols Air Base, France	
*	Jan 1954	Report 51 Chambley Air Base, Chambley, France	
*	Feb 1954	Report 52 Etain-Rouvres Air Base, Etain, France	
*	Feb 1954	Report 53 St. Nazaire-Montoir Air Base, St. Nazaire, France	
*	Mar 1954	Report 54 Orlandet Air Base, Norway	
*	Mar 1954	Report 55 Stavanger-Sola Airport and Forus Airfield, Stavanger, Norway	
*	Apr 1954	Report 56 Gardermoen Air Base, Oslo, Norway	
*	Apr 1954	Report 57 Karup Air Base, Karup, Denmark	
*	May 1954	Report 58 Tirstrup Air Base, Tirstrup, Denmark	
*	Jun 1954	Report 59 Vaerloose Air Base, Vaerloose, Denmark	
*	Aug 1954	Report 60 Vandel Air Base, Vandel, Denmark	
*	Jun 1954	Report 61 Luxemburg Airport, Luxemburg, Luxemburg	
*	Jun 1954	Report 62 Summary Report on the Geology and Soils of French Morocco	
*	Jul 1954	Report 63 Summary Report on the Geology and Soils of Western Germany	
*	Jul 1954	Report 64 Athens-Ellinikon Airport, Athens, Greece	
*	Jun 1954	Report 65 Timbakion Air Base, Timbakion, Crete	
*	Jul 1954	Report 66 Kastellion Air Base, Kastellion, Crete	

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* TM 3-343 (Cont)	Jul 1954	Report 67 Araxos Air Base, Greece	
*	Jul 1954	Report 68 Larisa Air Base, Larisa, Greece	
*	Aug 1954	Report 69 Etimesut Air Base, Ankara, Turkey	
*	Aug 1954	Report 70 Esenboga Airport, Ankara, Turkey	
*	Oct 1954	Report 71 Eskisehir Air Base, Eskisehir, Turkey	
*	Oct 1954	Report 72 Balikesir Air Base, Balikesir, Turkey	
*	Aug 1954	Report 73 Diyarbakir Air Base, Diyarbakir, Turkey	
*	Aug 1954	Report 74 Adana Airport, Adana, Turkey	
*	Aug 1954	Report 75 Adana Air Base, Adana, Turkey	
*	Jun 1954	Report 76 Sanjurjo Airport, Zaragoza, Spain	
*	Jun 1954	Report 77 Torrejon de Ardoz Air Base, Madrid, Spain	
*	Jun 1954	Report 78 Summary of Investigations at a Proposed Airfield Site, Moron de la Frontera, Spain	
*	Jul 1955	Report 79 Wheelus Air Base, Tripoli, Libya	
*	Feb 1955	Report 80 Idris Airport, Castel Benito, Libya	
*	Jan 1955	Report 81 Misurata West Airfield, Misurata, Libya, North Africa	
*	Jan 1955	Report 82 Berca II Airfield, Benghazi, Libya	
*	Jan 1955	Report 83 Benina Airport, Benghazi, Libya	
*	Jan 1955	Report 84 El Adem Air Base, El Adem, Libya	
*	Feb 1955	Report 85 San Pablo Airport, Sevilla, Spain	
*	Mar 1955	Report 86 Los Llanos Air Base, Albacete, Spain	
*	Apr 1955	Report 87 Reus Air Base, Reus, Spain	
*	Feb 1955	Report 88 Muntadas Airport, Barcelona, Spain	
*	Mar 1955	Report 89 Barajas International Airport, Madrid, Spain	
*	Aug 1955	Report 90 Royal Air Force Station Manston, Kent, England	
*	Oct 1955	Report 91 RAF Station Brize Norton, Oxford, England	
* Statement B. See Preface.			

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* TM 3-343 (Cont)	Oct 1955	Report 92 RAF Station Mildenhall, Suffolk, England	
*	Oct 1955	Report 93 RAF Station Molesworth, Huntingdonshire, England	
*	Aug 1955	Report 94 Royal Air Force Station Holme, Yorkshire, England	
*	Oct 1955	Report 95 RAF Station Elvington, Yorkshire, England	
*	Aug 1955	Report 96 RAF Station Alconbury, Alconbury (Lincolnshire), England	
*	Oct 1955	Report 97 RAF Station East Kirkby, Lincolnshire, England	
*	Dec 1955	Report 98 RAF Station Fairford, Gloucestershire, England	
*	Oct 1955	Report 99 RAF Station Bentwaters, Suffolk, England	
*	Oct 1955	Report 100 RAF Station Burtonwood, Lancashire, England	
*	Oct 1955	Report 101 RAF Station Wethersfield, Essex, England	
*	Dec 1955	Report 102 RAF Station Woodbridge, Suffolk, England	
*	Dec 1955	Report 103 RAF Station Shepherds Grove, Suffolk, England	
*	Dec 1955	Report 104 RAF Station Lakenheath, Suffolk, England	
*	Dec 1955	Report 105 RAF Station Upper Heyford, Oxfordshire, England	
*	Dec 1955	Report 106 RAF Station Tibenham, Suffolk, England	
*	Dec 1955	Report 107 RAF Station Beaulieu, Hampshire, England	
*	Dec 1955	Report 108 RAF Station Sturgate, Lincolnshire, England	
*	Feb 1956	Report 109 RAF Station Blyton, Lincolnshire, England	
*	Feb 1956	Report 110 Blackbush Airport, Surrey, England	
*	Feb 1956	Report 111 RAF Station Spilsby, Lincolnshire, England	
*	Feb 1956	Report 112 RAF Station Sandtoft, Lincolnshire, England	
*	Feb 1956	Report 113 RAF Station Sculthorpe, Norfolk, England	
*	Mar 1956	Report 114 RAF Station Carnaby, Yorkshire, England	

---

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 3-343 * (Cont)	Feb 1956	Report 115 RAF Station St. Mawgan, Cornwall, England	
*	Mar 1956	Report 116 RAF Station Wroughton, Wiltshire, England	
*	Apr 1956	Report 117 RAF Station Chelveston, Northamptonshire, England	
*	Apr 1956	Report 118 RAF Station Full Sutton, Yorkshire, England	
*	Apr 1956	Report 119 RAF Station East Fortune, East Lothian, Scotland	
*	May 1956	Report 120 RAF Station Lindholme, Yorkshire, England	
*	May 1956	Report 121 RAF Station Oakington, Cambridgeshire, England	
*	May 1956	Report 122 Royal Naval Air Station Ford, Sussex, England	
*	Mar 1957	Report 123 RPAF Station Mauripur, Karachi, West Pakistan	
*	Feb 1958	Report 124 Dhahran Airfield, Dhahran, Saudi Arabia	
*	Feb 1958	Report 125 PAF Station Peshawar, Peshawar, West Pakistan	
*	Dec 1957	Report 126 PAF Station Drigh-Road, Karachi, West Pakistan	
TM 3-344		Airfield Pavement Evaluation:	
	Jan 1953	Report 1 Campbell Air Force Base, Kentucky	AD 010 425
	Dec 1953	Report 2 Sheppard Air Force Base, Wichita Falls, Texas	
	Dec 1953	Report 3 Boca Raton Airfield, Florida	
	Dec 1953	Report 4 Davis-Monthan Air Force Base, Tucson, Arizona	
	Jan 1954	Report 5 Pope Air Force Base, North Carolina	
	Oct 1953	Report 6 Palm Beach International Airport, Florida	
	Dec 1955	Report 7 Perrin Air Force Base, Sherman, Texas	AD 756 330
	Jan 1956	Report 8 Ardmore Air Force Base, Ardmore, Oklahoma	AD 756 372
TM 3-349		Design of Flexible Airfield Pavements for Multiple-Wheel Landing Gear Assemblies:	
	Sep 1952	Report 1 Test Section with Lean Clay Subgrade	AD 010 209
	Jun 1955	Report 2 Analysis of Existing Data	AD 083 086

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 3-354	Feb 1953	Topsoil and Seeding Studies at Vicksburg, Mississippi	AD 003 396
TM 3-357	Apr 1960 Reprinted May 1967	The Unified Soil Classification System (includes Appendix A: Characteristics of Soil Groups Pertaining to Embankments and Foundations; and Appendix B: Characteristics of Soil Groups Pertaining to Roads and Airfields)	AD A026 473
TM 3-360	Apr 1953	Filter Experiments and Design Criteria	AD 771 076
TM 3-361	Apr 1953	Recommended Practices for Establishment and Maintenance of Turf	AD 010 208
TM 3-362	Apr 1953	Investigation of Bituminous Cold Mixes for the Protection of Upper River Banks	AD A006 533
TM 3-372		Tar-Rubber Test Section at Waterways Experiment Station:	
	Nov 1953	Report 1 Design and Construction of Test Section	AD 024 381
	Oct 1957	Report 2 Heat and Blast Effects	AD 147 194
TM 3-373		Design of Upper Base Courses for High-Pressure Tires:	
	Dec 1953	Report 1 Base Course Requirements as Related to Contact Pressures	AD 025 962
TM 3-377	Jan 1954	Heat and Blast Effects on Tar and Tar-Rubber Pavements, Presque Isle Air Force Base, Maine	AD 030 247
TM 3-379		Analysis of Piezometer and Relief-Well Data:	
	Feb 1954	Report 1 Data from Sardis Dam, Mississippi	
TM 3-384	Aug 1954	Review of Soils and Foundation Design and Field Observations, Morganza Floodway Control Structure, Louisiana	
* TM 3-391	Jun 1954	Geological Investigation of the New Orleans Harbor Area	
TM 3-392	Jul 1954	Topsoil and Seeding Studies at Purdue University, Indiana	
Unnumbered	Aug 1954	Construction Inspectors Manual for Flexible Pavements	
TM 3-394	Oct 1954	Heat and Blast Effects of Current-Type Jet Aircraft on Airfield Pavements	
TM 3-400	Mar 1955	Comparative Engineering Traffic Tests of 10-, 11-, and 12-Gage M8 Steel Landing Mat	AD 062 773

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 3-401		Field Moisture Content Investigation:	
	May 1948	Interim Report 1	
	Apr 1955	Report 2 October 1945-November 1952 Phase	AD 069 343
	May 1961	Report 3 November 1952-May 1956 Phase	AD 266 782
	Nov 1963	Report 4 August 1955-March 1959 Phase	AD 432 810
TM 3-408	Jun 1955	Grouting of Foundation Sands and Gravels	AD A950 080
	Jan 1956	Appendix A Tests of Acrylamide N, N' Methylene-bis-acrylamide as a Grouting Agent	AD A950 081
TM 3-409	Oct 1955	Review of Soils Design and Field Observations, Enid Dam, Yocona River, Mississippi; Prototype Analyses (Soils) (includes Appendix A)	AD A950 197
	Mar 1959	Appendix B Analysis of Piezometric and Relief Well Data	
TM 3-415	Oct 1955	A Study of In-Place Density Determinations for Soils	AD 080 870
TM 3-416	Nov 1955	Tests of Vinyl Membrane as Surfacing for Airplane Landing Facilities	AD 083 085
TM 3-418	Oct 1955	Theoretical Landing Mat Studies	AD 083 084
TM 3-420	Nov 1955	Summary of Investigations of Effects of Jet Blast, Fuel Spillage, and Traffic on Experimental Tar-Rubber-Concrete Pavements	AD 079 771
TM 3-423	Nov 1955	DeLong Pier Tests at Le Verdon, France	AD 082 371
TM 3-424		Investigation of Underseepage and Its Control, Lower Mississippi River Levees:	
	Oct 1956	Volume 1 (includes Appendixes A-D)	AD A012 771
	May 1964	Appendix E Analysis of 1961 Piezometric Data	AD 756 412
	Oct 1956	Volume 2	
TM 3-425	Jan 1956	Drainage Systems and Engineering Measurement Devices, St. Johns Bayou Floodgate, Missouri	
	Nov 1964	Appendix A Engineering Measurements and Remedial Operations, 1955-1963	
	Sep 1965	Appendix B Pumping Tests and Inspection of Wells, 1965	
TM 3-426	Feb 1956	Study of Channelized Traffic	AD 085 797
TM 3-430	Apr 1956	Investigation of Underseepage, Mississippi River Levees, Alton to Gale, Illinois. In 2 volumes	

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-432	Apr 1956	Investigation of Means of Placement of Rubber Waterstops Without Splitting Concrete Forms	
TR 3-433	Apr 1956	Investigation of Effects of Improved Joints and Direction of Traffic on Life of M8 Landing Mat	AD 099 683
TR 3-436	Jun 1956	Review of Petrographic Studies of Bed Material, Mississippi River, Its Tributaries, and Offshore Areas of Deposition	
TR 3-439	Oct 1956	Review of Soils Design, Construction, and Prototype Analysis, Blakely Mountain Dam, Arkansas	AD B951 688
TR 3-441	Nov 1956	Mathematical Expression of the CBR Relations	AD 119 141
TR 3-442	Nov 1956	Engineering Tests on Mobile Materials Laboratory M-II	AD 118 919
TR 3-443	Dec 1956	Performance of Relief Wells Along Missouri River Levees, 1951-1952 Floods	AD 756 393
TR 3-450	Feb 1957	DeLong Pier Tests at Fort Eustis, Virginia	AD 123 796
TR 3-451	Jan 1957	Review of Soils Design, Construction, and Prototype Data, Bayou Rigolette Floodgate	
TR 3-452	Mar 1957	Review of Soils Design, Construction, and Performance Observations, Benbrook Dam, Texas	
TR 3-453	Apr 1957	Review of Soils Design, Pile Loading Tests, Construction, and Performance Observations, Section 1-B Floodwall, Memphis, Tennessee	
TR 3-455		Soil Stabilization:	
	Jun 1957	Report 1 Field Evaluation of Calcium Acrylate (WES Test Lanes 1 and 2)	AD 135 305
	Aug 1958	Report 2 Initial Laboratory and Field Tests of Quicklime as a Soil-Stabilizing Material	AD 201 742
	Jul 1960	Report 3 Investigations of a Chemically Modified Cement as a Soil-Stabilizing Material	AD 241 536
	Nov 1960	Report 4 Investigations of Phosphorus Pentoxide as a Soil-Stabilizing Material	AD 266 509
	Mar 1962	Report 5 Investigations of Quicklime as a Stabilizing Material	AD 402 304
	Jun 1963	Report 6 Investigations of a Chemically Modified Quicklime as a Stabilizing Material	AD 411 145
	Feb 1965	Report 7 Laboratory Investigation of Soil Stabilizing Systems for Military Purposes, by G. R. Kozan and W. B. Fenwick	AD 613 171



## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-458	Jun 1957	Review of Soils Design, Construction, and Performance Observations, Bayou Boeuf Lock	
TR 3-459	Jun 1957	Demonstration Test of Performance of Heavy-Load Airfield Pavements, Kelly AFB, San Antonio, Texas	AD 137 963
TR 3-460	Jun 1957	Review of Observations from Hydrostatic Pressure Measuring Devices, Wappapello Dam, Wappapello, Missouri	AD 756 349
TR 3-461	Jul 1957	Engineering Tests of Experimental T7 Magnesium and Modified Standard Steel Airplane Landing Mats	AD 138 269
TR 3-463	Jul 1957	Soils and Foundation Analyses for DeLong Pier Installation at Little Creek, Virginia	AD 139 084
TR 3-464	Aug 1957	Review of Soils Design, Construction, and Performance Observations, John H. Kerr Project (Buggs Island and Island Creek Dams), Virginia	AD 756 376
TR 3-466		Army Airfield Pavement Evaluation:	
	Oct 1957	Report 1 Blackstone Army Airfield, Camp Pickett, Virginia	
	Oct 1957	Report 2 Davison Army Airfield, Fort Belvoir, Virginia	
	Oct 1957	Report 3 Fort Polk Army Airfield, Fort Polk, Louisiana	
	Jan 1958	Report 4 Simmons Army Airfield, Fort Bragg, North Carolina	
	Jan 1958	Report 5 Redstone Army Airfield, Huntsville, Alabama	
	May 1958 Revised May 1959	Report 6 Felker Army Airfield, Fort Eustis, Virginia	
	Aug 1958	Report 7 Walker Army Airfield, Fort Monroe, Virginia	
	Aug 1958	Report 8 Gary Army Airfield, San Marcos, Texas	
	Aug 1958	Report 9 Lawson Army Airfield, Fort Benning, Georgia	
	Aug 1958	Report 10 Post Army Airfield, Fort Sill, Oklahoma	
	Jan 1959	Report 11 Libby Army Airfield, Fort Huachuca, Arizona	
	Jan 1959	Report 12 Gray Army Airfield, Fort Lewis, Washington	
	Nov 1959	Report 13 Cairns Army Airfield, Fort Rucker, Alabama	
	Nov 1959	Report 14 Laguna Army Airfield, Yuma Test Station, Yuma, Arizona	

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-466 (Cont)	Feb 1960	Report 15 Michael Army Airfield, Dugway Proving Ground, Dugway, Utah	
	May 1960	Report 16 Wolters Army Airfield, Camp Wolters, Texas	
	May 1960	Report 17 Crissy Army Airfield, Presidio of San Francisco, California	
	Jul 1960	Report 18 Butts Army Airfield, Fort Carson, Colorado	
* TR 3-470	Jan 1958	Tests of M-15 Antitank Mine in Soils of Various Strengths	
TR 3-474	Mar 1958	Review of Soils Design, Construction, and Performance Observations, Tom Jenkins Dam, Ohio	AD 756 325
TR 3-477	May 1958	Review of Soils Design, Construction, and Performance Observations, Vicksburg Floodwall	
TR 3-479	Jun 1958	Analysis of Piezometer and Relief Well Data, Arkabutla Dam	
TR 3-480	Jun 1958 Revised Mar 1968	Geological Investigation of the Yazoo Basin, Lower Mississippi Valley	
TR 3-483	Jul 1958	Geology of the Mississippi River Deltaic Plain, Southeastern Louisiana. In 2 volumes	
TR 3-484	Sep 1958	Review of Soils Design, Construction, and Prototype Observations, Texarkana Dam, Texas	AD A006 524
TR 3-487	Aug 1958	Settlement Observations - New Orleans, Texas, and Mexico Railroad High-Level Crossing Over West Atchafalaya Floodway	
TR 3-490	Dec 1958	Proof-Test Section, Columbus Air Force Base	AD 209 219
TR 3-492		Prefabricated Airfield and Road Surfacing Membrane Investigation:	
	Feb 1959	Report 1 Engineering Tests, July 1953-December 1954	
	Oct 1962	Report 2 Engineering Tests, January 1956-December 1959	AD 295 472
TR 3-493		Fuel Spillage, Traffic, and Blast Testing of Maintenance Materials for Rubberized-Tar Concrete Airfield Pavements:	
	Feb 1959	Report 1 1956-1957 Tests	AD 211 969
TR 3-495	Mar 1959	Combined CRR Criteria	AD 213 706

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-499	Apr 1959	Evaluation Tests of Three-Quarter-Ton Trailer Equipped with Soil Testing Equipment Set No. 1 Revised	AD 216 186
TR 3-501	Apr 1959	Review of Soils Design, Construction, and Performance Observations, Harlan County Dam, Nebraska	AD 763 048
TR 3-502	May 1959	Review of Soils Design, Construction, and Performance Observations, Lookout Point Dam, Oregon	AD 763 049
TR 3-503	May 1959	Review of Soils Design, Construction, and Performance Observations, Algiers Lock, Louisiana	AD 763 047
TR 3-506	May 1959	Handbook; A Technique for Preparing Desert Terrain Analogs	AD 217 639
TR 3-507	Jun 1959	Engineering Tests of T10 Steel Airplane Landing Mat (Modified M8), Dust-Alleviation Type	AD 217 750
TR 3-508	Jun 1959	Review of Soils Design, Construction, and Performance Observations, Wister Dam, Oklahoma	AD 763 046
TR 3-514	Jun 1959	Lacquering of Sampling Tubes for Protection Against Corrosion	AD 763 050
TR 3-515		Prefabricated Airfield and Road Surfacing Membranes:	
	Jul 1959	Report 1 Temperate Zone Storageability Tests, 1953-1956	AD 219 383
	May 1960	Report 2 Torrid Zone Storageability Tests, 1954-1957	AD 238 027
TP 3-524	Oct 1959	Review of Soils Design, Construction, and Performance Observations, Yazoo City Pumping Station	AD 763 051
TR 3-529	Nov 1959	Compaction Requirements for Soil Components of Flexible Airfield Pavements	AD 230 082
TR 3-530		Dustproofing and Waterproofing of Soils:	
	Dec 1959	Report 1 Field and Laboratory Investigations of Selected Materials	AD 231 925
	Jul 1963	Report 2 Laboratory Studies of Soil Waterproofing Materials	AD 450 631
TR 3-533	Dec 1959	Proof-Test Section, Columbus Air Force Base, Structural Investigation of Pavements	AD 231 549
TR 3-534	Jan 1960	Core Drilling in Frozen Ground	AD 233 396
TR 3-538	Mar 1960	Review of Soils Design, Construction, and Prototype Observations, Ferrells Bridge Dam, Texas	AD 763 052

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-539	Apr 1960	Criteria for Designing Runways to be Surfaced with Landing Mat and Membrane-Type Materials	AD 236 364
TR 3-542		Portable Surfacing for Military Access Roads:	
	May 1960	Report 1 Laboratory and Tank Traffic Tests	AD 238 028
TR 3-548	Jun 1960	Investigation of Behavior of Flexible Airfield Pavements, Effect of Channelized, Heavy-Aircraft Traffic	AD 240 275
TR 3-554	Jul 1960	Validation of Soil-Strength Criteria for Aircraft Operations on Unprepared Landing Strips	AD 241 546
TR 3-560	Jan 1961	Review of Soils Design, Construction, and Performance Observations, Bayou Courtableau Drainage Structure, La.	AD 756 274
TR 3-563	May 1961	Engineering Tests of T12 Plastic Airplane Landing Mat	AD 265 630
TR 3-574	Jul 1961	Engineering Tests of Experimental T8 Magnesium Airplane	AD 265 629
TR 3-582	Aug 1961	Revised Method of Thickness Design for Flexible Highway Pavements at Military Installations	AD 270 581
TR 3-587	Jan 1962	A Limited Study of Effects of Mixed Traffic on Flexible Pavements	AD 275 972
TR 3-588		Project Otter (Overland Train Terrain Evaluation Research):	
	Dec 1961	Report 1 Pretest Report	AD 402 257
	Feb 1965	Report 2 Test Report, by J. H. Shamburger and L. M. Duke	AD 613 166
* TR 3-591	Jan 1962	Investigation of Slide and Fill Areas, U. S. Military Academy, West Point, N. Y.	AD 908 328L
TR 3-592	Feb 1962	Beach Stabilization Tests of Landing Mats and Prefabricated Membranes	AD 401 508
TR 3-594	Feb 1962	Pavement Mix Design Study for Very Heavy Gear Loads; Pilot Test Section	AD 687 370
TR 3-595	Feb 1962	Development of the Gyrotory Testing Machine and Procedures for Testing Bituminous Paving Mixtures	AD 280 912
TR 3-599		Dynamic Bearing Capacity of Soils:	
	Jun 1962	Report 1 Dynamic Loading Machine and Preliminary Small-Scale Footing Tests	AD 286 011

---

\* For Official Use Only.

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-599 (Cont)	Sep 1965	Report 2 Dynamically Loaded Small-Scale Footing Tests on Dry, Dense Sand, by J. K. Poplin	AD 623 516
	Dec 1964	Report 3 The Application of Similitude to Small-Scale Footing Tests, by J. G. Jackson and P. F. Hadala	AD 454 374
	Jun 1965	Report 4 Investigation of a Dimensionless Load-Displacement Relation for Footings on Soft Clay, by P. F. Hadala	AD 467 081
	Sep 1963	Report 5 Vertical Displacements of Spread Footings on Clay: Static and Impulsive Loadings	AD 450 619
TR 3-600	Jul 1962	Exploration Equipment for Military Construction, Engineering Tests	AD 8951 689
TR 3-601	Jun 1962	Distribution of Soils Bordering the Mississippi River from Donaldsonville to Head of Passes	
TR 3-602	Jun 1962	Review of Soils Design, Construction, and Performance Observations, Low-Sill Structure, Old River Control	
TR 3-603	Jun 1962	Review of Soils Design, Construction, and Prototype Observations; Grenada Dam, Mississippi	
TR 3-604	Jun 1962	Engineering Properties of Fine-Grained Mississippi Valley Alluvial Soils, Meander Belt and Backswamp Deposits	AD 706 213
TR 3-610	Nov 1962	Total Thickness and Compaction Requirements for Flexible Pavements to be Subjected to Channelized Traffic	AD 296 042
TR 3-612	Nov 1962	A Technique for Mapping Terrain Microgeometry	AD 295 473
TR 3-619	Mar 1963	Three-Dimensional Electrical Analogy Seepage Model Studies	
	May 1964	Appendix A Flow to Circular Well Arrays Centered Inside a Circular Source; Series G	AD 735 840
	Mar 1965	Appendix B Flow to a Single Well Centered Inside a Circular Source; Series H, by D. C. Banks	AD 735 841
TR 5-622	Apr 1963	Organization and Presentation of Environmental Data for Office of Civil Defense Use; A Feasibility Study (includes Appendixes A-E)	AD 402 917
	Sep 1964	Appendix F Engineering-Geologic Map Folio; Cost Analysis, by R. T. Saucier; Appendix G: Environmental Data Source; Directory Investigations	AD 447 529
TR 3-624	Jun 1963	Aircraft Operations on Unsurfaced Soil; Soil Measurements and Analyses, Project ROUGH ROAD ALPHA	AD 410 099

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-630		Analogs of Yuma Terrain:	
	Feb 1958 Revised Jun 1962	Report 1 Analogs of Yuma Terrain in the Northeast African Desert	
	Mar 1959 Revised Aug 1962	Report 2 Analogs of Yuma Terrain in the South Central Asian Desert	AD 478 846
	Apr 1959	Report 3 Analogs of Yuma Terrain in the Mexican Desert	AD 478 847
		Report 4 Analogs of Yuma Terrain in the Middle East Desert:	
	May 1960 Revised Jun 1966	Volume I Analogs of Yuma Terrain in the Middle East Desert, by C. R. Kolb and W. K. Dornbusch, Jr.	AD 487 475
	May 1960	Volume II Analogs of Yuma Terrain in the Middle Eastern Desert	AD 478 848
	Revised Jun 1966	Volume II Analogs of Yuma Terrain in the Middle East Desert, by C. R. Kolb and W. K. Dornbusch, Jr.	AD 487 434
		Report 5 Analogs of Yuma Terrain in the Southwest United States Desert:	
	Jun 1963	Volume I	AD 466 089
	Jun 1963	Volume II	AD 450 611
		Report 6 Analogs of Yuma Terrain in the Northwest African Desert:	
	Feb 1958 Revised Jun 1965	Volume I, by J. R. Van Lopik, C. R. Kolb, and J. H. Shamburger	AD 466 206
	Feb 1958 Revised Jun 1965	Volume II	AD 465 207
TR 3-632		Development and Evaluation of Soil Bearing Capacity, Foundations of Structures:	
	Jul 1963	Report 1 Field Vibratory Tests Data	AD 672 494
TR 3-634	Sep 1963	Engineering Tests of Experimental T11 Aluminum Airplane Landing Mat (includes Appendix A)	AD 450 622
	Feb 1966	Appendix B Development of Revised Design Criteria for T11 Landing Mat, by D. N. Brown	AD 630 599

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-633	Jan 1964	Laboratory and Field Study of Epoxy-Asphalt Concrete	AD 434 896
TR 3-642	Feb 1964	Review of Soils Design, Construction and Performance Observations, Overbank Structure, Old River Control	AD 735 774
	Jan 1968	Appendix A Pumping Tests and Well Cleaning Operations, 1966, by C. C. Trahan and F. Mitronovas	AD A054 084
	Oct 1971	Appendix B Pumping Tests and Well Cleaning Operations, 1969-1970, by C. C. Trahan and R. L. Montgomery	AD A054 085
	Mar 1975	Appendix C Pumping Tests and Well Cleaning Operations, 1973, by M. A. Vispi	
TR 3-648		Feasibility of Constructing Large Underground Cavities:	
	Jul 1964	Volume I Background, Site Selection, and Summary	AD 621 729
	Jun 1964	Volume II The Stability of Deep Large-Span Underground Openings	AD 621 747
	Jun 1964	Volume III Report on Cost and Constructability	AD 621 742
TR 3-658		Groundwater in Alluvium of the Lower Mississippi Valley (Upper and Central Areas), by E. L. Krinitzsky and J. C. Wire:	
	Sep 1964	Volume I	AD 735 772
	Sep 1964	Volume II	AD 735 773
TR 3-659	Sep 1964	Geological Investigation of the St. Francis Basin (and Supplements), by R. T. Saucier	
TR 3-664	Oct 1964	Helicopter Downwash Blast Effects Study, by G. W. Leese	AD 452 177
TR 3-675		Anchor Systems for Prefabricated Membrane Surfacing for Army Helicopter Landing Pads:	
	May 1965	Report 1 Engineering Tests, May 1964, by S. G. Tucker	AD 616 249
TR 3-677	Jun 1965	Engineering Tests of T13 Plastic Airplane Landing Mat, by Robert Turner	AD 620 041
TR 3-679	Jun 1965	Operational Test of Modified T11 Aluminum Landing Mat, England AFB, Louisiana, by C. D. Burns and G. L. Carr	AD 620 031
TR 3-680	Jun 1965	Improved Beach Matting for U. S. Navy Amphibious Operations, Engineer Tests, January-August 1964, by S. G. Tucker	AD 620 138
TR 3-686	Aug 1965	Portable Surfacing for U. S. Army Helicopter Landing Pads, Engineering Field Tests, by S. G. Tucker	AD 621 685

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-699		Engineering Properties of Nuclear Craters:	
	Oct 1965	Report 1 Site Selection Investigations, Wet Medium Cratering Experiments, by R. T. Saucier and D. C. Banks	AD 626 899
	Oct 1965	Report 2 Theoretical Studies of Cratering Mechanisms Affecting the Stability of Cratered Slopes, Phase II, by A. S. Vesic, W. E. Wilson, G. W. Clough, and T. L. Tai	
	Dec 1965	Report 3 Review and Analysis of Available Information on Slopes Excavated in Weak Shales, by R. C. Hirschfeld, R. V. Whitman, and L. A. Wolfskill	AD 487 981
	Aug 1967	Report 4 The Formation and Initial Stability of Slopes on Cohesionless Materials, by B. N. MacIver	AD 668 918
	Dec 1966	Report 5 Residual Shear Strength of Weak Shales, by H. G. Herrmann and L. A. Wolfskill	AD 651 746
	Mar 1967	Report 6 Theoretical Studies of Cratering Mechanisms Affecting the Stability of Cratered Slopes, Phase III, by Tein-Lie Tai and A. S. Vesic	AD 668 247
TR 3-700	Nov 1965	Portable Surfacing for U. S. Army Pioneer-Type Runways, Laboratory and Engineering Field Tests, by S. G. Tucker	AD 626 150
TR 3-712	Jan 1966	Selected Geologic Literature, Lower Mississippi Valley Division Area, Index and Annotated Bibliography, by R. T. Saucier	AD 628 983
	Aug 1984	Supplement 6, by R. T. Saucier and R. W. Hunt (includes Appendixes A-B) (supersedes Supplement 5 which superseded Supplements 1-4)	AD A148 945
TR 3-714	Feb 1966	Artillery Weapon Dust Alleviation Tests, by J. L. Dezell	AD 628 731
* TR 3-721	Nov 1966	Evaluation of Applicability of AASHO Road Test Results to Corps of Engineers Flexible Pavement Design Criteria, by D. N. Brown and P. J. Vedros	AD 804 117L
TR 3-722	May 1966	Embankment Pore Pressures During Construction, by G. W. Clough and J. W. Snyder	AD 735 842
TR 3-737		Aircraft Ground-Flotation Investigation:	
	Aug 1967	Part I Basic Report, by D. M. Ladd and H. H. Ulery	AD 821 088
	Apr 1966	Part II Data Report on Test Section 1, by W. N. Brabston, A. H. Rutledge, and W. J. Hill	AD 484 672
	Apr 1966	Part III Data Report on Test Section 2, by W. N. Brabston, A. H. Rutledge, and W. J. Hill	AD 484 673

\* Statement B. See Preface.



## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-737 (Cont)	Apr 1966	Part IV Data Report on Test Section 3, by W. N. Brabston, A. H. Rutledge, and W. J. Hill	AD 485 274
	Aug 1966	Part V Data Report on Test Section 4, by W. N. Brabston and W. J. Hill	AD 809 381
	Aug 1966	Part VI Data Report on Test Section 5, by W. N. Brabston and W. J. Hill	AD 809 189
	Aug 1966	Part VII Data Report on Test Section 6, by W. N. Brabston and W. J. Hill	AD 809 190
	Aug 1966	Part VIII Data Report on Test Section 7, by W. N. Brabston and W. J. Hill	AD 808 382
	Sep 1966	Part IX Data Report on Test Section 8, by A. H. Rutledge and W. J. Hill	AD 805 290
	Sep 1966	Part X Data Report on Test Section 9, by W. N. Brabston and W. J. Hill	AD 805 295
	Sep 1966	Part XI Data Report on Test Section 10, by W. N. Brabston and W. J. Hill	AD 805 278
	Sep 1966	Part XII Data Report on Test Section 12, by W. N. Brabston and G. M. Hammitt	AD 805 279
	Oct 1966	Part XIII Data Report on Test Section 13, by J. E. Watkins and G. M. Hammitt	AD 809 193
	Sep 1966	Part XIV Data Report on Test Section 14, by J. E. Watkins and G. M. Hammitt	AD 805 296
	Sep 1966	Part XV Data Report on Test Section 14A, by J. E. Watkins and G. M. Hammitt	AD 805 280
	Sep 1966	Part XVI Data Report on Test Section 15, by J. E. Watkins and W. J. Hill	AD 805 297
	Sep 1966	Part XVII Data Report on Test Section 16, by J. E. Watkins and G. M. Hammitt	AD 805 298
	Sep 1966	Part XVIII Data Report on Test Section 17, by J. E. Watkins and W. J. Hill	AD 805 281
	Oct 1966	Part XIX Data Report on Light-Load Traffic Tests, by A. H. Rutledge and G. M. Hammitt	AD 808 381

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 3-741	Sep 1966	Pile Tests, Columbia Lock and Dam, Ouachita and Black Rivers, Arkansas and Louisiana, by N. L. Worth, G. W. Clough, J. C. Chang, and C. C. Trahan	AD 730 738
TR 3-757	Feb 1967	Geological Investigation of the Boeuf-Tensas Basin (and Supplements), by R. T. Saucier	
TR 3-772	Apr 1967	Engineering Tests of T17 Membrane Used as All-Weather Surfacing for Two-Way Military Roads, by S. G. Tucker and T. W. Vollar	AD 812 809
TR 3-773	Apr 1967	Laboratory and Engineering Field Tests of Electronic-Welded Membrane Surfacing (T15) for Helicopter Landing Pads, by S. G. Tucker	AD 813 587
TR 3-777	Apr 1967	Stability of Slopes and Foundations (Reprint of EM 1110-2-1902 dated February 1962)	AD 756 351
TR 3-779	Jun 1967	Evaluation of Gasketing Tapes for Waterproofing Structural-Plate Joints and Seams, by C. C. Calhoun	AD 816 071
TR 3-781	Jun 1967	Laboratory Investigation of Soil Infiltration Through Pipe Joints, by E. H. Nettles and J. R. Compton	AD 653 599
TR 3-786	Jul 1967	Drainage Characteristics of Base Course Materials, Laboratory Investigation, by E. H. Nettles and C. C. Calhoun	AD 655 505
TR 3-793	Aug 1967	A Model Study of the Small Boy Footing Behavior, by P. F. Hadala and J. G. Jackson	AD 659 254
TR 3-798	Nov 1967	Geological Reconnaissance of the Sulphur River and Cypress Creek Basins, Texas, by R. T. Saucier	AD 730 739
TR 3-800	Nov 1967	Engineering Tests of T14 Plastic Airplane Landing Mat, by H. L. Green	AD 824 225
TR 3-803	Nov 1967	Effect of Placement Method on Response of Soil Stress Gage, by P. F. Hadala	AD 663 797
TR 3-812	Jan 1968	Evaluation of T10 Dust-Abatement-Type Steel Landing Mat as Expedient Surfacing for Tactical Assault Airfields; Engineering Field Tests, 1961-1966, by S. G. Tucker	AD 826 466
TR 3-820	Apr 1968	Engineering Tests of Modified T12-Plastic Airplane Landing Mat, by H. L. Green	AD 832 940
* TR S-68-1	Apr 1968	Soil Property Investigation for HEST Test V, by J. G. Jackson and J. E. Windham	AD 888 293L
TR S-68-2	Jul 1968	Pore Pressures in Embankment Foundations, by J. W. Snyder	AD 730 745

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* TR S-68-3	Jul 1968	Braking Tests on Nonskid Materials Applied to T17 Membrane Surfacing, November 1964-March 1966, by R. H. Grau and S. G. Tucker	AD 837 658
TR S-68-4	Aug 1968	Sidewall Friction Reduction in Static and Dynamic Small Blast Load Generator Tests, by P. F. Hadala	AD 675 396
TR S-68-6		Gyratory Compaction of Soils:	
	Sep 1968	Report 1 Pit-Run Clay Gravel, Data Report, by W. B. Abbott	AD 679 165
	Nov 1969	Report 2 Lean Clay, Data Report, by J. F. Sirr, S. L. Webster, and L. M. Womack	AD 701 191
	May 1969	Report 3 Crushed Limestone, Data Report, by W. B. Fenwick	AD 689 454
TR S-68-7	Sep 1968	Analysis of Data from Instrumentation Program, Port Allen Lock, by W. C. Sherman and C. C. Trahan	AD 730 746
TR S-68-8	Nov 1968	Effect of Shallow Burial on Load-Displacement-Time Response of Square Footings in Clay Under Impulsive Loading, by E. B. Perry	AD 680 905
TR S-68-9	Nov 1968	Design and Evaluation of a Device for Determining the One-Dimensional Compression Characteristics of Soils Subjected to Impulse-Type Loads, by Larry Schindler	AD 680 317
TR S-68-10	Dec 1968	Pile Tests, Jonesville Lock and Dam, Ouachita and Black Rivers, Arkansas and Louisiana, by C. R. Furlow	AD 730 747
TR S-69-2	Mar 1969	Geological Investigation of the Ouachita River Area, Lower Mississippi Valley, by A. R. Fleetwood	
TR S-69-3	Mar 1969	A Model Study of Dynamically Loaded Square Footings on Dry Sand, by J. K. Poplin	AD 685 825
	Mar 1969	Appendixes A-J, by J. K. Poplin	
TR S-69-4	Apr 1969	Geological Investigation of the Mississippi River Area, Artonish to Donaldsonville, La., by R. T. Saucier	
TR S-69-6	Jul 1969	Effects of Relative Density and Pulse Duration on Dynamic Response of Footings Buried in Sand, by P. F. Hadala and J. K. Poplin	AD 692 299
TR S-69-7		Distribution of Coarse-Grained Construction Materials and Potential Construction Sites in the Mekong Delta, South Vietnam:	
*	Jun 1971	Volume I Text, by W. K. Dornbusch	AD 885 547L

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR S-69-7 * (Cont)	Aug 1969	Volume II Plates, by W. P. Covey, J. R. May, and J. K. Dornbusch	AD 863 584L
*	Jun 1970	Supplement to Volume II, by W. K. Dornbusch, J. R. May, and H. K. Woods	AD 875 325L
TR S-69-8	Sep 1969	Geology of Backswamp Deposits in the Atchafalaya Basin, Louisiana, by E. L. Krinitzsky and F. L. Smith	AD 695 617
TR S-69-10		Foundation Investigations, NASA Mississippi Test Facility:	
	Nov 1969	Report 1 Static and Vibratory Load Testing of Foundation Piles at Test Stand S-1C, by J. B. Stevens	AD 698 028
	Jun 1970	Report 2 Static Load Testing of Foundation Piles at Test Stand S-II, A1, by J. B. Stevens, Jack Fowler, and R. G. Guernsey	AD 708 553
	Jun 1970	Report 3 Load Transfer by Foundations S-1C and S-II Test Complexes During Construction, by Jack Fowler and J. B. Stevens	AD 708 554
	Jun 1970	Report 4 Dynamic Behavior of Piling During Initial Test Firings on the S-1C and S-II Test Complexes, by Jack Fowler	AD 708 555
TR S-70-1	Apr 1970	Acoustic Subbottom Profiling Systems, a State-of-the-Art Survey, by R. T. Saucier	AD 706 212
TR S-70-2	May 1970	Correlation of Backswamp Sediments, Atchafalaya Test Section VI, Atchafalaya Levee System, Louisiana, by E. L. Krinitzsky	AD 710 966
TR S-70-3	May 1970	Effect of Saturation on Dynamic Response of Footings in Sand, by J. K. Poplin	AD 707 956
TR S-70-5	Jul 1970	Thickness Requirements for Unsurfaced Roads and Airfields; Bare Base Support, Project 3782-65, by G. M. Hammitt and W. Aspinall	AD 713 897
	Jan 1973	Errata Sheet No. 1	
TR S-70-9		Study of Clay Shale Slopes Along the Panama Canal:	
	Nov 1970	Report 1 East Culebra and West Culebra Slides and the Model Slope, by R. J. Lutton and D. C. Banks	AD 715 977
		Report 2 History, Geology, and Mechanics of Development of Slides in Gaillard Cut:	
	Apr 1975	Volume I Text, by R. J. Lutton	

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR S-70-9 (Cont)	Dec 1974	Volume II Plates of Maps and Sections, by R. J. Lutton, R. W. Hunt, W. L. Murphv, with contributions by R. H. Stewart	
	Jun 1975	Report 3 Engineering Analyses of Slides and Strength Properties of Clay Shales Along the Gaillard Cut, by D. C. Banks, W. E. Strohm, Jr., Mariano De Angulo, and R. J. Lutton	AD A013 516
	Aug 1978	Supplemental Report, A Reanalysis of the East Culebra Slide, Panama Canal, by D. C. Banks	AD A061 404
TR S-71-2		Investigation of Plane Strain Shear Testing:	
	Mar 1971	Report 1 WES High-Capacity Plane Strain Shear Apparatus, by M. M. Al-Hussaini	AD 756 120
	Jun 1971	Report 2 Drained Plane Strain and Triaxial Compression Tests on Crushed Napa Basalt, by M. M. Al-Hussaini	AD 756 121
	Sep 1972	Report 3 Plane Strain and Triaxial Compression Tests on Painted Rock Dam Material, by M. M. Al-Hussaini	AD 756 122
TR S-71-4		Ground Shock Calculation Parameter Study:	
	Apr 1971	Report 1 Effect of Various Nonlinear Elastic-Plastic Model Formulations, by G. Y. Baladi and P. F. Hadala	AD 723 981
	Nov 1972	Report 2 Effects of Various Bottom Boundary Conditions, by G. Y. Baladi	AD 752 423
	Apr 1974	Report 3 Influence of Type of Constitutive Model on Ground Motion Calculations, by G. Y. Baladi and I. Nelson	AD 778 164
TR S-71-5	Jun 1971	Geological Investigation of the Western Lowlands Area; Lower Mississippi Valley, by R. T. Saucier and F. L. Smith	
TR S-71-6		Engineering Properties of Clay Shales:	
	Jun 1971	Report 1 Development of Classification Indexes for Clay Shales, by W. Helev and B. N. MacIver	AD 756 123
	Aug 1974	Report 2 Residual Shear Strength and Classification Indexes of Clay Shales, by F. C. Townsend and P. A. Gilbert	AD 786 554
	Sep 1976	Report 3 Preliminary Triaxial Test Program on Taylor Shale from Laneport Dam, by R. H. G. Parry	AD A032 992
	Sep 1982	Report 4 Laboratory and Computational Procedures for Prediction of Pore Pressures in Clay Shale Foundations, by D. A. Leavell, J. F. Peters, and F. C. Townsend (includes Appendixes A-C)	AD A121 448

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR S-71-10	Jul 1971	Evaluation of Anchors Used to Secure Membrane Surfacing, by R. H. Grau	AD 729 802
TR S-71-11	Aug 1971	Comparison of Performance of Experimental Membranes, Nonskid Compounds, Adhesives, and Earth Anchors with Regard to C-130 Aircraft Operational Requirements, by T. W. Vollor	AD 729 803
* TR S-71-12	Nov 1971	A One-Dimensional Plane Wave Propagation Code for Layered Nonlinear Hysteretic Media, by N. Radhakrishnan and B. Rohani	AD 889 905L
TR S-71-14		Earth Vibration Effects and Abatement for Military Facilities:	
	Nov 1971	Report 1 Site Selection for Ground Motion Studies, by L. W. Heller	AD 733 875
	Apr 1972	Report 2 The Particle Motion Field Generated by the Torsional Vibration of a Circular Footing on Sand, by L. W. Heller	AD 741 772
	Sep 1972	Report 3 Analysis Method for Footing Vibrations Through Layered Media, by Gunter Waas	AD 749 507
	Jan 1974	Report 4 Ground Motion Transmission in Nonhomogeneous Soils, by R. A. Weiss	AD A025 364
TR S-71-15	Nov 1971	Development of a Dynamic High-Pressure Triaxial Test Device, by J. Q. Ehrgott and R. C. Sloan	AD 734 312
* TR S-71-16	Dec 1971	Evaluation of a Transmitting Boundary for a Two- Dimensional Wave Propagation Computer Code, by Paul Hadala	AD 889 996L
TR S-71-17		Multiple-Wheel Heavy Gear Load Pavement Tests:	
	Nov 1971	Volume I Basic Report, by R. G. Ahlvin, H. H. Ulerv, R. L. Hutchinson, and J. L. Rice	AD 889 705
	Nov 1971	Volume II Design, Construction, and Behavior Under Traffic, by C. D. Burns, R. L. Hutchinson, H. H. Ulerv, J. E. Watkins, and R. W. Grau	AD 889 889
	Nov 1971	Volume IIIA Presentation and Initial Analysis of Stress-Strain-Deflection and Vibratory Measurements; Instrumentation, by R. H. Ledbetter, J. L. Rice, H. H. Ulerv, F. W. Kearney, and J. B. Gambill	AD 890 779

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR S-71-17 (Cont)	Nov 1971	Volume IIIB Presentation and Initial Analysis of Stress-Strain-Deflection and Vibratory Measurements; Data and Analysis, by R. H. Ledbetter, J. L. Rice, H. H. Ulery, F. W. Kearney, J. B. Gambill, and J. W. Hall	AD 890 780
	Nov 1971	Volume IV Analysis of Behavior Under Traffic, by G. M. Hammitt, R. L. Hutchinson, J. L. Rice, O. O. Thompson, and D. N. Brown	AD 890 668
TR S-72-2	Feb 1972	Effect of Grid Size on Cutoff Frequency in the Numerical Solution of an Elastic One-Dimensional Wave Propagation Problem, by P. F. Hadala and H. M. Taylor	AD 738 533
TR S-72-4	Apr 1972	Physical Property and Dynamic Compressibility Analysis of the Watching Hill Blast Range, by J. G. Jackson	AD 741 773
TR S-72-5	Apr 1972	An Evaluation of an Existing Procedure for Determining Shear Moduli at Depths by In Situ Vibratory Technique, by Jack Fowler	AD A050 481
TR S-72-6	May 1972	Dynamic Response of Rectangular Footings in Clay and Sand, by H. M. Taylor	AD 743 634
TR S-72-7	Jun 1972	Development of Design Criteria and Acceptance Specifications for Plastic Filter Cloths, by C. C. Calhoun	AD 745 085
TR S-72-10	Jun 1972	Analysis of Data from Instrumentation Program, Old River Lock, by W. C. Sherman and C. C. Trahan	AD 756 126
TR S-72-11	Aug 1972	State-of-the-Art of Marine Soil Mechanics and Foundation Engineering	AD 747 366
TR S-72-12	Nov 1972	In Situ Tests for the Determination of Rock Mass Shear Strength, by T. W. Zeigler	AD 752 422
TR S-73-3	May 1973	Evaluation of Redesigned XW18 Membrane and Accessories, by F. M. Palmer	AD 761 089
TR S-73-4	May 1973	Analysis of Stress and Strain Distributions in Triaxial Tests Using the Method of Finite Elements, by N. Radhakrishnan	AD 763 181
TR S-73-5		Seepage in Mississippi River Banks:	
	May 1973	Report 1 Analysis of Transient Seepage Using a Viscous-Flow Model and the Finite Difference and Finite Element Methods, by C. S. Desai	AD 762 556
TR S-73-6	Aug 1973	Effect of Constitutive Properties of Earth Media on Outrunning Ground Shock from Large Explosions, by P. F. Hadala	AD 768 176

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR S-73-10		Material Property Investigation for Project MIDDLE GUST, Events I, II, and III:	
	Oct 1973	Report I Subsurface Exploration and Laboratory Test Results, by J. E. Windham, E. E. Chisolm, J. L. Gatz, and J. T. Lewis	AD 771 036
TR S-73-11		Material Property Investigation for Project MIDDLE GUST, Events IV and V:	
	Oct 1973	Report I Subsurface Exploration and Laboratory Test Results, by R. A. Knott, M. A. Vispi, and W. J. Farrell	AD 771 920
TR S-73-12	Oct 1973	Model Study of the Response of Silo-Type Structures in Dry Sand Under One-Dimensional Plane Wave Loading, by E. B. Perry	AD 771 927
TR S-73-13	Dec 1973	Vehicle/Road Compatibility Analysis and Modification Systems (VRCAMS), by V. C. Barber and N. R. Murphy	AD 772 962
TR S-74-1	Jan 1974	An Evaluation of the Thermocouple Psychrometric Technique for the Measurement of Suction in Clay Soils, by L. D. Johnson	AD 774 863
TR S-74-2	Feb 1974	Engineer Design Test of Heavy-Duty Membrane Airfield Surfacing, by F. M. Palmer	AD 776 331
TR S-74-3	Apr 1974	Analysis of Pile Tests, by W. C. Sherman, Jr., D. M. Holloway, and C. C. Trahan	AD 779 425
TR S-74-5	Jul 1974	Geological Investigation of the Lower Red River-Atchafalaya Basin Area, by F. L. Smith and D. P. Russ	AD A037 805
TR S-74-6	Jul 1974	Finite Element Analysis of the Columbia Lock Pile Foundation System, by C. S. Desai, L. D. Johnson, and C. M. Hargett	AD A049 480
TR S-74-7	Sep 1974	Stresses and Shearing Resistance in Soil Beneath a Rigid Wheel, by M. M. Al-Hussaini and P. A. Gilbert	AD A000 609
TR S-74-8		Comparative Performance of Structural Layers in Pavement Systems:	
	Jun 1974	Volume I Design, Construction, and Behavior Under Traffic of Pavement Test Sections, by C. D. Burns, C. L. Rone, W. N. Brabston, and H. H. Ulery, Jr.	AD 785 024
	Apr 1977	Volume II Analysis of Test Section Data and Presentation of Design and Construction Procedures	AD A052 154
	Dec 1974	Volume III Design and Construction of MESL, by G. M. Hammitt II	AD A005 893



## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR S-74-8 (Cont)	Jan 1977	Volume IV Analysis of Insulating Layers in Pavement Test Sections, by W. R. Barker and Frazier Parker, Jr.	AD A038 116
* TR S-74-9	Nov 1974	Ratiocinative Design Criteria for Membrane-Enveloped Fine-Grained Soil Layers, by G. M. Hammitt II	AD B025 049L
TR S-74-10		Prestressed Concrete Pavements:	
	Oct 1974	Volume I Dulles Test Road Instrumentation and Load Tests, by E. C. Odom and R. H. Ledbetter	AD A000 456
	Nov 1974	Volume II Design and Construction Procedures for Civil Airports, by E. C. Odom and P. F. Carlton	AD A003 477
TR S-74-11	Sep 1974	Aircraft-Pavement Compatibility Study, by F. H. Griffis, Jr., and M. A. Gamon	AD A001 408
TR S-74-12	Nov 1974	Steel Fibrous Concrete for Airport Pavement Applications, by Frazier Parker, Jr.	AD A003 123
	Dec 1975	Errata Sheet No. 1	
TR S-75-1	Jan 1975	Evaluation of Experimental Polyurethane-Coated Membranes, by T. W. Vollor	AD A005 151
TR S-75-2	Jan 1975	Field Tests of T16 Membrane Beneath AM2-AM5-Landing-Mat-Surfaced SATS Airfield, by R. H. Grau	AD A006 144
* TR S-75-3	Mar 1975	Material Property Investigations for the ESSEX I Test Site at Fort Polk, Louisiana, by J. Q. Ehrgott and R. L. Stanley (includes Appendixes A-J)	AD B004 634L
* TR S-75-5	Jun 1975	Wave Equation Analyses of Pile Driving, by D. M. Holloway (includes Appendixes A-B)	AD B004 854L
TR S-75-6	Jun 1975	Pleistocene Sediments of the New Orleans-Lake Pontchartrain Area, by C. R. Kolb, F. L. Smith, and R. C. Silva	
TR S-75-7	Jun 1975	An Analytical Study of Projectile Penetration Into Rock, by D. K. Butler	AD A012 140
TR S-75-8	Jun 1975	Evaluation and Selection of Experimental Membranes for Use as Medium-Duty Surfacing, by A. J. Bush III	AD A012 144
TR S-75-9		Development of a Projectile Penetration Theory:	
	Jun 1975	Report 1 Penetration Theory for Shallow to Moderate Depths, by R. S. Bernard and S. V. Hanagud (includes Appendixes A-D)	AD A013 361
	Feb 1976	Report 2 Deep Penetration Theory for Homogeneous and Layered Targets, by R. S. Bernard	AD A022 649

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* TR S-75-10	Jul 1975	Development of a Structural Design Procedure for All-Bituminous Concrete Pavements for Military Roads, by W. N. Brabston, W. R. Barker, and G. G. Harvey (includes Appendixes A-D)	AD B006 299L
TR S-75-11		Pavement Response to Aircraft Dynamic Loads:	
	Jun 1975	Volume I Instrumentation Systems and Testing Programs, by W. J. Horn and R. H. Ledbetter	AD A016 450
	Sep 1975	Volume II Presentation and Analysis of Data, by R. H. Ledbetter	AD A022 806
	Sep 1975	Appendix A Automatic Data Processing, by B. W. McCleave	
	Sep 1975	Appendix B Data, by R. H. Ledbetter	AD A018 337
	Jun 1976	Volume III Compendium, by R. H. Ledbetter	AD A028 378
TR S-75-13	Oct 1975	Effects of Anisotropic Versus Isotropic Consolidation in Consolidated-Undrained Triaxial Compression Tests of Cohesive Soils, by R. T. Donaghe and F. C. Townsend (includes Appendixes A-C)	AD A049 481
TR S-75-14		Nondestructive Vibratory Testing of Airport Pavements:	
	Sep 1975	Volume I Experimental Test Results and Development of Evaluation Methodology and Procedure, by J. L. Green and J. W. Hall (includes Appendixes A-C)	AD A017 511
	Apr 1975	Volume II Theoretical Study of the Dynamic Stiffness and Its Application to the Vibratory Non-destructive Method of Testing Pavements, by R. A. Weiss	AD A013 681
TR S-75-15	Nov 1975	Piping in Earth Dams Constructed of Dispersive Clay; Literature Review and Design of Laboratory Tests, by E. B. Perry (includes Appendixes A-C)	AD A018 695
	Aug 1976	Errata Sheet	
TR S-75-16	Dec 1975	Investigation of $K_v$ Testing in Cohesionless Soils, by M. M. Al-Hussaini and F. C. Townsend	AD A019 503
TR S-75-17	Sep 1975	Development of a Structural Design Procedure for Flexible Airport Pavements, by W. R. Barker and W. N. Brabston (includes Appendixes A-K)	AD A019 205
TR S-76-1	Mar 1976	Dynamic Analysis of Fort Peck Dam, by W. F. Marcuson III and E. L. Krinitzsky (includes Appendixes A-E)	AD A022 390

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR S-76-2	Jan 1976	Determination of Rock Mass Permeability, by T. W. Zeigler (includes Appendixes A-C)	AD A021 192
TR S-76-3	Feb 1976	An Iterative Layered Elastic Computer Program for Rational Pavement Design, by Yu T. Chou (includes Appendixes A-C)	AD A024 334
TR S-76-4	Jun 1976	Effect of Backfill Compaction on Design Criteria for Hardened Facilities: Results of Soil-Structure Interaction Calculations for Dry Types I and II Backfill Materials, by J. E. Windham (includes Appendixes A-B)	AD A026 936
TR S-76-5	Jun 1976	Geology and Geotechnical Properties of Laterite Gravel, by F. L. Krinitzsky, D. M. Patrick, and F. C. Townsend (includes Appendixes A-F)	AD A026 505
TR S-76-6	Jun 1976	Review and Analysis of Blasting and Vibrations at Bankhead Lick, by R. J. Lutton	AD A026 735
TR S-76-7	Jun 1976	The Changeable Interaction Between Soils and Pressure Cells; Tests and Reviews at the Waterways Experiment Station, by M. J. Hvorslev	AD A029 161
	Aug 1976	Errata Sheet No. 1	
TR S-76-8	Jun 1976	Analysis of Behavior of Expansive Soil Foundations, by L. D. Johnson and W. R. Stroman (includes Appendixes A-D)	AD A028 724
TR S-76-9	Aug 1976	Investigation of Accelerated Curing of Soil-Lime and Lime-Fly Ash-Aggregate Mixtures, by F. C. Townsend and R. T. Donaghe (includes Appendixes A-F)	AD A029 142
TR S-76-10	Sep 1976	Evaluation of Parameters Affecting Horizontal Stability of Landing Mats, by Yu T. Chou, W. R. Barker, and W. P. Dawkins (includes Appendix A)	AD A030 882
TR S-76-11	Sep 1976	Effect of Horizontal Reinforcement on Stability of Earth Masses, by M. M. Al-Hussaini and E. B. Perry	AD A036 120
TR S-76-12	Aug 1976	Evaluation of Nonlinear Resilient Moduli of Unbound Granular Materials from Accelerated Traffic Test Data, by Yu T. Chou (includes Appendix A)	AD A030 377
* TR S-76-13	Nov 1976	Projectile Penetration in Earth Materials: Theory and Computer Analysis, by R. S. Bernard and D. C. Creighton (includes Appendixes A-D)	AD B016 183L
TR S-76-14	Nov 1976	An Evaluation of the Design and Applications of Yieldable Rock Bolts, by W. O. Miller (includes Appendix A)	AD A034 026
TR S-76-15	Dec 1976	Pavement Deterioration Analysis for Design and Evaluation Systems, by V. C. Barber, E. C. Odom, and R. W. Patrick (includes Appendix A)	AD A037 076

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR S-76-16	Nov 1976	Plastic and Resilient Properties of Heavy Clay Under Repetitive Loadings, by F. C. Townsend and E. E. Chisolm (includes Appendix A)	AD A035 035
TR S-76-17	Sep 1976	Behavioral Characteristics of Gravelly Sand and Crushed Limestone for Pavement Design, by E. E. Chisolm and F. C. Townsend (includes Appendix A)	AD A033 336
TR S-77-1	Feb 1977	Investigation of Construction Techniques for Tactical Bridge Approach Roads Across Soft Ground, by S. L. Webster and J. E. Watkins	AD A037 351
TR S-77-2	Feb 1977	Microearthquake Monitoring at Corps of Engineers Facilities, by D. M. Patrick (includes Appendix A)	AD A038 896
TR S-77-3	Apr 1977	Constitutive Property Investigations in Support of Full-Scale Penetration Tests in Dakota Sandstone, San Ysidro, New Mexico, by D. K. Butler, R. R. Nielsen, R. K. Dropek, and S. W. Butters (includes Appendixes A-D)	AD A040 056
TR S-77-4	May 1977	Investigation of a Proposed Full-Scale Rock Penetration Test Site Near Los Lunas, New Mexico, by D. K. Butler	AD A042 127
* TR S-77-5	May 1977	Numerical Analysis of Partially Penetrating Random Well Arrays, by J. B. Warriner and D. C. Banks (includes Appendixes A-D)	AD B019 285L
TR S-77-6	Jul 1977	Finite Element Analysis of a Reinforced Earth Wall, by M. M. Al-Hussaini and L. D. Johnson (includes Appendixes A-C)	AD A043 069
TR S-77-7	Aug 1977	Evaluation of Laboratory Suction Tests for Prediction of Heave in Foundation Soils, by L. D. Johnson	AD A044 027
TR S-77-8	Feb 1977	Analysis of Permanent Deformations of Flexible Airport Pavements, by Y. T. Chou	AD A044 269
TR S-77-9	Feb 1977	Engineering Behavior of Pavement Materials: State of the Art, by Y. T. Chou	AD A045 272
TR S-77-10	Sep 1977	General Deformation (Elastic and Inelastic) and Stress Distribution Theory in Soils, by R. H. Ledbetter	AD A045 022
TR S-77-11	Aug 1977	Design and Construction of Continuously Reinforced Concrete Airport Pavements, by G. G. Harvey	AD A049 970
TR S-77-12	Nov 1977	Airfield Pavement Smoothness Requirements, by W. J. Horn	AD A050 921
TR S-78-1	Jan 1978	Strength and Deformation Properties of Rock Fill, by R. T. Donaghe and M. W. Cohen	AD A051 795

---

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR S-78-2	Feb 1978	Study of Feasibility of Using Wissa-Type Piezometer Probe to Identify Liquefaction Potential of Saturated Fine Sands, by J. H. Schmertmann	AD A052 910
* TR S-78-3	May 1978	Damage to Dams from Nuclear Weapons Effects (Formerly ESSEX II); Vulnerability of an Earth Dam to Buried Explosions, Preliminary Studies, by W. C. Sherman, Jr.	AD B028 609L
TR S-78-4	Jun 1978	Depth and Motion Prediction for Earth Penetrators, by R. S. Bernard	AD A056 701
TR S-78-5	Jun 1978	Effect of Backfill Property and Airblast Variations on the External Loads Delivered to Buried Box Structures, by J. E. Windham and J. O. Curtis (includes Appendixes A-B)	AD A058 669
TR S-78-6	Jul 1978	Investigation of Construction Concepts for Pavements Across Soft Ground, by S. L. Webster and S. J. Alford	AD A058 930
TR S-78-7	Jul 1978	Predicting Potential Heave and Heave with Time in Swelling Foundation Soils, by L. D. Johnson (includes Appendixes A-H)	AD A059 069
TR S-78-8	Jul 1978	The Deterioration and Reliability of Pavements, by V. C. Barber, E. C. Odom, and R. W. Patrick (includes Appendixes I-IV)	AD A058 895
TR S-78-9	Aug 1978	Comparison Between the Strengths of Undisturbed and Reconstituted Sands from Niigata, Japan, by M. L. Silver	AD A061 001
TR S-78-10	Aug 1978	Cyclic Strength of Undisturbed Sands from Niigata, Japan, by M. L. Silver	AD A060 626
TR S-78-11	Sep 1978	Fabric Analysis of Undisturbed Sands from Niigata, Japan, by J. K. Mitchell, F. J. Guzikowski, and W. C. B. Villet	AD A061 145
TR S-78-12	Sep 1978	Response of Linear Elastic Transverse-Isotropic Media to Borehole Pressuremeter Loadings, by G. Y. Baladi and M. E. George	AD A061 140
* TR S-78-13	Sep 1978	Uncertainties in Predicting Earth Penetrator Performance in Inaccessible Geologic Targets, by Behzad Rohani, P. F. Hadala, and D. C. Creighton	AD B031 408L
TR S-78-14	Sep 1978	Non-Normal Impact and Penetration: Analysis for Hard Targets and Small Angles of Attack, by R. S. Bernard and D. C. Creighton (includes Appendixes A-D)	AD A061 512
TR S-78-15	Oct 1978	Gyratory Shear Apparatus Design, Testing Procedures, and Test Results on Undrained Sand, by Arthur Casagrande and Franklin Rendon (includes Appendix A)	AD A062 843

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR S-78-16	Oct 1978	Effect of Shear Stress on Dynamic Bulk Modulus of Sand, by J. H. Schmertmann (includes Appendixes A-C)	AD A062 256
TR S-78-17	Dec 1978	Feasibility Study of an Earth Melting Penetrator System for Geoprospecting Tunnel Right-of-Ways, by D. L. Black	AD A067 565

## SOILS AND PAVEMENTS LABORATORY

Translations

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
69-5	Jun 1969	Physical Properties of Remolded Cohesive Soils (Über die Festigkeitseigenschaften gestorter bindiger Boden), by M. J. Hvorslev	AD 735 432

## SOILS AND PAVEMENTS LABORATORY

Soil Mechanics Information Analysis Center

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
Unnumbered	Sep 1972	Applications of the Finite Element Method in Geotechnical Engineering; Proceedings of the Symposium held at Vicksburg, Mississippi, 1-4 May 1972; edited by C. S. Desai	
		Volume 1	AD A020 800
		Volume 2	AD A020 801
		Volume 3	AD A020 802
Unnumbered	Apr 1974	Microthesaurus of Soil Mechanics Terms	AD A003 812



## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		AGRICULTURAL AVIATION ENGINEERING COMPANY, Santa Clara, California	
CR 3-169	Sep 1967	Development of Aerial Dispersal System for Rapid-Landing-Site Stabilization, by G. S. Sanders	AD 908 495
		ARE, INC., ENGINEERING CONSULTANTS, Austin, Texas	
CR S-75-6	Aug 1975	State-of-the-Art in Variability of Material Properties for Airport Pavement Systems, by T. W. Kennedy, W. R. Hudson, and B. F. McCullough	AD A018 800
		ARMOUR INDUSTRIAL CHEMICAL CO., McCook, Illinois	
CR S-68-7	Nov 1968	Bituminous and Resinous Materials for Dust Control, by R. D. Thomas	AD 857 645
		ASHLAND CHEMICAL COMPANY, Minneapolis, Minnesota	
CR S-68-5	Nov 1968	Research Study on Soil Treatment Materials for Dust Palliation, Soil Waterproofing and Soil Strengthening, by C. N. Impola and D. A. Olsen	AD 859 274
		AUSTIN RESEARCH ENGINEERS, INC., Austin, Texas	
CR S-76-11	Sep 1976	Data Collection and Analysis, Runway 4R-22L, O'Hare International Airport, by H. J. Treybig, H. L. Von Quintus, and B. F. McCullough	AD A030 806
		BOOZ-ALLEN APPLIED RESEARCH, INC., Bethesda, Maryland	
CR S-71-3	Aug 1971	Cost-Effectiveness Study of Prefabricated Airplane Landing Mats; Final Report, by G. R. Bieman, C. T. deLorimier, and K. Behari	AD 756 172
		BOYNTON ASSOCIATES, La Canada, California	
CR 3-98	May 1962	Preliminary Design and Economic Study for a Dual Load Generator; Final Report	
CR 3-99	Jan 1963	Charge Development Study and Fabrication of Test Equipment for Footing Loader of Dual Load Generator; Final Report	

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		UNIVERSITY OF CALIFORNIA, Berkeley	
CR 3-89	Feb 1964	Effects of Sampling and Disturbance on the Strength of Soft Clays, by H. B. Seed, I. Noorany, and I. M. Smith	AD 837 276
CR 3-132	Nov 1965	The Effect of Anisotropy and Reorientation of Principal Stresses on the Shear Strength of Saturated Clay, by J. M. Duncan and H. B. Seed	AD 837 277
CR 3-133	Nov 1965	Errors in Strength Tests and Recommended Corrections, by J. M. Duncan and H. B. Seed	AD 837 278
CR 3-134	Nov 1965	The Effect of Temperature Changes During Undrained Tests, by J. M. Duncan and R. G. Campanella	
CR 3-145		Behavior of Stabilized Soils Under Repeated Loading:	
	Dec 1965	Report 1 Background, Equipment, Preliminary Investigations, Repeated Compression and Flexure Tests on Cement-Treated Silty Clay, by J. K. Mitchell, Chih-Kang Shen, and C. L. Monismith	AD 632 802
	Sep 1966	Report 2 Behavior in Repeated Flexure, Frequency and Duration Effects, Fatigue Failure Analyses, by J. K. Mitchell and C. L. Monismith	AD 651 938
	May 1969	Report 3 Repeated Compression and Flexure Tests on Cement- and Lime-Treated Buckshot Clay, Confining Pressure Effects in Repeated Compression for Cement-Treated Silty Clay, by J. K. Mitchell, P. E. Fossberg, and C. L. Monismith	AD 863 756
	Oct 1970	Report 4 Stresses and Deflections in Cement-Stabilized Pavements, by M. C. Wang, J. K. Mitchell, and C. L. Monismith	AD 877 607
	Aug 1972	Report 5 Performance Evaluation of Cement-Stabilized Soil Layers and Its Relationship to Pavement Design, by J. K. Mitchell, T-S. Ueng, and C. L. Monismith	AD 747 352
	Oct 1974	Report 6 A Summary Report with a Suggested Structural Pavement Design Procedure, by J. K. Mitchell, Peter Dzwilewski, and C. L. Monismith	AD A001 524
CR 3-159	Aug 1966	The Significance of Cap and Base Restraint in Strength Tests on Soils, by J. M. Duncan, H. B. Seed, and P. Dunlop	AD 693 307
CR S-68-3	Feb 1968	Finite Element Analyses of Slopes in Jointed Rock, by J. M. Duncan and R. E. Goodman	AD 678 632
CR S-68-4	Jun 1968	Slopes in Stiff-Fissured Clays and Shales, by J. M. Duncan and P. Dunlop	AD A040 183

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		UNIVERSITY OF CALIFORNIA, Berkeley (Cont)	
CR S-68-6	May 1968	Finite Element Analyses of Slopes in Soil, by P. Dunlop, J. M. Duncan, and H. B. Seed	AD 687 376
CR S-69-6	Sep 1969	Finite Element Analyses of Port Allen and Old River Locks, by G. W. Clough and J. M. Duncan	
CR S-69-8	Nov 1969	Finite Element Analyses of Stresses and Movements in Embankments During Construction, by F. H. Kulhawy, J. M. Duncan, and H. B. Seed	AD 713 900
CR S-70-3	Jan 1970	Strength and Stress-Strain Behavior of Atchafalaya Levee Foundation Soils, by J. M. Duncan	AD A040 187
CR S-71-6	May 1971	Three-Dimensional Finite Element Analyses of Dams, by G. Lefebvre and J. M. Duncan	AD 731 231
CR S-72-2	Jan 1972	Effect of Reservoir Filling on Stresses and Movements in Earth and Rockfill Dams, by E. S. Nobarri and J. M. Duncan	AD 745 216
CR S-73-2	Jan 1973	Hydraulic Fracturing in Zoned Earth and Rockfill Dams, by E. S. Nobarri, K. L. Lee, and J. M. Duncan	AD 766 728
CR S-74-3	Oct 1974	Finite Element Analyses of Transverse Cracking in Low-Embankment Dams, by Guy Lefebvre and J. M. Duncan	AD A001 523
CR S-76-2	Apr 1976	Finite Element Analyses of Stresses and Movements in Birch Dam, by Antonio Soriano, J. M. Duncan, Kai Wong, and J.-M. Simon	AD A025 448
CR S-76-4	Jun 1976	State-of-the-Art Review on Shotcrete, by T. L. Brekke, University of California, Berkeley; H. H. Einstein, Massachusetts Institute of Technology, Cambridge; U. S. Bureau of Reclamation, Engineering and Research Center, Denver, Colorado; and R. E. Mason, A. A. Mathews, Inc., Rockville, Maryland	AD A028 031
CR S-76-5	Jun 1976	The Influences of Sand Fabric on Liquefaction Behavior, by J. K. Mitchell, J. M. Chatoian, and G. C. Carpenter	AD A026 884
CR S-76-6	Jun 1976	The Role of Fill Strength in the Stability of Embankments on Soft Clay Foundations, by Suphon Chirapuntu and J. M. Duncan	AD A027 087
CR S-77-3	Jan 1977	Influence of Sample Disturbance on Sand Response to Cyclic Loading, by Kenji Mori, H. B. Seed, and C. K. Chan	AD A044 075

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		UNIVERSITY OF CALIFORNIA, Berkeley (Cont)	
CR S-77-4		Analysis of Consolidation of Earth and Rockfill Dams:	
	Sep 1977	Volume I Main Text and Appendixes A and B, by C. S. Chang and J. M. Duncan	AD A045 332
*	Sep 1977	Volume II Appendixes C-E: User's Manual for Computer Program CON2D for the Finite Element Analysis of Consolidation in Zoned Dams, by C. S. Chang and J. M. Duncan	AD B022 321L
		UNIVERSITY OF CALIFORNIA, Los Angeles	
CR S-76-1	Mar 1976	Influence of End Restraint in Cyclic Triaxial Tests, by K. L. Lee	AD A022 811
CR S-77-1	Jun 1977	Effect of Frictionless Caps and Bases in the Cyclic Triaxial Test, by F. J. Vernese and K. L. Lee	AD A042 041
		CALIFORNIA RESEARCH AND TECHNOLOGY, INC., Woodland Hills, California	
* CR S-75-1	Feb 1975	Analysis of Dynamic Stresses Within a Terminal Delivery Vehicle During Penetration of a Hard Earth Target, by Y. M. Ito, K. N. Kreyenhagen, G. E. Eggum, and W. S. Goerke	AD B004 777L
CR S-75-4	Aug 1975	Numerical Analysis of Projectile Impact and Deep Penetration Into Earth Media, by M. H. Wagner, K. N. Kreyenhagen, and W. S. Goerke	AD A014 142
	May 1975	Supplement Time Histories of Stresses, Velocities, and Displacements. Part I: Deformable-Body Solution. Part II: Rigid-Body Solution.	
		UNIVERSITY OF CAMBRIDGE, England	
CR S-76-3	May 1976	Pore Pressures in Soft Ground Under Surface Loading; Theoretical Considerations, by R. H. G. Parry and C. P. Wroth	AD A024 998
CR S-76-10	Sep 1976	Pore Pressures in Soft Ground Under Surface Loading; Interpretation of Field Records, by R. H. G. Parry and C. P. Wroth	AD A030 891

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		LEO CASAGRANDE	
CR 3-141	Aug 1964	Conceptual Studies in the Fields of Mass Movement of Earth and Stabilization of Earth (With Special Attention to Peaty Soils)	
		COLUMBIA UNIVERSITY, New York, New York	
CR 4-12	Jun 1954	Influence Values for Certain Stresses and Displacements in a Three-Layer Pavement System for Airfields, by D. M. Burmister	
		CONTINENTAL OIL COMPANY, Ponca City, Oklahoma	
CR 5-68-2	Dec 1968	A Research Study to Determine the Occurrence and Structural Competency of Deep Rock Formations by the Use of Surface Vibrators, by D. E. Dunster and D. E. Miller	AD 726 332
		CORNELL UNIVERSITY, Ithaca, New York	
CR 3-73		Feasibility Study of Electrokinetic Processes for Stabilization of Soils for Military Mobility Purposes: Progress Report, February 1, 1963-July 31, 1963, by M. I. Esrig	
	May 1964	Report 1 A Theoretical Study of the Equations Governing Electroosmotic Flow, and A Laboratory Investigation of the Effects of Electrokinetic Treatment on an Illitic Soil, by M. I. Esrig	AD 450 691
	Jun 1965	Report 2 An Analysis of the Electroosmotic Phenomenon in Soil Capillary Systems, by M. I. Esrig and S. Majtenyi	AD 469 599
	Aug 1966	Report 3 Results of a Preliminary Field Investigation, by M. I. Esrig	AD 808 317
	Jul 1967	Report 4 Laboratory Investigation of Electrokinetic Treatment of Consolidated Soils, by M. I. Esrig	AD 822 728
	Mar 1968	Report 5 A Study of Pore Water Pressures During Electrokinetic Treatment, by M. I. Esrig	AD 839 645

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		M. T. DAVISSON, Foundation Engineer, Champaign, Illinois	
CR S-69-3	Apr 1969	Effect of Degree of Saturation on Compressibility of Soils from the Defense Research Establishment, Suffield, by A. J. Hendron, M. T. Davisson, and J. F. Parola	AD 687 365
		BARRY J. DEMPSEY, Consulting Engineer, Urbana, Illinois	
CR S-76-12	Jun 1976	Climatic Effects on Airport Pavement Systems; State of the Art, by B. J. Dempsey	AD A029 422
		DOW CHEMICAL COMPANY, Midland, Michigan	
* CR S-71-1	Mar 1971	Research Study for the Design, Development, Fabrication and Delivery of Heavy Duty Landing Mat, by G. K. Glaza	AD 882 170L
CR S-74-1	May 1974	Research Study for the Design, Development, Fabrication, and Delivery of Truss Web Heavy Duty Landing Mat with Integral Waterproofing, by G. K. Glaza	AD A040 182
		DUKE UNIVERSITY, Durham, North Carolina	
CR S-75-5	Dec 1975	The Mechanics of Pile-Soil Interaction in Cohesionless Soils, by D. M. Holloway, G. W. Clough, and A. S. Vesic	AD A019 298
* CR S-76-13	Sep 1976	User's Manual for AXISYM: A Finite Element Program for Axisymmetric or Plane Strain Simulation of Soil-Structure Interaction, by D. M. Holloway	AD B014 047L
* CR S-76-14	Sep 1976	User's Manual for DUKFOR: A Computer Program for Analyses of Pile-Soil Interaction, by D. M. Holloway	AD B015 379L
		DYNATECH CORPORATION, Cambridge, Massachusetts	
CR 3-172	Jan 1967	Development of Urea-Based and Latex Emulsion Systems for Dust Control in Support of Military Operations, by A. R. Reti, J. E. Ehrreich, and G. B. Gilbert	AD 822 886
CR S-70-4	Jul 1970	Latex Systems for Dust Control in Support of Military Operations, by A. R. Reti, J. E. Ehrreich, and R. L. Wentworth	AD 873 344

---

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		EUSTIS ENGINEERING COMPANY, Metairie, Louisiana	
CR 4-79	Sep 1963	Analysis of Data; Non-destructive Dynamic Soil Tests at AASHO Road Test	
CR 4-85	Jan 1964	Analysis of Data; Non-destructive Dynamic Soil Tests, Foss Field, Sioux Falls, South Dakota	AD 757 417
		FAIRCHILD HILLER, REPUBLIC AVIATION DIVISION, Farmingdale, Long Island, New York	
CR 3-166	Jun 1967	Research Study for the Design of a Portable VTOL Blast Controlling Platform, by W. M. Dervin, R. S. Moss, and F. H. Ringler	AD 818 913
		UNIVERSITY OF FLORIDA, Gainesville	
CR 3-53	Sep 1962	Study of the Propagation and Dissipation of "Elastic" Wave Energy in Granular Soils, by F. E. Richart, J. R. Hall, and J. Lysmer	AD 286 075
		GENERAL AMERICAN TRANSPORTATION CORPORATION, Niles, Illinois	
CR 3-137	Mar 1964	Conceptual Studies in the Fields of Mass Movement of Earth and Stabilization of Earth, by F. E. Wolosewick, N. T. Guttenberger, and A. A. Arentz	
		GEORGIA INSTITUTE OF TECHNOLOGY, Atlanta	
CR 3-75	Sep 1963	Theoretical Studies of Cratering Mechanisms Affecting the Stability of Cratered Slopes, by A. S. Vesic and R. D. Barksdale	
CR S-70-2		Study of Soil Behavior Under High Pressure:	
		Report 1 Response of Two Recompactd Soils to Various States of Stress, by B. B. Mazanti and C. N. Holland:	
	Feb 1970	Volume I	AD 709 315
	Feb 1970	Volume II	AD 756 124
	Feb 1970	Volume III	AD A040 186

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		GEOTECH, A TELEDYNE COMPANY, Garland, Texas	
CR 3-176	Aug 1967	Research, Development, and Prototype Production of an Ultraviolet Sensing Soil Moisture Meter, by J. B. Cohen	AD 837 529
		GLOBE ALBANY CORPORATION, Buffalo, New York	
CR S-71-7	Sep 1971	Research and Development of Prefabricated Airfield and Road Surfacing Membrane, by G. C. Pedersen	AD 756 180
		HARVARD UNIVERSITY, Cambridge, Massachusetts	
CR 3-3		Investigation of Effect of Long Time Loading on the Strength of Clays and Shales at Constant Water Content:	
	Jul 1949	Final Report, by A. Casagrande and S. D. Wilson	AD 714 633
	Jul 1950	Report on the 1949-1950 Program, by A. Casagrande, J. M. Corso, and S. D. Wilson	
CR 3-42		Investigation of Stress-Deformation and Strength Characteristics of Compacted Clays:	
	May 1960	First Progress Report, by A. Casagrande and R. C. Hirschfeld	
	Apr 1962	Second Progress Report, by A. Casagrande and R. C. Hirschfeld	
	Nov 1963	Third Progress Report, by A. Casagrande, R. C. Hirschfeld, and S. J. Poulos	
	Oct 1964	Fourth Progress Report, by A. Casagrande and S. J. Poulos	
CR 3-84	Mar 1964	Report on Control of Leakage in the Triaxial Test, by S. J. Poulos	
CR S-69-5	Apr 1969	Cracking of Earth and Rockfill Dams; A Theoretical Investigation by Means of the Finite Element Method, by S. W. Covarrubias	AD 708 935
CR S-70-5	Jun 1970	Residual Strength of Clay and Clay-Shales by Rotation Shear Tests, by D. P. LaGatta	AD 756 171
CR S-70-7	Jul 1970	Cracking of Earth and Rockfill Dams; Tension Zones in Embankments Caused by Conduits and Cutoff Walls, by A. Casagrande and S. W. Covarrubias	AD 720 550



## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		HARVARD UNIVERSITY, Cambridge, Massachusetts (Cont)	
CR S-71-5	Aug 1971	The Effect of Rate of Displacement on Measuring the Residual Strength of Clays, by D. P. LaGatta	AD 746 351
CR S-71-11	Apr 1971	Cracking of Earth and Rockfill Dams; Comparison of Observed and Theoretical Tensile Strains in the Crests of Two Earth and Rockfill Dams, by S. W. Covarrubias	AD 736 372
		HARZA ENGINEERING COMPANY, Chicago, Illinois	
CR 3-81		Feasibility Study of Improved Methods for Riverbank Stabilization:	
	Jan 1964	Six Months Progress Report	
	Nov 1964	Final Report	
		W. RONALD HUDSON, Consulting Engineer, Austin, Texas	
CR S-75-7	Aug 1975	State-of-the-Art in Predicting Pavement Reliability from Input Variability, by W. R. Hudson	AD A018 904
		UNIVERSITY OF ILLINOIS, Urbana	
CR 3-38	Oct 1959	Report on Survey of Literature in Connection with the Dynamic Bearing Capacity of Soils, by Narbey Khachaturian	AD 232 102
CR 3-45	Jan 1961	Analytical Study of Dynamic Bearing Capacity of Foundations, by G. E. Triandafilidis	AD 255 092
CR 3-52	Jul 1962	Experimental Studies of Dynamically Loaded Footings on Sand, by W. E. Fisher	AD 290 731
CR 3-74	Aug 1963	Tests on Clay Subsoils Beneath Statically and Dynamically Loaded Spread Footings, by T. D. Johnson and H. O. Ireland	AD 422 094
CR S-71-4	Sep 1971	Measurement of Stress and Strain During One-Dimensional Compression of Large Compacted Soil and Rockfill Specimens, by M. W. C. Emerson and A. J. Hendron	AD 730 772

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		ILLINOIS INSTITUTE OF TECHNOLOGY RESEARCH INSTITUTE, Chicago	
CR 3-168	Jun 1967	A Bibliography on the Response of Earth Media and Buried Structures to Ground Shock Loading, by R. L. Chiapetta and C. J. Costantino	AD A040 180
CR S-69-2	Jun 1968	Study of Wave Propagation in Confined Soils, by D. Hampton and P. J. Huck	AD 684 338
		THE JOHNS HOPKINS UNIVERSITY, Baltimore, Maryland	
CR 3-28		Vibratory Cutting, Penetration and Compaction of Soils:	
	Dec 1957	Technical Report No. 1 Laboratory Apparatus for Vibratory Cutting and Penetration of Soils, Preliminary Development, by R. S. Ayre and R. L. Kondner	
	Jan 1958	Technical Report No. 2 Bibliography Relating to Vibratory Cutting, Penetration and Compaction of Soils, by S. C. Cowin, R. L. Kondner, and R. S. Ayre	AD 160 028
	Feb 1958	Technical Report No. 3 Bibliography Relating to Vibratory Cutting, Penetration, and Compaction of Soils, Supplement No. 1, by S. C. Cowin, R. L. Kondner, and R. S. Ayre	AD 200 147
	Apr 1958	Technical Report No. 4 A Critical Review of Selected Literature Relating to the Vibratory Cutting, Penetration and Compaction of Soils, by S. C. Cowin, R. L. Kondner, and R. S. Ayre	AD 200 148
	Jun 1958	Technical Report No. 5 Laboratory Investigation of the Vibratory Cutting and Penetration of Soils, Part I, by R. L. Kondner, R. S. Ayre, and Yong Suk Chao	
	Jun 1958	Technical Report No. 6 Study of Vibratory Cutting, Penetration and Compaction of Soils, Summary Report 1957-1958, by R. L. Kondner and R. S. Ayre	AD 201 946

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		THE JOHNS HOPKINS UNIVERSITY, Baltimore, Maryland (Cont)	
CR 3-28 (Cont)	Jul 1959	Technical Report No. 7 The Vibratory Cutting, Compaction and Penetration of Soils, Part II, by R. L. Kondner	AD 232 298
	Aug 1960	Technical Report No. 8 A Non-dimensional Approach to the Vibratory Cutting, Compaction and Penetration of Soils, by R. L. Kondner	AD 243 486
		KANSAS STATE COLLEGE, Manhattan	
CR 4-9	Dec 1951	Analytical Studies of Landing Mats for Forward Airfields, by Gerald Pickett	
		KONDNER RESEARCH, Deerfield, Illinois	
CR 3-148	Nov 1965	A Rheologic Investigation of the Dynamic Response Spectra of Cohesive Soils; Summary Report, by R. L. Kondner	AD 633 802
		MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge	
CR 3-2	Mar 1948 through Nov 1961	Solid Solidification (Stabilization) by Chemical Methods, Final Report; Phases I Through XIII	
CR 3-4		Research on Shearing Characteristics of Clay:	
	Sep 1949	Report 1	
	Dec 1950	Report 2 Triaxial Research on Clay	
	Jun 1951	Report 3	
	Feb 1953	Report 4 Effects of Duration of Pre-shear Consolidation and Rebound Pressures	
	Feb 1955	Report 5 Review of Research on Shearing Strength of Clay, by D. W. Taylor	
CR 3-26		The Response of Soils to Dynamic Loadings:	
	Nov 1957	Report 1 Scope of Test Program and Equipment Specifications	
	Jan 1959	Report 2 Test Equipment for High-Speed Triaxial Tests	

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge (Cont)	
CR 3-26 (Cont)	Oct 1959	Report 3 First Interim Report on Dynamic Soil Tests	
	Aug 1960	Report 4 One-Dimensional Compression and Wave Velocity Tests, by R. V. Whitman, J. E. Roberts, and Shieh-Wen Mao	
	Nov 1960	Report 5 Pore Pressure Measurements During Transient Loadings, by K. A. Healy	
	Apr 1961	Report 6 Effects of Rate of Strain on Stress-Strain Behavior of Saturated Soils, by A. M. Richardson	
	Jun 1961	Report 7 Adaptation and Use of the Boynton Device for Rapid One-Dimensional Compression Tests, by P. J. Moore	
	Jul 1961	Report 8 Laboratory Measurement of Dilatational Wave Propagation Velocity, by F. V. Lawrence	
	May 1962	Report 9 Shearing Resistance of Sands During Rapid Loadings, by R. V. Whitman and K. A. Healy	
	Jun 1962	Report 10 Strength of Saturated Fat Clay, by R. V. Whitman, A. M. Richardson, and N. M. Nasim	
	Sep 1962	Report 11 Triaxial Tests Upon Saturated Fine Silty Sand, by K. A. Healy	
	Dec 1962	Report 12 Static Tests Upon Thin Domes Buried in Sand, by R. V. Whitman, Zvi Getzler, and Kaare Hoeg	
	Feb 1963	Report 13 The Dependence of Dilation in Sand on Rate of Shear Strain, by K. A. Healy	
	Mar 1963	Report 14 Propagation Velocity of Ultrasonic Waves Through Sand, by F. V. Lawrence	
	Mar 1963	Report 15 Undrained Strength of Saturated Clayey Silt, by K. A. Healy	
	Apr 1963	Report 16 Effective Stress vs. Strength: Saturated Fat Clay, by A. M. Richardson	
	May 1963	Report 17 Stress-Strain-Time Behavior of Soil in One Dimensional Compression, by R. V. Whitman	
	May 1963	Report 18 The Dynamic Passive Pressure Problem for Sand, by W. C. Kerr	
	Aug 1963	Report 19 Stresses and Strains in a Planar Array of Elastic Spheres, by F. T. Miller	

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge (Cont)	
CR 3-26 (Cont)	Nov 1963	Report 20 Further Study of a Rapid Response Pore Pressure Gage, by E. T. Miller	
	Oct 1963	Report 21 One-Dimensional Compression and Wave Propagation in a Sand, by P. J. Moore	
	Mar 1964	Report 22 Dynamic Response of a Particulate Soil System, by W. C. Kerr	
	Jan 1965	Report 23 Ultrasonic Shear Wave Velocities in Sand and Clay, by F. V. Lawrence	
	Mar 1966	Report 24 Wave Velocities Through Partially Saturated Sand-Clay Mixtures, by H. A. Balakrishna Rao	AD 638 027
	May 1966	Report 25 Miscellaneous Studies of the Formation of Wave Fronts in Sand, by R. V. Whitman	AD 640 753
	May 1970	Report 26 Final Report, by R. V. Whitman	AD 708 625
CR 3-32	Sep 1958 through Jan 1960	Soil Solidification Project:  Report of Period 18 September 1958 to 31 January 1959 Report of Period 1 February 1959 to 15 June 1959 Report of Period 18 September 1959 to 31 January 1960	
CR 3-63		Soil Stabilization:	
	May 1963	Phase Report 1 Engineering Behavior of Partially Saturated Soils	
	Sep 1963	Phase Report 2 Triaxial Equipment and Computer Program for Measuring the Strength Behavior of Stabilized Soils	
	Jul 1964	Phase Report 3 Effective Stress-Strength Behavior of Compacted Stabilized Soils, by A. E. Z. Wissa and C. C. Ladd	AD 456 489
	Oct 1964	Phase Report 4 Chemical Stabilization of Selected Tropical Soils from Puerto Rico and Panama, by A. E. Z. Wissa and Rurik Halaby	AD 470 758
	Jun 1965	Phase Report 5 Shear Strength Generation in Stabilized Soils, by A. E. Z. Wissa and C. C. Ladd	AD 625 942

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge (Cont)	
CR 3-63 (Cont)	Dec 1968	Phase Report 6 Compressibility-Permeability Behavior of Untreated and Cement Stabilized Clayey Silt, by A. E. Z. Wissa and R. P. Monti	AD 711 974
	Jun 1969	Phase Report 7 A Durability Test for Stabilized Soils, by A. E. Z. Wissa and J. G. Paniagua	AD 715 755
	Jan 1970	Phase Report 8 Effect of Molding Conditions on the Effective Stress-Strength Behavior of a Stabilized Clayey Silt, by A. E. Z. Wissa, Samuel Feferbaum-Zytno, and J. G. Paniagua	AD 711 536
	Aug 1971	Phase Report 9 The Effects of Mixing Conditions, Method of Compaction, and Curing Conditions on the Effective Stress-Strength Behavior of a Stabilized Soil, by A. E. Z. Wissa, R. T. McGillivray, and J. G. Paniagua	AD 747 351
	Jun 1972	Phase Report 10 Equipment for Studying the Effect of Repeated Loading on the Stress-Strength Behavior of Stabilized Soils, by A. E. Z. Wissa and J. G. Paniagua	AD 763 185
CR 3-101		Research in Earth Physics:	
	Feb 1963	Progress Report for the Period June 1962-December 1962	
		Phase Report No. 1:	
	Apr 1964	Part I Stress-Strain Behavior of Saturated Clay and Basic Strength Principles, by C. C. Ladd	AD 450 658
	Jul 1965	Part II The Influence of Stress System on the Behavior of Saturated Clays During Undrained Shear, by C. C. Ladd and Julius Varallyay	AD 622 331
	Mar 1965	Phase Report No. 2 Adsorption and Friction Behavior of Minerals in Vacuum, by L. G. Bromwell	AD 616 737
	Oct 1965	Phase Report No. 3 The Effects of Salt on the Consolidation Behavior of Saturated Remolded Clays, by W. A. Bailey	AD 625 871
	Sep 1965	Phase Report No. 4 Quantitative Fabric of Consolidated Kaolinite, by R. T. Martin	AD 632 061
	Dec 1965	Phase Report No. 5 Use of Electrical Pressure Transducers to Measure Soil Pressure, by R. S. Ladd	AD 636 446

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		NORTHWESTERN UNIVERSITY, Evanston, Illinois	
CR 3-62		A Rheologic Investigation of the Dynamic Response Spectra of Soils:	
	Dec 1962	Report 1 Basic Concepts, Equipment Development and Soil Testing Procedures, by R. L. Kondner and R. J. Krizek	AD 411 567
	Aug 1963	Report 2 A Response Spectra Formulation for a Cohesive Soil, by R. L. Kondner and R. J. Krizek	AD 450 693
	Jun 1964	Report 3 Energy Dissipation Response of a Cohesive Soil, by R. L. Kondner and M. M. K. Ho	AD 613 071
	Jun 1965	Report 4 High Speed Explosive Pulse Type Compression Apparatus for the Dynamic Testing of Cohesive Soils, by R. L. Kondner	AD 636 443
CR S-70-6	Jun 1970	Report 1 Operational Procedure for Slurry Consolidometer, by R. J. Krizek and D. E. Sheeran	AD 613 071
	Jun 1970	Report 2 Slurry Preparation and Characteristics of Samples Consolidated in the Slurry Consolidometer, by R. J. Krizek and D. E. Sheeran	AD A040 188
CR S-76-7	Aug 1976	Saturated Sand as an Inelastic Two-Phase Medium, by Z. P. Bazant and R. J. Krizek	AD A029 940
CR S-76-8	Aug 1976	Densification and Hysteresis of Sand Under Cyclic Shear, by Z. P. Bazant and R. J. Krizek	AD A029 939
CR S-76-9	Aug 1976	Endochronic Constitutive Law for Liquefaction of Sand, by Z. P. Bazant and R. J. Krizek	AD A029 937
		PURDUE UNIVERSITY, Lafayette, Indiana	
CR 4-102	Aug 1964	Laboratory Thermal Expansion Measuring Techniques Applied to Bituminous Concrete, by C. C. Hooks and W. H. Goetz	AD 757 419
CR S-69-7	Jul 1969	A Theoretical Study of Landing Mat Behavior, by M. E. Harr and J. C. Rosner	AD A040 185
		RENSSELAER POLYTECHNIC INSTITUTE, Troy, New York	
CR 3-142		Mass Earth Movement and Treatment Feasibility Study, by E. C. W. A. Geuze	AD A040 179

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		REPUBLIC AVIATION CORPORATION, Farmingdale, Long Island, New York	
CR 3-123	Aug 1965	Feasibility Study on the Design and Development of a VTOL Blast Controlling Platform, by S. Bartha and F. H. Ringler	AD 626 617
		ROLAND F. BEERS, INC., Alexandria, Virginia	
CR 3-157	Nov 1964	Mass Earth Movement and Treatment with Nuclear Explosives	
		J. H. SCHMERTMANN, Consulting Engineer, Gainesville, Florida	
CR S-69-4	Oct 1969	Dutch Friction-Cone Penetrometer Exploration of Research Area at Field 5, Eglin AFB, Florida, by J. H. Schmertmann	AD A040 184
		UNIVERSITY OF SOUTHERN CALIFORNIA, Los Angeles	
Unnumbered	Jun 1958	An Annotated Bibliography for the Mexican Desert	
Unnumbered	Feb 1959	An Annotated Bibliography for the Desert Areas of the United States	
		SOUTHWEST RESEARCH INSTITUTE, San Antonio, Texas	
CR 3-138	Apr 1964	A Feasibility Study of Mass Movement, Disaggregation, and Stabilization of Soil, by A. R. Nye and J. M. Clark	AD 631 560
CR 3-144	May 1965	Feasibility Study on the Rapid Stabilization of Soils by the Use of Sulfur, by H. I. Hoffman	AD 483 018
CR 3-149	Feb 1966	Design, Fabrication and Development of a Single Explosion Cell for the Repetitive Explosion Device for Soil Displacement, by R. H. Hemion and Robinson Brown	AD 809 267
CR 3-173	Oct 1967	Theoretical and Experimental Studies of Dynamic Response of Weapon Foundations, by P. S. Westine	AD 825 456
CR S-69-1	May 1967	The Use of Sodium Silicate and Sulphur as a Dust Palliative, by E. J. Baker and W. A. Mallow	AD 848 460



## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		TEXAS INSTRUMENTS, INCORPORATED, Dallas	
CR 3-140	May 1964	An Investigation of Some Problems Concerned with Thermal Soil Stabilization Processes	
		UNION CARBIDE CORPORATION, Tarrytown, New York	
CR S-71-9	Oct 1971	Development of an Improved Dust-Control System Based on Polyvinyl Acetate Latex, by D. F. Anderson, J. A. Durante, and L. H. Wartman	AD 732 484
	Jan 1975	Errata Sheet No. 1	
		UNITED RESEARCH SERVICES, INCORPORATED, Burlingame, California	
CR 3-91		Study of the Dynamic Stress-Strain and Wave Propagation Characteristics of Soils:	
	Nov 1964	Report 1 Concepts, Equipment, and Techniques for the Study of the Dynamic Behavior of Soils, by J. V. Zaccor, H. G. Mason, and D. F. Walter	AD 627 079
	Nov 1964	Report 2 Correlation of Stress-Strain and Wave-Propagation Parameters in Shock-Loaded Dry Sands, by W. L. Durbin	AD 453 420
	Feb 1965	Report 3 Measurements of Stress-Strain, Peak Particle Velocity, and Wave-Propagation Velocity in Three Sands, by W. L. Durbin	AD 474 143
	Mar 1965	Report 4 Concepts of Shock Behavior in a Granular Medium, by J. V. Zaccor, W. L. Durbin, N. R. Wallace, and H. G. Mason	AD 474 690
CR 3-171		Procedures for Prediction of Ground Shock Phenomena Based on One-Dimensional Shock Propagation Considerations:	
	Apr 1967	Report 1 Procedures and Applications, by J. V. Zaccor	AD 664 121
	May 1967	Report 2 Experimental Study of Loading-Unloading Stress Wave Interactions in a Soil Shock Tube, by J. V. Zaccor, D. F. Walter, and V. W. Davis	AD 663 830
		U. S. NAVAL CONSTRUCTION BATTALION CENTER, CIVIL ENGINEERING LABORATORY, Port Hueneme, California	
CR S-75-8	Oct 1975	State-of-the-Art for Prediction of Pavement Response, by J. E. Crawford and M. G. Katona	AD A018 681

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		UTAH STATE UNIVERSITY, Logan	
CR S-75-3	Aug 1975	Model Study of C-5A Landings on Dow Truss Web Landing Mat, by F. W. Kiefer, P. T. Blotter, and V. T. Christiansen	AD A015 021
		UNIVERSITY OF VIRGINIA, Charlottesville	
CR 3-139	Apr 1964	Conceptual Studies in the Field of Mass Movement of Earth and Stabilization of Earth, by H. G. Larew	
		PAUL WEIDLINGER, Consulting Engineer, New York, New York	
CR S-68-1		Investigation of Ground Shock Effects in Nonlinear Hysteretic Media:	
	Mar 1968	Report 1 Development of Mathematical Material Models, by Ivan Nelson and M. L. Baron	AD 680 323
	Jul 1970	Report 2 Modeling the Behavior of a Real Soil, by Ivan Nelson	AD 719 719
	Jan 1969	Report 3 A Note on the Plane Waves of Pressure and Shear in a Half-Space Hysteretic Material, by A. T. Matthews and H. H. Bleich	AD 699 411
	Mar 1970	Report 4 Effect of a Step Load Moving with Constant Superseismic Velocity on a Half-Space of a Variable Modulus Material, by A. T. Matthews, Ivan Sandler, and H. H. Bleich	AD 706 830
	Aug 1971	Report 5 Computer Code Computations and Comparison with Theoretical Solutions - Variable Moduli Material, by A. T. Matthews and M. L. Baron	AD 730 767
* CR S-71-8	Sep 1971	Effects of Transmitting Boundaries in Ground Shock Computation, by A. T. Matthews	AD 888 910L
CR S-71-10		Investigation of Air Induced Ground Shock Effect Resulting from Various Explosive Sources:	
	Nov 1971	Report 2 Influence of Constitutive Models on Ground Motion Predictions, by M. L. Baron, Ivan Nelson, and Ivan Sandler	AD 733 927
Unnumbered	Oct 1972	Data Report - Pretest Ground Motion Calculations for the MIXED COMPANY Event of the MIDDLE NORTH Series, by I. S. Sandler, J. P. Wright, and M. L. Baron	AD 781 316

\* Statement B. See Preface.

## SOILS AND PAVEMENTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		WEIDLINGER ASSOCIATES, Consulting Engineers, New York, New York	
CR S-74-4	Oct 1974	Ground Motion Calculations for the MIXED COMPANY Event of the MIDDLE NORTH Series, by I. S. Sandler, J. P. Wright, M. L. Baron, and J. Kovarna	AD A003 220
CR S-75-2	Jun 1975	Parameter Studies of MIXED COMPANY; Influence of Constitutive Properties on Ground Motion Calculations, by I. S. Sandler	AD A012 817
* CR S-77-2	Jul 1977	Development of a High Pressure Cap Model for Use in Computations of Ground Shock from Subsurface Explosions, by D. Rubin and I. Sandler	AD B020 929L
		THE WESTERN COMPANY OF NORTH AMERICA, RESEARCH DIVISION, Richardson, Texas	
CR 3-174	Oct 1967	Development of a Soil Treatment Material to Serve as a Dust Palliative in the Theater of Operations; Final Report, by J. B. Dobbs and Marie Hitchcock	AD 826 481
CR S-71-2	Mar 1971	Evaluation of Polymer Emulsions to Serve as Soil Treatments for Dust Control, by J. B. Hammond	
		WILSON, NUTTALL, RAIMOND ENGINEERS, INC., Chestertown, Maryland	
CR 3-92	Nov 1964	Conceptual Studies in the Fields of Mass Movement of Earth and Mass Stabilization of Earth, by G. T. Cohron	
CR S-70-1	Mar 1970	A Cost Effectiveness Study of Prefabricated Membrane Surfacing, by W. C. Grenke and C. J. Nuttall, Jr. (includes Appendixes A-D)	AD 756 361
		UNIVERSITY OF WISCONSIN, Madison	
CR 4-10	Sep 1953	Analytical Studies of Orthotropic Landing Mats for Forward Airfields, by Gerald Pickett	
		MATTHEW W. WITCZAK, Consulting Engineer	
CR S-76-15		Pavement Performance Models:	
	Aug 1976	Volume I Repeated Load Fracture of Pavement Systems, by M. W. Witeczak	AD A035 873

WEAPONS EFFECTS LABORATORY

## WEAPONS EFFECTS LABORATORY

Instruction Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
IR 8	Mar 1967	Procedure for Assembling SE-Type Soil Stress Gages, by J. K. Ingram	
IR N-70-1	Jun 1970	Protection of POL Storage Facilities; A Survey of Current Protection Practices and a Discussion of an Underground POL System, by F. W. Skinner and W. H. McAnally	AD 873 343
IR N-73-1	May 1973	Adaptation of the IITRI Soil Strain Gage for Dynamic Measurements on Long Cable Lengths and Single Coil Set Operation, by J. K. Ingram and G. P. Bonner	AD 761 083

NOTE: The U. S. Army Engineer Waterways Experiment Station (USAEWES) Explosive Excavation Research Laboratory (EERL) was the USAEWES Explosive Excavation Research Office prior to 21 April 1972. Prior to 1 August 1971 (and since 1962) the organization was known as the USAE Nuclear Cratering Group. On 1 July 1975, EERL was absorbed by WES and subsequently made a part of WES's Weapons Effects Laboratory. In this list the PNE Reports and the Technical Reports are available through the National Technical Information Service, U. S. Department of Commerce, Springfield, Virginia 22151, or the Defense Technical Information Center, Cameron Station, Alexandria, Virginia 22314. Organizations desiring copies of Technical Memoranda should contact the Commander and Director, U. S. Army Engineer Waterways Experiment Station, P. O. Box 931, Vicksburg, Mississippi 39180. Other reports can be obtained through the National Technical Information Service in the same manner as PNE Reports and Technical Reports.

Weapons Effects Laboratory reports are preceded by the letter "N" because at the time this numbering system was implemented, the Laboratory was named Nuclear Weapons Effects Division. Reports in this section preceded by an "E" number designation were published by the Explosive Excavation Research Laboratory prior to their becoming a part of WES's Weapons Effects Laboratory on 1 July 1975.

## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 2-103	Oct 1954	Tests of Small-Scale Explosions in Extremely Shallow Water	AD 756 359
MP 2-192	Mar 1957	Stemming Effects for Certain HE Charges	AD 477 000
* MP 2-212	Apr 1957	Shock Wave Behavior in Tunnel-Adits Systems, Exploratory Phase	
MP 2-250	Jan 1958	Basic Statistical Definitions and Procedures	
MP 2-274	Jun 1958	Blast-Pressure Measurements in Snow	
MP 2-285	Oct 1958	An Exploratory Study of the Effect of a Bubble Screen on Water Shock	AD 305 364
MP 2-344	Jul 1959	The Response of Flexibly Supported Simple Beams to Dynamic Loads	
* MP 2-370	Feb 1960	Considerations of High-Yield Explosions on Salt-Water Barriers and Other Structures in San Francisco Bay	AD 908 441L
MP 2-374		Floods Resulting from Suddenly Breached Dams:	
	Feb 1960	Report 1 Conditions of Minimum Resistance; Hydraulic Model Investigation	AD 234 980
	Nov 1961	Report 2 Conditions of High Resistance; Hydraulic Model Investigation	AD 268 411
MP 2-378	Feb 1960	Blast Effects on a Snow Tunnel, Camp Century, Greenland	
MP 2-386	Apr 1960	Effect of an Initial Stress State on Response of Gravity-Type Dams to Transient Loads, Construction and Testing Phase	AD 316 697
MP 2-399	Jun 1960	Measurements of Explosion-Induced Shock Waves in Ice and Snow, Greenland, 1957 and 1958	AD 756 307
MP 2-402	Jul 1960	The Effect of Structure and Foundation Interaction Upon Shock Transmission	AD 841 370
MP 2-424	Apr 1961	Crater and Permanent Displacement Measurements from a Five-Ton Surface Explosion; U. S. Project 1.6, Canadian HE Test Program, 1959	AD 256 626
MP 2-426	Apr 1961	Design of the Large Blast Load Generator	
MP 2-490	Jun 1962	Crater Measurements from a Twenty-Ton Surface Explosion	AD 281 917
* MP 2-491	May 1962	The U. S. Army Corps of Engineers Program for Developing the Capability of Performing Large-Scale Excavations Using Nuclear Explosives	

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 2-524	Sep 1962	Craters Formed by Small Explosions in Dry Sand	AD 291 494
MP 2-529	Oct 1962	Crater Measurements from a 100-Ton Surface Explosion; U. S. Project 3, Canadian HE Test Program, 1961	AD 493 010
MP 2-553	Jan 1963	The Attenuating Effects of a Rubble Screen on Underwater Shock	AD 335 620
MP 1-593	Aug 1963	Design of a Transducer for Pressure Measurements on Buried Concrete Structures	AD 450 995
MP 1-608	Nov 1963	Attenuation of Airblast in Protective Structures	AD 450 996
MP 1-631	Feb 1964	Attenuation of Airblast in Open Entranceways of Blast-Protective Structures; U. S. Project 6, Canadian HE Test Program, 1961	AD 450 997
MP 1-644	Apr 1964	Evaluation of WES Self-Recording Displacement Gage	AD 450 998
MP 1-654	Jun 1964	The Application of Similitude to Protective Construction Research	AD 747 817
MP 1-663	Feb 1965	Project PRE-RUGGY, Emplacement and Firing of High-Explosive Charges and Crater Measurements, by A. D. Rooke and L. K. Davis	AD 747 818
MP 1-668	Aug 1964	The Design of Buried Arches to Resist Blast Loads	AD 747 819
MP 1-672	Sep 1964	Investigation of Use of Accelerometers for Transient Displacement Measurements, by R. F. Runko	AD 450 999
MP 1-673	Aug 1964	Operation Danny Boy, Earth-Motion Measurements	AD 747 820
MP 1-677	Oct 1964	Method for Predicting the Shape of Explosion-Produced Craters, by J. W. Strange and A. J. Hendron	AD 451 000
MP 1-685	Nov 1964	Research in Soil Structure Interaction, by W. J. Flathau	AD 747 821
MP 1-688		The Effect of Underwater Explosions on Underwater Storage Systems:	
*	Jan 1965	Report 1 Results of Small-Scale Explosion Tests on Pseudo Models of Underwater Storage Containers, by J. W. Strange and J. M. Pinkston	AD 350 460L
*	Sep 1967	Report 2 Results of Underwater Explosion Tests on 15-, 500-, and 1,000-Gallon POL Containers, by F. W. Skinner and J. M. Pinkston	AD 320 429L
*	Sep 1970	Report 3 Results of Underwater Explosions on Scaled Models of a 50,000-Gallon POL Storage Container, by F. W. Skinner, Douglas Outlaw, and Louis Miller	AD 377 556L

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 1-693	Jan 1965	Engineering Materials for Tomorrow's Construction, by A. G. Sutton and F. R. Brown	AD 747 822
* MP 1-718	May 1965	Response of Gravity Type Dams to Nuclear weapons Effects, by W. J. Flathau and J. N. Strange	AD 522 451L
MP 1-733	May 1965	Project DUGOUT: Deep Underground Shock Measurements, by J. D. Day	AD 742 375
MP 1-736	Aug 1965	Concrete Arch Studies, Project 2.2, Operation SNOWBALL, by R. A. Sager	AD 471 342
* MP 1-741	Oct 1965	Status Report on Explosion-Generated Water Surface Waves, by J. N. Strange	AD 369 789L
MP 1-742	Oct 1965 Revised Mar 1966	Model Study of Dynamically Loaded Arch Structures, by D. R. Denton and W. J. Flathau	AD 747 823
MP 1-745	Oct 1965	Correlation of Operation SNOWBALL Ground Motions with Dynamic Properties of Test Site Soils, by A. J. Hendron	AD 474 046
* MP 1-752	Nov 1965	Some Notes on the Equivalence of Nuclear and High Explosives, by G. B. Clark	AD 362 947L
MP 1-754	Dec 1965	Danny Boy Event, Project 1.6: Mass Distribution Measurements of Crater Ejecta and Dust; POR 1815 (WT), Appendix B: Volumetric Equalities of the Crater, by L. K. Davis and A. D. Pooke	AD 476 592
* MP 1-764	Dec 1965	Operation Snow Ball, Project 3.1, Crater Measurements and Earth Media Determinations; Interim Report, by A. D. Rooke and T. D. Chew	AD 478 060L
* MP 1-778	Jan 1966	Techniques for Determining the Cratering Effects of Surface and Underground Explosions, by A. D. Pooke and J. N. Strange	AD 478 711L
MP 1-790	Feb 1966	Evaluation Tests of Mosler Blast Valves, by M. A. Vispi	AD 629 405
* MP 1-792	Feb 1966	Model Tests of an Accidental Missile Explosion in an Underground Launch Cell, by A. D. Rooke, J. T. Brogan, J. N. Strange, and L. F. Ingram	AD 480 332L
* MP 1-800	Jun 1966	Nuclear Weapons Effects on Dams; Chapter 12 of the NASA Monograph, Underwater Nuclear Explosions, Volume II, Effects, by J. N. Strange and W. J. Flathau	AD 374 421L
MP 1-808	Mar 1966	Water Shock Waves from Above-Water Explosions, by J. M. Pinkston and Akira Sakurai	AD 747 824
MP 1-809	Apr 1966	Static and Dynamic Tests of Buried Unreinforced Concrete Arches, by W. J. Flathau and G. D. Meyer	AD 633 339

\* Statement B. See Preface.



## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 1-810	Apr 1966	The Elastic Response of Buried Cylinders in Sand, by R. E. Walker, G. E. Albritton, and T. E. Kennedy	AD 633 285
MP 1-814		Blast Phenomena from Explosions at an Air-Water Interface:	
*	Jun 1966	Report 1 A Preliminary Study of Water Shock Waves Directly Beneath a Surface Explosion, by J. N. Strange and Louis Miller	AD 374 422L
MP 1-825	Nov 1966	Recommended Long-Range Research Program for Blast-Loaded Structures, by E. F. Smith and D. R. Denton	AD 748 092
* MP 1-826	Jun 1966	Water Shock-Wave Reflection Properties of Various Bottom Materials; Summary Progress Report, by J. N. Strange	AD 376 294L
** MP 1-830	Jul 1966	Report of Participation in Operation Tiny Tot; Project 1.9: Reentry Investigations, by L. K. Davis	AD 902 932L
MP 1-831	Jul 1966	The Dynamic Stress-Strain Relation for a Sand as Deduced by Studying Its Shock-Wave Propagation Characteristics in a Laboratory Device, by T. E. Kennedy and A. J. Hendron	AD 488 318
MP 1-837	Aug 1966 Revised Sep 1967	Rapid Tensile Tests of Six Intermediate-Grade Steel Reinforcing Bars, by J. T. Ballard and J. R. Hossley	AD 659 263
* MP 1-853	Nov 1966	Crater and Ejecta Measurements for a Full-Scale Missile Detonation in an Underground Cell, by A. D. Rooke and T. D. Chew	AD 804 114L
MP 1-874	Mar 1967	Behavior of Reinforced Concrete Deep Beams Under Static and Dynamic Loading, Literature Review and Pilot Study, by F. W. Beaufait	AD 649 355
MP 1-877	Feb 1967	Blast Load Generator Facilities and Investigations of Dynamically Loaded Concrete Slabs, by W. J. Flathau, J. V. Dawsey, and D. R. Denton	AD 747 825
MP 1-885	Apr 1967	Instrumentation for Earth Stresses and Motions Produced by Explosions, by L. F. Ingram	AD 651 456
MP 1-896	Aug 1966	Ferris Wheel Series, Flat Top Event, Project Officers Report - Project 1.9: Crater Measurements, by A. D. Rooke and L. K. Davis	AD 489 077
* MP 1-901	May 1967	Participation in Operation Distant Plain Apparent Crater Ejecta Measurements, by A. D. Rooke, L. W. Pitman, L. K. Davis, and T. D. Chew	AD 815 762L
MP 1-913	Aug 1967	Small Blast Load Generator Tests Using M-9 Propellant, by J. R. Hossley	AD 660 348

---

\* Statement B. See Preface.

\*\* For Official Use Only.

## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP 1-930	Oct 1967	Destruction of Earthen Tunnels, by J. R. Day and P. F. Hadala	AD 868 601L
* MP 1-939	Oct 1967	Effects of a Near-Surface Water Table on Crater Dimensions, by L. K. Davis	AD 833 336L
* MP 1-946	Dec 1968	High-Explosive Cratering Experiments in Shallow Water, by L. K. Davis and A. D. Rooke	AD 847 125L
* MP 1-947	Dec 1967	Mono Lake Explosion Test Series, 1965; Results of the Wave Runup Experiments, by A. D. Rooke, L. K. Davis, and J. N. Strange	AD 826 156L
MP 1-956	Sep 1967	Project Pre-GONDOLA I, Close-In Ground Motion, Earth Stress and Pore Pressure Measurements, by J. D. Day, D. W. Murrell, and W. C. Sherman	AD 735 669
* MP 1-957	Mar 1967	Vela Uniform, Project Long Shot, Project 1.01, Ground and Water Shock Measurement, by J. D. Day and D. W. Murrell	AD 813 536L
MP 1-962	Jan 1968	Data Reduction Techniques for Analysis of Wave Propagation in Dissipative Materials, by J. L. Drake	AD 665 642
MP 1-963	Jan 1968	Comparison of Simulation and Field Tests of a Buried Concrete Arch Structure, by T. E. Kennedy	AD 665 379
MP 1-964	Feb 1968	Behavior of Circular Tubes Buried in Sand Under Dynamic Loading; Laboratory Investigation, by A. G. Leskys and G. E. Albritton	AD 666 768
MP 1-965	Apr 1968	An Analysis of the Dynamic Strengths of Reinforced Concrete Slabs, by E. F. Smith	AD 755 271
* MP 1-972	Mar 1968	Feasibility of Using Environmental Modeling to Assess the Effects of Standoff Explosions on Dams, by J. N. Strange	AD 829 315L
MP 1-984		Air Blast Loading of a Precast Reinforced Concrete Manhole:	
*	Nov 1968	Report 1 C Manhole Test, by R. S. Cummins	AD 8021 210L
*	Apr 1968	Report 2 E Manhole Test, by J. M. Watt	AD 832 2211
* MP 1-987	Apr 1968	Operation Snow Ball, Project 3.1, Crater Measurements and Earth Media Determinations; The Apparent and True Craters, by A. D. Rooke, T. D. Chew, L. K. Davis, and J. N. Strange	AD 832 913L
* MP N-68-1	Sep 1968	A Small-Scale Study of Craters Resulting from Repeated Explosions Along a Common Vertical Axis, by T. D. Chew, A. D. Rooke, and L. W. Pitman	AD 840 945L

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP N-68-2	Dec 1968	Nuclear Weapons Effects on Various Amphibious Vehicles, by F. W. Skinner, Jr.	AD 600 454L
MP N-68-3		An Experimental Study of Model Deep Beams:	
	Jul 1968	Report 1 Tests on One-Quarter Scale Simply Supported Beams, by P. A. Hampe and J. P. Balsara	AD 673 704
MP N-68-4	Oct 1968	Pressure Distribution on a Buried Flat Plate Subjected to Static and Airblast Overpressures, by J. P. Balsara and R. S. Cummins	AD 678 313
MP N-68-5	Oct 1968	Response of Deep Reinforced and Unreinforced Concrete Slabs to Static and Dynamic Loading, by G. E. Albritton	AD 680 315
MP N-68-6	Nov 1968	Shock Isolation by Discontinuities, by J. T. Brogan and D. W. Murrell	AD 680 320
MP N-68-7	Dec 1968	Evaluation of End Wall Designs for Underground Protective Military Structures, August 1968, by G. L. Carre and J. T. Ballard	AD 847 486
MP N-68-8	Nov 1968	Project Pre-GONDOLA II, Survival of Hypothetical Pre-emplaced Charges, by C. E. Joachim	AD 682 726
MP N-68-9	Oct 1968	Project Pre-GONDOLA II, Close-in Ground Motion and Earth Stress, by C. E. Joachim	AD 748 823
MP N-69-1	Apr 1969	Test Devices, Blast Load Generator Facility, by W. L. Huff	AD 687 366
MP N-69-2	Sep 1969	MINE SHAFT Series, Events MINE UNDER and MINE ORE; Ejecta Studies, by J. W. Meyer and A. D. Rooke	AD 860 530
MP N-70-1	Mar 1970	Digital Filters for Routine Data Reduction, by H. D. Carleton	AD 705 571
MP N-70-2	Mar 1970	Failure of Footing-Supported Buried Steel Arches Loaded Statically, by J. F. Munn, G. L. Carre, and T. E. Kennedy	AD 704 719
MP N-70-3	Jun 1970	Neutron Streaming Through T-Jo-Legged Concrete Ducts with Baffles, by Klaus Donat	AD 710 963
MP N-70-4	Jul 1970	Operation MINE SHAFT, Surface Effects and Cavity Resulting from the Detonation of a 16-Ton Charge Deep in Granite, by J. N. Strange and W. H. McAnally	AD 874 685
MP N-70-5	Jul 1970	Airblast Loading of a Large Metal Shipping Container; Laboratory Investigation, by G. L. Carre and R. E. Walker	AD 710 361
MP N-70-6	Jul 1970	Cratering in Greenland Icecap Snow, by J. A. Conway and J. W. Meyer	AD 711 861

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP N-70-7	Jul 1970	Placement Effects on Ground Shock Instrumentation, by J. K. Ingram	AD 711 894
* MP N-70-8	Jui 1970	Close-In Free-Field Ground Motion; Project MIRACLE PLAY, by H. D. Carleton	AD B021 006L
* MP N-71-1	Jan 1971	Participation in Operation DISTANT PLAIN; Project 3.01: Apparent Crater and Ejecta Measurements, Events 6A, 6, and 1A, by L. K. Davis, J. W. Meyer, L. W. Pitman, and A. D. kooke	AD 879 916L
MP N-71-2	Jan 1971	Similitude Study of Reinforced Concrete Deep Beams, by J. P. Balsara and L. E. Roggenkamp	AD 718 318
MP N-71-3	Apr 1971	Dynamic Tests of a Model Flexible-Arch-Type Protective Shelter, by T. E. Kennedy	AD 723 960
* MP N-71-4	Apr 1971	Dynamic Response of Concrete Arch Bunkers, Laboratory Tests, by R. K. McGrath	AD 884 842L
* MP N-71-5	Apr 1971	Vulnerability of Man-Made Inland Waterways to Conventional Air-Delivered Bombs, by J. W. Meyer, L. K. Davis, and A. D. Rooke	AD 883 615L
MP N-71-6	Apr 1971	Destruction of Model Earthen Tunnels by Internal Explosive Detonation, by W. M. Gay, M. A. Vispi, J. K. Ingram, and H. M. Taylor	AD 723 046
* MP N-71-7	Jun 1971	Underwater Shock Effects on Shielded Timber Bridge Piling, by Louis Miller	AD 888 513L
* MP N-71-8	Aug 1971	Vulnerability of Earthen Structures to Ground Shock and Cratering, by Klaus Donat	AD 888 168L
	Sep 1974	Errata Sheet No. 1	
MP E-72-1	Jun 1972	Explosive Excavation for Water Environment and Road Cut Applications, by R. L. LaFrenz	AD A027 404
* MP N-72-1	Feb 1972	Operation Mine Shaft; Cratering Effects of a 100-Ton TNT Detonation on Granite, by L. K. Davis and B. L. Carnes	AD 892 701L
MP E-72-2	Jul 1972	Craters as Engineering Structures, by W. C. Day	
* MP N-72-4	Apr 1972	Vulnerability of Underground POL Storage Facilities; Event Dial Pack, Project LN313, by F. W. Skinner	AD 893 883L
* MP N-72-5	Apr 1972	Static Tests of a 1/2-Scale Model Unreinforced Concrete Manhole, by J. M. Watt	AD 907 894L
* MP N-72-6	May 1972	Effects of Stemming on High-Explosive Cratering, by H. L. Knudson, J. W. Meyer, S. B. Price, and A. D. Rooke	AD 900 326L

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP N-72-7	Jun 1972	Bronze-Brazed Joints for Sealing Rebar Penetrations of Electromagnetic Pulse Shields, by J. R. Hossley	AD 744 459
* MP N-72-8	Sep 1972	Explosion-Generated Wave Effects in Inland Waterways, by J. R. Houston and D. R. Bucci	AD 903 646L
* MP N-72-9	Dec 1972	Dial Pack: Crater and Ejecta Measurements from a Surface-Tangent Detonation on a Layered Medium, by A. D. Rooke, J. W. Meyer, and J. A. Conway	AD 907 260L
MP N-72-10	Dec 1972	Ground Motions from High-Explosive Experiments, by L. F. Ingram	AD 756 448
MP E-72-11	Aug 1972	Explosive Excavation Research, by R. H. Gates	AD 761 719
MP E-73-1	Jan 1973	Demolition of Ft. Meade Dam - Sturgis, South Dakota, June 1972, by B. B. Redpath	AD 757 597
* MP N-73-1	Jan 1973	Protection of POL Storage Facilities; Proposed Expedient Underground Storage Facility, by L. Miller, F. W. Skinner, Jr., and C. E. Stewart	AD 907 409L
MP E-73-2	Mar 1973	Thermal and Reactor Analysis of Nuclear Rocket Transients, by R. R. Mills, Jr.	AD 764 231
MP N-73-2	Mar 1973	Fundamental Experiments in Ground Shock Phenomenology, by J. G. Wallace and J. Fowler	AD 759 502
MP E-73-3	May 1973	Analysis of Ground-Motion Peak Particle Velocities from Cratering Experiments at Trinidad, Colorado, by T. M. Tami	AD 764 230
MP E-73-4	Apr 1973	Project ARMOR OBSTACLE II: Final Technical Report, by Joseph Briggs	AD 773 667
MP N-73-4	Sep 1973	Operation Mine Shaft; Distribution of Natural and Artificial Ejecta Resulting from Detonation of 100-Ton TNT Charge on Granite: Mineral Rock Event, by J. W. Meyer and A. D. Rooke, Jr.	AD 768 788
MP N-73-5	Sep 1973	Evaluation Tests of Ben-Weld No. 11 Reinforcing Steel, by J. R. Hossley	AD A043 645
MP N-73-6	Dec 1973	Protection of the Environment During Demolition Activities, by F. W. Skinner, L. Miller, and W. Harvey	AD 772 920
	Oct 1974	Errata Sheet No. 1	
* MP N-73-8	May 1973	ESSEX-DIAMOND ORE Research Program; Theoretical Investigation of Explosive Device Effects for Tunnel Destruction, by R. T. Sedgwick, J. L. Waddell, and L. J. Walsh	AD 8021 209L

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP E-74-1	Mar 1974	User's Guide to: TEMPLT (TENSOR Graphics Code) and EOSLIB and XMUPGENS (Auxiliary Data Codes), by D. E. Burton and C. M. Snell	AD 779 421
MP N-74-1	Jan 1974	Decoupling of Ground Shock from Explosions in Rock Cavities, by J. L. Drake	AD 773 671
MP E-74-2	Mar 1974	Investigation of Intermediate- and Maximum-Range Missiles Produced by Cratering Experiments, by J. F. Dishon III	AD 779 501
MP N-74-2	Dec 1974	Construction of Axisymmetric 1/4-Scale Model of Minuteman Launch Facility for SMI Field Test Program - Event I, by R. D. Crowson	AD A003 171
MP E-74-3	Mar 1974	An Investigation of a Concept of Limiting the Effects of Cratering Detonations, by B. B. Redpath	AD 780 707
MP E-74-4	Oct 1974	ESSEX - DIAMOND ORE RESEARCH PROGRAM: The Development and Manufacture of a Gelled Nitromethane Explosive for Project ESSEX, by F. Helm, R. Boat, M. Finger, and D. Wooster	AD A001 343
MP E-74-5	Oct 1974	Use of the Subterrene for Military-Drilling Applications, by L. C. Webster	AD A001 522
MP E-74-6	Dec 1974	A Review of Explosives Used in Explosive Excavation Research Laboratory Projects Since 1969, by H. H. Reed	AD A005 006
MP E-75-1	Jan 1975	One-Dimensional Analyses: Shock Wave Propagation from Underwater Cratering Detonations, by C. M. Snell (includes Appendixes A-F)	AD A012 065
* MP N-75-1	Feb 1975	Water Plume Study; Prototype Bridge Tests - FY 1974, by J. W. Meyer (includes Appendixes A-B)	AD B002 744L
Unnumbered		Hardness Program, Non-emp In-Place Testing of Shock-Isolation Systems for SAFEGUARD TSE Ground Facilities, F. B. Safford and R. E. Walker, Principal Investigators	
*	Mar 1975	Volume I Final Report	AD B011 656L
*	Mar 1975	Volume II Appendixes	AD B011 657L
* MP N-75-2	Apr 1975	ESSEX - DIAMOND ORE RESEARCH PROGRAM: Finite Element Analysis of Response of North Fork Dam Model to Water Shock, by P. J. Rieck and J. L. Kirkland	AD B003 903L
	Apr 1975	Errata Sheet	
* MP E-75-3	Feb 1975	ESSEX - DIAMOND ORE RESEARCH PROGRAM: Ejecta Measurements Report - ESSEX I, PHASE 1, by J. F. Dishon	AD B002 477L

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP N-75-3	May 1975	Influence of Burst Position on Airblast, Ground Shock, and Cratering in Sandstone, by J. K. Ingram, J. L. Drake, and L. F. Ingram	AD A010 326
MP E-75-4	Feb 1975	Results of Airblast Overpressure Measurement Program at Project R. D. BAILEY, by M. J. Hoeft (includes Appendixes A-C)	AD A008 981
* MP N-75-4	Sep 1975	MIDDLE NORTH SERIES, MIXED COMPANY EVENT, Silo Interaction Study, by J. P. Balsara and D. W. Hartman	AD B011 818L
* MP N-75-5	Jul 1975	ESSEX - DIAMOND ORE RESEARCH PROGRAM; True Crater and Permanent Displacement Measurements Associated with Simulated Low-Yield Nuclear Explosions, by A. D. Rooke, Jr. (includes Appendixes A-B)	AD B006 321L
* MP E-75-6	Apr 1975	ESSEX - DIAMOND ORE RESEARCH PROGRAM: Test Execution Report - ESSEX I, Phase 1: Nuclear Cratering Device Simulation (Project ESSEX), by G. M. Miller, Jr. (includes Appendixes A-E)	AD B004 488L
MP N-75-6	Jul 1975	Evaluation of Expedient Techniques for Strengthening Floor Joist Systems in Residential Dwellings, by M. S. Black	AD A013 987
* MP E-75-7	Jun 1975	ESSEX - DIAMOND ORE RESEARCH PROGRAM: Ground Motion in the Seismic Region; Project ESSEX I, Phase 1, by T. M. Tami	AD B005 001L
* MP N-75-7	Nov 1975	ESSEX - DIAMOND ORE RESEARCH PROGRAM; Essex I, Phase 2: Structures Test, by J. R. Hossley (includes Appendixes A-B)	AD B007 713L
MP N-75-8	Dec 1975	Structural Analysis of the New Orleans Inner Harbor Navigational Canal Lock Wall, by P. J. Rieck and R. E. Walker (includes Appendixes A-D)	AD A019 694
* MP N-76-1	Feb 1976	ESSEX - DIAMOND ORE RESEARCH PROGRAM; True Crater and Permanent Displacement Measurements for Simulated Low-Yield Nuclear Explosions, Phase 2, by A. D. Rooke, Jr. (includes Appendixes A-C)	AD B010 488L
* MP N-76-2	Mar 1976	Computer Program for Drawing Finite Element Grids, by P. J. Rieck and R. A. Cole (includes Appendix A)	AD B010 310L
MP N-76-3	Mar 1976	POKEHOLES Cratering Series; Explosive Comparison Tests Conducted at Fort Polk, Louisiana, Fall 1973, by R. V. Gorski (includes Appendixes A-C)	AD A024 160
Unnumbered	Mar 1976	Size and Weight Statistics for Explosion-Produced Granitic Rock Ejecta, by J. N. Strange	
* MP N-76-5	Apr 1976	Preliminary Analysis of a Command and Control Structure, by S. A. Kiger	AD B010 852L

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP N-76-6	May 1976	Deliberate Road Crater Design Test Series: Raystown, Pennsylvania, by H. H. Reed (includes Appendixes A-C)	AD A025 248
* MP N-76-7	Jun 1976	Graphic Portrayal of Discrete Explosion-Produced Crater-Ejecta Characteristics, by A. D. Rooke, Jr.	AD B011 916L
* MP N-76-8	Jun 1976	Expedient Triggering Screens to Defeat High-Explosive Point-Detonating Ammunition, by W. H. Sadler, Jr.	AD B012 101L
MP N-76-9	Jun 1976	Explosive Evaluation: Gelled Nitromethane and Slurry as Military Bulk Explosive Systems, by H. H. Reed (includes Appendix A)	AD A026 955
MP N-76-10	Jun 1976	Correlation of Impact and Explosively Created Ground Shock Phenomena, by M. B. Ford (includes Appendixes A-D)	AD A027 059
* MP N-76-11	Jul 1976	ESSEX - DIAMOND ORE RESEARCH PROGRAM; Ground Motion in the Seismic Region -- Project ESSEX I, Phase 2, by T. M. Tami	AD B013 250L
* MP N-76-12	Sep 1976	ESSEX - DIAMOND ORE RESEARCH PROGRAM; Test Execution Report - ESSEX I, Phase 2: Nuclear Cratering Device Simulation (Project ESSEX), by R. L. Wagner (includes Appendixes A-E)	AD B015 935L
* MP N-76-13	Sep 1976	Blast Door Tests for the Federal Republic of Germany, by R. S. Cummins, Jr. (includes Appendixes A-C)	AD B014 368L
* MP N-76-14	Nov 1976	Pechora-Kama Canal Study, by T. E. Ricketts and G. S. Rubin de la Borbolla (includes Appendixes A-C)	AD B015 378L
* MP N-76-15	Nov 1976	ESSEX - DIAMOND ORE RESEARCH PROGRAM: Ground Motions in the Intermediate Range, ESSEX I, Phase 1: Nuclear Cratering Device Simulation (Project ESSEX), by J. D. Day (includes Appendix A)	AD B015 934L
* Unnumbered	Dec 1976	Antitank Ditching with Explosives, by H. D. Carleton	
* MP N-77-1	Feb 1977	ESSEX - DIAMOND ORE RESEARCH PROGRAM: True Crater and Permanent Displacement Measurements for Simulated Low-Yield Nuclear Explosions, Project ESSEX I, Phase 3, by A. D. Rooke, Jr.	AD B017 943L
* MP N-77-2	Mar 1977	ESSEX - DIAMOND ORE RESEARCH PROGRAM; Cratering Kinetics, Project ESSEX I, Phase 1, by J. F. Dishon (includes Appendixes A-B)	AD B017 904L
MP N-77-3	Apr 1977	Charts for Preliminary Design of Deep Underground Structures Subjected to Dynamic Loads, by J. R. Britt (includes Appendixes A-B)	AD A040 058
* MP N-77-4	Apr 1977	Dynamic Tests of a Model Radome Structure, by J. S. Shore and W. L. Huff (includes Appendixes A-D)	AD B019 827L

\* Statement B. See Preface.



## WEAPONS EFFECTS LABORATORY

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP N-77-4 (Cont)	Jun 1977	Errata Sheet No. 1	
* MP N-77-5	May 1977	An Experiment in the Field Mixing of Bulk Explosives, by W. B. Lane, J. E. Shaler, S. D. Lent, and R. F. Burns	AD B018 811L
* MP N-77-6	Dec 1977	The Use of Vibration/Impedance Measurements to Predict Blast-Induced Structural Vibrations, by T. E. Kennedy, R. E. Walker, and F. B. Safford	AD B024 503L
MP N-77-7	Jul 1977	Explosive Ditching with TNT, by A. M. Muller and H. D. Carleton (includes Appendixes A-D)	AD A042 427
* MP N-77-8	Aug 1977	Field Test of a Buried Hardened Structure Subjected to a Cylindrically Cased Equivalence Charge, by S. A. Kiger and J. R. Hossley	AD B021 168L
* MP N-78-1	Jan 1978	ESSEX - DIAMOND ORE RESEARCH PROGRAM; Tunnel Destruction - A State-of-the-Art Summary, by C. E. Joachim	AD B026 182L
	Dec 1978	Errata Sheet No. 1	
* MP N-78-2	Mar 1978	ESSEX - DIAMOND ORE RESEARCH PROGRAM: Test Execution Report, ESSEX I, Phase 3; Nuclear Cratering Device Simulation (Project ESSEX), by J. E. Shaler (includes Appendixes A-C)	AD B026 675L
* MP N-78-3	Mar 1976	ESSEX - DIAMOND ORE RESEARCH PROGRAM: Apparent Crater Measurements for Simulated Low-Yield Nuclear Explosions, Project ESSEX I, Phases 1 and 2, by A. D. Rooke, Jr.	AD B027 079L
* MP N-78-4	Jun 1978	MISERS BLUFF Series; Phase I, Ground Shock and Airblast Measurements Data Report, by D. W. Murrell (includes Appendixes A-H)	AD B029 720L
MP N-78-5	Jun 1978	Development of Engineering Criteria for Use of Slurry-Type Explosives Against Tactical Structural Targets, by J. M. Watt, Jr.	AD A056 541
* MP N-78-6	Sep 1978	Preliminary Design and Cost Estimates for a Hardened Military Command Center, by J. T. Baylot and S. A. Kiger	
MP N-78-7	Nov 1978	Application of an Implicit Linear Statistical Analysis to the Estimation of the Resistance of a Reinforced Concrete Beam-Column, by P. F. Mlakar	AD A091 373
* MP N-78-8	Dec 1978	ESSEX - DIAMOND ORE RESEARCH PROGRAM; Ground Motions in the Intermediate Range, ESSEX I, Phase 2, by D. W. Murrell and J. D. Day (includes Appendixes A-D)	AD B037 519L
* MP N-78-9	Dec 1978	ESSEX - DIAMOND ORE RESEARCH PROGRAM: Ground Motions in the Intermediate Range, ESSEX I, Phase 3 (includes Appendixes A-B)	AD B037 306L

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

PNE REPORTS

<u>Number</u>	<u>Date</u>	<u>Subject</u>	<u>Title</u>	<u>AD Number</u>
PNE 234F	Oct 1964	SEDAN	Stability of Crater Slopes, by W. E. Strohm, J. S. Ferguson, Jr., and E. L. Krinitzsky	AD 606 948
PNE 300P	Aug 1963	Pre-BUGGY	Scope of Chemical Explosive Cratering Experiment, by E. Graves, W. R. Wray, and R. B. Pierce	AD 417 659
PNE 301F	Aug 1964	Pre-BUGGY	Venting Measurements, by W. R. Wray and R. B. Pierce	
PNE 302	Feb 1965	Pre-BUGGY	Emplacement and Firing of High-Explosive Charges and Crater Measurements, by A. D. Rooke Jr., and L. K. Davis	AD 747 818
PNE 304F	Sep 1963	Pre-BUGGY	Base Surge Analysis, by J. B. Knox and R. Rohrer	
PNE 315F	Jun 1965	Pre-BUGGY II	Studies of the Pre-BUGGY II Apparent Craters, by J. L. Spruill and F. F. Videon	AD 617 884
PNE 322	Apr 1969	BUGGY	Preshot Geologic and Engineering Properties Investigations, by R. J. Lutton, R. W. Hunt, and R. E. Rowland	AD 735 845
PNE 501P	Aug 1964	Pre-SCHOONER	Stem Design, by K. L. Saucier	
PNE 501F	Nov 1964	Pre-SCHOONER	Stem Design and Shotcrete, Grout, and Concrete Support, by K. L. Saucier	
PNE 502F	Mar 1965	Pre-SCHOONER	Crater Measurements, by J. L. Spruill and R. A. Paul	AD 779 533
PNE 503F	Apr 1965	Pre-SCHOONER	Base Surge and Cloud Formation, by Robert Rohrer	
PNE 504F	Sep 1965	Pre-SCHOONER	Strong Motion Seismic Measurements, by L. J. Cauthen, Jr.	
PNE 505P	Sep 1965	Pre-SCHOONER	Preshot Investigations, by R. C. Nugent and D. C. Banks	
PNE 505F	Apr 1967	Pre-SCHOONER	Geologic and Engineering Properties Investigations, by R. J. Lutton, F. E. Girucky, and R. W. Hunt	AD 657 638
PNE 506F	Oct 1968	Pre-SCHOONER	Surface Motion Measurements, by W. G. Christopher and J. E. Lattery	
PNE 507	Oct 1966	Pre-SCHOONER II	Technical Director's Summary Report, by B. C. Hughes	AD 779 532

## WEAPONS EFFECTS LABORATORY

PNE REPORTS

<u>Number</u>	<u>Date</u>	<u>Subject</u>	<u>Title</u>	<u>AD Number</u>
PNE 508	May 1967	Pre-SCHOONER II	Apparent-Crater Studies, by R. H. Benfer	
PNE 509	Dec 1967	Pre-SCHOONER II	Preshot Geologic and Engineering Properties Investigations, by R. J. Lutton, F. E. Girucky, R. W. Hunt, and J. R. Curro, Jr.	
PNE 510	Aug 1967	Pre-SCHOONER II	Design, Construction, and Postshot Evaluation of Concrete Stem for Access Hole, by K. L. Saucier and F. S. Stewart	AD 743 435
PNE 511	Jun 1966	Pre-SCHOONER II	Cloud Development Studies, by W. C. Day and Robert Rohrer	AD 637 746
PNE 512F	Feb 1968	Pre-SCHOONER II	Air-Blast Measurements, by J. W. Reed and L. J. Vortman	AD 735 652
PNE 513	Oct 1968	Pre-SCHOONER II	Surface Motion Measurements, by W. G. Christopher and K. L. Larner	
PNE 514	Apr 1966	Pre-SCHOONER II	Ground Shock Measurements, by L. K. Davis	
PNE 515	Jun 1966	Pre-SCHOONER II	Subsurface Effects Measurements, by M. Heusinkveld and R. E. Marks	
PNE 516	Nov 1967	Pre-SCHOONER II	Postshot Geologic and Engineering Properties Investigations, by A. D. Frandsen	
PNE 527	Jan 1971	SCHOONER	Far-Out Fallout Collection Program, by T. M. Tami, T. A. Gibson, and A. L. Prindle	
PNE 601F	Aug 1965	DUGOUT	Apparent Crater Studies, by J. L. Spruill	AD 735 770
PNE 602F	Feb 1968	DUGOUT	Geologic and Engineering Properties Investigations, by R. J. Lutton	
PNE 609F	May 1965	DUGOUT	Deep Underground Shock Measurements, by J. D. Day	AD 680 910
PNE 610F	Apr 1965	DUGOUT	Concrete, Grout, and Shotcrete Support, and Design and Postshot Evaluation of Stem, by K. L. Saucier	AD 740 662
PNE 713F	Oct 1965	SULKY	Crater Measurements, by F. Videon	
PNE 719P	Jul 1965	SULKY	Preshot Geologic Investigation, by R. C. Nugent and D. C. Banks	

## WEAPONS EFFECTS LABORATORY

PNE REPORTS

<u>Number</u>	<u>Date</u>	<u>Subject</u>	<u>Title</u>	<u>AD Number</u>
PNE 720F	Nov 1966	SULKY	Geologic and Engineering Properties Investigations, by R. J. Lutton and F. E. Girucky	AD 724 163
PNE 904F	Jul 1966	PALANQUIN	Studies of the Apparent Crater, by F. F. Videon	
PNE 905F	Oct 1968	PALANQUIN	Preshot Geologic and Engineering Properties Investigations, by R. C. Nugent and F. E. Girucky	AD 730 735
PNE 957	Mar 1970	CABRIOLET	Engineering Properties Investigations of the Cabriolelet Crater, by A. D. Frandsen	
PNE 966	Oct 1968	CABRIOLET	Preshot Geological Engineering Investigations for Project Cabriolelet, Pahute Mesa, Nevada Test Site, by R. W. Hunt, D. M. Bailey, and L. D. Carter	
PNE 1100	May 1968	Pre-GONDOLA	Seismic Site Calibration, by M. K. Kurtz, Jr., and B. B. Redpath	
PNE 1101	Feb 1967	Pre-GONDOLA	Site-Selection Investigations, by H. A. Jack and W. W. Dudley	AD 735 658
PNE 1102	May 1968	Pre-GONDOLA I	Technical Director's Summary Report, by M. K. Kurtz, Jr.	AD 735 717
PNE 1103	May 1969	Pre-GONDOLA I	Geologic Investigations and Engineering Properties of Craters, by P. R. Fisher, R. J. Kley, and H. A. Jack	AD 735 719
PNE 1104	Sep 1967	Pre-GONDOLA I	Close-In Ground Motion, Earth Stress, and Pore Pressure Measurements, by J. D. Day, D. W. Murrell, and W. C. Sherman	AD 735 669
PNE 1105	Jul 1967	Pre-GONDOLA I	Intermediate Range Ground Motions, by D. V. Power	
PNE 1106	Aug 1967	Pre-GONDOLA I	Structures Instrumentation, by R. F. Ballard, Jr.	AD 735 668
PNE 1107	Dec 1967	Pre-GONDOLA I (Part I)	Crater Studies: Crater Measurements, by R. W. Harlan	AD 735 670
PNE 1107	Feb 1969	Pre-GONDOLA I (Part II)	Crater Studies: Surface Motion, by W. G. Christopher and J. E. Lattery	AD 735 671
PNE 1108	Sep 1967	Pre-GONDOLA I	Cloud Development Studies, by W. C. Day and R. F. Rohrer	AD 735 656

## WEAPONS EFFECTS LABORATORY

PNE REPORTS

<u>Number</u>	<u>Date</u>	<u>Subject</u>	<u>Title</u>	<u>AD Number</u>
PNE 1110	Jul 1967	Pre-GONDOLA I	Lidar Observations of the Pre-GONDOLA I Clouds, by J. W. Oblanas and R. T. H. Collis	AD 735 659
PNE 1111	Jul 1967	Pre-GONDOLA I	Preshot Geophysical Measurements, by R. T. Stearns and J. T. Rambo	AD 735 666
PNE 1112	Feb 1971	Pre-GONDOLA II	Summary Report, edited by W. C. Day	AD 720 602
PNE 1113	Oct 1968	Pre-GONDOLA II	Close-In Ground Motion and Earth Stress, by C. E. Joachim	AD 748 823
PNE 1114	Apr 1970	Pre-GONDOLA III (Phase I)	Summary Report, by J. P. Cress, J. E. Lattery, J. B. Andrews, et al	AD 737 736
PNE 1115	Oct 1968	Pre-GONDOLA II	Intermediate Range Ground Motions for Pre-GONDOLA II and Associated Events, by D. V. Power	
PNE 1116	May 1968	Pre-GONDOLA II	Structures Instrumentation, by R. F. Ballard, Jr.	AD 730 734
PNE 1117	Mar 1971	Pre-GONDOLA III (Phase II)	Summary Report: Connecting Row-Crater Experiment, Edited by J. E. Lattery	AD 735 720
PNE 1118	Jun 1971	Pre-GONDOLA III (Phase II)	Microbarograph Measurements, by J. W. Reed	AD 741 359
PNE 1119	Jan 1968	Pre-GONDOLA II	Airborne Lidar Observations, by R. T. H. Collis and John Oblanas	AD 735 657
PNE 1120	Jan 1972	Pre-GONDOLA III (Phase III)	Connection of a Row Crater to a Reservoir, by B. B. Redpath	AD 737 198
PNE 5001P	Jul 1964		Geology of Buckboard Mesa, by D. C. Banks and R. T. Saucier	AD 462 139
PNE 5003	Feb 1965		Investigation of Manufacture of Aggregate and Riprap by Nuclear Means, by J. M. Polatty, B. J. Houston, R. L. Stowe, and D. C. Banks	AD 697 666
PNE 5004P	Apr 1966		Construction Techniques and Costs for Underground Emplacement of Nuclear Explosives, by W. J. Samuelson, J. R. Hair, and P. R. Fisher	AD 633 511
PNE 5004F	Apr 1969		Construction Techniques and Costs for Underground Emplacement of Nuclear Explosives, by J. L. Hair	AD 689 443
PNE 5005	Nov 1966	DANNY BOY	Engineering - Geologic Investigations, by R. C. Nugent and D. C. Banks	AD 738 346

## WEAPONS EFFECTS LABORATORY

PNE REPORTS

<u>Number</u>	<u>Date</u>	<u>Subject</u>	<u>Title</u>	<u>AD Number</u>
PNE 5006	Aug 1966		Trace Elements in Common Rock Types and Their Relative Importance in Neutron-Induced Radioactivity Calculations, by R. A. Paul and W. C. Day	
PNE 5008	Feb 1968		Distribution of Selected Trace Elements in Rocks, by R. J. Kley	
PNE 5009	Aug 1967		The Formation and Initial Stability of Slopes on Cohesionless Materials, by B. N. MacIver	AD 668 918
PNE 5010	Oct 1967		A Study of Selected Rock Excavations as Related to Large Nuclear Craters, by R. J. Kley and R. J. Lutton	AD 737 737
PNE 5011	Oct 1967		The Formation of a Crater as Observed in a Series of Laboratory-Scale Cratering Experiments, by R. G. Bening and M. K. Kurtz, Jr.	
PNE 5012-I	Feb 1968		Engineering Properties of Craters: Description of Crater Zones and Site Investigation Methods; Report I, by P. R. Fisher	AD 737 734
PNE 5013	Sep 1971		Crater Stability Under the Influence of Large Seismic Motions, by T. J. Shackelford	AD 730 762

## WEAPONS EFFECTS LABORATORY

Research Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
RR 1-4	May 1965	Ray Theory for Energy Transmission in Snow, by J. W. Brown	AD 463 257
RR 1-6		Damage to Model Tunnels Resulting from an Explosively Produced Impulse:	
*	May 1965	Report 1 Test in a Simulated Rock Mass of Medium Strength, by A. J. Hendron, G. B. Clark, and J. N. Strange	AD 371 771L
* RR N-72-1	Mar 1972	Upper Critical Depth Wave Generation, by Akira Sakurai	AD 893 273L

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Memoranda\*

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 65-1	Mar 1965	Computer Code Input and Printout Interpretation for the A. V. Shelton Fallout Model (FLIP), by W. Day and G. A. Morris	
TM 65-2	Apr 1965	Pre-SCHOONER Ground Surface Motion Study, by K. L. Larner	
TM 65-3	May 1965	Surface Geology of the Pre-SCHOONER II Area, by R. A. Paul	
TM 65-4	Aug 1965	Post - Shot Field Investigations, Buckboard Mesa, Nevada Test Site, by A. D. Frandsen  Appendix A Photographs of Postshot Trench Excavation for Pre-SCHOONER Charlie, DUGOUT and SULKY Craters	
TM 65-5	May 1965	Analysis of Knox Fallout Prediction System (KFOC), by G. A. Morris	
TM 65-7	Jul 1965	Ground Water Contamination Study and Evaluation, by R. A. Cooper	
TM 65-8	Nov 1965	Study of the Shape and Slope of Explosion-Produced Craters, by B. C. Hughes, R. H. Benfer, and F. H. Foster	
TM 65-9	Oct 1965	Project ZULU: A One-Pound High Explosive Cratering Experiment in Scalped and Remolded Desert Alluvium, by B. C. Hughes and R. H. Benfer	
TM 65-10	Jul 1965	Analysis of A. V. Shelton Fallout Prediction System (FLIP CODE), by J. E. Lattery	
TM 65-11	Nov 1965	Geologic Examination of the Access Shaft and Explosive Cavity for Project Pre-SCHOONER II, by R. A. Paul	
TM 65-12	Nov 1965	Preliminary Model for Analysis of Nuclear Crater Slope Stability in Homogeneous Medium, by J. W. Peck	
TM 65-13	Nov 1965	A Preliminary Assessment of Overexcavation as a Possible Solution to Potential Slope Stability Problems, by J. W. Peck	
TM 65-15	Nov 1965	Preliminary Report of the Analytic Study of Tide-Induced Currents in a Sea-Level Canal, by D. D. DeFord	
TM 66-2	Jan 1966	The Knox Fallout Prediction System's (KFOC) Response to Changes in Input Parameters Which Define the Activity-Particle Size Distribution, by G. A. Morris	

\* The Technical Memoranda listed on pages W-20 through W-26 are a discontinued series issued by the former Explosive Excavation Research Laboratory.



## WEAPONS EFFECTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 66-3	Feb 1966	Summary of the Opinions of the Technical Associates to the Atlantic-Pacific Interoceanic Canal Study Commission and Opinions of the Consultants to the Waterways Experiment Station Which Are Related to the Nuclear Excavation Cuts, by W. J. Slazak, J. W. Peck, P. R. Fisher, and R. S. Holmes	
TM 66-4	Feb 1966	Early Estimates of Radioactivity in the Fallout Field, by R. A. Cooper	
TM 66-5	Feb 1966	Phenomenology of the Formation of a Crater By Detonation of a One-Pound Charge Buried at a Depth of Burst of Two Feet in the ZULU II Moist Sand, by R. G. Bening and K. L. Larner	
TM 66-6	Aug 1966	The Effects of Inhomogeneities in a Controlled Sand Medium on Small Scale High Explosive Experiments, by W. G. Christopher	
TM 66-7	Nov 1966	Consolidated Report, Operation BREAKUP, FY 66, Ice Cratering Experiments, Blair Lake, Alaska, by M. K. Kurtz, Jr.	
TM 66-8	Sep 1966	Cloud Dimensions for Cratering Explosions, by W. C. Day	
TM 66-11	Jul 1966	A Computer Solution Using the Pillsbury Method for Computation of Tides and Currents in Nuclear Excavated, Conventionally Excavated or Combination Channels, by R. G. Bening	
TM 66-12	Aug 1966	Stem Design for Tactical Emplacement of Nuclear Explosives, by M. K. Kurtz, Jr.	
TM 66-13	Apr 1967	A Model of the Formation of the NEPTUNE Crater, by W. G. Christopher	
TM 66-14	May 1967	Analysis of Surface Motion Phenomena of One-Pound ZULU II Charges of Varying Depth of Burst, by W. G. Christopher	
TM 66-15	Apr 1967	Analysis of the Phenomena Within the Immediate Crater Area Resulting from the Detonation of One-Pound ZULU II Charges, by W. G. Christopher	
TM 66-16	Oct 1966	Tidal Hydraulics - Preliminary Report on the Results of Tidal Hydraulic Computations Performed Using the Pillsbury Method of Solution, by R. G. Bening	
TM 66-17	Oct 1966	Tidal Hydraulics - Hydraulic Characteristics of Tidal Channels Produced by Nuclear Excavation Techniques, by W. J. Slazak	

## WEAPONS EFFECTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 66-18	Oct 1966	Variation of Project ZULU II Crater Dimensions Versus Medium Properties, by R. H. Benfer	
TM 66-19	Nov 1966	Zone of Bulking, Project SULKY, by P. R. Fisher	
TM 66-20	Dec 1966	A Report of the Scope and Preliminary Results of Project Pre-GONDOLA I, by M. K. Kurtz, Jr.	
TM 67-1	Feb 1967	Predicted Dose Rates Within the Nuclear Crater and Lip Area, by W. C. Day	
TM 67-2	Jan 1967	Channel Criteria for the Evaluation of the Tides and Currents in a Nuclear Excavated Sea-Level Canal, by R. G. Bening	
TM 67-3	Mar 1967	Engineering Properties of Craters, by P. R. Fisher	
TM 67-5	Mar 1967	An "L" Shaped Row Charge Cratering Experiment, by W. G. Christopher	
TM 67-6	Apr 1967	The EUCLID Code, a Computer Program for the Calculation of the Nuclear Explosive Requirements for a Nuclear Excavated Channel, by W. R. Bechtell	
TM 67-7	Jan 1967	Trace Elements in Common Rock Types and Their Relative Importance in Neutron-Induced Radioactivity Calculations, by W. C. Day and R. A. Paul	
TM 67-8	Jul 1967	Pre-SCHOONER Target Horizontal Displacement and Velocity Histories, by W. J. Christopher	
TM 67-9	Aug 1967	A Report of the Scope and Preliminary Results of Project Pre-GONDOLA II, Row Charge Cratering Experiment, by M. K. Kurtz, Jr.	
TM 67-10	Jul 1967 Revised Jan 1968	Pre-GONDOLA Seismic Decoupling Series, by R. W. Harlan, W. G. Christopher, and B. B. Redpath	
TM 67-14	Sep 1967	Explosively Producing an Embankment Across a Narrow, Steep-Walled Canyon, by E. H. Kleist	
TM 67-16	Sep 1967	Nuclear Excavation Feasibility Study, Construction of Rockfill Embankment for a Dam, edited and abridged by E. H. Kleist	
TM 67-17	Sep 1967	Site Selection Investigation for a High Explosive Cratering Experiment in Varying Terrain, by A. D. Frandsen	
TM 67-18	Oct 1967	Conceptual Study: Dam Construction in Dimond Gorge, Western Australia, by R. S. Holmes, E. H. Kleist, and M. K. Kurtz, Jr.	

## WEAPONS EFFECTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 67-19	Dec 1967	Concepts of Techniques of Seismic Site Calibration for Project Pre-GONDOLA, by B. B. Redpath	
TM 67-20	Nov 1968	Project ANGLEDZER: Site Selection Investigations, by A. D. Frandsen and R. W. Fleming	
TM 68-1	Feb 1968	The WIND Code: A Computer Program for Calculating and Summarizing Wind Hodographs, by W. R. Bechtell	
TM 68-2	Feb 1968	Concepts of Nuclear Excavation, by E. H. Kleist	
TM 68-3	May 1968	Project Pre-GONDOLA II: Physical Characteristics Studies, Fort Peck Dam Embankment, by R. J. Kley	
TM 68-4	Feb 1968	Effective Yields for Effects Predictions for Row and Array Emplacement of Surface and Buried Nuclear Charges, by W. C. Day	
TM 68-5	Mar 1968	Results of Array Modeling Experiment to Produce Flat Slopes Using the Two Pass Concept	
TM 68-6	Apr 1968	Summary of Nuclear Crater Slope Stability Empirical and Analytical Studies, FY 1963 - FY 1968, by Earth Sciences Group	
TM 68-7	Apr 1968	Preliminary Assessment of Nuclear Crater Slope Stability as Related to the Interoceanic Canal Studies, by B. C. Hughes	
TM 68-8	Jul 1968	A Computer Program for Analyzing the Stability of Nuclear Crater Slopes, by W. R. Bechtell	
TM 68-9	Nov 1968	Project ZULU II: Summary Report of Flat-Slope Array Experiments, by J. P. Cress	
TM 68-10	Jul 1968	Preliminary Report: NCG Pre-GONDOLA III Sixty-Four Pound TNT Flat-Slope Experiments Conducted at Fort Peck, Montana, by J. P. Cress	
TM 68-11	Oct 1968	Sensitivity of Nitromethane and Survivability of a One-Ton Aluminum Sphere Under High Pressure Loading, by J. P. Cress	
TM 68-12	Jan 1969	BORHOL: A Computer Program to Compile Geological Engineering Parameters from NX Borehole Camera Data, by G. Furst and J. F. Fischer	
TM 68-13	Nov 1968	Analysis of the Feasibility of Channel Improvement by Nuclear Excavation at Sergius and Whitestone Narrows, Alaska, by R. W. Mattes	
TM 68-14	Nov 1968	Analysis of Vesic Crater Modeling Experiments, by D. L. Nelson and T. S. Taylor III	

## WEAPONS EFFECTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 68-15	Jan 1969	An Analysis of the Grid Photography Technique as a Means of Determining the Size Distribution of Crater Fallback and Ejecta, by B. D. Anderson II	
TM 68-16	Jan 1969	Preliminary Assessment of the Postshot Engineering and Construction Requirements for the Cape Keraudren Port Development Project, by J. D. Johnson	
TM 69-1	Jan 1969	Preliminary Estimation of the Postshot Interval Required for Radionuclide Concentration in Family Cow Milk to Decay to Acceptable Levels, by A. E. Sowers	
TM 69-3	Feb 1970	Project ZULU II: Harbor Modeling Study, by D. J. Fitchett	
TM 69-5	Apr 1970	A Method for Predicting Final Rubble Size in Explosive Excavations, by J. F. Fischer	
TM 69-6	Jan 1970	General Site Selection Study, by A. D. Frandsen	
TM 69-7	May 1969	Predicted Exposure Rates Within the Nuclear Crater and Lip Area, by T. M. Tami	
TM 69-9	Aug 1970	Estimating the Internal Radiation Dose to Man Via Major Ecological Pathways for Plowshare Nuclear Cratering Events, by A. E. Sowers, L. J. Corsiglia, and R. Vollmerhausen	
TM 69-11	Jul 1970	Summary of Explosive Cratering Performance Tests Conducted at Site 300 During 1969, by R. F. Bourque	
TM 69-12	Jan 1970	Lunar Excavation with Buried Explosives, by R. F. Bourque	
TM 70-1	Mar 1970	Analysis and Reevaluation of Bulking Factors, by A. D. Frandsen	
TM 70-3	Jan 1971	Chemical Explosive Excavation State-of-the-Art, by R. K. Leu	
TM 70-4	Jan 1971	Explosive Excavation on the Moon: The Lunar Surface, Lunar Explosives and Emplacement, Terrestrial Modeling Techniques, and Seismic, Blast, and Ejecta Effects, by R. F. Bourque	
TM 70-5	Feb 1971	Conceptual Lunar Applications of Chemical Explosives, by G. E. Thorne	
TM 70-6	Aug 1970	Training for Chemical Explosives Employment for Lunar Applications, by K. E. Sprague	
TM 70-7	Apr 1971	Analysis of Hydrologic Transport of Tritium, by W. M. Little	

## WEAPONS EFFECTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 70-8	Feb 1971	Rainfall Leaching Model for Fallout Tritium: The RAIN Code, by W. M. Little	
TM 70-11	Aug 1971	Summary of Underwater Cratering Tests Conducted at Site 300 During 1970, by K. T. Sakai and R. F. Bourque	AD A027 426
TM 70-12	Mar 1971	Feasibility of Constructing a Military Harbor Using Nuclear Explosives, by F. F. Warden and T. M. Tami	
TM 70-13	Apr 1971	A Method for Estimating the Bulking Factor of Rubble in Explosive Excavation, by J. C. Struckel	
TM 70-14	Mar 1971	A Review of Material on Predicting Underwater Shock Wave Dynamics and Safe Distances for Underwater Swimmers, by L. J. Corsiglia	
TM 70-15	Oct 1970	User's Manual for Crater Data: A Computer Code for Analyzing Experimental Cratering Tests, by R. F. Bourque	
TM 71-1	Feb 1972	Cost Experience of Explosive Excavation Experiments, by W. J. Wnuk	
TM 71-2	Dec 1971	Explosive Cavity Construction by Drilling and Underreaming, by J. C. Struckel and W. J. Wnuk	
TM 71-3	Sep 1971	Media Classification for Explosive Excavation, by R. H. Gates and C. E. Gardner	
TM 71-4	Dec 1971	Wedge Slope Stability Analysis of Explosive Excavations, by R. E. Zehrbach	
TM 71-5	May 1971	Groundwater and Piezometric Records for Pre-GONDOLA Craters, by T. J. Shackelford	
TM 71-6	Jan 1972	Results of Cylindrical Charge Tests, Site 300, 1970 - 71, by D. R. Gilson and L. W. Mays	
TM 71-7	Feb 1971	Design and Analysis of Spherical Aluminum Containers Used in the MIDDLE COURSE Cratering Experiments, by F. F. Warden	
TM 71-8	Mar 1972	Tree Damage from the TRINIDAD Cratering Experiments C-1, C-2, and C-3, by C. M. Snell	
TM 71-9	Jan 1972	Underwater Explosive Excavation Modeling Tests, by E. H. Kleist and M. R. Florey	
TM 71-10	Mar 1972	Project MINI-MOUND, by T. J. Shackelford	
TM 71-11	Aug 1971	A Study of Emplacement Construction Techniques for the Explosive Excavation of SERGIUS NARROWS, by K. E. Sprague	

## WEAPONS EFFECTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 71-12	Dec 1971	Explosive Excavation Test Facility, Site 300, by W. J. Wnuk	
TM 71-15	Oct 1972	DIAMOND ORE, Phase I	
TM 71-17	Apr 1972	Shock Wave Interaction and Near-Surface Cavitation, Project TUGBOAT, by C. M. Snell	
TM 71-18	Apr 1972	Development of Large Diameter Core Barrel, by T. J. Shackelford	
TM 71-29	Mar 1972	Simulation of Subsurface Nuclear Explosions with Chemical Explosives, by D. E. Burton and E. J. Leahy	
TM 71-30	Jan 1972	User's Manual for CPM Computer Code, by W. J. Wnuk	
TM 72-1	Feb 1972	User's Manual for MIDOL Cost Mirimization Computer Code, by W. J. Wnuk	
TM 72-2	Jan 1972	Anthology on Explosive Excavation, 1968 - 1971, edited by R. H. Gates	
TM 72-4	Apr 1972	User's Manual for MITIM Time Minimization Computer Code, by L. W. Mays	

## WEAPONS EFFECTS LABORATORY

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
Unnumbered		Effects of Explosions in Shallow Water:	
	Dec 1951	Report 1 Cratering Effects in Loess Soil and Surface Waves for a Scaled Water Depth of 200 Ft (AFSWP-131)	
	Mar 1952	Report 2 Cratering Effects in Loess Soil and Surface Waves for a Scaled Water Depth of 30 Ft (AFSWP-343)	AD 223 190
	Jul 1952	Report 3 Cratering Effects in Sand and Surface Waves for a Scaled Water Depth of 200 Ft (AFSWP-132)	
	Aug 1952	Report 4 Cratering Effects in Loess Soil for Scaled Water Depths of 200 and 30 Ft (Addenda to Reports Nos. 1 and 2) (AFSWP-133)	
	Jan 1953	Report 5 Cratering Effects in Sand, Surface Waves, and Air Blast Measurements for a Scaled Water Depth of 30 Ft (AFSWP-134)	AD 003 400
	Apr 1953	Report 6 Cratering Effects in Sand, Surface Waves, and Air-Blast Measurements for a Scaled Water Depth of 200 Ft (AFSWP-135)	AD 019 803
	Jul 1953	Report 7 Cratering Effects in Sand and Loess Soil, Surface Waves and Air-Blast Measurements for Scaled Water Depths of 60 and 100 Ft (AFSWP-136)	AD 021 161
	Sep 1953	Report 8 Cratering Effects in Clay Soils for Scaled Water Depths of 30, 60, 100, and 200 Ft (AFSWP-137)	AD 019 990
	Sep 1953	Report 9 Instrumentation (AFSWP-138)	AD 025 961
Unnumbered	Jul 1952	Soil Conditions Beneath Coastal Harbors - United States	
TM 2-397	Jan 1955	Underwater Explosion Test, Sevier Bridge Reservoir, Utah (WES Portion of Program) (AFSWP-806)	AD 055 434
TM 2-406	Apr 1955	Effects of Explosions in Shallow Water; Final Report (AFSWP-452)	AD 061 696
TM 2-422	Nov 1955	Study of Energy Partitioning for Partially Confined Explosives (AFSWP-788)	AD 085 063
TM 2-427	Feb 1956	Effects of Explosions in Deep Water; Final Report (AFSWP-960)	

## WEAPONS EFFECTS LABORATORY

Technical Reports\*

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
** TR 1	Jun 1966	Military Engineering with Nuclear Explosives, by M. K. Kurtz, Jr., and B. C. Hughes	AD 814 714L
TR 2	Sep 1968	Nuclear Construction Engineering Technology, by B. C. Hughes, R. S. Holmes, B. B. Redpath, et al	AD 685 798
TR 3	Nov 1968	Project ZULU II - Phase I, Single-Charge Calibration Series, by W. W. Johnson and D. L. Nelson	AD 682 736
TR 5	Nov 1968	Project ZULU II - Laboratory-Scale Row-Charge Cratering Series, by M. A. Novak	AD 681 941
TR 6	Oct 1968	Nuclear Excavation Design of a Transisthmian Sea-Level Canal, by B. C. Hughes	AD 681 228
TR 7	Aug 1971	Prediction of Airblast Overpressures from Underground Explosions, by C. M. Snell, D. L. Oltmans, and E. J. Leahy	AD 743 173
TR 8	Oct 1968	The Corps of Engineers Nuclear Explosives Studies for Civil Construction, by B. C. Hughes	AD 680 187
TR 10	Mar 1969	Construction Techniques and Costs for Emplacement of Nuclear Explosives in Disturbed Media, by J. L. Hair	AD 688 170
TR 11	May 1970	Nuclear Explosive Quarrying Potential Within North Pacific Engineer Division	AD 873 452
TR 12	Mar 1970	Conventional Excavation Methods and Costs for Use in Feasibility Studies of Nuclear and Conventional Earthwork Projects, by J. D. Wills and C. O. Brunken	AD 707 439
TR 13	Dec 1970	Quarrying with Nuclear Explosives, by A. S. Vesic	AD 734 332
TR 14	Sep 1969	Natural Rubble Slopes and Their Relevance to Crater Fallback Slopes, by R. J. Lutton	AD 699 412
TR 15		Empirical Study of Behavior of Clay Shale Slopes, by R. W. Fleming, G. S. Spencer, and D. C. Banks	
	Dec 1970	Volume 1	AD 722 249
	Jul 1971	Volume 2 Appendixes	AD 729 849
TR 17	Jun 1969	Project TANK TRAP: A Field Evaluation of Nuclear Terrain Barriers	AD 693 817
TR 18	Mar 1970	A Simple Technique to Determine the Size Distribution of Crater Fallback and Ejecta, by B. D. Anderson II	AD 707 440

\* The Technical Reports listed on pages W-28 and W-29 are a series issued by the former Explosive Excavation Research Laboratory which is now discontinued.

\*\* For Official Use Only.



## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 19	Jan 1970	The NCG Fallout Sealing Model: A Graphic-Numerical Method of Predicting Fallout Patterns for Nuclear Cratering Detonations, by D. E. Burton	AD 704 688
TR 21	Jun 1971	Explosive Excavation Technology, by S. M. Johnson	AD 727 651
TR 22	Sep 1971	Fallout Prediction Procedure for Subsurface ADM's, by Charles Snell, Donald Burton, and John O'Connor	AD 736 852
TR 25	Feb 1971	Study of Explosives for Lunar Applications	AD 724 646
TR 27	Aug 1970	Seepage Characteristics of Explosively Produced Craters in Soil and Rock, by W. C. Sherman and D. C. Banks	AD 715 727
TR 28	Nov 1970	Project Trencher - Evaluation of Aluminized Blasting Agents for Cratering and Hole Springing, by R. F. Bourque	AD 892 049
TR 29	Nov 1970	The Initiation of Failure in Slopes in Overconsolidated Clays and Clay Shales, by I. V. Constantopoulos, J. T. Christian, and R. V. Whitman	AD 738 140
TR 30	Sep 1970	Hydrologic Transport of Radionuclides from Nuclear Craters and Quarries, by Paul Kruger	AD 737 210
TR 33	Nov 1971	Project Sergius Narrows - Summary of Tests on Liesnoi Island, Alaska, 1970, by R. H. Gillespie	AD 740 657
TR 35	Jun 1971	Middle Course I Cratering Series, by D. J. Fitchett	AD 738 139
TR 36	Jul 1971	Analytical and Graphical Methods for the Analysis of Slopes in Rock Masses, by A. J. Hendron, Jr., E. J. Cording, and A. K. Aiyer	AD 738 929
TR 37	May 1971	Summary of Time-Delayed Row-Charge Cratering Experiments, Site 300, 1970, by R. J. Meisinger	AD 734 294
TR 38	Aug 1971	Project Pre-Gondola III, Phase III, Connection of a Row Crater to a Reservoir, by B. B. Redpath	AD 737 198
TR 39	Nov 1971	A Revised Empirical Approach to Airblast Prediction, by C. M. Snell and D. L. Oltmans	AD 742 673
TR 40	Nov 1971	Prediction of Ground-Shock-Induced Airblast Overpressures for Subsurface Explosions from Peak Vertical Spall Velocity, by C. M. Snell and D. L. Oltmans	AD 739 509

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 2-438	Jan 1957	Effects of Stemming on Underground Explosions	AD 121 974
TR 2-467	Nov 1957	Model Determination of Explosion Damage to Concrete Runways (Feasibility Study)	AD 912 603
* TR 2-471	Mar 1958	Feasibility of Reducing Wave Heights by Means of Large Craters	AD 909 045L
TR 2-472	Apr 1958	The Effects of Explosions on Gravity-Type Dams	AD 156 860
TR 2-478	May 1958	Effects of a Soil-Rock Interface on Cratering	AD 161 068
TR 2-482	Jun 1958	Cratering Effects of Surface and Buried HE Charges in Loess and Clay	AD 219 888
TR WT-1420	Jun 1959	Blast Loading and Response of Underground Concrete-Arch Protective Structures (Operation PLUMBBOB - Project 3.1), by W. J. Flathau, R. A. Breckenridge, and C. K. Wiehle	AD B001 855
TR 2-512	Jun 1959	The Effect of the Angle of Incidence on Water-Shock Loading of Underwater Structures	AD 309 534
TR 2-547		Cratering from High Explosive Charges:	
*	May 1960	Report 1 Compendium of Crater Data	AD 238 430L
*	Jun 1961	Report 2 Analysis of Crater Data	AD 263 170L
TR 2-564	Apr 1961	Shock-Wave Attenuation Properties of a Bubble Screen	AD 323 151
TR 2-590	Jan 1962	Design and Analysis of Underground Reinforced-Concrete Arches	AD 274 727
TR 2-597	Feb 1962	Air Blast in an Arctic Environment	AD 274 722
* TR 2-615	Feb 1963	A Quantitative Evaluation of the Underwater Shock Wave Resulting from Surface and Underwater Explosions	AD 336 409L
TR 1-647		Surface Waves Resulting from Explosions in Deep Water:	
*	Jul 1964	Report 1 Summary of Experimental Procedures and Results of Tests at WES Underwater Explosion Test Site	AD 354 598L
*	Apr 1966	Report 2 Summary of Experimental Procedures and Results of Tests at Lake Ouachita, Arkansas, by J. M. Pinkston	AD 374 708L
*	Apr 1968	Report 3 Propagation Characteristics, by C. E. Pace, R. W. Whalin, and J. N. Strange	AD 836 949L
*	Jan 1969	Report 4 Effect of Charge Depth of Submergence on Wave Height and Energy Coupling, by C. E. Pace, R. W. Whalin, A. Sakurai, and J. N. Strange	AD 848 044L

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* TR 1-647 (Cont)	Mar 1970	Report 5 Summary of Results, Comparison with Theory, and Development of a Prediction Method, by C. E. Pace, R. W. Whalin, and J. N. Strange	AD 501 521L
TR 1-649		Structures in an Arctic Environment: Report 1 (not published) Report 2 (not published)	
	Oct 1964	Report 3 Airblast and Subsurface Shock of High-Explosive Tests, by C. E. Joachim	AD 450 624
TR 1-660	Nov 1964	Model Study of a Buried Arch Subjected to Dynamic Loading, by R. K. Tener	AD 452 104
TR 1-665	Nov 1964	Craters Resulting from Repeated Explosions Along a Common Vertical Axis, by J. N. Strange and A. D. Rooke	AD 452 611
TR 1-674	May 1965	An Experimental Study of Arching in Sand, by J. W. McNulty	AD 615 511
TR 1-676	Jun 1965	Static Tests of Reinforced-Concrete Deep Beams, by G. E. Albritton	AD 467 023
TR 1-682	Jul 1965	Response of Horizontally Oriented Buried Cylinders to Static and Dynamic Loadings, by A. F. Dorris	AD 621 340
* TR 1-695	Oct 1965	Some Basic Principles of Scaling Explosion-Produced Damage to Deep Unlined Openings in Rock, by G. B. Clark	AD 368 244L
TR 1-701	Nov 1965	Review of the Literature Pertaining to the Analysis of Deep Beams, by G. E. Albritton	AD 626 589
TR 1-704		Water-Shock Wave Reflection Properties of Various Bottom Materials:	
*	Nov 1965	Report 1 Reflection of a Clayey-Silt Bottom, by Louis Miller	AD 369 080L
*	Sep 1967	Report 2 Reflection Properties of a Consolidated-Sand Bottom, by Louis Miller and J. N. Strange	AD 821 241L
*	Sep 1968	Report 3 Reflection Properties of a Concrete Bottom, by Louis Miller, J. N. Strange, and J. M. Pinkston	AD 842 023L

---

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 1-704 * (Cont)		Report 4 Final Report:	
*	May 1971	Volume I Main Text, by Louis Miller, J. N. Strange, and J. M. Pinkston	AD 884 576L
*	May 1971	Volume II Appendixes, by Louis Miller, J. N. Strange, and J. M. Pinkston	AD 884 577L
TR 1-707	Dec 1965	Description, Proof Test, and Evaluation of Blast Load Generator Facility, by G. E. Albritton	AD 477 079
TR 1-720	Apr 1966	The Elastic Response of Buried Cylinders, Critical Literature Review and Pilot Study, by G. E. Albritton, J. L. Kirkland, T. E. Kennedy, and A. F. Dorris	AD 633 673
TR 1-723	Jun 1966	Initial Evaluation of the Free-Field Response of the Large Blast Load Generator, by T. E. Kennedy, G. E. Albritton, and R. E. Walker	AD 636 729
TR 1-750	Dec 1966	Response of a Buried Prototype Communications Conduit to Static and Dynamic Loading, by A. F. Dorris and G. E. Albritton	AD 646 608
TR 1-758	Feb 1967	Static and Dynamic Laboratory Tests of Unreinforced Concrete Fixed-End Arches Buried in Dry Sand, by G. D. Meyer and W. J. Flathau	AD 650 851
TR 1-759	Mar 1967	Operation Snowball; Project 3.6 - Earth Motion Measurements, by D. W. Murrell	AD 649 769
TR 1-768		Dynamic Test of a Model Flexible-Arch-Type Protective Shelter:	
	Apr 1967	Report 1 Pilot Test, by T. E. Kennedy and J. T. Ballard	AD 651 349
TR 1-770		Nuclear Weapons Effects on Dams and Other Submerged and Semisubmerged Hard Targets:	
*	Apr 1967	Report 1 Literature Survey and Proposed Research to Study Damage from Contact Burst, by L. K. Davis and A. D. Rooke	AD 813 982L
TR 1-771		Water Shock Waves Resulting from Explosions Above an Air-Water Interface:	
*	Apr 1967	Report 1 Results of a Theoretical Investigation, by Akira Sakurai and J. M. Pinkston	AD 814 396L
*	May 1970	Report 2 Experimental Study, by Louis Miller, J. M. Pinkston, and J. N. Strange	AD 870 820L

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 1-789	Jul 1967	A Dynamic Ultimate Strength Study of Simply Supported Two-Way Reinforced Concrete Slabs; Final Report, by D. R. Denton	AD 658 749
TR 1-794	Sep 1967	Shock Transmission Through Ice and Snow, by C. E. Joachim	AD 659 774
TR 1-797	Sep 1967	The Dynamic Response of Buried Concrete Arches, Project 3.2, Operation Snowball, by N. Palacios and T. E. Kennedy	AD 661 632
TR 1-801	Nov 1967	Development of On-Structure Stress Gages, by R. W. Faust and J. K. Ingram	AD 664 127
TR 1-807	Jan 1968	Similitude Study of Flexible Buried Arches Subjected to Blast Loads, by J. P. Balsara	AD 666 204
TR 1-813	Jan 1968	The Stability During Construction of Three Large Underground Openings in Rock, by E. J. Cording	AD 666 183
TR 1-814	Feb 1968	Development of a Free-Field Soil Stress Gage for Static and Dynamic Measurements, by J. K. Ingram	AD 666 769
TR 1-821	Apr 1968	Behavior of Flexible Cylinders Buried in Sand Under Static and Dynamic Loading, by G. E. Albritton	AD 670 015
* TR N-68-1	Aug 1968	Design, Construction, and Evaluation of Protective Military Structures, by G. L. Carre	AD 839 513L
TR N-69-1	Jan 1969	Modeling of Beams and Arches Made from Processed Snow and Subjected to Static Loads, by J. M. Watt	AD 681 909
TR N-69-2		Response of Deep Two-Way-Reinforced and Unreinforced Concrete Slabs to Static and Dynamic Loading:	
*	Mar 1969	Report 1 Review of the Literature and Nuclear Weapons Effects Pertaining to Deep Slabs, by G. E. Albritton and K. M. Cole	AD 849 966L
*	Oct 1969	Report 2 The Dynamic Response of Deep Slabs, Project Hercules, by G. E. Albritton and K. M. Cole	AD 861 163L
*	Nov 1969	Report 3 Static Tests of Deep Slabs Having a Span-to-Thickness Ratio of 4.12, by K. M. Cole, G. E. Albritton, and J. E. Beavers	AD 863 637L
*	Nov 1969	Report 4 Mine Shaft Series, Mine Under Event; Program 3 - Structural Response, Deep-Slab Tests, by G. E. Albritton, J. P. Balsara, and D. M. Bayer	AD 862 558L
*	Sep 1970	Report 5 Static Tests of Deep Square Composite Slab, by J. E. Beavers and G. E. Albritton	AD 877 404L

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR N-69-2 * (Cont)	Sep 1970	Report 6 Mine Shaft Series, Mineral Rock Event, Program 3 - Structural Response Studies, Deep-Slab Tests, Phase 2, by J. M. Watt, J. P. Balsara, and G. E. Albritton	AD 877 405L
*	May 1971	Report 7 Static Tests of Deep Slabs Having Various Span-to-Thickness Ratios, by J. E. Beavers and G. E. Albritton	AD 884 574L
*	Jun 1974	Report 8 Dynamic Tests of Deep Slabs Having a Span-to-Thickness Ratio of 4.12, by J. M. Watt, Jr.	AD 920 839L
*	Jul 1973	Report 9 Summary Report, by G. E. Albritton and R. D. Crowson	AD 912 711L
TR N-69-3		Shock Waves Resulting from Explosions at an Air-Water Interface:	
*	May 1969	Report 1 Analytical Study, by Akira Sakurai	AD 854 010L
*	Jan 1971	Report 2 Experimental Study, by L. Miller and J. M. Pinkston, Jr.	AD 514 070L
TR N-69-4		Runup Characteristics of Explosion-Generated Waves in Major Harbor Areas:	
*	Jun 1969	Report 1 Wave Intrusion Into Monterey Harbor, California, by D. R. Bucci and R. W. Whalin	AD 854 998L
*	Sep 1970	Report 2 Methodology for Conducting Runup Tests in a Distorted Model and Wave Intrusion Into San Diego Bay, California, by D. R. Bucci and R. W. Whalin	AD 877 123L
* TR N-69-5	Nov 1969	Critical Charge Standoff Distances for Destroying Various Types of Bridge Piers, by J. N. Strange, L. Miller, and D. R. Bucci	AD 506 471
TR N-69-6	Oct .969	Elastic Response of Shock-Isolated Cylinders Buried in a Dense, Dry Sand, by D. C. Foster	AD 696 083
* TR N-69-7	Nov 1969	Dynamic Response of a Small Shear Wall Structure, by J. D. Bakos	AD 863 820L
TR N-69-8		Army Aircraft Protective Structures Designs:	
	Nov 1969	Report 1 Helicopter Revetment Systems Using Field-Available Materials for Protection Against Weapon Fragmentation, by G. L. Carre and W. L. Huff	AD 861 853

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR N-69-8 * (Cont)	Sep 1970	Report 2 Weapons Effects and Vulnerability Analyses -- Mortars, by A. D. Rooke, Jr., C. A. Miller, and H. D. Hardcastle	AD 512 410L
	Aug 1971	Report 3 Response of Selected Materials to High-Speed Fragment Impact, by J. W. Brown and W. G. Dykes	AD 730 673
*	Nov 1971	Report 4 Fragmentation Tests of Selected Statically Detonated Mortar and Rocket Rounds, by G. L. Carre	AD 889 678L
*	Apr 1972	Report 5 Weapons Effects and Vulnerability Analyses -- Rockets, by H. D. Hardcastle and H. L. Knudson	AD 520 665L
*	Mar 1972	Report 6 Weapons Effects and Vulnerability Analyses -- Parking Areas, by A. D. Rooke, Jr.	AD 520 259L
*	Jan 1972	Report 7 Evaluation of Thin-Walled Revetments, by G. L. Carre	AD 891 443L
*	Jun 1972	Report 8 Analysis, Construction, and Evaluation of a Large Hardened Arch Shelter, by J. P. Balsara, et al.	AD 901 053L
*	Jun 1972	Report 9 Design, Construction, and Evaluation of Small Shelters, by B. B. Hoot, et al.	AD 901 054L
TR N-70-1	Dec 1970	Strength and Behavior of Reinforced Concrete Slab-Column Connections Subjected to Static and Dynamic Loadings; Final Report, by M. E. Criswell	AD 717 308
TR N-70-3		Subscale Static Tests Closure Analysis and Test Program:	
*	Jan 1970	Report 1 Data Report for First-Phase Tests, by J. M. Watt	AD 865 527L
*	Apr 1970	Report 2 Data Report for Second-Phase Tests, by J. M. Watt	AD 873 550L
* TR N-70-4	Feb 1970	Mine Shaft Series, Subtask N123, Calibration Cratering Series, by L. K. Davis	AD 867 467L
* TR N-70-5	Feb 1970	Results of Surface Wave Experiments, Mono Lake Explosion Test Series, 1965, by J. M. Pinkston, F. W. Skinner, and J. N. Strange	AD 867 008L
TR N-70-6	Mar 1970	Dynamic Response of a Model Buried Field Shelter, Project LN31A, Operation Prairie Flat, by T. E. Kennedy	AD 704 957

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR N-70-7		An Experimental Investigation of Soil-Structure Interaction in a Cohesive Soil:	
	Mar 1970	Volume I, by G. E. Jester	AD 706 210
	Mar 1970	Volume II, by G. E. Jester	AD 706 211
* TR N-70-8	Mar 1970	Mine Shaft Series, Events Mine Under and Mine Ore, Subtask N121, Crater Investigations, by L. K. Davis	AD 871 472L
* TR N-70-9	Apr 1970	Surface Waves Resulting from Explosions Above a Water Surface, by C. E. Pace	AD 869 576L
TR N-70-10	Apr 1970	Survey of Gulf Coast Structural Damage Resulting from Hurricane Camille, August 1969; Final Report, by M. E. Criswell and R. S. Cummins	AD 707 941
* TR N-70-11	Jul 1970	In-Structure Motion Measurements, Project LN315, Operation Prairie Flat, by T. E. Kennedy	AD 875 023L
* TR N-70-12	Aug 1970	Mono Lake Explosion Test Series, 1965, Analysis of Surface Wave and Wave Runup Data, by R. W. Whalin, C. E. Pace, and W. F. Lane	AD 876 073L
TR N-70-14	Sep 1970	Distant Plain Events 6 and 1A, Project 3.02A, Earth Motion and Stress Measurements, by D. W. Murrell	AD 716 769
* TR N-71-1	Feb 1971	In-Structure Motion Studies for Shallow Buried Protective Facilities; Phase IIB, by T. E. Kennedy	AD 882 988L
TR N-71-2	Apr 1971	Dynamic Tests of Large Reinforcing Bar Splices, by W. J. Flathau	AD 723 045
TR N-71-3	May 1971	Project Officer's Final Report, Operation Distant Plain, Events 1, 2A, 3, 4, and 5; Project 3.02A, Earth Motion and Stress Measurements, by J. K. Ingram	AD 725 534
* TR N-71-6	Jun 1971	Portable Bunker Tests and Evaluation, by B. B. Hoot	AD 885 285L
TR N-71-7	Jun 1971	Digital Filters for Explosion Effects Analysis, by H. D. Carleton	AD 725 993
TR N-71-8	Jul 1971	Dynamic Response of Concrete Arch Bunkers; Event Dial Pack, Project LN314A, by R. K. McGrath	AD 726 969
TR N-71-9	Jul 1971	The Dynamic Response of a Simulated Buried Arch to Blast Loading, by T. E. Kennedy	AD 727 678
* TR N-71-10	Jun 1971	Fragment Defeating Capabilities of Plastic Armor, by W. W. Kakei	AD 887 621L
* TR N-72-1	Jan 1972	Mine Shaft Series, Events Mine Under and Mine Ore; Subtask SS222, Ground Motion and Stress Measurements, by C. E. Joachim	AD 891 597L

\* Statement B. See Preface.



## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR N-72-2	Feb 1972	Operation Prairie Flat, Project LN 302: Earth Motion and Stress Measurements, by D. W. Murrell	AD 738 138
* TR N-72-3	Feb 1972	Generation of Water Surface Waves by Multiple Explosions, by C. E. Pace and F. W. Skinner	AD 892 377L
TR N-72-4		Bridge Response to Explosion-Produced Water Plumes:	
*	Feb 1972	Report 1 Physics of the Plume in Deep Water, by W. H. McAnally, Jr., and R. L. Rand, Jr.	AD 519 529L
*	Jan 1974	Report 2 Physics of the Plume in Shallow Water, by D. G. Outlaw and J. N. Strange	AD 917 077L
	Mar 1974	Errata Sheet No. 1	
* TR N-72-5	Feb 1972	Subsurface Sensors for Measuring Surface Waves, Mono Lake Explosion Test Series, 1969, by J. R. Houston and D. R. Bucci	AD 892 366L
TR N-72-6	Apr 1972	Operation Mine Shaft, Mineral Rock Event, Far-Out Ground Motions from a 100-Ton Detonation Over Granite, by D. W. Murrell	AD 741 771
TR N-72-7		Fundamental Studies of Medium-Structure Interaction:	
	Jun 1972	Report 1 Finite Element Analysis of Buried Cylinders, by J. L. Kirkland and R. E. Walker	AD 743 862
* TR N-72-9	Sep 1972	Shock Wave Propagation in Shallow Water, by Louis Miller and J. N. Strange	AD 904 283L
TR N-72-10	Nov 1972	Design and Testing of a Blast-Resistant Reinforced Concrete Slab System, by M. E. Criswell	AD 755 096
TR N-72-12		An Assessment of the State-of-the-Art for Vulnerability and Hardness Analysis of Ballistic Missile Defense Facilities:	
*	Dec 1972	Chapter 1 Introduction, by T. E. Kennedy	AD 915 366L
*	Dec 1972	Chapter 4 Ejecta, by A. D. Rooke and J. W. Meyer	AD 915 372L
	Mar 1973	Errata Sheet No. 1	
*	Dec 1972	Chapter 6 Nuclear Radiation, by L. S. Abbott	AD 915 373L
TR E-72-16	Apr 1972	Estimating Water-Shock-Induced Airblast from Detonations in a Medium Overlain with Water, by C. M. Snell	AD 755 099
TR E-72-23	Feb 1972	Project TUGBOAT: Explosive Excavation of a Harbor in Coral, by W. C. Day	AD 754 534

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR E-72-24	Jun 1972	Hole Springing, by R. H. Gillespie	AD 755 097
TR E-72-26	Jun 1972	Construction of Nuclear Geostorage Facilities for Petroleum Products, by K. E. Sprague	AD 755 100
TR E-72-31	Dec 1972	Cratering in Layered Media, by A. S. Vesic, N. M. F. Ismael, and Kul Bhushan	AD 755 098
TR E-72-32	Jul 1972	Annotated Bibliography of Explosive Excavation Related Research	AD 757 157
TR E-73-1	Jul 1972 Revised	Project Trinidad - Explosive Excavation Tests in Sandstone and Shale, by B. B. Redpath	AD 767 480
TR N-73-1	Apr 1973	Behavior of Stiff Cylinders Buried in Sand Under Static Loading, by C. D. Norman and J. D. Prendergast	AD 760 434
TR E-73-2	May 1973	Military Engineering Applications of Commercial Explosives: An Introduction, by Joseph Briggs	AD 763 177
* TR N-73-2	Apr 1973	Operation Mine Shaft; Ground Shock from Underground and Surface Explosions in Granite, by D. W. Murrell and H. D. Carleton	AD 910 114L
TR E-73-3	Jul 1973	Middle Course II Cratering Series, by K. E. Sprague	AD 765 436
* TR N-73-3	May 1973	Event Mine Throw I: Cratering Effects of a Multiton Near-Surface Detonation in Desert Alluvium, by B. L. Carnes and J. A. Conway	AD 910 941L
TR E-73-4	Aug 1973	Seismic Refraction Exploration for Engineering Site Investigations, by B. B. Redpath	AD 768 710
TR N-73-4	May 1973	Operation Dial Pack, Project LN 305: Earth Motion and Stress Measurements in the Outrunning Region, by D. W. Murrell	AD 762 172
TR E-73-5	Oct 1973	Project Drum Inlet: Explosive Excavation in Saturated Sand, by C. M. Snell and R. H. Gillespie	AD 769 581
TR N-73-5	Jul 1973	Influence of Backfill Properties on the Collapse of Pipes Under Dynamic Loads, by J. L. Drake and C. E. Joachim	AD 765 432
	Oct 1973	Errata Sheet No. 1	
TR E-73-6	Oct 1973	Explosive Selection and Fallout Simulation Experiments: Nuclear Cratering Device Simulation (Project Diamond Ore), by J. M. O'Connor	AD 776 361
TR N-73-6	Sep 1973	Behavior of Lined Openings in Jointed and Unjointed Model Rock Masses, by J. G. Wallace	AD 767 543

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR N-73-7	Oct 1973	Mathematical Model for Describing Stress Wave Propagation in a Jointed Rock Mass, by J. L. Drake	AD 769 582
TR N-73-8	Dec 1973	Dynamic Strength Study of Small, Fixed-Edge, Longitudinally Restrained, Two-Way Reinforced Concrete Slabs; Final Report, by W. M. Brown and M. S. Black	AD 774 848
* TR N-73-9	Dec 1973	Evaluation of SAFEGUARD System Perimeter Acquisition Radar Building Shear Key Connections, by J. P. Balsara and J. R. Hossley	AD 916 585L
TR E-74-1	Jan 1974	Project Trinidad: Explosive Excavation of Railroad Cuts 2 and 3 by Mounding and Directed Blasting, by J. E. Lattery	AD 775 824
TR N-74-1	Jan 1974	Cratering by Explosions: A Compendium and an Analysis, by A. D. Rooke, Jr., B. L. Carnes, and L. K. Davis	AD 8024 657
TR N-74-2	Mar 1974	Vibration Characteristics of the North Fork Dam Model, by J. P. Balsara, R. E. Walker, and J. Fowler	AD 777 548
TR E-74-3	Dec 1974	Fallout Simulation: Nuclear Cratering Device Simulation (Project DIAMOND ORE), by E. J. Leahy, D. Oltmans, C. M. Snell, T. J. Donlan, and W. B. Lane	AD A006 295
TR N-74-3	Apr 1974	Earth Motion and Stress Measurements, Project LN 302, Operation Dial Pack, by D. W. Murrell	AD 779 505
TR N-74-4	May 1974	Application of Field Available Materials to Fortifications, by G. L. Carre	AD 780 735
* TR N-74-5	Aug 1974	Evaluation of Field Fortifications, by B. B. Hoot, et al.	AD 921 985L
* TR N-74-6	Sep 1974	Shock-Wave Reflection Characteristics of a Typical Sea Bottom, by Louis Miller and J. N. Strange	AD 922 866L
* TR N-74-7	Sep 1974	Expedient Field Fortifications for Use Against Nuclear Weapons, by T. E. Kennedy, J. W. Ball, B. B. Hoot, and P. J. Rieck	AD 923 220L
* TR N-74-8	Dec 1974	Investigation of Idealized Silo Motions, by C. E. Pace and R. E. Walker	AD 8000 947L
TR E-75-1	Jan 1975	Project Lost Creek: Field Tests of Mounding and Controlled Blasting, by C. C. McAneny (includes Appendixes A-H)	AD A007 156
* TR N-75-1	Feb 1975	Middle Gust Calibration Shots; Ground Motion Measurements, by J. D. Day, J. H. Stout, and D. W. Murrell (includes Appendixes A-I)	AD 8002 758L
TR E-75-2	Jun 1975	Project R. D. BAILEY Experimental Excavation Program, by W. R. Bechtell (includes Appendixes A-D)	AD A013 388

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR N-75-2	Jun 1975	Collapse Strength of a Two-Way-Reinforced Concrete Slab Contained Within a Steel Frame Structure, by W. L. Huff (includes Appendixes A-C)	AD A012 825
TR N-75-3	Jul 1975	Digital Filters for Earthquake Site Studies, by H. D. Carleton	AD A014 194
* TR N-75-4	Sep 1975	ESSEX - DIAMOND ORE RESFARCH PROGRAM; ESSEX VI - Effects of Low-Yield Nuclear Explosions on Airfields and Railway Systems, Calendar Year 1973 Experimental Effort, by L. K. Davis	AD B007 658L
TR N-75-5	Oct 1975	Effect of Charge Shape on Crater Dimensions, by J. N. Strange (includes Appendixes A-B)	AD A017 291
	Jan 1976	Errata Sheet No. 1	
* TR N-75-6	Nov 1975	Mechanical Impedance Tests of Prototype and Model Concrete Arch Aircraft Shelters, by R. D. Crowson (includes Appendixes A-C)	AD B008 214L
TR N-76-1	Jun 1976	Dredged Sediment Movement Tracing in San Francisco Bay Utilizing Neutron Activation, by E. J. Leahy, W. B. Lane, T. M. Tami, and others	AD A026 84 <sup>A</sup>
	May 1976	Appendix A San Francisco Bay Sampling Data, by E. J. Leahy, W. B. Lane, T. M. Tami, and others	AD A027 133
TR N-76-3	Mar 1976	Dynamic Response Characteristics of a Model Arch Dam, by C. D. Norman, R. D. Crowson, and J. P. Balsara	AD A024 301
TR N-76-4	Mar 1976	Final Report on a Calculational Parameter Study of Soils Typical of Some ESSEX I Cratering Sites, by M. F. Goodrich, J. B. Bryan, J. M. Thomsen, and C. M. Snell (includes Appendix)	
* TR N-76-5	Apr 1976	Analysis and Modeling of Buried Vertical Cylinders Under Dynamic Loading (includes Appendixes A-B)	AD B011 479L
	Aug 1976	Errata Sheet No. 1	
TR N-76-6	May 1976	Development and Evaluation of Corrugated Metal Fighting Hole Cover Designs, by J. W. Ball	AD A025 697
* TR N-76-7	Jun 1976	Design of Earth-Covered Structures to Defeat Contact Burst Rounds, by D. R. Bucci and P. F. Mlakar	AD B012 031L
TR N-76-9	Sep 1976	A Method for Designing Deep Underground Structures Subjected to Dynamic Loads, by J. L. Drake and J. R. Britt	AD A030 601

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* TR N-76-10	Dec 1976	ESSEX - DIAMOND ORE RESEARCH PROGRAM; Damage Predictions for Contact Bursts on Reinforced Concrete Bridge Piers, Project ESSEX III, by J. W. Ball (includes Appendixes A-B)	AD B016 101L
TR N-76-11	Dec 1976	Explosive Tests of Airport Lockers, by D. R. Coltharp	
TR N-77-1	Mar 1977	Comparison of Vibration Test Results for a Model and Prototype Arch Dam, by R. D. Crowson and C. D. Norman	AD A038 060
TR N-77-2		Federal Republic of Germany Structures Test Program, DICE THROW Event:	
*	Jun 1977	Report 1 Pretest Planning and Analyses, by J. M. Watt, Jr., Gerhard Zahlmann, and R. A. Cole (includes Appendixes A-E)	AD B019 367L
*	Oct 1978	Report 2 Construction and Test Data, by J. M. Watt, Jr., and R. R. Kaufmann (includes Appendix A)	AD B032 566L
*	Oct 1979	Report 3 Results of Posttest Analysis, by J. M. Watt, Jr., R. R. Kaufmann, and M. K. McVay	AD B042 708L
*	Aug 1979	Report 4 Geotechnical Investigation, by A. E. Jackson, Jr., and B. R. Phillips	AD B042 466L
*	Nov 1979	Report 5 Small-Scale High-Explosive Tests, by R. S. Cummins and G. E. Albritton	AD B043 878L
* TR N-77-3	Dec 1977	ESSEX - DIAMOND ORE RESEARCH PROGRAM; Aircraft Shelter Response, Project ESSEX V, by R. D. Crowson (includes Appendixes A-C)	AD B024 716L
* TR N-77-4	Aug 1977	ESSEX-DIAMOND ORE RESEARCH PROGRAM, A Preliminary Assessment of the Radiation Simulation Experiments of Project ESSEX I, by N. J. Adams, W. B. Lane, and L. C. Webster (includes Appendixes A-I)	AD B021 646L
TR N-77-5	Sep 1977	Effects of Instrument Canister Placement Conditions on Ground Shock Measurements, by J. K. Ingram and M. B. Ford (includes Appendixes A-D)	AD A045 999
TR N-77-6		CENSE Explosion Test Program:	
	Sep 1977	Report 1 CENSE 1, Explosions in Sandstone, by J. K. Ingram (includes Appendixes A-C)	AD A046 147
	Oct 1977	Errata Sheet No. 1	
	Dec 1977	Report 2 CENSE 2, Explosions in Soil, by J. K. Ingram (includes Appendixes A-C)	AD A050 348
TR N-78-1	Apr 1978	Expedient Upgrading of Existing Structures for Fall-out Protection, by W. L. Huff	AD A053 763

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* TR N-78-2	Aug 1978	ESSEX - DIAMOND ORE RESEARCH PROGRAM; Vibration Tests and Analyses of ESSEX V Model Structures, by R. D. Crowson (includes Appendixes A-B)	AD B032 132L
* TR N-78-3	May 1978	ESSEX - DIAMOND ORE RESEARCH PROGRAM; Structure-Medium Interaction and Structural Response Calculations for the ESSEX Phase 3 Event, by S. H. Pang and J. Isenberg (includes Appendix I)	AD B030 790L
TR N-78-4	Aug 1978	Computer Modelling of Jointed Rock Masses, by Tidu Maini, Peter Cundall, Joaquin Marti, Peter Beresford, Nigel Last, and Margaret Asgian (includes Appendixes I-XVI)	AD A061 658
	Jan 1979	Errata Sheet No. 1	
TR N-78-5		ESSEX - DIAMOND ORE RESEARCH PROGRAM; Summary Report of the ESSEX Program:	
*	Dec 1978	Volume I Phenomenology and Effects, by J. N. Strange, et al	AD B035 227L
*	Apr 1979	Volume II Target Response Studies, by J. N. Strange, et al	AD B040 512L
* TR N-78-7	Oct 1978	Static Test of a Hardened Shallow-Buried Structure, by S. A Kiger (includes Appendix A)	AD B033 103L
* TR N-78-8	Dec 1978	Static Loading of Shallow-Buried Model Cylinders, Phase I of III, by V. T. Cost and J. M. Watt, Jr. (includes Appendix A)	AD B033 120L
* TR N-78-9	Dec 1978	Static Loading of Shallow-Buried Model Cylinders, Phase II or III, by V. T. Cost and J. M. Watt, Jr. (includes Appendix A)	AD B034 151L

---

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		AMMAN & WHITNEY, New York, New York	
CR 2-19	Aug 1956	Design Report for Three Basic Types of Underground Structures	
		BARODYNAMICS, INC., Georgetown, Colorado	
CR 2-39	Mar 1960	Application of the Livingston Crater Theory to Blasts in Loess and Clay, by C. W. Livingston	AD 234 078
		BOYNTON ASSOCIATES, La Canada, California	
CR 2-35	May 1959	Final Report Feasibility Study, Dynamic Load Generator Capable of Subjecting Structures and Soils to Loads Similar to Those Created by a Nuclear Explosion	
CR 2-44		Final Report:	
	Aug 1960	Part I Design of Blast Load Generator Capable of Subjecting Structures and Soils to Loads Similar to Those Created by Nuclear Explosion	
	Aug 1960	Part II Structural Analysis of Blast Load Generator Capable of Subjecting Structures and Soils to Loads Similar to Those Created by a Nuclear Explosion	
CR 2-54	Oct 1962	Final Report Technical Consultation During Fabrication of the Steel Portion of the Large Blast Load Generator	
CR 2-69	Mar 1963	Final Report Design of the Large Blast Load Generator Operational Controller System, Evaluation of Pressure Transducers, Manufacture of the Controller, Controller Operation Manual	
CR 1-97	Nov 1960	Operation Manual for 250 psi 4-Foot Diameter Dynamic Load Generator	
CR 1-113	Jun 1962	Final Report Technical Consultation on the Construction of the Central Firing Station, Large Blast Load Generator Facility	
CR 1-128	Jun 1963	Final Report Proof Testing Large Blast Load Generator, First Phase	AD 757 418

## WEAPONS EFFECTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		UNIVERSITY OF CALIFORNIA, Berkeley	
CR 1-175	Jan 1968	A Computer Program for the Dynamic Stress Analysis of Underground Structures, by E. L. Wilson	AD 832 681
Unnumbered	Dec 1969	The Behavior of Sands Under Seismic Loading Conditions, by M. L. Silver and H. R. Seed (Earthquake Engineering Research Center, Report No. EERC 69-16)	AD 714 982
CR N-70-1	Jan 1970	A Nonlinear Finite Element Code for Analyzing the Blast Response of Underground Structures, by Iraj Farhoomand and Edward Wilson	AD 703 920
Unnumbered	Apr 1972	Seepage and Groundwater Effects Associated with Explosive Cratering, by J. M. Duncan, P. A. Witherspoon, J. K. Mitchell, D. J. Watkins, J. H. Hardcastle, and J. C. Chen (Institute of Transportation and Traffic Engineering, Report No. TE-72-2)	AD 782 356
		GEORGE B. CLARK AND ASSOCIATES, Rolla, Missouri	
CR 1-170	Apr 1967	A Comparison of Plane and Spherical Transient Voigt Waves with Explosion Generated Waves in Rock Masses, by G. B. Clark, G. B. Rupert, and J. E. Jamison	AD 660 340
		ENGINEERING-PHYSICS COMPANY, Rockville, Maryland	
CR 2-49		Analysis of Bubble Screen Phenomena:	
	Mar 1962	First Bi-monthly Report, by Vincent Cushing and Robert Heller	
	Jun 1962	Second Bi-monthly Report, by Vincent Cushing and Robert Heller	
	Sep 1962	Third Bi-monthly Report, by V. J. Cushing	
		GENERAL AMERICAN TRANSPORTATION CORPORATION, Niles, Illinois	
CR N-69-2	May 1969	Theory and Operation Manual, 1500 psi Dynamic Load Simulator, by R. J. Klima and L. E. Fugelso	AD A040 178



## WEAPONS EFFECTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		HOLMES & NARVER, INC., Los Angeles, California	
CR 2-21	Oct 1956	Analysis Report for Basic Types of Underground Structures	
CR 2-29	Apr 1958	Post-Shot Analysis for Project 3.1, Operation Plumbbob	
		ILLINOIS INSTITUTE OF TECHNOLOGY RESEARCH INSTITUTE, Chicago	
CR 1-90	Jul 1964	Evaluation and Analysis of Central Firing Station of WES Large Blast Load Generator, by A. Longinow	AD 450 954
CR 1-105	Nov 1964	A Miniature Piezoelectric Gage for Static and Dynamic Soil Stress Measurement, by E. T. Selig and R. A. Wetzel	AD 453 457
CR 1-107	Mar 1965	Stress and Strain Distributions in a Long Cylindrical Shell with Arbitrary Pressure and Shear Loadings Im- posed on the Outer Surface, by W. F. Riley	AD 672 499
CR N-71-1		Comparison of a Soil/Structure Interaction Formulation with Experimental Data for the SAFEGUARD Power Plant:	
*	Sep 1971	Volume I, by R. R. Robinson	AD 894 677L
*	Sep 1971	Volume II, by R. R. Robinson	AD 894 678L
		UNIVERSITY OF ILLINOIS, Urbana	
CR N-69-1		Geomechanical Model Study of the Behavior of Under- ground Openings in Rock Subjected to Static Loads:	
	Oct 1969	Report 1 Development of Modeling Techniques, by R. E. Heuer and A. J. Hendron	AD 697 735
	Feb 1971	Report 2 Tests on Unlined Openings in Intact Rock, by R. E. Heuer and A. J. Hendron (includes Ap- pendixes A-C)	AD 722 830
	Jun 1972	Report 3 Tests on Lined Openings in Jointed and Intact Rock, by A. J. Hendron, Paul Engeling, A. K. Aiyer, and Appendix by S. L. Paul	AD 745 212
		MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge	
* CR 2-40	Apr 1960	Modeling and Analysis Techniques for Evaluating the Effects of Dynamic Loading on Gravity Dams, by M. J. Holley, H. T. Miyamoto, and H. D. Smith	

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		McDONNELL DOUGLAS ASTRONAUTICS COMPANY, West Huntington Beach, California	
CR N-73-2	Dec 1973	Research Study of Ejecta Impact Parameters	AD A038 106
		NATHAN M. NEWMARK AND ASSOCIATES, Urbana, Illinois	
CR 2-41		Analysis and Design of Flexible Underground Structures: Interim Report:	
	May 1960	Volume I, by N. M. Newmark, J. W. Briscoe, and J. L. Merritt	
	Oct 1962	Final Report; First Phase, by N. M. Newmark, J. W. Briscoe, and J. L. Merritt	AD 298 347
CR 2-55	Nov 1962	Design of Openings for Buried Shelters; Preliminary Report	
CR 2-67	Jul 1963	Design of Openings for Buried Shelters, by N. M. Newmark	AD 427 616
CR 1-110	May 1965	Design of Model Test Program for a Buried Field Shelter	AD 465 567
CR 1-135	Nov 1965	Feasibility of Modeling Cavity Behavior in Jointed Rock Masses	AD 631 028
		PHYSICS INTERNATIONAL COMPANY, San Leandro, California	
CR E-74-1	Dec 1974	Ground Motion and Airblast Measurements on Shot 6M of DIAMOND ORE, by C. T. Vincent	AD A005 001
		PICATINNY ARSENAL, Dover, New Jersey	
CR 1-121	Aug 1965	Preliminary Investigation of a Blast Load Generator, by A. G. Edwards and Edward Lee	AD 467 444

## WEAPONS EFFECTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		RECON, INCORPORATED, Tallahassee, Florida	
CR 2-47	Feb 1962	Subseismic Impulsive Pressure on an Elastic Half-Space, by G. L. Rogers, D. M. Palmer, and W. C. Sachdev	
CR 2-48	Mar 1962	Subseismic Distributed Pressures on an Elastic Half-Space, by G. L. Rogers, D. M. Palmer, W. C. Sachdev, and H. H. Hosack	
CR 2-51	Jun 1962	Transeismic and Superseismic Pressures on an Elastic Half-Space, by G. L. Rogers, D. M. Palmer, and W. C. Sachdev	
CR 2-58	Jul 1962	Numerical Studies of Moving Pressure Pulses Over an Elastic Halfspace, by G. L. Rogers and D. M. Palmer	AD 404 610
CR 2-59	Aug 1962	Stress Wave Propagation in Layered Elastic Cylinders, by G. L. Rogers and J. W. Shiver	AD 403 500
CR 2-61	Apr 1963	Stress Wave Propagation in Complex Solid Rods, by J. W. Shiver	
CR 2-65	Apr 1963	The Use of Explosives in a Fallout Shelter Building Program, by T. W. Wood, G. L. Rogers, T. M. Fisher, and R. D. Heins	AD 408 789
*	Apr 1963	Supplement, by T. W. Wood, G. L. Rogers, T. M. Fisher, and R. D. Heins	AD 908 354L
CR 2-71	Apr 1963	A Study to Find the Phenomenon Associated with the "Regressive" Wave in Seismic Readings Taken Near Explosions on Tundra Ice, by D. M. Palmer, H. G. Ryland, and R. E. Walker	
CR 2-76	Jun 1962	Feasibility Study on the Use of Explosives in a Fallout Shelter Building Program as a Substitute for or as an Aid to Conventional Earth-Moving Methods; Interim Report	
CR 1-93	Aug 1964	Additional Studies on Buried Cylinders, by D. M. Palmer and James Lankford	
CR 1-95	Sep 1963	The Experimental and Theoretical Study of Buried Cylinders Under Dynamic Loading, by D. M. Palmer and James Lankford	AD 672 495
CR 1-106	Aug 1964	A Computer Program for the Analysis of Deep Beams, by G. L. Rogers and C. W. Waring	
CR 1-111	May 1965	A Systems Science Approach to the Study of Mechanical Radiation Effects on Buried Structures, by G. L. Rogers, T. M. Fisher, D. M. Palmer, and E. E. Watson	AD 464 880

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		RECON, INCORPORATED, Tallahassee, Florida (Cont)	
CR 1-147	1963	The Experimental and Theoretical Study of Buried Cylinders Under Static Loading, by D. M. Palmer, R. M. Root, James Lankford, and T. C. Troutner	
		SHANNON AND WILSON, INC., Seattle, Washington	
CR 1-125	Jul 1964	Soil Vibration Tests, Suffield Experiment Station, Canada	AD A950 202
		SOUTHWEST RESEARCH INSTITUTE, San Antonio, Texas	
* CR N-77-1	Mar 1977	Development of a Design of a Relocatable Command and Control Bunker, by E. J. Baker, L. R. Garza, and P. S. Westine	AD B017 945L
		TETRA TECH, INC., Pasadena, California	
CR 1-167		Analysis of Data on Water Waves:	
	Jun 1967	Volume I Theoretical Developments Related to Water Waves Generated by Explosions in Deep Water, by R. W. Whalin	AD A040 170
	Jun 1967	Volume II Mono Lake Field Experiment, by R. W. Whalin	AD A040 171
	Jun 1967	Volume III Shallow Water Wave Study, by R. W. Whalin	AD A040 172
		WEIDLINGER ASSOCIATES, Menlo Park, California	
* CR N-77-2	May 1977	ESSEX - DIAMOND ORE RESEARCH PROGRAM; Structural Response Analysis for ESSEX V, by S. H. Pang and J. Isenberg	AD B020 242L
		PAUL WEIDLINGER, Consulting Engineer, New York, New York	
CR N-70-2	May 1970	Stress Waves in a Soil-Filled Cylindrical Shell, by John Kovarna and H. H. Bleich	AD 709 726

\* Statement B. See Preface.

## WEAPONS EFFECTS LABORATORY

Contract Reports

<u>Number</u>	<u>Date</u>	<u>Contractor and Title of Report</u>	<u>AD Number</u>
		J. H. WIGGINS COMPANY, Redondo Beach, California	
* CR N-75-1	Oct 1975	System Survivability Analysis, by J. D. Collins	AD B011 734L

---

\* Statement B. See Preface.

MISCELLANEOUS SUBJECTS

## MISCELLANEOUS SUBJECTS

Bulletins

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
		<u>Combined Series</u>	
40	Jan 1955	Pressure Cells for Field Use	
		Development of Hydrologic Equipment, Engineering Studies, Project ES-173	
		<u>Project Bulletins:</u>	
53-1	Jun 1953	No title	
54-1	Nov 1953	No title	
55-1	Sep 1954	No title	
55-2	Apr 1955	No title	
57-1	Jan 1957	No title	
	Jun 1957	Technical Bulletin 1	
58-1	Jan 1958	No title	
58-2	Jun 1958	Operating Characteristics of Keyer P-8	
59-1	Jun 1959	Concise Report on Subproject Accomplishments During FY 1959	
60-1	Apr 1960	Recently Developed Recorder and Power Supply	
61-1	Jun 1961	Sacramento District Radio Communications Network	
61-2	Jun 1961	Evaluation of Low-Drain Precipitation Keyer	
61-3	Jun 1961	Development of Remote-Reporting Precipitation Gage	
62-1	Jun 1962	Measurement and Telemetry of Current Velocity and Direction	
63-1	Jun 1963	Digital Recording of Reservoir Inflow and Outflow	
64-1	Feb 1964	Hydrologic and Weather Variables on Teletype	
65-1	Jan 1965	Red Rock Reservoir Telemetering System	
68-1	May 1968	Summary of Developments of 1965-68	

MISCELLANEOUS SUBJECTS  
Information Exchange Bulletins

<u>Volume</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
IEB K-76-1	Jun 1976	Engineering Computer Notes	
IEB K-76-2	Aug 1976	Engineering Computer Notes	
IEB K-77-1	Apr 1977	Engineering Computer Notes	
IEB K-77-2	Sep 1977	Engineering Computer Notes	
IEB K-78-1 through IEB K-78-3	Jan 1978 through Nov 1978	Engineering Computer Notes	
IEB 0-76-1	May 1976	Engineering and Scientific Research at WES	
IEB 0-76-2	Dec 1976	Engineering and Scientific Research at WES	
IEB 0-77-1 through IEB 0-77-5	Jan 1977 through Oct 1977	Engineering and Scientific Research at WES	



## MISCELLANEOUS SUBJECTS

Instruction Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
IR 9	Sep 1967	Guide for Preparation of Waterways Experiment Station Technical-Information Reports (superseded by Instruction Report O-74-1)	
IR K-78-1	Dec 1978	Analyzing Sliding Stability of Structures Using the Computer Program GWALL, by R. L. Hall (revised by IR K-83-7)	AD A064 201
IR O-74-1	Dec 1975	Guide for Preparation of Waterways Experiment Station Technical-Information Reports (Second Edition) (superseded by Instruction Report O-79-1)	
IR O-74-2	Aug 1974	Guide for Preparation of Waterways Experiment Station Contract Reports	AD A044 356
IR O-77-1	Mar 1977	Guide for Effective Engineering Graphics, Waterways Experiment Station	AD A038 649

## MISCELLANEOUS SUBJECTS

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP 5-21	Oct 1954	Summary of Earth Pressure Cell Development to 1954	AD 071 982
MP 5-28	Mar 1952 Revised Jul 1953	Maintenance Instructions, Duluth Ship Canal Current Indicator	
* MP 5-36	May 1953	Proposed WES Concrete Stress Meter	
MP 5-49	Nov 1953 Revised Sep 1955	Notes on the Reproduction of Drawings in Waterways Experiment Station Technical Reports	AD 106 366
* MP 5-63	Mar 1950	Review of Model Study for Breakwater Locations, Alameda Naval Air Station	
MP 5-83	Apr 1954	Waterways Experiment Station Relief Well Flow Meter	
MP 5-87	Jul 1954	Model Gate Vibration and Downpull Measuring Apparatus; Civil Works Investigation CW 827	AD A951 959
MP 5-163	Apr 1956	Catalog Card Reproduction by Addressograph	
MP 5-193	Jan 1957	Development and Application of Improved Techniques and Equipment in the Telemetering of Hydrologic Data	
MP 5-214	Apr 1957	Photography of Surface Currents in Hydraulic Models, by F. B. Gauthier	AD 475 247
MP 5-217	May 1957	Procedures of the Research Center Library	
MP 5-219	May 1957	Report of the International Photographic Exposition and National Industrial Photographic Conference	
MP 5-226	Jun 1957	Repetitive Flash Tracks Tow in Model Tests	
MP 5-231	Jun 1957	Development of Wave-Height Measuring Device	
MP 5-248	Dec 1957	Tracing Currents with "Salt-Water" Lights	
MP 5-280	Jul 1958	U. S. Army Engineer Waterways Experiment Station	
MP 5-295	Dec 1958	Genesis of the Waterways Experiment Station	
MP 5-343	Jul 1959	Data-Reduction Facilities	
MP 5-458		Research Coordination Meeting, U. S. Bureau of Reclamation, U. S. Army Corps of Engineers, Tennessee Valley Authority:	
	Oct 1961	Report 1 Report of Sessions on Soils, Denver, Colorado, 13 August 1961	

\* Statement B. See Preface.

## MISCELLANEOUS SUBJECTS

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 5-458 (Cont)	Oct 1961	Report 2 Report of Sessions on Hydraulics, Denver, Colorado, 1-3 August 1961	
	Oct 1961	Report 3 Report of Sessions of General Group, Denver Colorado, 1-3 August 1961	
	Oct 1961	Report 4 Report of Sessions on Concrete, Denver, Colorado, 1-3 August 1961	
MP 5-475	Mar 1962	Present Status of Evaporation Reduction by Chemical Films	AD 756 312
MP 5-515	Jul 1962	Computer Programming for Swedish Slip Circle Method of Slope Stability Analysis	AD 748 820
MP 5-542	Sep 1962	Attendance at 10th Annual Engineering Management Conference	
* MP 5-583	Jun 1963	A GE-225 Computer Program for Numerical Integration with Automatic Method Selection	AD 677 382
*	Jan 1965	Addendum	
* MP 5-619	Jan 1964	A GE-225 Computer Program for Slope Stability Analysis	AD 748 819
MP 5-627	Feb 1964	A Mathematical Method for Aggregate Mix Design	AD 748 882
* MP 5-667	Jul 1964	A GE-225 Computer Program for Simple Linear and Curvilinear Regression Analyses (Method of Least Squares)	AD 748 172
MP 9-708	Feb 1965	U. S. Army Engineer Waterways Experiment Station, Lecture Before Engineer Officers Career Class, 21 October 1964, by Col. A. G. Sutton, Jr.	
MP 5-711	Feb 1965	Telemetry of Soil-Moisture and Weather Variables, by F. P. Hanes and L. M. Womack	AD 764 976
MP 5-770	Jan 1966	The Significance of Numbers and the Reporting of Numerical Values, by J. N. Strange and Bryant Mather	
MP 5-905	Aug 1967	Development of In-House Capability for Use of the Finite Element Method of Analysis of Boundary Condition Problems, by J. F. Smith and W. F. Ingram	
* MP K-72-1	Aug 1972	Numerical Solution of Differential Equations, by S. I. Kang and J. B. Cheek	AD 912 009L
* MP K-73-1	Jan 1973	Instruction Manual for Using Waterways Experiment Station Time Sharing Computer Program "FEDIT" for Rewriting Other FORTRAN Programs, by J. B. Cheek, Jr., and P. K. Senter	AD 912 010L
* MP K-73-2	Mar 1973	Instruction Manual for Using WES Time-Sharing System for Analysis of Slope Stability (The Circular Arc Method), by J. B. Cheek, Jr.	AD 912 011L

\* Statement B. See Preface.

## MISCELLANEOUS SUBJECTS

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
* MP K-73-3	May 1973	A Three-Dimensional Finite Element Program for Steady-State and Transient Seepage Problems, by F. T. Tracy	AD 911 148L
* MP K-73-4	May 1973	A Plane and Axisymmetric Finite Element Program for Steady-State and Transient Seepage Problems, by F. T. Tracy	AD 912 012L
* MP K-73-5	Jun 1973	A Computer Program for Lock Culvert Frame Analysis, by P. K. Senter and F. T. Tracy	AD 912 138L
* MP K-73-6	Aug 1973	Computer-Aided Design of Horizontally Framed Miter Gates, by W. L. Boyt (superseded by Miscellaneous Paper K-75-9)	AD 913 915L
* MP K-73-7	Nov 1973	Urgent Automatic Data Processing Equipment Requirements and Justification for the U. S. Army Corps of Engineers Waterways Experiment Station, by D. L. Neumann	AD 771 034L
* MP K-74-1	Mar 1974	A Computer Program for Contouring the Output of Finite Element Programs, by F. T. Tracy	AD 917 837L
* MP K-74-2	Mar 1974	Instruction Manual for Using WES Time-Sharing System for Analysis of Slope Stability; Wedge Method With Excess Pore Pressures, by J. B. Cheek, Jr. (superseded by Miscellaneous Paper K-77-1)	AD 918 699L
* MP K-74-3	Jun 1974	Stability Analysis of Linear and Nonlinear Dynamic Finite Element Method Programs, by F. T. Tracy and J. L. Kirkland	AD 920 530L
Unnumbered	Jan 1975	Engineering Computer Graphics Colloquium, 8-9 April 1974, edited by N. Radhakrishnan, J. B. Cheek, Jr., and D. L. Neumann	AD A007 251
* MP K-75-1	Feb 1975	Development of a WESNET Data Communications System Simulation, by J. R. Mitchell	AD 8002 295L
MP K-75-2	May 1975	Background Theory and Documentation of Five University of Texas Soil-Structure Interaction Computer Programs, by N. Radhakrishnan and Frazier Parker, Jr.	AD A012 067
MP K-75-3	Mar 1975	Engineering Computer Notes	
MP K-75-4	Apr-May 1975	Engineering Computer Notes	
MP K-75-5	Jun 1975	Engineering Computer Notes	
* MP K-75-6	Jun 1975	Documentation of Two- and Three-Dimensional Seepage Problems Using the Finite Element Method, by R. L. Hall, F. T. Tracy, and N. Radhakrishnan	AD 8005 326L
MP K-75-7	Aug 1975	Engineering Computer Notes	

---

\* Statement B. See Preface.

## MISCELLANEOUS SUBJECTS

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP K-75-8	Oct 1975	Engineering Computer Notes	
* MP K-75-9	Nov 1975	Computer-Aided Design of Horizontally Framed Miter Gates, by W. L. Bovt (supersedes Miscellaneous Paper K-73-6)	AD B008 176L
MP K-76-1	Jan 1976	Engineering Computer Notes (Special Issue - Computers and Urban Studies)	
* MP K-76-2	Apr 1976	Corps Data Communication System Long Range Planning, by D. D. Boozer	AD B011 199L
* MP K-76-3	Jun 1976	Instruction Manual for Using WES Time-Sharing System for Analysis of Slope Stability; Wedge Method, by J. B. Cheek	AD B012 219L
MP K-76-4	Jul 1976	NETDEN: An Interactive Network Design Graphics Simulation, by D. D. Boozer and R. K. Williams	AD A029 225
* MP K-77-1	Apr 1977	Analysis of Slope Stability, Wedge Method Using Head Profiles to Model Uplift Pressures, by J. B. Cheek (supersedes Miscellaneous Paper K-74-2)	AD B018 763L
* MP K-77-2	May 1977	Instruction Manual for the Interactive-Graphics Lock-Culvert Analysis Program, by R. L. Hall	AD B018 780L
* Unnumbered	Jun 1977	Manual for a Conversationally Oriented Real-Time Program-Generating System (CORPS), by H. W. Jones	AD B021 383L
* MP K-77-3	Aug 1977	Instruction Manual for the Use of the Interactive Graphics Program STRUPUT, by R. L. Hall	AD B021 472L
* MP K-77-4	Aug 1977	An Interactive Graphics Postprocessor for Finite Element Method Results, by F. T. Tracy	AD B021 395L
* MP K-77-5	Aug 1977	An Interactive Graphics Finite Element Method Grid Generator for Two-Dimensional Problems, by F. T. Tracy	AD B021 396L
* MP K-78-1	May 1978 Revised Oct 1984	A Computer Program for Computer-Aided Design/Analysis of Three-Girder Tainter Gates, by W. A. Price III (includes Appendixes A-E)	AD B098 505L
Unnumbered		Graphics in the Corps; Proceedings of the Computer Graphics Colloquium, edited by J. M. Jones, R. L. Hall, and N. Radhakrishnan:	
	1978	Volume I Papers and Presentations	AD A062 478
	1978	Volume II Abstracts of Computer Graphics Programs (includes Appendixes A-C)	AD A062 479
MP O-69-1	Aug 1969	Visits to Hydraulic Laboratories in The Netherlands and England, April 1969, by L. A. Brown, COL, CE	AD A043 787

\* Statement B. See Preface.

## MISCELLANEOUS SUBJECTS

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 0-70-1	Mar 1970	Signal Conditioning System for Velocity Gages, by F. P. Hanes	AD A044 354
MP 0-70-2	Jun 1970	Operation MINE SHAFT; An Electronic System for Precise Timing and Firing Control of Explosive Tests, by F. P. Hanes	AD 872 246
MP 0-71-1	Jun 1971	Potential Nonstructural or Low Cost Waterways System Improvements, by LTC F. M. Anklam	AD A044 343
MP 0-71-2	Jul 1971	Application of Spline Interpolation Methods to Engineering Problems, by J. B. Cheek, Narayanaswamy Radhakrishnan, and F. T. Tracy	AD A044 344
MP 0-72-1	Sep 1972	Engineering and Scientific Research at WES	AD A044 362
MP 0-72-2	Oct 1972	Engineering and Scientific Research at WES	AD A044 351
MP 0-72-3	Dec 1972	Engineering and Scientific Research at WES	AD A044 350
MP 0-73-1	Jan 1973	Engineering and Scientific Research at WES	AD A044 347
MP 0-73-2	Feb 1973	Engineering and Scientific Research at WES	AD A044 348
MP 0-73-3	Mar 1973	Engineering and Scientific Research at WES	AD A044 349
MP 0-73-4	Apr 1973	Field Evaluation of the U. S. Army Engineer Topographic Laboratories' Laser Dam Alignment Instrument, by C. D. Davis	AD 759 904
MP 0-73-5	Apr 1973	Engineering and Scientific Research at WES	AD A044 360
MP 0-73-6	May 1973	Engineering and Scientific Research at WES	AD A044 359
* MP 0-73-7	Jul 1973	Exit Report, by BG E. D. Peixotto	
* MP 0-73-8	Jul 1973	A Manager's Overview of WES, by BG E. D. Peixotto	
MP 0-73-9	Jul 1973	Engineering and Scientific Research at WES	AD A044 358
MP 0-73-10	Sep 1973	Engineering and Scientific Research at WES	AD A044 357
MP 0-73-11	Oct 1973	Engineering and Scientific Research at WES	AD A044 361
MP 0-73-12	Dec 1973	An Empirical Study of Light Path Behavior, and Application of the Findings to the Design of Precise Surveying Systems for Dam Alignment	AD 773 654
MP 0-74-1	Feb 1974	Engineering and Scientific Research at WES	AD A044 346
MP 0-74-2	Mar 1974	Engineering and Scientific Research at WES	
MP 0-74-3	May 1974	Engineering and Scientific Research at WES	AD A044 345
MP 0-74-4	Jul 1974	Engineering and Scientific Research at WES	

\* Statement B. See Preface.

## MISCELLANEOUS SUBJECTS

Miscellaneous Papers

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
MP 0-74-5	Aug 1974	Engineering and Scientific Research at WES	
MP 0-74-6	Sep 1974	Engineering and Scientific Research at WES	
MP 0-74-7	Oct 1974	Engineering and Scientific Research at WES	
MP 0-74-8	Nov 1974	Engineering and Scientific Research at WES	
MP 0-74-9	Dec 1974	Engineering and Scientific Research at WES	
MP 0-75-1 through MP 0-75-10	Jan 1975 through Dec 1975	Engineering and Scientific Research at WES	
MP 0-76-1	Feb 1976	Engineering and Scientific Research at WES (Piping in Earth Dams Constructed of Dispersive Clays, by E. B. Perry. Numerical Simulation of Tsunamis, by A. W. Garcia)	
MP T-69-1	Jun 1969	Operations Research/Systems Analysis, by J. F. Smith	AD A044 355
* MP T-70-1	Apr 1970	A General Purpose Contouring System, by J. T. Long and F. T. Tracy	AD 879 662L
Unnumbered	Jun 1977	WES Microthesaurus of Scientific and Technical Terms	AD A042 743
Unnumbered	Jun 1978	Periodicals Holdings of the U. S. Army Engineer Waterways Experiment Station Library, by A. S. Clark, P. A. Taccarino, C. E. McMillin, and R. M. T. Peck	AD A058 836

---

\* Statement B. See Preface.

## MISCELLANEOUS SUBJECTS

Technical Memoranda

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TM 0-4	1931	Experiment to Determine Flotation Effect on Pipe Line Across Bonnet Carre Floodway	
TM 27	May 1933	Report on Investigation of Method of Propagating Willow Trees	
TM 71-1	Feb 1935	Bentzel Velocity Tube. The Use of the Instrument as a Current Direction Indicator; including "The Bentzel Velocity Tube," a paper delivered at an annual ASCE meeting	
TM 78-1	May 1935	Hydraulic Data Secured at the U. S. Waterways Experiment Station During the Flood of May 6, 1935	
TM 78-2	May 1936	Hydraulic Data Secured at the U. S. Waterways Experiment Station During the Flood of April 29, 1936	
TM 83-2	Apr 1939	Hydrological Study, Experiment Station Watershed	
TM 91-1	Jan 1936	Design and Calibration of Diaphragm Orifices	
TM 120-1	Apr 1937	Report on Sediment Investigation, Mississippi River, Low Water of 1936	
TM 120-2	May 1940	Report on Sediment Investigation, Mississippi River, Low Water of 1939	
TM 122-1	Feb 1939	Study of Materials in Suspension, Mississippi River	
TM 139-1	May 1938	Calibration of Venturi Meter	
TM 158-1	Sep 1939	Study of Materials in Transport, Passes of the Mississippi River	
Unnumbered	Jul 1942	Hydrological Research Project - Storm Studies. In 2 folders	
Unnumbered	Sep 1943	Electrical Measuring Equipment, Service Behavior Test, Barksdale Field, Louisiana	
Unnumbered	Dec 1943	Evaporation from Lake and Land Pans, U. S. Waterways Experiment Station (January 1941 Through December 1942). Revised	



## MISCELLANEOUS SUBJECTS

Technical Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
TR 5-589	Jan 1962	An IBM-650 Program for Simultaneous Multi-Stage Backwater Analysis	AD 748 824
Unnumbered	Jun 1968	History of the Waterways Experiment Station; J. B. Tiffany, Technical Director, Editor	
Unnumbered	1969	Activities Summary, FY '69	
Unnumbered	1970	Activities Summary, FY 1970	
Unnumbered	1971	Activities Summary, FY 1971	
Unnumbered	1972	Activities Summary, FY 1972	
Unnumbered	1973	Activities Summary, FY 1973	
Unnumbered	1974	Activities Summary, FY 1974	
Unnumbered	1975	Activities Summary, FY 1975	
Unnumbered	1976	Activities Summary, FY 1976	
* TR K-76-1	Jun 1976	Documentation for Modified Uframe Program, by N. Radhakrishnan and H. W. Jones	AD B012 380L
TR K-78-1	Feb 1978	List of Computer Programs for Computer-Aided Structural Engineering, by N. Radhakrishnan, Deborah Kaufman, W. A. Price, and D. B. May	AD A052 789

---

\* Statement B. See Preface.

MS-12

MISCELLANEOUS SUBJECTS

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
<u>Annual Summary</u>			
1-22	1951 to 1972	Annual Summary of Investigations in Support of the Civil Works Program	
<u>Contract Reports</u>			
JOHN CAIRNS, JR., Virginia Polytechnic Institute, Blacksburg; and PHILIP S. HUMPHREY, University of Kansas, Lawrence			
CR 0-69-1	May 1969	A Water Resources Ecology Capability for the Waterways Experiment Station and Corps of Engineers, by John Cairns, Jr., and P. S. Humphrey	AD 751 783
LEROY Z. EMKIN, Consulting Engineer, Tucker, Georgia			
CR K-76-1		General Purpose Computer-Aided Analysis and Design of Tainter Gates:	
	Aug 1976	Volume I Theoretical Manual, by L. Z. Emkin	AD A030 854
	Aug 1976	Volume II Procedural Manual, by L. Z. Emkin	AD A029 938

POTAMOLGY INVESTIGATIONS

## POTAMOLGY INVESTIGATIONS

Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
1-1	Nov 1947	Instructions and Outline for Potamology Investigations	
1-2	Dec 1947	Outline of Plans for the Potamology Investigations	
2-2	Jun 1950	Preliminary Tests of Mississippi River Dikes, Bank Stabilization Model	
2-3	Sep 1951	Preliminary Tests of Experimental Baffles, Bank Stabilization Model	
2-4	Nov 1951	Preliminary Flume Tests of Mississippi River Revetment (2nd Interim Report)	
2-5	Apr 1953	Investigation of Bank Stabilization, Miller Bend, Mississippi River	
2-6	Jul 1953	Verification of Bank-Stabilization Model	
3-1	Jul 1948	Interim Report on Investigation of Sand-Asphalt Revetment	
4-1	Jul 1948 Revised May 1950	Investigation of 110-Volt Echo Sounder	
5-1	Jul 1947	Geological Investigation of Reid Bedford Caving Area	
5-2	Jun 1948	Field Investigation of Reid Bedford Bend Revetment, Mississippi River  Volume 1 Text  Volume 2 Plates  Volume 3 Appendix A - Soils Investigation	
5-3	May 1950	Triaxial Tests on Sands, Reid Bedford Bend, Mississippi River	
5-4	May 1950	Piezometer Observations at Reid Bedford Bend and Indicated Seepage Forces	
5-5	May 1950	Standard Penetration Tests, Reid Bedford Bend, Mississippi River	AD A950 074
5-6	May 1951	Undisturbed Sand Sampling and Cone Sounding Tests, Reid Bedford Bend Revetment, Mississippi River	
7-1	Jun 1951	Soils Investigation, Bauxippi-Wvanoke Revetment	
8-1	Jun 1950	Hardscrabble Bend, Mississippi River, Revetted Bank Failure; Soils Investigation	

## POTAMOLOGY INVESTIGATIONS

Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD. Number</u>
9-1	Nov 1951	Bank Caving Investigations, Kempe Bend Revetment, Mississippi River; Soils Investigation	
10-1	Jun 1948	Preliminary Development of Instruments for the Measurement of Hydraulic Forces Acting in a Turbulent Stream	
10-2	May 1950	Turbulence in the Mississippi River	
10-3	Mar 1951	Evaluation of Instruments for Turbulence Measurements, 1948-1949	
10-4	Apr 1951	Evaluation of Instruments for Turbulence Measurements, 1949-1950	
11-0	Feb 1947	Resume of Conference Initiating Potamology Investigations	
11-1	Mar 1948	Report of Conference on Potamology Investigations, 15 March 1948	
11-2	Dec 1948	Report of First Potamology Conference with Hydraulic Consultants	
11-3	Apr 1949	Minutes of Conference on Soil Studies, Potamology Investigation, 18 April 1949	
11-4	May 1949	Report of Second Potamology Conference with Hydraulic Consultants	
11-5	Oct 1949	Minutes of Conference with Soils Consultants, Stability of Mississippi River Banks, 5 and 8 October 1949	
11-6	Apr 1951	Report of Conference on Potamology Investigations, 6-7 October 1949 (in 2 volumes)	
11-7	Oct 1950	Minutes of Conference on Soil Aspects of Potamology Program, 17-18 June 1950	
11-8	Apr 1951	Minutes of Conference on Potamology Program, 5 April 1951	
12-1	Jun 1952	Density Changes of Sand Caused by Sampling and Testing	
12-2	Oct 1952	Summary Report of Soils Studies	
12-3	Apr 1954	Verification of Empirical Method of Determining Slope Stability	
12-4	Jun 1955	Verification of Empirical Method of Determining Slope Stability - 1954 Data	
12-5	Jun 1956	A Review of the Soils Studies	

## POTAMOLOGY INVESTIGATIONS

Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
12-6	Jul 1956	Verification of Empirical Method of Determining Slope Stability - 1955 Data	
12-7	Jun 1957	Verification of Empirical Method for Determining Slope Stability - 1956 Data	
12-8	Jan 1959	Verification of Empirical Method for Determining Riverbank Stability - 1957 Data	
12-9	Sep 1959	Verification of Empirical Method for Determining Riverbank Stability - 1958 Data	
12-10	Dec 1960	Verification of Empirical Method for Determining Riverbank Stability - 1959 Data	
12-11	Dec 1961	Verification of Empirical Method for Determining Riverbank Stability - 1960 Data	
12-12	Oct 1962	Verification of Empirical Method for Determining Riverbank Stability - 1961 Data	
12-13	Sep 1964	Verification of Empirical Method for Determining Riverbank Stability - 1962 Data, by W. E. Strohm and W. K. Caldwell	
12-14	Apr 1965	Verification of Empirical Method for Determining Riverbank Stability - 1963 Data, by W. E. Strohm and W. K. Caldwell	
12-15	Sep 1965	Geological Influences on Bank Erosion Along Meanders of the Lower Mississippi River, by E. L. Krinitzsky	AD A951 793
12-16	Oct 1965	Methods of Preventing Flow Slides, by D. C. Banks and W. E. Strohm	
12-17	May 1966	Verification of Empirical Method for Determining Riverbank Stability - 1964 Data, by W. K. Caldwell	AD A951 794
12-18	Dec 1967	Verification of Empirical Method for Determining Riverbank Stability - 1965 Data, by W. K. Caldwell and C. C. Calhoun	
12-19	Jul 1968	Verification of Empirical Method for Determining Riverbank Stability - 1966 Data, by C. C. Calhoun	AD A951 795
12-20	Apr 1969	Verification of Empirical Method for Determining Riverbank Stability - 1967 Data, by C. C. Calhoun and C. P. Flanagan	AD A951 796
12-21	Oct 1972	Verification of Empirical Method for Determining Riverbank Stability - 1968 and 1969 Data, by V. H. Torrey	

## POTAMOLOGY INVESTIGATIONS

Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
12-22	Apr 1976	Verification of Empirical Method for Determining River-bank Stability - 1970 and 1971 Data, by V. H. Torrey III and A. R. Gann	
13-1	Jun 1952	Bank Caving Investigations, Huntington Point Revetment, Mississippi River; Field Investigation	
14-1	Jun 1952	Goodrich Landing Revetment, Mississippi River, Field Investigation	
15-1	May 1952	Bank Caving Investigations, Free Nigger Point and Point Menoir, Mississippi River; Soils Investigation	
16-1	Sep 1953	Development of Operating Technique for and Verification of Channel-Meander Model	
17-1	Apr 1954	Hydrographic and Hydraulic Investigations of Mississippi River Revetments; Field Investigations	
18-1	Jun 1962	Rotary Cone Penetrometer Investigations	AD A951 797
18-2	Jun 1965	Verification of Cone Criteria for Determining Riverbank Stability, by W. E. Strohm and Laszlo Devay	
19-1	Sep 1965	Hydraulic Analysis of Mississippi River Channels, Miles 373 to 603, Fiscal Year 1964; Potamology Research Project No. 10, by M. G. Anding (prepared by Vicksburg District)	
19-2	Apr 1967	Resume of Research Studies of Hydraulic Characteristics of Mississippi River Channels; Interim Report FY 1967; Potamology Research Project 10, by P. W. Pierce and C. M. Elliott (prepared by Vicksburg District)	
19-3	Jun 1970	Hydraulic Characteristics of Mississippi River Channels; Interim Report FY 1970; Potamology Research Project No. 10, by M. G. Anding (prepared by Vicksburg District)	
20-1	Dec 1965	Effects of River Stages on Bank Stabilization; Analysis of Field Data; Potamology Research Project 1, by J. J. Franco	
21-1	Mar 1967	Sand-Filled Bags as Dike Material; Potamology Research Project 9, by R. T. Easley (prepared by Memphis District)	AD A951 805
21-2	Mar 1967	Review of Past Experience with Contraction Works; Potamology Research Project 9, by J. G. Fairley and R. T. Easley (prepared by Memphis District)	AD A951 776
21-3	May 1969	Investigation of Existing Dike Systems; Potamology Research Project 9, by B. J. Littlejohn (prepared by Memphis District)	

## POTAMOLOGY INVESTIGATIONS

Reports

<u>Number</u>	<u>Date</u>	<u>Title</u>	<u>AD Number</u>
21-4	Jun 1970	Use of Plastic Filter Cloth in Revetment Construction; Potamology Research Project 11, by J. G. Fairley, R. T. Easley, J. H. Bowman, and B. J. Littlejohn (prepared by Memphis District)	
21-5	Aug 1977	Use of Plastic Filter Cloth in Revetment Construction; Potamology Research Project II, by B. J. Littlejohn	AD A061 851
300-1	Aug 1977	Suspended Sediment and Bed Material Studies on the Lower Mississippi River, by L. G. Robbins	AD A044 285



REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY U. S. ARMY  
ENGINEER WATERWAYS EXPERIMENT STATION FOR OTHER AGENCIES

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		AMERICAN SOCIETY OF CIVIL ENGINEERS, THE ENGINEERING FOUNDATION, HARVARD UNIVERSITY, and the U. S. ARMY ENGINEER WATERWAYS EXPERIMENT STATION, Vicksburg, Mississippi	
Unnumbered	Nov 1948	Subsurface Exploration and Sampling of Soils for Civil Engineering Purposes, by M. J. Hvorslev	
		INTERNATIONAL TRAINING ADMINISTRATION, Washington, DC, and the CHINESE SUPPLY COMMISSION	
Unnumbered	Jul 1945	Study of Harbor Design, compiled by Chao Hwa, Chu Teng-Kao, and Hsu Zan-Ziang. In 4 volumes	
		JOINT SERVICES CIVIL ENGINEERING RESEARCH AND DEVELOPMENT COORDINATING GROUP (JSCERDCG)	
Unnumbered	Jan 1982	Airfield Damage Repair; Sub-Committee Report	AD B063 873L
		MISSISSIPPI RIVER COMMISSION, Vicksburg, Mississippi	
Unnumbered	Apr 1952	Geological Investigation of the Atchafalaya Basin and the Problem of Mississippi River Diversion:  Volume I Text  Volume II Plates	
		OFFICE, CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, Washington, DC	
Unnumbered	Mar 1949	Slope Protection for Earth Dams. Preliminary Report	
Unnumbered	Mar 1950	Proceedings of Conference on Foundations and Embankment Construction, Kansas City, Missouri, 23, 24, 25 May 1949	
Unnumbered	Nov 1950	Summary of Regional Soil Mechanics Conferences, 1950	

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		OFFICE, CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, Washington, DC (Cont)	
Unnumbered	May 1956	Tidal Hydraulics, by Brigadier General George B. Pillsbury, U. S. A., Retired. Revised edition	
Unnumbered	Apr 1956	Guide to Good Practice in Technical Report Prepara- tion	
Unnumbered	Feb 1957	Corps of Engineers Greenland Ice Cap Research Program; Studies Completed in 1954. In 2 volumes	
Unnumbered		Corps of Engineers Greenland Ice Cap Research Program; Studies Conducted in 1955-56:	
	May 1958	Volume 1	
	Oct 1958	Volume 2	
	Jun 1959	Volume 3	
1-	1960 to date	Earth Dam Criteria Reports	
Unnumbered	Jun 1972	Investigation of the Behavior of Large Sections of Expansive Concrete, Jonesville Lock, by G. C. Hoff	
Unnumbered	Oct 1972	U. S. Army Corps of Engineers, Hydrographic Survey Con- ference, 9-11 May 1972; edited by E. D. Hart and G. C. Downing	
Unnumbered	Oct 1973	U. S. Army Corps of Engineers, Hydrographic Survey Conference, 30-31 May 1973; edited by E. D. Hart and G. C. Downing	
Unnumbered	Aug 1973	Supplement No. 1, by G. C. Downing	
Unnumbered	Nov 1973	Influence of Reservoir Discharge Location on Water Quality, Biology, and Sport Fisheries of Reservoirs and Tailwaters, 1968-1971, by R. G. Martin and R. H. Stroud	
Unnumbered	Nov 1974	Report of Ninth Interagency Conference on Hydraulic Laboratory Techniques and Instrumentation	
Unnumbered	Dec 1974	U. S. Army Corps of Engineers, Third Hydrographic Survey Conference, 21-22 May 1974; edited by E. D. Hart and G. C. Downing	
Unnumbered	Mar 1976	U. S. Army Corps of Engineers, Fourth Hydrographic Conference, 5-6 November 1975; edited by E. D. Hart and G. C. Downing	

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		OFFICE, CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, Washington, DC (Cont)	
Unnumbered	Mar 1978	U. S. Army Corps of Engineers, Fifth Hydrographic Survey Conference, 8-9 November 1977; edited by E. D. Hart and G. C. Downing	AD A055 031
Unnumbered	Aug 1980	U. S. Army Corps of Engineers, Sixth Hydrographic Survey Conference, 4-5 December 1979; edited by J. E. Hite, Jr., E. D. Hart, and G. C. Downing (includes Appendixes A-F)	
		Section 32 Program, Streambank Erosion Control Eval- uation and Demonstration:	
Unnumbered		Final Report to Congress:	
	Dec 1981	Main Report	AD A119 104
	Dec 1981	Appendix A Literature Survey	AD A121 131
	Dec 1981	Appendix B Hydraulic Research	AD A121 132
	Dec 1981	Appendix C Geotechnical Research	AD A121 133
	Dec 1981	Appendix D Ohio River Demonstration Projects	AD A121 134
		Appendix E Missouri River Demonstration Projects:	
	Dec 1981	Volume 1	AD A121 135
	Dec 1981	Volume 2	AD A121 136
	Dec 1981	Appendix F Yazoo River Basin Demonstration Projects	AD A121 137
	Dec 1981	Appendix G Demonstration Projects on Other Streams, Nationwide:	
	Dec 1981	Volume 1	AD A121 138
	Dec 1981	Volume 2	AD A121 139
		Appendix H Evaluation of Existing Projects:	
	Dec 1981	Volume 1	AD A121 140
	Dec 1981	Volume 2	AD A121 141

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		<u>Work Unit 2</u>	
		Inspection Reports:	
1	Oct 1977	Field Inspection; Field Inspection of Yazoo River (Vicksburg to Redwood, Mississippi), by S. T. Maynard	AD A143 931
2	Nov 1977	Evaluation of Existing Bank Protection; Field Inspection of Sites in St. Paul and Rock Island Districts, by M. P. Keown	
3	Nov 1977	Evaluation of Existing Bank Protection; Inspection of Sites in Albuquerque District, by M. P. Keown	AD A143 692
4	Feb 1978	Evaluation of Existing Bank Protection; Field Inspection of Bank Protection Measures on the Upper Yazoo River, by S. T. Maynard	AD A143 701
5	Oct 1978	Evaluation of Existing Bank Protection; Field Inspection of Sites in the Vicksburg District in the Upper Yazoo Basin, by M. P. Keown and E. A. Dardeau, Jr.	AD A143 839
7	Sep 1979	Evaluation of Existing Bank Protection; Field Inspection of Morameal Revetment on the Red River, by M. P. Keown and E. A. Dardeau, Jr.	AD A144 000

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		OFFICE, CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, Washington, DC (Cont)	
		Inspection Reports (Cont):	
8	Feb 1980	Evaluation of Existing Bank Protection; Field Inspection of Sites in the Ohio River Division, by M. P. Keown, E. A. Dardeau, Jr., and E. M. Causey	
9	Apr 1980	Evaluation of Existing Bank Protection; Field Inspection of the Mill Creek Midfloodway Gabion Barrier in the Los Angeles District, by E. A. Dardeau, Jr.	AD A143 745
10	Oct 1980	Evaluation of Existing Bank Protection; Field Inspection Sites in the Missouri River Division, by M. P. Keown, E. A. Dardeau, Jr., and E. M. Causey	AD A143 370
11	Apr 1981	Evaluation of Existing Bank Protection; Field Inspection of the Fisher River Channel Realignment Project Near Libby, Montana, by M. P. Keown	AD A098 767
		<u>Work Unit 3</u>	
		Research Reports:	
1	Nov 1977	Hydraulic Research; Model Demonstration of the Effects of Propeller Wash on the Bed of an Alluvial River, by S. T. Maynard	
2	Nov 1977	Hydraulic Research; Wave Stability Study of Cellular Concrete Blocks; Hydraulic Model Investigation, by D. G. Markle	
3	Apr 1978	Hydraulic Research; Bank Protection Techniques Using Gabions, by N. R. Oswalt and S. T. Maynard	AD A143 730
		<u>Work Unit 4</u>	
		Investigation Reports:	
1	Feb 1979	Research on Soil Stability and Identification of Causes of Streambank Erosion; Evaluation of Sprav-On Stabi- lizers for Bank Protection, by J. C. Oldham	AD A065 428
2	May 1979	Research on Soil Stability and Identification of Causes of Streambank Erosion; Evaluation of Rigid and Flexible Materials for Bank Protection, by C. R. Styron III	AD A116 808

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		OFFICE, CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, Washington, DC (Cont)	
		Investigation Reports (Cont):	
3	Nov 1979	Research on Soil Stability and Identification of Causes of Streambank Erosion; Investigation of a Grid for Bank Protection, by A. C. Spivey, Jr., and C. R. Strvon III	AD A116 309
Unnumbered		Corps-Wide Conference on Computer-Aided Design in Structural Engineering, 22-26 September 1975, New Orleans, LA, edited by N. Radhakrishnan	
	Aug 1976	Volume I Management Report, by N. Radhakrishnan and J. B. Cheek, Jr. (includes Appendixes A-I)	AD A031 243
	Aug 1976	Volume II List of Computer Programs for CADSE, edited by N. Radhakrishnan and D. B. May	AD A031 244
	Aug 1976	Volume III Invited Speeches and Technical Presen- tations (includes Appendix A)	AD A031 245
	Aug 1976	Volume IV Division Presentations	AD A031 246
	Aug 1976	Volume V Gravity Monoliths, U-Frame Locks, and Channels, by N. W. Wilke, C. M. Hargett, and J. W. Simmons	AD A031 247
	Aug 1976	Volume VI Gates, Stop Logs, and Trashracks, by Keith O'Donnell, W. D. Churchill, L. E. Sell, and J. D. Gibson, Jr.	AD A031 248
	Aug 1976	Volume VII Single- and Multicell Conduits and Tunnels, by G. W. Henson, C. M. Terzian, and R. J. Smith	AD A031 249
	Aug 1976	Volume VIII Pile Foundations and Sheet Pile Cells, by B. H. James, T. J. Mudd, Thurman Gaddie, and Herman Gray	AD A031 250
	Aug 1976	Volume IX Sheet Pile Walls and T-Walls, by W. D. Judlin III and Raymond Veselka	AD A031 251
	Aug 1976	Volume X Stiffness Methods, Frames, and Military Engineering, by W. D. Ashton, Daniel Reynolds, and D. B. Baldwin	AD A031 252
	Aug 1976	Volume XI Earthquake and Dynamic Analysis, by M. M. Dembo and L. G. Guthrie	AD A031 253
	Aug 1976	Volume XII Interactive Graphics, SEARCH and CORPS Systems, by R. L. Hall, Bruce Dains, Dale Brvant, J. H. Spoonamore, and H. W. Jones	AD A031 254

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		U. S. AIR FORCE SYSTEMS COMMAND, Tyndall Air Force Base, Florida	
* Unnumbered	Feb 1976	Evaluation of Rejuvenators for Bituminous Pavements, by E. R. Brown and R. R. Johnson (includes Appendixes A-B)	AD 8011 090L
Unnumbered	Feb 1976	Use of Recycled Materials in Airfield Pavements; Feasibility Study, by LT R. J. Lawing	AD A029 528
Unnumbered	Apr 1977	Membrane Encapsulated Soil Layer (MESL) for Contingency Airfields, by C. L. Rone and A. L. Sullivan III	AD A047 004
Unnumbered	Sep 1978	Evaluation of Materials for Post-Attack Pavement Repair, by C. L. Rone	AD A066 516
		U. S. AIR FORCE WEAPONS LABORATORY, AIR FORCE SYSTEMS COMMAND, Kirtland Air Force Base, New Mexico	
Unnumbered	May 1970	Nondestructive Testing of Flexible Pavements; A Literature Review, by J. W. Hall	AD 869 528
Unnumbered	Mar 1972	Nondestructive Testing of Pavements: Tests Multiple-Wheel Heavy Gear Load Sections at Eglin and Hurlburt Airfields, by J. W. Hall, Jr.	AD 894 113
Unnumbered	Jun 1973	Nondestructive Testing of Pavements: Final Test Results and Evaluation Procedure, by J. W. Hall, Jr. (includes Appendixes A-B)	AD 764 787
Unnumbered	Aug 1975	A Study of the Effects of Braking on Drag Force and Shrinkage, by J. L. Smith and G. W. Turnage	AD 014 912
* Unnumbered	Nov 1975	Near-Surface Cratering Experiments, Fort Polk, Louisiana, by W. T. Harvey, J. F. Dishon III, and T. M. Tami	AD 8010 105L
		U. S. ARMY CORPS OF ENGINEERS COMMITTEE ON CHANNEL STABILIZATION	
		Technical Reports:	
1		Symposium on Channel Stabilization Problems:	
	Sep 1963	Volume 1	AD 746 961
	May 1964	Volume 2	AD 746 964

\* Statement B. See Preface.



REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		U. S. ARMY CORPS OF ENGINEERS COMMITTEE ON CHANNEL STABILIZATION (Cont)	
		Technical Reports (Cont):	
	Jun 1965	Volume 3	AD 746 965
	Feb 1966	Volume 4	AD 746 966
2	Sep 1963	Review of Research on Channel Stabilization of the Mississippi River, 1931-1962, by J. B. Tiffany	AD 746 967
3	Aug 1966	Effect of Water Temperature on Discharge and Bed Configuration, Mississippi River at Red River Landing, Louisiana, by P. P. Burke	AD 746 968
4	Nov 1966	Channel Stabilization Publications Available in Corps of Engineers Offices	AD 746 969
5	Nov 1968	A Procedure for Computation of the Total River Sand Discharge and Detailed Distribution, Bed to Surface, by F. B. Toffaleti	AD 746 970
6	Sep 1969	Water-Temperature Effects on Stage-Discharge Relations in Large Alluvial Rivers, by G. B. Fenwick	AD 746 971
7	Oct 1969	State of Knowledge of Channel Stabilization in Major Alluvial Rivers, edited by G. B. Fenwick	AD 746 972
8	Oct 1969	Channel Stabilization, Inter-oceanic Sea-Level Canal, Lower Atrato River Portion, Route 25, Colombia, South America, by C. P. Lindner	AD 746 973
9	May 1972	Sedimentation Aspects, Project for Navigation and Flood Control, Lower Colorado River, Texas, by C. P. Lindner and G. B. Fenwick	AD 743 333
10	May 1973	Chena River Lakes Project, Alaska; Problems Relating to Channel Development, Erosion, and Bank and Levee Protection, by C. P. Lindner and G. B. Fenwick	AD 758 443
11	May 1974	Jackson Hole Flood Control Project	AD 777 796
12	Aug 1974	Mississippi River and Tributaries Project: Problems Relating to Changes in Hydraulic Capacity of the Mississippi River, by F. B. Toffaleti	AD 785 532
	Dec 1974	Florida Sheet No. 1	
13	Sep 1971	Chilina-Imvite and Other Rivers, Washington, Restoration Subsequent to Mt. St. Helens Eruption	AD A164 041
14	Sep 1971	Arizona Canal Diversion Channel Selection and Construction Subsequent to Damaging the Overhead Canal at the Appendix A	AD A164 067

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		U. S. ARMY CORPS OF ENGINEERS COMMITTEE ON TIDAL HYDRAULICS	
		Reports:	
1	Feb 1950	Evaluation of Present State of Knowledge of Factors Affecting Tidal Hydraulics and Related Phenomena	
2	Feb 1954	Bibliography on Tidal Hydraulics	
	Jun 1955	Supplement No. 1 Supplementary Material Compiled Through May 1955	
	May 1957	Supplement No. 2 Supplementary Material Compiled from May 1955 to May 1957	
	May 1959	Supplement No. 3 Supplementary Material Compiled from May 1957 to May 1959	AD 217 516
	May 1965	Supplement No. 4 Supplementary Material Compiled from May 1959 to May 1965	
	Aug 1968	Supplement No. 5 Supplementary Material Compiled from May 1965 to May 1968	
	Jul 1971	Supplement No. 6 Supplementary Material Compiled from May 1968 to May 1971	
	Jun 1975	Supplement No. 7 Supplementary Material Compiled from May 1971 to May 1974	AD A013 082
	Dec 1980	Supplement No. 8 Supplementary Material Compiled from June 1974 to June 1980	AD A097 284
	Jun 1985	Supplement No. 9 Supplementary Material Compiled from June 1980 to June 1983	AD A155 990
3	May 1965	Evaluation of Present State of Knowledge of Factors Affecting Tidal Hydraulics and Related Phenomena, C. F. Wicker, editor (supersedes Report No. 1)	AD 585 307
		Technical Bulletins:	
1	May 1954	Sediment Discharge Measurements in Tidal Waterways, by C. F. Wicker	
2	Apr 1957	Fresh Water-Salt Water Density Currents, a Major Cause of Siltation in Estuaries, by E. A. Schultz and H. B. Simmons	
3	Jan 1960	Tidal Flow in Entrances, by J. L. French	
4	Jun 1960	Soil as a Factor in Shoaling Processes, a Literature Review	
5	Jun 1961	One-Dimensional Analysis of Salinity Intrusion in Estuaries, by A. T. Ippen and D. R. F. Harleman	AD A081 411

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		U. S. ARMY CORPS OF ENGINEERS COMMITTEE ON TIDAL HYDRAULICS (Cont)	
		Technical Bulletins (Cont):	
6	Jun 1963	Typical Major Tidal Hydraulic Problems in United States and Research Sponsored by the Corps of Engineers Committee on Tidal Hydraulics	
7	Sep 1963	A Study of Rheologic Properties of Estuarial Sediments, by R. B. Krone	AD 787 313
8	Mar 1965	Channel Depth as a Factor in Estuarine Sedimentation, by H. B. Simmons	
9	Jun 1965	A Comparison of an Estuary Tide Calculation by Hydraulic Model and Computer, by J. M. Caldwell	
10	Sep 1966	Significance of Clay Minerals in Shoaling Problems, by J. Neiheisel	AD 756 363
11	Sep 1966	Extracts from the Manual of Tides, by R. A. Harris	AD 756 364
12	Dec 1966	Unpublished Consultation Reports on Corps of Engineers Tidal Projects	AD 757 378
13	Jun 1967	Two-Dimensional Aspects of Salinity Intrusion in Estuaries: Analysis of Salinity and Velocity Distributions, by D. R. F. Harleman and A. T. Ippen	AD 756 135
14	Jul 1967	Tidal Flow in Entrances; Water-Level Fluctuations of Basins in Communication with Seas, by G. H. Keulegan	AD 756 200
15	Mar 1969	Special Analytic Study of Methods for Estuarine Water Resources Planning	AD 756 160
16	Sep 1969	The Computation of Tides and Currents in Estuaries and Canals, by D. R. F. Harleman and C. H. Lee	AD 756 136
	Jun 1973	Appendix A A User's Manual, by D. R. F. Harleman and M. L. Thatcher	AD 762 613
17	Jan 1971	Estuarine Navigation Projects: An Assembly of Information Pertaining to a Selection of Projects Having Characteristics or Problems Which are Con- sidered to be of Potential Wide Interest	AD 756 133
18	Jun 1972	History of the Corps of Engineers Committee on Tidal Hydraulics (January 1949 to June 1971), by J. B. Lockett	AD 744 784

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		U. S. ARMY CORPS OF ENGINEERS COMMITTEE ON TIDAL HYDRAULICS (Cont)	
		Technical Bulletins (Cont):	
19	Jun 1972	A Field Study of Flocculation as a Factor in Estuarial Shoaling Processes, by R. B. Krone (includes Appen- dixes A-C)	AD 744 785
	Jun 1972	Appendix D Velocities, Salinities, and Suspended Solids from Field Measurements and Samples, by R. B. Krone	
20	Jul 1974	Unsteady Salinity Intrusion in Estuaries; Part I: One- Dimensional, Transient Salinity Intrusion with Varying Freshwater Inflow; Part II: Two-Dimensional Analysis of Time-Averaged Salinity and Velocity Profiles, by D. R. F. Harleman, J. S. Fisher, and M. L. Thatcher	AD 782 804
21	Dec 1980	Evaluation of Numerical Storm Surge Models (includes Appendixes A-D)	AD A093 760
	Mar 1981	Errata Sheet No. 1	
		Reports on Special Tidal Hydraulics Problems:	
Unnumbered	Dec 1960	Present and Potential Channel Maintenance Problems in Lower Columbia Estuary (includes Appendix A)	
Unnumbered	Jul 1961	Review of Shoaling Problems in Hudson River, New York Harbor	
Unnumbered	Jul 1961	Charleston Harbor Shoaling Problem	
Unnumbered	Aug 1961	Georgetown Harbor Shoaling Problem	
Unnumbered	Aug 1961	Shoaling of Gastineau Channel, Alaska	
Unnumbered	Dec 1962	Navigation Project in Gastineau Channel, Alaska	
Unnumbered	Jan 1963	Saltwater Intrusion, Lake Washington Ship Canal, Seattle, Washington	
Unnumbered	Jan 1963	Improvement Plans for Knik Arm and Turnagain Arm, Portions of Cook Inlet, Alaska	
Unnumbered	Apr 1963	Saltwater Intrusion, Lake Washington Ship Canal, Seattle, Washington (Revised)	
Unnumbered	Jul 1963	Review of Improvements Recommended at Grays Harbor, Washington	
Unnumbered	Dec 1963	Channel Maintenance Problem, Chatham (Stage) Harbor, Massachusetts	
Unnumbered	Jan 1964	Comments on Plan for Comprehensive Study of the Delaware Estuary, Pennsylvania, New Jersey and Delaware (includes Appendix A)	
Unnumbered	Feb 1964	Wells Harbor Navigation Project, Wells Harbor, Maine (includes Appendix A)	
Unnumbered	Apr 1964	Plan of Study and Methods for Reducing Shoaling in Small Boat Basin, Dillingham, Alaska	

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		US ARMY CORPS OF ENGINEERS COMMITTEE ON TIDAL HYDRAULICS (Cont)	
		Reports on Special Tidal Hydraulics Problems (Cont)	
Unnumbered	Apr 1964	Plan of Study of the Small Boat Basin, Ninilchik, Alaska	
Unnumbered	Apr 1964	Proposed Plan and Studies for Small Boat Basin, Anchorage, Alaska	
Unnumbered	Oct 1964	Shoaling and Beach Stability Problem, Ponce de Leon Inlet, Florida	
Unnumbered	Nov 1964	The Channel in the Mouth of the Colorado River, Texas	
Unnumbered	Dec 1964	Channel Deepening Problems, Galveston Harbor, Texas	
Unnumbered	Dec 1964	Problems in Connection with Matagorda Ship Channel Project	
Unnumbered	Aug 1965	Inland Waterway Between Delaware River and Chesapeake Bay- Problem of Disposal of Material to be Removed from a Portion of Channel in Chesapeake Bay	
Unnumbered	Aug 1965	Sedimentation Problems in Entrance of Turning Basin, Corpus Christi, Texas	
Unnumbered	Oct 1965	Shoaling Problems on the Mississippi River-Gulf Outlet	
Unnumbered	Dec 1965	San Francisco Bay, California - Disposal of Dredge Spoil	
Unnumbered	Apr 1966	Charleston Harbor, South Carolina - A Review of Certain Aspects of Plans for Rediverting Santee-Cooper Power Plant Discharges from Cooper River	
Unnumbered	Dec 1966	Tides and Currents in the Proposed Sea-Level Canal Between the Atlantic and Pacific Oceans	
Unnumbered	Apr 1967	Intracoastal Waterway, Columbia River to Puget Sound, Washington	
Unnumbered	May 1967	Duwamish River, Washington, Proposed East Channel Closure	
Unnumbered	Jun 1967	Study Program of Willapa Bay, Washington	
Unnumbered	Jun 1967	Grays Harbor, Washington	
Unnumbered	May 1968	Delaware Estuary, Pennsylvania, New Jersey and Delaware - Long- Range Dredged Spoil Disposal Problem	
Unnumbered	Jan 1970	Tillamook Bay, Oregon	
Unnumbered	Mar 1970	Rogue River, Oregon	
Unnumbered	Sep 1970	Navigation Problems at Chincoteague Inlet, Virginia	
Unnumbered	Jun 1972	Georgetown Harbor Navigation Study	
Unnumbered	Nov 1975	Umpqua River Entrance, Oregon (includes Appendix A)	

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		U. S. ARMY ENGINEER DISTRICT, HUNTINGTON, West Virginia	
	Apr 1942 Revised Aug 1943	Report on Analysis of Hydrologic Data for Index Areas, Muskingum River Basin, Ohio	
		U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK, Arkansas	
	Dec 1944	Accelerated Traffic Tests, Natchitoches Municipal Airport, Louisiana	
		U. S. ARMY ENGINEER DISTRICT, LOS ANGELES, California	
		Reports	
2-100	Jul 1975	Supercritical Flow at Open-Channel Junctions; Hydraulic Model Investigation	AD A014 892
2-106	Oct 1978	Side-Channel Spillway and Outlet Works for San Antonio Dam; Hydraulic Model Investigation, by D. A. Barela (includes Appendix A)	AD A062 846
1-109	Mar 1972	Supercritical Flow in Curved Channels; Hydraulic Model Investigation (includes Appendixes A-B)	
	Sep 1972	Addendum	
1-110	Jan 1978	Rock-Lined Transitions; Hydraulic Model Investigation, by D. A. Barela	AD A052 769
2-112	Feb 1979	Whittier Narrows Flood-Control Basin, Los Angeles County Drainage Area, California; Hydraulic Model Investigation, by D. A. Barela	AD A068 521
		U. S. ARMY ENGINEER DISTRICT, MOBILE, Alabama	
	Jan 1945	Accelerated Traffic Tests, Eglin Field, Florida	

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
Unnumbered		U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS, Louisiana	
		Mississippi River, Baton Rouge to Gulf of Mexico; Investigations and Data Collection for Model Study of Southwest Pass, Mississippi River; Prototype Investigation:	
	Apr 1959	Volume I Text	AD 635 739
	Apr 1959	Volume II Plates	AD 635 740
	Jul 1971	National Shoreline Study; Inventory Report -- Lower Mississippi Region	
Unnumbered		U. S. ARMY ENGINEER DISTRICT, NORFOLK, Virginia	
	Jun 1945	Accelerated Traffic Tests, Langlev Field, Virginia	
Unnumbered		U. S. ARMY ENGINEER DISTRICT, ROCK ISLAND, Illinois	
	Feb 1964	Investigation of Cathodic Protection Current Require- ments of Stainless-Plain Couples	
Unnumbered		U. S. ARMY ENGINEER DIVISION, LOWER MISSISSIPPI VALLEY, Vicksburg, Mississippi	
	Feb 1981	Program Criteria Specifications Document; Computer Program TWDA for Design and Analysis of Inverted-T Retaining Walls and Floodwalls, by V. M. Agostinelli, W. A. Price, and C. E. Pace	AD A097 760
Unnumbered		U. S. ARMY RESEARCH OFFICE, Research Triangle Park, North Carolina	
	Sep 1975	Protection of Slopes Against Rainfall Erosion; Final Report, by E. B. Perry	AD A016 147
* Unnumbered		U. S. DEFENSE NUCLEAR AGENCY, Washington, DC	
	Jul 1973	MIDDLE NORTH Series, MIXED COMPANY; Strong- Motion Seismic Measurements, by R. F. Ballard, Jr., and R. E. Leach	AD 914 012L
* Unnumbered	Aug 1974	MIDDLE NORTH Series, MIXED COMPANY Event; Proof Test of Military Personnel Shelter Concepts, by J. W. Ball (includes Appendixes A-D)	AD B000 534L
* Unnumbered	Aug 1975	MIDDLE NORTH Series, MIXED COMPANY Event; Ground Shock from a 500-Ton High-Explosive Detonation on Soil Over Sandstone, by J. K. Ingram (includes Appendixes A-C)	AD B008 181L

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		U. S. DEFENSE NUCLEAR AGENCY, Washington, DC (Cont)	
* Unnumbered	Sep 1975	MIDDLE NORTH Series, MIXED COMPANY Event; Craters and Ejecta from Near-Surface Bursts on Layered Media, by B. L. Carnes (includes Appendixes A-C)	AD B008 936
* Unnumbered	Apr 1977	Pre-DICE THROW II; Crater and Permanent Displacement Study, by J. W. Meyer	AD B029 465L
* Unnumbered	Jul 1977	DICE THROW Series; Pre-DICE THROW II Event; Events 1 and 2, Ground Motion Measurements, by D. W. Murrell (includes Appendixes A-C)	AD B031 703L
Unnumbered	Dec 1977	Development of a Laterally Isolated Diaphragm-Type Soil-Structure Interface Stress Gage, by Andres Peekna (includes Appendixes A-C)	AD A089 719
Unnumbered	Dec 1977	Development of the Brinell Sandwich Passive Soil Stress Gage, by Andres Peekna (includes Appendixes A-E)	AD A061 462
* Unnumbered	Apr 1980	MISERS BLUFF Series; Phase I, Ground Shock and Airblast Measurements Data Report, by D. W. Murrell and J. H. Stout	AD B052 649L
		U. S. ENVIRONMENTAL PROTECTION AGENCY, Cincinnati, Ohio	
Unnumbered	Dec 1976	Design Considerations for Pump and Paper-Mill Sludge Landfills, by R. H. Ledbetter (includes Appendixes A-B)	
Unnumbered	Aug 1977	Physical and Engineering Properties of Hazardous Industrial Wastes and Sludges, by M. J. Bartos, Jr., and M. R. Palermo	
Unnumbered	May 1978	Chemical and Physical Effects of Municipal Landfills on Underlying Soils and Groundwater (includes Appendixes A-C)	
		U. S. ENVIRONMENTAL PROTECTION AGENCY/CORPS OF ENGINEERS TECHNICAL COMMITTEE ON CRITERIA FOR DREDGED AND FILL MATERIAL	
Unnumbered	Mar 1977	First Annual Report	AD A040 662
Unnumbered	Jul 1977	Ecological Evaluation of Proposed Discharge of Dredged Material Into Ocean Waters; Implementation Manual for Section 103 of Public Law 92-532 (Marine Protection, Research, and Sanctuaries Act of 1972)	AD A041 209
Unnumbered	Jan 1979	Activity Report	



REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		U. S. FEDERAL AVIATION ADMINISTRATION, Washington, DC	
Unnumbered	Oct 1974	Design of Civil Airfield Pavements for Seasonal Frost and Permafrost Conditions, by R. L. Berg, U. S. Army Cold Regions Research and Engineering Laboratory, Hanover, NH (includes Appendixes A-E)	AD A006 284
Unnumbered	Feb 1975	Field Survey and Analysis of Aircraft Distribution on Airport Pavements, by Victor A. HoSang, Howard, Needles, Tammen and Bergendoff, Alexandria, VA (includes Appendixes A-B)	AD A011 488
Unnumbered	Oct 1975	Statistical Quality Control Procedures for Airport Pavement Materials, by E. R. Brown (includes Appendixes A-D)	AD A017 594
Unnumbered	Sep 1976	Criteria for Airport Pavements; Final Summary Report	
Unnumbered	Oct 1976	Improvements to Airport Drainage Criteria, Phase I, by Jack Fowler	AD A033 644
Unnumbered	Dec 1976	Structural Design of Pavements for Light Aircraft, by D. M. Ladd, Frazier Parker, Jr. and A. T. Pereira (includes Appendix A)	AD A041 300
Unnumbered	Jan 1977	Plastic Pipe in Airport Drainage Systems, by G. G. Harvey (includes Appendixes A-B)	AD A041 200
Unnumbered	Oct 1977	Subgrade Elastic Moduli Determined from Vibratory Testing of Pavements, by R. A. Weiss (includes Appendixes A-B)	AD A055 158
Unnumbered	Mar 1978	Literature Review - Elastic Constants for Airport Pavement Materials, by J. L. Green (includes Appendix A)	AD A056 195
Unnumbered	Sep 1979	Filter Fabrics for Airport Drainage, by S. P. Miller (includes Appendixes A-B)	AD A085 509
Unnumbered	Dec 1979	A Review of Fabric Usage in Pavements Constructed on Low-Strength Soils, by D. M. Ladd	AD A083 076
Unnumbered		Pavement Evaluation and Overlay Design Using Vibratory Nondestructive Testing and Layered Elastic Theory:	
	Mar 1980	Volume I Development of Procedure, by R. A. Weiss (includes Appendixes A-B)	AD A087 186
	May 1980	Volume II Validation of Procedure, by R. A. Weiss and J. W. Hall, Jr.	AD A087 716
Unnumbered		Nondestructive Testing for Light Aircraft Pavements:	
	Jan 1980	Phase I Evaluation of Nondestructive Testing Devices, by A. J. Bush III	AD A083 597
	Nov 1980	Phase II Development of the Nondestructive Evaluation Methodology, by A. J. Bush III	AD A099 633
Unnumbered	May 1980	Procedure for Condition Survey of Civil Airports, by J. W. Hall, Jr., and D. E. Eisen	AD A089 457
Unnumbered	Apr 1981	Condition Survey of Paved Runways, Taxiways and Aprons, by J. E. Stoenberger	AD A112 311

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		U. S. FEDERAL HIGHWAY ADMINISTRATION, Washington, DC	
Unnumbered	Jun 1974	Users' Manual for Membrane Encapsulated Pavement Sections (MEPS), by S. L. Webster	
Unnumbered	Jun 1975	A Review of Engineering Experiences with Expansive Soils in Highway Subgrades, by D. R. Snethen, F. C. Townsend, L. D. Johnson, D. M. Patrick, and P. J. Vedros	AD A020 309
Unnumbered		Design and Construction of Compacted Shale Embankments:	
	Aug 1975	Volume 1 Survey of Problem Areas and Current Practices, by J. H. Shamburger, D. M. Patrick, and R. J. Lutton	
	Aug 1975	Volume 2 Evaluation and Remedial Treatment of Shale Embankments, by G. H. Bragg, Jr., and T. W. Zeigler	
	Feb 1977	Volume 3 Slaking Indexes for Design, by R. J. Lutton	
	Oct 1978	Volume 4 Field and Laboratory Investigations, Phase III, by W. E. Strohm, Jr. (includes Appendixes A-B)	
	Dec 1978	Volume 5 Technical Guidelines, by W. E. Strohm, Jr., G. H. Bragg, Jr., and T. W. Zeigler (includes Appendixes A-B)	
Unnumbered	Jan 1976	An Occurrence and Distribution Survey of Expansive Materials in the United States by Physiographic Areas, by D. M. Patrick and D. R. Snethen	
Unnumbered	Jan 1977	An Investigation of the Natural Microscale Mechanisms That Cause Volume Change in Expansive Clays, by D. R. Snethen, L. D. Johnson, and D. M. Patrick	
Unnumbered	Jun 1977	An Evaluation of Expedient Methodology for Identification of Potentially Expansive Soils, by D. R. Snethen, L. D. Johnson, and D. M. Patrick	
Unnumbered		Case Studies of Pavement Performance:	
	Jul 1977	Phase I Kentucky, by P. J. Vedros, Jr., and W. R. Barker (includes Appendixes A-B)	
	Jul 1977	Phase II Texas, by P. J. Vedros, Jr., and W. R. Barker (includes Appendixes A-B)	
Unnumbered	Sep 1977	Wastewater Treatment Systems for Safety Rest Areas, by G. W. Hughes, D. E. Averett, and N. R. Francingues, Jr. (includes Appendixes A-D)	

REPORTS PREPARED OR PUBLISHED AND DISTRIBUTED BY WATERWAYS  
EXPERIMENT STATION FOR OTHER AGENCIES

<u>Number</u>	<u>Date</u>	<u>Agency and Title</u>	<u>AD Number</u>
		U. S. FEDERAL HIGHWAY ADMINISTRATION, Washington, DC (Cont)	
Unnumbered	Feb 1979	Dynamic Testing of Slotted Underdrain Pipe, by A. J. Bush III and R. T. Sullivan	
Unnumbered	Jun 1979	Technical Guidelines for Expansive Soils in Highway Subgrades, by D. R. Soethen (includes Appendixes A-F)	
		U. S. NAVAL WEAPONS CENTER, China Lake, California	
* Unnumbered	Sep 1980	Full-Scale Penetration into Semiconfined Diorite Boulders by a Semiarmor-Piercing (SAP) Bomb and a Slender Penetrator, by C. F. Austin, C. C. Halsev, and S. L. Berry	
		U. S. WEATHER BUREAU, DEPARTMENT OF COMMERCE, AND CORPS OF ENGINEERS, U. S. ARMY	
		Hydrometeorological Reports:	
1	1943	Maximum Possible Precipitation Over the Ompompanoosuc Basin Above Union Village, Vermont	
2	1941	Maximum Possible Precipitation Over the Ohio River Basin Above Pittsburgh, Pennsylvania	
3	1943	Maximum Possible Precipitation Over the Sacramento Basin of California	
4	1943	Maximum Possible Precipitation Over the Panama Canal Basin	
5	1947	Thunderstorm Rainfall:	
		Part 1 Text	
		Part 2 Figures	

\* Statement B. See Preface.

INDEX

KEY-WORD-ONLY-CONTEXT (KWOC) INDEX

Term	Report No.	Page #	Term	Report No.	Page #
A. V. Shelton Fallout Model Prediction System	TM 65-1	W-20	Admixture (Cont)		
AASHTO Road Test	TM 65-10	W-20	Concrete (Cont)		
	CR 4-79	S-105	Underwater	TR 6-77-4	C-3
	TR 4-721	S-82	Hydrogel	TM	C-27
Aberdeen			Mass Concrete	MP 6-144/14	C-3
Lock and Dam	TR H-73-12	H-68	ADM's	TR 29	W-19
Proving Ground	MP H-77-13	M-15	AEC Structure, Oak Ridge	MP 3-71-26	C-45
Abiquiu Dam	TR 2-513	H-42	Aeration		
Abrasion			Biological Systems	TR Y-77-4	E-14
Erosion			Dewatering Fine-Grained Dredged Material	CR D-76-10	E-27
Damage	CTIAC-40	C-42	Aerial		
Evaluation	CTIAC-67	C-45	Cone Penetrometer	MP 4-899	M-7
Resistance	CTIAC-66	C-45		TR 3-462	M-29
	MP C-78-4/3	C-39	Dispersion System for Rapid-Landing-Site Stabilization	CR 3-169	S-99
Sand	TM 2	CERC-37	Infrared Survey	MP M-70-3	M-9
Absecon Inlet	TM 204-1	H-33	Penetrometer	MP 4-300	M-2
Absorptive Aggregate	MP 4-118	S-7	Photo Grav Tones	CR 4-12A	M-39
Accelerated			Photographic Techniques	TM 36	CERC-28
Curing			Photographs	CR 4-20	M-39
Hydration Products of Cement	MP C-78-11	C-26	Photographv	GITI 2	CERC-5
Soil-Lime	TR S-76-9	S-93		TM 48	CERC-28
Traffic Test	TM	S-60	Survey of Waterbird Colonies	TR D-73-13	E-14
	TR S-76-12	S-93	Afghanistan	CR 3-11/4	M-42
			Africa	CR 3-56	M-40
Eglin Field				TM 3-343/81	S-69
Langlev Field			Canal Zone Analogs	CR 3-30	M-43
Natchitoches Municipal Airport			Madagascar V	CR 3-30/V	M-43
Accelerograms	MP S-73-1/14	S-39	Yuma Analogs	CR 3-11	M-42
Accelerometers	MP 1-672	W-3	African Desert	TR 3-630/1	S-80
Access Channel	MP 2-114	H-4		TR 3-630/6	S-80
Acid Attack of Concrete	CTIAC-28	C-41	Agana Small-Boat Harbor	TR H-75-1	H-61
	MP C-77-9	C-25	Agate Bay Harbor	TM 203-1	H-33
	MP C-78-14	C-26	Aggregate	CTIAC-65	C-45
	MP 4-785	S-21		IR S-74-3	S-3
ACIL				MP 4-88	S-6
Acoustic				MP 6-8	C-2
Classifying Sensors	MP M-75-10	M-13		MP 6-132/4	C-3
Flowmeter	TM 31	CERC-27		MP 6-256	C-5
	TR 2-810	H-53		MP 6-278	C-5
Magnetic Data	MP M-75-2	M-12		MP 6-319	C-6
Subbottom Profiling	MP S-69-32	S-30		MP 6-389	C-6
	TR S-70-1	S-86		MP 6-395	C-6
Target Classifiers	TR H-76-7	M-32		MP 6-416	C-7
Acrylamide N	TM 3-408/A	S-73		MP 6-646	C-10
Activities Summary	TR	MS-11		MP 6-710	C-11
Adana				MP 6-732	C-12
Air Base	TM 3-343/75	S-69		MP 6-740	C-12
Airport	TM 3-343/74	S-69		MP 6-772	C-12
Addressograph	MP 5-163	MS-4		MP C-72-4	C-19
Adhesives	TR S-71-11	S-88		MP C-76-2	C-23
Adiabatic Temperature-Rise Tests	MP 6-936	C-15		PNE 5003	W-17
Admixture	CTIAC-30	C-42		TM	C-27
	MP 6-473	C-7		TM 6-224	C-27
	MP C-70-12	C-18		TR 6-543	C-32
	MP C-71-8	C-19		TR 6-593	C-33
	MP C-78-3	C-25		TR 6-747	C-34
	TM 6-419/4	C-29		TR 6-819	C-36
	TR C-77-1	C-39		IR S-70-5	S-3
	MP 6-471	C-7	Blending	TM 6-222	C-27
Concrete	MP 6-727	C-11	Bull Shoals Dam	MP 6-281	C-5
	MP 6-803	C-13	Carlyle Reservoir		
	MP 6-941	C-15			
	MP C-78-9	C-26			
	TR 6-584	C-33			

\* The letters C, CERC, E, H, M, S, and W before numbers indicate the originating WES laboratory as follows: C -- Concrete; CERC -- Coastal Engineering Research Center; E -- Environmental Effects; H -- Hydraulics; M -- Mobility and Environmental Systems; S -- Soils and Pavements; and W -- Weapons Effects. The letters MS, P, and Z designate Miscellaneous Subjects, Potomology Investigations, and Reports prepared or published and distributed by WES for other agencies, respectively.

## 2-INDEX

Term	Report No.	Page	Term	Report No.	Page
<b>Aggregate (Cont)</b>			<b>Airblast (Cont)</b>		
Concrete	TR C-69-6/1	C-37	Measurements (Cont.)	ENE 612F	W-16
	TR C-69-6/2	C-37		TM	W-27
Mixtures with High Water- Cement Ratios	TR C-72-3	C-37	Data Report	MP N-73-4	W-17
Corps of Engineers Dams	MP 6-415	C-7	Open Earthsheways	MP 1-231	W-7
Degradation Test Method	MP 6-218	C-4	Overpressure	MP N-55-4	W-7
Driver, Barber-Greene Company				TR 7	W-25
Model 837	TM 3-285	S-63	Measurement Program	MP E-75-4	W-11
Durability of Concrete	B 34	C-1	Prediction	TR 3	W-29
Fishtrap Dam	MP C-76-3	C-23	Protective Structures	MP 1-115	W-7
Grading	TR 6-717	C-34	Variations	TR S-73-5	S-95
Highway Construction	MP 6-568	C-8	Airborne Infrared Roof Moisture		
Mass Concrete	B 39	C-1	Surveys	TR M-75-1	W-1
Mix Design	MP 5-627	MS-5	Aircraft	MP M-73-16	W-19
Mixtures for New Lock and Dam No. 26	MP C-76-1	C-23		MP S-71-27	C-35
Nuclear Methods	MP 6-643	C-10	Blast and Helicopter Downwash Protection	MP S-75-19	S-47
Stone for the Reod Lake Reservoir	MP 6-589	C-9	Distribution on Airport Pavements		Z-16
St. Louis Flood Protection Project	MP 6-334	C-6	Dynamic Loads	TR S-75-11	S-32
Samples	MP 6-405	C-6	Ground-Flotation	TR 3-737	S-32
Shelbville Reservoir Project Sources	MP 6-588	C-9	Landing Gear	MP 4-459	S-15
New York State	CTIAC-3	C-40	Pavement		Z-16
Yazoo Backwater Project	MP C-73-3	C-21	Compatibility Study	TR S-74-11	S-51
Stonewall Jackson Dam	MP 6-523	C-8	Protective Structures Design	TR N-69-8	W-34
Tests	CTIAC-66	C-45	Shelter	TR N-75-6	W-40
Alton Floodwall	MP 6-251	C-5	Complex	MP N-75-6	M-13
Cape Girardeau Floodwall	MP 6-184	C-4	Response	TR N-77-3	W-41
Devil's Kitchen Dam	MP 6-158	C-3	Substandard Airstrips	MP N-75-13	M-14
<b>Agricultural Value of Dredged Material</b>	TR D-73-36	E-13	Traffic	MP S-73-56	S-43
<b>Air</b>			Runways	MP 4-359	S-13
Content			Airfield		Z-7
Hardened Concrete	MP 6-286	C-5		CR 4-9	S-109
Interior Mass Concrete	MP 6-467	C-7	Bare Base Support	MP S-72-14	S-32
Mass Concrete	TM 6-345	C-28	Damage Repair	MP S-73-27	S-41
	TM 6-352	C-28	Densities and Moistures	MP S-72-7	S-32
Demand	MP 2-31	H-4	Pavement	TM 3-357/B	S-72
	MP 2-75	H-4		MP S-69-10	S-27
Entraining Admixture	MP C-63-1	C-15		MP 4-199	S-9
	TM 6-327	C-27			Z-7
Entrainment					Z-16
Concrete	B 30	C-1	Construction	MP 4-91	S-6
Mass Concrete	TR C-69-1	C-36	Evaluation	MP S-72-7	S-35
Open-Water Pipeline Disposal	TR D-77-15	E-7		MP S-74-22	S-45
Overpressure Soil Test				TM	S-56
Facility	MP S-75-20	S-47		TM 3-349	S-71
Photo				TM 3-394	S-72
Interpretation	TR M-74-2/B	M-30		TR 3-493	S-72
Alluvial Soils	MP 3-181	S-9		MP S-75-18	S-47
Marshland Areas	MP 3-182	S-9		MP 4-311	S-11
Patterns of Terrain Features	TR 3-726/VI	M-23		MP 4-315	S-12
Pockets in Concrete Surfaces	TM	C-28		MP 4-321	S-12
<b>Airblast</b>				MP 2-74-3	S-44
Arctic Environment	TR 2-597	W-30	Altus Air Force Base	MP 3-344	S-71
Detonations	TR E-72-16	W-37		TR 3-456	S-75
Ground Shock	MP N-75-3	W-11	Bergstrom Air Force Base	MP 4-352	S-16
Loading				MP 4-359	S-16
Large Metal Shipping Container	MP N-70-5	W-7	Bergstrom Air Force Base	MP 4-311	S-16
Precast Reinforced Concrete Manhole	MP 1-384	W-6	Butts Army Airfield	MP 2-74-22	S-50
Measurements			Davis Field	MP 4-321	S-12
	CR E-74-1	W-46	Dwight Air Force Base	MP 4-311	S-11
			Godman Army Airfield	MP 2-74-3	S-44
			Goodfellow Air Force Base	MP 4-311	S-11
			Gray Air Force Base	MP 4-311	S-11
			Hirsch Auxiliary Field	MP S-69-43	S-31
			Hunter Air Force Base	MP 4-375	S-11
			Iwo Jima Air Force Base	MP 4-384	S-24

Term	Report No.	Page	Term	Report No.	Page
Airfield (Cont)			Alameda Naval Air Station	MP 5-64	MS-4
Pavement (Cont)				TM 2-152	H-40
Evaluation (Cont)			Alaska	CR 3-37	M-40
James Connally Air Force Base	MP 4-310	S-11		TM 6-320/21	C-28
	MP 4-376	S-13		TR 2-78-9	E-33
Keesler Air Force Base	MP S-69-45	S-31	Alaskan Earthquake	TM 2-333/36	C-69
Laredo Air Force Base	MP S-69-44	S-31	Albarette, Spain	INR 3	C-4
Moodv Air Force Base	MP 4-314	S-12	Albuquerque District		
Opalokka Airport	MP 4-316	S-22	Alcoa	MP S-69-40	S-31
Perrin Air Force Base	MP 4-397	S-14	AM2 Landing Mat	MP S-70-25	S-33
Reese Air Force Base	MP 4-375	S-13	Brazeed AMS Landing Mat	MP S-69-17	S-29
	MP 4-427	S-14	T11		
Robert Gray Army Airfield	MP 4-697	S-20	Alconbury (Lincolnshire), England	TM 4-343/36	S-20
	MP S-69-38	S-30	Aleutian Trench	RR H-75-4	H-29
Robins Air Force Base	MP 4-367	S-13	Alexandria and Arlington County Reach	TR H-75-19	H-53
Sheppard Air Force Base	MP 4-366	S-13		TR H-76-24	H-69
Travis Air Force Base	MP 4-312	S-11	Alfheil	TM 6-330/A/B	C-28
Turner Air Force Base	MP 4-638	S-20	Algiers Lock	TM 2-309	H-38
Webb Air Force Base	MP 4-398	S-14		TR 3-503	S-77
Junctures	MP S-76-19	S-49	Algorithm	CETA 82-1	CERC-4
Kelly AFB	TR 3-459	S-75		CETA 22-4	CERC-4
Loads	MP S-73-66	S-44		TP 82-2	CERC-33
Smoothness Requirements and Railway Systems	TR S-77-12	S-94	Alizeville Lock and Dam	TR H-74-10	H-61
Rennaissance, Vieques Airfield, Puerto Rico and Road Surfacing Membrane	TR N-75-4	W-40		TR H-78-2	H-67
	MP 4-18	M-2	Alkali Aggregate Reaction	CTIAC-26	C-43
	CR S-71-7	S-106		CTIAC-17	C-41
	TR 3-492	S-76		MP 6-345	C-5
	TR 3-515	S-77		MP C-75-3	C-22
Site Evaluation	IR M-75-1	M-1		MP C-77-10	C-25
	TR M-75-3	M-31		TM 6-368	C-28
Moron de la Frontera, Spain Selection	TM 3-343/78	S-69	Carbonate Reaction in Concrete Reactivity	TR 6-481	C-31
Surfacing	MP 4-19	M-2		MP 6-659	C-10
Theater of Operations	TR S-74-2	S-90		CTIAC-65	C-49
Airhead Construction	MP S-74-23	S-46		MP 6-530	C-8
Airmobile	MP 4-130	S-7		MP 6-646	C-10
Airoll	MP M-72-6	M-10	Rock Reactions in Concrete Reactivity	MP C-72-9	C-20
	MP 4-439	M-3		MP C-76-3	C-23
	MP 4-513	M-4	Portland Cement	TM 6-224	C-27
Airphoto Approach	TM 3-331/6	M-18	Pozzolans	MP C-74-1	C-21
Pattern Analysis	CR 4-6	M-38	Reactions with Carbonate Rock Silica	MP 6-682	C-11
Airplane Landing Facilities	TM 3-416	S-73		MP 6-530	C-3
Mat Investigation	CR S-71-3	S-99	Reaction Concrete	MP 6-646	C-10
Steel, Pierced Type M-6	TM 212-2	S-59	Concrete	CTIAC-68	C-45
Wheels	TM 212-8	S-60	Hiwassee Dam	CTIAC-32	C-42
Airport	MP 4-16	S-4		MP C-73-10	C-26
	MP S-69-33	S-30	New Savannah Bluff Lock and Dam	CTIAC-33	C-42
	TR S-74-10/II	S-91		MP C-73-13	C-26
Drainage		Z-16	Products	CTIAC-31	C-42
Lockers	TR N-75-11	W-41		MP C-73-7	C-42
Pavement		Z-16	Allatona Dam	TM 214-1	H-34
	MP	S-48		TM 214-2	H-34
	TR S-74-12	S-91	Allentown, Pennsylvania	TR 2-621	H-46
	TR S-75-14	S-92	Alligator Weed	TM 2-376	H-40
	TR S-75-17	S-92	Alluvial Deposits	TR	M-43
	TR S-77-8	S-94	Patterns	TM	S-51
	TR S-77-11	S-94	River	CR 4-513	M-49
Materials		Z-16		RR 1	Z-5
	CR S-75-6	S-99		TM	H-35
	CR S-75-12	S-104		TR 6	Z-8
Airstrip	MP M-76-18	M-14	Soils	TR 7	Z-8
	MP S-68-13	S-27	Meander Belt and Backswamp Deposits	MP 3-181	S-9
Binh Hung, South Vietnam	MP 4-549	M-4		TR 3-534	S-79
Ala Wai Boat Harbor	TR 2-767	H-52			

## 4-INDEX

Term	Report No.	Page	Term	Report No.	Page
Alluvial (Cont)			Ammonium Salt as a Stabilizing Agent	MP 3-151	S-8
Streams	MP H-71-3	H-12	AMOPES	MP M-76-11	M-14
Terrain	MP S-77-24	S-52	Amphibian (MCA)	TR A-77-171	M-49
Alluvium	TR H-73-3	W-39	Amphibious Vehicle	MP M-70-9	M-9
Alps	MP 3-561	S-19		MP N-68-2	W-7
Altair	MP S-68-14	S-27		TR 3-783/D	M-24
Alternate National Military Command Center (ANMCC) Improvement Project	CTIAC-61	C-44	AMRAD	MP 4-955	S-25
Alternative Power Sources	TR D-77-32	E-11	Ananotia River	TR 2-434	H-42
Altos			Anaerobic Sediments	TP Y-78-11	E-33
Floodwall	MP 6-251	C-5	Anaheim Bay	TM 68	CERC-40
Illinois	TM 77-1	S-55		TM 2-255	H-36
Altus Air Force Base	MP 4-352	S-12	Analogs	TR 3-506	S-77
	MP 4-353	C-12	Canal Zone Climate	CP 3-30	M-43
	MP S-73-14	S-40	Fort Greely and Fort Churchill		
Alum Creek Dam	TR H-70-4	H-56	Terrain	CR 3-27	M-44
Aluminized Blasting Agents	TR 28	W-29	Yuma		
Aluminum	MP S-71-28	S-36	Climate	CR 3-11	M-42
	MP S-73-9	S-40	Terrain	TR 3-630	S-80
Allow Pierced Plank Mat	TM 212-7	S-60	Analytical Model		
Coated Wires	TR 6-613	C-34	Predicting		
Containers	TM 71-7	W-25	Cross-Country Vehicle Performance	TR 3-783	M-24
Honeycomb Landing Mat	MP 3-69-49	S-31	Vehicle Performance	TR M-70-7/I	M-26
	MP S-70-21	S-34	Ship Transit Capabilities	MP H-69-10	H-11
	MP S-71-7	S-34	Terrain	TR M-70-3	M-26
	MP S-72-4	S-36	Study of Ground-Surface Shielding	TR M-74-4	M-30
	MP S-73-8	S-40		TR M-71-4	M-28
	MP S-73-11	S-40	ANAMOB	TR 3-675	S-81
Ions of X-ray Emission Spectroscopy	MP 6-604	C-9	Anchor	TR S-71-10	S-88
Landing Mat	MP S-69-29	S-30		TM 6-399	C-29
	MP S-69-39	S-30	Mass-Concrete Forms		
	MP S-69-51	S-31	Anchorage, Alaska		
	MP S-72-38	S-38	Angle of Incidence	TR 2-512	W-30
	MP S-74-14	S-45	Internal Friction	MP S-69-12	S-29
Mat Panels	MP S-69-36	S-30	ANGLEDOZER	TM 67-20	W-23
Pierced Type, M9	TM 3-724	S-55	Animal		
Sandwich Mat	MP S-71-11	S-34	Colonization	TP 76-7	CERC-30
Sphere	TM 68-11	W-23	Habitats	CR Y-75-2	E-35
AM1 Landing Mat	MP 4-599	S-18	Upland Disposal Areas	CR D-77-2	E-22
	MP 4-655	S-19	Anisotropic		
	MP 4-737	S-22	Shear Strength	MP S-76-2	S-48
	MP 4-884	S-24	Versus Isotropic Consolidation	TR S-75-13	S-92
AM2			Anisotropically Consolidated Clay	MP S-73-60	S-43
Aluminum Landing Mat	MP 4-386	S-24	Anisotropy	CR 3-132	S-100
-AM5-Landing-Mat-Surfaced SATS			Ankara, Turkey	TM 3-343/69-70	S-69
Airfield	TR S-75-2	S-91			
Landing Mat	MP 4-747	S-21	ANMCC Improvement Project	CTIAC-58	C-44
	MP 4-753	S-21		CTIAC-61	C-44
	MP 4-786	S-21	Annot Sandstone	MP 3-562	S-18
	MP 4-788	S-22		MP 3-566	S-18
	MP 4-789	S-22	Annual Summary		
	MP S-68-11	S-27	Civil Works Program		MS-12
	MP S-69-3	S-28	Ansonia-Derby Local Protection	TR H-69-4	H-54
	MP S-69-13	S-29	Antelope Lake Target	MP S-76-7	S-48
	MP S-69-40	S-31	Antenna	MP 4-937	S-25
	MP S-69-41	S-31	Foundation	MP S-68-14	S-27
	MP S-70-4	S-32	Guvs	MP C-77-14	C-25
	MP S-70-5	S-32	Anteus Bank-Pressure Consolidation Apparatus	MP 3-478/11	S-16
Mat	MP 4-954	S-25	Antifreeze Compounds	MP 6-871	C-14
AM3 Landing Mat	MP 4-820	S-22	Antipersonnel Mine Projectile	MP S-72-33	S-38
AM5 Landing Mat	MP S-70-26	S-33	Antitank		
Ambrasevs on Engineering Seismology	MP S-74-15	S-45	Ditching with Explosives	MP	W-12
AMC-71 Mobility Model	TR M-76-5	M-31	Mine	TR 3-470	S-76
AMC-74 Vehicle Dynamics Module	TR M-76-1	M-31	Projectile	MP S-74-31	S-46
Amedee Army Airfield	MP S-71-15	S-35		MP S-73-58	S-43
Amistad Dam	MP 6-591	C-9			
	TR 2-653	H-47			



Term	Report No.	Page	Term	Report No.	Page
Anzio Beach	MP M-74-5	M-12	Arching in Sand	TR 1-674	W-31
	MP M-73-8	M-16	Arctic		
Apalachicola Bay Marsh			Environment	TR 2-597	W-40
Development Site	TR D-73-32	E-17		TR 1-543	W-41
Aperture Testing	MP S-74-3	S-44	Subarctic Regions	MP 4-713	M-5
Approach Roads	TR S-77-1	S-94	Andmore Air Force Base	MP 4-374	S-4
Greenland	TR 3-505	M-20		TM 3-344/5	S-71
Aqua-Trio System	TR A-78-3/1	M-51	ARES Facility, Kirtland Air		
Aquatic			Force Base	MP S-72-27	S-47
Animals	TR D-78-29	E-17	Arid Climate Theater	TR M-70-7/11	M-26
Biology	TR D-77-23/D	E-8	Arizona Canal Diversion Channel	TR 14	E-8
Biota	TR D-79-15/C	E-15	Arkabutia Dam	TM	S-48
	TR D-78-15/D	E-15		TM 167-1	H-33
				TM 169-1	H-33
Disposal				TR 3-479	S-76
Duwamish Waterway	TR D-77-24	E-9	Arkansas		
Field Investigations			Post Canal Route		
Ashtabula River	TR D-77-42	E-12	River	MP 6-586	S-9
Columbia River	TR D-77-30	E-10		MP H-71-9	I-12
Eaton's Neck	TR D-77-6	E-6		TM 3-332	S-15
Galveston, Texas	TR D-77-20	E-7		TR 2-608	H-46
Dredged Material Disposal	TR DS-78-1	E-27		TR 2-650	H-47
	TR DS-78-4	E-27		TR 2-746	H-51
Environments	TR D-77-26	E-10		TR H-68-3	H-54
	TR D-78-21	E-16		TR H-69-3	H-54
	TR D-77-38/B	E-12		TR H-70-12	H-57
Habitats				TR H-73-2	H-59
Marsh Plants	CR D-74-9/II	E-24		TR H-77-4	H-66
Organisms	TR DS-78-5	E-25		TR H-77-6	H-66
Plant	IR A-77-1	M-46		TR H-71-5	H-57
	MP A-77-2	M-47	Dams		
	TR A-78-3	M-51	Lork		
Control	CR A-76-1	M-52	and Dam 5	MP 3-78-11	S-53
	MP	M-47	No. 2, Lork No. 5, and		
	MP A-77-1	M-47	Dam No. 2	MP 3-781	S-21
	TR	M-48	Multiple-Purpose Plan	MP 3-336	S-12
	TR A-77-1	M-49	Navigation	TR 2-795	H-53
Program	TR	M-48		TR H-70-8	H-56
22-24 October 1975	MP A-76-1	M-47		TR H-71-1	H-57
19-22 October 1976	MP A-77-3	M-47		TR H-73-10	H-59
3-6 October 1977	MP A-78-1	M-47		TR H-74-7	H-61
Project, 12 January 1972	MP	M-47	Tributaries	MBM 24-1	H-23
Research Program	IEB A-78-1	M-46	Spring 1941 and 1943		
	IEB A-78-2	M-46	Floods	MBM 14-1	H-22
	MP	M-47		MBM 14-2	H-22
	TR	M-48	Arlington County	TR H-75-19	H-53
	TR	M-48	Armor	CETA 81-7	CERC-3
Use Pattern	TR	M-48		TR N-71-10	W-36
Diquat	TR	M-48		MP E-73-4	W-9
Silvex	TR	M-48	OBSTACLE II	MP M-75-8	M-14
Vegetation	CR 3-31/II	M-38	Stones	MP H-74-2	H-14
Weed			Units	R 1-73	CERC-17
Control with Plant Pathogens	TR	M-48	Underlayer Stones	MP H-75-4	H-14
Laser Radiation	TR	M-48	Armored Reconnaissance Scout		
Plant Pathogens	CR A-76-2	M-52	Vehicles	MP	M-12
Aramid-Fiber Ropes	MP C-77-13	C-25		MP M-74-6	M-12
Araxos Air Base	TM 3-343/67	S-69	Army		
Arnadja Lake	MP Y-77-3	E-30	Aircraft Protective		
	TR Y-77-2	E-32	Structures Design	TR N-69-3	W-34
	TR Y-77-3	E-32	Airfield Pavement Evaluation	TR 3-466	S-75
Arch	TR 1-797	W-34	Lawson Army Airfield	MP 4-411	S-14
Blast Loading	TR 1-307	W-33	Facility Management	TR M-74-2	M-29
	TR N-71-9	W-36	Mobility Research Center	MP 4-404	M-3
Buried in Dry Sand	TR 1-758	W-32	Tactical Mobility Require-		
Dam	TR N-76-3	W-40	ments (Howze)	MP 4-528	M-4
	TR N-77-1	W-41	Arnold Engineering Development		
Dynamic Loading	TR 1-660	W-31	Center	MP 3-73-3	S-40
Loaded Statically	MP N-70-2	W-7	ARPA Advisory Committee on		
Processed Snow	TR N-69-1	W-33	Mobility Environmental		
Shelter	TR N-69-8/8	W-35	Research	MP 4-670	M-5
Structure	MP 1-742	W-4	Arsenic in Sediments	MP D-75-18	E-3
	MP 1-963	W-6			
Archeological Problem	MP M-77-14	M-16			

## 6-INDEX

Term	Report No.	Page	Term	Report No.	Page
ARSV Test Courses	MP M-74-8	M-12	Atlantic (Cont)		
Arthur Kill-Kill Van Kurl Channel	MP 2-952	H-10	Coastal Salt Marsh Plants	TP D-77-28	E-10
Articulated Concrete Mattress	MP 6-473	C-7	Generating Station	TR H-75-16	H-63
Artificial			Munk	TM 3-326	S-65
Armor Units	MP H-74-2	H-14	Pacific Inter-Oceanic Canal		
Island	MR 73-3	CERC-12	Study Commission	MP H-70-7	H-12
Design	R 78-14	CERC-21	Shelf	TM 66-3	W-21
Reefs	TM 43	CERC-28		R 1-70	CERC-16
Seaweed	R 79-4	CERC-21		R 79-7	CERC-21
Artificially	MR 75-9	CERC-10	Atomic Absorption Spectro-		
Filled Beach	R 1-69	CERC-16	photometer	MP C-70-5	C-17
Nourished Beaches	TM 29	CERC-38	Attenuation of Airblast	MP 1-508	W-3
Artillery				MP 1-631	V-3
Foundations	MP S-69-7	S-28	Auger	B 13	S-1
and Related Vehicles	MP M-77-1	M-15	Australia; Canal Zone		
Asbestos Fibers	MP 4-335	S-12	Analogs VIII	CR 3-30/VIII	M-43
Ashtabula River Disposal Site	TR D-77-42	E-12	Autauga Creek	TM 200-	H-34
Asia			Automated		
Canal Zone Analogs II	CR 3-30/II	M-43	Field Station	MP H-76-22	M-15
Yuma Analogs	CR 3-11/4-6	M-42		MP M-77-5	M-15
Asian Desert	TR 3-630/2	S-80	Procedure	TR M-77-4/2	M-33
Asphalt	MP 4-44	S-5	Airfield Site Evaluation	IR M-75-1	M-1
Content Gage	MP 4-45	S-5	Evaluating Sites	IP M-75-1	M-1
Mix Design	MP S-75-23	S-47	Slope Map Construction	TR M-77-3	M-32
Patch Plant	MP 4-244	S-10	Remote Sensing Techniques	TR M-76-6	M-32
Pavements	TM 4-228	S-10	System for Collecting,		
	TM 3-312	S-54	Processing, and Displaying		
	TM 3-314	S-64	Environmental Baseline Data	TR M-76-11	M-32
Paving	MP 4-207	S-9	Automation		
Mixtures	TM	S-60	Cross-Country Locomotion		
Runway	TM 3-254	S-61	Model	MP M-71-7	M-10
Slurry Seals	MP S-76-24	S-50	Model for Predicting the		
Underwater Protection of	IR S-69-1	S-2	Clearing of Vegetation	MP M-72-1	M-10
River Banks			Techniques for Physical		
Asphaltic	TM 3-329	S-65	hydraulic Models	MP H-78-3	H-19
Concrete	MP 4-44	S-5	AV Tank	MP M-77-3	M-15
Overlays on Highways	TR 3-516/2	M-20	Avian Habitat	TR DS-78-18	E-28
Pavements, Thule Air Base	MP S-72-12	S-37	Aviano Air Base	TM 3-343/43	S-68
Paving Mixtures	MP 4-436	S-14	AXISYM	CR S-76-13	S-104
Surfaces	MP 4-335	S-12	Axissymmetric		
Pavements in the Caribbean	MP 4-92	S-6	Finite Element Code	MP S-76-3	S-48
Area	MP 4-232	S-10	Plane Strain Simulation	CR S-76-13	S-104
Assemblages	TR D-77-30/C	E-11	Azores	MP 4-179	S-8
Atchafalaya				TM 3-345/16	S-66
Basin		Z-1		TM 3-343/17	S-67
Protection	MBM 81-5	H-25	B. Everett Jordan Lake	TR H-76-3	H-64
Levee	TM 48-1	S-55	Backfill		
Foundation Soils	TR S-69-8	S-86	Compaction	TR S-76-4	S-93
Floodway	TR S-74-5	S-90	Property	TR M-73-5	W-33
Levee	MP S-69-53	S-31	Background Noise Signature	TR S-78-5	S-95
Foundation	MP S-72-32	S-38	Data Base Development	MP M-78-1	M-16
Clays	TM 3-284	S-63	Backpacking		
Soils	TR 3-437	S-76	Material	CP 6-160	C-46
River Basin	MP S-72-17	S-37	Backswamp	MP 6-730	C-13
Athens-Ellinikon Airport	TR S-70-2	S-86	Deposits	TR 6-763/1	C-45
Atlantic	CR S-72-3	C-114	Sediments	TR 3-604	S-79
City, New Jersey	CR S-70-3	S-101	Backwater	TR S-70-2	S-36
Coast	MBM 31-3	H-24	Analysis		
	TM 3-343/64	S-68	Chutes	TR 3-689	MS-11
	MR 81-3	CERC-13	Effects	CR Y-74-4	E-35
	R 12-74	CERC-19	Bridges		
	MP H-76-2/F	H-15	Submerged Sills	E 2/3	H-1
	TP 78-4	CERC-37		E 15	H-26

Term	Report No.	Page	Term	Report No.	Page
Barkwater (Cont)			Barge		
Illinois River	P Y	H-26	Canal Lock, Sacramento River		
Red River	P 10	H-26	Deep-Water Ship Channel		
Barfile			Project	TR 1-556	H-31
Bank Stabilization Model	R 2-3	P-1	Harbor	TR H-762-1	H-31
Blocks	MP H-70-4	H-12	Barklev		
Piers	MP 2-184	H-4	Lock		
Bluestone Dam	TM 2-243	H-36	and Dam	TR 1-689	H-16
BAILEY	MP 2-75-4	W-11	Prototype Tests	TR H-70-11	H-32
Experimental Excavation			Reservoirs	MPM 3-3	H-33
Program	TR 2-75-2	W-39	Barkdale Field	TM	MO-1
Balances	MP 3-473/5	S-15		TM	H-33
Baleshed-Ajax Bar Reach	MP H-70-1/1	H-11	Barnegat Inlet	TR 2-74-1	H-10
Balikesir Air Base	TM 3-343/72	S-69	Barnhart Island-Cornwall Island		
Ballistic Missile Defense			Reach	TR 2-575	H-46
Facilities	TR H-70-12	W-37	Baromix	MP 4-43	C-1
Ballistically Loaded Clav	MP S-73-57	S-43	Barrier	RR H-73-4	H-28
Ballona Creek Outlet	P 18	H-26		TR 1/2	H-47
	TM 100-1	H-31			
Bamboo	TR C-69-3/1	C-36		TR 1/3	H-47
	TR C-69-3/3	C-36		TR H-69-12/1	H-55
Reinforced Concrete	MP C-70-2	C-17		TR H-69-12/2	H-55
Reinforcement	MP 6-705	C-11		TR H-69-12/3	H-55
	MP 6-926	C-15	Islands	MP S-70-29	C-33
	TR 6-646	C-34		R 81-7	CERC-22
Bangor International Airport	MP S-73-52	S-43		P 31-8	CERC-22
Bank			Basalt	MP C-69-1	C-16
Caving Investigations				MP S-70-13	C-33
Free Nigger Point and	R 15-1	P-4		TR M-70-15	M-27
Point Menoir	R 13-1	P-4		TR S-71-2/2	S-87
Huntington Point Revetment	R 9-1	P-2	Base		
Kempe Bend Revetment	TM 3-318	S-64	Course		
Morville Revetment	MP S-76-2	S-52	Airfields	IR S-69-5	S-2
Distress of Low Water Weirs	TR 2-580/		Materials	TR 3-78b	S-84
Erosion	III/6	H-45	Soils	MP 4-197	S-9
	R 12-15	P-3	Surge		
Lower Mississippi River	R 8-1	P-1	Analysis	PNE 104F	W-14
Failure	INR 2	Z-4	Cloud Formation	PNE 503F	W-14
Protection	INR 3	Z-4	Baseline		
	INR 4	Z-4	Conditions		
	INR 5	Z-4	Benthic Assemblages	TR D-77-6/0	E-6
	INR 7	Z-4	Demersal Fish Assemblages	TR D-77-6/0	E-6
	INV 1	Z-5	Phytoplankton Assemblages	TD D-77-6/1F	E-6
	INV 2	Z-5	Zooplankton Assemblages	TR D-77-6/1E	E-6
	INV 3	Z-6	Inventory		
	P 12	H-26	Aquatic Biota	TR D-73-15/0	H-15
	RR 3	Z-5	Terrestrial Flora, Fauna,		
	TM	S-60	and Sediment Chemistry	TR D-73-15/1B	E-15
	TR H-77-9	H-66	Water Quality, Sediment		
	MP H-73-2	H-13	Quality, and Hydro-		
	CETA 77-3	CERC-2	ynamics	TR D-73-15/1A	E-15
Roughness	R 20-1	P-4	Bathymetric Data	CETA 31-33	CERC-4
Stabilization	R 2-5	P-1	Bathtub-Type Blast Deflector	MP 4-391	S-14
	R 2-6	P-1	Battlefield Sensor System	MP	M-13
Miller Bend	TR S-76-6	S-93	Bauxippi-Wyanoke Revetment	R 7-1	P-1
Model	B 2/3	H-1	Bav Springs		
Bankhead Lock	TR 2-735/2/4	H-51	Canal Surge Study, Tennessee-		
Bar	TM	S-59	Tombigbee Waterway	TR H-78-9	H-68
	TM 212-1	S-59	Lake Water-Quality Study	TR H-76-7	H-24
	TR N-71-2	W-36	Lock, Tennessee-Tombigbee		
	TM 3-343/89	S-69	Waterway	TR H-78-19	H-69
	TR C-69-3/2	C-36	Bavou		
Barajas International Airport	TM 3-285	S-63	Bodrau		
Barbed Wire	TR H-78-20	H-69	Dam	TM	S-62
Barber-Greene Company Model 337	TM 3-343/88	S-70	Outlet Structures	TM 174-1	H-33
Barbers Point Deep-Draft Harbor	TR 2-523	H-43	Boeuf Lock	TM	S-64
Barcelona, Spain	MP S-70-24	S-33		TR 3-458	S-75
Barcelona, New York	MP S-70-24	S-33			
Bare Base Support	MP S-70-24	S-33			
	MP S-70-24	S-33			
	MP S-70-24	S-33			
	MP S-70-24	S-33			

## 8-INDEX

Term	Report No.	Page	Term	Report No.	Page
Bavou (Cont)			Beach (Cont)		
Corodrie Drainage Structure	MP 3-53	S-5	Nourishment (Cont)	MR 82-2	CERC-13
	TM 3-289	S-63		MR 82-13	CERC-14
Courtableau Drainage				MR 82-14	CERC-14
Structure	TR 3-560	S-73		MR 83-3	CERC-15
des Glaises Drainage Culvert	TM 147-1	H-32		R 3-66	CERC-16
Lamourie Control Structure	TM	S-64		TM 17	CERC-37
Manon	TR H-69-13	H-55		TM 60	CERC-29
Rapides Drainage Structure	MP 3-17	S-4		TR H-76-13	H-65
Rigollette Floodgate	TR 3-451	S-74		TR H-76-13/1	H-65
Sorrel Lock	TM	S-60		TR H-76-13/3	H-65
Beach	CETA 79-3	CERC-2		TR H-76-13/4	H-65
	MP 2-64	CERC-7	Ocean-Atmosphere System	TM 7	CERC-26
	R 3-68	CERC-16	Platforms	R 79-6	CERC-21
	R 1-69	CERC-16	Processes	R 78-4	CERC-20
	R 25-73	CERC-13	Profile	MP 10-75	CERC-9
	R 4-75	CERC-19		R 7-73	CERC-17
	R 78-9	CERC-20		TM 44	CERC-39
	TM 29	CERC-33		TM 52	CERC-39
	TM 41	CERC-39		TM 53	CERC-39
	TM 44	CERC-28		TM 134	CERC-44
	TM 110	CERC-42		TP 77-9	CERC-31
	TM 130	CERC-44	Analysis System	TR 82-1	CERC-34
	TP 81-1	CERC-33	Radioactivity	TM 135	CERC-44
Accretion	MR 77-12	CERC-11	Replenishment	MR 78-4	CERC-12
Behavior	R 79-3	CERC-21		R 83-3	CERC-23
Changes	MP 6-64	CERC-7	Sampling Methods	TM 50	CERC-39
	MR 79-5	CERC-12		TM 90	CERC-41
	MR 80-3	CERC-12	Sand	TM 16	CERC-37
	MR 80-9	CERC-13		TM 28	CERC-38
	MR 81-3	CERC-13	Sediment	TM 22	CERC-38
	MR 83-5	CERC-15		TM 39	CERC-38
	TP 77-1	CERC-31	Stability		Z-12
	TP 77-10	CERC-31	Studies	MR 77-7	CERC-11
	TM 20	CERC-37		TM 14	CERC-37
Cycles	R 4-69	CERC-16	Surveys	CETA 81-11	CERC-3
Data	MP M-75-8	M-13	Trafficability	MP M-74-5	M-12
Desert Sands	MP 6-408	C-6	Widening	TR H-73-8	H-59
Dune	MP 4-74	CERC-8	Beale Air Force Base	MP S-73-18	S-41
Erosion	MR 77-12	CERC-11	Beam	CR 1-106	W-47
	R 1-67	CERC-16		CTIAC-55	C-44
	R 79-11	CERC-21		MP N-68-3	W-7
	TM 24	CERC-38		MP N-71-2	W-8
Board	MR 77-9	CERC-11		TM 6-412/3	C-29
Control	TM 41	CERC-28		TM 6-412/4	C-29
	TR H-77-15	H-67		TR 6-570/5	C-33
Surveys	TM 36	CERC-28		TR 6-570/6	C-33
Evaluation Program	MP 3-69	CERC-7		TR 1-701	W-31
Fauna	MR 77-6	CERC-10	Arches	TR N-69-1	W-33
	MR 82-12	CERC-14	Dynamic Loads	MP 2-344	W-2
Fill	R 12-74	CERC-19	Investigation	TR 6-570/4	C-33
	R 13-74	CERC-19	Reinforced	TR 6-818/1	C-36
	TM 11	CERC-26	Tests	MP 6-613/1	C-9
	TM 20	CERC-27	Under Static and Dynamic		
	TM 102	CERC-42	Loading	MP 1-374	W-5
	TM 113	CERC-43	Bearing Capacity	TR M-70-1	M-26
	TM 127	CERC-43	Foundations	CR 3-45	S-107
Design	R 73-10	CERC-21	Soils	CR 3-38	S-107
	R 79-9	CERC-21		TR 3-599	S-78
Evaluation	TP 77-6	CERC-31	Beaulieu, Hampshire, England	TM 3-343/107	S-70
Material	TM 16	CERC-26	Beaver Dam	MP 3-499	S-16
Ocean City, N. J.	TM 77	CERC-41	Berkman Model 930 Air Compari-		
Matting	TR 3-620	S-81	son Pycnometer	MP 3-478/3	S-15
Tests at Onslow Beach	MP 4-600	S-13	Bed		
Morphology	MR 77-5	CERC-10	Form	MP 1-74	CERC-8
Nourishment	MP 1-73	CERC-8		TM 28	CERC-27
	MP 80-1	CERC-12	Friction	R 79-13	CERC-21

Term	Report No.	Page	Term	Report No.	Page
Bed (Cont)			Berlin		
Load	R 82-5	CERC-23	Dam	TM 194-1	H-4
	R 82-6	CERC-23	Germany	PLR 33/28	C-17
	R 83-1	CERC-23	Berms	TM 101-1	C-10
Material	TM 112-1	H-31	Berrien County, Michigan	MR 80-2	H-11-12
Movement in a Forked Flume	TM 4-4	H-30	Bessie Cutoff	TR 2-592	H-4
Samples from Cottonwood Bar	TM 17-1	S-55	Beulah-Lake Vermillion Levee		
Material	TM 2	CERC-26	Unit	TM 53-1	C-20
Mississippi River	R 300-1	P-5	Bibliography	PSTIAC-2	M-44
	TM 62-2	S-55	Abstracts		
Movement	TR 3-436	S-74	Pavements	PSTIAC-5	M-34
Roughness	P 17	H-25	Terrain	PSTIAC-4	M-34
Been	MP H-73-2	H-13	Vehicle Mobility	PSTIAC-3	M-34
Fork Lake	TR H-73-14	H-60	Aquatic and Marsh Plants	CR D-74-9/11	F-24
River Dam	MP 3-532	S-17	Beach Erosion Board	MP 1-68	CERC-7
Bellefontaine Air Force Station	MP 4-694	S-20			
Belleville Locks and Dam	TR 2-687	H-48	Biological Effects of		
	TR 2-738	H-51	Constructing Coastal		
Belt			Structures	MR 83-2	CERC-14
Conveyors	TR C-74-4	C-38	Breakwaters	MR 79-1	CERC-12
Loader	MP M-76-2	M-13	Coastal		
Belton Dam	TM 2-363	H-39	Ecology	MR 78-2	CERC-11
Beltzville Dam	TR H-69-18	H-56		MR 80-5	CERC-13
	TR H-75-10	H-62	Engineering Research Center		
	TR H-77-14	H-67		MP 1-68	CERC-7
Ben-Weld No. 11 Reinforcing			Colonial Nesting Waterbirds	MP D-78-5	E-4
Steel	MP N-73-5	W-9	Desert Areas of the United		
Benbrook Dam	TM 2-269	H-37	States	CR	S-116
	TR 3-452	S-74	Explosive Excavation	TR E-72-32	W-33
Benghazi, Libya	TM 3-343/82	S-69	Fiber-Reinforced Cement and		
	TM 3-343/83	S-69	Concrete	CTIAC-21	C-41
Benina Airport	TM 3-343/83	S-69		CTIAC-25	C-41
Benito, Libya	TM 3-343/80	S-69		CTIAC-39	C-42
Benthic				CTIAC-43	C-43
Assemblages	TR D-77-6/C	E-5		CTIAC-48	C-43
	TR D-77-30/C	E-11		MP C-76-6	C-23
	TR D-77-42/A	E-12		MP 1-72	CERC-3
Community	MR 80-1/II	CFRC-12	Groins	CR	S-115
	MR 82-3	CERC-13	Mexican Desert		
	TR D-77-23/C	E-8	Mobility and Environmental		
	TR D-77-24/G	E-10	Systems Laboratory	PSTIAC-2	M-34
Fauna	TR D-77-45	E-13	Nearshore Environment	MP 5-75	CERC-8
	MR 76-10	CERC-10	Patents	MR 79-6	CERC-12
	MR 82-1	CERC-13	Remote Sensing	MP 2-73	CERC-8
	MR 82-2	CERC-13	Salinity and Salinity Changes		
Infaunal Communities	TR D-77-27	E-10	on Life	CR H-73-2	H-73
Macrofauna	TR D-77-24/F	E-10	Seagrasses	MR 80-7	CERC-13
Organisms	MP Y-76-3	E-30	Tidal		
Benthos	TP 76-15	CERC-30	Hydraulics	R 2	E-9
	TR D-77-34	E-11	Inlets	GITI 4	CERC-5
	TR D-78-35	E-17	Tsunamis	TM 30	CERC-33
	TR D-78-42	E-18	Wave-Current Interaction	MR 83-7	CERC-15
Lake Conway	TR A-78-2/		Bivole Army Airfield	MP 4-924	S-25
	1/III	M-49	Big		
	TR A-78-2/		Bend Dam		
	2/II	M-50		TR 2-605	H-46
Bentonite	B 10	S-1		TR H-77-3	H-56
	TM 135-1	S-56	Black Test Site	MP 3-72-13	C-37
Grout	B 12	S-1	Creek, La.	MP 3-78-2	S-52
Sands	B 1/1-9	S-1		TP H-69-13	H-55
Bentwaters, Suffolk, England	TM 3-343/99	S-70	Lake Reservation in Arkansas	TM 52-1	S-55
Bentzel Velocity Tube	TM 71-1	MS-10	Muddy River	TR H-75-2	H-61
Berna II Airfield	TM 3-343/82	S-69	Papa	MP 6-973	C-15
Bergamo, Italy	TM 3-343/46	S-68	Biggs Army Airfield	MP 3-73-13	F-40
Bergstrom	MP C-70-4	C-17	Binh Hung, South Vietnam	MP 4-549	M-4
Air Force Base	MP 4-315	S-12	Bioassav	MP D-76-6	E-3
Berkeley Pneumatic Tamper	MP 3-478/12	S-16		MP D-78-6	E-4
				TR D-78-23	E-16
			Biological		
			Agents for Control of		
			Aquatic Plants	MP A-77-2	M-47

## 10-INDEX

Term	Report No.	Page	Term	Report No.	Page
Biological (Cont)			Blakelev		
Assessment	TR D-77-3	E-6	Island Disposal Area	MP M-77-5	M-15
Community Control	TR D-78-50	E-19	Mountain Dam	TM 2-347	H-39
Aquatic Weeds with Plant Pathogens	CR D-75-3	E-26		TM 3-279/1	S-63
Mosquitoes				TM 3-279/2	S-63
Water Hyacinth	CR A-76-2	M-52		TR 3-439	S-74
Impact of Discharging Fill Material	TR D-78-48	E-19	Blankets	MP H-69-7	H-11
Systems	TR	M-48	Blast		
Biomass Dynamics	TR D-77-29	E-10	Attenuation	MP 6-840	C-13
Biota	TR Y-77-4	E-33	Water	MP 4-903	S-24
	TR D-77-28	E-10	Controlling Platform	CR 3-123	S-116
	TR D-77-20/C	E-8		CR 3-166	S-106
	TR D-78-15/C	E-15	Deflector	MP 4-391	S-14
	TR D-78-15/D	E-15	Field Tests		
	TR D-77-24/E	E-10	Corporal Missile	MP 4-392	S-14
Biphenyls	CR S-76-2	S-101	Honest John Rocket	MP 4-430	S-14
Birch Dam	TR D-78-9	E-14	Door Tests	MP N-76-13	W-12
Birds	TR D-78-17	E-15	Effects	TM 2-372/2	S-72
Point New-Madrid Floodway	MBM 31-1	H-23	Snow Tunnel, Camp Century	TM 3-394	S-72
	MBM 31-6	H-23	Tar and Tar-Rubber Pavements	MP 2-378	W-2
	MBM 31-7	H-24	Ejanta Effects	TM 3-377	S-72
	P C	H-26	Furnace Slag Cements	TM 70-4	W-24
	TM 2-300	H-38	Induced Structural Vibrations	MP 6-198	C-4
Bitburg			Load	MP N-77-6	W-13
I Air Base	TM 3-343/23	S-67	Deeply Buried Protective Structures	MP 1-668	W-3
II Air Base	TM 3-343/24	S-67	Generator	TR 1-807	W-33
Bituminous					
Cold Mixes	TM 3-362	S-72		MP 6-807	C-13
Concrete	CR 4-102	S-115		CR 2-44	W-43
Pavements	MP 4-210	S-9		CR 2-54	W-43
Paving Mix	MP S-76-10	S-49		CR 1-90	W-45
Mix	TR S-75-10	S-92		CR 1-113	W-43
Mixtures	MP 4-57	S-5		CR 1-121	W-46
Pavement	MP 4-216	S-10		CR 1-128	W-43
	MP 4-301	S-11		MP 2-426	W-2
		Z-7		MP 1-877	W-5
	IR S-77-2	S-3		MP N-69-1	W-7
	MP 4-121	S-7		TR 1-707	W-32
	MP 4-225	S-10		TR 1-723	W-32
	MP 4-294	S-11		TR S-68-4	S-85
	TM 3-246	S-61	Operational Controller		
Durability	MP 4-45	S-5	Systems	CR 2-69	W-43
Mix Design	MP 4-162	S-8	Tests Using M-9 Propellant	MP 1-913	W-5
Samples	MP 4-170	S-8	Loaded Structures	MP 1-825	W-5
Paving			Loading	TR WT-1420	W-30
Lajes Air Force Base	MP 4-179	S-8	Oriented Problems	MP S-68-17	S-27
Mix	MP 4-38	S-5	Panels	MP 4-784	S-21
	MP 4-46	S-5	Phenomena from Explosions	MP 1-814	W-5
	MP 4-118	S-7	Pressure		
Mixtures	TR 3-595	S-78	Measurements in Snow	MP 2-274	W-2
Stabilized Pavement Layers	MP S-73-4	S-40	Walls	MP 6-856	C-14
Surfaces for Use in MESL			Protective Structures	MP 1-631	W-3
Construction	MP S-76-14	S-49	Resistant Reinforced Concrete		
Surfacing	TM 211-1	S-58	Slabs	TR N-72-10	W-37
	TM 211-2		Response of Underground		
	thru		Structures	CR N-70-1	W-44
	211-5A	S-59	Tests	MP S-69-36	S-30
Treatment	MP 3-122/4	S-7	Valves	MP 1-790	W-4
Black			Blasting	TR E-74-1	W-39
Butte Dam	TR 2-551	H-44	Agents	TR 28	W-29
River	MP 3-546	S-17	Guide	IR S-72-2	S-3
	TR 3-741	S-84	Loess and Clay	CR 2-39	W-43
Blackbush Airport	TM 3-343/110	S-70	Vibrations at Bankhead Lock	TR S-76-6	S-93
Blackstone			Blended Cements	TR C-69-6	C-37
Army Airfield	TR 3-466/1	S-75	Blends of Portland and Natural- Cements	TM	C-27
River Flood-Control Project	TR 2-468	H-42			
Blair Lake, Alaska	TM 66-7	W-21			

Term	Report No.	Page	Term	Report No.	Page
Block			Botanical		
Analysis	MP S-71-17/5	S-35	Monitoring	TR D-78-25/2	E-10
Revetment	R 78-5	CE-70	Soil	TR D-78-24/2	E-10
	TM 20-2	H-30	Resources	TR D-78-23/2	E-10
Blue			Botany	TR D-77-23/2	E-8
Clay	CR 3-101/15	S-113	Bottom		
Crabs	CR A-77-2	M-52	Friction	TM 31	CERC-33
Bluestone Dam	TM 2-227	H-35	Materials	TR 1-704	W-31
	TM 2-243	H-36	Roughness	TM 95	CERC-42
	TM 220-1	H-35	Sediment	TM 75	CERC-40
				TM 104	CERC-42
				TM 105	CERC-42
Blvton, Lincolnshire, England	TM 3-343/109	S-70	Sedimentation	TR D-77-6/A	E-6
Boat				TR D-77-30/A	E-10
Basin	MP H-75-8	H-15		TR D-77-42/B	E-13
Moored in Standing Waves	CR H-68-2	H-70	Slopes	TM 122	CERC-43
Boca Raton Airfield	TR 3-344/3	S-71	Topography	MP D-74-13	E-2
Bodv Motions	MP 4-893	M-7	Boulders	TP 76-19	CERC-11
Boeing			Boundary		
GM Wheels	MP M-71-3	M-10	Condition	MP 5-905	MS-5
	TR M-70-15	M-27		TR S-71-4/2	S-87
LRV Wheels	TR M-71-10	M-28	Development	MP H-68-2	H-10
Boeuf			Effects	MP H-68-5	H-10
River	TR H-69-13	H-55		MP H-70-6	H-12
-Tensas Basin	TR 3-757	S-84	Fitted Coordinate Systems	MP H-73-9	H-19
Bogue Bank, North Carolina	MR 83-3	CERC-15	Laver	MP 2-587	H-8
Boliver Peninsula	TR D-78-15	E-15		R 21-73	CERC-18
Bolling Air Force Base	MP 4-3/6	S-4	Bow Wave Problems	MP S-77-1	S-50
Bolts	TR S-76-14	S-93	Bovnton Devine	CR 3-25/7	S-110
Bomb			BPAS	TR 33-1	CERC-34
	MP N-71-5	W-8	Bradv, Texas	TM 2-270	H-37
Blast on Trees	TR M-69-3/1	M-25	Braking		
Crater Repair	MP 4-526	S-17	Drag Force and Shrinkage		Z-7
Damage Repair	TR C-78-2/1	C-39	Tests on Nonskid Materials	TR S-68-3	S-85
Damaged Runways	CR C-71-1	C-46	Branched Oak Dam	TR H-72-1	H-57
	TR C-75-2	C-38	Brandon Road		
Penetration Study, Hill AFB	MP 3-904	S-24	Dam, Illinois Waterway	MP C-78-4	C-25
Bonding Compounds	MP C-75-10	C-23	Lock and Dam, Illinois		
Bonnet Carre Floodway	TM 0-2	H-30	Waterway	MP C-78-13	C-26
	TM 0-4	MS-10	Breached Dams	MP 2-374	W-2
Bordeaux-Merignac Air Base	TM 3-343/22	S-67	Breaker	R 3-68	CERC-15
Bore Generator	RR 2-5	H-27		R 4-70	CERC-16
Borehole	TM 49	CERC-39	Height	R 3-73	CERC-17
Camera	TM 68-12	W-23		R 8-73	CERC-18
Geophysical Methods	MP S-77-18	S-51	Zone	TM 79	CERC-43
Plugging Program	MP C-78-1	C-25	Breaking Wave	MR 75-3	CERC-10
Pressuremeter Loadings	TR S-78-12	S-95		TM 40	CERC-39
Television Examination	MP 3-985	S-26		TM 57	CERC-29
Boreno; Canal Zone Analogs VII	CF 3-30/VII	M-43		TM 59	CERC-40
BORHOL	TM 68-12	W-23	Forbes on Piles	TR H-68-3	H-53
Boring			Pressures	TM 106	CERC-42
93 UoS	MP S-72-17	S-37	BREAKUP	RR H-68-1	H-27
Logs	MP	S-48	Breakwater	TM 66-7	W-21
Borrow				CDM 76-1	CERC-2
Area	MR 80-1	CERC-12		CETA 79-4	CERC-2
	MR 82-1	CERC-13		CETA 79-6	CERC-2
	TM 11	CERC-26		CETA 30-7	CERC-3
	TM 20	CERC-27		CETA 30-8	CERC-3
	TM 127	CERC-43		CR 2-104	H-72
Material	R 13-74	CERC-19		CR 2-109	H-72
	TM 60	CERC-29		CR 2-117	H-72
Pits	TM 0-2	H-30		MP 4-75	CERC-3
Soils	TR D-77-5	E-6		MP 2-224	H-5
Boston	MP 3-532	S-17		MP 2-276	H-5
Bar	TM 159-1	H-32		MP 2-296	H-6
Blue Clay	CR 3-101/15	S-113		MP 2-372	H-6
				MP H-71-8	H-12
				MP H-76-10	H-16
				MR 76-5	CERC-10

## 12-INDEX

Term	Report No.	Page	Term	Report No.	Page
Breakwater (Cont)	MR 77-4	CERC-10	Bridge		
	MR 79-1	CERC-12	Decks	CTIAC-2	C-40
	MR 82-4	CERC-13		MP C-73-2	C-21
	MR 82-5	CERC-14	Fort Rilev	MP C-77-1	C-24
	R 2-66	CERC-16	Piers	TR N-69-5	W-34
	R 78-8	CERC-20		TR N-75-10	W-41
	R 79-6	CERC-21	Response to Explosion- Produced Water Plumes	TR N-72-4	W-37
	R 81-10	CERC-22	Tests	MP N-75-1	W-10
	R 83-12	CERC-23	Wax Lake Outlet	TM 145-1	S-57
	RR 2-2	H-27	Bricell Sandwich Passive Soil Stress Gage		Z-15
	RR 2-10	H-27	Brize Norton, Oxford, England	TM 3-343/91	S-69
	RR 2-11	H-27	Bronze-Brazed Joints	MP N-72-7	W-9
	RR H-69-2	H-27	Broward County, Florida	MR 80-1	CERC-12
	TM	H-33		MR 82-1	CERC-13
	TM	H-34		TM 41	CERC-28
	TM 1	CERC-37	Brown Shrimp <u>Penaeus Aztecus</u> Ives	CR H-77-1	H-71
	TM 16	CERC-37	Brown's Ferry Nuclear Plant	MP 4-970	S-26
	TM 57	CERC-29	Brunite Formation	MP 6-867	C-14
	TM 2-365	H-40	Brunswick Harbor	RR H-75-3/3	H-29
	TP 76-4	CERC-30	Bubble Screen	TR H-72-5	H-58
	TP 76-8	CERC-30	Phenomena	TR 2-564	W-30
	TP 76-17	CERC-30	Underwater Shock	CR 2-49	W-44
	TP 78-3	CERC-32	Water Shock	MP 2-553	W-3
	TP 81-1	CERC-33	Bunana River, Puerto Rico	MP 2-285	W-2
	TP 82-4	CERC-33	Burkboard	TR H-73-3	H-68
	TR 80-1	CERC-34	Mesa	MP 6-425	C-7
	TR 2-523	H-44		MP 4-666	S-19
	TR H-68-2	H-53	Burket	MP 3-703	S-20
	TR H-68-3	H-53	Center Hill Dam	MP 3-783	S-21
Alameda Naval Air Station	MP 5-63	MS-4	Stewart's Ferry Dam	PNE 5001P	W-17
	TM 2-242	H-36	Type Energy Dissipator	TM 65-4	W-20
Burns Waterway Harbor	TR 2-766	H-52	Buggs Island Dam		
Construction, Tsoving Harbor	TR 2-640	H-47	Clark Hill Dam	TM 202-1	H-34
Crescent City Harbor	MP 2-171	H-5	Burkling of Landing Mats	TM 2-239	H-36
	TM 2-413	H-41	Burkshot		
Dana Point Harbor	TR 2-725	H-50	Borrow Pits of the Wilman New Levee	TM 3-4	S-55
Design, Hamlin Beach Harbor	TM H-73-13	H-59	Clav	CR 3-145/3	S-100
East Beaver Bay Harbor	TM 2-295	H-37	Buffalo Harbor	MP S-70-8/2	S-32
	TM 2-295/1	H-37		MP 6-695	C-11
Half Moon Bay Harbor	TR 2-668	H-48	Burford Dam	TR 2-536	H-44
Jetties	MP 2-453	H-7	Buggs Island Dam	TM 2-350	H-39
Lahaina Harbor	MP H-76-8	H-16	Clark Hill Dam	TM 2-281	H-37
Lorain Harbor	TR 2-628	H-46	Burkling of Landing Mats	TR 3-464	S-75
Monterey Harbor	MP H-69-11	H-11	BURKING	MP S-69-42	S-11
Nassau Harbor	MP 2-799	H-9		PNE 322	W-14
	TR 2-697	H-49	Bulk		
New Buffalo Harbor	TR 2-761	H-52	Densities and Water Contents	MP S-77-13	S-51
Novo Harbor	MP 2-341	H-9	Explosive	MP N-76-9	W-12
	TR 2-799	H-53		MP N-77-5	W-13
Oak Harbor	TR H-71-3	H-57	Impregnated Specific Gravity	MP 4-152	C-8
Oswego Harbor	TM 2-291	H-37	Bulkhead Prototype Closure Tests	MP H-73-8	H-34
Port Washington Harbor	TM 2-334	H-38	Bulking	TM 66-19	W-22
Repair	MP H-73-4	H-19	Factors	TM 70-1	W-24
Kahului Harbor	TR 2-644	H-47		TM 70-13	W-25
Morro Bay Harbor	TR 2-567	H-45	Bull Shoals Dam	MP 2-77	H-4
Nawiliwili Harbor	MP 2-377	H-6		TM	C-27
Roosevelt Roads Naval Base	TM 207-1	H-34		TM 6-222	C-27
Small-Boat Basin No. 2, Juneau	MP 2-648	H-8	Bulldozer Blades	TR 2-234	H-35
Stabilitv	B 31	H-2		TR 2-438	H-43
East Beaver Bay Harbor	TM 2-296	H-37		MP M-74-3	M-12
Imperial Beach	TR H-77-22	H-67			
Models	MP H-75-4	H-14			
	MP H-75-5	H-15			
Superior Entry, Duluth- Superior Harbor	TR 2-616	H-46			
Tarionite Harbor (Two Islands)	TM 2-405	H-41			
Vermilion Harbor	TR H-70-5	H-56			
Brick-Veneer Buildings	TR C-73-3	C-39			
Walls	MP C-73-16	C-26			



Term	Report No.	Page	Term	Report No.	Page
Bumps and Grinds: Study in Body Motion	MP 4-893	M-7	C-5A (Cont)		
Bunker	CR N-77-1	W-48	Landings	CR S-75-3	S-118
	TR N-71-4	W-8	Operations on Landing Mat		
	TR N-71-8	W-36	Test Facility	MP S-72-10	S-36
Buried			C-12A Aircraft	MP M-76-18	M-14
Arch			C-130 Ramp Kit	MP 4-679	S-19
Blast			C-130E Aircraft	MP 4-712	S-20
Loading	TR N-71-9	W-36	C-141A Flight Test	MP S-69-50	S-31
Loads	MP 1-688	W-3	Cabriole		
	TR 1-807	W-33	Crater	PNE 957	W-16
Dynamic Loading	TR 1-660	W-31	Pahute Mesa	MP S-68-24	S-28
Box Structures	TR S-78-5	S-95		PNE 966	W-16
Concrete			Caddoa Dam	TM 166-1	H-33
Arch	TR 1-797	W-33	Gadmium in Sediments	MP D-76-18	E-3
Structure	MP 1-963	W-6	CADSE		Z-6
Structures	MP 1-593	W-3	Campino Airport	TM 3-343/37	S-67
Cylinders	CR 1-93	W-47	Cairns Army Airfield	TR 3-466/13	S-75
	TR 1-720	W-32	Cairo, Illinois	TR H-77-3	H-66
Dynamic Loading	TR N-72-7/1	W-37	Caisson Breakwaters	TM	H-34
Static	CR 1-95	W-47	Calcareous Soils in French Morocco	TM 3-343/48	S-68
and Dynamic Loadings			Calcasieu		
Loading	TR 1-682	W-31	River	TM 2-310	H-38
Explosions	CR 1-147	W-48	Saltwater Barrier	MP H-71-4	H-12
Field Shelter	TR S-78-3	S-95	Calcedine Shale Pozzolan	MP 6-510	C-8
Flat Plate	CR 1-110	W-46	Calcium		
Hardened Structure	MP N-68-4	W-7	Acrylate	MP 3-122/2	S-7
Model Cylinders	MP N-77-8	W-13		TR 3-455/1	S-74
	TR N-78-8	W-42	Aluminates	MP C-71-3	C-18
	TR N-78-9	W-42	Sulfates	MP 6-431	C-7
				MP C-76-5	C-23
Prototype Communications			Calibration		
Conduit	TR 1-750	W-32	Cratering Series	TR N-70-4	W-35
Shelters	CR 2-55	W-46	Data Reduction	RR H-71-2/1	
	CR 2-67	W-46	/1		H-28
Structure	CR 1-111	W-47	/1/A	TR H-69-12	H-55
	CR 3-168	S-108	/2/B	TR H-69-12	H-55
	TR N-78-7	W-42	Tetra Tech Dredging Material- Disposal Models	TR D-78-47	E-19
Burlington Island Back Channel	TM 2-337/3	H-38	California		
Burns Waterway Harbor	TR 2-766	H-52	Bearing Ratio		
Burnsville Dam	TR H-75-5	H-62	Apparatus	IR	S-2
Burst	MP S-76-17	S-49	Test	TM	S-58
Position	MP N-75-3	W-11		TM 213-1	S-60
Burtonwood, Lancashire, England	TM 3-343/100	S-70	Coast	TM 14	CERC-26
Bushmaster	MP M-75-4	M-13	Extractor	MP 4-294	S-11
Bushy Park Water Supply Tests	MP H-76-5	H-16	Californium-252	MP S-76-18	S-49
Butler			Radiation Facility at WES	MP S-75-26	S-48
AM1 Landing Mat	MP 4-787	S-22	Calion Lock and Dam	MP 6-738	C-12
AM2 Landing Mat	MP 4-789	S-22		MP 3-775	S-21
Butoxyethanol Ester of 2,4-D	TR	M-48	Calumet		
Butterfly Valves for Pearl River Locks	TM 2-313	H-38	Floodgates	MP 3-37	S-5
Buttermilk Sound Marsh Development Site	TR D-78-26	E-16	River Lock	TR 2-497	H-43
Butts Army Airfield	MP S-72-26	S-37	Camera	TM 68-12	W-23
	MP S-76-22	S-50	Cameli Air Base Site	MP N-71	S-6
	TR 3-466/18	S-76	Camouflage	MP M-75-6	M-13
				MP H-76-1	M-13
BW-1 Airfield, Narsarsuaq, Greenland	TM 3-343/5	S-66		MP N-76-21	M-15
BW-8 Airfield, Sondre Stromfjord, Greenland	TM 3-343/4	S-66	Camp		
			A. P. Hill	MP 4-505	M-4
			Gagetown	TR N-70-3	M-26
			McCoy	CR 4-103	M-37
			Stewart	MP 4-101	M-2
C-5A			Campbell		
Aircraft	MP S-71-27	S-36	Air Force Base	TM 3-344/1	S-71
	MP S-73-6	S-40	Army Airfield	MP S-72-19	S-37
	MP S-73-27	S-41			
	MP S-77-1	S-50			

## 14-INDEX

Term	Report No.	Page	Term	Report No.	Page
CAMPBOR	MP C-72-8	C-20	Catalog Card Reproduction	MP 5-163	MS-4
Canaradea Creek	MP 2-413	H-7	Catapult Studv	TM H-77-8	H-66
	TM 170-1	H-33	Catfish Point Control Structure	TM 3-249	S-61
Canadian HE Test Program			Cathodic Protection		Z-14
1959	MP 2-424	W-2	Cationic Admixtures in Concrete	MP 6-471	C-7
1961	MP 2-529	W-3	Cattahoochee River	TR H-78-10	H-68
	MP 1-631	W-3	Cattaraugus Creek Harbor	TR H-75-18	H-63
Canal	TB 16	Z-10	Cavernous Areas, Patoka Dam	MP 3-78-1	S-52
	TR H-79-13	H-68	Cavitation	MP 2-485	H-7
Density Currents	MP H-69-6	H-11	Baffle Piers	MP 2-154	H-4
Lining	B 11	S-1	Erosion-Resistant Materials	TR C-76-2	C-38
Locks	CR 2-1/2	H-73	Cavity	MP	S-51
Surge Studv, Tennessee-Tombigbee Waterway	TR H-78-9	H-68		MP S-73-40	S-42
Zone Analogs	CR 3-30	M-43	Behavior	CR 1-135	W-46
Candidate Reservoir	TR M-72-3	M-29	Construction	TM 71-2	W-25
Zero Maintenance Paving Materials	MP C-77-14	C-25	Cavuga Inlet	TR 2-709	H-48
Canisteo River	TM 170-1	H-33	Cazes Airport	TM 3-343/9	S-66
Canister Placement Conditions	TR H-77-5	W-41	CBR		
Cannelton Lock and Dam	MP C-71-4	C-18	Criteria	TR 3-495	S-76
	TR 2-710	H-49	Curves	MP 4-16	S-4
	TR H-75-6	H-62	Design	MP 4-252	S-10
	TR 2-713	H-49	Criteria	MP 4-243	S-10
Main Lock	MP H-77-7	H-18	Curve	IR 4	S-2
Pool	MP C-75-1	C-22		IR S-77-1	S-3
CANNIKIN	MP H-68-3	M-8	AM1 Landing Mat	MP 4-599	S-18
Canopy Closure	TM 190-1	H-33		MP 4-655	S-19
Canton Dam	TM 67-14	W-22	Harvey Aluminum Landing Mat	MP 4-615	S-19
Canyon			Mat	MP 4-29	S-4
Cap			Landing Mats	MP 4-501	S-16
and Base	CR S-77-1	S-102	MGMZ Landing Mat	MP 4-817	S-22
Restraints	CR 3-159	S-100	Runways	TR 3-441	S-74
Model	CR S-77-2	S-115	Relations		
Cape Cod, Massachusetts Fear	TP 80-5	CERC-32	Cedar City		
	MR 77-11	CERC-11	Tonalite	MP C-69-9	C-16
	TP 79-3	CERC-32	Utah	MP S-70-22	S-33
River Basin	MP 2-649	H-8	Cedars Look and Dam, Lower Fox River	CTIAC-52	C-44
Girardeau Floodwall	TR H-69-14	H-55	Cellular		
Kennedy	MP 6-184	C-4	Block-Lined Grade Control		
	MP 6-760	C-12	Structure	MP H-73-7	H-14
	MP 4-878	S-23	Caisson Breakwaters	TM	H-34
Keraudren Port Development	TM 68-16	W-24	Concrete	MP C-72-1	C-19
May, New Jersey	MR 80-4	CERC-12		MP C-72-8	C-20
Capodichino Airfield	TM 3-343/38	S-67		MP C-74-8	C-22
Carbonate Rock	MP 6-682	C-11	Backpacking Material	MP C-74-8/2	C-22
	MP C-69-15	C-17	Blocks	MP S-73-32	S-42
	TR C-75-3	C-38	Fragmentation Acceptors	TR 6-763/2	C-35
Cargo Carriers	MP M-78-10	M-16	RR 2		Z-5
Truck	MP M-77-4	M-15	Cement	MP 6-973	C-15
	MP M-78-9	M-16	Handbook	MP 6-236/A	C-1
	MP 4-232	S-10		TR 6-691	C-34
Caribbean Area			Aggregate Reaction	MP 6-169	C-4
Carlson			Anhydrite	MP 6-209	C-4
Strain Meters	MP C-72-3	C-19	Cold Weather		
Stress Meter	TR 6-454	C-31	Concreting	MP C-75-11	C-23
Carlyle Dam	MP 6-281/A	C-5	Construction and Concrete	MP C-76-11	C-24
	TR 2-568	H-45		CTIAC-21	C-41
	MP 6-281	C-5		CTIAC-25	C-41
Reservoir	MP 6-538	C-8		CTIAC-39	C-42
Spillway	MP 6-802	C-13		CTIAC-43	C-43
Carnaby, Yorkshire, England	TM 3-343/114	S-70	Durability	CTIAC-48	C-43
Carnwell Air Force Base	MP S-73-39	S-42		MP C-76-6	C-23
Casablanca, French Morocco	TM 3-343/9	S-66		TM	C-27
Cast-Iron Collector Pipe	MP 6-318	C-6		TR C-72-2	C-37
Castle Air Force Base	MP S-73-19	S-41	Fly Ash Pastes	MP C-78-11	C-26
Study Area	MP C-69-16	C-17	Lime	MP 4-728	S-21
			Pastes	CTIAC-4	C-40
				MP C-72-5	C-19

Term	Report No.	Page	Term	Report No.	Page
<b>Cement (Cont)</b>			<b>Channel (Cont)</b>		
Performance in Concrete	TR 6-787	C-35	Improvement (Cont)		
Production and Specifications	CTIAC-29	C-41	Fire Island Inlet	TH H-69-16	H-55
	MP C-78-2	C-25	Gastineau Channel	TR H-72-9	H-58
Replacement Materials	MP 6-123	C-2	Grand Tower Reach	TM 114-1	H-31
Requirements for Soil Cement	MP S-68-25	S-28	Ludington Harbor	TH H-75-14	H-61
Soil-Stabilizing Material	TR 3-455/3	S-74	Mississippi River	TM 89-1	H-30
Stabilized				TM 89-2	H-30
Pavements	CR 3-145/4	S-100	Outer Bar, Lake of Maracaibo	TM 105-1	H-31
Soil	MP S-77-14	S-51	Savannah River	TM 57-1	H-30
Layers	CR 3-145/5	S-100		TM 57-2	H-30
Treated Silty Clay	CR 3-145/1	S-100	Swiftsure Towhead	TM 110-1	H-31
	CR 3-145/3	S-100	Islands Harbor, California	TR 82-4	CERC-35
	MP 6-452	C-7	Junction	MP H-69-4	H-11
	TM 6-335	C-28		R 2-100	Z-13
<b>Cementitious Material</b>					Z-11
<b>CENSE</b>			<b>Maintenance</b>		
Explosion Test Program	TR N-77-6	W-41	Meander Model	R 16-1	P-4
1, Explosions in Sandstone	TR N-77-6/1	W-41	Realignment Near St. Joseph	MBM 52-1	H-24
2, Explosions in Soil	TR N-77-6/2	W-41	Relocation	TR 2-735/2/4	H-51
Center Hill Dam	MP S-74-5	S-44	Roughness	TR H-78-13	H-68
	TM 202-1	H-34	Schemes on Tides, Currents,		
	MP 3-2	S-4	and Shoaling	MP H-78-6/2	H-19
Centerville	RR S-72-1	S-54	Sediments	TR D-77-23/	
Central Core Dam				F/I	E-9
Centrifuge			Stabilization	TR 1	Z-7
Installations and Modeling	MP	S-51	Mississippi River	P 15	H-26
Model Testing of Soils	MP S-76-9	S-49		TR 2	Z-8
<b>Ceramic</b>			<b>Publications</b>	TR 4	Z-8
Aggregate for Concrete	MP 6-8	C-2	Transitions	MP H-68-3	H-10
Coated Aluminum Blast Panels	MP 4-784	S-21	Channelized Traffic	TR 3-426	S-73
Cesium <sup>137</sup> Irradiation	MP H-69-3	M-8		TR 3-548	S-78
CH-47A Chinook Helicopter	MP 4-766	M-6	Chanoine Wicket Dam	B 1/3	H-1
Chace Air Meter	MP 6-189	C-4	Chanthaburi Area	CR 3-156/F	H-42
Chagrin River	TR H-70-11	H-56	<b>Charge</b>		
Chain of Rocks			Calibration	TR 3	W-28
Canal	MP 2-275	H-5	Depth	TR 1-647/4	W-30
	TM 2-403	H-41	Shape	TR N-75-5	W-40
	TR H-78-7	H-68	Standoff Distances	TR N-69-5	W-34
	MBM 81-2	H-24	Tests	TM-71-6	W-25
Dam	MP 6-405	C-6	Charleston		
Low Water Dam No. 27	TM 104-1	H-31	AFB	MP 4-545	S-17
Reach	TM 3-343/51	S-68	Harbor	MP 2-299	H-6
Chambly Air Base		Z-6			Z-11
Channel	R 1-109	Z-13			Z-12
	MP 2-498	H-7			H-16
	MP H-68-5	H-10		MP H-76-9	H-18
	MP H-69-5	H-11		TR 2-444	H-42
	MP H-73-2	H-13		TR 2-733	H-50
	TM 67-6	W-22		MP C-69-6	C-16
	TM 137-1	H-32	<b>Naval Shipyard</b>		
		Z-12	Charts for Design of Deep		
<b>Closure</b>			Underground Structures	MP N-77-3	W-12
Conditions, Devil's Island			Chateauroux-Deols Air Base	TM 3-343/50	S-68
Reach	TR H-73-1	H-59	Chatham (Stage) Harbor		Z-11
Contour Maps	TR H-74-5/II	H-30	Chaumont Air Base	TM 3-343/20	S-67
Currents, Naval Operating			Cheatham		
Base, Midway Islands	TM 2-251	H-36	Lock	TM 2-358	H-39
Deepening		Z-12	Reservoir	MBM 23-3	H-23
Depth	TB 8	Z-10		TM 2-381	H-40
Development in the			<b>Chelveston, Northamptonshire,</b>		
Atochafalaya Basin	MBM 81-5	H-25	England	TM 3-343/117	S-71
Expansions at Culvert Outlets	TR H-74-9	H-61	<b>Chemical</b>	TM 6-419/1	C-29
Improvement	B 2/3	H-1	Admixture	MP 6-123/3	C-2
	TM 107-1	H-31	Concrete	MP 6-803	C-13
	TR 2-765	H-52		TM 6-390	C-29
	TR H-72-2/6	H-58	<b>Agent for Soil Stabilization</b>	MP S-70-11	S-32
Barnegat Inlet	TR H-74-1	H-60	Analysis of Portland Cement	MP 6-111	C-2
Boston Bar	TM 159-1	H-32	Coagulation	TR D-77-39	E-12
Canacades Creek	MP 2-413	H-7	Constituents	CR D-76-1	E-24
Chain of Rocks Reach	TM 104-1	H-31		CR D-76-7	E-25
Contra Costa County	TR H-78-14	H-68		TR D-76-7	E-5
Dogtooth Bend	TM 109-1	H-31	<b>Control of Mosquitoes</b>	TR D-78-48	E-19
Farm Creek	TM 2-355	H-39	Data	CTIAC-31	C-42
				MP C-78-7	C-26

## 16-INDEX

Term	Report No.	Page	Term	Report No.	Page
Chemical (Cont)			Classification (Cont)		
Explosive	TM 70-5	W-24	of Dredged Material	TR D-77-18	E-7
	TM 70-6	W-24	Indexes of Clay Shales	TR S-71-6/2	S-87
	TM 71-29	W-26	Terrain	MP 4-444	M-3
Cratering	PNE 300P	W-14	Classifying Terrain by		
Excavation	TM 70-3	W-24	Spectral Characteristics	TR M-77-2/2	M-32
Extraction of Heavy Metals	TR D-78-6	E-14	Clay	CP 2-39	W-43
Films	MP 5-475	MS-5		CR 3-3	S-106
Flux Characteristics of a				CR 3-4	S-109
Dredged Material Marsh	TR D-77-23/ F/II	E-9		CR 3-25/16	S-110
				CR 3-26/23	S-111
Impact of Discharging Fill				CR 3-42	S-106
Material	TR D-77-29	E-10		CR 3-89	S-100
Reactivity	TM 6-368	C-28		CR 3-101	S-112
Stabilization of Selected					and
Tropical Soils	CR 3-63/4	S-111			S-113
Chena River Lakes Project	TR 10	Z-8		CR 3-132	S-100
Chert Popouts, Wolf River				CR 3-145/1	S-100
Floodwall	TR 6-581	C-33		CR 3-145/3	S-100
Chesapeake				CR S-68-4	S-100
Bay		Z-12		CR S-70-5	S-106
	MP 3-59	CERC-36		CR S-71-5	S-107
	TM 38	CERC-28		CR S-72-3	S-114
	TM 47	CERC-28		MP 3-428	S-14
Radioactive Tracer Study	MP H-76-1	H-15		MP 3-332	S-22
Delaware Canal	MP H-74-10	H-14		MP 4-835	M-6
	TM 93-1	H-30		MP M-70-8	M-9
	TM 93-3	H-30		MP M-71-2	M-9
	TR H-73-16	H-60		MP S-69-20	S-29
Chiang Mai Area	CR 3-156/C	M-41		MP S-73-57	S-43
Chicago Sanitary and Ship Canal	TR 2-776	H-52		MP S-75-15	S-49
Chickamauga Dam Powerhouse	TR 6-637	C-34		TM 3-271/2	S-62
Chief Joseph Dam	MP 2-266	H-5		TM 3-315	S-64
Chinoteague Inlet		Z-12		TR 29	W-29
Chinese Inner Asia; Yuma				TR 2-482	W-30
Analogs No. 6	CR 3-11/6	M-42		TR 3-545	M-20
Chinook Helicopter	MP 4-766	M-6		TR 3-565/1	M-20
Chlorinated Hydrocarbon				TR 3-666/3	M-22
Compounds	TR D-77-23/E	E-9		TR S-68-6/2	S-85
Chouteau Island	MBM 81-1	H-24		TR S-75-15	S-92
Chrome-Lignin	MP 3-122/1	S-7	Foundations	CR S-76-6	S-101
	MP 3-145	S-8	Gravel	MP 3-664	S-19
	TR D-77-24/C	E-9		TR S-68-6/1	S-85
Chromium	MP 3-902	S-24	Lime Mixtures	CTIAC-41	C-43
Chukar Mesa Investigation			Minerals	B 14	S-1
Chute Spillway			Shoaling Problems	TB 10	Z-10
Cowanesque Dam	TR H-76-12	H-64	Mixtures	TR D-78-34	E-17
Fort Randall Dam	TR 2-716	H-50	Shale	CR S-70-5	S-106
Riverine Fishery	CR Y-74-4	E-35		MP S-73-68	S-44
Circular				TR 29	W-29
Arc Method	MP K-73-2	MS-5		TR S-70-9/3	S-87
Loads	TM 3-323/3	S-65		TR S-71-6	S-87
Circulation				TR S-71-6/5	S-87
Analysis	MP H-73-3/ 17-7	H-15	Foundations	TR S-71-6/4	S-87
	MP H-76-3/ 17-9	H-16	Slopes	MP S-71-22	S-35
	MP H-76-4	H-16		TR 15	W-28
Long Beach Harbor	TR H-75-4/5	H-62	Panama Canal	TR S-70-9	S-86
Tests			Soil	MP 4-765	M-6
Civil Works				MP S-69-24	S-30
Investigations	MP 6-112	C-2		MP S-73-28	S-41
Program		MS-12		TM 18	W-27
Clam <u>Rangia Cuneata</u>	CR H-73-1	H-73		TR 3-783/F	M-24
Clarence Cannon				TR S-74-1	S-90
Dam	MP C-73-5	C-21	Subsoils	CR 3-74	S-107
	TR H-77-8	H-66	Under Repetitive Loadings	TR S-75-16	S-94
Reservoir	MP 6-906	C-14	Clayey		
	TR H-77-7	H-57	Sands	TM 3-271/1	S-62
Clark Hill Dam	TM 2-229	H-35	Sandy Gravel	MP S-73-25/1	S-41
Classification					
Cohesionless Soils	MP S-77-21	S-52			

Term	Report No.	Page	Term	Report No.	Page
Clavey (Cont)			Coastal (Cont)		
Silt	CR 3-26/15	S-110	Structures (Cont)	H 83-5	CERC-23
	CR 3-63/6	S-112		R 83-8	CERC-23
	CR 3-63/8	S-112		ER H-68-2	H-27
	TM 3-323/1	S-65		SR 10	CERC-25
Bottom	TR 1-704/1	W-31		TM 66	CERC-40
Clear Creek Drainage and Levee District	TM 80-1	S-55		TM 96	CERC-42
	TM 80-2	S-56	Survey Base Lines	CETA 31-15	CERC-4
	TM 163-1	S-57	Waters	CR H-73-1	H-73
Clendening Lake Outlet Tunnels	MP C-77-9	C-25		CR H-73-2	H-73
Cleveland Dikes	MP M-76-8	M-14		TP 80-2	CERC-32
Climate	CR 3-11	M-42	Waves	MR 76-11	CERC-10
	CR 3-30	M-43	Zone	TM 48	CERC-28
	TR 5-625/G	M-21	Management	MP H-72-3	H-12
Climatic			Pollution Problems	MP Y-72-2	E-29
Analog	CR 3-27	M-42	Coated Membranes	TR S-75-1	S-91
Effects on Airport Pavement	CR S-76-12	S-104	Coatings	MP 6-864	C-14
Clinton Dam	TR H-73-5	H-59	Conhiti Dam	TR 2-705	H-49
Cloud	PNE 1110	W-17	Coding Handbook	CR 3-13	M-36
Development Studies	PNE 511	W-15		CR 3-36	M-40
	PNE 1108	W-16	Cofferdam Diversion Study, Arkansas River	MP H-71-9	H-12
Dimensions for Cratering			Cohesionless		
Explosions	TM 66-8	W-21	Material	MP S-68-15	S-27
Formation	PNE 503F	W-14		RR S-76-1	S-54
Coagulation	TR D-77-39	E-12		CR S-75-5	S-104
	TR D-78-54	E-19	Soil	MP S-77-21	S-52
Coal	MP M-76-2	M-13		RR S-76-2/5	S-54
	MP M-76-4	M-13		TR S-75-16	S-92
Coarse			Cohesive Soil	CR 3-62	S-115
Aggregate	TR 6-819	C-36		CR 3-148	S-109
Grained				MP 3-473/12	S-16
Construction Materials	TR S-79-7	S-85		MP 3-676	S-19
Soil	MP 4-477	M-4		MP 4-767	M-6
	TM 3-240	M-17		MP S-70-8	S-32
		and		MP S-74-20	S-45
	TR 3-652/6	M-21		MP S-76-11	S-49
	TR 3-666/5	M-22		TR M-70-14/3	M-27
	TR 3-666/7	M-22		TR N-70-7	W-36
	TR M-71-8	M-28		TR S-75-13	S-92
	TM 44	CERC-39		Transl 69-5	S-97
Coast Erosion			Cold		
Coastal			Mixed Asphaltic Pavements	MP 4-232	S-10
Changes	MR 81-2	CERC-13	Weather		
	TP 76-16	CERC-30	Concreting	CTIAC-36	C-42
	R 76-3	CERC-20	Construction	MP C-75-11	C-23
Currents			Environments	MP C-75-11	C-23
Dredged Material Disposal	MP D-75-13	E-2		MP C-76-11	C-24
Areas	MP 1-62	CERC-36		CTIAC-16	C-41
Dunes	CETA 82-1	CERC-4		MP C-75-5	C-23
Engineering	CETA 82-4	CERC-4	Colewa Creek	TR H-69-13	H-55
	MP 2-73	CERC-8	Columbia	MP 4-355/4	M-3
	R 4-72	CERC-17		MP 2-543	H-7
Research Center	R 1-75	CERC-19	Colonial		
Terms	MP 2-72	CERC-8	Bird	TR D-78-10	E-14
Features	MR 76-2	CERC-10		TR D-79-14	E-15
Flooding for Louisiana	MP H-78-5	H-19	Nesting Waterbirds	MP D-78-5	E-4
Imagery Data Bank	MP 3-72	CERC-8	Seabirds	TR D-73-1	E-13
Inlet	CETA 77-1	CERC-2		TR D-78-1	E-13
Marsh Plants	TR D-77-2	E-5	Colorado River		Z-12
Models	TP 76-11	CERC-30		TR 9	Z-8
Processes	MP H-78-8	H-19	Coloring Agents for Camouflage	MP M-76-1	M-13
	R 1-67	CERC-16	Columbia		
Profiles	TR 76-1	CERC-34	Bottoms Levee	MBM 31-3	H-23
Regime	R 3-70	CERC-16	Dam	MP 6-603	C-9
Revetment	MR 76-7	CERC-10		TR 2-573	H-45
Sediment Transport	MR 81-5	CERC-13	Estuarv		Z-11
Structures	MP H-74-2	H-14	Lock	MP S-72-30	S-38
	MR 83-10	CERC-15	and Dam	MP S-74-24	S-46
				MP 3-503	S-16
				MP 3-518	S-17

## 18-INDEX

Term	Report No.	Page	Term	Report No.	Page
Colombia (Cont)			Compressive (Cont)		
Lock (Cont)			Strength (Cont)		
and Dam (Cont)	MP 3-569	S-18	Molded Cylinders and		
	TR 2-571	H-45	Drilled Cores	MP 6-395	C-6
	TR 3-741	S-84	Soil-Cement	TM 137-1	S-58
	TR 2-756	H-52	Computer	MP 2-133	H-4
	TR S-74-6	S-90		MP K-76-1	MS-7
Pile Foundation			Aided		
River	MP H-70-3	H-11	Analysis and Design of		
	TR D-77-30	E-10	Tainter Gates	CR K-76-1	MS-12
Disposal Site	MP 2-765	H-9	Design		
Estuary	TR 2-735	H-50	Analysis of Three-Girder		
Restoration	TR 13	Z-8	Tainter Gates	MP K-73-1	MS-7
Columbus			Horizontally Framed Miter		
Air Force Base	MP 4-303	S-11	Gates	MP K-75-9	MS-6
	TR 3-490	S-76	Structural Engineering		
	TR 3-533	S-77	Structural Engineering	TR K-73-1	MS-11
Lock and Dam	TR H-74-13	H-61	Analysis of Vehicle Dynamics	CR 3-155	M-36
	TR H-77-11	H-66	Calculated		
Column Test	MP S-78-6	S-52	Geometric Characteristics	TR M-74-5	M-30
Combat Vehicle	MP M-78-7	M-16	Tank-Defender Intervisi-		
Command and Control			bility	MP M-76-5	M-14
Bunker	CR N-77-1	W-48	Code	TM 71-30	W-26
Structure	MP N-76-5	W-11		TM 72-1	W-26
Commerce, Mississippi	TM 3-299	S-63		TM 72-4	W-26
	TM 3-316	S-64	Crosshole Seismic Test	MP S-78-8	S-53
Commercial 1/4-3/4-Ton Vehicles	MP M-76-6	M-14	Graphics Colloquium	MP	MS-6
Committee				MP	MS-7
on Channel Stabilization		Z-7	Information System for		
		thru	Environmentally Sensitive		
		Z-8	Wildlife	TR M-74-6	M-30
on Tidal Hydraulics		Z-9	Model	CETA 77-1	CERC-2
		thru	Modelling of Jointed Rock		
		Z-12	Masses	TR N-79-4	W-42
		W-32	Notes	MP K-75-3	
Communication Conduit	TR 1-750			thru	
Compacted				K-75-5	MS-6
Fine-Grained Cohesive Soils	MP S-76-11	S-49		MP K-75-7	MS-6
Kaolinite	MP S-75-11	S-47		MP K-75-8	MS-6
Rock	MP S-70-7/1	S-32	Program	CETA 81-13	CERC-4
Compaction	CTIAC-18	C-41		IR M-76-1	M-1
Bituminous Concrete	MP 4-210	S-9		MP K-75-2	MS-6
Pavements	MP S-76-10	S-49	Analyses of Pile-Soil		
Characteristics	MP 4-269	S-10	Interaction	CR S-76-14	S-104
Earth-Rock Mixtures	MP S-73-25	S-41	CADSE		Z-6
Data	MP S-70-13	S-32	CON2D	CR S-77-4/II	S-102
Embankments	MP 3-383	S-13	Design/Analysis of Three-		
Hammers	MP 4-357	S-12	Girder Tainter Gates	MP K-78-1	MS-7
Soils	CR 3-28	S-108	Drawing Finite Element Grids	MP N-76-2	W-11
	MP 4-240	S-10	Dynamic Stress Analysis		
Study	MP 4-380	S-13	of Underground Structures	CR 1-175	W-44
Zero-Slump Concrete	MP S-76-16	S-49	FEDIT	MP K-73-1	MS-5
Tests	MP S-77-4	S-50	GWALL	IR K-78-1	MS-3
Gravelly Soils	MP 3-676	S-19	Linear and Curvilinear		
Sands with Fines	MP S-72-29	S-37	Regression Analyses	MP 5-667	MS-5
Compactor			Measuring the Strength		
Bituminous Mixtures	MP 4-261	S-10	Behavior of Stabilized		
Standard Effort Compaction			Soils	CR 3-63/2	S-111
Tests	MP S-77-4	S-50	Numerical Integration	MP 5-583	MS-5
Composite Slabs	TR N-69-2/5	W-33	Radioisotopic Sand Tracer	MP 3-70	CERC-7
Compressibility	CR 3-63/6	S-112	Rational Pavement Design	TR S-76-3	S-93
Analysis of the Watching Hill			Slope Stability Analysis	MP 5-619	MS-5
Alast Range	TR S-72-4	S-89	Static and Dynamic Analysis		
Soils	CR S-69-3	S-104	of Earth Slopes	MP S-78-13	S-53
Compression			Structural Engineering	TR K-78-1	MS-11
Apparatus	CR 3-62/4	S-115	TWDA		Z-14
Tests, Newburgh Lock and Dam	MP S-74-29	S-46	CON2D	CR S-77-4/II	S-102
Waves	MP S-69-30	S-30	Concentration Index for Pave-		
Compressive			ment Design	MP S-74-4	S-44
Failure of Portland-Cement-			Concertina Wire	TR C-69-3/2	C-36
Based Mortars	MP C-70-19	C-18	Conchas Dam	TM 97-1	S-56
Strength			Stilling Basin	TM 105-1	H-31
Concrete	TR C-74-1	C-38	Concrete	CTIAC-5	C-40
Lean Mass Concrete	TR C-74-2	C-38		CTIAC-26	C-41

Term	Report No.	Page	Term	Report No.	Page
Concrete (Cont)	CTIAC-54	C-44	Concrete (Cont)		
	CTIAC-66	C-45	Cores (Cont)		
	CTIAC-68	C-45	Chickamauga Dam Powerhouse	TR 6-637	C-34
	MP 5-458/4	MS-5		TM	C-27
	MP 6-709	C-11	Dams -- Petrographic Report	TM	C-28
	MP 6-737	C-12	Devil's Kitchen Dam	MP 6-165	C-3
	MP 6-890	C-14	Drv Dock No. 2, Charleston		
	MP 6-958	C-15	Naval Shipyard	MP C-69-6	C-16
	MP C-71-5	C-19	Martin Dam	CTIAC-38	C-42
	MP C-72-7	C-20	New Second Lock, Sault Ste.		
	MP C-72-10	C-20	Marie	MP C-73-8	C-21
	MP C-77-10	C-25	Runway, Dow Air Force Base	MP 6-326	C-6
	MP C-78-9	C-26	Cylinders	MP 3-437	S-14
	MP S-75-25	S-48		MP 6-771	C-12
	TR C-70-2	C-37		MP C-72-12	C-20
	TR C-75-3	C-38		TM	C-27
Aggregate	CTIAC-65	C-45	Dams	MP	S-33
	MP 6-772	C-12		MP C-71-8	C-19
	TM 6-370	C-28	Deep Beams	MP 1-874	W-5
Clarence Cannon Reservoir	MP 6-906	C-14		MP N-71-2	W-8
Kaskasia River	MP 6-730	C-12	Deterioration	MP 6-795	C-13
Airfield Pavement	MP S-74-22	S-45		MP 6-927	C-15
Airport Pavements	TR S-77-11	S-94	Dilation	MP C-69-18	C-17
Analyses	B 27	C-1	Division, U. S. Army Engineer		
Arch	MP 1-736	W-4	Waterways Experiment Station	MP 6-421	C-7
	MP 1-809	W-4	Eisenhower and Snell Locks	MP 6-493	C-8
	TR 2-590	W-30		TR 6-784	C-35
Aircraft Shelters	TR N-75-6	W-40	Elements		
Bunkers	MP N-71-4	W-8	Bamboo Reinforcement	TR 6-646	C-34
	TR N-71-8	W-36	Structures in Selected		
Protective Structures	TR WT-1420	W-30	Theaters of Operations	TR C-78-1	C-39
Armor Units	CETA 81-7	CERC-3	Exposed		
	MP H-74-2	H-14	Natural Weathering	TM 6-226	C-27
Backfills for Lined Tunnels	MP C-70-23	C-18	Sea	MP C-70-3	C-17
Backpacking	TR 6-763/3	C-35	Farley Nuclear Containment		
Batching	TM 6-407	C-29	Structure	MP C-74-2	C-21
Beam	MP 6-159	C-3	Fixed-End Arches	TR 1-758	W-32
	MP 6-611	C-9	Flat Slabs	TR C-70-1	C-37
	MP 6-665	C-10	Freezing and Thawing	MP C-68-6	C-16
	MP 6-868	C-14	Investigation - Bull Shoals		
	MP N-78-7	W-13	Dam	TM	C-27
	TM 6-412/1	C-29	Lined Channel	TR 14	Z-8
	TM 6-412/2	C-29	Manhole	MP N-72-5	W-8
	TR 6-570	C-33	Masonry	MP 6-279	C-5
	TR 6-818	C-36		TR 6-596	C-33
	TR C-69-4	C-36	Materials and Riprap for Use		
	TR C-69-5	C-36	at DeGrav Dam	MP 6-596	C-9
	TR C-70-3	C-37	Matress	MP 6-473	C-7
Exposed				TR 6-613	C-34
Marine Environment	CTIAC-49	C-43	Mixer	MP 6-692	C-11
Natural Weathering	CTIAC-50	C-43		TM 6-419/4	C-29
Investigation	TR 6-570/4	C-33	Performance	TP 6-562	C-32
Block	MP 6-123/9	C-3	Carlisle Reservoir	MP 6-538	C-8
	MP 6-123/11	C-3	Shelbville Reservoir	MP 6-975	C-15
	RR 2	Z-5	Turbine Type	TR 6-525	C-31
Fort Dix	MP C-75-8	C-23	Mixture	MP 6-520/2	C-3
Revetment	MP 1-64	CERC-7	Devils Kitchen Dam	MP 6-257	C-5
Bottom	TR 1-704/3	W-31	High Water-Cement Ratios	TR C-73-3	C-37
Bridge Decks	CTIAC-2	C-40	Kinzua Dam	CTIAC-67	C-45
	MP C-73-2	C-21	Proportions	CTIAC-58	C-44
Cement	Handbook	C-1	10 Years of Moist Curing	MP 6-123/12	C-3
Columns	TR C-72-2	C-37	Old River Lock	MP 3-554	S-17
Concreting Materials	TR 6-553	C-32	Pavement	TR S-74-10	S-91
Condition, William Bacon			Construction	MP S-77-26	S-52
Oliver Lock and Spillway	MP C-77-5	C-24	Military Roads	TR S-75-10	S-92
Cores	CTIAC-53	C-44	Placement Temperatures	MP C-77-7	C-24
	MP 6-236/A	C-5	Port Allen Lock	MP 6-297	C-6
	TM	C-27	Quality	TR 6-717	C-34
Carlisle Reservoir Spillway	MP 6-802	C-13	Reactor Vessels	MP C-72-13	C-20
			Research	MP 6-211	C-4

## 20-INDEX

Term	Report No.	Page	Term	Report No.	Page
Concrete (Cont)			Condition Survey (Cont)		
Research (Cont)	MP 6-420	C-7	Butts Army Airfield	MP S-72-26	S-37
	TM	C-27	Campbell Army Airfield	MP S-72-19	S-37
Retaining Wall, South			Carswell Air Force Base	MP S-73-39	S-42
Amsterdam, New York	MP 6-527	C-8	Castle Air Force Base	MP S-73-19	S-41
Runways--Rome Air Depot	TM	C-27	Civil Airports		Z-15
Sand	RR S-76-2/2	S-54	Davison Army Airfield	MS S-68-26	S-28
Sheet Piles	MP C-69-2	C-16		MP S-72-20	S-37
	MP C-69-13	C-17	Dvess Air Force Base	MP S-73-43	S-42
Ships and Vessels	CTIAC-27	C-41	Ellsworth Air Force Base	MP S-73-12	S-40
	MP C-77-12	C-25	Felker Army Airfield	MP S-74-27	S-46
Slab	MP 1-877	W-5	Forbes Air Force Base	MP S-73-44	S-42
	MP 6-911	C-14	Forney Army Airfield	MP S-72-22	S-37
	MP 1-965	W-6	Fort		
	MP N-68-5	W-7	Devens Army Airfield	MP S-73-47	S-43
	TR 1-789	W-33	Polk Army Airfield	MP S-72-24	S-37
	TR C-69-2	W-33	Glasgow Air Force Base	MP S-73-33	S-42
	TR C-72-1	C-37	Grand Forks Air Force Base	MP S-73-42	S-42
	TR N-73-8	W-39	Gray Army Airfield	MP S-73-2	S-40
	TR N-75-2	W-40	Hunter Army Airfield	MP S-69-37	S-30
Southeast Asia	TR C-69-3	C-36	K. I. Sawyer Air Force Base	MP S-73-15	S-41
Source of Aggregate	CTIAC-19	C-41	Kincheloe Air Force Base	MP S-73-30	S-42
	MP C-76-2	C-23	Laguna Army Airfield	MP S-73-50	S-43
Specimens	MP 6-637	C-10	Lawson Army Airfield	MP S-69-19	S-29
Damaged by Electrolvsis	MP 6-188	C-4	Libby Army Airfield	MP S-71-11	S-34
Treat Island, Maine	MP 6-177	C-4	Liberty Army Airfield	MS S-68-2	S-27
Stems for Field Cratering			Lorbourn Air Force Base	MP S-73-54	S-43
Tests	MP 6-805	C-13	Loring Air Force Base	MP 4-898	S-24
Strength	MP S-74-30	S-46		MP S-73-51	S-43
Stress Meter	MP 5-36	MS-4	Malmstrom Air Force Base	MP S-73-22	S-41
Structures	MP C-77-11	C-25	March Air Force Base	MP S-73-38	S-42
	TR C-78-4	C-39	Mather Air Force Base	MP S-73-31	S-42
Surfaces	CTIAC-40	C-42	McConnell Air Force Base	MP S-73-29	S-42
	TM 6-336	C-28	Michael Army Airfield	MP 4-976	S-26
	TR 6-559	C-32	Minot Air Force Base	MP S-73-23	S-41
	TR 6-785	C-35	Pease Air Force Base	MP S-73-34	S-42
	TR 6-788	C-35	Plattsburg Air Force Base	MP S-73-46	S-42
	TR 6-816	C-36	Porous Friction Surface		
Painted	TR C-68-1	C-36	Course		Z-16
Technology Information			Redstone Army Airfield	MP S-72-23	S-37
Analysis Center	CTIAC-11	C-40	Robert Gray Army Airfield	MP 4-989	S-26
	MP C-72-24	C-21		MP S-73-16	S-41
Temperature			Sheridan Army Airfield	MP S-68-1	S-26
Control Study	CTIAC-62	C-44	Sherman Army Airfield	MP S-72-25	S-37
	MP C-77-8	C-25	Simmons Army Airfield	MP S-69-47	S-31
Greens Ferry Dam	MP 6-342	C-6	Soil-Cement	MP 4-93	S-6
Test	MP C-78-4	C-25	Troy Lock and Dam	MP C-78-6	C-26
	MP C-78-12	C-26	Vance Air Force Base	MP 4-815	S-22
Mechanical Casting Plant	MP 6-255	C-5	Westover Air Force Base	MP S-73-41	S-42
Methods	TR C-69-2	C-36	Whiteman Air Force Base	MP S-73-45	S-42
Specimens	MP C-78-17	C-26	Wright-Patterson Air Force		
Thermal Studies for Lock and			Base	MP S-73-55	S-43
Dam No. 2	CTIAC-55	C-44	Wurtsmith Air Force Base	MP S-73-13	S-40
Underwater	TR C-76-3	C-38	Conductivity Probe Calibration	RR H-71-2/I	
U. S. Military Academy	MP 6-653	C-10	/1		H-28
	MP S-72-8	S-36	Conduit		Z-6
	MP 6-235	C-5		MP H-68-2	H-10
Units in Iceland	MP C-74-14	C-22		MP H-73-1	H-13
Walter Reed Hospital	MP 6-737	C-12	Bull Shoals Dam	TM 2-428	H-41
Workability	MP 6-849	C-14	Cutoff Walls	CR S-70-7	S-106
	TR 6-598	C-33	Denison Dam	MP 2-31	H-4
Condition Survey	MP 4-3	S-4	Detroit Dam	TM 2-302	H-38
	MP 4-213	S-9	Enid Dam	TR 2-510	H-43
	MP 4-451	S-15	Inlets of Earth Dam	MP H-69-3	H-11
Altus Air Force Base	MP S-73-14	S-40	Kevstone Dam	TR 2-555	H-44
Bangor International Airport	MP S-73-52	S-43	Melvern Dam	MP H-77-5	H-17
Beale Air Force Base	MP S-73-18	S-41	Narrows Dam	TM 2-294	H-37
Bicycle Army Airfield	MP 4-924	S-25	Pine Flat Dam	TM 2-375	H-40
Biggs Army Airfield	MP S-73-10	S-40			



Term	Report No.	Page	Term	Report No.	Page
Conduit (Cont)			Consolidated		
Rend Lake Dam	TR H-75-2	H-61	Soils	CR 3-73/4	S-103
Summersville Dam	MP 2-988	H-10	Undrained Triaxial Compression		
Table Rock Dam	TR 2-504	H-43	Tests	MP S-70-8	S-92
Cone				TR S-75-13	S-92
Criteria	R 18-2	P-4		MP S-70-18	S-34
Index			Consolidation		
Measurements	MP 4-327	M-2	Dredged Material in Confined		
Relations	MP 4-457	M-3	Disposal Areas	TR D-76-1	E-5
Penetration			Earth and Rockfill Dams	CR S-77-4	S-102
Method	MP 3-478/4	S-15	Fine-Grained Dredged Material	TR D-77-16	E-7
Resistance	TR 3-652/4	M-21	Zoned Dams	CR S-77-4/11	S-102
Test Data	MP 3-749	S-21	Consolidometers	B 12	S-1
Penetrometer	CR S-69-4	S-116	Constitutive		
	IR 7	S-2	Equation	MP S-74-18	S-45
	MP 3-435	S-15	Model	MP S-71-13	S-35
	MP 4-899	M-7	Engineering Materials	MP S-77-19	S-51
	R 18-1	P-4	Ground Motion		
	TR 3-462	M-20	Calculations	TR S-71-4/3	S-87
			Predictions	CR S-71-10/2	S-118
Sounding			Ground Motion Calculations	MP S-72-13	S-37
Device	MP 3-4	S-4	Relation	TR S-77-3	S-94
Tests, Reid Bedford Bend			Earth Media	TR S-73-6	S-89
Revetment	R 5-6	P-1	Ground Motion Calculations	CR S-75-2	S-119
Velocity	MP M-69-7	M-9	Relation	MP S-73-14	S-53
Conemaugh Dam	TM 2-272	H-37		RR S-76-2/3	S-53
Coney Island, New York	MP H-75-2	H-14		RR S-76-2/5	S-54
Conference			Construction		
Aquatic Plant Control			Coastal Zone	R 2-75	CERC-19
Program			Equipment	MP S-75-1	S-46
22-24 October 1975	MP A-76-1	M-47		TR D-77-1	E-5
19-22 October 1976	MP A-77-3	M-47		TR D-77-7	E-6
Project, 12 January 1971	MP	M-47		MP 4-100	S-5
Computer-Aided Design in			Index		
Structural Engineering		Z-6	Inspectors Manual for Flexible		
Earth and Concrete Dams	MP	S-34	Pavements	TM	S-72
Foundations and Embankment			Joints	MP C-75-10	C-23
Construction		Z-1	Material	CR D-74-2	E-23
Integrated Systems of Aquatic				MP C-75-11	C-23
Plant Control, 29-30 October				MP S-76-26	S-50
1973	MP	M-47		SR 10	CERC-25
Potamology			Munitions	TR S-69-7	S-35
Investigations	R 11-1	P-2	Tactical Bridge Approach Roads	TR M-69-3	M-25
	R 11-6	P-2	Contact Burst	TR S-77-1	S-94
Program	R 11-8	P-2		TR 1-770/1	W-32
Seismic Propagation Study	MP	M-10		TR N-76-7	W-40
Soil				TR N-76-10	W-41
Potamology			Container		
Investigation	R 11-3	P-2	Handler	MP M-75-8	M-13
Program	R 11-7	P-2	Handling Vehicles	MP S-72-34	S-38
Stability of Mississippi			Containment		
River Banks	R 11-5	P-2	Area		
Confined			Design	TR D-78-12	E-14
Disposal			Dredged Material	TR D-77-21	E-8
Area	CR D-74-4	E-21	Effluent	TR D-78-54	E-19
	TR D-76-1	E-5	Facility	CR D-74-6	E-23
	TR D-77-16	E-7	Management	TR D-77-19	E-7
	TR D-78-16	E-15	Operation	TR DS-78-9	E-27
	TR D-78-24	E-16	Structures	TR D-78-31	E-17
	TR D-78-43	E-18	Contaminant		
	TR DS-78-11	E-27	Dispersion	CR H-75-1/	
Dredged Material				17-5	H-70
Sites	CR D-75-5	E-24	Dredged Materials	TR D-76-4	E-5
Soils	CR S-69-2	S-108	Release	TR D-73-49	E-19
Confinement of Dredged Material	TR D-74-2	E-5		TR D-78-45	E-18
Congerote	MP 4-134	S-7	Contaminated Dredged Material	TR DS-78-8	E-27
Conneaut Harbor	TR 2-617	H-46		TR DS-78-14	E-27
Connecting Channel for Tioga			Contamination Dispersion in		
and Hammond Lakes	TR H-76-6	H-64	Estuaries	MP 2-332	H-6

## 22-INDEX

Term	Report No.	Page	Term	Report No.	Page
Continental Shelf	MP 1-66	CERC-7	Cordell Hull Navigation Lock	TR 2-739	H-51
	MR 77-11	CERC-11	Core	MP 6-493/2	C-8
	MR 79-4	CERC-12		MP 6-570	C-8
	MR 80-4	CERC-12	Barrel	TM 71-18	W-26
	MR 82-10	CERC-14	Concrete	TR 6-522	C-31
	R 22-73	CERC-18	Structures	TR 6-629	C-34
	TM 29	CERC-27	Dam	RR S-72-1	S-54
	TM 34	CERC-27		TM	C-28
	TM 42	CERC-28	Petrographic Report	MP S-75-17	S-47
	TM 45	CERC-28	Drill Methods	TR 3-534	S-77
	TM 47	CERC-28	Drilling in Frozen Ground	CTIAC-12	C-40
	TM 54	CERC-29	Highway Bridges in Georgia	MP C-73-11	C-21
	TP 76-2	CERC-30	Material	B 14	S-1
	TP 78-4	CERC-32	Possum Kingdom Dam	TM 113-2	S-56
	TP 79-2	CERC-32	Tatum Salt Dome	TR 6-614	C-34
	TP 79-3	CERC-32	Coring Device	MR 82-8	CERC-14
	R 24-73	CERC-18	Corporal Missile	MP 4-392	S-14
Sediment	MP T-70-1	MS-9	Corps		
Contouring System	TR H-78-14	H-68	Data Communication System	MP K-76-2	MS-7
Contra Costa County	IR O-74-2	MS-3	of Engineers		
Contract Reports	R 21-2	P-4	CBR Design Procedures	MP 4-252	S-10
Contraction Works			Committee on Tidal		
Control			Hydraulics	TB 18	Z-10
Aquatic Plants		M-50	Dams	MP 6-415	C-7
	MP A-77-2	M-47	Division and District		
	TR A-78-2	M-49	Offices	TR M-75-2/2	M-31
Bunker	CR N-77-1	W-48	Dredged Material Research		
Gates	CR H-69-1	H-71	Program	MP D-73-8	E-2
	MP 2-484	H-7		MP D-73-9	E-2
Housing	MP C-76-10	C-24		MP D-74-12	E-2
Shaft 4, Fort Peck Dam	TM 2-402	H-41	Facilities	TR S-77-2	S-94
Structure	MP H-73-7	H-14	Kneading Compactor	MP 4-261	S-10
	TM	S-61	Recreation Area	MP Y-76-1	E-29
	TM 3-249	S-61		MP Y-77-5	E-30
	TM 2-275	H-37	Tidal Projects	TB 12	Z-10
	TR 2-447	H-42	Corpus Christi Pass, Texas		Z-12
	TR H-76-15	H-65		GITI 8	CERC-5
	TR H-77-2	H-66		GITI 9	CERC-5
Denison Dam	TM 161-1	H-32	Corral Bay	TM 2-382	H-40
Little Sioux River	TR 2-762	H-52	Corrosion	TM 27	CERC-27
Controlled			Tests of Metals, Sardis Dam	MP 3-86	S-6
Blasting	TR E-75-1	W-39	Corrugated		
Release Herbicides	TR	M-48	Metal		
	TR A-78-1	M-49	Cover Designs	TR N-76-6	W-40
Convair Landing Mat	MP 4-656	S-19	Pipe	MP 2-699	H-9
Converging Supercritical Flow	MP H-76-19	H-17	Steel Pipe	MP 4-657	S-19
Conversationally Oriented Real-			Corson Inlets	TR H-78-11	H-68
Time Program-Generating System	MP	MS-7	Cost		
Convex Chutes	MP H-76-19	H-17	Estimates for a Hardened		
Conveyors to Transport Mass			Military Command Center	MP N-78-6	W-13
Concrete	TR C-74-4	C-38	Explosive Excavation	TM 71-1	W-25
Cook Inlet		Z-11	Minimization Computer Code	TM 72-1	W-26
Cool Water Discharge	MP H-77-13	H-18	Costa Rica		
Cooling Water	MP 2-125	H-4	No. 1	MP 4-355/5	M-3
Canal Shoaling	MP 2-407	H-6	No. 2	MP 4-355/8	M-3
Channel	TR /4	H-48	Cottonwood		
Cooper			Bar	TM 17-1	S-55
Dam	MP 3-258	S-10		TM 17-2	S-55
	MP 6-329	C-6	Springs Dams	TR H-72-1	H-57
	MP 3-339	S-12	Cover		
	MP 3-359	S-13	Designs	TR N-76-6	W-40
	TM	S-61	Lavers	MP 2-296	H-6
River		Z-12		MP 2-372	H-6
	MP H-76-5	H-16		RR 2-11	H-27
	MP H-77-14	H-18	Cow Island	TM 112-1	H-31
	TR 2-733	H-50	Cowansque Dam	TR H-76-12	H-64
Coordinate Systems	MP H-78-9	H-19	COWBOY	MP 6-419	C-7
Coos Bay-South Slough Complex	TR H-78-22	H-69	Cowlitz River Restoration	TR 13	Z-8
Copan Dam	TR H-70-9	H-56	CPM Computer Code	TM 71-30	W-26
Copperclad Steel Wires	TR 6-613/2	C-34			
Coral	TR E-72-23	W-37			
Reefs	TM 4	CERC-37			

Term	Report No.	Page	Term	Report No.	Page
Crack			Crater (Cont)		
Arrest Techniques	TR C-74-7/1	C-38	Slope (Cont)	MP S-72-2	S-35
Sealing	MP 4-436	S-14		PNE 234F	W-14
Survey	CTIAC-60	C-44		TM 63-8	W-23
Cracking			Stability	TM 65-12	W-20
Concretes	MP 6-796	C-13		TM 68-6	W-22
Earth and Rockfill Dams	CR S-69-5	S-106		TM 68-7	W-22
	CR S-70-7	S-106	Soil and Rock	MP S-69-24	S-30
	CR S-71-11	S-107		TR 27	W-29
	MP S-71-10	S-34	Stability	PNE 5013	W-18
Induced by Environmental			Studies	PNE 1107	W-15
Effects	MP 6-796	C-13	Theory	CR 2-39	W-43
Kansas City Floodwall	MP 6-72	C-2	Cratered Slopes	CR 2-75	S-100
Low-Embankment Dams	CR S-74-3	S-101		TR 3-699/2	S-82
Cranev Island Disposal Area	MP H-72-8	H-13		TR 3-699/6	S-82
Crater	MP 2-524	W-3	Cratering	MP E-73-3	W-3
	MP 1-677	W-3		MP E-74-2	W-10
	MP N-75-5	W-11		MP N-71-8	W-8
	PNE 508	W-15		MP N-72-6	W-3
	PNE 601F	W-15		MP N-75-3	W-11
	PNE 904F	W-16		PNE 300P	W-14
	PNE 1103	W-16		PNE 5011	W-13
	PNE 1120	W-17		TM 65-9	W-20
	PNE 5012-I	W-18		TM 67-5	W-22
	TM 65-4/A	W-20		TM 67-17	W-22
	TM 65-8	W-20		TM 69-11	W-24
	TM 66-5	W-21		TR 28	W-29
	TM 67-3	W-22		TR 37	W-29
	TR 30	W-29		TR 2-478	W-30
	TR 38	W-29			
	TR 2-471	W-30	Detonations	MP E-74-3	W-10
	TR 3-699	S-82		MP E-75-1	W-10
Area	TM 66-15	W-21		TR 19	W-29
	TM 67-1	W-22	Device Simulation	MP N-76-12	W-12
	TM 69-7	W-24		MP N-76-15	W-12
Barriers to Mobility	MP M-71-4	W-10		MP N-78-2	W-13
	MP M-73-5	M-11		TR E-73-6	W-18
	MP M-73-6	M-11	Effects	TR N-73-3	W-38
Data	TM 70-15	W-25	Clay	TM	18
Design Test Series	MP N-76-6	W-12	Loess	TM	W-27
Dimensions	TM 66-18	W-22	Sand	TM	W-27
	TR N-75-5	W-40		TM	17
Disturbance Zone Delineation	MP S-69-6	S-28	Surface		
Ejecta			Buried HE Charges	TR 2-482	W-30
Characteristics	MP N-76-7	W-12	Underground Explosions	MP 1-778	W-4
Dust	MP 1-754	W-4	Experiments	TM 71-7	W-25
Measurements	MP 1-853	W-5		TM 71-8	W-25
	MP N-71-1	W-8	Fort Polk		Z-7
Near-Surface Bursts		Z-15	Shallow Water	MP 1-946	W-5
Engineering Structures	MP E-72-2	W-8	Explosions	TM 66-8	W-21
Fallback Slopes	TR 14	W-28		TR N-74-1	W-39
Measurements	MP 2-490	W-2	Greenland Incap Snow	MP N-70-6	W-7
	MP 2-529	W-3	High Explosive Charges	TR 2-547	W-30
	MP 1-663	W-3	Kinetics	MP N-77-2	W-12
	MP 1-764	W-4	Layered Media	TR E-72-3	W-33
	MP 1-896	W-5	Mechanisms	CR 3-75	S-105
	MP 1-987	W-6		TR 3-699/2	S-82
	MP N-73-3	W-13		TR 3-699/6	S-82
	PNE 502F	W-14	Series	TR 35	W-29
Modeling	TM 68-14	W-23		TR E-73-3	W-33
Permanent Displacement		Z-15	Site	MP 3-902	S-24
Measurement	MP 2-424	W-2		TR N-75-4	W-40
	MP N-76-1	W-11	Tests	TM 70-11	W-25
	MP N-77-1	W-12		TM 70-15	W-25
Resulting from Repeated			Crawling Vehicles	MP M-69-6	M-8
Explosions	MP N-68-1	W-6	Creep	TR C-72-1	C-37
	TR 1-665	W-31		TR C-72-11	C-28
Slope	MP 3-662	S-19	Concrete	CTIAC-24	C-41
	MP S-68-3	S-27		MP 6-132	C-3
	MP S-68-8	S-27			

## 24-INDEX

Term	Report No.	Page	Term	Report No.	Page
Creep (Cont)			Current (Cont)	R 81-2	CERC-22
Concrete (Cont)	MP C-70-1	C-17		TM 7	CERC-37
	MP C-70-20	C-18		TM 10	CERC-26
	MP C-77-3	C-24		TM 57	CERC-29
Mass Concrete	MP 6-132/3	C-3		TR H-69-12/2	H-55
Tests	MP 6-613/2	C-9		TR H-69-12/3	H-55
	MP S-76-15	S-49		TR H-73-13	H-63
Crescent City Harbor	TM 2-413	H-41	Direction Indicator	TM 71-1	MS-10
	TR H-68-6	H-54	Duluth-Superior Harbor	MP 2-502	H-7
	TR H-71-2	H-57	East River	MP H-69-7	H-11
Breakwater	MP 2-171	H-5	Estuaries and Canals	TB 16	Z-10
Tsunami Model	TR H-69-9	H-55	Indicator	MP 5-28	MS-4
Crete	TM 3-343/65-66	S-68	Observations	CETA 80-3	CERC-3
				TM 13	CERC-37
Crispy Army Airfield	TR 3-466/17	S-76	Pattern Mosaics	TR H-75-4/5/B	H-62
Crosby Slough	MP D-78-2	E-4	Prediction	TM 58	CERC-29
Cross			Sea-Level Canal	TM 65-15	W-20
Country			Velocity	R 2-68	CERC-16
Locomotion Model	MP M-71-7	M-10	Curvilinear Regression Analyses	MP 5-667	MS-5
Performance	MP M-70-7	M-9	Cushioning Materials	CR 6-127	C-46
Vehicle	TR 3-733	M-24	Cutoff	P I	H-26
Performance	TR M-70-7/I	M-26	Rocky Reach Hydroelectric		
Over Galleries, Kaskaskia Lock	CTIAC-60	C-44	Project	MP 2-417	H-7
Crossett, Arkansas	TM 3-331/9	M-19	Walls	CR S-70-7	S-106
CROSSHOLE	MP S-78-8	S-53	CV-2 Aircraft	TR 3-790	M-25
Crushed			CW 462-F	TM	S-63
Aggregate Base Course	TM 3-271/9	S-62	Cyclic		
Cellular Concrete	MP C-74-8/2	C-22	Load Tests of Steel Pile		
Stone Bases	MP 4-559	S-17	Connectors	MP C-74-13	C-22
Crust Management	TR D-77-17	E-7	Loading	CR S-77-3	S-101
Cucaracha Formation, Panama				MP C-78-5	C-26
Canal	MP S-74-16	S-45		RR S-76-2/6	S-54
Culebra Slides	TR S-79-9/1	S-86	Shear	CR S-76-8	S-115
Culvert			Strength of Undisturbed Sands	TR S-78-10	S-95
Outlets	MP H-72-5	H-13	Triaxial		
	TR H-74-9	H-61	Compression Tests	MP S-74-29	S-46
Pressures, Greenup Lock	TR 2-734	H-50	Center Hill Dam	MP S-74-5	S-44
Research	MP 4-801	S-22	Watts Bar Nuclear Power		
Storm-Drain Outlets	RR H-70-2	H-27	Plant Site	MP S-74-9	S-44
Cumberland			Results	MP S-76-5	S-48
Maryland	TR 2-448	H-42	Test	CR S-76-1	S-102
River	MBM 23-1	H-23		CR S-77-1	S-102
	MBM 23-3	H-23	Testing Techniques	MP S-76-6	S-48
	TR H-75-11	H-62	Cylinders	CR 2-59	W-47
Curing				CR 1-93	W-47
Compounds	MP 6-166	C-4		MP 6-476	C-7
	MP 4-819/1	S-22		R 19-73	CERC-18
	MP C-75-10	C-23		TR 1-720	W-32
	TR C-69-7	C-37		TR N-72-7/1	W-37
Concrete	TR 6-440	C-31		TR N-78-8	W-42
Soil-Lime	TR S-76-9	S-93		TR N-78-9	W-42
Current		Z-12	Buried		
	CETA 81-14	CERC-4	Clay Specimens	MP 3-768	S-21
	MP 2-67	CERC-7	Dense, Dry Sand	TR N-69-6	W-34
	MP 5-248	MS-4	Sand	TR 1-821	W-38
	MP 2-641	H-8		TR N-73-1	W-38
	MP 2-912	H-10	Dynamic Loading	CR 1-95	W-47
	MP 2-952	H-10		TR N-76-5	W-40
	MP 2-953	H-10	Sand	MP 1-810	W-5
	MP H-69-13	H-11	Static		
	MP H-72-8	H-13	Dynamic Loadings	TR 1-582	W-31
	MP H-72-10	H-13	Loading	CR 1-147	W-48
	MP H-76-9	H-16	Cylindrical		
	MP H-78-6/2	H-19	Charge Tests	TM 71-6	W-25
	MR 76-11	CERC-10	Shell	CR N-70-2	W-48
	MR 82-7	CERC-14	Test Beds	CTIAC-56	C-44
	MR 83-6	CERC-15	Cylindrically Cased Equivalence		
	MR 83-7	CERC-15	Charge	MP N-77-8	W-13
	R 76-3	CERC-20	Cypress Creek Basin	TR 3-798	S-94
	R 81-1	CERC-22			

Term	Report No.	Page	Term	Report No.	Page
Dakota Sandstone, San Ysidro, New Mexico	TR S-77-3	S-24	Deep (Cont)	TM 40	S-10-13
Dale Hollow Dam	TM 197-1	H-34	Water	TR D-77-147E	Z-1
Dam	CR S-77-4	S-102	Disposal Site	TM D-77-1	H-16
	MP 2-336	W-2	Point Range	MP 4-125	---
	MP H-63-1	H-10	Well System for Dewatering		
	RR S-76-2	S-54	Defense Research Establishment, Suffield	TR S-69-1	S-184
	TR 1-770	W-32	Deflecting Walls	MP S-69-35	S-87
	TR S-78-3	S-95	Deflection		
Alignment	ME S-73-12	MS-8	Coverage Relationship	MP S-71-14	S-15
Instrument	MP S-73-4	MS-8	Moving Tires	TR 3-575	M-23
Construction in Diamond Gorge No. 36, Ohio River	TM 67-18	W-22	Reinforced Concrete Flat Slab	TR C-71-1	C-37
	TM 64-1	H-30	Deformable-Body Solution	CR S-75-47	
	TM 64-2	H-30	Suppl		S-126
	TM 64-3	H-30	Deformation	TR S-77-10	S-74
No. 37, Ohio River	P D	H-26	Concrete	TR C-75-4	C-23
Site at the Waterways Experi- ment Station	TM 70-1	S-55	Flexible Airport Pavements	TR S-77-2	S-34
Warrior River	TM 133-1	S-57	Properties of Rock Fill	TR S-78-1	S-94
Damage			DeGrav Dam	MP 5-573	C-7
Contact Burst	TR 1-770/1	W-32		MP 6-396	C-9
	TR N-76-10	W-41		MP S-73-25/1	S-41
Damping	MP S-72-11/2	S-36	Del Rio Clay Shale	TR 2-684	H-48
	TP 76-18	CERC-31	Delaware	TR S-71-6/5	S-87
Capacity of Soil	MP S-72-11	S-36	Bav	MP 4-59	CERC-36
Dana Point Harbor	TR 2-724	H-50	Dam	TM 205-1	H-34
DANNY BOY	TR 2-725	H-50	Estuarv		Z-11
	MP 6-570	C-8			Z-12
	MP 6-640	C-10	River		Z-12
	MP 1-673	W-3		MP 2-332/1	H-6
	MP 1-754	W-4		MP 2-358	H-6
	PNE 5005	W-18		MP H-76-17	H-17
Dardanelle Lock	TR 2-573	H-45	Entrance	TR 2-457	H-42
	TR H-69-5	H-54		TM 93-1	H-30
and Dam	TR 2-558	H-44	Estuarv Model	TM 93-3	H-30
DARM	TR D-78-27	E-17	Model	RR H-75-3/1	H-29
Data				MP 2-114	H-4
Acquisition Svstem	TM 21	CERC-27		MP 2-125	H-4
Base Development	TR M-78-1	M-33		MP 2-407	H-6
Processing Equipment	MP K-73-7	MS-6		RR H-75-2/2	H-29
Reduction	MP S-343	MS-4		TM 2-337	H-38
	MP S-76-12	S-48	DeLong Pier		
Dauphin Island	MP H-77-11	H-18	Foundation	MP 3-78	S-6
Davis			Little Creek	TR 3-463	S-75
Air Force Base	MP 6-236	C-5	Norfolk, Virginia	MP 3-157	S-8
Field	MP 4-356	S-12	Tests		
Monthan Air Force Base	MP 4-91	S-6	Fort Eustis	TR 3-450	S-74
	MP 4-213/1	S-9	Le Verdon, France	TM 3-423	S-73
	TM 3-344/4	S-71	Delta	B 2/3	H-1
Davison Army Airfield	MP S-68-26	S-28	Barrage, United Arab Republic	MP 2-607	H-8
	MP S-72-20	S-37	Demersal Fish	TR D-77-6/D	E-6
	TR 3-466/2	S-75		TR D-77-30/E	E-11
DCA-1295	MP S-75-21	S-47	Demolition of Ft. Meade Dam	MP E-73-1	W-3
Debris	B 10	S-1	Demopolis Lock and Dam	TM 2-252	H-36
	TM 94-1	S-56	Denison Dam	MP 2-31	H-4
	TM 94-2	S-56		TM 161-1	H-32
Denapod Shellfish	TR D-77-30/E	E-11		TM 177-1	H-33
Decoupling of Ground Shock	MP N-74-1	W-10	Denmark	TM 3-333/	
Deep				57-60	S-63
Beams	CR 1-106	W-47	Densification	CR S-76-8	S-115
	MP N-63-3	W-7		TR D-77-4	E-6
	MP N-71-2	W-8	Density	IR S-74-1	S-3
	TR 1-676	W-31		MP 4-117	M-2
	TR 1-701	W-31		MP 4-495	S-16
Draft Harbors	RR H-76-1	H-29		MP M-71-1	M-9
Slabs	TR N-69-2	W-33		MP S-69-15	S-29
				MP S-72-37	S-38
				MP S-77-18	S-51
				TR 3-652/4	M-21
			Changes of Sand	R 12-1	P-2

## 26-INDEX

Term	Report No.	Page	Term	Report No.	Page
Density (Cont)			Dewatered		
Currents	CR 2-1	H-73 and H-74	Dredged Material	MP D-78-3	E-4
	MP H-69-6	H-11		TR D-77-33	E-11
	TB 2	Z-6	Dewatering		
Determinations			Dredged Material	CR D-75-19	E-22
Base Courses and Soils	MP 4-197	S-9		MP D-77-2	E-4
Soils	TM 3-415	S-73		MP D-77-4	E-4
Sands	RR S-76-2/4	S-54		TR D-77-19	E-7
Soils	MP S-76-18	S-49		TR D-78-5	E-14
Variations	TM 3-240/1	M-17		TR DS-78-11	E-27
Depore Lock and Dam	CTIAC-51	C-43	Excavation	MP 3-185	S-9
Depoe Bay, Oregon	TM 23	CERC-27	Low Sill Structure, Old		
Depth Determination	TM 5	CERC-27	Siver	MP 3-200	S-9
	TM 9	CERC-37	Dewev Dam	TM 191-1	H-33
Desalination Plants	RR H-71-2	H-28	Dhahran Airfield	TM 3-343/124	S-71
Desert	TR 3-630	S-80	Dial Park	MP M-71-4	M-10
Alluvium	TM 65-9	W-20		MP N-72-4	W-8
	TR N-73-3	W-38		MP N-72-9	W-9
Sand	MP M-75-8	M-13		TR N-71-8	W-36
	TR M-71-5/2	M-28		TR N-73-4	W-38
Terrain Analogs	TR 3-506	S-77	DIAMOND ORE	TR N-74-3	W-39
United States	CR	S-116		CR E-74-1	W-46
Designated Clays	MP S-69-20	S-29		TR E-73-6	W-38
Design				TR E-74-3	W-39
Changes on Vehicle Performance	MP M-72-2	M-10	Phase		
Criteria	B 37	H-2	I	TM 71-15	W-26
Drainage Wells	TM 195-1	S-58	IIA	MP M-73-6	M-11
Membrane-Enveloped Fine-Grained Soil Layers	TR S-74-9	S-91	Diaphragm Orifices	TM 91-1	MS-10
Earthquakes	MP S-73-1/7	S-39	DICE THROW		
Hurricanes	TP 77-13	CERC-31	Event	TR N-77-2	W-41
Wave	TR H-76-1	H-63	Mobility Experiments	MP M-77-12	M-15
Destabilizing Soils with Chemicals	MP 4-186	S-9	I and II	MP	S-49
Destruction of Earthen Tunnels	MP 1-930	W-6	Series	MP	S-50
Detection			Dirkev		Z-15
Calcium Sulfates and Magnesium Oxide in Fly Ash	MP C-76-5	C-23	Lake	MP Y-76-7	E-30
Subsurface Cavities	MP	S-51	Lincoln School		
	MP S-73-40	S-42	Damsites, Maine	MP S-77-2	S-50
Tunnels	TR 3-769	M-24	Lakes Hydrothermal Model	TR H-76-22	H-66
Deteriorated Concrete Blocks	MP C-75-8	C-23	Dictionary	MP	M-13
Deterioration			DIDO QUEEN	MP C-74-8/11	C-22
Concrete			Differential		
Dams	MP 6-845	C-13	Equations	MP K-72-1	MS-5
Davis Air Force Base	MP 6-236	C-5	Movements of Adjacent Monoliths	MP 4-124	S-7
Eisenhower Lock	MP 6-929	C-15	Pressure Gage Directional Wave Monitor	MP 82-11	CERC-14
Sidewalks and Curbs	MP 6-866	C-14	Diffusion	R 9-74	CERC-19
	MP 6-900	C-14	Digital		
Pavements	TR S-78-8	S-95	Bathymetric Data	CETA 81-13	CERC-4
Detonation	MP 3-869	S-23	Data	MP M-76-16	M-14
	MP N-71-6	W-8	Filters	TR N-75-3	W-40
Desert Alluvium	TR N-73-3	W-38	Data Reduction	MP N-70-1	W-7
Layered Medium	MP N-72-92	W-9	Explosion Effects Analysis	TR N-71-7	W-35
Over Granite	TR N-72-6	W-37	Image Processing	MP M-78-4	M-16
16-Ton Charge Deep in Granite	MP N-70-4	W-7	Recording of Reservoir Inflow and Outflow		
Detroit			Dike	B 63-1	MS-1
Arsenal	MP 4-888	S-24		MP 2-723	H-9
Dam	TM 2-260	H-36		MP 2-860	H-10
	TM 2-302	H-38		MP H-69-13	H-11
Devil's				PL	H-26
Island Reach	TR H-73-1	H-59		R 2-2	P-1
Kitchen Dam	MP 6-158	C-3	Lake Traverse Project	TR D-77-9	E-7
	MP 6-165	C-3	Location	TM 118-1	S-56
	MP 6-257	C-5	Material	P 11	H-26
			Raising with Dewatered Fine-Grained Dredged Material	R 21-1	P-4
				MP D-78-3	E-4

Term	Report No.	Page	Term	Report No.	Page
Dike (Cont)			Disposal (Cont)		
Rehabilitation	TM 2-337/4	H-38	Operations	TR 2-71-1	E-1
Study, Conev Island, New York	MP H-75-2	H-14	PCB-Contaminated Sediment	TR 2-71-2	E-1
Systems	P 21-3	P-4	Site	TR 2-71-3	E-1
Mississippi River	MP H-70-1	H-11	Hawaiian Islands	TR 2-71-4	E-1
Dilatational Wave Propagation	CR 3-26/8	S-110	Middle Mississippi River	MP H-77-6	E-1
Dilation in Sand	CR 3-25/13	S-110	Techniques to Identify	MP Y-71-5	E-1
Dillingham, Alaska			Wildlife Habitat Develop-		
Dillon Dam	TM 2-264	H-37	ment Factors	MP D-77-5	E-4
Dilution Contour Plots	RR H-71-2/1/2	H-28	Dissipation of "Elastic" Wave		
Dimensional Analyses	MP E-75-1	W-10	Energy	CR 3-43	D-105
Dimethylamine and Integrated			Dissolved Oxygen in Dikev Lake	MP Y-75-7	E-10
Control	TR	M-48	Distant Plain	MP 1-977	E-25
Dimond Gorge	TM 67-18	W-22	Apparent Crater Ejecta		
Diorite Boulders			Measurements	MP 1-901	W-5
Diquat for Control of Egeria			Events		
and Hydrilla	TR	M-48	1, 2A, 3, 4, and 5	TR N-71-3	W-36
Disaggregation	CR 3-133	S-116	1A	MP S-73-21	S-41
Discharge			6 and 7A	TR N-70-14	W-36
Dredged or Fill Material into			Project 3.33	MP N-71-1	W-8
Navigable Waters	MP D-76-17	E-3	Ditching with TNT	MP N-77-7	W-13
Duration	MBM 23-2	H-23	Diversion Tunnel, Long Lake,		
Hydrographs for Arkansas River	MBM 44-1	H-24	Alaska	MP H-71-7	H-12
Rating Curves for Vertical			Divide Cut Drainage Structures	TR H-76-18	H-65
Lift Gates	MP 2-606	H-8	Division Laboratory Tests on		
Discrete Explosion-Produced			Standard Soil Samples	MP 3-813	S-22
Crater-Ejecta Characteristics	MP N-75-7	W-12	Divarbakir Air Base	TM 3-343/73	S-69
Diseases at Habitat Development			Dock Expansion at Newport News	MP H-72-10	H-33
Field Sites	MP D-78-1	E-4	Docking and Loading Facility	MP H-71-8	H-12
Disintegration of Concrete from			Documentation for Modified		
Tusaloosa Lock and Dam	TM	C-27	Uframe Program	TR K-75-1	MS-11
Dispersion			Dogtooth Bend	TM 109-1	H-31
Proposed Theodore Industrial			Dolos	P 1-73	CERC-17
Park Effluents	MP H-71-3	H-18	Armor Units	TR H-77-19	H-67
Chemical Constituents	CR D-76-1	E-24	Domes Buried in Sand	CR 3-26/12	S-110
Dispersive			Dominina	MP M-75-1	M-9
Clay	MP C-76-1	M-9	Dow		
Earth Embankments	TR S-75-15	S-92	Air Force Base	MP 6-326	C-6
Gage	MP M-69-8	A-9	Chemical		
Measurements	MP S-71-17/5	S-35	Extruded		
Disposal	MP 1-644	W-3	Aluminum Landing Mat	MP S-71-28	S-36
Alternative for Contaminated	MP 2-424	W-2	Modified MX13-B	MP S-73-9	S-43
Dredged Material	MP N-75-5	W-11	XM18E1	MP S-69-4	S-28
Area			Landing Mat	MP S-69-51	S-31
CR D-74-4	TR DS-78-8	E-27	Medium-Duty Mat	MP S-65-9	S-27
CR D-74-8	CR D-74-8	E-25	Truss-Web Landing Mat	MP S-69-22	S-29
CR D-77-2	CR D-77-2	E-22	MP S-72-40	MP S-72-40	S-38
MP D-75-13	MP D-75-13	E-2	MP S-74-6	MP S-74-6	S-14
MP H-72-8	MP H-72-8	H-13	MP S-69-17	MP S-69-17	S-29
TR D-76-1	TR D-76-1	E-5	MP S-69-40	MP S-69-40	S-31
TR D-77-1	TR D-77-1	E-7	CR S-75-3	CR S-75-3	S-178
TR D-77-22	TR D-77-22	E-3	MP S-75-9	MP S-75-9	S-47
TR D-78-16	TR D-78-16	E-15	MP S-75-13	MP S-75-13	S-47
TR DS-78-7	TR DS-78-7	E-27	MP S-37	MP S-37	MS-4
TR H-75-13/1	TR H-75-13/1	H-63	Downpull Measuring Apparatus		
MP H-75-1	MP H-75-1	H-14	Downwash		
MP D-76-16	MP D-76-16	E-3	Data	MP S-74-17	S-45
TR DS-78-12	TR DS-78-12	E-27	Petition	MP S-75-19	S-47
TR D-78-27	TR D-78-27	E-17	Velocity Measurements	MP S-72-31	S-48
TR D-77-4	TR D-77-4	E-6	Dozer		
CR D-74-1	CR D-74-1	E-25	Blades	MP M-78-5	M-16
CR D-75-4	CR D-75-4	E-25	Surface Mining of Coal	MP M-75-4	M-13
TR D-77-33	TR D-77-33	E-11	Drag	R 81-11	CERC-32
MP D-74-13	MP D-74-13	E-2	Coefficient	TM 24	CERC-27
MP D-74-14	MP D-74-14	E-2	Forme	TM 50	CERC-29
TR D-78-2	TR D-78-2	E-14	Shrinkage	MP H-70-4	H-12
Open Ocean					2-7

Term	Report No.	Page	Term	Report No.	Page
Drainage			Dredged (Cont)		
Base Course Materials	TR 3-780	S-84	Material (Cont)		
Criteria		Z-16	Confined Disposal Areas	TR D-76-1	E-5
District No.17, Mississippi				TR D-77-16	E-7
County, Arkansas	TR H-77-12	H-67	Containment	CR D-76-8	E-24
Erosion Control Facilities	MP H-74-6	H-13		TR D-78-19	E-16
Fine-Grained Dredged Material	TR D-77-16	E-7	Areas	TR D-78-58	E-20
Structure	MP 3-2	S-4		MP D-73-4	E-4
	MP 3-17	S-4		TR D-77-1	E-5
	MP 3-53	S-5		TR D-77-7	E-6
	TR H-75-18	H-65		TR D-77-17	E-7
System		Z-16		TR D-77-25	E-10
	TM 3-425	S-73		TR D-78-18	E-15
New Madrid	TM	S-60		TR D-78-41	E-18
Previous Levels	TM 155-1	S-57		TR D-78-53	E-19
Wells	TM 153-1	S-57		TR D-78-55	E-19
	TM 195-1	S-58		TR D-78-56	E-19
Levee Foundations	B 11	S-1		TR DS-78-10	E-27
Sardis Dam	TM 3-287	S-53		TR DS-78-20	E-27
Drained Plane Strain	TR S-71-2/2	S-83	Deposits	TR D-78-13	E-14
Drainpipe Study	MP 4-144	S-8	Discharged in the Estuarine		
Drawbar Pull	MP M-70-10	M-9	Environment	CR D-76-5	E-25
	TM 3-240/19	M-18	Dispersion	TR DS-78-13	E-27
Drawings in Waterways Experiment Station Technical Reports	MP 5-49	MS-4	Disposal		
Dredge Spoil		Z-12		CR D-74-1	E-25
Dredged	TR 2-755	H-52		CR D-75-1	E-21
Discharge Pipe	TR 2-751	H-52		CR D-75-3	E-26
Disposal Activities	TR D-77-24/E	E-10		CR D-75-4	E-25
Jadwin	TM 2-232	H-35		CR D-76-6	E-26
Production	D 3/2	H-1		CR D-76-9	E-21
Spoil	R 2-72	CERC-17		MP D-75-13	E-2
	TP 76-7	CERC-30		MP D-76-6	E-23
	TR H-72-8	H-58		MP D-76-15	E-3
				MP D-77-3	E-4
Dredged				MP H-77-6	H-18
Cut-offs	P 1	H-26		TR D-77-5	E-6
Material	CR D-74-2	E-23		TR D-77-24/A	E-9
	CR D-74-3	E-25		TR D-77-24/C	E-9
	CR D-75-5	E-24		TR D-77-24/G	E-10
	CR D-76-1	E-24		TR D-77-43	E-13
	MP D-74-13	E-2		TR D-78-22	E-16
	MP D-74-14	E-2		TR D-78-34	E-17
	MP D-76-17	E-3		TR D-78-45	E-18
	MP D-77-2	E-4		TR D-78-48	E-19
	MP D-77-4	E-4		TR DS-78-4	E-27
	MP D-78-3	E-4		TR D-77-30/C	E-11
	MP D-78-6	E-4	Benthic Assemblages		
	MR 33-3	CERC-15	Community Structure of		
	TR D-74-1	E-5	Benthic Organisms	MP Y-76-3	E-30
	TR D-74-2	E-5		TR D-77-37	E-11
	TR D-76-2	E-5	Effluents	TR DS-78-1	E-27
	TR D-77-9	E-7	Impacts	TR D-78-52	E-19
	TR D-77-10	E-7	Marsh-Estuarine Ecosystems	TR D-78-47	E-19
	TR D-77-18	E-7	Models	TR D-77-27	E-10
	TR D-77-19	E-7	Monterey Bay	TR D-77-20/C	E-8
	TR D-77-21	E-3	Offshore Biota	TR D-78-2	E-14
	TR D-77-38/C	E-12	Open Ocean	TR DS-78-12	E-27
	TR D-77-38/E	E-12	Reuse Management		
	TR D-77-38/F	E-12	Techniques to Identify		
	TR D-77-39	E-12	Wildlife Habitat Development Factors	MP D-71-5	E-4
	TR D-77-45	E-13			
	TR D-78-5	E-14	Upper Mississippi River	MP D-73-2	E-4
	TR D-73-6	E-14	at Crosby Slough	TR D-77-24/D	E-9
	TR D-78-20	E-16	Elliott Bay	MP D-78-5	E-4
	TR D-78-36	E-16	Islands	TR D-77-23/A	E-8
	TR D-78-50	E-19		TR D-78-1	E-13
Aquatic Animals	TR D-78-29	E-17		TR D-78-8	E-14
				TR D-78-9	E-14
				TR D-78-14	E-15
				TR DS-78-18	E-28



Term	Report No.	Page	Term	Report No.	Page
Dredged (Cont)			Dredging (Cont)		
Material (Cont)			Frequency	TR H-74-5	H-38
Literature Review	TR D-77-11	E-11	Practices	TR D-74-58	E-20
Marketing	CR D-74-7	E-21	Procedures and Operations	CR D-74-1	E-21
Marsh	TR D-77-211	E-9	Systems for Reach Nourishment	TR H-74-1471	H-55
	F/II	E-9	DRIBBLE	MP 6-771	E-12
Movement	TR DS-78-3	E-27		TR 6-534	E-14
Natural Resource	MP D-76-13	E-3	Drigh-Road, Kurashi, West		
Navigation Pool of the Upper			Pakistan	TM 4-433/126	D-71
Mississippi River	TR D-77-31	E-11	Drill	MP D-75-17	S-47
Ocean Waters		Z-15	Rig	S 10	S-1
Open-Water Disposal Sites	TR D-78-7	E-14		H 12	S-1
Overburdens	TR D-78-15	E-17		H 13	S-1
Placement Methodology	CR D-76-1	E-23	Drive Cylinder	IR 2	S-2
Pollution Potential	TR DS-78-6	E-27	Drop		
Processing Operations	TR D-77-12	E-11	Structure	TR 2-752	H-52
Reclamation and Drainage	CR D-74-5	E-22	Cavuga Inlet	TR 2-709	H-49
Research			Garing Valley Project	TR 2-760	H-52
Notes, News, Reviews, etc.	IEB D-76-1		Walnut Creek Project	TR 2-710	H-50
	thru		Table for Consolidating		
	D-76-8	E-1	Cylindrical Concrete		
	IEB D-77-1		Test Specimens	MP C-78-17	C-20
	thru			TR E-73-5	W-38
	D-77-11	E-1	Drum Inlet		
	IEB D-78-1		Drv		
	thru		Donk		
	D-78-9	E-1	No. 4, Puget Sound Navy Yard	TH 189-1	H-11
	MP D-73-1		YFD-15	TH 219-1	H-35
	thru		Fill Levee	TH 8-1	S-55
	D-73-7	E-2	Ine	MP 4-246	S-10
	MP D-74-1		Season	TR M-72-2/1	M-29
	thru			TR M-73-2/1	M-29
	D-74-10	E-2		TR M-73-3	M-29
	MP D-75-1		Drying Rate of Fine-Grained		
	thru		Dredged Material	TR D-77-10	E-7
	D-75-12	E-2	Dual		
	MP D-76-2	E-3	Load Generator	CR 3-98	S-99
	MP D-76-4	E-3		CR 3-99	S-99
	MP D-73-8	E-2	Wheel	TR M-71-8	M-28
	MP D-73-9	E-2	Dunk, North Carolina	MR 82-12	CERC-14
	MP D-74-12	E-2	Field Research Facility	MR 76-6	CERC-10
Program				MR 77-6	CERC-10
				MR 80-8	CERC-13
Annual Report				MR 81-7	CERC-13
1st-3d	MP	E-2		MR 82-16	CERC-14
4th	MP	E-3		MR 83-4	CERC-15
Sediments	TR D-78-43	E-18		R 79-12	CERC-21
Separation, Drying, and				R 83-13	CERC-23
Rehandling	CR D-74-6	E-23	Dunts with Baffles	MP N-70-3	W-7
Slurry	TR D-78-44	E-18	Dugout	MP 1-733	W-4
	TR D-78-54	E-19		MP 3-68-16	S-27
Solid Waste Management	TR D-77-11	E-7		PNE 601F	W-15
Subaqueous Disposal Areas	TR D-77-22	E-8		PNE 602F	W-15
Transport Systems	TR D-78-28	E-17		PNE 609F	W-15
Sediment	CR D-77-4	E-23		PNE 610F	W-15
	TP 80-1	CERC-32	Concrete, Grout, and Shotcrete	MP 6-729	C-12
	TR D-77-2	E-5	SULKY Craters	TM 65-4/A	W-20
	TR D-78-45	E-18	Dugway Proving Ground	MP 4-976	S-26
				TR 3-466/15	S-76
Movement Tracing in San	TR N-76-1	W-40		CR S-75-14	S-104
Francisco Bay	MP 1-73	CERC-8	Concrete, Grout, and Shotcrete	TR S-74-10/I	S-91
Dredging	MR 82-3	CERC-13	DUKFOR		
	TP 76-15	CERC-30	Dulles Test Road		
	TR D-77-20/C	E-8	Duluth		
	TR D-77-23/		Ship Canal Current Indicator	MP 5-28	NS-4
	F/I	E-9	Superior Harbor	MP 2-502	H-7
	TR D-77-27	E-10		TR 2-616	H-46
	TR 2-444	H-42	Vermillion Study Area	MP C-70-9	C-17
Charleston Harbor			Dune	MP 1-62	CERC-36
Disposal				MP 1-70	CERC-7
Aquatic Organisms	TR DS-78-5	E-27		MP 9-75	CERC-9
Operations	CR D-75-6	E-22			

## 30-INDEX

Term	Report No.	Page	Term	Report No.	Page
Dune (Cont)	MR 77-8	CERC-11	Dvess Air Force Base	MP 4-303	S-11
	MR 83-8	CERC-15		MP 4-722/2	S-20
	R 3-69	CERC-16		MP S-69-50	S-31
	R 25-73	CERC-18		MP S-72-10	S-35
	R 26-73	CERC-18		MP S-73-43	S-40
Erosion	R 83-4	CERC-23	Dvke Marsh Demonstration Area, Potomac River	TR D-76-6	E-5
Formation	TM 101	CERC-42		TR D-77-13	E-7
Restoration	TP 80-5	CERC-32			
Sand	MP 6-408	C-6	Dvnamis		
Stabilization	CETA 77-4	CERC-2	Air Overpressure Soil Test Facility	MP S-75-20	S-47
	MR 76-3	CERC-10	Analysis		Z-6
	R 73-12	CERC-21	Earth Slopes	MP S-73-13	S-53
	SR 3	CERC-25	Fort Peck Dam	TR S-76-1	S-92
	TM 22	CERC-27	Axisymmetric, Finite Element Code	MP S-76-3	S-48
	TM 101	CERC-42	Bearing Capacity Foundations	CR 3-45	S-107
	TP 80-5	CERC-32	Soils	CR 3-38	S-107
	MP 4-272	S-10	Behavior	TR 3-599	S-78
Duo-Pactor			Piling	TR S-69-10/4	S-86
DuPont Plants Effluent			Soils	CR 3-91/1	S-117
Dispersion	MP 2-222	H-5	Foundation Investigations	MP 4-878	S-23
Durability			High-Pressure Triaxial Test Device	TR S-71-15	S-88
Behavior of Prestressed Concrete Beams	TR 6-570	C-33		MP 3-418	S-14
Concrete	B 34	C-1	Load	MP N-77-3	W-12
	MP 6-270	C-5		TR N-73-5	W-38
	TM 96	CERC-42		TR N-76-9	W-40
Test for Stabilized Soils	CR 3-63/7	S-112	Generator	MP 3-418	S-14
Dust			Mortar Baseplates Simulator	CR 2-35	W-43
Alleviation	TR 3-507	S-77		CR 1-97	W-43
	TR 3-714	S-82	Loading	MP S-69-14	S-29
	TR 3-812	S-84		CR N-69-2	W-44
Alleviators	MP 4-819	S-22		CR 1-95	W-47
Cloud Sampling	MP 4-977	S-26		CR 3-26	S-109
Control	CR 4-172	S-104			and
	CR S-68-7	S-99			S-110
	CR S-70-4	S-104			
	CR S-71-2	S-119			
	MP 4-811	S-22			
	MP S-69-1	S-28			
Film	MP M-76-1	M-13			
Materials	IR S-72-3	S-3			
	MP S-72-14	S-37			
	MP S-73-67	S-44			
	MP S-73-70	S-44			
Roads and Airfields System	CR 3-165	S-114	Gravity Dams	CR 2-40	W-45
Thermal Methods	CR S-71-9	S-117	Machine	MP 3-445	S-14
Palliation	MP S-70-27	S-33		TR 3-599/1	S-78
Palliative	CR S-68-5	S-99	Model of Lake Michigan	CR 2-46	H-71
	CR 3-174	S-119	Mud Flows	TR D-78-46	E-19
	CR S-69-1	S-116	Passive Pressure Problem for Sand	CR 3-26/18	S-110
	MP 4-722	S-20	Properties of Mass Concrete	CTIAC-23	C-41
	MP 4-756	S-21		MP C-77-6	C-24
Dustproofing Soils	MP 3-176	S-8	Response	CR 3-26/22	S-111
	TR 3-530	S-77	Concrete Arch Bunkers	MP N-71-4	W-8
Dutch Friction-Cone Penetrometer	CR S-69-4	S-116		TR N-71-8	W-36
Duwamish River			Footings Buried in Sand	TR C-69-6	S-85
Waterway Disposal Site	TR D-77-24	Z-12	Model		
Dwellings	MP N-75-6	W-11	Arch Dam	TR N-76-3	W-40
Dworshak (Bruce's Eddy) Dam	MP 6-613	C-9	Buried Field Shelter	TR N-70-6	W-35
Dye	R 2-74	CERC-19	Rectangular Footings	TR S-72-6	S-89
Dispersion	MP 2-641	H-8	Shear Wall	TR N-69-7	W-34
	TR H-69-12/2	H-55	Simulated Buried Arch to Blast Loading	TR N-71-9	W-36
	TR H-69-12/3	H-55	Spectra		
	TR H-75-13	H-63	Cohesive Soils	CR 3-148	S-109
Patterns	MP 2-951	H-10	Soils	CR 3-62	S-115
Time-Concentration Curves	TR H-69-12/ 2/A	H-55	Weapon Foundations	CR 3-173	S-116
	TR H-69-12/ 3/A	H-55			

Term	Report No.	Page	Term	Report No.	Page
Dynamic (Cont)			Earth (Cont)		
Soil			Motion (Cont)	TR N-73-4	W-33
Stress Measurement	CR 1-105	W-45	TR N-74-3	W-39	
Tests	CR 3-26/3	S-110	CR 3-142	S-115	
AASHO Road Test	CR 4-79	S-105	CR 3-157	S-116	
Foss Field	CR 4-85	S-105	MP S-78-15	S-53	
Stiffness	TR S-75-14/II	S-92	MP S-75-15	S-47	
Stress			MP S-77-23	S-52	
Strain	CR 3-91	S-117	TR S-78-4	S-95	
Terminal Delivery Vehicle	CR S-75-1	S-102	TR S-78-13	S-95	
Testing			CR 3-101	S-112	
Devices	MP S-75-2	S-46	MP 5-21	MS-4	
Pavements	MP 4-348	S-12	MP S-70-7	S-32	
Tests			MP S-73-25	S-41	
Large Reinforcing Bar Splines	TR N-71-2	W-36	MP S-78-13	S-53	
Model			MP 1-885	W-5	
Flexible-Arch-Type			MP 1-956	W-6	
Protective Shelter	MP N-71-3	W-8	CR S-75-1	S-102	
Radome Structure	MP N-77-4	W-12	TR S-71-14	S-88	
Wheeled Vehicles	TR M-68-1	M-25	TR S-77-6	S-94	
Dynamically Loaded			Earthen		
Footings on Sand	CR 3-52	S-107	Structures	MP N-71-8	W-8
Square Footings on Dry Sand	TR S-69-3	S-85	Tunnels	MP 1-930	W-6
Dynapactor	MP 4-273	S-11	MP N-71-6	W-8	
			MP S-73-1/7	S-39	
Eagle Lake, Mississippi	P A	H-26	Analysis	MP S-73-1/11	S-39
Earth	CR 3-92	S-119	Assessment	MP S-73-1/5	S-39
	CR 3-137	S-105	California	MP S-73-1/3	S-39
	CR 3-139	S-118		MP S-76-1	S-48
	CR 3-92	S-119	Central United States	MP S-73-1/1	S-39
Anchors	MP S-69-18	S-29		MP S-73-1/12	S-39
	TR S-71-11	S-88	Effects	MP S-71-17/3	S-35
Covered Structures	CTIAC-34	C-42	Engineering	MP S-73-1/2	S-39
	MP C-78-15	C-26		MP S-74-15	S-45
Dam				RR S-76-2/7	S-54
	CR S-69-5	S-106	Generated SH Waves	MP S-77-12	S-51
	CR S-70-7	S-105	Ground Motion	MP S-73-1/14	S-39
	CR S-71-11	S-107	Guatemala	MP	S-9
	CR S-72-2	S-101	Hazards in the United States	MP S-73-1	S-39
	CR S-73-2	S-101	Intensity	MP S-73-1/4	S-39
	CR S-77-4	S-102		MP S-73-1/16	S-39
	MP	S-33		MP S-73-1/20	S-40
	MP S-71-10	S-34	Investigations at the Dikeve-		
	MP S-71-17	S-35	Lincoln School Damsites	MP S-77-2	S-50
	MP S-71-17/3	S-35	Liquefaction Potential at		
Constructed of Dispersive			Patoka Dam	MP S-72-42	S-38
Clays	MP O-76-1	MS-9	Magnitude	MP S-73-1/6	S-39
Criteria Reports			Patoka Damsite	MP S-72-41	S-38
Flood Control Outlet Works	MP H-69-3	H-11	Records	MP S-73-1/8	S-39
Embankments	MP S-71-17/5	S-35		MP S-73-1/9	S-39
	TM 37	CERC-28	Resistance	MP S-71-17	S-35
Masses	TR S-76-11	S-93	Series in the Mississippi		
Materials	MP M-76-15	M-14	Alluvial Valley	MP S-77-5	S-50
	MP S-72-33	S-38	Site Studies	TR N-75-3	W-40
	MP S-73-58	S-43	Earthwork	TR 12	W-28
	MP S-78-14	S-53	East		
	TR S-76-13	S-93	Anglia, England	MP 4-19	M-2
Media	CR 3-168	S-108	Barre Dam	MP 2-293	H-5
	CR S-75-4	S-102	Beaver Bay Harbor	TM 2-295	H-37
	TR S-73-6	S-89		TM 2-295-1	H-37
Melting Penetrator System	TR S-78-17	S-96		TM 2-296	H-37
Motion	MP 1-673	W-3	Branch Reservoir, Clarion		
	TR 1-759	W-32	River	TM 2-325	W-38
	TR N-70-14	W-36	Calumet and West Calumet		
	TR N-71-3	W-36	Floodgates	MP 3-37	S-5
	TR N-72-2	W-37		TM	S-60

## 32-INDEX

Term	Report No.	Page	Term	Report No.	Page
East (Cont)			Eisenhower Lock	MP 6-493	C-8
Culebra				MP 6-929	C-15
Slide, Panama Canal	TR S-70-9/ Suppl	S-87		TR 6-784	C-35
and West Culebra Slides	TR S-70-9/1	S-86	Ejenta	MP M-72-9	M-11
Fortune, Scotland	TM 3-343/119	S-71		TM 68-15	W-24
Kirkbv, Lincolnshire, England	TM 3-343/97	S-70		TR 18	W-28
Lothian, Scotland	TM 3-434/119	S-71	Characteristics	MP N-76-7	W-12
Passage, Narragansett Bay	TR 2-754	H-52	Effects	TM 70-4	W-24
River	MP H-69-7	H-11	Impact Parameters	CR N-73-2	W-46
	TM 125-1	H-32	Measurements	MP E-75-3	W-10
	TM 125-3	H-32	El Adem Air Base, El Adem, Libva	TM 3-343/84	S-69
Side Levee and Sanitary			El Verde, Puerto Rico	MP M-68-3	M-8
District, East St. Louis,				MP M-69-3	M-8
Illinois	TM 154-1	S-57	Elastic		
Eaton's Neck Disposal Site,			Constants for Airport Pavement		
Long Island Sound	TR D-77-6	E-6	Materials		Z-16
Eau Galle Reservoir	TR 2-774	H-52	Constitutive Equation	MP S-74-18	S-45
Echo Sounder	R 4-1	P-1	Half-Space	CR 2-47	W-47
Ecologic Effects of Ejenta	MP M-72-9	M-11		CR 2-48	W-47
Ecological				CR 2-51	W-47
Effects of Salinity Changes				CR 2-58	W-47
in Coastal Waters	CR H-73-1	H-73	Loop Mobility System	TR M-71-1	M-27
Evaluation of Proposed				TR M-74-7	M-30
Discharge	MP D-76-17	E-3	Media	MP M-70-6	M-9
Succession and Production in			Moduli		Z-16
Estuarine Marshes	TR D-77-35	E-11		MP 4-577	S-18
Terms	MP 2-74	CERC-8		MP 4-933	S-25
Ecology	CR 0-69-1	MS-12	Plastic		
Pismo Clams	MP 8-75	CERC-8	Constitutive Relation	MP S-78-14	S-53
Ecosystem	TR A-78-2/ 2/VII	M-50	Model Formulations	MP S-76-2/3	S-54
			Soil	TR S-71-4/1	S-87
Modeling	CR Y-77-1	E-35	Porous Material	CR 3-129/4	S-114
	TR D-76-3	E-5	Response	CR 3-129/1	S-113
Structure	TR D-78-3	E-13	Buried Cylinders in Sand	TR N-69-6	W-34
Eelgrass	CETA 82-6	CERC-4	Rim Wheels	MP 1-810	W-5
San Diego Bay	MP Y-76-2	E-30	Spheres	TR M-71-6	M-28
Effective Stress	CR 3-26/16	S-110	and Viscoelastic Layered	CR 3-26/19	S-110
Effluent	CR D-76-8	E-24	Systems	MP M-69-8	M-9
	TR D-78-16	E-15	Wave Energy	CR 3-53	S-105
	TR D-78-24	E-16	Elasticity of Rock	MP C-68-3	C-15
	TR D-78-54	E-19	Elastomers	MP 4-245	S-10
	TR DS-78-7	E-27	Electric		
Delaware River	TR 2-457	H-42	Analog Model of the Kansas		
Discharges in Cooper River	MP H-77-14	H-18	River	MP 2-590	H-8
Dispersion	RR H-71-2/II	H-28	Meters for Determining		
Delaware River	MP 2-222	H-5	Moisture Content of Fine		
Mobile Bay	MP H-77-3	H-18	Aggregate	TR 6-476	C-31
Quality	TR D-77-23/ F/I	E-9	Electrical		
	TR D-78-18	E-15	Analyz Seepage Model	TR 3-619	S-80
Egeria	TR	M-48	Measuring		
Eglin			Devices	MP 3-452	S-14
Airfield		Z-7		MP 3-554	S-17
Air Force Base	CR S-69-4	S-116	Equipment	TM	MS-10
	CR 3-70/2	M-41	Pressure Transducers	CR 3-101/5	S-112
	MP 4-3/5	S-4	Resistivity Exploration	B 33	S-1
	MP 4-34	S-5	Stabilization of Fine-Grained		
	MP 4-110	S-7	Soils	MP 3-122/7	S-7
	MP 4-722/3	S-20	Electrofishing Survey of the		
	MP M-75-6	M-13	Illinois River	CR Y-75-4	E-34
Field		Z-13	Electrokinetic		
No. 9	CR 3-70/2	M-41	Processes	CR 3-73	S-103
En, pH, and Salinity	MP 4-81	S-6	Treatment	CR 3-73/5	S-103
Eielson Air Force Base, Fair-	TR D-77-40	E-12	Consolidated Soils	CR 3-73/4	S-103
banks, Alaska	MP 4-62	S-5	Illitic Soil	CR 3-73/1	S-103

Term	Report No.	Page	Term	Report No.	Page
Electromagnetic			Energy (Cont)		
Propagation Constants	TR 3-693/5	M-23	Flume	TM 61-2	H-20
Pulse Shields	MP N-72-7	W-9		TM 61-3	H-30
Sensors	MP 4-630	M-5		TM 61-4	H-30
Electron			Flux	MR 81-4	CERC-13
Microscope	MP S-75-11	S-47		TP 80-4	CERC-32
Microscopy	CTIAC-4	C-40		TP 82-2	CERC-33
Electronic Computers	MP 2-133	H-4	Losses	CETA 82-2	CERC-4
Electroosmotic			Partitioning for Partially		
Dewatering of Dredged Material	MP D-77-2	E-4	Confined Explosives	TM 2-722	W-27
Flow	CR 3-73/1	S-103	River	TM 61-1	H-30
Phenomenon	CR 3-73/2	S-103	Settling Tube	TM 23	CERC-38
Elizabeth River Dike	MP H-69-13	H-11	Spectra	TP 80-2	CERC-32
Ellerslie	MP 3-2	S-4	Spectrum Analyzer	TM 58	CERC-32
Elliott Bay	TR D-77-24/A	E-9	Transmission in Snow	RR 1-4	W-19
	TR D-77-24/D	E-9	Engineer		
Ellsworth Air Force Base	MP S-73-12	S-40	Horizontal Construction Model	MP S-77-17	S-51
Elmerdorf Air Force Base			Officers Career	MP 9-708	MS-5
Hospital	MP 6-761	C-12	Engineering		
Elutriate	MP D-76-18	E-3	Behavior of Pavement Materials	TR S-77-9	S-94
Test	MP D-76-7	E-3	Challenges of Dredged Material		
	MP D-78-45	E-2	Research	MP D-74-11	E-2
	TR D-77-3	E-6	Computer		
	TR D-78-45	E-18	Graphics Colloquium		
Embankment			Notes		
	CR S-69-8	S-101			
	MP 3-383	S-13	Condition Survey		
	MP S-75-3	S-46	Criteria for Use of Slurry-		
	TM 67-14	W-22	Type Explosives	MP N-78-5	W-13
	TM 90-1	S-56	Geologic		
Dams	CR S-74-3	S-101	Investigations	PNE 5005	W-18
Design	TM 3-279/1	S-63	Map Folio	TR 5-622/F	S-79
Evaluation with Radar			Management Conference	MP 5-542	MS-5
Measurements	MP S-78-10	S-53	Materials	MP 1-693	W-4
Foundations	CR 3-76-6	S-101		MP S-77-19	S-51
	TM 3-357/A	S-72	Measurement Devices, St.		
	TR S-68-2	S-84	Johns Bayou Floodgate	TM 3-425	S-73
Pore Pressures	TR 3-722	S-82	Properties	PNE 957	W-16
Protection	P 12	H-26	Cement-Stabilized Soil	MP S-77-14	S-51
Stability	MP S-77-10	S-51	Cohesive Soils	MP S-74-20	S-45
Emergency Gate	MP 2-622	H-8	Craters	PNE 5012-I	W-18
Empirical				TM 67-3	W-22
Analysis	MP S-77-16	S-51	Dredged Material	TR D-77-18	E-7
Method	MP S-78-5/18	S-52	Nuclear Craters	TR 3-699	S-82
	MP S-78-5/19	S-52	Oil Shales	MP S-78-3	S-52
Emplacement			and Scientific Research at WES	IEB	MS-2
Nuclear Explosives	PNE 5004F	W-17		MP 0-79-1	
	PNE 5004P	W-17		thru	
	TR 10	W-28		0-73-11	MS-8
Stemming Load Measurements	MP C-75-1	C-22		MP 0-74-1	
Emsworth Locks and Dam, Ohio				thru	
River	MP C-76-8	C-24		0-74-5	MS-8
Emulsified Asphalt	MP 4-44	S-5		MP 0-74-5	
End				thru	
Restraint in Cyclic Triaxial				0-76-1	MS-9
Tests	CR S-76-1	S-102	England	MP 4-19	M-12
Wall Designs	MP N-68-7	W-7		TM 3-343	S-69
Endochronic Constitutive Law					
for Liquefaction of Sand	CR S-76-9	S-115	AFB	TR 3-679	S-81
Energy			Enid Dam	TM 2-223	H-35
Dissipation	TP 81-1	CERC-33		TM 3-245	S-61
Dissipator	TR 2-620	H-46			
Buggs Island Dam	TM 2-281	H-37			
Clark Hill Dam	TM 2-229	H-35			
Mississinewa Dam Outlet					
Conduit	MP 2-536	H-7			
Santa Paula Creek	TR H-73-11	H-59			
Storm-Drain Outlets	RR H-71-1	H-28			

Term	Report No.	Page	Term	Report No.	Page
Enid Dam (Cont)	TM 3-250	S-61	Environmental (Cont)		
	TM 3-409	S-73	Stresses	CR 3-36	M-40
Ensley Pumping Station	TR 2-510	H-43	Studies of Protected Sea-Land		
Entrance	MP 6-715	C-11	Boundary Zones	CR	M-36
Channel Improvements for			and Water Quality Operational		
Ludington Harbor	TR H-75-14	H-63	Studies	IEB E-73-1	
Harbor	B 2/1	H-1		thru	
Loss	MP H-68-2	H-10		E-78-5	E-36
Studies	TR 2-735/2	H-50	Enzymatic Materials for Soil		
Entrenched Valley of the Lower			Stabilization	MP S-69-9	S-29
Red River	TM 3-298	S-63	EQSLIB	MP E-74-1	W-10
Environment	CR 3-24/3	H-36	Epon-Asphalt Pavement	MP 4-388	S-13
	MP M-73-15	M-12	Epoxv		
	TR M-70-13	M-27	Asphalt		
	TR M-73-2	M-29	Airfield Pavements	MP 4-704	S-20
Analysis	CR 3-15	M-35	Concrete	TR 3-638	S-81
Demolition Activities	MP N-73-6	W-9	Pavement	MP 4-483	S-16
Military Operations	CR 3-24/4	M-36		MP 4-537	S-17
	CR 3-24/5	M-37	Patrick Air Force Base	MP 4-466	S-15
	CR 3-24/7	M-37	Grout	MP C-69-14	C-17
Terms	PSTIAC-1	M-34	Polyester Resin Concrete	TR C-69-4	C-36
Environmental			Resin	TR 6-521	C-31
Analysis and Assessment of				TR C-71-1	C-37
the Mississippi River 9-Ft				TR C-71-2	C-37
Channel	TR Y-74-1	E-32	EQS User's Manual	MP S-78-13	S-53
Baseline			Erding Air Base	TM 3-343/30	S-67
Data	TR M-76-11	M-32	Erosion		Z-14
Descriptions	TR M-77-4	M-33	Abatement	MP 7-75	CERC-8
Characteristics	MP M-70-5	M-9		TR 76-2	CERC-34
	MP M-73-9	M-11	Control	CETA 82-3	CERC-4
	TR M-72-2	M-29		MP H-73-6	H-13
Characterization	TR M-71-3	M-28		MR 79-2	CERC-12
Conditions	CR D-74-4	E-21	ARES Facility, Kirtland Air	R 78-2	CERC-20
Data	IR 6	M-1	Force Base		
	IR 10	M-1	Evaluation and Demonstration	MP S-72-27	S-37
	MP M-77-5	M-15		Z-3	
	TR 5-622	S-79		thru	
Descriptions of Ranger				Z-6	
Training Areas	CR 3-70	M-41	Damage	IR H-77-1	H-3
Effects on Microseismic Wave			Structures	CTIAC-40	C-42
Propagation	MP S-73-53	S-43	Rates	TR C-78-4/2	C-39
Element in Military Operations	CR 3-24/2	M-36	Resistance	CETA 79-2	CERC-2
Factors in Thailand	TR 3-681/1	M-22	Concrete		
Impact	TR D-78-45	E-18	Materials on Concrete	MP C-78-4/3	C-39
Dredged Material Disposal	MP D-78-2	E-4	Watersheds	TR C-76-2	C-38
Marsh Development with			ERTS	TR M-77-4/4	M-33
Dredged Material	TR D-77-23/C	E-8	1	R 3-74	CERC-19
Inventory and Assessment				MR 76-2	CERC-10
Illinois Waterway	MP Y-74-1	E-29	A	R 5-73	CERC-17
Mississippi River 9-Ft			Water Data Transmitter	R 18-73	CERC-18
Channel	MP Y-72-3	E-29	Esenboga Airport	TR Y-77-5	E-33
Navigation Pools	CR Y-75-1	E-34	Eskisehir Air Base	TM 3-343/70	S-69
	CR Y-75-2	E-35			
	CR Y-75-3	E-34	ESSEX	TM 3-343/71	S-69
	CR Y-75-4	E-34	-DIAMOND ORE		
	TR Y-75-1	E-32	RESEARCH PROGRAM	MP N-73-8	W-9
	TR Y-75-2	E-32		W-10	
Management	IR M-78-2	M-1		thru	
	MP M-75-1	M-12		W-13	
	TR M-74-8	M-30		CR N-77-2	W-48
	TR M-74-3/2	M-31		MP N-78-8	W-13
Maps	TR M-74-2/B	M-30		TR N-76-10	W-41
Modeling	MP 1-972	W-6		TR N-77-3	W-41
Quality				TR N-77-4	W-41
Management of Military				TR N-78-2	W-42
Installations	TR M-76-10	M-32		TR N-78-3	W-42
Research Program Development	TR E-78-1	E-37	ESSEX VI	TR N-78-5	W-42
			I	TR N-75-4	W-40
				MP M-75-3	M-13
				TR N-77-4	M-41

Term	Report No.	Page	Term	Report No.	Page
ESSEX (Cont)			Evaluation		
I (Cont)			Existing		
Cratering Sites	TR N-76-4	M-40	Bank Protection	INR 3	2-4
Phase	MP N-76-15	W-12		INR 4	2-4
1	MP N-77-2	W-12		INR 5	2-4
and 2	MP N-78-3	W-13		INR 7	2-4
Test Site at Fort Polk	TR S-75-3	S-91		INR 8	2-5
2	MP N-76-11	W-12		INR 9	2-5
	MP N-76-12	W-12		INP 10	2-5
	MP N-78-8	W-13		INR 11	2-5
Mobility Experiments	MP N-76-7	M-14	Projects	/H	2-4
3	MP N-77-1	W-12	Remote Sensor Performance	TR M-76-8	M-30
	MP N-78-2	W-13	Rigid and Flexible Materials		
	MP N-78-9	W-13	for Bank Protection	INV 2	2-5
Event	TR N-78-3	W-42	Spray-On Stabilizers for		
II	TR S-78-3	S-96	Bank Protection	INV 1	2-5
III	TR N-76-10	W-41	Three Side Channels	CR Y-74-1	E-34
V	CR N-77-2	W-48	Evaporation		
Model Structures	TR N-78-2	W-42	Lake and Land Pans	MP H-58-4	H-10
Essex Estuary	MP 1-74	CERC-8		TM	MS-10
Estuarial			Reduction by Chemical Films	MP 5-475	MS-5
Sediment	TB 7	Z-10	Event		
Transport	TR D-77-12	E-7	Dial Park	TR N-71-8	W-30
Shoaling Processes	TB 19	Z-11	DICE THROW Mobility Experiments	MP M-77-12	M-15
Estuarine			MINE UNDER and MINE ORE;		
Ecosystems	TR D-78-3	E-13	Ejerta Studies	MP N-69-2	W-7
Environment	CR D-76-5	E-25	Everett Dam Spillway and		
Fish	TP 76-20	CERC-31	Discharge Channel	MP 2-403	H-6
	TP 77-3	CERC-31	Evreux-Fauville Air Base	TM 3-343/18	S-67
Islands	TR D-78-17	E-15	EWQOS	IEB E-78-1	
Marshes	TR D-77-35	E-11	thru		
Models	RR H-75-2	H-29	E-78-5		E-36
Navigation Projects	TB 17	Z-10	Excavated or Combination		
Plankton	MR 76-1	CERC-10	Channels	TM 86-11	W-21
Sedimentation	TB 8	Z-10	Excavation		
Shoaling Analysis	TR H-78-5/2	H-68	Design of a Transisithmian		
Water Resources Planning	TB 15	Z-10	Sea-Level Canal	TR 6	W-28
Estuary	MP 1-74	CERC-8	Methods	TR 12	W-28
	MP 2-332	H-6	Nuclear Explosives	MP 2-491	W-2
	MP H-72-4	H-13	Exchange Program in the Field		
	MR 81-5	CERC-13	of Polymer Concrete	CTIAC-35	C-42
	R 25-73	CERC-18	Executive Overview and De-		
	R 26-73	CERC-13	tailed Summary	TR DS-79-22	E-28
	TB 2	Z-9	Exhaust		
	TB 5	Z-9	Blasts	MP S-73-61	S-43
	TJ 20	Z-11	F-100A Aircraft	MP 4-91	S-6
	TM 2-374	H-40	Exit Report	MP 3-73-7	MS-8
	TR D-78-9	E-14	Expanded Lightweight Aggregates	MP 6-183	C-4
	TR H-72-2	H-53		TR C-70-2	C-37
Canals	TB 16	Z-10	Expansion		
Entrance, Umpqua River	TR H-70-6	H-56	Concrete	TR 6-627	C-34
Model	MP 6-669	C-10	Alkali-Aggregate Reaction	MP 6-345	C-6
	RR H-71-2/II	H-28		TR 6-431	C-31
	RR H-75-3/1	H-29	Expansive		
	TB 9	Z-10	Cement	CTIAC-8	C-40
Tide Calculation	TM 3-343/52	S-68		MP C-70-21	C-18
Etain-Rouvres Air Base	MP 3-478/7	S-15		MP C-72-22	C-20
ETCO Consolidation Device	TM 3-343/69	S-69		TR C-74-6/1	C-38
Etimesut Air Base	TM 67-6	W-22	Concrete	MP C-69-8	C-16
EUCLID Code	TR 2-575	H-45	Clay		
Eufaula Dam Spillway	CR 3-27	M-42	Soils	MP S-69-24	S-30
Eurasia	TR	M-48		MP 3-73-28	S-41
Eurasian Water Milfoil	MP M-75-4	M-13	Concrete, Jonesville Lock		
Europe Snenarios			Materials		2-2
European					2-17
Dredging Practices	TR D-78-58	E-20			
Research Institutions	MP	S-38			
Waterways	TR M-70-12	M-27			

## 36-INDEX

Term	Report No.	Page	Term	Report No.	Page
Expansive (Cont)			Explosion (Cont)		
Soil		Z-17	Produced		
		Z-18	Crater	TM 65-8	W-20
Foundations	MP S-73-17	S-41	Ejerta Characteristics	CR N-77-2	W-48
Highway Subgrades	TR S-76-8	S-93		MP N-76-7	W-12
Expedient			Damage to Deep Unlined		
Field Fortifications	TR N-74-7	W-39	Openings in Rock	TR 1-695	W-31
Ground Surfacing	MP 4-396	S-14	Granitic Rock Ejerta	MP	W-11
Methodology for Identification of Potentially			Water Plumes	TR N-72-4	W-37
Expansive Soils		Z-17	Salt-Water Barriers	MP 2-370	W-2
Ramps	MP 4-966	S-26	Sandstone	TR N-77-6/1	W-41
Reinforcement for Concrete	TR C-69-3	C-35	Shallow Water	MP 2-103	W-2
Surfaced Airfield Facilities	IR S-73-1	S-3		TM	W-27
Surfacing	TR 3-812	S-84	Soil	TM 2-406	W-27
Drainage	MP S-69-11	S-29	Test	TR N-77-6/2	W-41
Materials	MP 4-304/1	S-21	Program	MP 1-689/2	W-3
Techniques for Strengthening			Pseudo Models of Underwater	TR N-77-6	W-41
Floor Joint Systems	MP N-75-6	W-11	Storage Containers	MP 1-689/1	W-3
Triggering Screens	MP N-76-8	W-12	Sevier Bridge Reservoir	TM 2-397	W-27
Upgrading of Existing			Tundra Ice	CR 2-71	W-47
Structures for Fallout			Underground Launch Cell	MP 1-792	W-4
Protection	TR N-78-1	W-41	Water Surfacing	TR N-70-9	W-36
Experiment Station Watershed	TM 33-2	MS-10	Explosive	MP	W-12
Experimental					
Excavation Program	TR E-75-2	W-39			
Hydraulics	B 28	H-2			
Prediction in Hydraulics	MP 2-340	H-6			
Study of Model Deep Beams	MP N-63-3	W-7			
Exploration					
Alluvial Terrain	MP S-77-24	S-52			
Equipment for Military					
Construction	TR 3-600	S-79			
Explosion	CR S-77-2	S-119	Charges	MP 1-663	W-3
	MP 2-424	W-2	Comparison Tests	MP N-76-3	W-11
	MP 2-490	W-2	Cratering	CR	W-44
	MP 2-529	W-3			
	MP 1-885	W-5			
	MP N-68-1	W-6			
	TR 2-438	W-30	Detonation	TM 65-9	W-20
	TR 2-615	W-30	Ditching with TNT	TM 69-11	W-24
	TR 1-665	W-31	Excavation	MP N-71-6	W-8
	TR M-76-2	M-31		MP N-77-7	W-13
	TR S-74-6	S-89		MP E-72-1	W-8
	TR S-73-3	S-95		TM 69-5	W-24
Air-Water Interface	MP 1-814	W-5		TM 70-3	W-24
	TR 1-771	W-32		TM 70-13	W-25
	TR N-69-3	W-34		TM 71-1	W-25
Cell	CR 3-149	S-116		TM 71-3	W-25
Damage to Concrete Runways	TR 2-467	W-30		TM 71-4	W-25
Dams	MP 1-972	W-6		TM 71-9	W-25
Deep Water	CR 1-157/I	W-48		TM 72-2	W-26
	TM 2-427	W-27		TR E-72-32	W-38
	TR 1-647	W-30		TR E-72-23	W-37
Device	CR 3-149	S-116	Harbor in Coral	TM 70-4	W-24
Dry Sand	MP 2-524	W-3	Moon	TR E-74-1	W-39
Generated			Railroad Cuts	MP E-72-11	W-9
Water Surfacing Waves	MP 1-741	W-4	Research	MP E-74-6	W-10
Wave			Laboratory Projects	TR E-73-5	W-38
Effects in Inland Water-			Saturated Sand	TM 71-11	W-25
ways	MP N-72-8	W-9	SERGIUS NARROWS	TR 21	W-29
Harbor Areas	TR N-69-4	W-34	Technology	TM 71-12	W-26
Rock Masses	CR 1-170	W-44	Test	TR E-73-1	W-38
Granite	TR N-73-2	W-38	Sandstone and Shale	MP N-72-10	W-9
Gravity-Type Dams	TR 2-472	W-30	Experiments		
Induced Shock Waves	MP 2-399	W-2	Fallout Shelter Building		
			Program	CR 2-65	W-47
				CR 2-76	W-47
				TR 25	W-29
			Lunar Applications	MP E-74-4	W-10
			Project ESSEX	TR 11	W-28
			Quarrying	MP N-76-9	W-12
			Systems	MP N-78-5	W-13
			Tactical Structural Targets		



Term	Report No.	Page	Term	Report No.	Page
Explosive (Cont)			Fatigue Failure Analyses	CR 3-145/2	S-100
Tests	MP 0-70-2	MS-8	Fault	MP S-77-8	S-51
Airport Lockers	TR 1-649/3	W-31	Earthquake		
Explosively	TR N-76-11	W-41	Engineering	MP S-73-1/2	S-39
Created Ground Shock			Magnitude	MP S-73-1/6	S-39
Phenomena	MP N-76-10	W-12	Faulting in the Lower		
Produced Craters in Soil			Mississippi Valley	TM 3-311	S-64
and Rock	MP S-69-34	S-30	Fauna	TR D-78-15/B	E-15
Exposure	TR 6-546/0	C-32	Mississippi River Floodplain	CR Y-74-3	E-34
Extruded Aluminum Landing Mat	MP S-74-14	S-45	Feasibility		
Extruders and Fabricators	MP 4-954	S-25	Pinto Island	MP D-77-3	E-4
Exxon Test Program	TR H-78-17	H-69	Study		
			Earth Melting Penetrator		
			System	TR S-78-17	S-96
			Numerical Tow Model	MP H-78-11	H-13
			Federal		
F-100A Aircraft	MP 4-91	S-6	Republic of Germany	MP N-76-13	H-12
F5A Austere Field Test	MP 4-701	S-20	Structures Test Program	TR N-77-2	W-41
F. E. Warren Auxiliary Sites	MP 6-585	C-9	Water Pollution Control Act		
Fabric	MP S-78-17	S-53	Amendments of 1972	MP D-76-17	E-3
Analysis of Undisturbed Sands	TR S-78-11	S-95	FEDIT	MP K-73-1	MS-5
Bituminous Surfaces for Use			Felker Army Airfield	MP S-74-27	S-46
in MESL Construction	MP S-76-14	S-49		TR 3-466/6	S-75
Pavements		Z-16	Felsenthal Lock and Dam	MP 3-696	S-20
Factor Analysis	CR 3-24/7	M-37		MP 6-738	C-12
Failure			Fenestra Landing Mats	MP S-69-17	S-29
Criteria for Flexible			Ferrells Bridge Dam	TR 3-538	S-77
Airfield Pavements	MP 4-260	S-10	Ferris Wheel Series, Flat Top		
Footing-Supported Buried			Event	MP 1-396	W-5
Steel Arches	MP N-70-2	W-7	I Event, Grouting Support	MP 6-834	C-13
Slopes	TR 29	W-29	Fetch	TM 73	CEFC-40
Fairbanks, Alaska	MP 4-135	M-2	Width	TM 70	CEFC-40
Fairchild, Washington	MP C-69-12	C-17	Fiber		
Fairford, Gloucestershire,			Glass		
England	TM 3-343/98	S-70	Membrane Surfacing	MP 4-714	S-20
Fall River Dam	TM 2-230	H-35	Reinforced Resins	MP S-71-19	S-35
Fallbank	TM 68-15	W-24	Reinforced		
	TR 18	W-28	Cement and Concrete	CTIAC-21	C-41
Materials	MP 3-974	S-26		CTIAC-25	C-41
Slopes	TR 14	W-28		CTIAC-39	C-42
Fallout				CTIAC-43	C-43
Collection Program	PNE 527	W-15		CTIAC-48	C-48
Field	TM 66-4	W-21		MP C-76-6	C-23
Patterns	TR 19	W-29	Concrete	CTIAC-10	W-40
Prediction	TM 65-5	W-20		MP C-74-3	C-21
	TM 65-10	W-20		MP C-78-5	C-26
	TM 66-2	W-20	Hvdraulic Structures	CTIAC-15	C-40
	TR 22	W-29		MP C-75-4	C-23
Protection	TR N-78-1	W-41	Structure	MP C-74-11	C-22
Shelter Building Program	CR 2-65	W-47	DCA-1295	MP S-75-21	S-47
	CR 2-76	W-47	Resin Depositor	MP 1-396	S-14
Simulation	TR E-73-6	W-38	Fibrous		
	TR E-74-3	W-39	Concrete	TR S-74-12	S-91
Tritium	TM 70-8	W-25	Screens	RR H-72-2	H-23
Falls Lake Water-Quality Study	MP H-76-6	H-16	Field		
Far East; Canal Zone Analogs IX	CR 3-30/IX	M-43	Demonstration of Shrimp		
Farley Nuclear Containment			Mariculture	TR D-79-53	E-19
Structure	MP C-74-2	C-21	Fortifications	TR N-74-5	W-39
Farm Creek, Illinois	TM 2-355	H-39		TR N-74-7	W-39
Farmdalian Substage	MP Y-77-1	E-30	Inspection		
Fast			Bank Protection Measures on		
Fix C-1 Cement	CR C-71-1	C-46	the Upper Yazoo River	INR 4	Z-4
Setting Cement	CTIAC-1	C-40	Fisher River Channel	INR 11	Z-5
	MP C-73-1	C-21	Mill Creek Midfloodway		
Fat Clay	CR 3-26/10	S-110	Gabion Barrier	INR 9	Z-5
	CR 3-26/16	S-110	Morameal Revetment on the		
	TR 3-545	M-20	Red River	INR 7	Z-4
	TR 3-565/1	M-20	Sites		
			Ohio River Division	INR 8	Z-5

## 38-INDEX

Term	Report No.	Page	Term	Report No.	Page
Field (Cont)			Fine (Cont)		
Inspection (Cont)			Grained (Cont)		
Sites (Cont)			Dredged Material	MP D-77-4	E-4
Missouri River Division	INR 10	Z-5		MP D-78-3	E-4
St. Paul and Rock Island Districts	INR 2	Z-4		TR D-77-10	E-7
Vicksburg District in the Upper Yazoo Basin	INR 5	Z-4		TR D-77-19	E-7
Yazoo River	INR 1	Z-4	Confined Disposal Areas	TR D-77-16	E-7
Mixing of Bulk Explosives	MP N-77-5	W-13	Containment Areas	TR D-78-56	E-19
Moisture Content Investigation	TM 3-401	S-73	Lavered Soils	TR M-75-1	M-31
Performance Investigation Stations	MP S-69-26	S-30	Soil	CR 3-152	M-45
Vibratory Techniques	TR M-77-4/2	M-33		MP 3-122/7	S-7
Fighter Aircraft	MP 4-577	S-18		MP 4-441	M-3
Fighting Hole Cover Designs	MP S-70-24	S-33		MP 4-477	M-4
Fill	TR N-76-6	W-40		MP 4-879	M-6
Material	MP S-73-7	S-40		MP M-73-2	M-11
Strength	MP D-77-17	E-3		TM 3-240/18	M-18
	TR D-77-29	E-10		TR 3-331/10	M-19
	CR S-76-6	S-101		TR 3-639	M-21
				TR 3-652	M-21
Filling and Emptying			Layers	TR S-74-9	S-91
Characteristics			Under High-Speed Tire		
Barge Canal Lock, Sacramento River Deep-Water Ship Channel	TR 2-556	H-44	Loads	TR 3-652/7	M-21
Calumet River Lock	TR 2-497	H-43	Sands	TR S-78-2	S-95
System	MP H-75-7	H-15	Silty Sand	CR 3-26/11	S-110
Bay Springs Lock, Tennessee, Tombigbee Waterway	TR H-78-19	H-69	Finite		
Cannelton Main Lock	TR 2-713	H-49	Difference	MP S-73-5/1	S-89
Cordell Hull Navigation Lock	TR 2-739	H-51		TM 32	CERC-27
Dardanelle Lock	TR H-69-5	H-54		TR S-73-5/1	S-89
Jonesville Lock	TR 2-678	H-48		TR S-73-4	S-89
Low-Lift Locks, Arkansas River	TR 2-743	H-51	Element		
McAlpine Lock	TR 2-778	H-52	Analyses		
McNary Dam Lock	MP 2-146	H-4	Dams	CR S-71-6	S-101
Medium Lift Locks	TR H-77-7	H-66	Port Allen and Old Rover Locks	CR S-69-6	S-101
Millers Ferry and Jones Bluff Locks	TR 2-718	H-50	Slopes		
New			Jointed Rock	CR S-68-3	S-100
Bankhead Lock	TR H-72-6	H-58	Soil	CR S-68-6	S-101
Poe Lock	TR 2-561	H-44	Stresses and Movements		
Ship Lock, Mississippi River-Gulf Outlet	TR H-78-16	H-69	Birch Dam	CR S-76-2	S-101
Old River Navigation Lock	TR 2-549	H-44	Embankments	CR S-69-8	S-101
Port Allen Navigation Lock	TR 2-500	H-43	Transverse Cracking	CR S-74-3	S-101
Filter			Analysis		
Cloth	MP S-69-46	S-31	Atchafalava Basin Protection Levees	MP S-69-53	S-31
	MP S-70-2	S-31		TR N-72-7/1	W-37
	R 21-4	P-4	Buried Cylinders		
	R 21-5	P-4	Columbia Lock Pile		
	TR S-72-7	S-89	Foundation	TR S-74-6	S-90
Erid and Grenada Dams	TM 3-245	S-61	Consolidation in Zoned Dams	CR S-77-4/II	S-102
Experiments	TM 3-360	S-72	North Fork Dam Model	MP N-75-2	W-10
Fabrics		Z-16	Reinforced Earth Wall	TR S-77-6	S-94
Requirements for Underdrains	TM 183-1	S-58	Code	CR N-70-1	W-44
Stability Tests on Mud				MP S-75-5	S-46
Mountain Dam	TM 3-248	S-61		MP S-76-3	S-48
Filtering Systems	CR D-76-8	E-24		MP N-76-2	W-11
Filtration Systems	TR D-78-5	E-14	Grids	CR S-69-5	S-105
Fine			Method	MP 5-905	MS-5
Aggregate	MP 6-416	C-7		MP K-74-3	MS-6
Grading	TR 6-544	C-32		MP K-75-6	MS-6
Grained				MP K-77-4	MS-7
Cohesive Soils	MP S-76-11	S-49		MP K-77-5	MS-7
Deposits	MP 3-818	S-22		MP S-72-2	S-36
				MP S-73-63	S-44
				MP S-76-21	S-50
				SMIAC	S-98
				TR S-73-5/1	S-89
			Procedure	MP S-75-7	S-46

Term	Report No.	Page	Term	Report No.	Page
Finite (Cont)			Flexible (Cont)		
Element (Cont)			Pavement (Cont)	MP 4-202	S-9
Program	CR S-76-13	S-104		MP 4-360	S-13
	MP K-73-3	MS-6		MP 4-470	S-15
	MP K-73-4	MS-6		MP 4-486	S-16
	MP K-74-1	MS-6		MP 4-487	S-16
Study	MP S-72-15	S-37		MP 4-494	S-16
Fire Island Inlet	MP H-77-12	H-18		MP 4-550	S-17
	TR H-69-16	H-56		MP S-69-33	S-30
Firestone				MP S-71-18	S-35
Panels 512 and 510B	MP 4-525	S-17		MP S-73-69	S-44
Tar-Rubber Test Pavement	MP 4-707	S-20		TM	S-72
Fish	CR A-77-2	M-52		TM 3-323	S-65
	MR 80-1/I	CERC-12		TR 3-587	S-73
	MR 81-5	CERC-13		TR 3-610	S-79
	TP 76-20	CERC-31		TM 213-1	S-63
	TP 77-3	CERC-31	Airports	MP S-73-63	S-44
	TR A-78-2/		Analysis	TM	S-60
	1/II	M-49	Behavior	MP 4-61	S-5
	TR A-78-2/		Design	TM	S-60
	2/II	M-50		TR 3-721	S-82
	TR D-77-24/A	E-9	Pipe	MP 4-364	S-13
	TR D-77-30/E	E-11	Flexure	MP 6-609/2	C-9
	TR	M-43	Flint Lock	MP C-69-7	C-16
Aquatic Plant Control	TR D-77-6/D	E-6	Flip		
Assemblages	CR Y-74-1	E-24	Bucket	MP H-71-1	H-12
Habitat			Pine Flat Dam	TR 2-511	H-43
Fisher			CODE	TM 65-10	W-20
River Channel Realignment	INR 11	Z-5	Flivver Site	MP 3-895	S-24
Vehicles	MP 4-743	M-5	Floating		
Fisherv	CR Y-74-4	E-35	Breakwater	MP 2-648	H-3
	TR D-77-42/A	E-12		MR 82-4	CERC-13
Compartments	CR Y-77-1	E-35		MR 82-5	CERC-14
Fishtrap Dam	MP C-76-3	C-23		TM 99	CERC-42
Fissures	TR 6-437	C-31		TP 76-17	CERC-30
Fittler New Levee Unit	TM 53-1	S-55		TP 82-4	CERC-33
Fixed-Bed				TR H-71-3	H-57
Model	GITI 18	CERC-6	Oak Harbor	CETA 79-4	CERC-2
River Models	MP 2-406	H-6	Tire Breakwater	TP 73-3	CERC-32
Flared Outlet Transitions	RR H-72-1	H-28		TB 19	Z-11
Flash			Flocculation	MBM 12-1	H-22
Floods	CETA 78-1	CERC-2	Flood	MBM 12-2	H-22
Tracks Tow	MP 5-226	MS-4		MBM 13-1	H-22
Flat				MBM 14-1	H-22
Plate	MP H-68-4	W-7		MBM 14-2	H-22
Slope	TM 68-5	W-23		MBM 15-1	H-22
Arrav Experiments	TM 68-9	W-23		MBM 15-2	H-23
Experiments	TM 68-10	W-23		MBM 29-1/A-H	H-23
Top				MBM 31-4	H-23
Event	MP 1-896	W-5		MBM 43-1	H-24
I Event	MP 6-834	C-13		MBM 44-1	H-24
Flex-Trac	MP 4-412	M-3		MBM 86-1	H-25
Flexible				MP 2-374	W-2
Airfield Pavement			April 29, 1936	MP H-69-9	H-11
	MP 4-175	S-8	Control	TM 73-2	MS-10
	MP 4-260	S-10		B 2/2	H-1
	MP S-73-66	S-44		TR H-75-18	H-63
	TM 3-349	S-71	Chagrin River	TR H-70-11	H-50
	TR 3-529	S-77	Denison Dam	MP 2-31	H-4
	TR 3-548	S-78	Detroit Dam	TM 2-302	H-38
Junctures	MP S-76-19	S-49	Enid Dam	TR 2-510	H-43
Airport Pavements	TR S-75-17	S-92	Keystone Dam	TR 2-555	H-44
	TR S-77-8	S-94	Melvern Dam	MP H-77-5	H-13
Arch-Type Protective Shelter	MP N-71-3	W-8	Summersville Dam	MP 2-938	H-10
	TR 1-768	W-32	Lower Colorado River	TR 9	Z-9
Highway Pavements	TR 3-582	S-78			
Materials for Bank Protection	INV 2	Z-5			
Pavement					
	B 29	S-1			
	MP 4-180	S-8			

## 40-INDEX

Term	Report No.	Page	Term	Report No.	Page
Flood (Cont)			Flow (Cont)		
Control (Cont)			Curved Channels	R 1-109	Z-13
Project			Lines	MBM 31-9	H-24
Alexandria and Arlington			Lower Ohio River	TR H-77-18	H-67
County	TR H-75-19	H-63		MBM 31-9	H-24
Allentown, Pennsylvania	TM 2-376	H-40	Model	MP S-70-3/1	S-32
Ananostia River	TR 2-434	H-42	Open Channels	MP 2-498	H-7
Hoosic River	TM 2-338	H-38	Over		
	TM 2-338/2	H-39	Boundaries	CR 2-124	H-71
	TM 2-339	H-39	Deflecting Walls	MP S-69-25	S-30
Johnstown, Pennsylvania	TM 2-303	H-38	Patterns	MP S-75-24	S-7
Kalamazoo River	TR 2-465	H-42		MP M-76-10	M-14
Little and Warm Creeks and			Slides	R 12-16	P-3
Santa Ana River	TR H-75-7	H-62	Flowline Study, Mississippi		
Pearl City, Hawaii	TR H-75-3	H-61	and Illinois Rivers	MBM 31-5	H-23
Rondout Creek Basin	TR H-74-2	H-60	Flowmeter	MP 5-83	MS-4
Woonsocket, Rhode Island	TR 2-468	H-42		TR 2-810	H-53
Flows	MBM 81-4	H-24	Fluid Mud Dredged Material	TR D-78-40	E-18
	TR H-76-11	H-64	Flume	RR 2-1/1	H-27
Heights	MP H-77-7	H-18		TM 4-4	H-30
Insurance	TR H-74-3	H-60		TM 61-2	H-30
	TR H-75-17	H-63		TM 61-3	H-30
	TR H-78-26	H-69		TM 61-4	H-30
May 6, 1935	TM 78-1	MS-10		TP 77-4	CERC-31
Missouri and Kansas Rivers	TM 1-2-1	H-31		TR D-78-34	E-17
	TM 1-2-2	H-31	Tests	TM 99-1	H-31
Protection			Mississippi River Revetment	R 2-4	P-1
Bradley, Texas	TM 2-270	H-37	Flushing Studies, Victoria		
Cumberland, Maryland	TR 2-448	H-42	Channel	MP 2-812	H-9
Prattville, Alabama	TM 200-1	H-34	Flux Characteristics of a		
Routing	MBM 24-1	H-23	Dredged Material Marsh	TR D-77-23/	E-9
Lower Ohio River	MP H-73-3	H-13		F/II	
Floodgate	MP 3-37	S-5	Flv Ash	CTIAC-63	C-44
	TM	S-60		MP 6-123/8	C-3
	TM 3-425	S-73		MP 6-473	C-7
	TR 3-451	S-74		MP C-76-5	C-23
Floodplain	CR Y-74-3	E-34		TM 6-419/5	C-29
	MBM 92-1	H-25		TR 6-541	C-31
Animals	CR Y-75-2	E-35		TR 6-583	C-33
Flow	RR H-77-1	H-29		TR 6-627	C-34
Floodwall		Z-14	Flvsh Formations	MP 3-551	S-18
	B 11	S-1	Foamed		
	MP 6-184	C-4	Plastics	MP S-71-24	S-35
	MP 3-140	S-8	Sulfur	CR 6-87	C-46
	TR 3-477	S-76	Foggia		
Memphis, Tennessee	TR 3-453	S-74	Amendola Airfield	TM 3-343/40	S-57
Floodwaters	MP C-78-16	C-26	Main Airfield	TM 3-343/39	S-67
	P R	H-26	Folsom Dam	TM 2-369	H-40
Floodway	MBM 31-1	H-23	Footing	CR 3-74	S-107
	MBM 31-6	H-23		CR 3-115	S-114
	P C	H-26		CR 3-129/2	S-113
	TM	S-60		CR 3-146	S-114
	TM 2-429	H-41		MP 3-418	S-14
Flora	TR D-78-15/B	E-15		TR 3-793	S-84
Dredged Material Sites	TR D-77-31	E-11	Air-Drv Sands	TR M-70-14/1	M-27
Mississippi River Floodplain	CR Y-74-3	E-34	Buried in Sand	TR S-69-6	S-85
Florida	CR	M-36	Clay	TR 3-599/5	S-79
	MP 4-829	M-6		TR S-68-8	S-85
	TR Y-78-2	E-33		TR S-72-6	S-89
Everglades	CR 3-72	M-37	Cohesive Soils	TR M-70-14/3	M-27
Water-Control Project	TR 2-633	H-47	Dry Sand	TR S-69-3	S-85
Flotation	MP 4-923	S-25	Elastic-Plastic Soil	CR 3-129/4	S-114
	TM 0-4	MS-10	Frenchman Flat Silt	MP 3-572	S-18
Flow			Loader	CR 3-99	S-99
Characteristics	CR 2-116	H-72	Sand	CR 3-52	S-107
Computations	TR H-77-18	H-67		TR S-70-3	S-86
Conditions	TR H-77-3	H-66		TR S-71-14/2	S-86
Control Plan for the Chesapeake and Delaware Canal	MP H-74-10	H-14	Soft Clay	TR 3-599/4	S-79

Term	Report No.	Page	Term	Report No.	Page
Footing (Cont)			Fort (Cont)		
Tests	MP 3-445	S-14	Perk (Cont)		
	MP S-68-12	S-27	Dam (Cont)	TM 185-1	H-33
	TR 3-599/1	S-78		TM 2-407	H-41
	TR 3-599/2	S-79		TR S-76-1	S-92
	TR 3-599/3	S-79	Embankment	TM 68-3	W-23
Vibrations	TR S-71-14/3	S-88	Tunnel #	TR 2-520	H-43
Vibratorv Loads	CR 3-88	S-114	Power House Penstock	TM 206-1	H-34
Footsteps	MP M-73-12	M-11	Polk		Z-7
Forbes Air Force Base	MP S-73-44	S-42		MP N-76-3	W-11
Ford, Sussex, England	TM 3-343/122	S-71		TR S 75-3	S-91
Forecasting Wind-Generated Sea	TM 43	CERC-39	Army Airfield	MP S-72-24	S-37
Forest				TR 3-456/3	S-75
Hill Formation	MP 6-916	C-14	Randall Dam	TR 2-435	H-42
Lands	MP M-72-7	M-10		TR 2-528	H-44
Stands	TR M-71-9	M-28		TR 2-626	H-46
Forestry	MP 4-959	M-7		TR 2-716	H-50
Form			Rilev	MP C-77-1	C-24
Anchors	TR 6-473	C-31	Runker	MP 4-300	M-2
Linings	TM 6-336	C-28	Scott Dam	TR H-73-6	H-59
Lumber	MP 6-80	C-2	Sherman	CR 3-18	M-33
	TR 6-735	C-35	Smith Reach	TR H-68-7	H-54
Oil	MP 6-80	C-2	Fortification	MP S-71-12/1	S-34
Formed Concrete Surfaces	MP 6-364	C-14		TR N-74-4	W-39
	TR 6-559	C-32		TR N-74-5	W-39
	TR 6-788	C-35		TR N-74-7	W-39
	TR 6-816	C-36		MP K-73-1	MS-5
Formula VL	MP 4-92	S-6	FORTTRAN	TM 3-343/55	S-68
Forney Army Airfield	MP S-72-22	S-37	Forus Airfield	IR S-74-3	S-3
Fort			Forward Area Operations	CR 4-85	S-103
Benning	CR 3-70/3	M-41	Foss Field	MP 4-451	S-15
	TM	S-61		CR 3-45	S-107
Bragg	MP 4-545	S-17	Foundation	MP S-70-20	S-33
	MP 4-620	S-19		MP S-71-24	S-35
	MP 4-714	S-20		RR S-76-2	S-54
	MP 4-722/1	S-20		TM 140-1	S-57
	MP M-75-9	M-13		TM 163-1	A-57
	TR M-73-2	M-29		TM 172-1	S-57
Campbell	MP 4-855	S-23		TM 3-357/A	S-72
Carson	MP S-76-22	S-50		TR 3-777	S-84
Natural Resources	TR M-77-4	M-33		TR S-60-10/3	S-86
Churchill	CR 3-15	M-35		TR S-68-2	S-84
	CR 3-27	M-42		TR S-76-8	S-93
	TM-3-240/2	M-17	Bavou Sorrel Lock	TM	S-69
Terrain	CR 3-37	M-44	Beech River Dam	MP 3-532	S-17
Devens Army Airfield	MP S-73-47	S-13	DeLong Piers	MP 3-157	S-8
Dix	MP C-75-8	C-23	Design	MP	S-51
Eustis	MP S-74-27	S-46		TM 3-36	S-72
	TR 3-450	S-74	Little Grassv Dam	TM 179-1	J-57
Gibson Dam	TM 192-1	H-34	Dynamics	MP 4-969	S-26
	TM 2-228	H-35	Embankment Construction		Z-1
Greely	CR 3-22	M-44	Investigation	TM	S-65
	CR 3-27	M-42		TM 117	S-56
Automotive Test Course	MP 3-861	S-23	Lock Site No. 2	TM 131-1	S-50
Terrain	CR 3-37	M-44	Static Loading	MP S-77-20	
Gulick	TM 3-322	S-64	Wolf River Floodwall	TM 3-297	S-63
Hood	MP S-74-13	S-45	Material		
Huachuca	TR M-73-3	M-29	Dam on the Warrior River	TM 133-1	S-57
Knox	CR 3-68	M-45	Varuum Solar Telescope Site	MP 3-763	S-21
	CR 3-94	M-45	Piezometers	MP S-69-31	S-30
	MP M-74-8	M-12	Piles	TR S-69-10/2	S-36
Leonard Wood	CR 3-64	M-37	Precompression	MP S-69-21	S-29
McClellan	MP M-76-22	M-15	Soil	MP 4-388	S-24
Meade Dam	MP E-73-1	W-9		MP S-69-23	S-29
Perk	TM 68-10	W-23		MP S-77-13	S-51
Dam	MP S-75-4	S-46		TR S-77-7	S-94
	TM 41-1	S-55		TR S-78-7	S-95
	TM 160-1	H-32	Structures	TR 3-632	S-80

## 42-INDEX

Term	Report No.	Page	Term	Report No.	Page
Fountain Lake	MP Y-77-4	E-30	Frost	MP 3-482	M-4
445th Troop Carrier Wing	MP 4-519	S-17	Resistance of Mortar and Concrete	TR C-76-4	C-33
Fourier			Resistant Concrete	MP C-75-6	C-23
Analysis	CR 3-82	M-40	Frozen Ground	TR 3-534	S-77
Series	CR 3-33	M-36	Fuel Spillage	MP 4-142	S-8
Transform Coefficients	TP 76-9	CERC-30		TM 3-420	S-73
Fourmile Run	TR H-75-19	H-63		TR 3-493	S-76
Fox			Bituminous Pavements	MP 4-225	S-10
Point Barrier	TR 73	H-46	Firestone Panels 512 and 510B	MP 4-525	S-17
River	CTIAC-51	C-43	Hunter Air Force Base	MP 4-98	S-6
	CTIAC-52	C-44	Full Sutton, Yorkshire, England	TM 3-343/118	S-71
FPS-26 Towers	MP 4-694	S-20	Forstentfeldbruck Air Base	TM 3-343/32	S-67
Fracture of Pavement Systems	CR S-76-15/1	S-119	Fuze	MP M-73-10	M-11
Fracturing					
Material	MP C-72-6	C-19			
Soils	MP S-77-6	S-50			
Fragment			Gabions	RR 3	Z-5
Defeating Capabilities of Plastic Armor	TR N-71-10	W-36	Gage		Z-15
Impact	TR N-69-3/3	W-35		B 61-3	MS-1
Penetration	MP S-71-12/2	S-34		IR 8	W-1
	MP S-75-27	S-43		IR N-73-1	W-1
Fragmentation	TR N-69-3/4	W-35		MP 1-644	W-3
Frames		Z-6		MP S-75-23	S-47
France	TM 3-343/18-22	S-67		TR 3-803	S-84
	TM 3-343/49-53	S-63	Aravs	TP 77-7	CERC-31
Frankfurt am Main, Germany	TM 3-343/36	S-67	Installation	CTIAC-60	C-44
Franklin	MP 3-2	S-4	Gaillard Cut	TR S-70-9	S-86
Falls Dam	TM 165-1	H-32	Gainesville Lock	TR H-76-19	H-65
Free Nigger Point	R 15-1	P-4	Gallipolis Locks	TR H-78-6	H-68
Freeze-Thaw Enhancement	TR D-77-16	E-7	Galop Rapids Reach	TM 2-233	H-35
Freezing			Galveston		
and Thawing	MP 6-531	C-8	Bav	B 1/2	H-1
	TM 3-331/7	M-18		MP 6-75	CERC-8
Concrete Specimens	MP 6-183	C-4		TP 76-13	CERC-30
	MP 6-256	C-5	Hurricane Surge	TR D-78-15	E-15
Tests			Model Study	TR H-69-12	H-55
Concrete	MP 6-178	C-4	Channel	B 2/1	H-1
	MP 6-716	C-11	County	TM 127-1	H-32
	TR 6-782	C-35	Harbor	MR 79-4	CERC-12
Specimens	TM 6-395	C-29	Entrance		Z-12
Treat Island, Maine	MP 6-223	C-4		MP 2-472	H-7
Test on Soil	MP 3-15	S-4		RR H-75-3/2	H-29
Fremont Drop Structure	TR 2-752	H-52	Offshore Disposal Site	TR H-69-2	H-54
French Morocco	TM 3-343/9-15	C-66		TR D-77-20	E-1
	TM 3-343/48	S-68		TR D-73-34	E-17
	TM 3-343/62	S-60	Gamma-Ray		
Frenchman Flat			Measurements	MP 4-986	M-7
Nevada Test Site	MP 4-645	S-13	Signatures	CR	M-39
Silt	MP 3-572	S-13	Spectral Region	MP 4-823	M-6
Frequency Measurements	MP C-77-11/3	C-25		TR 3-693/3	M-23
French Concrete	TR 6-780/3	C-35	Techniques	TR M-70-14/2	H-27
Freshwater			Gander Airport	TM 3-343/7	S-66
Bavou, Louisiana	MP 3-387	S-13	Gap	TR M-70-12	H-27
Control Plan	TR 2-580/IV	H-46	Gradings of Concrete		
Plants	TR D-77-2	E-5	Aggregates	TR 6-593	C-33
-Salt Water Density			Gardemoen Air Base	TM 3-343/56	S-68
Currents	Td 2	Z-9	Garrison Dam	TM 2-431	H-41
				TR H-68-1	H-53
Friction			Gary		
Channel	TR 2-752	H-52	Army Airfield	TR 3-466/5	S-75
Reduction	TR S-68-4	S-85	Harbor	TR 2-509	H-43
Surface Course	MP S-75-12	S-47	Gaseous Diffusion Add-On		
	MP S-76-13	S-49	Plant	MP S 77-20	S-51
	CR S-77-1	S-102	Site	MP S-73-4	S-52
Frictionless Caps and Bases	TP 76-17	CERC-30	Gasketing Tapes	TR 3-779	S-84
Friday Harbor, Washington			Gastineau Channel		Z-11
				MP 2-847	H-9
				TR H-72-9	H-58

Term	Report No.	Page	Term	Report No.	Page
Gate		Z-6	Geological (Cont)		
	TR 2-447-1	H-42	Investigation (Cont)		
	TR 2-491	H-43	Western Lowlands	TR S-71-5	S-87
	TR H-70-2	H-50	Yazoo Basin	TR 3-480	S-76
Catapult Study	TR H-77-8	H-60	Observations	MP S-70-29	S-33
Green-up Locks	TR 2-537	H-44	Reconnaissance		
Oscillations	MP 2-563	H-8	Cooper Dam Site	MP 3-258	S-10
Sills	TR 2-555/A	H-47	Sulphur River and Cypress		
Vibration	MP 5-87	MS-4	Creek Basins	TR 3-798	S-84
Arkansas River Dams	TR H-75-17	H-65	Geology	MP 3-507	S-16
Gated Spillway for Ravstown	TR H-71-5	H-57		MP S-76-17	S-49
Reservoir	TR H-70-15	H-57		TP 79-3	CERC-32
GATOR Mine	MP M-76-3	M-13		TR M-77-45	M-33
	MP M-76-15	M-14		TR S-70-9/2	S-86
	MP M-77-13	M-15		TM 3-332	S-65
Gavins Point Dam	TM 2-404	H-41	Arkansas River		
GE-225 Computer Program	MP 2-583	MS-5	Auxiliary Channel, Yazoo River		
	MP 5-619	MS-5	Basin	MP 3-215	S-9
	MI 5-667	MS-5	Bankwamp Deposits	TR S-69-8	S-86
Gelatin Modeling	MP 4-969	S-26	Boring 93 UES	MP S-72-17	S-37
Gelled Nitromethane	MP N-75-9	W-12	Burkboard Mesa	PNE 5001P	W-17
Explosive	MP E-74-4	W-10	French Morono	TM 3-343/62	S-68
Jaregatslet Dam	TM 2-351	H-39	Jonesville Lock and Dam	MP 3-684	S-19
General			Lake Erie	MR 32-15	CERC-14
Electric Airplane Landing Mat	TM	S-58	Laterite Gravel	TR S-76-5	S-93
Investigation of Tidal Inlets		CERC-5	Mississippi River Deltaic		
		CERC-6	Plain	TR 3-483	S-76
Motors Proving Grounds	MP A-73-3	M-11	Red River	TM 3-319	S-64
Geobathymetric Survey	MP S-70-17	S-33	St. Francis River	MP 3-555	S-17
Geology			Western German	TM 3-343/63	S-68
Control of Sand Boils	MP S-75-22	S-47	Geomechanical Model Study	CR N-69-1	W-45
Data	MP 3-341	S-12	Geometric		
and Engineering Properties	MP 3-894	S-24	Annordanne	MP M-76-16	M-14
	MP 3-915	S-25	Characteristics	TR M-74-5	M-30
	MP 3-68-16	S-27	Parameters	RR H-77-1	H-29
	MP S-69-42	S-31	Geomorphin Study	CR Y-75-3	E-34
	PNE 322	W-14	Geomorphology	MP H-77-12	H-13
	PNE 505F	W-14		TM 29	CERC-27
	PNE 516	W-15		TM 34	CERC-27
	PNE 602F	W-15		TM 38	CERC-28
	PNE 723F	W-15		TM 42	CERC-28
	PNE 905F	W-15		TM 45	CERC-28
Examination	TM 65-11	W-20		TM 54	CERC-29
Investigation	PNE 719P	W-15		TM 128	CERC-43
	PNE 1103	W-16		TP 76-2	CERC-40
Literature	TR 3-712	S-82		TP 75-3	CERC-35
Map Folio	TR 5-562/F	S-79	Mississippi River	CR Y-74-2	E-34
Targets	TR 3-73-13	S-95	Geophysical		
Geological			Exploration	TM 138-1	S-58
Engineering	MP 3-63-24	S-28	Investigation, Prado Dam and		
	TM 55-12	W-23	Mentone Dam Site	MP S-75-6	S-46
Conditions	MP 3-895	S-24	Measurements	PNE 1111	W-17
Factors for Design Earthquake	MP 3-72-41	S-38	Methods	MP S-77-18	S-50
Features on Soil Strength	MP 3-70-25	S-33		MP S-77-24	S-52
Investigation			Survey of Cavernous Areas,		
Atchafalaya Basin		Z-1	Patoka Dam	MP S-79-1	S-52
Bozef-Texas Basin	TR 3-757	S-84	Techniques	MP S-73-36/1	S-42
Gold Meadows Area	MP 4-618	S-19	Geoprospecting Tunnel Right-		
Gravel Deposits	TM 3-273	S-62	of-Ways	TR S-78-17	S-96
H. Prototype Test Site	MP 3-11-7	S-44	Georgetown Harbor		
Mississippi River	TM 3-268	S-63		MP H-78-6	H-13
	TR 3-69-4	S-85	Geotechnical		
Gulf Outlet Channel	TM 3-259	S-10	Earthquake Engineering	RR S-71-3/7	S-54
New Orleans Harbor	TM 4-191	S-72	Engineering	R 75-5	CERC-20
Quanita River	TR 3-49-3	S-86		SM140	S-98
Red River-Atchafalaya Basin	TR 3-74-1	S-90	Properties of Laterite Gravel	TR S-76-5	S-93
St. Francis Basin	TR 3-659	S-87	Research	TM 3-332	S-3
			Gering Valley Project	TR 2-760	H-60

## 44-INDEX

Term	Report No.	Page	Term	Report No.	Page
German			Gravel	MP 3-664	S-19
English Vocabulary of Soils				TM 3-408	S-71
Terms	B 15	S-1		TM 5-419/5	C-29
Terrain	TR M-70-6	M-26		TR S-68-6/1	S-85
Germany	MP N-76-13	W-12		TR S-76-5	S-93
	TM 3-343/		Deposits	TM 3-273	S-62
	23-36	S-67	Gravelly		
Structures Test Program	TR N-77-2	W-41	Sand	TR S-76-17	S-95
Ghedi Air Base	TM 3-343/44	S-68	Soils	MP 3-676	S-19
Giebelstadt Airfield	TM 3-343/34	S-67	Gravitv		
GITI Reports		CERC-5	Dams	CR 2-40	W-45
		CERC-6		MP 2-386	W-2
Glacial				MP 1-718	W-4
Deposited Materials	CR 4-6/S-2	M-39		TR 2-472	W-30
Patterns	CR 4-6/2	M-38	Head Visrometer	MP H-74-3	H-14
Till	MP S-73-49	S-42	Monoliths		Z-6
Otter Brook Dam	MP 6-262	C-5	Waves	MP H-74-11	H-14
St. Lawrence Seaway Project	MP 6-573	C-9		R 6-73	CERC-17
Glasgow Air Force Base	MP S-73-33	S-43	Grav		
Glass Fiber-Resin Mixture	MP 4-776	S-21	Air Force Base	MP 4-313	S-11
Gloss-Reduction	MP M-76-1	M-13	Army Airfield	MP S-73-2	S-40
Glossary				TR 3-466/12	S-75
Coastal Engineering Terms	MP 2-72	CERC-8	Gravs Harbor		
Ecological Terms	MP 2-74	CERC-8			Z-11
GNOME	MP 6-514	C-8		TM 2-417	H-41
Gobi Blank Revetment	TM 55	CERC-29		TR D-78-11	E-14
Godman Army Airfield	MP S-71-1	S-34	Estuary	TR H-72-2	H-58
GOER	TR M-70-3	M-26	Grease		
XM520	MP 4-477	M-4	Aquatic Environments	TR D-77-26	E-10
GOES Water Data Transmitter	TR Y-77-5	E-33	Contamination	TR D-77-25	E-10
Gold Meadows Area, Nevada			Great		
Test Site	MP 3-618	S-19	Egg Harbor	TR H-78-11	H-68
Goodfellow Air Force Base	MP 4-305	S-11	Lakes	CETA 81-4	CERC-3
	MP 4-306	S-11		MP 2-75	CERC-8
Goodrich Landing Revetment	R 14-1	P-4		MP 7-75	CERC-8
Goodvear				MP H-76-12	H-16
Aluminum Mat Panels	MP S-69-36	S-30		MP H-76-2/E	H-15
Honeycomb Landing Mat	MP S-69-49	S-31		TP 80-7	CERC-32
	MP S-73-8	S-40		TR D-78-10	E-14
Goose				TR H-76-1	H-63
Air Base	MP 4-537	S-17	Design Wave Heights	MP H-76-21	H-17
Bav Airfield	TM 3-343/6	S-66	Inlets	TP 77-8	CERC-31
Gordv	MP 3-2	S-4	Wave Models	TR 73-1	CERC-34
Grain			Salt Plains Dam	TM 148-1	H-32
Shape	R 4-75	CERC-19	Soil Group	CR 3-150	M-37
	TP 76-11	CERC-30	Greene	TM 3-343/64	S-63
Sizes	TM 77-1	S-55		TM 3-343/	
Grand				67-68	S-69
Forks Air Force Base	MP 6-717	C-11	Green River Formation	MP S-78-3	S-52
	MP S-73-42	S-42	Greenland	CR 3-37	M-44
Island	MP 3-59	S-5		MP 4-216	S-10
Marais Harbor	TM 186-1	H-33		MP 2-597	H-8
	TM 186-2	H-33		TM 3-343/4-5	S-66
River	TR H-73-2	H-59		TM 3-414	M-15
Tower	B 3/1	H-1	Ine Cap		
Reach	TM 114-1	H-31	Research Program		Z-2
Granite	MP C-69-1	C-16	Snow	MP N-70-6	W-7
	MP C-71-1	C-18	1955 Program	TR 3-505/1	M-20
	TR N-72-6	W-37	1956-1957 Program	TR 3-505/2	M-20
Granitic Rock Ejecta	MP	W-11	Greenup		
Granodiorite	MP 6-846	C-13	Lock	TR 2-527	H-44
Granular				TR 2-734	H-50
Material	MP S-74-18	S-45	and Dam	TR 2-469	H-42
	TR S-76-12	S-93		TR 2-572	H-45
Soils	CR 3-53	S-105	Greenville		
	MP 3-473/6	S-15	Bridge	TM 2-366	H-40
Graphics	MP	MS-7	Front Levee	TM 182-1	S-58
Simulation	MP K-76-4	MS-7	Greens Ferry Dam	MP 6-342	C-6
				MP 3-582	S-18



Term	Report No.	Page	Term	Report No.	Page
Grenada			Ground (Cont)		
Dam	TM	S-64	Shock (Cont)	MP N-71-8	W-3
	TM 3-245	S-61		MP N-75-3	W-11
	TM 3-250	S-61		TR 3-71-4	S-87
	TR 3-603	S-79	Computation	CR S-71-8	S-113
Reservoir	TM	S-62	Effect	CR S-68-1	S-113
Grid				CR S-71-10	S-118
Generator	MP K-77-5	MS-7	Explosions	TR S-73-6	S-89
Photography	TM 68-15	W-24	Rock Cavities	MP N-74-1	W-10
Size	TR S-72-2	S-89	Induced Airblast Over-		
Griffiss Air Force Base	MP 4-514	S-18	pressures	TR 40	W-29
Groin	CETA 31-1	CERC-3	Instrumentation	MP N-70-7	W-8
	MP 1-72	CERC-3	Loading	CR 3-168	S-108
	MP 2-59	CERC-36	Measurements	MP N-75-4	W-13
	R 79-3	CERC-21		TR N-77-5	W-41
	TM 10	CERC-37	Phenomena	CR 3-171	S-117
	TM 114	CERC-43		MP N-76-10	W-12
Design	R 4-67	CERC-16	Phenomenology	MP N-73-2	W-9
	R 15-73	CERC-18	Subsurface Explosions	CR S-77-2	S-119
Grooving Tools	MP 3-346	S-12	Underground and Surface		
Ground	CR 3-112	M-45	Explosions	TR N-73-2	W-33
Acceleration	MP S-73-1/16	S-39	Support Equipment	MP M-73-4	M-11
Blast, Redstone Missile	MP 4-325	S-12	Surface Motion Study	TM 65-2	W-20
Cover	MP S-69-5	S-28	Vehicles	MP S-70-14	S-32
	MP S-73-35	S-42	Wash Flow	MP S-69-25	S-30
Crawling	CR 3-162	M-45	Groundwater		Z-15
Facilities	MP	W-10		b 36	S-1
Flotation	MP 4-459	S-15		CR	W-44
	MP 4-948	S-25		TM 65-7	W-20
	TR 3-737	S-82		TR 3-658	S-31
Motion	CR 3-158	S-114		TR 3-727	M-24
	MP 4-859	S-23		TR Y-78-1	E-33
	MP 4-969	S-26	Grout	CTIAC-5	C-40
	MP E-73-3	W-9		CTIAC-56	C-44
	MP E-75-7	W-11		MP 5-195	C-4
	MP N-76-11	W-12		MP 6-410	C-7
	MP N-76-15	W-12		MP 6-600/2	C-10
	MP N-76-16	W-12		MP 6-731	C-12
	MP N-78-8	W-13		MP 6-802	C-14
	MP N-78-9	W-13		MP C-71-5	C-19
	MP S-73-1/14	S-39		MP C-72-10	C-20
	MP S-73-1/17	S-40		MP C-73-4	C-23
	PNE 11-5	W-16		MP C-77-4	C-24
	PNE 1113	W-17		TM 6-419	C-29
	TR M-78-1	M-33		TR 6-609	C-34
	TR N-72-6	W-37		TR C-70-2	C-37
	TR S-71-14/1	S-83		TR C-74-5/1	C-36
	TR S-71-14/4	S-83	Deep Hole	MP 6-517	C-8
Calculations	CR	S-113		MP 6-650	C-10
	CR S-74-4	S-119	Fluidifiers	MP 6-720	C-11
	CR S-75-2	S-119	Mighty Epic Structures Program	CTIAC-20	C-41
	TR S-71-4/3	S-87		MP C-76-7	C-24
Design Earthquakes	MP S-73-1/3	S-39	Mixtures	MP 6-514	C-5
High-Explosive Experiments	MP N-72-10	W-9		MP 6-628	C-10
Measurements		Z-15		MP 6-640	C-10
	CR E-74-1	W-46		MP C-73-1/2	C-25
	TR N-75-1	W-39		TR 6-667	C-33
Predictions	CR S-71-10/2	S-113	Grouted Cutoff, Rocky Beach		
Pre-GONDOLA II	PNE 1115	W-17	Hydroelectric Project	MP 2-417	W-7
Project MIRACLE PLAY	MP N-70-8	W-8	Grouting	CTIAC-13	C-40
San Fernando Earthquake	MP S-76-1	S-48		IR 3-70-3	S-2
Seismic Design	MP S-73-1/4	S-39		MP 6-875	C-14
Radius Effects Study, Redstone				MP C-69-7	C-10
Arsenal	MP 4-910	S-25		MP C-78-6	C-26
Sensors	MP	M-12		MP S-70-19	S-33
	MP	M-16		TM 6-419/5	C-27
Shock		Z-15		TR 6-437	C-31

Term	Report No.	Page	Term	Report No.	Page
Grouting (Cont)			Habitat (Cont)		
Agent	TM 3-408/A	S-73	Development (Cont)		
Cement	MP 6-384	C-6	Field (Cont)		
Foundation Sands and Gravels	TM 3-408	S-73	Investigations (Cont)		
Mixtures	MP 6-773	C-12	Salt Pond No. 3	TR D-78-57	E-20
Spoured Foundation, Old River	MP C-78-19	C-26	Windmill Point	TR D-77-23	E-8
Support	MP 6-409	C-7	Site	MP D-78-1	E-4
	MP 6-425	C-7	Columbia River	TR D-77-38	E-12
	MP 6-700	C-11	Galveston Bay	TR D-78-15	E-15
Project			Hahn Air Base	TM 3-343/25	S-65
COWBOY	MP 6-419	C-7	Haleside Pumping Station	MP 3-595	S-18
Scroll	MP C-69-4	C-16	Half		
Underground Nuclear Test	MP 6-429	C-7	Moon Bay Harbor	TR 2-668	H-48
	MP-6-914	C-14	Tide Harbor	R 77-1	CERC-20
Growth/Dynamics	TR D-77-44/II	E-13	Wavelength Theory	MP S-70-28	S-33
Guam	TR H-75-1	H-61	Hamlin Beach Harbor	TR H-73-13	H-59
Guatemala Earthquake	MP	S-49	Hammond		
Guide Rail	MP 4-850	S-23	Bay, Michigan	CR 2-5	H-71
Guided Projectile Control			Lake	TR H-76-5	H-64
Housing	MP C-76-10	C-24		TR H-76-6	H-64
Guidelines				TR H-76-11	H-64
Dewatering/Densifying Dredged			Handbook		
Material	TR DS-78-11	E-27	Concrete and Cement	Handbook	C-1
Dredged Material Containment			Wildlife Habitat Development	TR D-78-37	E-18
Areas	TR DS-78-10	E-27	Handbar/Painted Pony	MP 6-875	C-14
Disposal Area Reuse Management	TR DS-78-12	E-27	Hannibal		
Material Placement in Marsh			Locks and Dam	TR 2-731	H-50
Creation	CR D-75-2	E-21		TR 2-796	H-53
Models for River Sedimentation	IR H-78-1	H-3	St. Louis Reach	MBM 15-1	H-22
Gulf			Thebes Reach	MBM 15-2	H-23
Carpentaria, Australia	R 3-74	CERC-19		MBM 31-2	H-23
Coast	TP 78-4	CERC-32	Harbor	B 2/1	H-1
	TR D-77-44	E-13		CETA 81-6	CERC-3
Farndalian Substage	MP Y-77-1	E-30		CR 2-122	H-72
Hurricane Camille	TR N-70-10	W-36		CR H-69-2	H-70
Inland Waterways	MP H-75-6	H-15		MP H-77-10	H-18
Coastal Plain	TR Y-78-5	E-33		RR 2-8	H-27
Intraoastal Waterway	MP H-76-7	H-16		SR 2	CERC-25
GWALL	IR K-78-1	MS-3		TP 80-6	CERC-32
Gyratory				TR 2-740	H-51
Compaction	MP 4-494	S-16		TR E-72-23	W-37
	TR S-68-6	S-85		TR N-69-4	W-34
Machine	MP 4-333	S-12	Breakwater, Crescent City,		
	MP-3-474	S-15	California	MP 2-171	H-5
	TR 3-595	S-78	Connected Basins	CR H-71-2	H-70
			Design		Z-1
			Entrance	R 25-73	CERC-18
				R 26-73	CERC-18
			Improvements, Wells Harbor	TR H-78-18	H-69
			Improvements, Port Washington		
			Harbor	TR H-77-1	H-66
			Nuclear Explosives	TM 70-12	W-25
			Oahu, Hawaii	TR H-76-8	H-64
			Oscillations	MP H-76-20	H-17
				MP H-77-2	H-17
			Barbers Point Harbor	TR H-78-20	H-69
			of Refuge	CR 2-5	H-71
				CR 2-7	H-71
				TR 2-523	H-44
			Kelleys Island	MP 2-560	H-8
			Shoaling, Port Orford, Oregon	TR H-74-4	H-60
			United States	TM	W-27
			HARD HAT Grouting Support	MP 6-575	C-9
			Hardened		
			Concrete	CTIAC-14	C-40
				MP C-69-10	C-16
				TR C-76-1	C-38
H-21 Helicopter					
Flexible Pavements	MP 4-180	S-8			
Landing Gear	MP 4-202	S-9			
Habitat					
Creation	CR D-76-2	E-21			
Data	TR M-77-4/1	M-33			
Development	MP D-77-5	E-4			
Dredged Material	TR D-78-37	E-18			
	TR DS-78-15	E-27			
	TR DS-78-16	E-28			
	TR DS-78-17	E-28			
	TR DS-78-19	E-28			
Field					
Investigations					
Apalachicola Bay	TR D-78-32	E-17			
Bolivar Peninsula	TR D-78-15	E-15			
Buttermilk Sound	TR D-78-26	E-16			
Nott Island	TR D-78-25	E-16			
Port St. Joe	TR D-78-33	E-17			
Rennie Island	TR D-78-11	E-14			

Term	Report No.	Page	Term	Report No.	Page
Hardened (Cont)			Heavy (Cont)		
Military Command Center	MP N-78-6	W-13	Metals	CR D-77-4	E-23
Shallow-Buried Structure	TR N-78-7	W-42		TR D-77-37	E-11
Structure	MP N-77-8	W-13		TR D-78-6	E-14
Hardness				TR D-78-42	E-18
Impact Areas, Yuma Proving			Minerals	TM 33	CERC-27
Ground	MP M-77-10	M-15	Helicopter	MP M-73-4	M-11
Program	MP	W-10	Downwash	MP S-74-17	S-45
Hardscrabble Bend	R 8-1	P-1	Blast Effects	TR 3-664	S-81
Harlan County Dam	TM 2-236	H-35	Protection	MP S-75-19	S-47
	TR 3-501	S-77	Landing		
Harmon Air Force Base	TM 3-343/3	S-66	Gear Loadings	MP 4-202	S-9
Asphalt	MP 4-172	S-8	Pad	MP 4-565	S-18
Harper Lake	MP S-73-6	S-40		MP 4-766	M-6
Harrison County, Mississippi	TM 107	CERC-42		TR 3-675	S-81
Harrisville, Michigan	CR 2-7	H-71		TR 3-686	S-81
Harry S. Truman Dam	TR H-77-8	H-66		TR 3-773	S-84
Hartwell Dam	TM 2-393	H-40	Zones	IR M-76-1	M-1
	TR 6-654/2	C-34		MP M-72-1	M-10
Harvesting of Aquatic Plants	TR A-78-3	M-51		TR M-69-3	M-25
Harvey Landing Mat	MP 4-615	S-19	Launching Pad, Ft. Benning	MP 4-620	S-19
	MP 4-747	S-21	Movement on Unimproved Terrain	TR M-74-1	M-29
	MP 4-786	S-21	Revetment	MP S-68-7	S-27
	MP 4-850	S-23		TR N-69-8/1	W-34
	MP 4-852	S-23	HEMSS		
	MP S-69-2	S-29	3T Experiment	CTIAC-57	C-44
	MP S-69-13	S-29	Cylindrical Test Beds	CTIAC-56	C-44
	MP S-69-29	S-30	Herbicide	CR A-77-1	M-52
	MP S-69-41	S-31		TR	M-48
	MP S-70-4	S-32		TR A-73-1	M-49
	MP S-71-29	S-36	Application Platforms	TR A-77-1	M-49
	MP S-72-38	S-38	Herbivorous Fish	TR	M-48
Hawaii	MP 4-355/7	M-3	Hercules	TR N-69-2/2	W-33
	MP H-76-8	H-16	Herpetofauna	TR A-78-2	M-49
	TR 2-644	H-47	HEST V	MP S-68-5	S-27
	TR H-75-3	H-61		MP S-68-23	S-28
	TR H-75-15	H-63		TR S-68-1	S-84
	RR H-74-2	H-29	Hevford, Oxfordshire, England	TM 3-343/105	S-70
Hawaiian Islands	MP H-77-6	H-18	Hickman Floodwall	TM	C-28
	TR H-77-16	H-67		TM	S-65
Hawk Missile	MP 4-784	S-21	High		
Hauser-Force Measurements	TR 2-685	H-48	Compressive-Strength Concrete	MP 6-520	C-8
HE Charges	MP 2-192	W-2		MP 6-567	C-8
	TR 2-482	W-30	Density Concrete	MP 6-698	C-11
				TR 6-635	C-34
Head			Explosive		
Loss	MP H-68-3	H-10	Charges	TR 2-547	W-30
	TM	S-65	Detonation		Z-14
of Passes	TM 2-356	H-39	Point-Detonating Ammunition	MP N-76-8	W-12
Heat and Blast Effects	TM	S-66	Frequency Radio Imaging	TR 3-769	M-24
	TM 3-372/2	S-72	Mobility Tactical Support		
	TM 3-377	S-72	Vehicles	TR M-76-3	M-31
	TM 3-394	S-72	Pressure Cap Model	CR S-77-2	S-119
Dispersion in Physical			Speed		
Estuarine Models	RR H-75-2	H-29	Penetration	TR 3-652	M-21
Hydration	MP C-69-11	C-16	Tire Loads	TR 3-652/7	M-21
	TM 6-410	C-29	Strength		
Strength Tests on Membranes	MP 4-847	S-23	Concrete	CTIAC-37	C-42
Heater-Remix-Overlay Maintenance	IR S-77-2	S-3		CTIAC-58	C-44
Heave	MP S-73-23/2	S-41		CTIAC-70	C-45
Foundation Soils	TR S-77-7	S-94		MP 6-698	C-11
Heavy				TR 6-635	C-34
Clay	TR S-76-16	S-94	Frost-Resistant Concrete	MP C-75-6	C-23
Duty			Highway Subgrades		Z-17
Flexible Pavements	MP 4-470	S-15			Z-18
Landing Mat	CR S-71-1	S-104		MP	S-47
	MP S-75-9	S-47	Hill AFB	MP 3-903	S-24
Membrane Airfield Surfacing	TR S-74-2	S-90			
Equipment Transporter	TR M-76-4	M-31			

## 48-INDEX

Term	Report No.	Page	Term	Report No.	Page
Hilo			Humboldt Bay	TR H-71-8	H-57
Bay	CR 2-60	H-72	Humidity	MP 6-279	C-5
Harbor	TR 2-792	H-53	Hunter		
Tsunami			Air Force Base	MP 4-98	S-6
Barrier	TR 2-742	H-51		MP 4-144	S-8
Model	MP 2-883	H-10		MP 4-379	S-13
	RR 2-3	H-27	Army Airfield	MP S-69-37	S-30
	RR 2-5	H-27		MP S-72-8	S-36
HIMO	TR M-76-3	M-31	Liggett Military Reservation	MP M-76-5	M-14
West Germanv Study Area	MP M-78-9	M-16		MP M-77-8	M-15
	MP M-78-10	M-16	Huntington		
Hirsch Auxiliary Field	MP S-69-43	S-31	Point Revetment	R 13-1	P-4
Historic Disposal Areas	MP Y-76-3	E-30	Reservoir Spillway	MP 2-876	H-10
History of the Waterways			Hurlburt Airfield		Z-7
Experiment Station	TR	MS-11	Hurricane	TM 56	CERC-29
Hiwassee Dam	CTIAC-32	C-42		TM 78	CERC-41
	MP C-78-10	C-26	Barrier		
HOBO, Grouting Support	MP 6-409	C-7	Narragansett Bay	MP 2-721	H-9
Holden Beach, North Carolina	MR 83-5	CERC-15		TR 2-754	H-52
Hole			Wareham-Marion, Massachu-		
Cover Designs	TR N-76-6	W-40	setts	TR 2-663	H-48
Springing	TR 28	W-29	Camille	TR N-70-10	W-36
	TR E-72-24	W-38	Carla	TP 77-13	CERC-31
Holt Lock and Dam	TR 2-698	H-49	Storm-tides	TM 120	CERC-43
	TR 2-745	H-51		TM 120A	CERC-43
Homestead Air Force Base	MP 4-142	S-8	Surge	MP 3-59	CERC-36
Homogeneous				MP 4-59	CERC-36
Clayey-Silt Test Section	TM 3-323/1	S-65		TM 26	CERC-27
Sand Test	TM 3-323/4	S-65		TR 2-662	H-48
HONDO	MP S-76-3	S-48		TR H-69-12	H-55
Honest John Rocket	MP 4-430	S-14	Barrier, Jamaica Bay, N. Y.	TR H-76-14	H-65
Honeycomb Landing Mat	MP S-69-49	S-31	Control Structures	TR 2-636	H-47
	MP S-70-21	S-33		TR H-76-16	H-65
	MP S-71-7	S-34	Heights	TR H-69-12/1	H-55
	MP S-72-4	S-36	Protection	MP H-72-1	H-12
	MP S-73-8	S-40	Tides	TR	H-47
	MP S-73-11	S-40	Wave Statistics	TM 98	CERC-42
Honolulu, Oahu, Hawaii	TR H-75-15	H-63	Hvacinth	MP M-73-13	M-11
Hoosic River	TM 2-338	H-38		TR	M-48
	TM 2-338/2	H-39		TR A-77-2	M-49
	TM 2-339	H-39	Hydrated		
	TR 2-755	H-52	Lime	MP 3-122/5	S-7
Hopper Dredges			Phases	MP C-72-5	C-19
Horizontal			Hydration Products	MP C-78-11	C-26
Displacement	TM 67-8	W-22	Hydraulic	MP 5-458/2	MS-4
Reinforcement	TR S-76-11	S-93	Analysis of Mississippi		
Stability	TR S-76-10	S-93	River Channels	R 19-1	P-4
Hot			Articles	MP 2-291	H-5
Mix			Capacity of the Mississippi		
Asphaltic Concrete	MP 4-44	S-5	River	TR 12	Z-8
Bituminous Pavement	MP 4-121	S-7	Characteristics		
	MP 4-333	S-12	Mississippi River Channels	R 19-2	P-4
Weather Concreting	CTIAC-36	C-42		R 19-3	P-4
Houghton, Michigan	MP M-74-1	M-12	New York Harbor	MP H-76-18	H-17
Housatonic River	TR H-69-4	H-54	Tidal Channels	TM 66-17	W-21
Houston Ship Channel	MP H-69-2	H-11	Design Criteria		
	TR H-73-12	H-59		MP 2-97	H-4
Howell-Bunger Valve			Effects	RR 2-1	H-27
Narrows Dam	TM 2-294	H-37	Efficiency	TR D-78-12	E-14
Summersville Dam	TR H-71-6	H-57	Fill at Yerba Buena Island	TM 116-1	S-56
HRS Prototype Test Site	MP S-71-2	S-34	Forces Stream	R 10-1	P-2
Hudson River			Fracturing	CR S-73-2	S-101
	MP C-78-6	C-26	Soils	MP S-77-6	S-50
Channel	TR 2-694	H-49	Friction Factors	MP 2-149	H-4
Huelsman Quarry Stone	MP 6-281/A	C-5	Jump	MP H-69-1	H-11
Hugo Dam	TR H-69-15	H-55		MP H-70-4	H-12
Hugoniot Equation	MP C-74-10	C-22			
	TR 6-669	C-34			
Hulah Dam	TM 2-253	H-36			
Emergency Bulkhead	MP H-73-8	H-14			

Term	Report No.	Page	Term	Report No.	Page
Hvdraulic (Cont)			Hvdrologie (Cont)		
Laboratories			Variables	B 64-1	MS-1
England and Franee	MP 2-578	H-8	Transport		
Europe and England	MP 2-401	H-6	Radionuclides	TR 30	w-29
France and England	MP 2-164	H-5	Tritium	TM 70-7	w-24
The Netherlands and England	MP 0-69-1	MS-7	Hvdrological		
Laboratory			Research	MP H-72-6	H-13
	MP 2-434	H-7	Study	TM 33-2	MS-10
	MP 2-543	H-7	Hvdro meteorological Reports		
	MP 2-734	H-9	Hvdropel	TM	C-27
Directors to USSR	MP 2-464	H-7	Hvdroponic Study of Heavy		
Model	B 37	H-2	Metal Uptake	TR D-76-5	E-5
	GITI 6	CERC-5	Hvdro-Power Plant Transients,		
	GITI 22	CERC-6	Garrison and Oahe Dams	TR H-68-1	H-53
	MP H-70-5	H-12	Hvdrostatic		
	MP H-76-11	H-16	Pressure	TM 151-1	S-37
	MP H-78-3	H-19	Measuring Devices, Wappa-		
	RR H-75-3	H-29	pello Dam	TR 3-460	S-75
	SR 5	CERC-25	Response	MP 3-72-35	S-38
	TM 2-364	H-39	Hvdrothermal Study	TR H-76-22	H-66
Investigation	TR H-77-5	H-66		TR H-77-5	H-66
Regime	TR D-77-6/A	E-6	Hyperion Beach	MP 4-74	CERC-8
	TR D-77-20/A	E-8	Hvpoenters for Seismographic		
	TR D-77-30/A	E-10	Networks	MP S-73-9	S-53
	TR D-77-42/B	E-13	Hvpothetical		
Research	/B	Z-3	Floods	MBM 29-1/A-H	H-23
	RR 1	Z-5		MBM 31-4	H-23
	RR 2	Z-5		MBM 43-1	H-24
	RR 3	Z-5	Storms	MBM 42-1	H-24
Roughness	MP H-73-2	H-13	Hvsteresis	CR S-76-8	S-115
Structures	CTIAC-15	C-40	Hvsteretic		
	MP 2-414	H-7	Material	CR S-68-1/3	S-113
	MP C-75-4	C-23	Media	CR S-69-1	S-113
	MP H-71-5	H-12		TR S-71-12	S-89
	MP S-71-23	S-35			
Verification	MP H-73-6/1	H-19	IBM-650 Program	TR 6-540	C-31
	TM 2-337/1	H-38		TR 6-589	MS-11
	TR 2-735/1	H-50	ICBM Facilities	MP 3-449	S-15
	TR H-73-12/1	H-59	Ice	CR 2-71	W-47
Hvdrilla	TR	M-48		TR 1-794	w-33
Hvdrovalone	CR D-73-1	E-24	Conditions	CR H-74-1	H-70
Hvdrodynamic	TR D-78-15/A	E-15	Cratering	TM 66-7	W-21
Delaware River Estuary Model	RR H-75-3/1	H-29	Flushing	TR H-76-9	H-64
Great Egg Harbor and Corson			Harbor	MP 2-465	H-7
Inlets	TR H-78-11	H-68	Iceland	MP 6-235	C-5
Model	CR H-75-1/			TM 3-343/1	S-65
	17-6	H-70		TM 3-343/8	S-66
Hvdrographic			Inthvoplankton Studies	TR D-77-30/D	E-11
Conference, 5-6 November 1975		Z-2	Idris Airport	TM 3-343/30	S-69
Survey	R 8-71	CERC-17	Igloo Wave Absorber Tests	MP H-76-22	H-17
	TM 32	CERC-38	Igneous Rocks	MP C-71-2	C-13
	TR H-77-10	H-66	IITRI Soil Strain Gage	IP N-73-1	W-1
Conference			Illinois		
9-11 May 1972		Z-2	Central Railroad Relocation	TM	S-62
30-31 May 1973		Z-2	River	MBM 31-5	H-23
21-22 May 1974		Z-2		P Y	H-26
8-9 November 1977		Z-3		TR M-76-6	M-32
4-5 December 1979		Z-3		TR Y-75-1	E-32
Hvdrologie				TR Y-75-2	E-32
Characteristics	CR 3-23	M-44	Eleotfishing Survey	TR Y-76-1	E-32
Data		Z-13	Floodplain Animals	CR Y-75-4	E-34
	MP 5-193	MS-4	Geomorphic Study	CR Y-75-2	E-35
	TR M-77-4/2	M-33	Vegetational Study	CR Y-75-3	E-34
Equipment		MS-1	Waterway	MP C-73-4	C-25
Geometry	TR 5-625/F	M-21		MP Y-74-1	F-29
	TR 3-726/V	M-23			
	TR 3-783/D	M-24			
Phosphorus Model	TR A-78-2/				
	2/IV	M-50			

## 50-INDEX

Term	Report No.	Page	Term	Report No.	Page
Illitic Soil	CR 3-73/1	S-103	Inlet (Cont)		
Image Contrasts	TR M-74-8/1	M-30	Discharge	R 81-1	CERC-22
Imagery			Entrance	TM 8	CERC-26
Earthquake Analysis	MP S-73-1/11	S-39	Equation	R 81-9	CERC-22
Missions	IR M-78-2/B	M-1	Hydraulics	GITI 14	CERC-6
Imaging Radar	R 79-8	CERC-21	Insents for Control of		
Impact	MP C-77-11/3	C-25	Waterhvairinths	TR A-77-2	M-49
	MP M-77-10	M-15	Inspection of Sites in Al-		
	MP M-77-13	M-15	buquerque District	INR 3	Z-4
	MP N-76-10	W-12	Inspectors Manual for Flexible		
	TR S-78-14	S-95	Pavements	TM	S-72
Compacted Kaolinite	MP S-75-11	S-47	Instrument	MP S-76-12	S-49
Compactor	MP 4-127	S-7		TM 3-240/3	M-17
Velocity	TR 3-462/4	M-20	Canister Plancement Conditions	TR N-77-5	W-41
Impedence Measurement	MP N-77-6	W-13	Detect Steel Embedded in		
Imperial Beach, California	MR 78-4	CERC-12	Portland-Cement Concrete	MP 6-762	C-12
	TR H-77-15	H-67	Hartwell Dam	TR 6-654/2	C-34
	TR H-77-22	H-67	Measure the Moisture Content	TR C-76-1	C-38
Impermeabilizing Sand	MP 3-106	S-7	Measurement of Hydraulic		
Impermeable Breakwaters	CETA 80-7	CERC-3	Forces	R 10-1	P-2
Impervious Walls	TM 3-2	S-55	Measuring	CR 2-151	H-71
Impulse-Type Loads	TR S-68-9	S-85	Turbulence	R 10-3	P-2
In				R 10-4	P-2
Cell Incident	MP S-72-13	S-37	Pore Pressures in Concrete	TR 6-654	C-34
Place Density Determinations	MP 4-197	S-9	Instrumentation		Z-2
Shore Harbor	TR 2-740	H-51		MR 80-8	CERC-13
Situ				TM 21	CERC-27
Density	RR S-76-2/4	S-54		TR S-74-10/I	S-91
Moduli	MP S-75-10	S-47		TR S-75-11/I	S-92
Inclinometers	MP S-76-12	S-49	Arkansas River Lock and Dam 5	MP S-78-11	S-53
Index			Columbia Lock	MP S-72-30	S-38
Clay Shales	TR S-71-6/2	S-87		MP S-74-24	S-46
Compaction Characteristics	MP 4-269	S-10	Conference on Earth and		
India			Concrete Dams	MP	S-33
Canal Zone Analogs II	CR 3-30/II	M-43	Earth Stresses	MP 1-885	W-5
Yuma Analogs No. 4	CR 3-11/4	M-42	Hydraulic Research	MP 2-156	H-5
Indian Creek Pumping Station,			Mississippi Basin Model	MBM 1-5	H-21
Mankato	TR H-78-8	H-68	Old River Lock	TR S-72-10	S-89
Indonesia, Canal Zone Analogs			Port Allen Lock	TR S-68-7	S-85
VII	CR 3-30/VII	M-43	Test Vehicles	TR 3-783/A	M-24
Industrial Wastes and Sludges		Z-15	Vehicle Mobility Testing	CR 3-154	M-35
Inelastic Two-Phase Medium	CR S-76-7	S-115	Insulating		
Infauna	TR D-77-34	E-11	Layers in Pavement	TR S-74-8/IV	S-90
	TR D-78-42	G-18	Materials for Mass Concrete	TR C-70-4	C-37
Inflow	TR M-78-2	M-33	Intake		
Influent	TR D-78-16	E-15	Bayou Bodeau Outlet Structures	TM 174-1	H-33
	TR D-78-24	E-16	Dardanelle Lock	TR 2-573	H-45
Information			Gate		
Dissemination	CR D-77-1	E-25	Catapult Study	TR H-77-8	H-66
System	TR M-74-6	M-30	Fort Randall Dam	TR 2-435	H-42
Infrared			Losses	MP 2-320	H-6
Emissivity of Soils	TR 3-693/4	M-23	Proposed Delaware City Plant	MP 2-125	H-4
Roof Moisture Surveys	IR M-78-1	M-1	Structure	MP 2-337	H-6
Spectrophotometer	MP 4-547	M-4	Fort Penk Dam	TM 160-1	H-32
Survey of the Walter F.			Interaction Between Soils		
George Lock and Dam	MP M-70-3	M-9	and Pressure Cells	TR S-76-7	S-93
Inhomogeneities	TM 66-6	W-21	Interactive Graphics		Z-6
Inland			Finite Element Method Grid		
Disposal	TR D-78-28	E-17	Generator	MP K-77-5	MS-7
Dewatered Dredged Material	TR D-77-33	E-11	Lock-Culvert Analysis	MP K-77-2	MS-7
Waterway		Z-12	Postprocessor for Finite		
Waterways	MP H-75-6	H-15	Element Method	MP K-77-4	MS-7
	MP N-71-5	W-8	STRUPUT	MP K-77-3	MS-7
	MP N-72-8	W-9	Interagency Briefing		
Inlet	GITI 20	CERC-5	February 1975	MP D-75-14	E-2
	MR 80-3	CERC-12	August 1975	MP D-76-14	E-3
	MR 81-1	CERC-13	February 1976	MP D-76-19	E-3
	TM 94	CERC-42	Interlocking Blocks	R 2-67	CERC-16
	TP 77-8	CERC-31			

Term	Report No.	Page	Term	Report No.	Page
Intermittent Loading	TR Y-77-4	E-33	Jaenichen on Side-Channel		
Internal Friction	MP S-69-12	S-29	Spillways	B 2/4	H-1
International			Jamaica Bay, New York	TR H-76-14	H-65
Association for Hydraulic			James		
Research	MP 2-164	H-5	Connally Air Force Base	MP 4-310	S-11
	MP 2-522	H-7		MP 4-376	S-13
Organization			River	MP 2-912	H-10
Standardization	MP 2-434	H-7		MP H-75-1	H-14
Standards	MP 2-401	H-6		TR D-77-23	E-8
Society for Terrain-Vehicle				TR D-77-45	E-13
Systems	MP M-75-7	M-13	Jav Plate-Type Vibratory		
Standards Organization			Compactor	MP 4-190	S-9
Technical Committee	MP 2-734	H-9	Jefferson Proving Ground	MP M-74-4	M-12
Interoceanic Canal	TM 68-7	W-23		MP S-74-31	S-46
	TR H-78-13	H-68	Jekvll Creek	TR H-72-5	H-58
Route 25	MP M-72-9	M-11	Jennite J-16 Seal-Coat Material	MP 4-287	S-11
Sea-Level Canal	TR 8	Z-8	Jet	RR H-71-2/I	H-28
Interstate Sanitation Commission	MP 2-558	H-8	Aircraft	TM	S-66
Intertidal Zone	MR 83-3	CERC-15		TM 3-394	S-72
Intracoastal Waterway			Blast	MP 4-79	S-5
	TM 221-1	H-35		TM 3-420	S-73
Intratheater Transportation	TR M-70-13	M-27	Fuel Spillage	MP 4-98	S-6
Invertebrate	MR 81-5	CERC-13		MP 4-225	S-10
Inverted-T Walls and Floodwalls			Fiberglass-Reinforced DCA-		
In-Water Containment Structures	TR D-78-31	E-17	1295	MP S-75-21	S-47
Iowa			Engine Exhaust Blast Tests	MP S-69-35	S-30
Sediment Concentration				MP S-69-36	S-30
Measuring System	TP 76-6	CERC-30	Fuel	MP 4-79	S-6
Tributaries	MBM 42-1	H-24		MP 4-245	S-10
Iran	CR 3-11/4	M-42	Resistance	MP 4-57	S-5
Iron Stain	TR 6-518/3	C-31	Resistant Coating	MP 4-134	S-7
Irradiation	MP M-69-3	M-8	Geometry Sketches	RR H-71-2/I	
Irregular Wave	CETA 79-5	CERC-2		I/2	H-28
	CETA 80-1	CERC-2	Jetcrete	TM	C-27
	TP 80-3	CERC-32	Jetport	CR H-74-1	H-70
	TP 82-1	CERC-33	Island	CR H-75-1/	
Model			17-6	17-6	H-70
Irrigation Tunnel for St. Mary			Model	CR H-75-1	H-70
Dam	TM 2-262	H-36		MP H-76-3	H-15
Irving Grid Landing Mat	TM	S-59		TR H-74-6	H-60
Isabella Project	MP S-78-16	S-53	Jetty	CETA 81-1	CERC-3
Island				MP 2-453	H-7
Creek Dam	TR 3-464	S-75		R 79-14	CERC-21
Tau, American Samoa	TR H-74-16	H-61		TR H-72-2/2	H-58
Isotropic				TR H-72-2/4	H-58
Consolidation	TR S-75-13	S-92		TR 2-735/2/4	H-51
Shear Strength	MP S-76-2	S-48	A and B	GITI 19	CERC-6
Isotropically Consolidated Clay	MP S-73-60	S-43	Construction	R 76-4	CERC-20
Italy	TM 3-343/			MP 2-472	H-7
	37-47	S-67	Galveston Harbor Entrance		
		and	Head Repair Sections, Humboldt		
		S-68	Bay	TR H-71-8	H-57
Iteration Procedure	CR 3-129/1	S-113	Models	TM 133-1	H-32
Iterative			Siusslaw River	TR 2-631	H-46
Analysis Procedure	TR 6-818/1	C-36	Stability Study, Masonboro		
Layered Elastic Computer			Inlet	MP H-78-12	H-20
Program	TR S-76-3	S-93	Jiger Vehicles	MP 4-743	M-5
Iwo Jima Air Force Base	MP 4-880	S-24	Jim Woodruff Dam	TM 2-340	H-39
			John		
			Dav Lock and Dam	MP 2-465	H-7
			H. Kerr Project	TR 3-464	S-75
			Martin Dam	TM	C-27
J. Percy Priest Dam	TM 2-239	H-36	TM 166-1	166-1	H-33
Jackson			Redmond Dam	TR 2-611	H-46
Dam	TR 2-531	H-44	Johnstown, Pennsylvania	TM 2-303	H-38
Field Test	MP S-73-28/1	S-41	Joint Sealing Materials	MP 6-70	C-2
Hole Flood Control	TR 11	Z-8	Jointed Rock Mass	CR 1-135	W-46
Lock	TR 2-685	H-48		TR N-73-7	W-39
and Dam	TR 2-532	H-44		TR N-78-4	W-42

## 52-INDEX

Term	Report No.	Page	Term	Report No.	Page
Joints	TR 3-433	S-74	Keflavik Airfield	TM 3-343/1	S-66
Concrete	TR 3-779	S-84	Kelleev Island	MP 2-560	H-8
Mass Concrete	TR 6-518	C-31	Kellv AFB	TR 3-459	S-75
Rigid Pavements	TM	C-27	Kempe Bend Revetment	R 9-1	P-2
Sealing Rebar Penetrations	MP S-72-43	S-38	Kentucky Reservoir	MBM 23-2	H-23
Joist Svstems	MP N-72-7	W-9		MBM 23-3	H-23
Jones Bluff Lock	MP N-75-6	W-11	Kewalo Basin, Honolulu	TR 2-767	H-52
and Dam	TR 2-718	H-50		TR H-75-15	H-66
Jonesville	TR H-69-17	H-56	Kever	B 61-2	MS-1
Floodwall and Pumping Plant	TM	S-64	P-8	B 58-2	MS-1
Lock	TR 2-678	H-48	Kevstone Dam	TR 2-555	H-44
and Dam	MP 3-571	S-18	KFOC	TM 65-5	W-20
	MP 6-603	C-9		TM 66-2	W-20
	MP 3-684	S-19	Khon Kaen Area	CR 3-156/E	M-42
	TR S-68-10	S-85	Khouribga Airfield	TM 3-343/10	S-66
Jordan Creek	TR Y-73-10	E-33	Kiamichi River	TR H-69-15	H-55
Jubail Harbor, Saudi Arabia	TR H-76-2	H-64	Kiakapoo River	MP Y-76-5	E-30
	TR H-76-20	H-65	Kill Channels	MP 2-953	H-10
Jumbo			Kincheloe Air Force Base	MP S-73-30	S-42
Jets	MP S-69-52	S-31	Kinetic		
Truck	MP 4-438	M-3	Energv	TM 96	H-31
Juneau, Alaska	MP 2-648	H-8	Project ESSEX I	MP N-77-2	W-12
Jungle Trail	MP M-69-5/1	M-8	Kinzua Dam	CTIAC-67	C-45
			Kirtland Air Force Base	MP 4-3/7	S-4
				MP S-72-27	S-37
			Kitzingen Airfield	TM 3-343/35	S-67
			Knik Arm, Alaska	Z-11	
				TP 76-1	CERC-30
K. I. Sawyer Air Force Base	MP S-73-15	S-41	Knox Fallout Prediction Svstem	TM 65-5	W-20
K <sub>o</sub> Testing in Cohesionless Soils	TR S-75-16	S-92		TM 66-2	W-20
Kahului Harbor	TR 2-644	H-47	Kootenai River	TR H-76-17	H-65
Kaiser Landing Mat	MP 4-850	S-23		TR H-76-21	H-65
	MP 4-881	S-24	Kwajalein, Marshall Islands	MP 4-858	S-23
	MP 4-897	S-24		MP S-68-14	S-27
	MP S-69-35	S-30			
	MP S-69-41	S-31			
	MP S-70-21	S-33			
	MP S-71-4	S-34	La		
	MP S-71-7	S-34	Guardia Airport	MP 2-641	H-8
	MP S-72-4	S-36	Jolla, California	TM 82	CERC-41
	MP S-73-11	S-40	Laboratory		
Kalamazoo River	TR 2-465	H-42	Apparatus	MP S-70-7/1	S-32
Kanawha River	MP H-77-1	H-17	Determination of Shear and		
Kaneohe Bay, Oahu, Hawaii	RR H-74-2	H-29	Young's Moduli	MP S-78-12	S-32
Kansas			Investigation of Slipform		
City			Construction	TR C-74-3	C-38
Floodwall	MP 6-72	C-2	Methods of Determining Damping	MP S-72-11/2	S-36
Lonal Protection	MBM 32-1	H-24	Procedure in Testing Soils and		
River	MP 2-590	H-8	Sediment	TM	S-56
Kaolinite	CR 3-101	S-112	Soils Testing	MP S-71-16	S-35
		and	Test Program	MP 4-785	S-21
		S-113	Labrador, Canada	TM 3-343/6	S-66
	MP S-75-11	S-46	Lanquering of Sampling Tubes	TR 3-514	S-77
Karachi, West Pakistan	TM 3-343/126	S-71	LaFarge Lake	MP Y-76-5	E-30
Karol-Warner Conbel Consol-				MP Y-77-2	E-30
idation Loading Devine	MP 3-478/2	S-15	Lages Air Force Base	TM 3-343/17	S-67
Karup Air Base	TM 3-343/57	S-68	Lagoons	MP Y-77-5	E-30
Kaskaskia			Laguna Army Airfield	MP S-73-50	S-43
Lock	CTIAC-60	C-44		TR 3-466/14	S-75
River	MP 6-730	C-12	Lahaina Harbor, Hawaii	MP H-76-8	H-16
	TR H-69-1	H-54	Lajes Air Force Base	MP 4-179	S-8
Kastellion Air Base	TM 3-343/66	S-68	Lake	CR H-75-1/	
Kaw Dam	TR H-70-14	H-57		17-5	H-70
Kawaihae Harbor	TR 2-806	H-53	Conway	TR H-73-4	H-59
Kavasinger Bluff Dam	TR 2-809	H-53		TR A-78-2	M-49
Keesler Air Force Base	MP 4-694	S-20			and
	MP S-69-45	S-31			M-50



Term	Report No.	Page	Term	Report No.	Page
Lake (Cont)			Landing		
Dardanelle	TR H-77-4	H-66	Facilities	TM 3-416	S-73
Erie	CR H-75-1/ 17-6	H-70	Mat	CR S-69-7	S-115
	MR 80-10	CERC-13		CR S-71-1	S-104
	MR 82-9	CERC-14		CR S-71-3	S-99
	MR 82-15	CERC-14		CR S-74-1	S-104
	TM 37	CERC-38		CR S-75-3	S-110
	YR 2-456	H-42		IR S-69-3	S-2
International Jetport Model	TR H-76-1/1	H-63		IR S-69-4	S-2
	CR H-74-1	H-70		IR S-70-2	S-2
	CR H-75-1	H-70		IR S-74-2	S-3
	MP H-76-3	H-15		MP 4-29	S-4
Waterway	TR H-74-6	H-60		MP 4-51	S-5
Huron	TR H-70-3	H-56		MP 4-221	S-10
Koonanusa	TR H-76-1/4	H-64		MP 4-317	S-12
Level	TR H-74-15	H-61		MP 4-581	S-13
	TM 36	CERC-38		MP 4-599	S-13
	TM 37	CERC-38		MP 4-615	S-14
	TM 38	CERC-38		MP 4-655	S-14
Michigan	CR 2-46	H-71		MP 4-656	S-14
	MP 10-75	CERC-9		MP 4-747	S-21
	MR 79-3	CERC-12		MP 4-753	S-21
	MR 81-2	CERC-13		MP 4-759	S-21
	TP 76-16	CERC-30		MP 4-786	S-21
	TP 79-4	CERC-32		MP 4-787	S-22
	TM 36	CERC-38		MP 4-789	S-22
	TR 76-1	CERC-34		MP 3-798	S-22
	TR H-76-1/3	H-64		MP 4-817	S-22
Maracaibo	TM 106-1	H-31		MP 4-820	S-22
Okeechobee	TM 56	CERC-29		MP 4-884	S-24
	TM 150-1	S-57		MP 4-886	S-24
	TM 150-2	S-57		MP 4-897	S-24
	TR 2-449	H-42		MP 4-967	S-26
Ontario	TM 38	CERC-38		MP S-68-9	S-27
	TR H-70-3	H-56		MP S-68-11	S-27
	TR H-76-1/2	H-64		MP S-69-2	S-28
Ouachita	TR 1-647/2	W-30		MP S-69-3	S-28
Pontchartrain	MP 3-842	S-23		MP S-69-7	S-28
	MP S-75-8	S-47		MP S-69-17	S-29
	TR 2-636	H-47		MP S-69-28	S-30
	TR S-75-6	S-91		MP S-69-29	S-30
Superior	TR H-76-1/5	H-64		MP S-69-39	S-30
Surfaces	TM 25	CERC-38		MP S-69-40	S-31
Traverse Project	TM 118-1	S-56		MP S-69-41	S-31
Washington Ship Canal		Z-11		MP S-69-49	S-31
Waterways Experiment Station	MP H-68-4	H-10		MP S-70-4	S-32
	TM	MS-10		MP S-70-5	S-32
Lakenheath, Suffolk, England	TM 3-343/104	S-70		MP S-70-6	S-32
Lakeshore Processes	MP 1-75	CERC-8		MP S-70-9	S-32
Laminar				MP S-70-21	S-33
Boundary Layer	TM 117	CERC-43		MP S-70-23	S-33
Flow	TM 47	CERC-39		MP S-70-26	S-33
Laminated Wood Airplane Landing				MP S-71-3	S-34
Mat	TM	S-58		MP S-71-7	S-34
Lance Missile Launcher	MP 4-920	S-25		MP S-71-21	S-35
Land	MP 4-64	CERC-7		MP S-71-29	S-36
Application of Waste				MP S-72-4	S-36
Materials	MP D-76-5	E-3		MP S-72-5	S-36
Enhancement	CR D-74-7	E-21		MP S-72-16	S-37
Improvement	MP D-76-13	E-3		MP S-72-38	S-38
	TR DS-78-21	E-28		MP S-72-39	S-38
Management	MP Y-78-2	E-30		MP S-72-40	S-38
Marine Interfaces	MP 4-829	M-6		MP S-73-8	S-40
Pans	MP H-68-4	H-10		MP S-73-11	S-40
	TM	MS-10		MP S-74-6	S-44
Use	MP D-78-4	E-4		MP S-74-12	S-45
	TR D-77-43	E-13		MP S-74-14	S-45
	TR D-78-55	E-19		MP S-75-9	S-47
	TR DS-78-20	E-28		MP S-75-13	S-47
Value	TR D-78-19	E-16		MP S-76-23	S-50
Landfill		Z-15		MP S-77-1	S-50
	CR D-74-2	E-23		TM	S-58

## 54-INDEX

Term	Report No.	Page	Term	Report No.	Page
Landing (Cont)			LANDSAT		
Mat (Cont)	TM	S-59	Digital Data	MP M-76-16	M-14
	TM 211-2	S-59	Multispectral Data	TR M-77-2	M-32
	TM 211-3	S-59	Landscape		
	TM 211-4	S-59	Development	CR D-75-5	E-24
	TM 212-1	S-59	Geometr	MP 3-521	M-4
	TM 212-2	S-59	Landslide		
	TM 212-3	S-59	Generated Water Waves	RR H-75-1	H-29
	TM 212-4	S-59		TR H-74-15	H-61
	TM 212-5	S-59	Induned Water Waves	MP S-73-1/15	S-39
	TM 212-6	S-60	Landstuhl Air Base	TM 3-343/26	S-67
	TM 3-266	S-62	Laneport Dam	TR S-71-6/3	S-87
	TM 3-324	S-65	Langlev		
	TM 3-400	S-73	Air Force Base	MP 4-722/4	S-20
	TM 3-418	S-73	Field		Z-14
	TR 3-433	S-74	Laon-Couvron Air Base	TM 3-343/21	S-67
	TR 3-461	S-75	Laredo Air Force Base	MP S-69-44	S-31
	TR 3-539	S-78	Larisa Air Base	TM 3-343/68	S-69
	TR 3-563	S-73	Larson Air Force Base	MP 3-534	S-17
	TR 3-574	S-78	Laser		
	TR 3-592	S-78	Dam Alignment Instrument	MP 0-73-4	MS-8
	TR 3-634	S-80	Profilometer System	MP M-73-7	M-11
	TR 3-677	S-81	Radiation	TR	M-48
	TR 3-800	S-84	Water Hvarinth Growth	TR	M-48
	TR 3-812	S-84	Laterite Gravel	TR S-76-5	S-93
	TR 3-820	S-84	Latex		
	TR S-76-10	S-93	Base Concrete Curing Compounds	MP 4-819/1	S-22
AM2	MP 4-850	S-23	Systems for Dust Control	CR 3-172	S-104
	MP 4-852	S-23		CR S-70-4	S-104
England AFB	TR 3-679	S-81	Latisteel Airplane Landing Mat	TM	S-58
Failure Study	MP 4-881	S-24	Latticework	MP S-71-17/4	S-35
Forward Airfields	CR 4-9	S-109	Launch Facility		
	CR 4-10	S-119	Foundation	MP S-70-20	S-33
	MP 4-113	S-7	Space Vehicles	MP 4-576	S-18
Ground Flotation	MP S-70-30	S-34	Lawn Sod Production	CR D-75-1	E-21
Membrane-Enveloped Soil			Lawson		
Lavers	MP S-75-14	S-47	Air Force Base	MP 4-3/3	S-4
Modified			Army Airfield	MP 4-411	S-14
M8	TR 3-507	S-77		MP S-69-19	S-29
MX18-B	MP S-69-4	S-28		TR 3-466/9	S-75
MX18-D	MP S-71-28	S-36	Layered		
MX18-E	MP S-73-9	S-40	Elastic Theory		Z-16
Overlap	IR S-69-6	S-2	Media		Z-15
	MP S-69-27	S-30		TR E-72-31	W-38
	MP S-76-24	S-50	Systems	MP M-69-8	M-9
Panels	MP 4-788	S-22	LBGR Locations	MP	S-48
	MP S-69-35	S-30	Le Verdon, France	TM 3-423	S-73
Steel	TM 212-8	S-60	Leachate	TR D-78-20	E-16
Surfaced				TR D-78-43	E-18
Airfields	MP S-73-27	S-41		TR DS-78-7	E-27
SATS Airfield	TR S-75-2	S-91	Leakage in the Triaxial Test	CR 3-84	S-106
Subgrades	IR S-70-3	S-2	Lean		
	MP S-70-19	S-33	Clav	TR 3-545/2	M-20
Test Facility	MP S-69-50	S-31		TR S-68-6/2	S-85
	MP S-72-10	S-36	Subgrade	TM 3-349/1	S-71
Tie Bars	TR C-69-3/2	C-36	Mass Concrete	TM 6-380	C-29
Uplift	MP S-75-16	S-47		TR C-74-2	C-38
XM18E1	MP S-69-51	S-31	Least Squares	MP 5-667	MS-5
Pads	TR 3-675	S-81	Leompte Control Structure	TM 3-292	S-63
	TR 3-686	S-81	LEO	CETA 81-5	CERC-3
	TR 3-773	S-84		MP 2-70	CERC-7
Sites	MP M-73-7	M-11		MR 82-6	CERC-14
Strip	MP 4-701	S-20		R 4-74	CERC-19
	MP 4-844	S-23		TM 49	CERC-28
	MP 4-931	S-25	Leopard 2 AV Tank	MP M-77-3	M-15
	TR 3-554	S-78	Lesser Antilles	MP 6-400	C-6
Eglin Air Force Base	MP 4-110	S-7			



## 56-INDEX

Term	Report No.	Page	Term	Report No.	Page
Littoral (Cont)			Look (Cont)		
Zone	MP 7-70	CERC-7	Filling and Emptying System	MP H-76-13	H-17
	TP 77-5	CERC-31	Holt Lock and Dam	TR 2-698	H-49
Livingston Crater	CR 2-39	W-17	Gates	TR 2-651	H-47
LN305	MP M-73-5	M-11	Hastings, Minnesota	TM 117-2	S-56
LN309	MP M-71-4	M-10	No. 19, Mississippi River	TR 2-537	H-44
LNG			Performance	MP H-74-6	H-14
Facility, Los Angeles Harbor	MP H-77-13	H-18	Pile Foundation	TR S-74-5	S-90
Terminal Sites	MP H-78-2	H-19	Prototype Tests	TR H-75-11	H-62
Load			Sault Ste. Marie	MP C-73-8	C-21
Buried Box Structures	TR S-78-5	S-95	Site No. 2, Proposed Pearl		
Carrying Evaluation	MP 4-479	S-16	River Improvement	TM 131-1	S-56
Deformation	MP S-78-17	S-53	Trinity River, Texas	TR H-77-7	H-66
Fracture	CR S-78-15/I	S-119	wall	MP N-75-8	W-11
Generator	CR 3-98	S-99	Longbourne Air Force Base	MP S-73-54	S-43
	CR 3-99	S-99	Locomotion Model	MP M-71-7	M-10
Transfer	TR S-69-10/3	S-86	Loess	CR 2-39	W-43
Loading	CR 3-26/5	S-110		MP 4-838	H-6
	CR 3-26/9	S-110		MP S-74-28	S-46
Conditions	CTIAC-24	C-41		RR S-69-1	S-54
	MP C-77-3	C-24		TM	W-27
Function	TR M-76-2	M-31		TM 156-2	S-57
Tests	CR 3-146	S-114		TR 2-482	W-30
Lock	B 2/3	H-1	Lofted Mine Concept	MP M-77-11	M-15
	CR 2-1/13	H-74	Log Skidder	MP M-69-1	M-8
Arkansas River	TR 2-743	H-51	Logistical Carrier	MP M-70-9	M-9
Capacity	MP H-75-9	H-15	LUKDAP	MP H-74-6	H-14
	TR H-73-25	H-69	Long		
Culvert			Beach		
Analysis Program	MP K-77-2	MS-7	Breakwater	MP H-76-10	H-16
Frame Analysis	MP K-73-5	MS-6	Harbor	MP H-76-4	H-16
Outlet Basins	MP 2-794	H-9		MP H-76-20	H-17
and Dam	MP H-76-15	H-17		MP H-77-10	H-18
	TR H-75-9	H-62		TM 2-265	H-37
Arkansas River	TR 2-623	H-46	Island, New Jersey	MR 80-9	CERC-13
Demopolis, Alabama	TM 140-1	S-57	Model	TR H-77-4	H-62
No.			Branch, New Jersey	TM 62	CERC-40
1			Island	TM 128	CERC-43
Red River Waterway	TR H-77-13	H-67	Sound	TP 81-3	CERC-33
St. Lucie Canal	TM 153-1	H-32		TR D-77-6	E-6
2, Red River Waterway	CTIAC-55	C-44	Lake, Alaska	MP H-71-7	H-12
3			Sault Canal	TR 2-489	H-43
Arkansas River	TR H-64-3	H-54	Shot	MP 1-957	W-6
Monongahela River	MP C-76-9	C-24	Wave Energy	H 82-2	CERC-22
4			Longshore		
Arkansas River	TR 2-745	H-51	Bars	TM 15	CERC-37
Cofferdam Diversion	MP H-71-9	H-12	Energy Flux	CETA 80-3	CERC-3
Monongahela River	TR 2-736	H-51	Transport	R 77-6	CERC-20
5 and 7, Arkansas River	TR 2-655/A	H-47		TP 79-1	CERC-32
6	TM 121-1	H-32	Rate	CETA 80-6	CERC-3
7, Arkansas River	TR H-69-3	H-54		H 12-73	CERC-18
8, Arkansas River	TR H-73-10	H-59	Troughs	TP 80-4	CERC-32
9, Arkansas River	TR 2-617	H-53	wave Energy	TM 15	CERC-37
13, Arkansas River	TR H-70-8	H-56		TR H-74-6/	
14, Arkansas River	TR H-71-1	H-57		17-3	H-60
17, Arkansas River	TR H-70-12	H-57	Lookout Point Dam	TR 3-502	S-77
26, Mississippi River	MP C-72-4	C-19	Lop Buri	CR 3-156/B	M-41
	MP C-76-1	C-23	Lopez Dam	MP S-71-17/4	S-35
	MP H-73-10	H-19	Lorain		
	TR H-73-15	H-63	Harbor	TR 2 628	H-46
51, Ohio River	MP H-74-4	H-14	Ohio	R 34-12	CERC-23
52, Ohio River	MP C-74-5	C-22	Loring Air Force Base	MP 4-898	S-24
53, Ohio River	MP C-74-7	C-22		MP S-73-51	S-43
Data Analysis Program	MP H-74-6	H-14	Lorran Lake Cutoff	MBM 91-1	H-20
Design	MP H-75-7	H-15	Los Angeles		
Emergency Gate, Barkley Dam	TR 2-689	H-49	County Drainage Area	R 2-212	Z-12
Facilities	TR H-74-5	H-60	District	INR 9	Z-5

Term	Report No.	Page	Term	Report No.	Page
Los Angeles Port Harbor	MP H-77-10	H-18	M4 Landing Mat Uplift	MP S-75-16	S-47
	MP H-77-2	H-17	M3A2 (Modified)	MP M-72-2	M-10
	MP H-77-13	H-15	M30A1 Tank	MP M-75-5	M-14
Model	TR H-75-23	H-69	M3A1E1 Tanks	MP A-77-9	M-15
Offutt Air Base	TR H-75-4	H-62	M3A1E3 Tanks	TR M-70-10	M-26
Osage, New Mexico	TM A-444/50	S-69	M113A1	MP M-72-2	M-10
Osage Creek	TR S-77-4	S-44	M31A2 Utility Truck	MP M-76-6	M-14
Louisiana State Highway No. 10	TR S-75-1	S-49	MarDill Air Force Base	MP A-34	S-5
	TM	S-61		MP 4-144	S-8
	TM A-275	H-63	Mathias Study Area, Maine	MP C-70-16	C-18
Low			Marobenthic Community	TR D-77-23/C	E-8
Penalty Structures	MP S-75-6	S-17	Microearthquakes	TR S-74-1/19	S-40
Underpressure Equipment	TR DS-75-9	E-27	Macrofauna	TP 76-14	CERC-30
Wall				TR D-77-24/F	E-10
Control Structure, Louisiana	TR H-77-2	H-66	Microgeometry	CR 3-68	M-49
Structure, Old River	MP A-143	H-63	Terrain Analysis	CR 4-86	M-15
	MP 3-200	S-9	Macroinvertebrate	CETA 7-3	CERC-2
	TR 3-602	S-79	Macrophytes of Lake Conroy	TR A-73-2/1	
Strength				/1	M-49
Structure	MP S-74-14	C-22	Madagascar; Canal Zone Analogs V	CR 3-33/V	M-43
Units		S-16	Madrid, Spain	TM 3-343/77	S-69
Yield Nuclear Explosions	MP N-75-1	N-11		TM 3-343/89	S-69
	MP N-77-1	N-12	Magin Island Complex	TR 2-767	H-57
	MP N-75-3	H-13	Magnesium Oxide	MP C-76-5	C-23
Lower Mississippi			Magnetic		
River Levels	TM 13-1	S-58	Data	MP M-75-2	M-12
	TM A-424	S-73	Tape Wave Recorder	TM 58	CERC-40
Valley	MP 3-618	S-20	Maid-Miles System	MP M-73-6	M-16
	TM 3-274	S-62	Maintenance Projects	TR H-75-3/3	H-68
	TM 3-311	S-64	Malmstrom Air Force Base	MP S-74-22	S-41
	TR 3-653	S-37	Malodors	CR D-76-9	E-21
	TR 3-712	S-82	Mammals	TR A-73-2/1/	
	TR S-71-5	S-87		II	M-49
Off wheels	TR M-71-10	M-26		TH A-73-2/2/	
Ordington Harbour	TR H-75-14	H-63		II	M-50
Oslam Beach, New Jersey	MR 80-3	CERC-12	Mun 6X6 and 8X8 Cargo Trunk	MP M-77-4	M-15
Lunar			Manager's Overview of WES	MP 0-73-8	MS-8
Applications	TM 70-6	H-24	Manasquan Inlet	MP 6-793	C-13
	TR 25	H-29	Manchester Islands	TM 131-1	H-33
Chemical Explosives	TM 70-5	H-24	Manganese in Sediments	MP D-76-13	E-3
Excavation	TM 09-12	H-24	Manhole	MP 1-354	H-6
Explosives	TM 70-4	H-24		MP M-72-5	H-5
Hover Vehicle	MP M-71-3	M-10	Mankato	TR H-73-8	H-66
Hover Vehicle	MP M-72-3	M-10	Manning's "n"	S 1/1	H-1
Wheels	TR M-71-7	M-23	Manston, Kent, England	TM 3-343/90	S-69
Wheels	TR M-70-15	M-27	Map	TR 4-726/	
Wheels	TR M-71-10	M-23		VIII	M-24
Surface	TM 70-4	H-24		TR M-74-2/B	H-30
Structures	TR M-70-2	M-26	Construction	TR M-77-3	M-32
Lakehurst Airport	TM 3-444/91	S-66	Generalization	MP 4-587	M-5
Excavation Bay and Inlet	TM 2-343	H-39	Ground Mobility	TR 4-726/VIII	H-24
Lytle Creek	TR H-75-7	H-62	Mapping	MP M-74-6	M-12
			Terrain Microgeometry	TR 3-612	S-75
			Trafficability	MP 4-461	H-4
			Maranalbo	TM 100-1	H-33
			Marth Air Force Base	MP 4-213/2	S-9
				MP 3-74-45	S-40
M4			Martha Hook		
Landing Mat	TR 4-443	S-74	Anchorage, Delaware River	MP H-75-17	H-17
Steel Landing Mat	TM 4-405	S-72	Schuykill Reach	MP 2-657	H-10
M3A1			Mare Island Strait	TM 61-1	H-45
Landing Mat	MP 4-435	S-25	Marina del Rey	TR 2-671	H-43
Steel Landing Mat	MP 4-317	S-22	Marine		
	MP 4-357	S-26	Armalin	TR D-77-24/	
	MP 4-77-9	S-32		B-C	E-4
M3A1 Landing Mat	MP 4-531	H-15	Benthos	TR D-73-35/1	E-17
M3A2 Landing Mat	MP 4-551	S-16			
M-15 Antitank Mine	TR 4-476	S-75			

## 58-INDEX

Term	Report No.	Page	Term	Report No.	Page
Marine (Cont)			Masonry	TR 6-596	C-33
Environment	CTIAC-15	C-40	Cement	TM 6-359	C-28
	CTIAC-49	C-43	Unit-Masonry Mortar Inter-		
	MP C-75-4	C-23	action	MP 6-433	C-7
Limestone	TP 76-4	CERC-30	Mass		
Organisms	MR 32-14	CERC-14	Coefficient	TM 24	CERC-27
Pipeline	MR 77-2	CERC-10	Concrete	B 39	C-1
Soil Mechanics	TR S-72-11	S-89		CTIAC-23	C-41
Maritime Alps	MP 3-561	S-18		MP 6-123/5	C-2
Marked Tree Siphon	B 2/3	d-1		MP 6-123/6	C-2
	MP 2-1	H-4		MP 6-123/10	C-3
Markland Locks and Dam	TR 2-446	H-42		MP 6-123/13	C-3
	TR 2-566	H-44		MP 6-123/14	C-3
Markov Model	R 7-73	CERC-17		MP 6-123/15	C-3
Marrakech Airfield	TM 3-343/14	S-66		MP 6-132/3	C-3
Marsh	TR D-77-35	E-11		MP 6-467	C-7
Arch Bridge, Fort Riley	MP C-77-1	C-24		MP 6-586	C-9
Creation	CR D-75-2	E-21		MP 6-936	C-15
Development	CETA 77-3	CERC-2		MP C-72-19	C-20
Site				MP C-73-10	C-21
Apalachicola Bay	TR D-78-32	E-17		MP C-77-6	C-24
Columbia River	TR D-77-38	E-12		TM	C-27
Galveston Bay	TR D-73-15	E-15		TM 6-307	C-27
Grays Harbor	TR D-78-11	E-14		TM 6-345	C-28
James River	TR D-77-23	E-8		TM 6-352	C-26
South San Francisco Bay	TR D-78-57	E-20		TM 6-380	C-29
Establishment Work	CR D-77-3	E-22		TR 6-748	C-34
Estuarine Ecosystems	TR D-78-3	E-13		TR 6-804	C-35
	TR D-78-52	E-19		TR C-69-1	C-36
Habitat	R 78-13	CERC-21		TR C-70-4	C-37
Development	TR D-77-23/			TR C-74-2	C-38
	F-I	E-9		TR C-74-4	C-36
	TR D-78-31	E-17	Blocks	MP 6-123/9	C-3
	CR D-76-2/I	E-21	Dams	MP 6-247	C-5
Island Site Selection	CR D-74-9/II	E-24	Mixtures	MP C-68-4	C-16
Plant	MP D-77-1	E-3	Pozzolans	MP 6-422	C-7
	MP D-78-6	E-4	Structures	TR 6-540	C-31
	TR D-77-2	E-5		TR 6-811	C-36
	TR D-77-28	E-10		TR C-74-3	C-38
	TR D-77-40	E-12		TM 6-330	C-28
	TR D-78-6	E-14	Surfaces	TM 6-353	C-28
	TR D-78-20/A	E-17	Earth Movement	CR 3-92	S-119
	TR D-78-51	E-19		CR 3-137	S-105
Delaware, Georgia, and Maine	TR D-77-36	E-11		CR 3-138	S-116
Establishment	CR D-74-9	E-24		CR 3-139	S-118
Species	TR D-76-5	E-5		CR 3-141	S-103
Gulf Coast Area	TR D-77-44	E-13		CR 3-142	S-115
Screw Amphibian	MP 4-751	M-5		CR 3-157	S-116
	TR 3-641	M-21		CR 3-138	S-116
	TR A-77-1/1	M-49	Placement of Sand Asphalt	TM 3-329	S-65
Soils	TR D-77-23/E	E-9	Stabilization of Earth	CR 3-92	S-119
Vegetation	SR 9	CERC-25	Massachusetts Bay	TP 76-3	CERC-30
Marshall Islands	MP 4-858	S-23	Matagorda		
Estabishment	MP C-68-14	S-27	Bay	MP 2-541	H-7
Marshland Areas	MP 3-182	S-9	Ship Channel		Z-12
Martin Dam	CTIAC-38	C-42	Model	TR 2-711	H-49
Martins Fork Dam	MP C-77-7	C-24	Material		
Maryland	MP 3-2	S-4	Evaluated as Soil Stabilizers	MP S-77-15	S-51
Marysville Lake Hydrothermal			Handling Equipment	MP M-74-5	M-12
Study	TR H-77-5	H-66	Highway Construction	MP 6-277	C-5
Masonboro Inlet	GITI 6	CERC-5	Modeling Rock	MP 6-934	C-15
	GITI 15	CERC-6	Property		
	GITI 18	CERC-6	Airport Pavement Systems	CR S-75-6	S-99
	GITI 22	CERC-6	Investigation	MP	S-49
	MP H-75-10	H-15		MP	S-50
	MP H-78-12	H-20	Response Characterization	MP S-77-11	S-51
	TR H-76-4	H-64	Suspension	TM 122-1	MS-10
Movable-Bed Model	MP H-76-14	H-17	Transport	TM 158-1	MS-10

Term	Report No.	Page	Term	Report No.	Page
Mathematical			Mechanical (Cont)		
Material Models	CR S-68-1/1	S-118	Impedance	TR 6-780/2	C-35
	MP S-72-11/1	S-36		TR N-75-6	W-40
Model	CR 3-24/6	M-37	Radiation Effects	CR I-111	W-47
	MP H-74-10	H-14	Mechanics of Wheels	TR 3-729	M-24
	MP M-68-7	M-8		TR M-68-2	M-25
	TR D-74-1	E-5	Media Classification for		
	TR D-76-1	E-5	Explosive Excavation	TM 71-3	W-25
	TR D-77-12	E-9	Medical and Veterinary Diseases	MP D-78-1	E-4
	TR H-73-16	H-60	Medium		
	TR H-77-5	H-66	Lift Locks, Trinity River	TR H-77-7	H-66
	TR H-77-18	H-67	Structure Interaction	TR N-72-7	W-37
	TR H-78-1	H-67	Meeker Control Structure	TM	S-61
	TR M-68-1/1	M-25	Meili Flex-Trac	MP 4-412	M-3
	TR M-70-9	M-26	Meiofauna	TP 76-14	CERC-30
	TR M-72-3	M-29	Meknes Airfield	TM 3-343/15	S-66
	TR M-73-4	M-29	Mekong Delta, South Vietnam	TR S-69-7	S-85
Modeling	TR N-73-7	W-39	Mellwood (Arkansas) Levee Unit	TM 142-1	S-57
Simulation	MR 77-10	CERC-11	Meltwater Gaging Program	MP 2-597	H-8
Storm Surge Model	TM 32	CERC-27	Melvern Dam	MP H-77-5	H-18
Mather Air Force Base	RR H-73-2	H-28	Membrane	CR S-71-7	S-106
	MP H-78-5	H-19		MP 4-847	S-23
	MP 4-316	S-12		MP S-68-20	S-26
	MP 4-321	S-12		MP S-76-23	S-50
	MP S-73-31	S-42		TR 3-492	S-76
				TR 3-592	S-78
Matthes on Roughness Coeffi-	B 1/3	H-1	Airfield Surfacing	TR S-71-11	S-88
cients			Curing and Bonding Compounds	TR S-73-3	S-89
Mattress Casting	MP 6-634	C-10	Encapsulated	TR S-75-1	S-91
Maul, Hawaii	TR 2-644	H-47	Pavement Sections	TR S-75-2	S-91
Mauripur, Karachi, West Pakistan	TM 3-343/123	S-71	Soil Layer	TR S-75-8	S-91
Mauvais Terre Levee and Drainage			Enveloped Soil Layers	TR S-74-2	S-90
District	TM 65-1	S-55		MP C-75-10	C-23
Maxwell Locks and Dam	TR 2-579	H-45			
	TR 2-672	H-48			
May Two-Piece AM2 Landing Mat	MP S-63-11	S-27			
Mayersville Sediment Survey	B 1/1	H-1			
MBT70 Tanks	TR M-70-10	M-26			
McAlpine Lock	MP 2-622	H-8			
and Dam	TR 2-778	H-52			
McClellan Air Force Base	TR 2-749	H-51			
	MP 4-311/6	S-11			
	MP 4-311/7	S-11			
	MP 4-311/8	S-11			
McConnaughay Asphalt Patch Plant	MP 4-228	S-10	Forming Compounds	TM 6-385	C-29
McConnell Air Force Base	MP S-73-29	S-42		TR C-68-1	C-36
McCoy Air Force Base	MP 4-213/3	S-9	Surfaced Runway	MP 4-620	S-19
McGee Bend Dam	MP 2-264	H-5	Surfacing	CR S-70-1	S-119
	MP 3-489	S-16		TR S-71-10	S-88
McNary				TR 3-675	S-81
Dam	TM 2-232	H-37		TR 3-773	S-84
Lock	MP 2-146	H-4		TR S-63-3	S-85
	TR 2-552	H-44	Type Materials	TR 3-539	S-73
Meander			Memphis	HP 3-140	S-8
Belt	TR 3-604	S-79	Engineer Depot	TM 89-1	H-30
Model	R 16-1	P-4		TM 89-2	H-30
Meandering			Harbor	TM 2-320	H-38
Alluvial Rivers	TM	H-35	Municipal Airport	MP 4-519	S-17
Channels	TM 2-429	H-41	Mentone Damsite	MP S-75-6	S-46
Model Streams	TM	H-35	MEPS		Z-17
Measurement Devices			Meramec		
Old River Navigation Lock	IR 5	S-2	Lake	TR H-78-15	il-68
Port Allen Lock	IR 3	S-2	Park		
Mechanical			Dam	TR H-70-1	H-56
Agitation on Drying Rate	TR D-77-10	E-7	Reservoir	MP 3-985	S-26
Constitutive Models	MP S-77-19	S-51	Mercury	TR D-77-24/C	E-9
Control	TR A-78-3/2	M-51	Differential Thermometers	MP C-69-11	C-16
Hammers	MP 4-357	S-12	METS		Z-7
Harvesting of Aquatic Plants	TR A-78-3	M-51		TR S-74-8/III	S-90
			Construction	MP S-76-14	S-49
			Demonstration Road	MP S-74-13	S-45

## 60-INDEX

Term	Report No.	Page	Term	Report No.	Page
<b>Metal</b>	TR D-77-23/E	E-9	<b>Military (Cont)</b>		
<b>Membranes</b>	MP 4-54	S-5	Bulk Explosive Systems	MP N-76-9	W-12
<b>Uptake</b>	TR D-76-5	E-5	Command Center	MP N-78-6	W-13
	TR D-77-40	E-12	Drilling Applications	MP E-74-5	W-10
	TR D-78-6	E-14	Engineering		Z-6
<b>Meteorological Data</b>	MP 4-298	M-2	Commercial Explosives	TR E-73-2	W-38
	TR M-77-4/2	M-33	Nuclear Explosives	TR 1	W-28
<b>Methyl Bromide Treatment</b>	MP 4-728	S-21	Evaluation of Geographic		
<b>MEXA</b>	TR M-70-11	M-27	Areas	MP 3-610	M-4
<b>Mexican Desert</b>	CR	S-116	Facilities	TR S-71-14	S-88
	TR 3-630/3	S-80	Field Exercises	MP S-76-24	S-50
<b>Michael Army Airfield</b>	MP 4-976	S-26	Geographic Intelligence	MP M-72-6	M-10
	TR 3-466/15	S-76	Ground Targets	MP M-76-13	M-14
<b>Michigamme Study Area, Michigan</b>	MP C-70-10	C-17	Installations	TR M-76-10	M-32
<b>Microbarograph Measurements</b>	PNE 1118	W-17	M151A2 Utility Truck	MP M-76-6	M-14
<b>Microcosm</b>	TR D-78-52	E-19	Mobility	CR 3-73	S-103
<b>Microcracking</b>	MP 6-731	C-12	Operations	CR 3-24	M-36
	TR 6-764	C-35			and
	TR 6-811/2	C-36			M-37
<b>Microdot Embedment Strain Gage</b>	TR S-77-2	S-94	Personnel Shelter Concepts		Z-14
<b>Microearthquake Monitoring</b>	IR 6	M-1	Region: A Mathematical Model	CR 3-24/6	M-37
<b>Microgeometry</b>	TR 3-612	S-79	Roads	IR S-72-1	S-3
	CR 3-80	M-40		TR 3-772	S-84
	CR 3-82	M-40		TR S-75-10	S-92
		Z-17		MP 3-605	S-18
<b>Microscale Mechanisms</b>			and Airfields	MP M-73-15	M-12
<b>Microseismic</b>			Transportation	TR M-70-11/	
<b>Signals</b>	MP M-73-12	M-11	Vehicles	2-4	M-27
	TR M-73-4	M-29			
	TR M-73-3	M-29	<b>Mill Creek</b>		
<b>Wave</b>	MP S-73-53	S-43	Dam	TM 156-1	S-57
<b>Propagation</b>	TR M-73-2	H-29		TM 156-2	S-57
				TM 188-1	H-33
				INR 9	Z-5
<b>Microthesaurus</b>			Flood-Control Project		
<b>Scientific and Technical Terms</b>		MS-9	Midfloodway Gabion Barrier		
<b>Soil Mechanics Terms</b>	SMIAC	S-98			
<b>Vehicle Mobility, Environment,</b>			<b>Miller</b>		
<b>and Pavement Terms</b>	PSTIAC-1	M-34	Bend	R 2-5	P-1
<b>Microwave</b>			City	MP 2-13	H-4
<b>Oven</b>	MP 3-478/13	S-16	Sands		
	MP C-73-7	C-21	Bar, Columbia River Estuary	MP 2-765	H-9
	TR 3-693/5	M-23	Marsh and Upland Habitat		
			Development Site, Columbia		
			River	TR D-77-38	E-12
<b>MIDDLE</b>				TR 2-718	H-50
<b>COURSE</b>	TM 71-7	W-25	<b>Millers Ferry Lock</b>	TR 2-643	H-47
	TR 35	W-29	and Dam	TR 2-775	H-52
	TR E-73-3	W-38			
	MP M-75-4	M-13	<b>Mine</b>		
<b>Desert</b>	TR 3-630/4	S-80	Concept	MP M-77-11	M-15
<b>Yuma Analogs No. 1</b>	CR 3-11/1	M-42		MP N-69-2	W-7
<b>GUST</b>	MP S-74-7	S-44	Ore	TR N-70-8	W-36
	TR N-75-1	W-39	<b>SHAFT Series</b>	MP N-69-2	W-7
	TR S-73-10	S-90		MP N-70-4	W-7
	TR S-73-11	S-90		MP N-72-1	W-8
		Z-14		MP N-73-4	W-9
		Z-15		MP O-70-2	MS-8
	CR	S-118		MP S-68-18	S-27
	CR S-74-4	S-119		MP S-70-22	S-33
	MP N-75-4	W-11		TR N-69-2	W-33
				TR N-70-4	W-35
<b>MIDOL Cost Minimization Computer</b>				TR N-70-8	W-36
<b>Code</b>	TM 72-1	W-26		TR N-72-6	W-37
<b>Mighty Epic Structures Program</b>	CTIAC-20	C-41		TR N-73-2	W-38
	MP C-76-7	C-24		TR N-73-3	W-38
<b>Migration</b>			Throw I	MP N-69-2	W-7
<b>Benthos</b>	TR D-73-35	E-17	Under Event	TR N-69-2/4	W-33
<b>Chemical Constituents</b>	CR D-76-1	E-24		TR N-70-8	W-36
	CR D-76-7	E-25		TR N-72-1	W-36
	TM 3-343/92	S-70		MP M-76-4	M-13
<b>Mildenhall, Suffolk, England</b>	TR	M-43	<b>Mined Areas</b>		
<b>Milfoil</b>	TR	M-43	<b>Mineral</b>		
<b>Milford Dam</b>	TR 6-629	C-34	<b>Admixtures</b>	MP 6-345	C-6
<b>Military</b>				TR 6-481	C-31
<b>Access Roads</b>	TR 3-542	S-78			
<b>Activities</b>	CR 3-36	M-40			



Term	Report No.	Page	Term	Report No.	Page
Mineral (Cont)			Mississippi (Cont)		
Cyeling	TR D-78-3	E-13	River (Cont)		
Fines	TM 6-419/1	C-29	Deltaic Plain	TR 3-453	S-76
	TM 6-419/2	C-29	Dike	R 2-2	P-1
Grain Studies	TM 28	CERC-38	Diversion		Z-1
Resources	MR 82-9	CERC-14	Fish Habitat	CR Y-75-4	E-34
Rock Event	MP N-73-4	W-9	Flood-Control Model	S 2/1	H-2
	TR N-69-2/6	W-34	Floodplain	CR Y-74-3	E-34
	TR N-72-6	W-37		MP Y-75-1	E-29
Soils	MP 4-438	M-3	Animals and Their Habitat	CR Y-75-2	E-35
Vacuum	CR 3-101/2	S-112	Floods	MBM 36-1	H-25
Mineralogical Properties of			Flow, Lake County, Tennessee	MBM 61-3	H-24
Aggregates	MP 6-119	C-6	Geomorphic Study	CR Y-75-3	E-34
MINI-MOUND	TM 71-10	W-25	Gulf		
Mining of Coal	MP M-76-2	M-13	Coast Inland Waterway	MP H-75-6	H-15
	MP M-76-4	M-13		MP 3-259	S-10
Minot Air Force Base	MP S-73-23	S-41	Outlet		Z-12
Minuteman Launch Facility	MP N-74-2	W-10		TR H-78-16	H-89
MIRACLE PLAY	MP N-70-8	W-8		TR 2-636	H-47
Miraflores Dam	TR 2-667	H-43	Levees	MP 3-131	S-7
MISERS BLUFF Series		Z-15		MP 3-205	S-9
	MP N-73-4	W-13		MP S-63-4/1	S-27
Missile	MP E-74-2	W-10		MP S-72-21	S-37
Bases	MP S-63-27	S-28		MP S-75-22	S-47
Detonation	MP 1-853	W-5		TM 3-424	S-73
Explosion	MP 1-792	W-4		TM 3-430	S-73
Launcher Stability Tests	MP 4-920	S-25	9-Ft Channel	TR Y-74-1	E-32
Launching Sites	MP S-71-19	S-35	Red River Landing	TR 3	Z-8
Site	MP S-73-35	S-42	Revetment	R 2-4	P-1
Mission Bay				R 17-1	P-5
Harbor	TR H-69-8	H-54	Side Channels	TR M-74-5	H-30
Inlet	R 11-73	CERC-13	Stages	MBM 31-6	H-25
Mississinewa Dam	MP 2-536	H-7	and Tributaries	TR 12	Z-8
Mississippi			1947, 1944, and 1943		
Alluvial Valley	MP S-77-5	S-50	Floods		
Basin				MBM 15-1	H-22
Model		H-21		MBM 15-2	H-23
		thru		CR Y-75-1	E-34
		H-25		TR S-69-10	S-36
		S 61		MP 3-818	S-22
Board	TM	S 61		MP S-73-1/10	S-39
		H-21		TR 3-658	S-81
		thru		MP 3-208	S-9
		H-25	Geology		
		S-64	Missouri River		
Foundation Investigations	TM	S-64	Demonstration Projects	/E	Z-3
County, Arkansas	TR H-77-12	H-67	Division	INN 10	Z-5
River	B 1/2	H-1	Levees	TR 3-443	S-74
	CR Y-74-2	E-34	and Tributaries		
	CR Y-75-4	E-34	1950 and 1947 Floods	MBM 12-1	H-22
	MBM 31-5	H-23	1952 and 1951 Floods	MBM 12-2	H-22
	MP H-70-1	H-1	Misurata West Airfield,		
	P H	H-26	Misurata, Libya	TM 3-343/31	S-69
	P U	H-26	M. I. T. Plane Strain Device	CR 3-101/2	S-113
	R 300-1	P-5	Miter		
	TM 3-288	S-63	Gates	MP 3-73-6	MS-6
	TR 2	Z-8		MP K-75-9	MS-6
	TR D-77-31	E-11	Type Lock Gates	TR 2-651	H-47
	TR H-74-8	H-61	MITIM Time Minimization Computer		
	TR H-77-13	H-67	Code	TM 72-4	H-26
	TR M-76-6	M-32	MIXED COMPANY Event		Z-14
	TR Y-75-1	E-32			Z-15
	TR Y-75-2	E-32		CR	S-116
	TR Z-76-1	E-32		CR S-74-4	S-119
Bank	R 11-5	P-2		CR S-75-2	S-119
	TR M-77-1	M-32		MP C-75-2	C-22
	TR S-73-5	S-89		MP M-73-5	M-11
Failure	MP 3-675	S-19		MP N-75-4	N-11
Channel	B 2/3	H-1		MP S-73-62	S-43
	R 19-1	P-4		MP S-74-1	S-44
	R 19-2	P-4		MP S-74-8	S-44
	R 19-3	P-4	Mixing	MP 3-122/6	S-7
				MP H-75-1	H-15
			Bulk Explosives	MP N-77-5	N-13
			Concrete	TR 6-446	Z-11

## 62-INDEX

Term	Report No.	Page	Term	Report No.	Page
Mobile			Model (Cont)		
Bay	MP H-77-3	H-18	Engineering Materials	MP S-77-19	S-51
Model Study	TR H-75-13	H-63	Estuarial Sediment Transport	TR D-77-12	E-7
Breakwater	MP H-71-8	H-12	Fate of Dredged Material	CR D-76-5	E-25
	TR H-68-2	H-53	Gate Vibration	MP 5-87	MS-4
Materials Laboratory	MP 3-138	S-5	Laws for Density Currents	CR 2-1	H-73 and H-74
Mobility	TR 3-442	S-74			
	CR 3-33	M-36	Limits	MBM 2-17	H-21
	CR 3-114	M-35	Materials Evaluation	GITI 7	CERC-5
	MP 4-147	M-2	Prototype		
	MP 76-6	M-14	Arch Dam	TR N-77-1	W-41
	MP M-73-3	M-16	Comparison	B 3/2	H-1
	TR 3-702	M-24	Confirmations	B 2/3	H-1
	TR 3-726/VII	M-23	Data, Marked Tree Siphon	MP 2-1	H-4
	TR M-70-6	M-26	Relationship	MP 2-357	H-9
	TR M-70-10	H-26	River Sedimentation	IR H-76-1	H-3
	TR M-76-4	M-31	Roughness	B 2/1	H-1
Analysis	MP 4-652	M-5	Testing of Soils	MP S-76-9	S-49
Assessment	TR M-76-3	M-31	Tests	MP H-76-14	H-17
	MP M-73-14	M-11	Theory	MP S-72-7	S-36
	TR M-73-1	M-29	Tunnels	RR 1-6	W-19
Chemical Constituents	TR D-76-7	E-5	Urban Studies	MP H-74-8	H-14
Consultants Conference	MP	H-4	Verification	B 1/3	H-1
Environmental Research	CR 3-143	M-43	Modeling		
	CR 3-153	M-43	Behavior of a Real Soil	CR S-68-1/2	S-117
	MP 4-670	M-5	Buried Vertical Cylinders	TR N-76-5	W-40
	MP 4-726	M-5	Ecological Succession	TR D-77-35	E-11
	TR 3-681	M-22	Recreation Use	TR H-73-1	E-39
	TR 3-726	M-23	Rock Mechanics	MP S-74-28	S-46
and Environmental Systems			Techniques	MP	S-51
Laboratory	PSTIAC-2	M-34		RR H-74-2	H-29
Exercise A	MP 4-979	M-7	Modulus of		
	TR M-70-11	M-27	Deformation	MP C-71-4	C-18
Experiments	MP M-75-3	M-13	Elasticity	MP 6-681	C-11
	MP M-77-12	M-15	Moist Curing on Concrete	TR C-69-6	C-37
Index Formula	TM 3-240/18	M-18	Moisture		
Models	TR M-71-4	M-23	Conditions	CTIAC 24	C-41
Number for Coarse-Grained				MP 4-175	S-8
Soils	TR 3-666/5	M-22		MP 6-279	C-5
	TR M-71-5/3	M-28	Content	MP C-77-3	C-24
Performance	TR M-70-4	M-26	Determinations	TM 3-240/1	M-17
Off-Road Materials Handling			Fine Aggregate	MP 4-73	S-6
Vehicles	MP M-78-8	M-16	Hardened Concrete	TR 6-476	C-31
1-1/4- to 5-Ton Cargo Trucks	MP M-78-9	M-16	Investigation	TR C-76-1	C-38
1/4- to 10-Ton Tactical			and Density	TM 3-401	S-73
Trucks and Cargo Carriers	MP M-78-10	M-16	Nuclear Methods	IR S-74-1	S-3
Towed and Self-Propelled			Soils	MP S-76-18	S-49
Artillery	MP M-77-1	M-15	Migration in Concrete	MP C-70-15	C-13
Prediction	TR 3-666/7	M-22		TR C-75-1	C-43
Requirements (Howze)	MP 4-528	M-4	Strength Characteristics	TR 3-791	M-25
Research	CR 4-16	M-45	Surveys	IR M-73-1	M-1
	CR 4-17	M-45	Mold Size	MP 4-327	M-2
	CR 3-118	M-42	Molded Cylinders	TR 6-522	C-41
	MP 4-623	M-5	Molesworth, Huntingdonshire,		
	TR 3-639	M-21	England	TM 3-343/93	S-70
	TR 3-652	M-21	Mo-Nat	MP 4-872	S-23
Studies	MP M-72-5	M-10		MP S-69-5	S-28
Tests	TR M-75-1	M-31	Moment-Transferring End Joints	MP S-72-5	S-36
Thailand	TR 5-625	M-21	Mono Lake	MP 4-317	S-12
Validation Test Results	MP M-74-6	M-12	Explosion Test Series		
Model			1965	MP 1-947	W-6
Appurtenances	B 2/3	H-1	1969	TR H-70-5	W-35
	B 3/1	H-1	Field Experiment	TR N-70-12	W-36
	B 4/2	H-1	Monoliths	TR N-72-5	W-37
Arch Dam	TR N-75-3	W-40		CR 1-167/II	W-48
Clearing of Vegetation by					Z-6
Explosives	MP M-72-1	M-10			
Design	TR H-75-4/4	H-62			
Distortion	RR 2-1	H-27			

Term	Report No.	Page	Term	Report No.	Page
Monongahela River	MP C-76-9 TR 2-736	C-24 H-51	Movable-Bed Experiments	MR 77-7 MR 81-4 MP H-75-10 B 2/3 GITI 77 R 3-75 TM 99-1 RR H-75-3/2 MP H-75-14 R 83-4	CERC-11 CERC-13 H-15 H-1 CERC-5 CERC-19 H-33 H-29 H-17 CERC-23
Monterey Bay	TP 76-15 TR H-75-17 TR D-77-27	CERC-30 H-63 E-30	Hydraulic Model Study Model		
Harbor	CR 2-136 MP H-69-11 TM 2-301 TR H-63-9 TR N-69-4/1 MP S-76-6	H-73 H-11 H-38 H-54 W-34 S-46	Galveston Harbor Entrance Tests Modeling		
No. O Sand			Movement		
Montgomery			Birch Dam	CR S-76-2	S-701
Cut-Off	TM 39-1	S-55	Tow-Generated Suspended Material Plumes	TR M-76-6	M-32
Locks and Dam	MP C-77-2	C-24	MHT Flow Line	MBM 91-1	H-25
Montichiari Air Base	TM 3-343/45	S-68	MSA Method for Determining Particle Size Distribution	MP C-70-24	C-18
Moody Air Force Base	MP 4-93/2 MP 4-314	S-6 S-12	Mt. St. Helens Eruption	TR 13	E-8
Moon	TM 70-4	W-24	Mud		
Moored Vessels	CR 2-131	H-70	Control Additives	MP 4-735	S-21
Mooring			Dredged Material	TR D-77-45 TR D-73-40 TR D-73-46	E-13 E-18 E-19
Force	TR H-71-3	H-57	Flows		
Load	CETA 79-4 TP 78-3	CERC-2 CERC-32	Mountain Dam	TM 104-1 TM 3-248 B 14 MP S-70-29	S-57 S-61 S-1 S-33
Morameal Revetment	INR 7	Z-4	Impervious Core Material		
Morgan City	MP 3-2	S-4	Mudlumps		
Morganza			Mugu		
Control Structure	TM	S-64	Lagoon	TM 14	CERC-37
Floodway	MP 3-6	S-4	Submarine Canyon	TM 19	CERC-37
	TM	S-60	Multiaxial		
	TM 2-275	H-37	Creep in Concrete	MP C-73-6	C-21
	TM 2-290	H-37	Stress	TR C-75-4	C-33
Control Structure	TM 2-258	H-36	Multiple-Wheel		
	TM 3-278	S-62	CBR Design Criteria	MP 4-243	S-10
	TM 3-308	S-63	Heavy Gear Load		
	TM 3-317	S-64		MP S-71-5 MP S-72-6 TR S-71-17 TM 3-349	S-34 S-36 S-68 S-71
	TM 2-326	H-36			
	TM 3-384	S-72			
Fuse-Plug Levee	TM 216-1	H-35			
Moron de la Frontera, Spain	TM 3-343/78	S-69	Pavement Tests		
Morristown Airport	TM	S-58	Landing Gear		
Morro Bay Harbor	TR 2-567	H-45	Multispectral		
Mortar	MP 6-330	C-6	Data	TR M-77-2	M-32
	MP 6-533	C-8	Photogrammetry	R 2-74	CERC-19
	TM	C-27	Municipal Landfills		
	MP C-69-5	C-16	Munition		
	TR C-74-6/1	C-38	Burst	MP M-73-16	H-11
	TR C-76-4	C-38	Clearing Helicopter Landing Zones		
	TR N-69-8/2	W-35	Height of Burst	TR M-69-3	M-25
	TM 6-368/2	C-26	Test Sites	MP M-73-8	M-11
	TM 6-368/3	C-26	Trajectory	TR M-71-3	H-25
	TR N-69-8/4	W-35	Transfer Trunk	MP M-73-10	M-11
Bar	TR C-69-8	C-37	Muntadas Airport	MP M-73-14	M-11
Baseplates	MP S-69-14	S-29	Murray Dam	TM 3-343/85	S-69
Containing Pozzolans	MP 6-123/7	C-3	Murrells Inlet, South Carolina	TM 108-1	S-56
Surfaces	TM 6-336	C-28	Muskeg	TR H-75-4 MP 4-446 TR 3-656 TR 3-744	H-56 H-3 M-21 M-24
Morville Revetment	TM 3-318	S-64	Trafficability Test	MP 4-621	M-5
Mosler Blast Valves	MP 1-790	W-4	Muskingum		
Mosquitoes	TR D-73-48	E-19	River Basin		
Motion			Watershed	B 2/4 MP C-77-9 MP	E-1 C-25 S-48
Measurements	TR N-70-11	W-36	MX Valley Studies Program		
Picture Library	B 2/3	H-1	MX19-B and MX19-C Aluminum Honeycomb Landing Mat	MP S-73-11	S-40
Mounding	TR E-74-1 TR E-75-1	W-39 W-39			
Mountain					
Home, Idaho	MP C-69-12	C-17			
Training Area	CR 3-70/1	M-41			

Term	Report No.	Page	Term	Report No.	Page
NAF-II Sigonella Foundation Soil	MP S-77-13	S-51	Navigation (Cont)		
Nakhon Sawan Area	CR 3-156/A	M-41	Conditions (Cont)		
Napa Basalt	MP S-70-18	S-33	New		
Naples, Italy	TR S-71-2/2	S-87	Bankhead Lock	TR H-72-6	H-53
Narragansett Bay	TM 3-343/38	S-67	Richmond Locks and Dam	TR 2-535	H-44
	MP 2-332/2	H-6	Ohio River Below Dam No. 36	TM 64-1	H-30
	TR 2-662	H-48		TM 64-2	H-30
	MP 2-721	H-9		TM 64-3	H-30
	TR	H-47	Ozark Lock and Dam	TR H-68-10	H-54
	TR /2	H-47	Pike Island Locks and Dam	TR 2-577	H-45
	TR 2-754	H-52	Robert S. Kerr Lock and Dam	TR H-63-5	H-53
Hurricane			Savannah Harbor	TM 2-268	H-37
Narrows Dam	TM 209-1	H-34	Suck Bend Reach, Chatta-		
	TM 2-294	H-37	hoochee River	TR H-78-10	H-68
Narsarsuaq, Greenland	TM 3-343/5	S-66	Uniontown Locks and Dam	TR H-75-9	H-62
NASA Mississippi Test Facility	TR S-69-10	S-86	Dam, Arkansas River	TR 2-655	H-47
Nassau Harbor	MP 2-799	H-9	Entrance, Lorain Harbor	TR 2-628	H-46
	TR 2-696	H-49	Improvement		
	TR 2-697	H-49	Columbia River Estuary	TR 2-735	H-50
Natchitoches Municipal Airport		Z-13	Cooper River	TR 2-733	H-50
National Shoreline Study		Z-14	Lock and Dam No. 17,		
Natural Resources	TR M-77-4	M-33	Arkansas River	TR H-70-12	H-57
Naugatuck	TR H-69-4	H-54	Lower Colorado River, Texas	TR 9	Z-8
Naval Operating Base			Model Studies of New Ohio		
Midway Islands	TM 2-251	H-35	River Locks	MP 2-381	H-6
Terminal Island	TM 2-237	H-36	Pool	CR Y-75-1	E-34
Navigable Waters	TP 30-6	CERC-32		CR Y-75-2	E-35
Navigation		Z-11		CR Y-75-3	E-34
		Z-12		CR Y-75-4	E-34
	MP H-76-15	H-17		TR D-77-31	E-11
Channel	TR H-72-2/5	H-53		TR Y-75-1	E-32
	TR H-73-13	H-63	St. Marys Falls Canal	TR Y-75-2	E-32
Arkansas River	TR 2-608	H-46	Structures	TM 208-1	H-34
Improvement	TR H-72-2/6	H-58	Study, South Carolina	MP 2-468	H-7
Barnegat Inlet	TR H-74-1	H-60	Typical Lock and Dam,	MP H-77-4	H-18
Gastineau Channel	TR H-72-9	H-58	Arkansas River	TR 2-623	H-46
Miller Sands Bar	MP 2-765	H-9	Navy		
Conditions			Department Floating Dry Dock	TM 219-1	H-35
Aberdeen Lock and Dam	TR H-78-12	H-68	X-Band Antenna		
Alexandria Reach	TR H-73-24	H-69	Waldorf, Maryland	MP 4-617	S-19
Aliceville Lock and Dam	TR H-78-2	H-67		MP 4-937	S-25
Belleville Locks and Dam	TR 2-738	H-51	Nawiliwili		
Cannelton Locks and Dam	TR H-75-6	H-62	Breakwater	MP H-78-4	H-19
Columbia Lock and Dam	TR 2-571	H-45	Harbor	MP 2-377	H-6
	TR 2-756	H-52	NCG Fallout Sealing Model	TR 19	W-29
Columbus Lock and Dam	TR H-77-11	H-66	Near-Surface		
Confluence of Arkansas,			Bursts		Z-15
Verdigris, and Grand			Cavitation	TM 71-17	W-26
Rivers	TR H-73-2	H-59	Nearshore		
Corral Bay	TM 2-332	H-40	Bottom-Crawling Vehicles	TR M-78-3	M-33
East Passage, Narragansett			Environment	MP 5-75	CERC-8
Bay	TR 2-754	H-52	Numerical Storm Surge	TR H-77-17	H-67
Fort Smith Reach	TR H-68-7	H-54	Neches River Saltwater Barrier	MP H-74-9	H-14
Greenup Locks and Dam	TR 2-469	H-42	NEPTUNE Crater	TM 66-13	W-21
Greenville Bridge	TM 2-306	H-40	NETDEN	MP K-75-4	MS-7
Hannibal Locks and Dam	TR 2-796	H-53	Netherlands	TM 105	CERC-42
Holt Lock and Dam	TR 2-745	H-51	Neubiberg Air Base, Germany	TM 3-343/31	S-67
Jackson Lock and Dam	TR 2-532	H-44	Neutron		
Little Rock Reach	TR H-72-3	H-58	Activation	TR N-76-1	W-40
Lock and Dam No.			Induced Radioactivity	PNE 5006	W-18
3, Arkansas River	TR H-68-8	H-54		TM 67-7	W-22
4,			Streaming	MP N-70-3	W-7
Arkansas River	TR 2-746	H-51	Nevada Test Site	MP 3-618	S-19
Monongahela River	TR 2-736	H-51		MP 4-636	S-19
7, Arkansas River	TR H-69-3	H-54		MP 4-645	S-19
9, Arkansas River	TR 2-817	H-53		MP 4-666	S-19
Markland Locks and Dam	TR 2-446	H-42		MP 3-703	S-20
Maxwell Locks and Dam	TR 2-672	H-48		MP 3-783	S-21
McAlpine Locks and Dam	TR 2-749	H-51			
Millers Ferry Lock and Dam	TR 2-775	H-52			

Term	Report No.	Page	Term	Report No.	Page
Nevada Test Site (Cont)	MP 3-895	S-24	Nitrogen		
	MP S-68-24	S-23	and Phosphorus, Lake Conway		
	TM 65-4	W-20	Ecosystem	TR A-73-2/1	
New				IV	H-49
Bankhead Lock	TR H-72-6	H-58		TR A-73-2/1	H-51
Buffalo Harbor	TR 2-701	H-52		2/IV	H-51
Castle-Finns Point Range	TM 2-259	H-36	Transformation	MP Y-74-4	E-29
Cumberland			Nitromethane	MP N-76-9	W-12
Dam	TM 2-335	H-40		TM 68-11	W-24
Locks and Dam	TR 2-585	H-46	No-Slump Concrete	MP C-74-10	C-21
Guinea; Canal Zone Analogs			Nomogram	TR M-74-3/3	H-31
VIII	CR 3-30/VIII	M-43	Nonbreaking Waves	RR 2-11	H-25
Hope Reservoir	TR H-69-14	H-55		TR H-65-3	H-53
Jersey Zinc Company Plant	TR 2-457	H-42		TR H-77-19	H-57
Lock and Dam No. 26	MP C-76-1	C-23	Nonpinnah Creek	MP 3-140	S-6
Madrid				TM 3-247	S-61
Bar Reach	MP H-70-1/2	H-11	Nondestructive		
Earthquake Series	MP S-77-5	S-50	Dynamic Soil Tests		
Floodway	MBM 31-6	H-23	AASHTO Road Test	CR 4-79	S-105
Orleans	MBM 31-7	H-24	Foss Field	CR 4-85	S-105
Harbor			Evaluation Procedure for		
Inner Harbor Navigational	TM 3-391	S-72	Military Airfields	MP S-78-7	S-52
Canal Lock Wall	MP N-75-8	W-11	Measurements of Soil Density	TR M-70-14/4	H-27
Lake Pontchartrain Area	TR S-75-6	S-91	Method of Testing Pavements	TR S-75-14/11	S-92
Texas and Mexico Railroad	TM	S-61	Test of Airport Pavement	MP	S-48
Poe Lock	TR 3-487	S-76	Testing		Z-16
Richmond Locks and Dam	TR 2-561	H-44	Concrete Structures	MP C-77-11	C-25
Savannah Bluff Lock and Dam	TR 2-535	H-44	Flexible Pavements		Z-7
	CTIAC-33	C-42	Light Aircraft Pavements		Z-16
	MP C-78-13	C-26	Pavements		Z-6
Ship Lock, Mississippi River-					Z-7
Gulf Outlet	TR H-78-16	H-69	Vibratory Testing	MP 4-373	S-13
York			Nonfreezing Weathering Test	TR S-75-14	S-92
Bay	TM 120	CERC-43	for Concrete	MP 6-109	C-2
	TM 120A	CERC-43		TM	C-27
Bight	R 79-1	CERC-21	Nonhomogeneous Soils	TR S-71-14/4	S-88
	TM 39	CERC-28	Nonlinear		
Harbor			Flow	F 77-4	CERC-20
	MP 2-332/3	H-6	Material	MP S-71-10	S-34
	MP H-76-18	H-17	Resilient Moduli	TR S-76-12	S-93
Model	MP 2-558	H-8	Water Waves	TM 133	CERC-43
Newburgh Lock and Dam	TR H-68-4	H-53	Wave Theory	MP H-76-16	H-17
	MP S-74-29	S-46	Nonmetallic Waterstops	MP C-70-22	C-18
	MP S-76-25	S-50		TR 6-546	C-32
Newfoundland, Canada	TM 3-343/2	S-66	Nonskid		
	TM 3-343/3	S-66	Compounds	TR S-71-11	S-88
	TM 3-343/7	S-66	Materials	TR S-68-3	S-85
Newmark Sliding Block Analysis	MP S-71-17/5	S-35	Nonuniform Flow	MP 2-601	H-8
Newport News	MP H-72-10	H-13	Norfolk Dam	TM 218-1	H-35
Niagara				TM 2-387	A-40
Falls	MP 2-229	H-5		TM 2-369	H-40
	TM 2-411	H-41	North		
Remedial Control Dam	TM 2-411/B	H-41	Africa	TM 3-343/31	S-69
Rockel in Sediments	MP D-76-18	E-3	America	CR 3-27	M-42
Niigata, Japan	TR S-73-9	S-95	Yuna Analogs No. 3	CR 3-11/8	M-42
	TR S-78-10	S-95	Atlantic United States	TR Y-76-3	E-33
	TR S-78-11	S-95	Bend	MP 3-2	S-4
Nike-Ajax Missile	MP 4-391	S-14	Fork		
1927 Flood	MBM 29-1/A	H-23	Dam Model	MP H-75-2	W-10
	MBM 44-1	H-24		TR H-74-2	W-39
1937 Flood	MBM 29-1/B	H-23	Lake Spillway	TR H-75-10	H-64
1943 Flood	MBM 29-1/C	H-23	Hartland Dam	MP 6-252	C-5
1945	MBM 29-1/D	H-23	Inlet, South Carolina	GITI 10	CERC-5
Flood				GITI 16	CERC-5
1961, 1967, and 1968 Flood			Norton Point Dike Study	MP H-75-2	H-14
Flows	MBM 31-4	H-24	Norway	TM 3-343/7	
1950 Flood	MBM 29-1/E	H-23		54-56	S-66
1951-1952 Floods	TR 3-443	S-74			
Ninilchik, Alaska		Z-12			

## 66-INDEX

Term	Report No.	Page	Term	Report No.	Page
Nott Island Upland Habitat Development Site	TR D-78-25	E-16	Nuclear (Cont)		
NOUGAT, Shot HARD HAT Grouting	MP 6-575	C-9	Rocket	MP E-73-2	W-9
Novo Harbor	MP 2-841	H-9	Terrain Barriers	TR 17	W-28
	TR 2-799	H-53	Weapons	TR N-74-7	W-39
Nuclear			Effects	TR N-69/2-1	W-33
Asphalt Content Gage	MP S-75-23	S-47		TR S-78-3	S-95
Charges	TM 63-4	W-23	Amphibious Vehicles	MP N-68-2	W-7
Construction Engineering			Dams	MP 1-800	W-4
Technology	TR 2	W-28		TR 1-770	W-32
Crater	MP 3-991	S-26	Numerical		
	PNE 5010	W-18	Analyses		
	TM 67-1	W-22	Effect of W/A in Earth		
	TM 69-7	W-24	Penetration	MP S-78-15	S-53
	TR 30	W-29	Penetration Dynamics	MP S-77-23	S-52
	TR 3-699	S-82	Analysis		
Slope	TR 68-8	W-23	Harbor Oscillations	MP H-76-20	H-17
Stability	TM 65-12	W-20		MP H-77-2	H-17
	TM 63-6	W-23	Barbers Point Deep-Draft		
	TM 68-7	W-23	Harbor	TR H-78-20	H-69
Cratering			Projectile Impact	CR S-75-4	S-102
Detonations	TR 19	W-29	Tidal Circulation for Long		
Device Simulation	MP E-75-6	W-11	Beach Harbor	MP H-76-4	H-16
	MP N-76-12	W-12	Well Arrays	TR S-77-5	S-94
	MP N-76-15	W-12	Calculation	TM 6	CERC-26
	MP N-78-2	W-13	Hindcast Model	MP H-77-9	H-18
	TR E-73-6	W-38	Instability	R 82-3	CERC-22
	TR E-74-3	W-39	Integration	MP 5-583	MS-5
Detonation	MP S-70-1	S-31	Methods	MP S-70-3/1	S-32
	MP S-71-17/2	S-35	Model	CETA 81-12	CERC-4
Earthwork	TR 12	W-23		GITI 6	CERC-5
Events	MP S-71-17/3	S-35		GITI 14	CERC-6
Excavated Channel	MP H-69-5	H-11		GITI 22	CERC-6
	TM 67-6	W-22		MR 80-6	CERC-13
Excavation	MP M-72-9	M-11		MR 83-10	CERC-15
	TM 66-17	W-21		R 79-10	CERC-21
	TM 63-2	W-23		RR H-75-1	H-29
	TM 66-3	W-21	Dredged Material Disposal	MP H-77-6	H-18
Cuts			Feasibility Study	TR H-74-6/17-4	
Design of a Transisthmian				TR M-73-5	M-29
Sea-Level Canal	TR 6	W-28	Ride Dynamics	TR 2-580/IV	H-46
Feasibility Study	TM 67-16	W-22	Study		
Sergius and Whitestone			Modeling		
Narrows, Alaska	TM 68-13	W-23	Hvdraulic Problems	MP H-78-9	H-19
Explosions	MP 1-800	W-4	Resonant Oscillations in		
	MP N-75-5	W-11	Deep Draft Harbors	RR H-76-1	H-29
	MP N-76-1	W-11	Procedure for Predicting Heave	MP S-73-28/2	S-41
	MP N-77-1	W-12	Simulation	TM 56	CERC-29
	MP N-78-3	W-13	Coos Bay-South Slough		
	TM 71-29	W-29	Complex	TR H-78-22	H-69
Airfields and Railway			Tidal Hydrodynamics, Great		
Systems	TR N-75-4	W-40	Egg Harbor and Corson		
Explosive	CR 3-157	S-116	Inlets	TR H-78-11	H-68
	MP 2-491	W-2	Tsunamis	MP 0-76-1	MS-8
	PNE 5004F	W-17	Solution of Differential		
	PNE 5004P	W-17	Equations	MP K-72-1	MS-5
	TM 66-12	W-21	Steady-State, Wind-Driven		
	TM 70-12	W-25	Circulation Analysis	MP H-76-3/17-7	H-15
	TR 1	W-28		TR H-77-17	H-67
	TR 8	W-28	Storm Surge		
	TR 10	W-23	Models		
	TR 13	W-28	Tow Model	MP H-78-11	H-19
Quarrying	TR 11	W-28	Values	MP 5-770	MS-5
Geostorage Facilities	TR E-72-26	W-38	Nutrients	TR D-77-37	E-11
Instruments	MP 4-117	M-2	NX Borehole Camera	TM 68-12	W-23
	MP 4-495	S-16			
	MP 4-827	S-23			
Methods	MP 3-69-15	S-29			
Probes	MP 4-199	S-9	Oahe Dam	TR 2-557	H-44
Radiation	TR N-72-12/6	W-37		TR 2-657	H-47

Term	Report No.	Page	Term	Report No.	Page
Oahe Dam (Cont)	TR H-63-1	H-53	Ohio (Cont)		
Oahu, Hawaii	RK H-74-2	H-29	River (Cont)		
	TR H-75-15	H-63	Basin	R 2	Z-13
	TR H-76-8	H-64	Below Dam No. 30	TM 64-1	H-30
	TR H-71-3	H-57		TM 64-2	H-30
Oak Harbor				TM 64-3	H-30
Oakington, Cambridgeshire, England	TM 3-343/121	S-71	Demonstration Projects	/D	Z-3
Oakley Dam	MP 4-892	S-24	Division	INR 6	Z-5
	MP S-72-3	S-36	Flood Heights	MP H-77-7	H-18
	TR H-70-13	H-57	Flow Conditions	MBM 66-2	H-25
	MP C-73-4	C-21	Locks	MP 2-361	H-6
Obstacle	CR 3-120	M-45	Oil	MP C-68-5	C-16
	MP M-68-7	M-8	Aquatic Environments	TR D-77-26	E-10
	TR 3-783	M-24	Contamination	TR D-77-25	E-10
	TR M-68-1/1	M-25	Pollution	MP C-71-9	C-19
	TR M-70-11	M-27	Shaies	MP 3-75-3	S-52
Vehicle-Speed Systems	TR M-68-1/4	M-25	Sinking Materials	MP C-71-9/2	C-19
Ocean	TR D-78-2	E-13	Storage System	MP C-71-9/3	C-19
Bottom	TP 77-11	CERC-31	Okatibbee Lake, Mississippi	MP 4-75	CERC-35
City, Maryland	MP 2-59	CERC-36	Old River	MP H-76-1	H-18
Disposal				MP 3-492	S-16
Dredged Materials	MP D-74-14	E-2		TR 2-496	H-43
Sites in the Hawaiian Islands	MP H-77-6	H-18	Auxiliary Structure Control	CTIAC-62	C-44
Dumping	R 79-1	CERC-21		MP 3-143	S-3
	TM 39	CERC-38		TR 3-602	S-79
Floor	CTIAC-6	C-40	Low-Sill Structure	TR 3-642	S-81
	MP C-73-4	C-21		MP 3-185	S-9
				MP 3-200	S-9
Waters				MP C-73-19	C-26
Wave	R 79-8	CERC-21		TR 2-447	H-42
	TM 46	CERC-39		TR H-76-15	H-65
	TM 59	CERC-29		TR H-77-2	H-66
Direction gage	R 1-66	CERC-16	Site	MP 3-126	S-1
Forces	TM 24	CERC-27	Structure	MBM 31-4	H-24
Measuring Instruments	TM 6	CERC-37	Sediment Diversion	TM 2-338	H-40
Records	TM 58	CERC-40	Vibration	MP 2-774	H-9
Spectra	TM 43	CERC-39	Lock	CR 3-63-6	S-101
	TP 76-10	CERC-30		MP 3-554	S-17
Oceanside, California, Littoral Cell	MP H-78-8	H-19	Navigation Lock	TR 3-72-10	S-89
Off-Road				IR 5	S-2
Materials Handling Vehicles	MP M-78-8	M-16		TR 2-549	H-44
Mobility	TR M-70-4	M-26	Outlet Channel	MP 2-143	H-4
	TR M-70-10	M-26	Overbank Structure	TR 2-491	H-43
Performance	TR M-70-7	M-26	Ole Miss Airport	MP 4-540	S-17
Vehicles	CR 3-162	M-45	Ompompanoosuc Basin	R 1	Z-18
	MP 4-362	M-3	One-Dimensional Compression	CR 3-26/4	S-110
	TR 3-666/8	M-22		CR 3-26/7	S-110
Offshore				CR 3-26/17	S-110
Bars	TM 8	CERC-37		CR 3-26/21	S-111
Beach Nourishment Projects	TR H-76-13/4	H-65	O'Neil Shear-O-Meter	CR S-71-4	S-107
Breakwater	R 78-8	CERC-20	Onslow Beach, N. C.	MP 3-74-11	S-45
Dredged Material Disposal Site	TR D-78-34	E-17	Oolitic Argonite	MP 4-600	S-13
Platforms	TP 76-13	CERC-31	Opalokka Airport	MP 1-69	CERC-7
Sand Deposits	TR H-76-13/3	H-65	Opekiska Lock and Dam	MP 4-316	S-22
Structures	MP 3-75	CERC-8	Open	TR 2-579	H-45
Surveys	CETA 82-5	CERC-4	Channel		
Zone	TM 126	CERC-43		MP H-63-5	H-10
Offutt AFB, Nebraska	MP M-77-2	M-15	Junctions	MP H-73-6	H-12
Ogee Crest Spillways	CR H-71-1	H-71	Transitions	R 2-100	Z-13
O'Hare International Airport	CR S-76-11	S-99	Storage Areas	MP 2-646	H-9
Ohio				MP 4-945	S-25
Cumberland-Tennessee- Mississippi River System	TR H-74-3	H-61	Water	MP 3-69-5	S-26
River	B 1/1	H-1	Disposal		
	MP C-76-8	C-24	Dredged		
	MP H-73-3	H-13	Material	CR D-76-1	E-24
	MP H-74-4	H-14		TR D-73-50	E-19
	TR H-77-18	H-67	Sediments	TR D-73-45	E-13
	TR H-73-6	H-66	Sites	TR D-73-7	E-14
			Dredge Disposal	TR D-77-24/5	E-10
			Dredged Material Placement		
			Methodology	CR D-76-3	E-23

## 68-INDEX

Term	Report No.	Page	Term	Report No.	Page
Open (Cont)			Outlet (Cont)		
Water (Cont)			works (Cont)		
Pipeline Disposal	TR D-73-30	E-17	Beltzville Dam	TR H-69-18	H-56
	TR D-78-46	E-19		TR H-75-10	H-62
	TR DS-73-13	E-27		TR H-77-14	H-67
Operation			Blank Butte Dam	TR 2-551	H-44
Distant Plain	MP 3-990	S-26	Blakely Mountain Dam	TM 2-347	H-39
Mine Shaft	MP 3-70-22	S-33	Branched Oak and Cottonwood		
Operations Research/Systems			Springs Dams	TR H-72-1	H-57
Analysis	MP T-69-1	MS-9	Cohiti Dam	TR 2-705	H-49
Optical			DeGrav Dam	TR 2-684	H-48
Data	CTIAC-31	C-42	East Branch Reservoir	TM 2-325	H-38
	MP C-78-7	C-26	Fort Randall Dam	TR 2-528	H-44
Density	TR M-74-3/3	M-31	Garrison Dam	TM 2-431	H-41
El Verde, Puerto Rico	MP M-69-3	M-8	Inlets	MP H-69-8	H-11
Oregon Soils	CR M-70-1	M-38	New Hope Reservoir	TR H-69-14	H-55
Organic Soils	MP 4-438	M-3	Oahe Dam	TR 2-557	H-44
	MP 4-439	M-3	Papillion Creek	TR H-73-17	H-60
Organisms	CR H-73-3	H-71	Rowlesburg	TR H-70-7	H-56
Orifices	TM 91-1	MS-10	San Antonio Dam	R 2-106	Z-13
Orio Al Serio Airfield	TM 3-343/46	S-68	Shelbville Dam	TR 2-719	H-50
Orlandet Air Base	TM 3-343/54	S-68	Stilling Basin		
Orthogonals	TM 21	CERC-37	Bayou Bodreau Dam	TM	S-62
Orthotropic Landing Mats	CR 4-10	S-119	Clinton and Fort Scott Dams	TR H-73-6	H-59
	MP 4-113	S-7	East Barre Dam	MP 2-293	H-5
Osneola Dam	TM 2-261	H-36	Tallahala Dam	TR H-73-5	H-59
Oscillations in Deep Draft			Texarkana Dam	TM 2-346	H-39
Harbors	RR H-76-1	H-29	Tavlorsville Lake	TR H-75-12	H-63
Oscillatory			Tooks Island Dam	TR H-70-10	H-56
Flow	R 79-13	CERC-21	Townshend Dam and Reservoir	TR 2-498	H-43
	TM 28	CERC-27	Warm Springs Dam	TR H-73-3	H-59
Waves	TM 117	CERC-43	Overbank Vegetation	MBM 81-6	H-25
Oslo, Norway	TM 3-343/56	S-68	Overburden		
Oswego Harbor	TM 2-291	H-37	Material	TM 140-1	S-57
Ottawa Sands	RR S-76-2/1	S-54	Removal	MP M-76-2	M-13
Otter (Overland Train Terrain			Overexcavation	TM 65-13	W-20
Evaluation Research)	MP 3-508	S-17	Overflow Embankments	MP 2-552	H-7
	TR 3-588	S-78	Overland		
Ouachita River	MP 3-507	S-16	Flow Treatment of Wastewater	MP Y-74-3	E-29
	MP 3-546	S-17		MP Y-76-6	E-30
	MP 3-683	S-19	Train Terrain Evaluation		
	MP S-70-16	S-33	Research	TR 3-583	S-73
	TR 3-741	S-84	Overlay	MP S-74-25	S-46
	TR S-69-2	S-85	Asphalt Runway	MP S-76-24	S-50
Oujda Airfield	TM 3-343/11	S-66	Highways	MP S-72-12	S-37
Outfall			Maintenance	IR S-77-2	S-3
Locations	MP 2-951	H-10	Test Slabs, Tampa Inter-		
Sewer	TM 2-367	H-40	national Airport	MP S-72-44	S-38
Systems	RR H-71-2	H-28	Overlapping Deteriorated Landing		
Outlet			Mat	MP S-70-23	S-33
Bayou des Glaises Drainage			Overpressure Soil Test Facility	MP S-75-20	S-47
Culvert	TM 147-1	H-32	Overtopping	CDM 76-1	CERC-2
Conduit, Rend Lake Dam	TR H-75-2	H-61		CETA 80-7	CERC-3
Structure	B 2/4	H-1		TM 80	CERC-41
	TM 174-1	H-33	Long Beach, California	MP H-76-10	H-16
Arkabutla Dam	TM 167-1	H-33	Oxford, England	TM 3-343/91	S-69
Eau Galle Reservoir	RR 2-774	H-52	Oxidation-Reduction		
Excavation, Grenada Dam	TM	S-64	TR Y-78-11	E-23	
Meramec Lake	TR H-78-15	H-68	TR D-77-15	E-7	
Sardis Dam	TM 123-2	H-32	Budget Analysis	CR D-75-3	E-26
Tuttle Creek Dam	TM 2-396	H-41	Dickey Lake	MP Y-76-7	E-30
Wappapello Dam	TM 134-1	H-32	Oxygenation of Dredged Material	TR D-77-15	E-7
Transitions	RR H-72-1	H-28	Oyster		
Tunnels, Muskingum Watershed	MP C-77-9	C-25	beds	MP 2-912	H-10
Works	MP 2-204	H-5	Reefs	MP S-70-29	S-33
	MP 2-234	H-5	Ozark		
	MP H-69-3	H-11	Highlands	TM 199-1	S-58
Abiquiu Dam	TR 2-513	H-43	Lock and Dam	TR H-68-10	H-54
				TR H-77-6	H-66



Term	Report No.	Page	Term	Report No.	Page
Pacific			Patoka		
Coast	MP H-76-2/G	H-15	Dam	MP S-72-42	S-38
Coastal Communities	TR H-74-3	H-60		MP S-74-26	S-46
Islands; Canal Zone Analogs X	CR 3-30/X	M-43		MP S-73-1	S-32
Northwest	TR D-78-17	E-15	Damsite	MP S-72-41	S-36
Padre Island, Texas	MR 77-8	CERC-11	Patrick Air Force Base	MP 4-466	S-19
	MR 33-8	CERC-15	Patriot Systems	MP M-76-26	M-14
PAF Station			Patterson Airfield, Inland	TM 3-343/1	S-16
Drigh-Road, Karachi, West			Paulsboro Refinery Docking Area	MP 2-797	H-9
Pakistan	TM 3-343/126	S-71	Paved Surfaces	TR C-73-2	S-29
Peshawar, West Pakistan	TM 3-343/125	S-71	Pavement		
Pahute Mesa, Nevada Test Site	MP S-58-24	S-28		CR 3-145/4	S-100
Painted Rock Dam	TR S-71-2/1	S-87		IR S-71-2	S-3
Pakistan	CR 3-11/4	M-42		MP S-59-27	S-30
	TM 3-343/123	S-71		MP S-71-24	S-37
	TM 3-343/125-126	S-71		MP S-72-43	S-36
Palanquin	MP S-68-21	S-28		MP S-75-1	S-45
	PNE 904F	W-16		PSTIAC-5	M-34
	PNE 905F	W-16		TR S-77-8	S-94
Palm Beach International Airport	TM 3-344/6	S-71		TR S-78-8	S-95
Panama	CR 3-56	M-40		TR S-74-8	S-95
	CR 3-53/4	S-111	Coating	MP 4-319	S-23
	IR	M-1	Condition Survey, Pease Air		
Canal	MP S-74-16	S-45	Force Base	MP 4-391	S-24
	TM 3-328	S-85	Construction	MP S-77-26	S-52
	TR S-70-9	S-86	Design	CR 3-145/5	S-100
	R 4	Z-18		CR 3-145/6	S-100
Zone	CR 3-18	M-33		MP S-71-14	S-35
	CR 3-34/2	M-40		MP S-74-4	S-44
	MP 4-355/1	M-2		TR S-76-3	S-93
	MP 4-909	M-7		TR S-76-17	S-95
	TM 3-322	S-64	Deterioration	TR S-76-15	S-93
	TR M-69-1	M-25	Evaluation		
	TR M-72-2	M-29		TM 3-343	S-66
City Beach, Florida	MR 76-10	CERC 10	Failure		
	MR 32-2	CERC-13	Morristown Airport	TM	S-58
	MR 82-3	CERC-13	Ramey Air Force Base	MP S-70-10	S-32
	MP 4-355/3	M-3	Layers	MP 4-34	S-6
Study No. 2				MP S-73-4	S-40
Panel			Light Aircraft		
Gates	TR 2-491	H-43	Materials		
Materials	MP S-77-9	S-51		TR S-77-9	S-94
Panicum Amarum	MR 76-3	CERC-10	Mix Design	TR 3-594	S-73
Paper-Mill Sludge Landfills			Performance		
Papillion Creek and Tributaries	TR H-73-17	H-60	Models	CR S-75-15	S-119
Paraibuna Dam	MP S-74-21	S-45	Reliability	CR S-75-7	S-107
Paraitinga Dam	MP S-74-21	S-45	Repair		
Park	TR R-73-1	E-39	Response	CR S-75-3	S-117
River Project, Hartford,				TR S-75-11	S-92
Connecticut	MP S-77-22	S-52	Sections		
Parker Estuary	MP 1-74	CERC-8	Smoothness Requirements	TR S-77-12	S-94
Parking			Surface Cracking, Amedee Army		
Aprons	MP 4-34	S-5	Airfield	MP S-71-15	S-35
Areas	MP S-69-11	S-29	Systems	CR 2-76-15/1	S-119
	TR N-69-8/6	W-35		TR S-74-5	S-90
Particle			Terms	PSTIAC-1	M-34
Motion	TR S-71-14/2	S-88	Test	TR S-71-17	S-88
Orbital Speed	TM 3	CERC-26	Jumbo Jets	MP S-69-52	S-31
Overpassing	R 1-74	CERC-19	Sections	TR S-74-3/1	S-30
Size Distribution	MP C-70-24	C-18		TR S-74-3/IV	S-90
Velocity	CR 3-91/3	S-117	Paving		
Particulate			Materials	MP C-77-14	C-25
Fractions	TR D-78-16	E-15	Methods	MP S-75-18	S-47
Soil System	CR 3-26/22	S-111	PCB		
PASNY Intake Structure	MP 2-337	H-6	Contaminated Sediment	TR D-77-24/B	E-3
Pathogens	CR A-76-2	M-52	Materials	CP S-75-6	E-22
	TR	M-48	Peakeeper Facilities	CTIAC-70	C-45
Control of Waterhyacinths	TR A-77-2	M-49	Pearl		
			City, Hawaii	TR H-75-3	H-61

## 70-INDEX

Term	Report No.	Page	Term	Report No.	Page
Pearl (Cont)			Perrin Air Force Base	MP 4-397	S-14
River				TM 3-344/7	S-71
Improvement	TM 11-1	S-56	Perry Dam	MP S-70-11/1	S-32
Locks	TM 2-313	H-38	Peru-Chile Trench	KR H-76-2	4-29
Pease			Pervious		
Air Force base	MP 4-391	S-42	Coastal Structures	RR H-69-1	H-27
	MP M-77-2	M-15	Foundations	TM 3-304	S-63
	MP S-7-34	S-42	Peshawar, West Pakistan	TM 3-343/125	S-71
Study Area	MP C-70-11	CERC-21	Pesticide	CR D-75-6	E-22
Peat Deposits	R 79-7	CERC-21		TR D-77-35	E-11
Peaty Soils	CR 3-141	S-103	Petrographic	MP S-73-57	S-43
Peconia-Kama Canal	MP N-76-14	W-12	Character of Bed Materials	TM 62-2	S-55
Pembine Study Area, Michigan and Wisconsin	MP C-70-14	C-18	Data	MP 6-254	C-5
Pendent Side Chains	CR A-77-1	M-52	Examination	MP C-73-1/2	C-25
Pendleton New Levee, Arkansas River	TM 172-1	S-57	Hardened Concrete	TR 6-614	C-34
Penetration	CR 3-28	S-108		MP 6-137	C-3
	TR S-78-14	S-95	Samples	MP 6-739	C-12
Apparatus	MP 6-187	C-4	Buffalo Harbor, New York	MP 6-695	C-11
Asphalt into Porous Aggregates	MP 4-38	S-6	Concrete Cores	MP 6-230/A	C-5
Diorite Boulders		L-13	Procedures	MP 6-174	C-4
Dynamics	MP S-77-23	S-52		TR 3-436	S-74
Gator Mine	MP M-76-15	M-14	Petroleum Fraction	TR D-78-16	E-15
Performance of Antitank Mine			pH	CR D-77-4	E-23
Projectile	MP S-74-31	S-46		TR D-77-40	E-12
Resistance	MP M-69-7	M-9	Phalsbourg Air Base	TM 3-343/49	S-66
	TR 3-652/3	M-21	Phi Grade Scale	CETA 79-7	CERC-2
Test	TR M-70-14	M-27	Philippines; Canal Zone		
	MP 4-360	M-7	Analog VI	CR 3-30/VII	M-43
	MP M-71-1	M-9	Philpott Dam	TM 2-321	H-38
	R 5-5	P-1	Phosphorus	TR A-73-2/1/	
	RR S-76-2/1	S-54	IV	TR A-78-2/2/	M-49
	RR S-76-2/2	S-54	IV		M-50
Clay	MP M-71-2	M-9	Pentoxide	TR 3-455/4	S-74
Dakota Sandstone	TR S-77-3	S-94	Photoelastic Studies	CR 3-118	M-42
Sites	MP M-77-13	M-15	Photogrammetric Experiments	R 9-74	CERC-19
Penetrator	CR S-69-4	S-116	Photogrammetry	R 2-74	CERC-19
	MP 4-300	H-2	Photographic		
	MP 3-361	S-13	Exposition and National		
	MP 3-455	S-15	Industrial Photographic		
	MP 4-899	M-7	Conference	MP 5-219	MS-4
	MP S-75-15	S-47	Remote Sensor	TR M-74-3/1	M-30
	MP S-77-23	S-52		TR M-74-3/2	M-31
	R 18-1	P-4	Photography	MP 5-214	MS-4
	TR 3-462	M-23	Photointerpretation	CR 3-43	M-43
	TR S-78-17	S-96	Physical		
Penetrometer	MP 3-832	S-23	Hydraulic Models	MP H-78-3	H-19
Penstocks				R H-75-3	H-29
Bluestone Dam	TM 220-1	H-35	Modeling	MP Y-72-2	E-29
Norfolk Dam	TM 218-1	H-35	Properties	Transl 69-5	S-97
Pepper Clay Shale	TR S-71-6/5	S-87	Physicochemical		
Perched Beach	TR H-73-8	H-59	Parameters	TR D-77-20/B	E-3
Percolation	TM 31	CERC-38	Sediment Parameters	TR D-77-3/B	E-6
Perimeter Acquisition Radar Building	MP S-72-15	S-37	Physiognomic analysis of		
	TR N-73-9	W-39	Vegetation	CR 3-72	M-37
Periodicals Holdings of the U. S. Army Engineer Waterways Experiment Station Library	MP	MS-3	Physiognomy of Vegetation	CR 4-103	M-37
Permafrost		Z-16	Physiographic Areas		Z-17
Permeability	CR 3-63/C	S-112	Phytoplankton Assemblages	TR D-77-3/F	E-6
	TM 62	CERC-29	Pickwick		
Model Jetties	B 1/1	H-1	Dam-Kentucky Dam Reach	MBM 13-1	H-22
Testing	TM 176-1	S-57	Discharge Duration	MBM 23-2	H-23
Tests	TM 3-299	S-63	Piedmont Lake Outlet Tunnel	MP C-77-9	C-25
	TM 6-380	C-29	Pier J		
Permeable Breakwater	CETA 79-5	CERC-2	Completion and Tanker Terminal	MP H-76-4/1	H-16
	TP 76-8	CERC-30		MP H- 6-4/3	H-16
				MP H-76-20/2	H-17
				MP H-76-20/3	H-17
				MP H-76-20/4	H-17
				MP H-76-4/2	H-16
				MP H-76-4/4	H-16
			Configurations		

Term	Report No.	Page	Term	Report No.	Page
Pierred Plank Landing Mat	TM	S-58	Pipe (Cont) Line	TP 77-11	CERC-41
	TM	S-59		TM 3-4	H-10
	TM 211-2	S-59		TR D-77-15	E-7
	TM 211-4	S-59		TR D-78-06	E-19
	TM 212-3	S-59		TR DS-78-14	E-27
	TM 212-4	S-59		TR D-78-44	E-18
	TM 212-5	S-59		TM 119-1	H-31
	TM 212-6	S-60		TM 119-2	H-32
	TM 212-7	S-60		D 1/1	H-1
	CR 1-105	W-45		MP 4-801	S-22
Piezoelectric Gage Piezometer	MP 4-52	S-5	Manufacturing Industry		
	MP S-68-22	S-28	Mobile Breakwater	MP H-71-8	H-12
	MP S-69-31	S-30	Tire Floating Breakwater	TP 62-4	CERC-44
	TM 4-379	S-72	Piping in Earth Dams	MP 0-76-1	MS-9
	TR 3-479	S-70		TR S-75-15	S-92
	R 5-4	P-1	Pisa San Giusto Airfield	TM 3-443/47	S-68
Piezometric Data	TM 3-341	S-69	Pismo Clams	MP 3-75	CERC-8
	TM 3-409/B	S-73	Piston-Type		
	TM 3-424/E	S-74	Samplers	TM 3-115	S-64
	TR 2-577	H-45	Wavemaker	R 4-71	CERC-17
Pike Island Locks and Dam	TR 2-586	H-46	Pixel Problems	MP M-76-9	H-14
	MP 3-686	S-20	Plain		
Pile	MP S-76-21	S-50	Concrete	MP 0-674	C-10
	TM	S-64		MP 6-779/1	C-12
	TM 15	CERC-26	Strain	TR S-71-2	S-87
	TM 69	CERC-40	Deformation Analysis of Soil	CP 3-129/3	S-113
	TM 71	CERC-40	Device	CR 3-101/12	S-113
	TM 106	CERC-42	Loading	CR 3-129/5	S-114
	TP 78-1	CERC-31	Shear		
	TR S-69-10/1	S-86	Apparatus	TR S-71-2/1	S-87
	TR S-69-10/2	S-86	Device	CR 3-101/10	S-114
	MP C-74-13	C-22	Tests	CR 3-101/15	S-113
	MP 6-846	C-13	Wave		
	TR S-75-5	S-91	Loading	TR S-73-12	S-90
		Z-6	Propagation Code	TR S-71-12	S-88
	TR S-74-6	S-90	Plankton	TR A-73-2/	
TM 3-317	S-64		1/III	M-49	
MP 3-148	S-8		TR A-78-2/2/		
TM 3-308	S-63		II	M-50	
TR 3-453	S-74	Planktonic Communities	TR D-77-42/A	E-12	
CR S-75-5	S-104		TM 102-2	H-31	
CR S-76-14	S-104	Plant	CR D-77-2	E-22	
TR S-74-3	S-90	Nutrients	CR D-77-4	E-23	
TR 3-741	S-84	Pathogens	CR A-76-2	H-52	
TR S-63-10	S-85		TM	H-43	
TR S-69-10/4	S-86	Propagation	TR DS-73-16	E-28	
TM	S-65		TR DS-78-17	E-23	
MP 6-793	C-13	Succession	TR D-73-9	E-14	
TM 66-11	W-21		TR D-78-14/II	E-15	
TM 66-16	W-21	Planting	TM 101	CERC-42	
TR Y-77-4	E-33	Plastic			
MP 2-75	H-4	Airplane Landing Mat	TR 4-800	S-34	
TM 2-375	H-40	Armor	TR H-71-10	W-36	
TR 2-511	H-43	Coatings	MP 0-864	C-14	
MP 4-34	S-5	Filter Cloth	MP S-70-2	S-31	
MP 4-144	S-8		R 21-5	P-4	
MP D-77-3	E-4	Glass Fiber Reinforcement	TR S-72-7	S-89	
	Z-18		MP 6-779	C-12	
MP 6-318	C-6	Pipe	TM 6-421	C-30	
MP 4-440	S-14				
MP 4-496	S-10	Properties of Heavy Clay	MP 3-90	S-6	
MP 4-657	S-19	Zone	TR S-75-16	S-94	
MP 2-699	H-9		CR 3-129/2	S-113	
TR 2-715	H-50	Plate Tectonics	MP S-73-1/5	S-39	
TR 2-751	H-52	Platforms	TR A-77-1	H-49	
MP S-73-65	S-44	Platte River Sand	RR S-76-2/2	S-54	
TR N-73-5	W-38	Plattsburgh			
TR 3-781	S-84	Air Force Base	MP S-73-46	S-42	
		Study Area	MP C-70-7	C-17	
Cover Requirements					
Dynamic Loads					
Joints					

## 72-INDEX

Term	Report No.	Page	Term	Report No.	Page
Pleistocene Sediments	TR S-75-6	S-91	Ponne de Leon Inlet		Z-12
Plowshare Nuclear Cratering Events	TM 69-9	W-24	Portons	TM 215-1	H-35
PLUMBBOB	CR 2-29	W-45		TM 2-256	H-36
Plume	TR WT-1420	W-30	Pool Elevation	TR Y-77-3	E-32
Deep Water	TR M-76-6	M-32	Pope Air Force Base	MP 4-3/2	S-4
Shallow Water	TR N-72-4/1	W-37		TM 3-344/5	S-71
Pneumatic	TR N-72-4/2	W-37	Pore		
Barriers	RR H-73-4	H-28	Pressure	TR 3-722	S-82
Coring Devine	MR 82-8	CERC-14	Clay Shale Foundations	TR S-71-6/4	S-87
Floats	TM 215-1	H-35	Concrete	TR 6-654	C-34
Tire	MP 4-443	M-3	Embankment Foundations	TR S-68-2	S-84
	MP 4-469	M-4	Gage	CR 3-26/20	S-111
	MP M-68-7	M-8	Measurements	CR 3-26/5	S-110
	TR M-68-1/1	M-25		MP 1-956	W-6
Clay	MP 4-335	M-6	Soft Ground	CR S-76-3	S-102
Dry Sand	MP 4-750	M-5		CR S-76-10	S-102
Sand	MP 4-336	M-6	Structure Research	MP 6-254	C-5
Soft Soil	MP 4-944	M-7	Water Pressure	CR 3-74/5	S-103
	TR 3-688	M-22		MP S-69-20	S-29
Tired Wheel	TR 3-703	M-23	Measuring Devices	MP 3-476/10	S-15
Wave Generators	RR 2-7	H-27	Porous		
Popopono Creek	TR H-69-18	H-56	Concrete	MP C-68-9	C-16
	TR H-75-10	H-62		MP C-72-18	C-20
	TR H-77-14	H-67	Friction		
Point			Course Pavement Construction	MP S-77-26	S-52
Arguello	TM 19	CERC-27	Surface Course		Z-16
Chehalis	TM 2-417	H-41		MP S-75-12	S-47
Conception	MP 2-69	CERC-7	Portland Cement Concrete	MP S-75-13	S-49
Fermin Naval Supply Depot	TM 2-238	H-36	Porpoising	CTIAC-46	C-43
Hueneme	TM 92	CERC-41	Port	MP 4-233	S-10
Mansfield Channel	GITI 12	CERC-5	Allen Look		
Menoir	R 15-1	P-4		CR S-69-5	S-101
Mugu	R 81-12	CERC-22		IR 3	S-2
Reves Beach	TM 65	CERC-40		MP 6-297	C-5
	TM 91	CERC-41		MP 3-432	S-14
Poisson's Ratio	TM	S-65		MP 3-437	S-14
POKEHOLES Cratering Series	MP N-76-3	W-11		TR 2-500	H-43
POL				TR S-68-7	S-85
Containers	MP 1-639/2	W-3	Construction in the Theater		
Storage Facilities	IR N-70-1	A-1	of Operations	TR H-73-9	H-59
	MP 1-689/3	W-3	Hueneme	TR H-75-8	H-62
	MP N-72-4	W-3	Ontario Harbor	TR H-77-20	H-67
	MP N-73-1	W-9	Orford	TR H-74-4	H-60
Polecat	MP 4-262	M-2	St. Joe Seagrass		
Bay Disposal Area, Mobile	MP D-78-3	E-4	Demonstration Site	TR D-78-33	E-17
Pollutant			San Luis	TR H-69-6	H-54
Discharges	MP M-73-11	M-11	Washington Harbor	MP H-76-22	H-17
Dispersion	MP M-76-10	M-14		TM 2-334	H-38
Pollution	MP Y-72-2	E-29		TR H-77-1	H-66
	TR 2-560/		Portable		
	III/5	H-45	Bunker	TR N-71-6	W-36
Narragansett Bay	TR /2	H-47	Surfing	TR 3-542	S-76
New York Harbor Model	MP 2-558	H-8		TR 3-666	S-81
St. Johns River	TM 2-244	H-36		TR 3-700	S-82
Savannah Harbor	MP 2-633	H-8	Portland		
Polychlorinated Biphenyls	TR D-77-24/E	E-10	Blast-Furnace Slag Cements	MP 6-196	C-4
Polyester Resin Concrete	TR C-69-4	C-36		TR 6-445	C-31
Polymer	CR A-77-1	M-52	Cement	MP 6-111	C-2
	MP S-77-14	S-51		MP 6-173	C-4
Concrete	CTIAC-35	C-42		MP 6-201	C-4
Emulsions	CR S-71-2	S-119		MP 6-290	C-6
Polymeric Cavitation Erosion-Resistant Materials	TR C-76-2	C-36		TM 6-359	C-26
Polypropylene-Asphalt Membrane	IR S-69-2	S-2		MP 3-798	S-22
Polyurethane-Coated Membranes	TR S-75-1	S-91		MP C-66-2	C-16
Polyvinyl Acetate	TR 6-466	C-31		MP C-66-7	C-16
Dust-Control Film	MP M-76-1	M-13		MP C-71-6	C-14
Latex	CR S-71-9	S-117		TM	C-27
				TM 6-410	C-24

Term	Report No.	Page	Term	Report No.	Page
Portland (Cont)			Pran Buri Area	CR 3-155/D	M-41
Cement (Cont)			Prattville, Alabama	TM 200-1	H-44
Based Mortars	MP C-70-19	C-18	PRE-BUGGY	MP 1-503	W-4
Concrete	CTIAC-46	C-43		PNE 300P	W-14
	MP 6-624	C-9		PNE 301F	W-14
	MP 6-762	C-12		PNE 302	W-14
	MP C-70-18	C-18		PNE 304F	W-14
	MP S-77-26	S-52		PNE 315F	W-14
Grout	MP 6-862	C-14	Precast Concrete Elements	MP 6-926	C-15
Mortar	MP 6-431	C-7		TR C-78-1	C-49
Pozzolan Cement	TR 6-541	C-31	Precipitation	R 1	Z-18
Portsmouth, Ohio	MP S-77-20	S-51		R 2	Z-18
	MP S-78-4	S-52		R 3	Z-18
	MP S-78-12	S-53		R 4	Z-18
Portugues River, Puerto Rico	TR H-78-3	H-63	Gage	B 61-3	MS-1
Possum Kingdom Dam	TM 111-1	H-31	Keiver	B 61-2	MS-1
	TM 111-2	H-31	Precompression for Improving		
	TM 111-3	H-31	Foundation Soils	MP S-69-23	S-29
	TM 113-1	S-56	Pre-DICE THROW		Z-15
	TM 113-2	S-56		MP	S-49
Post				MP	S-50
Army Airfield, Fort Sill	TR 3-466/10	S-75	Predicting		
Attack Pavement Repair		Z-7	Dredged Material Movement	TR DS-78-3	E-27
Tensioned Concrete Beams	CTIAC-50	C-43	Earth Penetrator Performance	TR S-78-13	S-95
Posthurricane Survey	MR 33-8	CERC-15	Potential Heave	TR S-78-7	S-95
Postprocessor for Finite			Soil Moisture Content	CR 4-8	M-44
Element Method	MP K-77-4	MS-7	Prediction		
Posttensioned Concrete	TR 6-570/2	C-33	Floods	MP H-69-9	H-11
Beam	TR 6-570/4	C-33	Heave	TR S-77-7	S-94
	TR 6-570/6	C-33	Heavy Metal Uptake	TR D-78-6	E-14
Potamology			Predisposal Baseline Conditions		
Barrel Samples	MP 3-9	S-4	Demersal Fish Assemblages	TR D-77-6/D	E-6
Conference	R 11-2	P-2	Phytoplankton Assemblages	TR D-77-6/F	E-6
	R 11-4	P-2	Zooplankton Assemblages	TR D-77-6/E	E-6
Investigations	R 1-1	P-1	Prefabricated		
	R 1-2	P-1	Airfield and Road Surfacing		
	R 11-0	P-2	Membrane	CR S-71-7	S-100
	R 11-1	P-2	Airplane Landing Mats	CR S-71-3	S-99
	R 11-6	P-2	Bituminous Surfacing	TM 211-1	S-58
Program	R 11-8	P-2		TM 211-2	S-59
Potomac River	TR D-76-6	E-5		TM 211-3	S-59
	TR D-77-13	E-7		TM 211-4	S-59
Powder Gun	MP S-75-27	S-48		TM 211-5	S-59
Power				TM 211-5A	S-59
Sources	TR D-77-32	E-11	Membrane Surfacing	CR S-70-1	S-119
Stations	TR /4	H-48	Pregermination	MP D-77-1	E-3
Tunnel				TR D-78-5/1	E-19
Fort Peck Dam	TM 165-1	H-33	Pre-GONDOLA	PNE 1100	W-10
Transitions	B 3/2	H-1		PNE 1101	W-10
Powered Wheels	TR M-76-9	M-32		TM 67-10	W-22
Powerhouse Intake Gate Catapult	TR H-77-8	H-66		TM 67-19	W-23
Pozzolan	MP 6-123/7	C-3		TM 71-5	W-25
	MP 5-422	C-7	I	MP 4-932	S-25
	MP 5-460	C-7		MP 1-956	W-5
	MP 6-510	C-8		MP S-69-6	S-28
	MP 6-571	C-10		PNE 1102	W-10
	MP C-68-1	C-15		PNE 1103	W-10
	MP C-71-8	C-19		PNE 1104	W-10
	TR C-69-6	C-37		PNE 1105	W-10
	TR C-69-9	C-37		PNE 1107/1	W-10
Lean Mass Concrete	MP 6-123/10	C-3		PNE 1107/11	W-10
	MP 6-123/14	C-3		PNE 1108	W-10
Samples	TR C-73-1	C-37		PNE 1110	W-17
Pozzolan Materials	MP 6-247	C-5		PNE 1111	W-17
Prado Dam	MP S-75-6	S-46		TM 65-20	W-22
Prairie Flat	MP S-71-6	S-34	II	MP 4-971	S-26
	TR N-70-0	W-35		MP N-65-3	W-7
	TR N-70-11	W-36		MP N-65-9	W-7
	TR N-72-2	W-37		MP S-68-19	S-26

Term	Report No.	Page	Term	Report No.	Page
Pre-GONDOLA (Cont)			Pressure (Cont)		
II (Cont)	PNE 1112	W-17	Gage	CR 3-26/20	S-111
	PNE 1113	W-17	Grouting	TR 6-437	C-31
	PNE 1115	W-17	Pulses	CR 2-58	W-47
	PNE 1116	W-17	Tests	MP H-77-5	H-18
	PNE 1119	W-17	Transducers	CR 3-101/5	S-112
	TM 67-9	W-22	Pressuremeter Loadings	TR S-78-12	S-95
	TM 68-3	W-23	Prestressed Concrete	CTIAC-64	C-45
III	PNE 1114	W-17		MP 6-779	C-12
	PNE 1117	W-17		MP 6-779/2	C-13
	PNE 1118	W-17		TM 6-421	C-30
	PNE 1120	W-17	Beams	TR 6-570	C-33
	TM 68-10	W-23	Pavements	TR S-74-10	S-91
	TR 38	W-29	Pretensioned		
Prepakt Concrete	TM 6-330	C-23	Beams	TR 6-570/3	C-33
Pre-SCHOONER	MP 6-660	C-10		TR 6-570/5	C-33
	MP 3-618	S-19	Concrete	TR 6-570/1	C-33
	MP 3-733	S-21	Probability Model	CR 3-24/5	M-37
	MP 3-915	S-25	Probes	TR 3-652/3	M-21
	PNE 501P	W-14	Proctor Dam	TR 2-645	H-47
	PNE 501F	W-14	Profile	R 11-74	CERC-19
	PNE 502F	W-14	Profilemeter System	MP M-73-7	M-11
	PNE 503F	W-14	Project		
	PNE 504F	W-14	Combat Trap	TR M-69-3	M-25
	PNE 505F	W-14	Manager System	MP C-73-9	C-21
	PNE 505P	W-14	Projectile	MP S-74-31	S-46
	PNE 506F	W-14	Control Housing	MP C-76-10	C-24
	TM 65-2	W-20	Earth Materials	MP S-72-33	S-38
	TM 67-8	W-22		MP S-73-58	S-43
Charlie	TM 65-4/A	W-20	Impact	CR S-75-4	S-102
II	MP 6-925	C-15		MP S-73-56	S-43
	PNE 507	W-14	Penetration		
	PNE 508	W-15	Concrete and Rock Targets	MP S-75-25	S-48
	PNE 509	W-15	Earth Materials	TR S-76-13	S-93
	PNE 510	W-15	Rock	MP S-77-16	S-51
	PNE 511	W-15		TR S-75-7	S-91
	PNE 512F	W-15	Resistance	MP S-71-12	S-34
	PNE 513	W-15	Theory	TR S-75-9	S-91
	PNE 514	W-15	Propagation of Elastic		
	PNE 515	W-15	Wave Energy	CR 3-53	S-105
	PNE 516	W-15	Propeller Wash	RR 1	Z-5
	TM 65-3	W-20	Prospect Beach, Connecticut	TM 127	CERC-43
	TM 65-11	W-20	Protective		
Preservation			Construction	MP 1-654	W-3
Concrete Structures	TR C-78-4	C-39	Cover Layers	MP 2-276	H-5
Slined Soil Samples	TM 3-306	S-63	Facilities	TR N-71-1	W-36
Presque Isle			Military Structures	TR N-63-1	W-33
Air Force Base	MP 4-32	S-4	Structures	MP 1-608	W-3
Peninsula	R 3-66	CERC-16		MP 6-807	C-13
	R 1-69	CERC-16		TR 6-763/1	C-35
	TM 3-377	S-72	Design	TR WT-1420	W-30
Pressure	CR 1-107	W-45	Prototype Tests	TR N-69-8	W-34
	CR 3-68-1/3	S-11	Proving Rings and Frames	MP 2-283	H-5
	MP 2-31	H-4	Prvors Island Reach	MP S-72-9	S-36
	MP 2-75	H-4	Psychometric Technique	TM 107-1	H-31
Cell	B 40	MS-1	Public Law 92-532	TR S-74-1	S-90
	MP 5-21	MS-4	Puerto Rico		Z-15
	TM 210-1	S-58		CR 3-63/4	S-111
	TM 3-323	S-65		CR 3-164	M-38
	TR H-77-6	H-66		IR	M-1
	TR S-76-7	S-93		MP 4-18	M-2
Installation	TM	S-58		MP 4-355/2	M-3
Tests	MP 2-77	H-4		MP 4-982	M-7
	TR 2-435	H-42		MP M-68-3	M-8
				MP M-69-3	M-8
Distribution				MP M-70-1	M-9
Outlet Works Inlets	MP H-69-8	H-11		MP M-70-5	M-9
Pneumatic Tires	MP M-70-6	M-9		MP M-73-13	M-11
Exerted Against Dams	TM 94-1	S-56		TR H-73-3	H-66
	TM 94-2	S-56		TR Y-75-3	E-33
Fluctuations	CR H-71-1	H-71	Studv No. 2	MP 4-355/6	M-3

<u>Term</u>	<u>Report No.</u>	<u>Page</u>	<u>Term</u>	<u>Report No.</u>	<u>Page</u>
Puget Sound		Z-12	Radioactive		
	TR D-77-24	E-9	Sediment		
	TR H-75-17	H-63	Density Probe	TM 121	CERC-43
Navy Yard	TM 189-1	H-33	Tracer Tests	MP 2-472	H-7
Pullout Resistance	MP C-74-12	C-22	Cape Fear River	MP 2-649	H-8
Pulp and Paper-Mill Sludge			Houston Ship Channel	MP H-69-2	H-11
Landfills		Z-15	Tracer	MP H-76-1	H-15
Pumice	MP 6-400	C-6		TM 105	CERC-42
Pumpability	TM 6-419	C-29	Radioactivity	TM 66-4	W-21
Pumpable Mortar Studies	TR C-74-6/1	C-38	Calculations	PNE 5006	W-13
Pumping				TM 67-7	W-22
Stations	TR H-77-3	H-66	Radiography	MP S-68-12	S-27
	TR H-77-12	H-67	Radioisotopes	MP 2-115	H-4
Tests	TM 3-341	S-65		MP 2-564	H-8
	TM 425/B	S-73	Radioisotopic Sand		
	TR 3-642/A-C	S-81	Tracer Study	MP 2-69	CERC-7
Pycnometer	MP 3-478/8	S-15		MP 3-70	CERC-7
				MP 4-70	CERC-7
				R 6-71	CERC-17
				TM 53	CERC-29
Quadrupod Cover Layers	MP 2-372	H-6	Radionuclide	TR 30	W-29
	R 2-69	CERC-16	Concentration	TM 69-1	W-24
Quality	MP 6-833	C-13	Radome Structure	MP N-77-4	W-12
Control	CTIAC-36	C-42	RAF Station		
Materials	MP 6-277	C-5	Alconbury	TM 3-343/96	S-70
Water and Sediments	MP C-74-4	C-21	Beaulieu	TM 3-343/107	S-70
Quarry	TR 30	W-29	Bentwaters	TM 3-343/99	S-70
Stone	TP 76-19	CERC-31	Blvton	TM 3-343/109	S-70
Cover Layers	RR 2-2	H-27	Brize Norton	TM 3-343/91	S-69
Quarrying	TR 11	W-28	Burtonwood	TM 3-343/100	S-70
Nuclear Explosives	TR 13	W-28	Carnaby	TM 3-343/114	S-70
Quartz	CTIAC-65	C-45	Chelveston	TM 3-343/117	S-71
Crystal Thermometers	CR 3-101/7	S-113	East Fortune	TM 3-343/119	S-71
	MP C-69-11	C-16	East Kirkby	TM 3-343/97	S-70
Quaternary Terraces	MS S-70-16	S-33	Elvington	TM 3-343/95	S-70
Quebec	CR 3-31/II	M-38	Fairford	TM 3-343/98	S-70
Quicklime	TR 3-455	S-74	Full Sutton	TM 3-343/118	S-71
	MP 3-122/5	S-7	Lakenheath	TM 3-343/104	S-70
			Lindholme	TM 3-343/120	S-71
			Mildenhall	TM 3-343/92	S-70
			Molesworth	TM 3-343/93	S-70
R. D. BAILEY	MP E-75-4	W-11	Oakington	TM 3-343/121	S-71
	TR E-75-2	W-39	St. Mawgan	TM 3-343/115	S-71
RAAMS	MP M-77-6	M-15	Sandtoft	TM 3-343/112	S-70
Rabat-Sale Airfield	TM 3-343/12	S-66	Sculthorpe	TM 3-343/113	S-70
Radar	R 79-8	CERC-21	Shepherds Grove	TM 3-343/103	S-70
	TR 79-1	CERC-34	Spilsby	TM 3-343/111	S-70
	TR M-72-4	M-29	Sturgate	TM 3-343/108	S-70
Building	MP S-72-15	S-37	Tibenham	TM 3-343/106	S-70
	TR N-73-9	W-39	Upper Hevford	TM 3-343/105	S-70
Detect Surface and Ground			Wethersfield	TM 3-343/101	S-70
Water	TR 3-727	M-24	Woodbridge	TM 3-343/102	S-70
Measurements	MP S-73-10	S-53	Wroughton	TM 3-343/116	S-71
Responses to Soil Samples	TR 3-693/2	M-23	Railroad		
Site			Cuts	TR E-74-1	W-39
Cape Kennedy, Florida	MP 4-878	S-23	Embankment	P R	H-26
White Sands Missile Range	MP 4-584	S-18		MP 3-6	S-4
Radiation				MP S-73-10	S-53
Dose to Man	TM 69-9	W-24	High-Level Crossing	TR 3-437	S-76
Effects on Buried Structures	CR 1-111	W-47	Relocation Fills	MP 2-465	H-7
Facility at WES	MP S-75-26	S-48	Test Embankment	MP S-72-36	S-33
Shielding Concrete	MP 6-719	C-11	Railway		
Simulation Experiments	TR N-77-4	W-41	Bridge	TM 145-1	S-57
Stress	MR 81-4	CERC-13	Systems	TR N-75-4	W-40
Radio			Rain		
Communications Network	B 61-1	MS-1	Code	TM 70-8	W-25
Imaging Techniques	TR 3-769	M-24	Forest	MP 4-932	M-7
				MP M-70-1	M-9

## 76-INDEX

Term	Report No.	Page	Term	Report No.	Page
Rainfall	R 5	Z-18	Redstone		
Data	MP M-76-22	M-15	Army Airfield	MP S-72-23	S-37
Erosion		Z-14	Arsenal	TR 3-466/5	S-75
Leaching Model	TM 70-8	W-25	Missile	MP 4-910	S-25
Ramey Air Force Base	MP S-70-10	S-32	Reefs	MP 4-325	S-12
RAMPART Radar Towers	MP 4-955	S-25	Reese Air Force Base	TM 122	CERC-43
Kamps	MP 4-966	S-26		MP 4-375	S-13
Rangeland Conservation	TR M-77-4/3	M-33		MP 4-427	S-14
Ranger Training Areas	CR 3-70	M-41	Reference Test Areas	MP 4-921	M-7
Rapid			Reflected Waves	R 82-1	CERC-22
Landing-Site Stabilization	CR 3-169	S-99	Refraction	MP H-77-8	H-18
Road Construction	IR S-71-1	S-3		RR H-74-1	H-29
Raritan River	TM 2-342	H-39	Regression	TP 83-1	CERC-33
Rationinative Design Criteria	TR S-74-9	S-91	Regressive Wave	CR 2-71	W-47
Ray Theory	RR 1-4	W-19	Regulated-Set Cement	CTIAC-16	C-41
Rayleigh				MP C-75-5	C-23
Disk	TM 18	CERC-37		MP C-75-11	C-23
Wave Dispersion	MP S-73-20	S-41		TR C-75-2	C-36
Raystown, Pennsylvania	MP N-76-6	W-12	Rehabilitation of Starved Rock		
Reservoir	TR H-70-15	H-57	Lock and Dam	MP C-76-12	C-26
RDMAS	IR S-76-1	S-3	Reid-Beedford	MP S-68-22	S-26
Reactor Vessels	MP C-72-13	C-20	Bend	R 5-3	P-1
Reaeration Tests	TR H-77-14	H-67		R 5-4	P-1
Rebar Penetrations	MP N-72-7	W-9		R 5-5	P-1
Reclamation	CR D-74-5	E-22	Revetment	R 5-2	P-1
	TR D-78-58	E-20		R 5-6	P-1
Mined Areas	MP M-76-4	M-13	Caving Area	R 5-1	P-1
Rechnotes	IEB R-77-1	E-38	Model	RR S-76-2/1	S-54
	IEB R-73-1		Reinforced		
	thru		Concrete	MP 6-779	C-12
	R-78-3	E-38		TM 6-421	C-30
Recolonization of Benthic Macro-				TR C-74-7/1	C-36
fauna	TR D-77-24/F	E-10	Airport Pavements	TR S-77-11	S-94
Recompacted Soils	CR S-70-2/1	S-105	Beam	CTIAC-49	C-43
Reconstituted Sands	TR S-78-9	S-95		MP 1-874	W-5
Recorder and Power Supply	B 60-1	MS-1		MP N-78-7	W-13
Recreation			Bridge Piers	TR N-76-10	W-41
Area	MP Y-76-1	E-29	Slab	MP 6-911	C-14
	MP Y-77-5	E-30		TR N-73-8	W-39
Land	CR D-76-6	E-26	Structures	TR N-75-2	W-40
Research Program	IEB R-77-1	E-38	Earth Wall	TM 6-330	C-23
	IEB R-78-1		Reinforcing	TR S-77-6	S-94
	thru		Bars		
	R-78-3	E-38		MP 6-351	C-6
Use in Water Related Parks	TR R-78-1	E-39		MP 1-837	W-5
User Information System	TR R-78-2	E-39		MP C-74-12	C-22
Rectangular Conduits	MP 2-160	H-5	Steel	MP N-73-5	W-9
	MP H-68-2	H-10	Port Allen Lock	MP 6-297	C-6
Renovled			Rejuvenators for Bituminous		
Concrete	MP C-72-14	C-20	Pavements		Z-7
Aggragate	CTIAC-9	C-40	Relief Well	MP 3-52	S-5
	CTIAC-19	C-41		TM	S-63
	MP C-72-23	C-21	Commerce and Trotters,		
	MP C-76-2	C-23	Mississippi		
Materials in Airfield			Data	TM 3-316	S-64
Pavements		Z-7		MP 3-5	S-4
Red				TM 3-304	S-63
Ouachita-Black River Basin	MBM 31-9	H-24		TM 3-379	S-72
River	INR 7	Z-4	Arkabutla Dam	TM 3-409/b	S-73
	P 10	H-26	Filters	TR 3-479	S-75
	TM 3-298	S-63	Flow Meter	MP S-68-4	S-27
	TM 3-319	S-64	Installations	MP 5-83	MS-4
	TR S-74-5	S-90	Mississippi River Levees	TM 3-247	S-61
Landing	TR 3	Z-8	Missouri River Levees	MP S-72-21	S-37
Navigation Project	TR H-78-24	H-69	Risers	TR 3-443	S-74
Waterway	CTIAC-55	C-44	Trotters, Mississippi	MP 3-90	S-6
	TR H-77-13	H-67	REMBASS	TM 3-341	S-65
Rock			Remote	MP	M-13
Dam	TR 2-673	H-48	Anti-Armor Mine System	MP M-77-6	M-15
Reservoir	B 65-1	MS-1	Imagery	MP S-75-24	S-47



Term	Report No.	Page	Term	Report No.	Page
Remote (Cont)			Shear Strength		
Sensing	IR M-78-2	M-1	Clay Shales	TR S-71-6/2	S-87
	MP 2-73	CERC-3	Weak Shales	TR 3-699/5	S-82
	MP M-73-11	M-11	Strength	MP S-74-21	S-45
	MP M-74-2	M-12	Clay	CR S-70-5	S-106
	MP M-77-14	M-16		CR S-71-5	S-105
	R 17-73	CERC-18	Resilient Moduli	TR S-76-12	S-93
	TR M-74-8	M-30	Resin	MP S-71-19	S-35
	TR M-76-6	M-32	Based Membrane Curing and		
Sensor	MP M-72-8	M-10	Bonding Compounds	MP C-75-10	C-23
	TR M-74-2	M-29	Concretes	MP C-72-21	C-20
	TR M-74-8/1	M-30	and Latex-Base Concrete		
	TR M-76-8	M-32	Curing Compounds	MP 4-819/1	S-22
	TR M-74-8/2	M-31	Resinous		
Imagery	IR M-78-2/A	M-1	Materials	CR S-68-7	S-99
Terrain Analysis	MP 4-791	M-6	Water Repellents	TM 217-1	S-60
Water-Quality Monitoring			Resistance		
Systems	TR Y-77-5	E-33	Coefficients	TR 2-715	H-50
Remotely Monitored Battlefield			Freshly Injected Grout	MP C-76-4	C-23
Sensor System	MP	M-13	Losses	MP H-73-1	H-13
Rend Lake			Resistivity Geophysical Explo-		
Dam	TR H-75-2	H-61	ration Methods	TM 198-1	S-58
Reservoir	MP 6-589	C-9	Resonant		
	MP H-68-1	H-10	Column		
	TR H-69-7	H-54	Dynamic Testing Devices	MP S-75-2	S-46
Rennie Island Marsh Development			Test	MP S-78-6	S-52
Site	TR D-78-11	E-14	Frequency Measurements	MP C-77-11/3	C-25
Repair			Oscillations	RR H-76-1	H-29
Bomb-Damaged Runways	MP C-72-15	C-20	Response	TR H-75-4/6	H-62
	TR C-75-2	C-38	Vibration Technique	MP 6-746	C-12
Paved Surfaces	TR C-78-2	C-39	Response of Earth Media	CR 3-168	S-108
Repeated			Rest Areas		
Compression	CR 3-145/1	S-100	Retaining Dikes	TR D-77-9	E-7
	CR 3-145/3	S-100	Reus Air Base	TM 3-341/37	S-69
Flexure	CR 3-145/2	S-100	Reusable Dredged Material		
Load Fracture	CR S-76-15/1	S-119	Disposal Sites	TR D-78-22	E-16
Loading	CR 3-145	S-100	Reverse Heads	TR H-70-2	H-56
Repetitive			Revetment	MP 2-35	H-4
Explosion Device	CR 3-149	S-116		MP 1-64	CERC-7
Loadings	TR S-76-16	S-94		MP 4-385	S-13
Republic Steel Ground Mat	MP 4-945	S-25		MR 76-7	CERC-10
Research				R 2-4	P-1
Center Library	MP 5-217	MS-4		R 2-67	CERC-16
Concrete	MP C-69-17	C-17		R 3-1	P-1
and Development Management				R 5-2	P-1
Analysis System	IR S-76-1	S-3		R 5-6	P-1
Soil Stability	INV 1	Z-5		R 17-1	P-4
	INV 2	Z-5		R 78-5	CERC-20
	INV 3	Z-6		TM 20-2	H-30
Reservoir				TM 55	CERC-29
	MBM 23-1	H-23		TP 81-1	CERC-43
	MP 3-981	S-26		TP 81-5	CERC-33
	MP S-77-3	S-50		TR N-69-8/7	W-35
	PNE 1120	W-17	Construction	R 21-4	P-4
	RR H-72-3	H-28		R 21-5	P-4
	TM 132	CERC-44	Revetted Bank Failure	R 8-1	P-1
	TR 38	W-29	Hevkjavik Airfield	TM 3-343/3	S-66
	TR H-69-10	H-55	Rhein-Main Air Base	TM 3-343/36	S-67
	TR M-72-3	M-29	Rheologic		
Ecosystem Modeling	CR Y-77-1	E-35	Investigation	CR 3-62	S-115
Filling	CR S-72-2	S-101		CR 3-148	S-109
Induced Macroeathquakes	TR S-73-1/19	S-40	Properties	TB 7	Z-10
Inflow and Outflow	B 63-1	MS-1	Rice Fields	MP 4-502	M-4
Operation	MBM 24-1	H-23		TR 3-702	M-23
Model	MBM 1-1	H-21	Richard B. Russell Lake Water		
Residential Dwellings	MP N-75-6	W-11	Quality Investigation	TR H-74-14	H-61
Residual			Richmond (Virginia) Harbor	TM 178-1	H-43
Materials	CR 4-6/6	M-39			

## 73-INDEX

Term	Report No.	Page	Term	Report No.	Page
Ride	MP M-78-7	M-16	River (Cont)		
Characteristics	MP M-68-5	M-8	Bank (Cont)		
	MP M-76-6	M-14	Stability (Cont)		
Dynamics	CR 3-33	M-36	1957 Data	R 12-8	P-3
	CR 3-114	M-35	1958 Data	R 12-9	P-3
	TR M-68-1/2	M-25	1959 Data	R 12-10	P-3
	TR M-73-5	M-29	1960 Data	R 12-11	P-3
Qualities	MP M-75-5	M-13	1961 Data	R 12-12	P-3
and Shock Test	MP M-77-3	M-15	1962 Data	R 12-13	P-3
	MP M-77-9	M-15	1963 Data	R 12-14	P-3
Ridgelev, West Virginia	TR 2-448	H-42	1964 Data	R 12-17	P-3
Rifle Gap Dam	MP S-70-1	S-31	1965 Data	R 12-18	P-3
	MP S-71-17/2	S-35	1966 Data	R 12-19	P-3
Rifling in Bredge Pipe Lines	B 2/1	H-1	1967 Data	R 12-20	P-3
Rigid			1968 and 1969 Data	R 12-21	P-3
Body			1970 and 1971 Data	R 12-22	P-3
Motion	MP S-75-15	S-47	Stabilization	CR 3-81	S-107
Solution	CR S-75-4/		Border Areas, Middle Missis-		
	Suppl	S-102	sippi River	MP Y-74-5	E-29
Flexible			Navigation	B 2/2	H-1
Airfield Pavement Juntures	MP S-76-19	S-49	Point Directory	MP H-75-6	H-15
Materials for Bank Protection	INV 2	Z-5	Regulation	MP 2-860	H-10
Pavement	MP 4-496	S-16	Reservoir Systems Model	MP Y-76-4	E-30
Tests	TM	S-60	Sand	MP 6-408	C-6
Plate Bearing Test	TM	S-59	Discharge	TR 5	Z-8
Wheel	TR 3-565	M-20	Sedimentation	IR H-78-1	H-3
	TR S-74-7	S-90	Models	MP H-70-2	H-12
Rigolets Pass, Louisiana	TR H-76-16	H-65	Stages	R 20-1	P-4
Rincon Island, California	MR 73-3	CERC-12	Training	MP H-71-2	H-12
	TM 43	CERC-28	Riverine		
Ring			Fishery	CR Y-74-4	E-32
Beam Antenna Foundation	MP S-68-14	S-27	Utility Craft	TR M-70-5	M-26
Test	MP C-69-5	C-16	Road	MP S-69-11	S-29
Ripple	TM 100	CERC-42		MP S-74-23	S-46
Tanks	RR H-74-1	H-29		TM 3-357/B	S-72
Rippled Beds	R 77-5	CERC-20		TR S-70-5	S-86
Riprap	MP 2-552	H-7	Construction	MP S-73-5	S-40
	MP 6-740	C-12	Crater Design Test	MP N-76-6	W-12
	MP 2-777	H-9	Greenland	TR 3-505	M-20
	MP H-68-1	H-10	Observations	TR 5-625/H	M-21
	PNE 5003	W-17	Research Laboratory, England	MP 4-380	S-13
	R 76-2	CERC-20	Sections in Western United		
	RR H-70-2	H-27	States	MP M-74-7	M-12
	TR 2-650	H-47	Surfacing Membrane	CR S-71-7	S-106
Carlyle Dam	MP 6-281/A	C-5		TR 3-492	S-76
Clarence Canyon Reservoir	MP 6-906	C-14		TR 3-515	S-77
Cover Layers	MP 2-465	H-7	Terrains	TR M-74-4	M-30
	TR 2-740/2	H-51	Test Results	TR 3-721	S-82
	MP 6-596	C-9	Robert		
DeGray Dam	MP H-78-7	H-19	Gray Army Airfield	MP 4-697	S-20
Design	MP 6-730	C-12		MP 4-989	S-26
Kaskaskia River	RR 2-8	H-27		MP S-69-26	S-30
Model of In-Shore Harbor	MP C-72-4	C-19		MP S-69-38	S-30
New Look and Dam No. 26	TR 2-447/2	H-42		MP S-73-16	S-41
Placement	TP 81-5	CERC-33		TR H-68-5	H-53
Revetments	MP 0-539	C-8	S. Kerr Look and Dam	TM 3-343/13	S-66
Sources, Shelbyville Reservoir	R 3-67	CERC-16	Roberts Field, Liberia	MP 4-367	S-13
Stability	TM 37	CERC-28	Robins Air Force Base	CR N-69-1	W-45
	TM 51	CERC-29	Rock	CR S-68-3	S-100
	TP 75-19	CERC-31		MP C-73-12	C-21
	TP 82-3	CERC-33		MP C-74-6	C-22
Stone for the Rend Lake				MP S-69-34	S-30
Reservoir	MP 6-589	C-9		MP S-77-16	S-51
River	MP H-69-9	H-11		PNE 5008	W-13
Bank	MP S-70-3	S-32		TR 6-802	C-35
	TM 3-329	S-65		TR i-813	W-33
Stability	MP S-78-5/18	S-52		TR S-75-7	S-91
	MP S-78-5/19	S-52	Bolts	MP S-77-7	S-50
	R 18-2	P-4		TR S-76-14	S-93

Term	Report No.	Page	Term	Report No.	Page
Rock (Cont)			Rockfill (Cont)		
Core	MP C-75-2	C-22	Embankment	TM 67-16	W-22
Bergstrom Study Area, Texas	MP C-70-4	C-17	Specimens	CR S-71-4	S-107
Castle Study Area, California	MP C-69-16	C-17	Rockv		
DeGray Dam	MP 6-579	C-9	Mountain Arsenal	TR Y-78-1	E-33
Duluth-Vermillion Study Area	MP C-70-9	C-17	Reach Hydroelectric Project	MP 2-417	H-7
Machias Study Area, Maine	MP C-70-16	C-13	Rods	CR 2-61	W-47
Michigamme Study Area, Michigan	MP C-70-10	C-17	Rogers Dry Lake, California	MP 4-365	S-13
Mountain Home, Idaho	MP C-69-12	C-17	Rogue River		Z-12
Pease Study Area, New Hampshire	MP C-70-11	C-17	Roi-Namur, Kwajalein Atoll, Marshall Islands	MP 4-858	S-23
Pembine Study Area, Michigan and Wisconsin	MP C-70-14	C-13	Rome		
Plattsburgh Study Area, New York	MP C-70-7	C-17	Air Depot	TM	C-27
Scott Study Area, Missouri	MP C-70-6	C-17	Italy	TM 3-343/37	S-67
Tests	MP C-75-9	C-23	Rondout Creek Basin	TR H-74-2	H-60
Warren, Wyoming	MP C-78-12	C-26	Roof Moisture	MP M-76-14	M-14
	MP C-69-3	C-16	Surveys	IR M-78-1	M-1
	MP C-70-17	C-13	Roosevelt Roads Naval Base	MP M-77-2	M-15
	MP	W-11	TM 207-1	TM 207-1	H-34
Ejecta	MP 3-991	S-26	Ropes	MP C-77-13	C-25
Excavations	PNE 5010	W-18	Rotary Cone Penetrometer	MP 3-361	S-13
	TR S-73-1	S-94		MP 3-455	S-15
Fill	CR S-68-2	S-103		MP 3-832	S-23
Formations	INR 2	Z-4		R 18-1	P-4
Island District	TM 133-1	H-32	Rotation Shear Tests	CR S-70-5	S-106
Jetty Models	R 1-110	Z-13	ROUGH ROAD ALPHA	TR 3-624	S-79
Lined Transitions	CR 1-135	W-46	Roughness		
Mass	CR 1-170	W-44	Coefficients	TR 14	Z-3
	RR 1-6/1	W-19	Elements	MP H-66-5	H-10
	TR N-73-6	W-33	Standards	MP H-70-6	H-12
	TR N-73-7	W-39	TM 2-364	TM 2-364	H-39
	TR N-73-4	W-42	Row		
Permeability	TR S-76-2	S-93	and Arrav Emplacement	TM 68-4	W-23
Shear Strength	TR S-72-12	S-89	Charge Cratering	TM 67-5	W-22
Mechanics	MP S-74-28	S-46		TM 67-9	W-22
	RR S-69-1	S-54		TR 5	W-28
	MP S-70-7/1	S-32		TR 37	W-29
Mixtures	R 3-67	CERC-16	Crater	PNE 1120	W-17
Movement	TR S-77-4	S-94		TR 38	W-29
Penetration Test Site	MP 6-254	C-5	Rowlesburg Dam	TR H-70-7	H-56
Samples	MP S-70-12	S-32	Royal		
Silo Prototype Test Site	RR H-73-1	H-28	Air Force Station		
Structures	MP S-75-25	S-48	Holme	TM 3-343/94	S-70
Targets	MP C-78-4	C-25	Manston	TM 3-343/90	S-69
Tests	MP C-69-14	C-17	Naval Air Station Ford	TM 3-343/123	S-71
Types	PNE 5006	W-13	RPAF Station Mauripur	TM 3-343/123	S-71
	MP 2-821	H-9	Rubbed Finishes	MP 6-854	C-14
Weirs	MP 4-430	S-14	Rubber		
Rocket	TR N-69-3/5	W-35	Based Coatings	MP 6-864	C-14
	MP 4-804	S-22	Tired Rollers	MP 4-240	S-10
Blast-Resistant Materials			TM 3-271/7	TM 3-271/7	S-62
Engine			Waterstop	TR 3-432	S-74
Blast Tests	MP 4-304/1	S-22	Failures	MP 4-124	S-7
Jet Blast	MP 4-903	S-24	Rubberized-Tar		
Rounds	TR N-69-3/4	W-35	Concrete		
Rockfill			Airfield Pavements	TR 3-493	S-76
Dams	CR S-69-5	S-106	Pavements	MP 4-288	S-11
	CR S-70-7	S-106		MP 4-304	S-11
	CR S-71-11	S-107	Paving Mixtures	MP S-71-8	S-34
	CR S-72-2	S-101	Specifications	MP 4-292	S-11
	CR S-73-2	S-101	Rubble	TM 70-13	W-25
	CR S-77-4	S-102	Mound		
	MP S-71-10	S-34	Breakwater	MP 2-224	H-5
	MP S-71-17	S-35		MP 2-276	H-5
	MP S-71-17/3	S-35		MP 2-296	H-6
	MP S-73-7	S-39		MP 2-372	H-6
	TR 2-496	H-43		MP 2-453	H-7
				MP H-70-8	H-16
				MR 76-5	CERC-10
				R 31-10	CERC-22
				RR 2-2	H-27

## 80-INDEX

Term	Report No.	Page	Term	Report No.	Page
Rubble (Cont)			St. (Cont)		
Mound (Cont)			Johns		
Breakwater (Cont)	RR 2-11	H-27	Bayou Floodgate	TM	S-60
	RR H-69-2	H-27		TM 3-425	S-73
	TM 2-365	H-40	River	TM 2-244	H-3b
	TR H-68-3	H-53	Lawrence		
Crescent City Harbor	TM 2-413	H-41	River	TM 2-233	H-35
Dana Point Harbor	TR 2-725	H-50		TR 2-489	H-43
Jubail Harbor, Saudi Arabia	TR H-76-20	H-65	Seaway	TR 2-576	H-45
Nassau Harbor	MP 2-799	H-9	Locks	TR H-76-9	H-64
	TR 2-697	H-49	Project	MP 6-573	C-9
Noyo Harbor	MP 2-841	H-9	Louis		
Repair			Flood Protection Project	MP 0-334	C-6
Kahului Harbor	TR 2-644	H-47	Harbor	TR H-72-7	H-58
Morro Bay Harbor	TR 2-567	H-45	Industrial Park	MBM 31-3	H-23
Nawiliwili Harbor	MP 2-377	H-6	to-Thebes Reach	MBM 81-6	H-25
Stability Models	MP H-75-4	H-14	Lucie Canal	P 14	H-26
	MP H-75-5	H-15		TM 153-1	H-32
Structures	CETA 81-7	CERC-3	Mary Dam	TM 2-262	H-36
	R 1-73	CERC-17	Marvs Falls Canal	TM 208-1	H-74
	R 79-4	CERC-21	Mawgan, Cornwall, England	TM 3-343/115	S-71
Trunks	TR H-77-19	H-67	Nazaire-Montoir Air Base	TM 3-343/53	S-68
Tsoving Harbor	TR 2-640	H-47	Paul District	INR 2	S-4
Tsunami Barrier, Hilo Harbor	TR 2-792	H-53	Salamonie Dam Flip Bucket	MP H-71-1	H-12
Size	TM 09-5	W-24	Saline		
Slopes	TR 14	W-28	Fronts	CR 2-1/12	H-74
RUC	TR M-70-5	M-26	Water	CR 2-1/13	H-74
Rulison Underground Nuclear Detonation	MP S-70-1	S-31	Wedges	CR 2-1/7	H-74
	MP S-71-17/2	S-35		CR 2-1/8	H-74
Running Gear	TR M-78-3	M-33	Salinity	CR 2-1/11	H-74
Runoff	CR 2-66	H-74		CR 2-1/4	H-73
Runway	MP C-72-15	C-20		CR H-73-3	H-71
	MP S-76-24	S-50		CR H-74-2	H-71
	TR 2-467	W-30		CR H-77-1	H-71
	TR 3-539	S-78		MP 2-912	H-10
	TR 3-700	S-82		MP H-69-13	H-11
	TR C-75-2	C-38		MP H-72-8	H-13
	CR S-76-11	C-99		MP H-76-9	H-16
O'Hare International Airport Pavement, Columbus Air Force Base	MP 4-303	S-11		TB 13	Z-10
				TB 20	Z-11
				TR /2	H-47
				TR D-77-40	E-12
				TR H-69-12/2	H-55
				TR H-69-12/3	H-55
				TR H-73-13	H-63
				CR H-73-1	H-73
				CR H-73-2	H-73
					Z-11
				TB 5	Z-9
				TB 13	Z-10
				TB 20	Z-11
				RR H-73-4	H-28
				TM 2-337/2	H-38
				MP H-78-5/1	H-19
				TM 2-337/1	H-38
				TR 2-735/1	H-50
				TR H-73-12/1	H-59
				CR 3-101/3	S-112
				CR 2-1/6	H-74
				MR 81-5	CERC-13
				SR 4	CERC-25
				TP 76-7	CERC-30
				TR D-77-37	E-11
				TR D-78-38	E-10
				TM 46	CERC-23
				TM 52	CERC-29
				TR D-78-3	E-13
				MP D-77-1	E-3
				TR D-77-28	E-10
				CETA 82-3	CERC-4
Sacramento Basin	R 3	Z-18	Changes in Coastal Waters		
District Radio Communications Network	B 61-1	MS-1	Intrusion		
Peak, New Mexico	MP 3-639	S-19		TB 5	Z-9
	MP 3-763	S-21		TB 13	Z-10
River Deep-Water Ship Channel	TR 2-556	H-44		TB 20	Z-11
SAFE GUARD	TR N-73-9	W-39	Stratified Water	RR H-73-4	H-28
Power Plant	CR N-71-1	W-45	Tests	TM 2-337/2	H-38
TSE Ground Facilities	MP	W-10	Verification	MP H-78-5/1	H-19
Sag Junction	TR 2-776	H-52		TM 2-337/1	H-38
St.				TR 2-735/1	H-50
Charles Parish Lakefront				TR H-73-12/1	H-59
Foundation Clays	MP S-76-15	S-49	Salt	CR 3-101/3	S-112
Levee	MP S-75-8	S-47	Barriers	CR 2-1/6	H-74
			Marsh	MR 81-5	CERC-13
Clair River	MP 2-821	H-9		SR 4	CERC-25
	P 16	H-26		TP 76-7	CERC-30
	TR H-72-4	H-58		TR D-77-37	E-11
Croix, U. S. Virgin Islands	MP S-70-26	S-50		TR D-78-38	E-10
Francis			Development	TM 46	CERC-23
Basin	TR 3-659	S-81		TM 52	CERC-29
River	MP 3-555	S-17	Estuarine Ecosystems	TR D-78-3	E-13
Sunk Lands	MP S-70-15	S-32	Plants	MP D-77-1	E-3
				TR D-77-28	E-10
			Vegetation	CETA 82-3	CERC-4

<u>Term</u>	<u>Report No.</u>	<u>Page</u>	<u>Term</u>	<u>Report No.</u>	<u>Page</u>
Salt (Cont)			Sand (Cont)		
Pond No. 3, Marsh Development			RR S-76-2/1	S-54	
Site	TR D-78-57	E-20	RR S-76-2/2	S-54	
River, Kentucky	TR H-75-12	H-63	RR S-76-2/3	S-54	
Water			RR S-76-2/4	S-54	
Barriers	MP 2-358	H-6	RR S-76-2/6	S-54	
	MP H-71-4	H-12	TM	W-27	
	MP H-74-9	H-14	TM	/7	W-27
Intrusion			TM 2	CERC-37	
Calcasieu River	TM 2-310	H-38	TM 9	CERC-26	
Canal Locks	CR 2-1/2	H-73	TM 62	CERC-40	
Cooper River	MP H-77-14	H-18	TM 66-5	W-21	
Intraoastal Waterway	TM 221-1	H-35	TM 76	CERC-41	
Rivers	CR 2-1/3	H-73	TM 99-1	H-31	
Lights	MP 5-248	MS-4	TM 102	CERC-42	
Salviacim Pavement	MP S-76-20	S-49	TM 3-271/1	S-62	
Samoa	TR H-74-16	H-61	TM 3-323/4	S-65	
Sample Disturbance	CR S-77-3	S-101	TM 3-341/10	M-19	
Samplers	TM 3-315	S-64	TM 3-408	S-73	
Sampling	CETA 79-3	CERC-2	TM 6-419/3	C-29	
Cohesionless Material	RR S-76-1	S-54	TM 6-419/4	C-29	
Soils			TM 6-419/5	C-29	
Variation	TP 76-14	CERC-30	TR 3-516/2	M-20	
San			TR 3-545/5	M-20	
Antonio Dam	R 2-106	Z-2	TR 3-599/2	S-79	
Diego Bay	MP Y-76-2	E-30	TR 3-652/1	M-21	
	TR N-69-4/2	W-34	TR 3-666	M-22	
Model	TR H-74-12	H-61	TR 1-674	W-31	
Fernando, California, Earth- quake	MP S-76-1	S-48	TR D-78-34	E-17	
Francisco Bay			TR E-73-5	W-36	
	MP 2-332/4	H-6	TR M-68-2	M-25	
	MR 79-2	CERC-12	TR M-69-2	M-25	
	MP 2-370	W-2	TR M-70-14/1	M-27	
	TR H-75-17	H-63	TR M-71-5/2	M-28	
	TR N-76-1	W-40	TR S-76-17	S-95	
Gabriel River	TR H-76-10	H-64	TR S-78-2	S-95	
Juan Harbor	TM 173-1	H-33	TR S-73-15	S-95	
Pablo Airport	TM 3-343/85	S-69	TM 23	CERC-33	
Ysidro, New Mexico	TR S-77-3	S-94	MP 4-335	S-13	
Sanctuaries Act of 1972			TM 3-329	S-65	
Sand	B 1/1-9	S-1	Analysis		
	CR	W-44	Asphalt		
	CR 3-26	S-110	Backfill		
			Old River Lock	MP 3-554	S-17
			Port Allen Lock	MP 3-437	S-14
			Beaches	R 81-3	CERC-22
				TM 126	CERC-43
			Boils	MP S-75-22	S-47
			Bottom	TM 1-704/2	W-31
			Bypassing	CR H-76-1	H-73
	CR 3-91	S-117		R 83-7	CERC-23
	CR 3-130	M-45		SR-8	CERC-25
	CR 3-161	S-114		TM 92	CERC-41
	CR S-76-7	S-115		TP 80-1	CERC-32
	CR S-76-8	S-115		MP 6-410	C-7
	CR S-76-9	S-115		CR 3-26/24	S-111
	MP 1-69	CERC-7		MP 3-12	S-4
	MP 3-67	CERC-7		TR H-76-13/3	H-65
	MP 3-106	S-7		TR 5	Z-8
	MP 4-194	S-9		MP S-69-21	S-29
	MP 6-408	C-6		MP S-75-8	S-47
	MP 4-443	M-3		CR S-76-5	S-101
	MP 2-524	W-3		MR 73-4	CERC-12
	MP 6-530	C-8		MR 77-4	CERC-10
	MP 4-535	M-4		R 21-1	P-4
	MP 6-647	M-5		TM 6-419/2	C-29
	MP 4-836	M-6		CETA 80-4	CERC-3
	MP 4-968	S-26		R 2-70	CERC-16
	MP M-68-2	M-8		MP 11-75	CERC-9
	MP S-72-29	S-37		TM 82	CERC-41
	MP S-72-37	S-38		TM 66-6	W-21
	MP S-75-27	S-48		R 16-73	CERC-13
	MP S-76-6	S-48			
	R 12-1	P-2			

## 82-INDEX

Term	Report No.	Page	Term	Report No.	Page
Sand (Cont)			Sardis Dam	MP 3-86	S-6
Motion	CETA 81-10	CERC-3		TM 123-2	H-32
	R 80-3	CERC-22		TM 132-1	H-32
Movement	MP 4-70	CERC-7		TM 132-2	H-32
	R 5-71	CERC-17		TM 3-250	S-61
	TM 1	CERC-26		TM 3-287	S-63
	TM 7	CERC-37		TM 3-379/1	S-72
	TM 14	CERC-26	Sarma Method	MP S-76-13	S-53
	TM 26	CERC-38	Satellites	R 4-72	CERC-17
	TM 42	CERC-39	SATS Airfield	TR S-75-2	S-91
	TM 48	CERC-39	Saturated		
	TM 68	CERC-40	Clayev Silt	CR 3-26/15	S-110
	TM 119	CERC-43	Clays	CR 3-101	S-112
Niigata, Japan	TR S-78-9	S-95			and
	TR S-78-10	S-95			S-113
	TR S-78-11	S-95	Cohesionless Soil	RR S-76-2/5	S-54
Profiles	CETA 81-4	CERC-3	Fat Clay	CR 3-26/10	S-110
Reid Bedford Bend	R 5-3	P-1		CR 3-26/16	S-110
Response to Cyclic Loading	CR S-77-3	S-101	Fine Sand	CR 3-26/11	S-110
Resources	MR 77-11	CERC-11		TR S-78-2	S-95
	MR 79-3	CERC-12	Remolded Clays	CR 3-101/3	S-112
	MR 79-4	CERC-12	Sand	CR S-76-7	S-115
	MR 80-4	CERC-12		RR S-76-2/3	S-54
	MR 80-10	CERC-13	Soils	CR 3-26/6	S-110
	MR 82-10	CERC-14		CR 3-63/1	S-111
	TP 79-2	CERC-32	Saturation	CR S-69-3	S-104
	TP 81-3	CERC-33		TR S-70-3	S-86
Ripple	R 81-11	CERC-22	Saudi Arabia	TM 3-343/124	S-71
Growth	TP 78-5	CERC-32		TR H-76-2	H-64
Sampler	R 4-66	CERC-16		TR H-76-20	H-65
Samples	MR 77-3	CERC-10	Sault Ste. Marie	MP C-73-8	C-21
Sampling	B 35	S-1	Savage River Dam	TM 2-378	H-40
	R 5-6	P-1	Savannah		
Shell Mixes	MP 4-136	S-7	Harbor	MP 2-633	H-8
Subgrades	TM 3-271/3	S-62		TM 2-268	H-37
Tests	GITI 7	CERC-5	River	TR 2-580	H-45
Static and Cyclic Loadings	RR S-76-2/b	S-54		TM 57-1	H-30
Transport	CETA 81-2	CERC-3	Tide Gate	TM 57-2	H-30
	MP 2-64	CERC-7	Sawyer Bend	R 79-5	CERC-21
	R 82-5	CERC-23	Scale	TR H-78-7	H-68
	R 83-8	CERC-23	Effects		
	TM 62	CERC-29		B 2/4	H-1
Traps	TM 119	CERC-43	Tests	MP H-75-4	H-14
	TR 82-4	CERC-35	Model Lunar Roving Vehicle	RR H-74-1	H-29
Variation	TM 65	CERC-40	Riprap Model	RR H-69-2	H-27
Volume	IR 2	S-2	Scaling	MP M-72-3	M-10
Sanded Grouts	TM 6-419	C-29	Explosion-Produced Damage	MP 2-8	H-27
Sandstone		Z-14	Relations	TR 1-695	W-31
	MP N-75-3	W-11	Scanning Electron	MP S-77-23	S-52
	TR E-73-1	W-38	Microscope		
	TR N-77-6/1	W-41	Microscopy	MP S-75-11	S-47
San Ysidro, New Mexico	TR S-77-3	S-94	Schmidt Concrete Test Hammer	CTIAC-4	C-40
Sandtoft, Linnolnshire, England	TM 3-343/112	S-70	Schokbeton Precast Concrete	MP 6-267	C-5
Sandwich Mat	MP S-71-4	S-34	Units		
Sanjurjo Airport	TM 3-343/76	S-69	Schooner	MP 6-235	C-5
Santa			Bavou Control Structure	PNE 527	W-15
Ana River	TR H-75-7	H-62	Schrontz on Wind Effects	TM	S-61
Barbara	TM 49	CERC-39	Schuvikill Reach	B 2/1	H-1
Harbor	TR 2-805	H-53	Scotland	MP 2-887	H-10
Cruz Harbor	R 2-69	CERC-16	Scott Study Area, Missouri	TM 3-343/119	S-71
María Airport	TM 3-343/16	S-66	Scour	MP C-70-6	C-17
Monica Bay	TR H-73-8	H-59	Scoured Foundation	MP H-71-5	H-12
Paula Creek	TR H-73-11	H-59	Scout Vehicle	MP C-78-19	C-26
Santee			Screen	MP	M-12
Cooper				RR 2-12	H-27
Power Plant		Z-12	Wave Absorbers	RR H-72-2	H-28
Project	TM 6-224	C-27		RR H-73-3	H-28
River Dam	TM 168-1	H-33			
SAP Bomb		Z-18			

Term	Report No.	Page	Term	Report No.	Page
Scroll	MP C-69-4	C-16	Sediment (Cont)	TP 79-2	CERC-32
Seulthorpe, Norfolk, England	TM 3-343/113	S-70		TR 32-4	CERC-35
SE-Type Soil Stress Gages	IR 8	W-1		TR D-76-7	E-5
Sea	MP 4-64	CERC-7		TR D-77-14	E-7
Bottom	TR N-74-6	W-39		TR D-77-23/F	E-9
Land				TR D-77-24/B	E-9
Boundary Zones	CR	M-36		TR D-77-30/B	E-11
Navigation	MP H-72-9	H-13		TR Y-76-1	E-32
Level Canal		Z-12		TR Y-76-11	E-33
	MP H-69-10	H-11	Absorbed		
	MP H-69-12	H-11	Heavy Metals	TR D-76-42	E-18
	RR 2-9	H-27	Pesticides	TR D-77-34	E-11
	TM 65-15	W-20	Associated Oil and Grease	TR D-77-26	E-10
	TM 67-2	W-22	Bordering the Mississippi	MP 3-481	S-16
	TR 6	W-28	Budget	R 31-7	CERC-22
	TR 8	Z-8	Analysis	R 73-3	CERC-20
Water on Concrete	MP 6-690	C-11	Chemistry	TR D-76-15/B	E-15
Seabirds	TR D-78-1	E-13	Discharge Measurements	TB 7	Z-9
	TR D-78-8	E-14	Distribution	MR 79-1	CERC-12
Seabrook Lock, Lake			Diversion	TM 2-388	H-40
Pontchartrain	MP 3-842	S-23	Elliott Bay	TR D-77-24/D	E-9
Seafloor Trafficability	TR M-70-8	M-26	Investigation		
Seagrass	CETA 80-2	CERC-3	Atchafalava basin	TM 46-1	S-55
	MR 80-7	CERC-13	Mississippi River	P H	H-26
Demonstration Site, Port				P U	H-26
St. Joe	TR D-78-33	E-17		TM 120-1	MS-10
Literature Survey	TR D-78-4	E-14		TM 120-2	MS-10
Seal	MP 3-75-13	S-47	Movement Tracing	TR N-76-1	W-40
Coat Material	MP 4-287	S-11	New Orleans-Lake Pontchar-		
	MP 4-288	S-11	train Area	TR S-75-6	S-91
	MP 4-302	S-11	Organic Matter	CR D-76-7	E-25
SEARCH and CORPS Systems		Z-6	Parameters	TR D-77-6/E	E-6
SEASAT Detection	R 81-1	CERC-22		TR D-77-42/C	E-13
Seaside Park, Connecticut	TM 11	CERC-26	Quality	TR D-76-15/A	E-15
Seasonal			Lake Conway	TR A-73-2/1	
Frost		Z-16		/VI	M-49
Variations in Great Lakes				TR A-73-2/2	
Design Wave Heights	MP H-76-21	H-17		/VI	M-50
Seawall	RR 2-10	H-27		TR A-73-2/3	
	TR 2-728	H-50		/VI	M-50
Seaweed	MR 76-9	CERC-10		TR A-73-2/4	
Section 32 Program	IR H-77-1	H-3		/VI	M-50
		Z-3	Sample Collection Stations	TR M-77-1	M-32
		thru	Sampling	TM 115	CERC-43
		Z-6	Sorting	TM 63	CERC-40
Sector Gate	MP H-71-4	H-12	Survey	b 1/1	H-1
	TR H-70-2	H-56		CETA 31-9	CERC-3
Security Sites in Puerto Rico	MP M-70-5	M-9	Suspension	TP 77-4	CERC-31
SEDAN	MP 3-662	S-19	Tracer Tests	MP 2-472	H-7
	PNE 234F	W-14		MP 2-649	H-3
Sediment	MP M-76-10	M-14	Transport	MP 1-71	CERC-8
	MR 76-10	CERC-10		MP 2-534	H-8
	R 24-73	CERC-18		MR 31-6	CERC-13
	R 77-5	CERC-20		MR 53-10	CERC-15
	R 78-8	CERC-20		R 13-74	CERC-16
	R 78-10	CERC-21		R 20-74	CERC-15
	R 300-1	P-5		R 21-74	CERC-16
	TB 7	Z-10		R 78-6	CERC-20
	TM	S-56		TR D-77-12	E-7
	TM 29	CERC-27	Traps	TR H-76-13/2	H-65
	TM 33	CERC-27	Sedimentary Material	MP 2-723	H-9
	TM 34	CERC-27	Sedimentation	TM 4-1	H-30
	TM 38	CERC-28			Z-12
	TM 40	CERC-28		CETA 31-6	CERC-3
	TM 42	CERC-28		IR M-73-1	H-3
	TM 45	CERC-28		R 77-1	CER -20
	TM 54	CERC-29		R 61-6	CERC-22
	TP 76-2	CERC-30		R 53-5	CERC-23
	TP 76-3	CERC-30		Tb 3	Z-10

Term	Report No.	Page	Term	Report No.	Page
Sedimentation (Cont)	TM 8	CERC-26	Seismic (Cont)		
	TM 19	CERC-37	Region	MP E-75-7	W-11
	TR 9	Z-8		MP N-76-11	W-12
	TR D-77-20/A	E-8	Sensor	MP	M-12
	TR D-77-30/A	E-10		MP M-75-10	M-13
	TR D-77-42/B	E-13	Site Calibration	PNE 1100	W-16
Concentrations	MP S-75-24	S-47		TM 67-11	W-23
Conditions	TR 2-623	H-46	Source Zones	MP S-73-1/21	S-40
Models	MP H-70-2	H-12	Survey		
Tank	R 76-1	CERC-19	Dam Sites	MP R-60	S-5
Seeding Studies			Grand Island	MP R-59	S-5
Purdue University	TM R-392	S-72	Spokane River Valley	MP R-64	S-6
Vicksburg	TM R-354	S-72	Techniques		
Seepage	B 10	S-1	Brown's Ferry Nuclear Plant	MP 4-970	S-26
	CR	W-44	Pre-Gondola II	MP 4-971	S-26
	MP S-69-34	S-30	Test Results	MP S-78-8	S-53
	MP S-70-3/1	S-32	Waves	MP S-73-1/10	S-39
	MP S-75-5	S-46	Seismicity	MP S-77-3	S-50
	TM 101-1	S-56		TR M-77-4/5	M-33
	TM 101-2	S-56	Seismograph Demonstration	B 10	S-1
	TM 135-1	S-56	Seismographic Networks	MP S-78-9	S-53
	TR 27	H-29	Seismological Factors for		
Analysis for Columbia Lock			Design Earthquakes	MP S-72-41	S-38
and Dam	MP R-503	S-16	Seismology	MP S-74-15	S-45
Mississippi River Banks	MP S-70-3	S-32	Selective Withdrawal	TR H-73-4	H-59
	TR S-73-5	S-89		TR H-73-14	H-60
Model	TR R-619	S-79	Self-Propelled		
Greenville Front Levee	TM 182-1	S-53	Artillery	MP M-77-1	M-15
Oaklev Dam	MP S-72-3	S-36	Vehicles	TM R-240	M-17
Problems	MP K-73-3	MS-6	Wheeled Vehicles	TM R-240/18	M-13
	MP K-73-4	MS-6	Selfridge Air Force Base	MP 4-707	S-20
Remote Imagery	MP S-75-24	S-47	Sembach Air Base	TM R-343/27	S-67
Studies	TM 175-1	S-57	Semiarmor-Piercing Bomb		Z-16
Segmented Tire	TR M-73-5	M-29	Sensor	MP	M-16
Seiches	MP 2-502	H-7		TR M-73-6	M-29
	MP S-73-1/15	S-39		TR M-73-3	M-29
Seismic			Fort Huachuca		
Acoustic Target Classifiers	TR M-76-7	M-32	Sites, Woodrudge and Fort		
Attenuation Tests	MP S-78-4	S-52	Belvoir	MP M-73-9	M-11
Characteristics	TR M-72-2	M-29	Test Areas in the Panama Canal		
Data	MP M-75-2	M-12	Zone	TR M-72-2	M-29
Decoupling	TM 67-10	H-22	SERGIUS NARROWS	TM 68-13	W-23
Design	MP S-73-1/4	S-39		TM 71-11	W-25
Ejecta Effects	TM 70-4	W-24	Series	TR 33	W-29
Exploration	TM 198-1	S-58	"A" Beams	TM 6-412/3	C-29
	TM 199-1	S-58	"B" Beams	CTIAC-59	C-44
Field Methods for In Situ				TM 6-412/4	C-29
Moduli	MP S-75-10	S-47	Settlement		
Hazard Analysis	MP S-73-1/13	S-39	Fallback Materials	MP R-374	S-26
	MP S-73-1/16	S-40	Large Hydraulic Structures	MP S-71-23	S-35
Instrumentation Conference on			7.6-Angstrom Reaction Product	CTIAC-41	C-43
Earth and Concrete Dams	MP	S-33	Sevier Bridge Reservoir	TM 2-397	W-27
Intrusion Detector	MP M-72-4	M-10	Sevilla, Spain	TM R-343/85	S-69
Investigation			Sewage		
Fort Peck Dam	MP S-75-4	S-46	Lagoons	MP Y-77-5	E-30
Isabella Project, California	MP S-73-16	S-53	Treatment Plant	MP 2-951	H-10
Loading	CR	W-44	Outfall, Los Angeles Harbor	TR H-78-23	H-69
Measurements		Z-14	Sewart Air Force Base	MP 4-3/1	S-4
	PNE 5015	H-14	SH waves	MP S-77-12	S-51
Methods	MP M-76-13	M-14	Shale	CR R-3	S-106
Motions	PNE 5013	H-13		CR S-68-4	S-106
Phenomena	MP 4-969	S-26		TR R-699/3	S-82
Preparation Study	MP	M-10		TR R-699/5	S-82
Reflection	CETA 82-5	CERC-4		TR E-73-1	W-38
	MR 80-10	CERC-17		TR S-71-6/5	S-87
	MR 82-15	CERC-14	and Coal Cores	MP 6-658	C-10
	R 1-70	CERC-16	Embarkments		Z-17
Refraction	TM 40	CERC-23	Laneport Dam	TR S-71-6/3	S-67
	TR E-73-4	W-38	Samples, Waco Dam	MP 6-545	C-8



Term	Report No.	Page	Term	Report No.	Page
Shallow Water	CETA 77-6	CERC-2	Shelter	CR 2-55	W-46
	CETA 82-2	CERC-4		CR 2-67	W-46
	R 6-73	CERC-17		CR 1-110	W-46
	R 83-14	CERC-23		MP N-71-3	W-8
	TM 4	CERC-37		TR 1-768	J-32
	TM 27	CERC-33		TR N-69-3/8	W-45
	TM 40	CERC-39		TR N-69-8/9	W-45
	TM 123	CERC-43		TR N-70-6	W-45
	TP 78-1	CERC-31	Building Program	CR 2-65	A-47
Wave Study	CR 1-167/III	W-48		CR 2-76	W-47
Shark River Boat Basin	R 80-2	CERC-22	Concepts		Z-14
Sharonville, Ohio	MP 4-47	S-5	Response	TR N-77-3	A-41
Shear			Shelton Fallout		
Apparatus	TR S-71-2/1	S-87	Model	TM 65-1	W-20
Key Connections	TR N-73-9	W-39	Prediction System	TM 65-10	A-20
Modulus	TR S-72-5	S-89	Shepherds Grove, Suffolk, England		
Constitutive Models	MP S-78-12	S-53	Sheppard Air Force Base	TM 3-343/103	S-70
Sand	MP S-71-13	S-35		MP 4-366	S-13
Responses	CR 3-161	S-114	Sheridan Army Airfield	TM 3-344/2	S-71
Strength	MP S-72-35	S-38	Sherman Army Airfield	MP S-68-1	S-26
Antelope Lake Target of Clay Shales	MP S-73-60	S-43	Sherwood Island State Park	MP S-72-25	S-37
Earth-Rock Mixtures	MP S-76-7	S-48	Shielding Model	TM 20	CERC-27
Stabilized Soils	TR S-71-6/2	S-87	Shifting Sand	TR N-74-4	M-30
Measurements	MP S-70-7	S-32	Shrinkage	MP 4-968	S-26
Saturated Clay	CR 3-63/5	S-111	Compensating Cement	CTIAC-29	C-41
Gravel	MP M-72-5	M-10		MP C-78-2	C-25
Stress	CR 3-132	S-100	Ship	CTIAC-27	C-41
Tests	MP 3-428	S-14	Canal	MP C-77-12	C-25
Compacted Soils	MP 3-664	S-19	Channel, Lake Charles, Louisiana	TR 2-776	H-52
Saturated Clays	R 3-71	CERC-17	Mooring		
to-Normal Stress Ratio	TR S-78-16	S-96	Facility	TM 124-1	S-56
Wave	CR 3-101/14	S-113	Motion Data	TR H-75-4/2	H-62
Velocity	CR S-70-5	S-106	Transit Capacities	TR 2-708	H-49
Shearing	MP S-72-32	S-38	Shipping Container	TR H-75-4/3	H-62
Characteristics of Clay	MP S-74-11	S-45	SHOAL, Grouting Support	MP H-69-10	H-11
Resistance	MP 3-478/9	S-15	Shoaling	MP N-70-5	W-7
Sands	CR 3-101/16	S-113		MP 6-700	C-11
Soil	MP M-68-8	M-8			Z-11
Sheepsfoot Roller	MP S-69-30	S-30			Z-12
	MP 6-746	C-12			
Sheet Pile				CETA 81-12	CERC-4
Cells				CETA 83-1	CERC-4
Walls				MP 2-641	H-8
Shelbyville				MP 2-952	H-10
Dam	TR 2-719	H-50		MP 2-953	H-10
Reservoir	MP 6-539	C-8		MP H-69-13	H-11
	MP 6-588	C-9		MP H-72-10	H-13
	MP 6-658	C-10		MP H-78-6/2	H-19
	MP 6-975	C-15		R 76-1	CERC-19
	R 3-72	CERC-17		TB 4	Z-9
Shelf Studies	CR 1-107	W-45		TB 10	Z-10
Shell	CR N-70-2	W-48		TM 59	CERC-29
	MP 4-136	S-7		TM 63	CERC-40
	MP 4-38	S-5		TM 2-403	H-41
	MP 4-81	S-6		TP 76-1	CERC-30
	MP 4-347	S-12		TP 80-8	CERC-32
Road Vibration Machine	TR D-77-24/A	E-9		TR /2	H-47
Shellfish	TR D-77-30/E	E-11		TR H-77-20	H-67
Shellpern	MP 3-106	S-7		TM 204-1	H-34
				TR H-78-5/2	H-68
				RR H-75-3/3	H-29
				TR H-72-5	H-58
				TR H-75-18	H-63
				TR 2-733	H-50
			Absecon Inlet		
			Analysis		
			Brunswick Harbor		
			Cattaraugus Creek Harbor		
			Charleston Harbor		
			Conditions		
			St. Louis Harbor	TR H-72-7	H-58
			Sawyer Bend	TR H-78-7	H-68
			Deepwater Point Range	TM 2-231	H-35

## 86-INDEX

Term	Report No.	Page	Term	Report No.	Page
Shoaling (Cont)			Shooters Island	MP 2-953	H-10
Delaware			Shore		
City Channels	MP 2-723	H-9	Effect Model	TR H-75-16	H-63
River			Erosion	MP 1-59	CERC-36
Entrance	TM 93-1	H-30		MR 30-2	CERC-37
Model	MP 2-407	H-6	Processes	TM 3	CERC-37
Elimination	TM 219-1	H-35	Protection		
Galveston			Manual	SPM	CERC-24
Bay	B 1/2	H-1	Structures	MP 2-75	CERC-8
Channel	TM 127-1	H-32	Retreat	TP 79-4	CERC-32
Head of Passes	TM 2-356	H-39		TP 80-7	CERC-32
Hudson River Channels	TR 2-694	H-49	Stabilization	SR 9	CERC-25
Manchester Islands	TM 181-1	H-33	Structures	TM 12	CERC-37
Marcus Hook-Schuykill Reach	MP 2-887	H-10	Shoreline		
Mare Island Strait	TM 81-1	H-30	Changes	MR 30-6	CERC-13
New Castle-Finns Point Ranges	TM 2-259	H-35		R 33-10	CERC-23
Port Orford, Oregon	TR H-74-4	H-60	Evolution	MR 83-11	CERC-23
Raritan River	TM 2-342	H-39	Fluctuations	MR 77-10	CERC-11
Richmond (Virginia) Harbor	TM 178-1	H-33	Geometry	MP 3-337	S-13
Savannah Harbor	TM 2-268	H-37	Plant Establishment	MP H-77-9	H-18
Southwest Pass	MP 2-155	H-4	Retreat	MR 78-1	CERC-11
	MP 2-349	H-6	Stabilization	R 73-11	CERC-21
	TR 2-690	H-49		MP 6-75	CERC-8
Starved Rock Lock and Dam	P 13	H-26	Short-Crested Waves	TP 70-13	CERC-30
Umpqua River	TM 2-277	H-37		TM 81	CERC-41
Verification	MP H-78-6/1	H-19		TM 125	CERC-43
Waves	TM 104	CERC-42	Shot		
Wilmington Harbor	TM 194-1	H-34	Pile Driver	MP C-69-7	C-16
Shoals	R 22-73	CERC-18	6M of DIAMOND ORE	CR E-74-1	W-46
Shock			Snotcrete	CR S-76-4	S-101
Absorbing Materials	TR 6-763	C-35		MP 3-660/2	C-10
Attenuating Material Systems	CTIAC-61	C-44		TR 1-74-5	J-38
Behavior	CR 3-91/4	S-117	Shrewsbury Inlet	MP 4-72-	H-13
Effects	MP N-71-7	W-8	Shrimp		
Impedance	CTIAC-5	C-40	Mariculture	TR D-78-53	E-19
	MPC-72-10	C-20	<u>Peneaus Aztecus</u> Ives	CR H-74-2	H-71
Induced Airblast	TR E-72-16	W-37		CR H-77-1	H-71
Isolating			Shrinkage of Concrete	MP 6-30	C-2
Backpacking Materials	MP 6-780	C-13	Masonry Units	MP 6-328	C-6
Material	CR 6-83	C-46	SID Testing at Fort Bragg	TR M-73-2	M-29
Underground Structures	CR 6-87	C-46	Side		
Isolation	MP	W-10	Chains	CR A-77-1	M-52
	MP N-68-6	W-7	Channel	MP Y-74-5	E-29
Loaded Dry Sands	CR 3-91/2	S-117		TR M-74-5	M-30
Measurements	MP 1-733	W-4	Contour Maps	TR M-74-5/II	M-30
	PNE 009F	W-15	Spillway	B 2/4	H-1
	TR N-77-5	W-41		R 2-106	Z-13
Mitigating			Sidewall Port	TR 2-713	H-49
Characteristics	CR 6-126	C-46	Filling and Emptying System	MP H-75-7	H-15
Materials	MP 6-928	C-15		TR H-68-4	H-53
Pressures	RR H-63-2	H-27	Sieve Analysis	B 13	S-1
	TM 59	CERC-40		MP 3-478/6	S-15
Propagation	CR 3-171	S-117		TR 6-543	C-32
Response of Rock	TR 6-802	C-45	Signal Conditioning System	MP 0-70-1	MS-6
Test	MP M-77-3	M-15	Sigonella Foundation Soil	MP S-77-13	S-51
	MP M-77-9	M-15	Silica Fume	CTIAC-47	C-43
Transmission	MP 2-402	W-2	Silo		
	TR 1-794	W-33	Interaction Study	MP N-75-4	W-11
Wave	MP 2-212	W-2	Motions	TR N-74-8	W-39
	MP 1-308	W-4	Type Structures	TR S-73-12	S-90
	TR 2-615	W-30	Silt	CR 3-26/15	S-110
	TR N-69-3	W-34		CR 3-63/6	S-112
	MP 2-399	W-2		CR 3-63/8	S-112
Ice and Snow, Greenland	TM 71-17	W-26		TR 3-516/2	M-20
Interaction	MP 1-831	W-5		TR D-78-34	E-17
Propagation	MP E-75-1	W-10	Curtains	TR D-78-39	E-16
	TR N-72-9	W-37	Samplers	B 12	S-1
Shallow Water	TR N-74-6	W-39	Siltation in Estuaries	TB 2	Z-9
Reflection					

Term	Report No.	Page	Term	Report No.	Page
Siltv			Sliding Block Analysis	MP S-71-17/5	S-45
Clay	CR 3-145/1	S-100	Slip Form	MP C-74-15	C-22
	CR 3-145/3	S-100	Construction	TR C-74-3	C-43
	MP S-73-25/1	S-47	Paving Method	MP S-75-13	S-47
	MP S-70-3/1	S-32	Slope		Z-14
	TM 3-271/2	S-62		TM 109	CERC-42
Sand	CR 3-26/11	S-110		TR 3-777	S-84
Silvex	TR	M-48	Climbing		
Similitude	B 3/1	H-1	Wheeled Vehicles	MP 4-545	M-4
	b 4/1	H-2	Elastic-Rim Wheels	TR M-71-5	M-25
	MP 1-654	H-3	Cohesionless Materials	PNE 5009	H-15
	MP H-74-1	H-14	Excavated in Weak Shales	TR 3-059/3	S-82
	MP N-71-2	H-8	Failures in Reservoirs	MP 3-981	S-20
Simmons Army Airfield	MP S-79-47	S-31	Map Construction	TR M-77-3	M-32
	TR 3-466/4	S-75	Overconsolidated Clays	TR 29	S-29
Simulated Low-Yield Nuclear Explosions			Protection for Earth Dams		Z-1
	MP N-76-1	W-11	Rainfall Erosion		Z-14
	MP N-77-1	W-12	in		
	MP N-78-3	W-13	Rock Masses	TR 36	W-19
Simulation	TM 71-29	W-26	Soil	CR S-55-5	S-101
Model	MP H-75-7	H-15	Stiff-Fissured Clays	CR S-55-4	S-100
Modeling	MP H-75-9	H-15	Stability	R 12-3	P-2
Single Wheel	MP 4-757	M-5	Analysis	MP 5-515	MS-5
Sinkage Equations	TR M-70-1	M-26		MP 5-519	MS-5
Sinking Methods	MP C-71-9	C-19		TM 71-4	W-25
Sioux City-to-Hermann Reach	MBM 12-1	H-22	Circular Arc Method	MP K-73-2	MS-5
Mouth Reach	MBM 12-2	H-22	1954 Data	R 12-4	P-2
Site			1955 Data	R 12-5	P-2
Artificial Habitat Creation	CR D-76-2	E-21	1956 Data	R 12-7	P-3
Background Noise Signature			Problems	TM 65-13	W-20
Data Base Development	MP M-73-1	M-16	Wedge Method	MP K-76-3	MS-7
Characterization	MP M-73-3	M-11	STUDIES	MP A-77-1	MS-7
Description, Panama Canal Zone	MP 4-909	M-7	SLOPEMAP	TR 3-240/8	M-17
Dredged Material Disposal	TR D-77-5	E-5	Sludge	TR M-77-3/11	M-33
Geology, Columbia Lock and Dam	MP 3-569	S-18	Landfills		Z-15
Investigations	TR E-73-4	W-38	Sluice	MP H-73-1	H-33
Selection			Allatoona Dam	TM 274-2	H-19
Calion Lock and Dam	MP 3-775	S-21	Allegheny Dam	TR 2-627	H-46
Columbia Lock and Dam	MP 3-518	S-17	Canton Dam	TM 190-1	H-33
Ground Motion Studies	TR S-71-14/1	S-88	Dale Hollow Dam	TM 197-1	H-34
Investigation	PNE 111	W-16	Fall River Dam	TM 2-230	H-35
	TM 07-20	W-23	Fort Gibson Dam	TM 2-228	H-35
High Explosive Cratering Experiment	TM 67-17	W-22	Hulah Dam	TM 2-253	H-35
Mine Shaft Series	MP S-68-18	S-27	Libby Dam	TR H-76-21	H-65
Study	TM 69-5	H-24	Outlet		
Siouxlaw River	TR 2-631	H-40	Bluestone Dam	TM 2-227	H-35
Size Distribution	R 4-75	CERC-30	Hartwell Dam	TM 2-393	H-40
	TP 75-11	CERC-30	Pine Flat Dam	MP 2-75	H-4
Model	TM 10	CERC-20	Pressures	TR H-75-17	H-65
Sizing of Containment Areas for Dredged Material	TR D-77-21	E-8	Red Hook Dam	TR 2-673	H-45
Skid			Wolf Creek Dam	TM 207-1	H-34
Measuring Equipment	MP S-72-23	S-37	Sluiced Levee	TM 6-1	S-52
Tests	MP S-76-23	S-50	Slump of Concrete	MP C-71-7	C-14
Skydrol	MP 4-433	S-10	Slurry	TR 6-656	C-33
Slab	TR N-69-2	H-33		TR D-75-54	E-19
			Consolidometer	CR S-70-6	S-115
Column Connections	TR N-70-1	H-35	Military Bulk Explosive Systems		
Slag Cement	MP 6-39	C-2	Seal Surface Treatments	MP N-75-5	H-12
	MP 5-198	C-4	Type Explosives	TR S-75-1	S-3
	TR 5-445	C-31	Small	MP N-75-5	H-13
Slaking Indexes		Z-17	Boat		
Slide	TR S-70-3/3	S-57	Basic		C-11
Gaillard Cut	TR S-70-3/2	S-55			Z-12
Gate Tests, Norfolk Dam	TM 2-389	H-40		MP 1-75-5	H-1
Mint Springs Bayou Bridge	MP 3-504	S-10	No. 2, Nuseau, Alaska Harbor	TR 1-75-1	H-1
U. S. Military Academy	TR 3-591	S-78	Port Washington	TR 1-75-1	H-1
			SOY	TR 1-75-1	H-1
			Testing Behavior	TR 3-75-3	H-1
			Craft Harbor	TR 3-75-3	H-1

## 88-INDEX

Term	Report No.	Page	Term	Report No.	Page
Small (Cont)			Soil (Cont)		
Scale Explosion	MP 2-103	W-2	Capillary Systems	CR 3-73/2	S-103
Tests	MP 1-689/1	W-3	Cement	MP 3-122/3	S-7
Smentite Clay-Lime Mixtures	GTIAC-41	C-43		MP 3-63-25	S-28
SMI Field Test Program	MP N-74-2	W-10	Base Courses	MP 4-253	S-16
Smoothness Requirements	TR S-77-12	S-94	Construction	MP 4-93	S-6
Snap-Trans	MP 4-322	M-2	Mixtures	TM 187-1	S-58
Snell Lock	MP 6-493	C-8	Classification	TM 3-240/10	M-17
	TR 6-784	C-35		TM 3-357	S-72
Snettisham Project	MP H-71-7	H-12		TR 5-625/B	M-21
Snow	MP 2-274	W-2	Cohesionless Soils	MP S-77-21	S-52
	MP 4-232	M-2	Compaction	TM 3-271	S-62
	MP 4-513	M-4	Conditions Beneath Coastal		
	MP 4-651	M-5	Harbors	TM	W-27
	MP 4-713	M-5	Constitutive		
	MP N-70-6	W-7	Properties	MP S-69-16	S-29
	RR 1-4	W-19	Relations	MP 4-980	S-26
	TM 3-414	M-19	Cores	MP 3-918	S-25
	TR N-69-1	W-33	Density	MP S-72-1	S-36
Tunnel	MP 2-378	W-2	Design	TR M-70-14/2	M-27
SNOWBALL	MP 1-746	W-4		TR 3-439	S-74
	MP 1-764	W-4		TR 3-451	S-74
	MP 1-937	W-6		TR 3-452	S-74
	TR 1-759	W-32		TR 3-453	S-74
	TR 1-797	W-33		TR 3-458	S-75
Ground Motions	MP 1-745	W-4		TR 3-464	S-75
Social Well-Being Indicators	MP Y-73-2	E-30	Disaggregation	CR S-73-1	S-114
Sod Production	CR D-75-1	E-21	Displacement	CR 3-149	S-116
Sodium			Dynamic Loadings	CR 3-26	S-109
Chloride	MP 6-669	C-10			and
Silicate	CR S-69-1	S-116			S-110
Tetraphosphate	MP 4-95	S-6	Engineering	MP S-69-7	S-23
Soft			Erosion	TR M-77-4/4	M-33
Clay	CR 3-39	S-100	ESSEX I Cratering Sites	TR N-76-4	W-40
Foundations	CR S-76-6	S-101	Fortification Material	MP S-71-12/1	S-34
Soils	TR 3-733/F	M-24	French Morocco	TM 3-343/48	S-63
Cohesive Soils	MP 4-767	M-6		TM 3-343/62	S-63
Ground	CR S-76-3	S-102	Germany	TM 3-343/63	S-63
	CR S-76-10	S-102	Group	CR 3-150	M-37
	TR S-78-6	S-95	Embankments and Foundations	TM 3-357/A	S-72
Soil	MP 4-651	M-5	Roads and Airfields	TM 3-357/B	S-72
	MP 4-370	M-6	Highway Subgrades	MP	S-47
	TR 3-670	M-22	Infiltration	TR 3-731	S-84
	TR 3-688	M-22	Information	CR	M-39
	TR 3-729	M-24	Investigation		
	TR M-70-11/2	M-27	Bauxippi-Wvanoke Revetment	R 7-1	P-1
Sonic Project	MP H-76-4/2	H-16	Tennessee-Tombigbee Waterway	TM 149-1	S-57
Soil	TR S-74-3	S-3	Layers	CR 3-145/5	S-100
	MP 3-15	S-4		MP S-73-5	S-40
	MP 3-453/1	MS-4		MP S-75-14	S-47
	MP S-69-34	S-30	Lime	TR S-76-9	S-93
	MP S-71-12	S-34	Literature Review	MP S-73-24	S-41
	TM	S-56	Low Permeability	MP Y-74-2	E-29
	TM 3-384	S-72	Masses	MP 4-393	S-14
	TM 3-415	S-73	Mattress	TM 211-5	S-59
	TR 3-666	M-22	Measurements	MP 4-960	M-7
	TR D-77-23/D	E-8	Mechanics	TM	S-64
	TR M-70-14	M-27	Conferences		
	TR M-71-5	M-28	Fact Finding Survey	TM	S-60
Alton, Illinois	TM 77-1	S-55	Laboratories	B 1/1-9	S-1
Bearing Capacity	TR 3-342	S-80	Laboratory Equipment	MP 3-476	S-15
Behavior	CR S-79-2	S-105	Terms	SMIAC	S-95
Beneath			Moduli	MP S-63-45	S-31
Landing Mats	MP S-71-3	S-34	Moisture	CR 4-12A	M-39
Rigid Wheel	TR S-74-7	S-90		MP 4-117	M-2
Bentonite Mixtures	S 33	S-1		MP 4-338	M-2
bordering the Mississippi				MP 4-495	S-1
River	TR 3-651	S-79		MP 3-711	M-2
Buildup	MP 4-940	M-7		MP M-73-1	M-17

Term	Report No.	Page	Term	Report No.	Page
Soil (Cont)			Soil (Cont)		
Moisture (Cont)			Structure Interaction (Cont)	MP 1-685	W-3
Content	CR 4-8	M-44		TR N-70-7	W-36
	MP 4-135	M-2		TR S-75-4	S-93
	TM 3-331/3	M-18	Computer Programs	MP K-75-2	MS-6
Distribution	MP 3-482	M-4	Studies	R 12-2	P-2
Meter	CR 3-176	S-106		R 12-5	P-2
Samplers	MP 4-371	M-3	Subjected to		
Particle Movements	MP M-71-2	M-9	Freezing and Thawing	TM 3-331/7	M-18
Penetration Resistance	MP M-69-7	M-9	Impulse-Type Loads	TR S-68-9	S-35
Permeability	B 36	S-1	Surface	MP M-70-10	M-9
Pressure	CR 3-101/5	S-112	System	CR 3-26/22	S-111
Cell	TM 210-1	S-58	Targets	MP S-71-12/2	S-34
	TR S-76-7	S-93	Team for Inspection of ICBM		
Properties	MP 4-986	M-7	Facilities	MP 3-449	S-15
	MP S-73-49	S-43	Terms	B 15	S-1
	TR 3-652	M-21	Terrain Evaluation	MP M-77-8	M-15
Property Investigation for			Test	TM 164-1	S-57
HEST Test V	MP S-68-23	S-28	Facility	B 1/1-9	S-1
	TR S-68-1	S-84		MP S-72-9	S-36
Puerto Rico and Panama	CR 3-63/4	S-111		MP S-75-20	S-47
Records	MP 4-338	M-2		TR 3-499	S-77
Resources	TR D-77-38/E	E-12	Testing	CR 3-62/1	S-115
Rock Interface on Cratering	TR 2-478	W-30		MP S-71-16	S-35
Sample	MP 3-813	S-22	Thailand	TR 3-791	M-25
	MP 3-978	S-26	Trafficability	MP 4-823	M-6
	TR 3-693/2	M-23		TR 5-625/C	M-21
Classifications	MP	S-84	Classification Scheme	MP 4-442	M-3
Overseas Air Bases	TM 3-274	S-62	Prediction	MP	M-6
Sampling	MP 4-949	M-7	Treatment		
Series Survey	CR 3-156	M-41	Dust		
Shear Moduli	MP 4-691	S-20	Control	CR S-71-2	S-119
Snoaling	TB 4	Z-9	Palliation	CR S-68-5	S-99
Shock Tube	CR 3-171/2	S-117	Palliative	CR 3-174	S-119
Solidification	CR 3-2	S-109	Type-Aerial Photograph Ties	TM 3-343	S-66
	CR 3-32	S-111	Vehicle Relations	TR 3-783/F	M-24
Specimens	CR S-71-4	S-107	Vibration Tests, Suffield		
	MP S-71-9	S-34	Experiment Station	CR 1-125	W-48
Stabilization	CR 3-63	S-111	Water Content	MP 3-473/13	S-16
	CR 3-140	S-117		MP S-69-15	S-29
	MP 3-122	S-7	Waterproofers	MP 4-756	S-21
	MP 4-129	S-7	Waterproofing	CR S-68-5	S-99
	MP 4-824	S-22		TR 3-530/2	S-77
	MP S-69-9	S-29	Wet Season	MP 4-447	M-3
	MP S-70-11	S-32	Wheel Interface	MP M-68-6	M-6
	TR 3-455	S-74	Solid		
Roads and Airfields	MP S-74-23	S-46	Retention	TR D-78-56	E-19
Vinsol Resin	TM 196-1	S-58	Waste Management	TR D-77-11	E-7
Stabilizers	MP S-77-15	S-51	Solitary Waves	CR 2-1/10	H-74
Strain Gage	IR H-73-1	W-1		TM 11	CERC-37
Strength	MP 4-104	S-7		TM 33	CERC-38
	MP 4-238	M-2	Solute Concentrations	TR M-78-2	M-33
	MP 4-284	M-2	Solvent Resistant Treatments	TM 3-246	S-51
	MP 4-950	M-7	Sonar Equipment	C&TA 82-5	CERC-4
	MP M-73-1	M-11	Sondrestromfjord, Greenland	MP 4-216	S-10
	MP S-70-25	S-33		TM 3-343/4	S-66
	TM 3-323/5	S-65	Sonic		
Aircraft Landing Sites	IR S-70-1	S-2	Pulse-Echo Technique	MP C-77-11/2	C-25
Criteria	MP S-70-24	S-33	Tests	MP 6-196	C-4
	TR 3-554	S-78	Soniscope	MP 6-263	C-5
Unsurfaced Forward-Area			Investigation of Elmendorf		
Airfields	MP S-70-14	S-32	Air Force Base Hospital	MP 6-761	C-12
Strengthening	CR S-68-5	S-99	Nondestructive Testing	MP 6-806	C-13
Stress	MP S-72-15	S-37	Survey, Pad 39-A, Cape		
Gage	IR 8	W-1	Kennedy, Fla.	MP 6-760	C-12
	TR 3-803	S-84	Testing Procedures	MP 6-373	C-14
Measurement	CR 1-105	W-45	Tests of Concrete	TR 6-333	C-9
Structure Interaction	CR N-71-1	J-45	Ultrasonic Testing of Concrete	MP 6-46	C-2
	CR S-76-13	S-104	Sounding Loads	TM 34	CERC-39
			Soundness Tests of Concrete		
			Aggregates	MP 6-278	C-5

Term	Report No.	Page	Term	Report No.	Page
<b>South</b>			<b>Spillway (Cont)</b>		
America; Canal Zone Analogs VI	CR 3-30/VI	M-43	Copan Dam	TR H-70-9	H-50
Atlantic United States	TR 1-78-7	E-33	Cowanesque Dam	TR H-70-12	H-54
Dakota Sand	MP 6-530	C-8	Crest	MP 2-606	H-5
Ellenville Flood Control	TR H-74-2	H-60	Design	MP H-73-5	H-33
Lake Worth Inlet, Florida	TM 42	CERC-39	Pine Flat Dam	TR 2-511	H-43
San Francisco Bay	TR D-73-57	E-20	Pressures, Chief Joseph Dam	MP 2-260	H-5
Southeast Asia; Canal Zone			Denison Dam	TM 171-1	H-33
Analogs II	CR 3-30/II	M-43	Design for Whitney Dam	TM 2-263	H-37
Southwest Pass		Z-14	Detroit Dam	TM 2-260	H-30
	MP 2-153	H-4	Dewey Dam	TM 191-1	H-33
	MP 2-155	H-4	Dillon Dam	TM 2-264	H-37
	MP 2-349	H-6	and Discharge Channel	MP 2-403	H-6
	TR 2-494	H-43	Energy Losses	MP 2-642	H-8
	TR 2-690	H-49	Enid Dam	TM 2-223	H-35
Southwind Maritime Centre	MBM 86-2	H-25	Flip Bucket, Hartwell Dam	TM 2-393	H-40
Soviet Middle Asia; Yuma			Folsom Dam	TM 2-369	H-40
Analogs No. 5	CR 3-11/5	M-42	Fort Gibson Dam	TM 192-1	H-34
Space-Vehicle Launch Facility			Garrison Dam	TM 2-431	H-41
Foundation	MP 4-557	S-17	Gate Vibrations on Arkansas		
Spain	TM 3-343/		River Dams	TR H-71-5	H-57
	76-73	S-69	Gavins Point Dam	TM 2-404	H-41
	TM 3-343/		Genegantslet Dam	TM 2-351	H-39
	85-89	S-69	Great Salt Plains Dam	TM 148-1	H-42
Spall Velocity	TR 40	H-29	Greenup Locks and Dam	TR 2-572	H-45
Spangdahlem, Germany	TM 3-343/24	S-67	Hannibal Locks and Dam	TR 2-731	H-50
Spartine Alterniflora Salt Marsh	TR D-73-38	E-13	Hugo Dam	TR H-69-15	H-55
Specific Gravity	MP 4-162	S-8	and Integral Sluices for the		
	MP H-73-4	H-14	Canton Dam	TM 190-1	H-33
	TM 6-419/3	C-29	John Redmond Dam	TR 2-611	H-40
Specimen Reconstitution	MP S-76-5	S-48	Kaw Dam	TR H-70-14	H-57
Spectrophotometer	MP 4-547	M-4	Kawsinger Bluff Dam	TR 2-809	H-53
	MP C-70-5	C-17	and Lock		
Spectrum Analyses	R 6-74	CERC-19	Approach		
Sphere	CR 3-26/19	S-110	Demopolis Lock and Dam	TM 2-252	H-36
	TM 68-11	H-23	Jim Woodruff Dam	TM 2-340	H-39
	TR H-68-2	H-53	Emergency Gate, Barkley		
	TR M-70-9	M-26	Lock and Dam	TR 2-689	H-46
Spillway	B 1/3	H-1	Lock and Dam 26, Mississippi		
	B 2/4	H-1	River	TR H-73-15	H-60
	CR H-71-1	H-71	Markland Locks and Dam	TR 2-566	H-44
	MP 2-206	H-5	McGee Bend Dam	MP 2-264	H-5
	MP 2-587	H-8	Millers Ferry Lock and Dam	TR 2-643	H-47
	RR H-70-1	H-27	Models	B 2/4	H-1
	TR 2-575	H-45	Modifications, Miraflores Dam	TR 2-667	H-48
	TR H-73-7	H-59	and Navigation Conditions,		
	TR H-78-21	H-69	Holt Lock and Dam	TR 2-745	H-51
Alineville Lock and Dam	TR H-74-10	H-61	New		
Allatoona Dam	TM 214-1	H-34	Cumberland		
Alum Creek Dam	TR H-70-4	H-56	Dam	TM 2-336	H-40
Amistad Dam	TR 2-653	H-47		TR 2-585	H-46
Apron of the Possum Kingdom			Lock and Dam No. 1, St.		
Dam	TM 111-3	H-31	Lunie Canal	TM 153-1	H-32
Belleville Locks and Dam	TR 2-687	H-43	Oane Dam	TR 2-657	H-47
Belton Dam	TM 2-363	H-39	Oakley Dam	TR H-70-13	H-57
Benbrook Dam	TM 2-269	H-37	Osneola Dam	TM 2-201	H-36
Berlin Dam	TM 193-1	H-34	and Outlet Works	MP 2-234	H-5
Big Bend Dam	TR 2-605	H-46	East Brannon Reservoir	TM 2-325	H-38
Bucket	CR 2-116	H-72	Fort Randall Dam	TR 2-528	H-44
	MP 2-625	H-8	Howlesburg Dam	TR H-70-7	H-50
	TM 2-239/A	H-30	Locks Island Dam	TR H-70-10	H-56
Burnsville Dam	TR H-75-5	H-62	Townshend Dam	TR 2-498	H-43
Cannelton Locks and Dam	TR 2-710	H-49	Philpott Dam	TM 2-321	H-38
Center Hill Dam	TM 202-1	H-34	Prout Dam	TR 2-545	H-47
Cheatham Lock and Dam	TM 2-351	H-49	Ravestown Reservoir	TR H-70-15	H-57
Clarence Cannon Reservoir	TR H-71-7	H-57	and Regulating Sluices for		
Columbus Lock and Dam	TR H-74-13	H-51	Wolf Creek Dam	TM 201-1	H-34
and Conduits			Rend Lake Reservoir	TR H-64-7	H-54
Pine Flat Dam	TM 2-375	H-40	Santee River Dam	TM 106-1	H-33
Table Rock Dam	TR 2-594	H-43	Sardis Dam	TM 132-1	H-32
				TM 132-2	H-32

Term	Report No.	Page	Term	Report No.	Page
Spillway (Cont)			Stabilization (Cont)		
Savage River Dam and Sluices	TM 2-378	H-40	Earth	CR 4-137	S-105
Allegheny Dam	TR 2-621	H-46		CR 3-139	S-118
Conemaugh Dam	TM 2-272	H-37		CR 3-141	S-103
Fort Gibson Dam	TM 2-228	H-35	Missile Launching Sites	MP S-71-19	S-45
Red Rock Dam	TR 2-673	H-48	Shifting Sand	MP 4-968	S-26
St. Lucie Canal	P 14	H-26	Soil	CR 3-148	S-116
Stewarts Ferry Dam and Stilling Basin	TM 2-239	H-36		IR S-74-3	S-3
Arkabutla Dam	TM 169-1	H-33		TR 6-706	C-34
Columbia Dam	TR 2-578	H-45	Cement and Lime	MP 4-728	S-21
Harlan County Dam	TM 2-236	H-35	Military Mobility Processes	CR 3-73	S-103
Jackson Dam	TR 2-531	H-44	Sulfur	CR 3-140	S-117
John Martin (Caddoa) Dam	TM 166-1	H-33	Stabilized	CR 3-144	S-115
Keystone Dam	TR 2-555	H-44	Clayey Silt	CR 3-63/6	S-112
Maxwell and Opekiska Locks and Dams	TR 2-579	H-45		CR 3-63/8	S-112
Pike Island Locks and Dam	TR 2-586	H-46	Layers in Flexible Pavement Systems	MP S-73-65	S-44
Possum Kingdom Dam	TM 111-1	H-31	Soil	CR 3-63	S-111
Stockton Dam	TR 2-683	H-48			and
Structure for Central and Southern Florida Water-Control Project	TR 2-633	H-47			S-112
Tainter Gates	MP H-72-7	H-13	Stabilizers for Bank Protection	CR 3-145	S-100
Toe Curve	CR H-68-1	H-72	Stage-Discharge Relations	MP S-77-14	S-51
Typical Low-Head Navigation Dam, Arkansas River	TR 2-655	H-47	Stainless Steel Wires	INV 1	Z-5
Vibration	CR	H-70	Stains from Mortar and Concrete	TR 6	Z-8
Ozark Lock and Dam	TR H-77-6	H-66		TR 6-613/2	C-34
Wappapello Dam	TM 146-1	H-32		CTIAC-7	C-40
Water-Surface Profiles	MP H-73-4	H-13	Standard	MP C-68-8	C-16
West Point Dam	TR 2-815	H-53	Effort Compaction Tests	MP S-77-4	S-50
Spilsby, Lincolnshire, England	TM 3-343/111	S-70	Elutriate Test	TR D-77-3	E-6
Spline Interpolation Methods	MP 0-71-2	MS-8	Penetration Tests	RR S-76-2/1	S-54
Spoil				RR S-76-2/2	S-54
Areas	B 2/1	H-1	Starved Rock Lock and Dam	MP C-75-9	C-23
Bank Locations	MP 2-143	H-4		MP C-78-12	C-26
Spokane River Valley	MP 3-64	S-6		P 13	H-26
Spray-Wall Pressures	B 3/1	H-1	State Fairgrounds Pumping Plant, Louisville, Kentucky	TM 2-367	H-40
Spread Footings	CR 3-74	S-107	Static		
Squeeze Test	MP 4-350	M-2	and		
SRI-RMG-2C4 Grout	CTIAC-56	C-44	Airblast Overpressures	MP N-68-4	W-7
STA-POD Stability Tests	MP H-74-7	H-14	Dynamic		
Stability	MP S-77-10	S-51	Analysis of Earth Slopes	MP S-78-13	S-53
	TR H-78-3	M-33	Soil Stress Measurement	CR 1-105	W-45
Analysis, Table Rock Dam	MP 3-544	S-17	Load	CR N-69-1	W-45
Beach Fill Material	TM 16	CERC-26	Testing of Foundation Piles	TR S-69-10/2	S-86
Brandon Road Lock and Dam	MP C-78-18	C-26	Loading	CR 1-147	W-48
Crater Slopes	MP 3-662	S-19		MP N-68-5	W-7
	MP S-68-3	S-27	Shallow-Buried Model	MP S-77-20	S-51
	MP S-68-8	S-27	Cylinders	TR N-69-2	W-33
	MP S-72-2	S-36		HR S-76-2/6	S-54
	PNE 234F	W-14	Test		
Cratered Slopes	CR 3-75	S-105	Closure Analysis	TR N-78-8	W-42
	TR 3-699/2	S-82	Hardened Shallow-Buried Structure	TR N-78-9	W-42
	TR 3-699/6	S-82	Plain Concrete	TR N-78-7	W-42
Earth Masses	TR S-76-11	S-93	Reinforced Concrete	MP 6-609	C-9
Embankments	CR S-76-6	S-101	Beams	TR 6-818	C-36
Rubble-Mound Breakwater	MP H-76-8	H-16	Deep Beams	TR 1-676	W-31
Slopes	PNE 5009	W-18	Steel Pile Connectors	MP C-74-13	C-22
	TR 3-777	S-84	and Vibratory Load Testing	TR S-69-10/1	S-80
Tests	MP H-74-7	H-14	Statistical		
Nawiliwili Breakwater Repair	MP H-78-4	H-19	Analysis		
Stabilization			Obstacle-Vehicle-Speed Systems	TR M-63-1/4	M-25
Chemical Methods	CR 3-2	S-109	Reinforced Concrete		
Dunes	MP 9-75	CERC-9	Beam-Column	MP N-76-7	W-13

Term	Report No.	Page	Term	Report No.	Page
Statistical (Cont)			Stilling (Cont)		
Terrain-Vehicle-Speed			Basin (Cont)		
Systems	TR M-68-1/3	M-25	Huntington Reservoir Spill-		
Definitions	MP 2-250	W-2	wav	MP 2-876	H-10
Methods for the Concrete			Jackson Dam	TR 2-531	H-44
Laboratory	MP 6-41	C-2	John Martin (Caddoa) Dam	TM 166-1	H-33
Model	MP H-69-12	H-11	Keystone Dam	TR 2-555	H-44
Quality Control		Z-16	Kinzua Dam	CTIAC 67	C-45
Stavanger-Sola Airport	TM 3-343/55	S-68	Locks and Dams Nos. 5 and 7	TR 2-655/A	H-47
Steady			Maxwell and Opekiska Locks		
Flow Profiles	MBM 23-2	H-23	and Dams	TR 2-579	H-45
Tests, Cumberland River	MBM 23-1	H-23	Narrows Dam	TM 209-1	H-34
Nonuniform Current	MP H-74-11	H-14	Pike Island Locks and Dam	TR 2-586	H-46
Steel			Possum Kingdom Dam	TM 111-1	H-31
Fiber-Reinforced Concrete			Tallahala Dam	TM 111-2	H-31
Structure	MP C-74-11	C-22	Texarkana Dam	TR H-73-5	H-59
Fibrous Concrete	TR S-74-12	S-91	Wall Pressures	TM 2-346	H-39
Frame Structure	TR H-75-2	W-40	Warrior Dam	TR H-76-17	H-65
Landing Mat	TR 3-461	S-75	Well	TR 2-485	H-42
Membranes	MP S-70-9	S-32	Design	TR 2-620	H-46
Pierced Plank Mat	MP S-68-20	S-28	Stockton Dam	TP 77-2	CERC-31
Pile Connectors	TM	S-58	Stone	TR 2-683	H-48
Piling	MP C-74-13	C-22	Protection Work	TR H-77-8	H-66
Reinforcing Bars	TM 27	CERC-27	Stonewall Jackson Dam	MP H-75-4	H-14
Sheet	MP 1-337	W-5	Stop	MP 6-480	C-7
Pile Groins	TM 10	CERC-37	Logs	CTIAC-66	C-45
Piling	TM 12	CERC-37	Terrain Factor Complexes		Z-5
Tunnel Supports	MP C-70-13	C-18	Storage Areas	TR M-70-7/I	M-26
Stem	TR C-73-2	C-37	Storageability	MP S-69-11	S-29
Access Hole	MP 6-729	C-12	Storm	TR 3-515	S-77
Design	PNE 610F	W-15	Bearnes	MBM 42-1	H-24
Field Cratering Tests	TR M-70-9	M-26	Drain Outlets	TR D-77-22	E-8
Stemming	MP 6-925	C-15	Analysis	R 79-2	CERC-21
Effects for HE Charges	PNE 510	W-15	Model	RR H-70-2	H-27
High-Explosive Cratering	MP 6-660/2	C-10	Washover Deposits	RR H-71-1	H-28
Load Measurements	PNE 501F	W-14	Waves	TR 2-620	H-46
Underground Explosions	PNE 501P	W-14	Strain	TM	MS-10
Step Load Moving	TM 66-12	W-21	Capacity	TM 35	CERC-28
Stevens Institute of Technology	MP 6-805	C-13	Clarence Cannon Dam	TR 76-3	CERC-34
Stewarts Ferry Dam	MP 2-192	W-2	Trumbull Pond Dam	TR H-77-17	H-67
Stiffness Methods	MP N-72-6	W-8	Concrete	MP H-76-3/	
Stilling	MP C-75-1	C-22	Device	17/8	H-15
Basin	TR 2-438	W-30	Gage	TB 21	Z-11
Arkabutla Dam	CR S-68-1/4	S-118	Hardening Soil	MP H-76-5	H-19
Bayou	MP H-70-7	H-12	Meter	TM 50	CERC-28
Bodrau Dam	TM 2-239	H-36	Sensitive Cable Sensor	TM 61	CERC-29
des Glaises Drainage		Z-6	Shear	MP 1-59	CERC-36
Culvert	B 2/4	H-1	Device		
Buford Dam	MP 2-77	H-4	Tests	MP C-74-5	C-21
Bull Shoals Dam	TM 103-1	H-31	Simulation	MP C-72-20	C-20
Clinton and Fort Scott Dams	TM 2-338/1	H-39	Stratified	MP C-71-6	C-19
Columbia Dam	TM 163-1	H-33	Impoundment	CR 3-101/12	S-113
Delaware Dam			Lake Conditions	TR 6-811/2	C-36
Designs	TM	S-62	Media	CR 3-129/5	S-114
East Barre Dam	TM 147-1	H-32	Reservoirs	MP C-72-3	C-19
Fort Gibson Dam	TM 2-350	H-39	Shear	MP C-74-9	C-22
Harlan County Dam	TM 2-234	H-35	Device	TR 6-811	C-36
	TR 2-488	H-43	Tests	TR M-73-6	M-29
	TR 2-578	H-45	Simulation		
	TM H-73-6	H-59	Stratified		
	TR 2-578	H-45	Impoundment		
	TM 205-1	H-34	Lake Conditions	MP H-78-1	H-18
	MP H-69-1	H-11	Media	MP H-76-3/	
	MP 2-293	H-5	Reservoirs	17-9	H-16
	TM 2-228	H-35	Shear	TR M-72-4	M-29
	TM 2-236	H-35	Device	RR H-72-3	H-28
			Tests	TR H-69-10	H-55
			Simulation		
			Stratified		
			Impoundment		
			Lake Conditions		
			Media		
			Reservoirs		



Term	Report No.	Page
Stratigraphic-Sedimentological Investigation	MP 3-675	S-19
Streambank Erosion Control Evaluation and Demonstration		Z-3 thru Z-6
Protection Methods	IR H-77-1	H-3
Strength Behavior	TR H-77-9	H-66
Atchafalaya Levee Foundation Soils	CR S-70-3	S-101
Clay	CR 3-3	S-106
	CR 3-101/8	S-113
Shales	TR S-70-9/3	S-87
Compacted Clays	CR 3-42	S-106
Concrete	MP C-72-16	C-20
Moisture-Density Relations	TR 3-639	M-21
Rock Fill	TR 3-78-1	S-94
Stabilized Soils	CR 3-63/2	S-111
	CR 3-63/3	S-111
	CR 3-63/5	S-111
Surface Materials	MP M-70-2	M-9
Tests	CR 3-133	S-100
Undisturbed Sands	CR S-75-4/ Suppl	S-102
	TR S-78-9	S-95
	TR S-78-10	S-95
Stress		
Analysis of Brandon Road Lock and Dam	MP C-78-18	C-26
Conditions	TR C-75-4	C-38
Corrosion	CTIAC-64	C-45
Deflection	TR S-71-17/ III	S-88 and S-89
Deformation of Compacted Clays and Displacement	CR 3-42	S-106
Elastic Media	MP M-70-6	M-9
Layered Systems	MP M-69-8	M-9
Relations	MP M-68-6	M-8
Three-Layer Pavement System	CR 4-12	S-103
Distributing Efficiency	MP 4-84	S-6
Distribution Theory of Soils	TR S-77-10	S-94
Environments	MP S-76-17	S-49
Gage		Z-15
	IR-8	W-1
	MP S-73-37	S-42
	TR 1-301	W-33
	TR 1-814	W-33
Measurement	MP S-77-22	S-52
	TR N-70-14	W-36
	TR N-71-3	W-36
	TR N-72-2	W-37
	TR N-73-4	W-36
	TR N-74-3	W-39
Meter and Movements	MP 5-36	MS-4
Birch Dam	CR S-76-2	S-101
Earth and Rockfill Dams	CR S-72-2	S-101
Ratio	MP M-68-8	M-8
Shear Strength of Saturated Clay	CR 3-132	S-100
Shearing Resistance in Soil	TR S-74-7	S-90
Strain	CR 3-91	S-117
	TR 6-764	C-35
Behavior of Saturated Clay	CR 3-101/1/1	S/112
Soil	CR 3-26/6	S-110

Term	Report No.	Page
Stress (Cont)		
Strain (Cont)		
Clay Shale Distribution	MP S-73-68	S-44
	CR 1-107	W-45
	TR S-73-4	S-89
One-Dimensional Compression Relations	CR S-71-4	S-107
	MP 4-390	S-13
	MP 1-831	W-5
Soils	CR 3-129	S-113
Time Behavior of Soil	CR 3-26/17	S-110
Triaxial Tests	MP S-71-9	S-34
Two-Layer System	MP 4-102	S-6
Strength Behavior of Stabilized Clayey Silt	CR 3-63/8	S-112
Soil	CR 3-63/3	S-111
	CR 3-63/9	S-112
	CR 3-63/10	S-112
System on the Behavior of Saturated Clays Under Moving Vehicles	CR 3-101/1/11	S-112
	MP 4/230	M-2
	TR 3/545	M-20
Uniform Circular Loads	TM 3-323/3	S-65
Unyielding Surface	MP 4/469	M-4
Vehicle Reliability Model	TR M-74-3	M-30
Wave Propagation		
Complex Solid Rods	CR 2-61	W-47
Jointed Rock Mass	TR N-73-7	W-39
Layer Elastic Cylinders	CR 2-59	W-47
Soil-Filled Cylindrical Shell	CR N-70-2	W-48
Yielding Soils	MP 4-463	M-4
Stressed Reinforced Concrete Beams	MP 6-159	C-3
Strong Motion Earthquake Records	MP S-73-1/8	S-39
	MP S-73/1/9	S-39
	MP 6-851	C-14
Stronger Concrete		
Structural Analysis	MP N-75/8	W-11
Design		
Flexible Airport Pavements	TR S-75-17	S-92
Pavements		Z-16
Engineering		Z-6
	TR K-76-1	MS-11
Layers		
Flexible Pavement	MP S-73-26	S-41
Pavement Systems	TR S-74-8	S-90
Response	CR N-77-2	W-48
Supporting Layers	MP S-71-24	S-35
Vibrations	CR H-71-1	H-71
	MP N-77-6	W-13
Structure		
CETA 76-1	CERC-2	
MP 5-64	CERC-7	
MP 4-983	S-26	
MP C-77-11	C-25	
MR 76-4	CERC-10	
TR 1-649	W-31	
TR H-77-15	H-67	
TR N-73-1	W-41	
MP	S-51	
MP 4-932	S-25	
PNE 1106	W-15	
PNE 1116	W-17	
TR N-73-3	W-42	
MP N-77-3	W-32	
TR N-75-9	W-40	
MP N-75-7	W-11	
TR N-77-2	W-41	
TR C-73-1	C-39	
STRUPUT	MP K-77-3	MS-7

## 94-INDEX

Term	Report No.	Page	Term	Report No.	Page
Study Tour, England, France, Russia, and Japan	MP	S-51	Suffield Experiment Station	CR 1-125	W-48
Sturgate, Lincolnshire, England	TM 3-343/108	S-70	Sulfate		
Stuttgart Airport	TM 3-343/33	S-67	Attack	MP C-69-8	C-16
Styrofoam Plastic	CR 6-126	C-46	Content	MP C-68-7	C-16
Subaqueous			Ion	MP 6-354	C-6
Borrow Pits	TR D-77-5	E-6	Resistance		
Disposal Areas	CR D-74-8	E-25	Concrete	MP 6-922	C-15
	TR D-77-22	E-8	Portland Cement	TR 6-569	C-32
Subartic			Soundness	MP 6-290	C-6
Regions	MP 4-713	M-5	CR 3-144	MP C-69-8	C-16
Snow	TM 3-414/4	M-19	Sulfur	CR 3-144	S-115
Subbottom Profiling			Bacteria Action	CTIAC-28	C-41
Surveying	MP S-69-32	S-30		MP C-77-9	C-25
Systems	TR S-70-1	S-86	Silica Capping Compound	MP C-73-14	C-26
Subgrade			SULKY	MP 6-943	C-15
				MP 3-703	S-20
	MP	S-47		MP 3-894	S-24
	MP S-70-19	S-33		PNE 713F	W-15
Compaction	TM 3-271/4	S-62		PNE 719F	W-15
Elastic Module				PNE 720F	W-16
Preparation	MP 4-47	S-5		TM 65-19	W-22
Stabilization	MP 3-798	S-22	Craters	TM 65-47A	W-20
Sub-levees in the Control of Seepage			Sulphur		
	TM 101-1	S-56	Dust Palliative	CR S-69-1	S-116
	TM 101-2	S-56	River	TR 3-798	S-84
	TM 19	CERC-37	Summersville Dam	MP 2-988	H-10
Submarine Topography				TR H-71-6	H-57
Submerged			Sump	TM	S-61
Rocks	MP 2-265	H-5	SUN BEAM	MP 6-626	C-10
Sills in the St. Clair River	P 16	H-26	Supercritical Flow	MP H-76-19	H-17
	TR H-72-4	H-58		R 2-100	Z-13
Submergence	R 76-7	CERC-20		R 1-109	Z-13
Subseismic			Superseismic Pressures	CR 2-51	W-47
Distributed Pressure	CR 2-48	W-47	Surf		
Impulsive Pressure	CR 2-47	W-47	Observations	R 1-68	CERC-16
Substrate				R 76-1	CERC-20
of a Dredged Material Marsh	TR D-77-23/ F/II	E-9	Statistics	TM 58	CERC-29
			Zone	TM 108	CERC-42
Selective Properties of Atlantic Coastal Salt Marsh Plants	TR D-77-28	E-10	Currents	CETA 80-1	CERC-2
Subsurface			Surfane	TM 32	CERC-38
Boring Logs	MP	S-48	Current	MR 82-7	CERC-14
Cavities	MP	S-51	Hydraulic Models		
Drainage	MP S-63-28	S-28	Pattern Mosaics	MP S-214	MS-4
	MP S-69-26	S-30		TR H-75-4/5	
Effects Measurements	PNE 515	W-15		7B	H-62
Exploration			Geology	TM 65-3	W-20
	MP	S-49	Geometry	TR 5-625/E	M-21
	MP S-73-20	S-41		TR 3-726/III	M-23
	MP S-73-36	S-42	Gravitv Waves	TR 3-733/C	M-24
	MP S-73-62	S-43	and Ground Water	MP H-74-11	H-14
	TR S-73-10/1	S-90	Loading	TR 3-727	M-24
	TR S-73/11/1	S-90		CR S-76-3	S-102
Alluvial Terrain	MP S-77-21	S-52	Microgeometry	CR S-76-10	S-102
Explosions	CR S-77-2	S-119	Mining	IR 6	M-1
	TR 40	W-29		MP M-76-2	M-13
Fracture Zones	MP 3-669	S-23	Motion Measurements	MP M-76-4	M-13
Investigation	MP S-63-5	S-27		PNE 506F	W-14
Nuclear Explosions	TM 71-29	W-26	Soils	PNE 513	W-15
Sensors	TR N-72-5	W-37	Treatments	MP 4-447	M-3
Subterrene	MP E-74-5	W-10		IR S-75-1	S-3
Sunk Bend Reach, Cattanoochee River	TR H-76-10	H-68	Underwater Explosions	MP M-73-3	M-16
Suction			Vibrators	TR 2-615	W-30
Head, Dredge Judwin	TM 2-232	H-35	Water Bodies	CR S-68-2	S-103
Heave of Expansive Soils	MP S-73-17	S-41	Wave	CR 3-75	M-35
Tests	TR S-77-7	S-94	Experiments		
Triaxial Compression Test	MP S-74-19	S-45	Multiple Explosions	TR N-70-5	W-35
			Explosions in Deep Water	TR N-72-3	W-37
			Havs	TR 1-547	W-30
				TM 17	CERC-26

Term	Report No.	Page	Term	Report No.	Page
Surfacing	TR S-74-2	S-90	T10		
Materials	MP S-69-10	S-29	Dust-Alleviation-Type Steel		
Requirements for Container-			Landing Mat	TR 3-312	S-84
Handling Vehicles	MP S-72-34	S-38	Steel Airplane Landing Mat		
Surge	TP 77-13	CERC-11	(Modified M8)	TR 3-507	S-77
Monterey Harbor	TR 2-489	H-43	T11		
	CR 2-136	H-73	Aluminum		
	TR H-68-9	H-54	Airplane Landing Mat	TR 3-334	S-80
Surging Basin	R 80-2	CERC-22	Landing Mat	MP 4-221	S-10
Surrey, England	TM 3-343/110	S-70		TR 3-679	S-81
Survey			Landing Mat	MP 3-798	S-22
Guide for Maid-Miles System	MP M-78-6	M-16		MP S 09-17	S-29
Potential Medical and Veteri-				MP S-70-24	S-50
nary Diseases	MP D-78-1	E-4		TR 3-634/B	S-80
Surveying Systems for Dam			T12 Plastic Airplane Landing Mat	TR 3-563	S-75
Alignment	MP 0-73-12	MS-8		TR 3-320	S-84
Survivability Analysis	CR N-75-1	W-49	T13 Plastic Airplane Landing Mat	TR 3-677	S-81
Suspended			T14 Plastic Airplane Landing Mat	TR 3-500	S-84
Dredged Material	TR D-78-29	E-17	T15 Membrane Runway	MP 4-565	S-15
Material	TR D-78-21	E-16	T16 Membrane	MP 3-75-2	S-11
Particles	TR M-78-2	M-33	T17 Membrane	MP 4-855	S-23
Sediment	R 13-73	CERC-18		MP 3-65-10	S-27
	R 14-73	CERC-18	Surfacing	TR 3-772	S-34
	TM 34	CERC-38		MP 4-722	S-20
	TM 115	CERC-43		MP 4-882	S-24
	TP 76-20	CERC-31		TR 3-33-3	S-65
	TP 77-3	CERC-31	TAA-2A		
	TP 77-5	CERC-31	Radar Site	MP 4-875	S-23
Soils	MR 76-1	CERC-10	Vero Beach	MP 4-933	S-26
Solids	CETA 01-6	CERC-3	TAA-3 Merritt Island	MP 4-933	S-26
Susquehanna River Basin	TR H-76-5	H-64	Table Rock Dam	MP 3-544	S-17
Sutton Reservoir	MP 6-123/3	C-3		TR 2-504	H-43
Swamp Fox	TR 3-609	M-20	Taconite Harbor	TM 2-405	H-41
	MP 4-556	M-4	Tactical		
Swedish Slip Circle Method	MP 5-515	MS-5	Bridge Approach Roads	TR 3-77-1	S-94
Swell Behavior	MP S-77-13	S-51	Gaps	TR M-70-12	H-27
Swellhead Effect	MP 2-468	H-7	Structural		
Swelling Foundation Soils	TR S-78-7	S-95	Targets	MP N-78-5	W-13
Swept-Frequency Radar	TR M-72-4	M-29	Vehicles	TR M-76-3	M-31
Swiftsure Towhead	TM 110-1	H-31	Trucks	MP M-76-10	M-16
Symmetrical Systems	MP H-76-13	H-17	TACV		
Symposium			Excursion	MP M-78-9	M-16
Channel Stabilization Problems	TR 1	Z-7	Study	MP N-73-10	M-16
Design, Testing, and Deploy-			Tailwaters		
ment of Unattended Ground			Tainter		
Sensors	MP	M-12	Gate	CR K-76-1	MS-12
Detection of Subsurface				MP H-72-7	H-13
Cavities	MP	S-51		MP K-73-1	MS-7
Nondestructive Test and			Cheatham Lock and Dam	TM 2-381	H-40
Evaluation of Airport			Norfolk Dam	TM 2-437	H-40
Pavement	MP	S-48	Valve		
Synthalogous			McNary		
Environments	TR M-70-13	M-27	Dam	TM 2-262	H-47
Theaters of Operation	TR M-70-7	M-26	Lock	TR 2-552	H-44
Synthetic			New Lock No. 19, Mississippi		
Products	MP C-72-5	C-19	River	TR 2-537	H-44
Soils	MP M-71-5	M-10	Taiwan	TR 2-640	H-47
System			Tallahala		
Analysis	CR 4-96/I	M-41	Creek Lake, Mississippi	TR H-73-1	H-67
Implementation	CR 4-96/II	M-41	Dam	TR H-73-5	H-59
Survivability Analysis	CR N-75-1	W-48	Tampa International Airport	MP S-72-44	S-38
			Tank	MP M-77-3	M-15
				MP M-77-3	M-15
				TR M-70-10	M-25
			Defender Intervisibility	MP M-75-5	M-14
T7 Magnesium Landing Mat	TR 3-461	S-75	TRAP	TR 17	W-23
T8 Magnesium Landing Mat	MP 4-221	S-10	Tanker Terminal	MP H-75-4/1	H-16
	TR 3-574	S-75		MP H-75-4/3	H-16

## 96-INDEX

Term	Report No.	Page	Term	Report No.	Page
Tanker Terminal (Cont)	MP H-76-20/2	H-17	TENPLT (Tensor Graphics Code)	MP E-74-1	W-10
	MP H-76-20/3	H-17	Tensas River	MP Y-78-1	E-30
	MP H-76-20/4	H-17		TR H-69-13	H-55
Tar			Tensile		
Binding Agent	MP 4-245	S-10	Compressive Strength		
Paving Mixtures	MP S-71-8	S-34	Concrete	TR C-74-1	C-38
Rubber			Lean Mass Concrete	TR C-74-2	C-38
Blends	MP 4-79	S-6	Crack Exposure Tests	CTIAC-59	C-44
Concrete Pavements	TM 3-420	S-73		TM 6-412	C-29
Pavement Overlays	TM 3-377	S-72	Strains	CR S-71-11	S-107
Paving, Homestead Air Force Base	MP S-74-25	S-46	Strength	MP C-69-5	C-16
Base	MP 4-142	S-8	Testing		
Test Section	TM 3-372	S-72	Compacted Soils	MP S-74-10	S-45
Target	MP M-76-13	M-14	Soils	MP S-73-24	S-41
	TR 1-770	W-32	Tension		
	TR S-78-14	S-95	Tests	MP S-77-1	S-50
	TR S-75-9/2	S-91	Zones in Embankments	CR S-70-7	S-106
Classifiers	TR M-76-7	M-32	Tensor Graphics Code	MP E-74-1	W-10
Response Studies	TR N-78-5/11	W-42	Terceira, Azores	TM 3-343/17	S-67
Tatum Dome	MP 3-509	S-17	Terminal Island	TM 2-237	H-36
	TR 6-614	C-34	Sewage Treatment Plant Outfall	TR H-78-23	H-69
Tau, American Samoa	TR H-74-16	H-61	Terra-Tires	MP 4-942	M-7
Taylor Shale	TR S-71-5/3	S-87		CR 3-33	M-36
Taylorville Lake	TR H-75-12	H-63		CR 3-34	M-40
Technical			Terrain	MP M-73-14	M-11
Information Reports	IR 0-74-1	MS-3		MP M-74-8	M-12
Report Preparation		Z-2		MP M-76-20	M-14
Technology Transfer System	CR D-77-1	E-25		MP M-77-11	M-5
Tectonics	MP S-73-1/5	S-39		MP S-77-24	S-52
Telemetering				PSTIAC-4	M-34
Hydrologic Data	MP 5-193	MS-4		TR 3-609	M-20
System	B 65-1	MS-1		TR 3-790	M-25
Telemetry				TR M-70-4	M-26
Current Velocity	B 62-1	MS-1		TR M-73-3	M-29
Soil-Moisture and Weather Variables	MP 5-711	MS-5		TR M-74-1	M-29
Tempelhof Air Base	TM 3-344/28	S-67		TR M-74-4	M-30
Temperate				TR M-77-2/2	M-32
Climate Theater	TR H-70-1/11	M-26		TR M-78-1	M-33
Soils	MP 4-961	M-7	Analog	CR 3-25	M-44
	TR 3-732	M-24		TR 3-506	S-77
Zone Storageability	TR 3-515/1	S-77	Analysis	CR 4-86	M-45
Temperature	CR H-77-1	H-71		MP	M-72
	CTIAC-24	C-41		MP 4-822	M-6
	MP C-77-3	C-24		MP 4-791	M-6
	MP H-75-10	H-15	Electromagnetic Means	TR 3-693	M-22
	TR H-73-1	H-67	Gamma	CR 3-100	M-41
Analysis	CR 3-134	S-100	Radar	CR 4-36	M-41
Changes During Undrained Tests	CTIAC-62	C-44	Barriers	TR 17	W-23
Control Study	MP C-77-8	C-25	Characteristics	CR 3-56	M-40
	MP C-77-7	C-24	Data Acquisition Study	MP M-75-9	M-13
Martins Fork Dam			Gator Mine	M-77-13	M-15
Rise			Comparisons	CR 3-57	M-40
Mass Concrete	MP 6-123/15	C-3	Constraints	MP M-76-3	M-13
Trumbull Pond Dam	MP C-72-20	C-20	Data	MP S-77-17	S-51
Shrimp	CR H-74-2	H-71		TR M-76-5/	
	CR H-77-1	H-71		A-D	M-31
Tennessee			Description	MP M-75-4	M-13
River and Tributaries, 1950 and 1948 Floods	MBM 13-1	H-22	Fort Leonard Wood	MP M-76-11	M-14
Tombigbee			Descriptive	CR 3-64	M-37
Canal Section Spillways	TR H-78-21	H-63	Systems for Mobility		
Waterway	MP C-77-8	C-25	Analysis	MP 4-852	M-5
	TM 149-1	S-57	Techniques	CR 3-94	M-45
	TR H-76-18	H-65	Evaluation	MP 3-542	M-4
	TR H-78-9	H-68		MP 3-361	S-23
	TR H-78-19	H-69		MP M-77-8	M-15
Valley Authority	MP 5-458	MS-4		TR 3-568	S-78
Fly Ash	TR 6-541	C-31	Factor		
			Complexes	TR M-79-7	M-26
			Family Maps	TR 3-726/VIII	M-24
			Features	TR 3-726/VI	M-23

Term	Report No.	Page
<b>Terrain (Cont)</b>		
Geometries	CR 3-33	M-36
Ground Mobility	TR 3-726	M-23
	TR M-70-0	M-26
Mobility Purposes	MP 4-444	M-3
Information	TR M-77-2	M-32
Materials	TR M-73-4	M-29
Microgeometry	TR 3-612	S-79
Profiles	CR 3-155	M-36
Reconnaissance	MP 4-630	M-5
Study		
Fort Greely	CR 3-22	M-44
Panama Canal Zone	CR 3-18	M-38
Yuma Test Station	CR 3-14	M-39
Surface Obstacles	CR 3-120	M-45
Terms	TR M-76-5/ A-D	M-31
<b>Vehicle</b>		
Mechanics	MP M-68-6	M-8
Programs	MP 4-638	M-5
Speed	TR M-68-1/3	M-25
Systems	MP M-75-7	M-13
West Germany	TR M-70-10	M-26
Terrapac Vibratory Roller	MP 4-271	S-10
<b>Terrestrial</b>		
Ecological Survey	TR D-73-25/A	E-16
Ecology	TR D-78-25/B	E-16
Flora	TR D-78-15/B	E-15
Modeling Techniques	TM 70-4	M-24
Resources	TR D-77-38/C	E-12
Wildlife Habitat Development	TR D-78-37	E-18
Terzaghi Lectures	B 11	S-1
<b>Test</b>		
Areas	MP 4-921	M-7
Track No. 2, Sharonville, Ohio	MP 4-47	S-5
<b>Testing</b>		
Instruments	TM 3-240/3	M-17
Procedures	TR S-73-15	S-95
<b>Tetra Tech Dredged Material</b>		
Disposal Models	TR D-78-47	E-19
Tetrahedral Blocks	TM 20-2	H-30
Tetrapod Cover Layer	MP 2-296	H-6
	TM 2-413	H-41
Texarkana Dam	TM 3-293	S-63
	TM 2-346	H-39
	TR 3-484	S-76
<b>Texas</b>		
City, Texas	TR 2-728	H-50
Coast	MP 1-70	CERC-7
Gulf Coast	MP D-74-13	E-2
and Pacific Railroad	TM 3-278	S-62
Main Line Embankment	MP 3-6	S-4
	TM	S-60
Thaden Articulated Wood Slat		
Airplane Landing Mat	TM	S-59
Thailand	CR 3-150	M-37
	CR 3-156	M-41
	MP 4-829	M-6
	TR 5-625	M-21
	TR 3-681/1	M-22
	TR 3-791	M-25
	TR M-69-1	M-25
	TR 3-753	M-24
Soils		
Theater of Operations Pavement		
Facilities	IR S-77-3	S-3
THEMIS	CR	M-39
Theodore		
Channel	TR H-75-13/1	H-63
Industrial Park	MP H-77-3	H-13

Term	Report No.	Page
<b>Thermal</b>		
Analysis	MP H-73-2	H-9
Expansion		
Aggregates	R 34	E-1
Concrete	MP 5-108	E-7
Methods	MP S-76-27	S-33
Soil Stabilization	CR 3-140	S-117
Stabilization of Soils	TR 6-706	E-34
Studies		
HEMSS (Cylindrical Test Beds)	CTIAC-56	E-44
Lock and Dam No. 2	CTIAC-55	E-34
Thermally Stratified Lake		
Conditions	MP H-76-37	
	17-9	H-16
Thermistor Probe	TM 3	CERC-26
Thermocline Structure	CR H-75-17	
	17-6	H-71
Thermocouple Psychrometric		
Technique	TR 5-74-1	E-90
Thermometers in Heat-of-		
Hydration Test	MP C-69-11	E-16
Thijssen on Wind Effect	S 172	H-1
Thiokol Pavement Coating	MP 4-339	S-23
Three		
Dimensional Hydrodynamic Model	CR H-75-17	
	17-6	H-70
Layer Pavement System	CR 4-12	S-134
Thule Air Base	MP 4-436	E-14
Thunderstorm Rainfall	H 5	E-73
Tibham, Suffolk, England	TM 3-393/106	E-76
Tidal		
Action	TM 52	CERC-34
	TR M-75-2	H-33
Channels	TM 65-17	H-21
Circulation		
Long Beach Harbor	MP H-75-4	H-16
Velocity Patterns	MP H-75-4/2	H-16
	MP H-75-4/4	H-16
Computations	RR 2-9	H-27
Currents	MP 2-797	H-9
	TM 5	CERC-26
East River	TM 125-1	H-32
	TM 125-3	H-32
Data Plotting	MP H-71-10	H-12
Datum	SR 7	CERC-25
Flow in Entrances	TB 3	E-9
	TB 14	E-10
Flushing of Estuaries	TM 2-374	H-40
Hydraulic		
	R 1	E-9
	R 2	E-9
	R 3	E-9
	TB 6	E-10
	TB 18	E-10
Computations	TM 55-16	H-21
Problems in United States	TB 6	E-10
Hydrodynamics	TR H-73-11	H-66
Inlet	PETA 77-5	CERC-2
	GITI 2	CERC-5
	GITI 4	CERC-5
	GITI 5	CERC-5
	GITI 11	CERC-5
	GITI 13	CERC-5
	GITI 17	CERC-5
	GITI 19	CERC-5
	GITI 20	CERC-5
	R 10-73	CERC-13
	R 10-24	CERC-14
Bay System Characteristics	R 79-10	CERC-21
Modeling	MP H-71-6	H-12

Term	Report No.	Page	Term	Report No.	Page
Tidal (Cont)			Tire (Cont)		
Prism			Model	TR M-68-1/1-b	M-25
Inlet Area	GITI 5	CERC-5	Moving in Dry Sand	MP 4-750	M-5
Measurements	MP H-70-4	H-11	Performance in Sand	MP M-68-2	M-8
Projects	TB 12	Z-10	Pressure	MP 4-220	S-10
Simulation	TR H-77-17	H-67		MP 4-240	S-10
Studies	B 2/2	H-1		TM 4-211/5	S-62
Verification	TR H-75-4/5	H-62	Sand	MP 4-345	M-5
Waterways	TB 1	Z-8	Selection for Off-Road		
Tide		Z-12	Vehicles	TR 4-666/5	M-22
	MP 2-65	H-4	Soft Soil	MP 4-944	M-7
	MP 2-601	H-8		TR 4-955	M-22
	MP 2-952	H-10	Soil Interface	MP 4-929	M-5
	MP 2-953	H-10	Spheres	TR H-68-2	H-53
	MP 4-60-13	H-11	Tired Wheel	TR 4-703	M-23
	MP H-72-8	H-13	Tirstrup Air Base	TM 3-343/58	S-68
	MP H-72-10	H-13	Titan I Facility	MP 3-534	S-17
	MP H-75-9	H-16	TNT	MP H-77-7	H-13
	MP H-75-6/2	H-19	Charge on Granite	MP 4-74-4	W-9
	SR 7	CERC-25	Detonation of Granite	MP H-72-1	W-8
	TB 1	Z-8	Tonks Island Dam	TR H-70-10	H-55
	TM 61	CERC-40	Toe		
	TR H-69-12/2	H-55	Curve Pressures	MP 2-625	5
	TR H-69-12/3	H-55	Protection	R 33-6	CERC-23
	TR H-73-13	H-63	Tom Jenkins Dam	TR 3-474	S-75
and Currents			Tombigbee		
East River	MP H-69-7	H-11	River	TM 2-52	H-36
Estuaries and Canals	TB 15	Z-10		TR 2-531	H-44
Nuclear Excavated				TR 2-532	H-44
Channels	TM 66-11	W-21		TR H-74-10	H-61
Sea-Level Canal	TM 67-2	W-22		TR H-74-13	H-61
Induced Currents	TM 65-15	W-20		TR H-76-19	H-65
Tidewater's Delaware City				TR H-77-11	H-66
Channels	MP 2-723	H-9		TR H-78-2	H-67
Tillamook Bay		Z-12	Waterway	TR H-78-12	H-66
	MP H-77-8	H-18		MP C-77-5	C-25
	TR H-74-11	H-61		TM 149-1	S-57
Timbakion Air Base	TR 3-343/65	S-68	Tonalite	MP C-69-9	C-16
Timber	TM 66	CERC-40	Tonopah Test Range, Nevada	MP S-75-7	S-48
Time			Topographic Effects	MP H-78-2/A	H-19
Delayed Row-Charge Cratering	TR 37	W-29		MP H-78-2/B	H-19
Dependent Problems	MP S-75-7	S-46	Topography	MP S-76-1	S-48
Histories of Stresses, Velocities, and Displacements	CR S-75-4/		Topsoil and Seeding Studies		
	Suppl	S-102	Purdue University	TM 3-392	S-72
Minimization Computer Code	TM 72-4	W-26	Vicksburg	TM 3-354	S-72
Sharing System for Analysis of			Torbay Airfield	TM 3-343/2	S-65
Slope Stability	MP K-76-3	MS-7	Torque Transmission Through		
Tiny Tot	MP 1-830	W-5	Rock Bolts	MP S-77-7	S-50
Tioga Lake	TR H-76-5	H-64	Torrejon de Ardoz Air Base	TM 3-343/71	S-69
	TR H-76-6	H-64	Torre Pineas Beach, California	MP 11-75	CERC-9
	TR H-76-11	H-64	Tr 76-5	TR 76-5	CERC-40
Tire	MP 4-443	M-3	Torrid Zone Storageability	TR 3-535/2	S-77
	MP 4-469	M-4	Torsion Shear		
	MP 4-942	M-7	Apparatus	B 38	S-1
	MP 4-948	S-25	Study	MP 3-10	S-4
	MP M-68-5	M-6	Tests	TM 3-328	S-65
	MP M-68-7	M-8	Toul-Rosieres Air Base	TR 3-343/19	S-67
	MP M-69-4	M-8	Toutle River Restoration	TR 13	Z-5
	MP M-70-6	H-3	Tow		
	TM 3-373	S-72	Behavior in Waterways	TR H-78-17	H-69
	TR 3-516	H-20	Entry	MP H-74-4	H-14
	TR 3-545/4	H-20	Generated Suspended Material		
	TR M-63-1/1	M-24	Plumes	TR M-76-5	M-32
	TR 3-545/5	H-20	Model	MP H-73-1	H-10
Air-Dry Sand	TR 4-335	M-6	Tests	MP 5-226	MS-4
Clay	MP 3-666/7	M-22	Sequencing	TR H-74-5	H-60
Coarse-Grained Soil	MP 4-497	M-4	Traffic	MP H-76-7	H-16
Firm to Soft Surfaces	CR 3-140	H-45		TR 4-76-1	E-32
Loads	TR 3-652/7	M-21	Towards Lake	MP 4-76-3	E-31
	TR 3-655	M-22			

Term	Report No.	Page	Term	Report No.	Page
Towed			Trafficability (Cont)		
Pneumatic Tire	TR 3-545/4	M-20	Studies	CR 4-6	M-38
and Self-Propelled Artillery	TR 3-545/5	M-20	Fort Churchill	TM 3-240/2	M-17
Vehicles	MP M-77-1	M-15	Through 1955	TM 3-240/14	M-17
Wheel	TM 3-240	M-17	Survey of Camp Stewart	MP 4-101	M-2
Soil	MP M-70-17	M-14	Test	MP 4-621	M-5
Towing Resistance	MP 4-626	M-5	Airroll	MP 4-339	M-3
Townshend Dam and Reservoir	MP 4-828	M-6	Confined Organic Terrain	TR 3-556	M-21
Toxic Metal	TR 2-498	H-43	Fine-Grained Soils	MP 4-879	M-6
Trace	TR D-77-40	E-12	5-Ton GOER	MP 4-477	M-4
Elements Rock	PNE 5006	W-18	Jumbo Truck	MP 4-438	M-3
Metal	PNE 5008	W-18	Marsh Screw Amphibian	MP 4-751	M-5
Tracer	TM 67-7	W-22	Rubber-Tired Log Skidder	TR 3-541	M-21
Study	TR D-77-40	E-12	Through 1963	MP M-69-1	M-3
Tracing in San Francisco Bay	TM 131	CERC-44	Two-Wheel-Drive Industrial	CR 3-119	M-45
Track	MP H-76-1	H-15	Tractor	MP 4-917	M-7
Loads	TR N-76-1	W-40	Unconfined Organic Terrain	TR 3-744	M-24
Mobility Number for Coarse-	MP 4-463	M-4	Wheel Vehicle	MP M-68-4	M-6
Grained Soils	TR M-71-5	M-28		MP M-69-4	M-8
Pull Performance	TR M-71-5/3	M-28	Transducer for Pressure		
Versus Wheels in Soft Soil and	TR M-71-5/2	M-28	Measurements	MP 1-593	W-3
Snow	MP 4-651	M-5	Tectonic Pressures	CR 2-51	W-47
Tracked Vehicles	TR 3-545/3	M-20	Transference Equations	B 31	H-2
Tractive Force Data	TR M-72-1	M-28	Transient		
Tractor	TM 17-2	S-55	Loadings	CR 3-26/5	S-110
Dozer	MP 4-917	M-7	Seepage	TR S-73-5/1	S-89
Blades	MP M-76-4	M-13	Two-Dimensional Analysis of		
Traffic	MP M-78-5	M-16	Soils	MP S-71-17/4	S-35
TM 3-312	S-64		Transisthmian Sea-Level Canal	TR 6	W-28
TM 3-314	S-64		Transit Capacity of Sea-Level		
TM 3-420	S-73		Canals	MP H-69-12	H-11
TM 3-426	S-73		Transmission of Wave Energy	MP H-76-10	H-16
TR 3-433	S-74		Transmitter	TR Y-77-5	E-19
TR S-71-17/IV	S-89		Transmitting Boundaries in		
TM	S-60		Ground Shock Computation	CR S-71-3	S-113
TR S-76-12	S-93		Transplantation	MP Y-76-2	E-40
MP S-71-14	S-35		Transport Systems	TR D-73-28	E-17
CR M-70-1	M-38		Trashracks		Z-6
MP 4-19	M-2		Travis Air Force Base	MP 4-312	S-11
MP 4-461	M-4		Tread Pattern	MP 4-942	M-7
MP 4-823	M-6		Treat Island, Maine	MP 6-177	C-4
TR M-78-3	M-33			MP 6-223	C-4
MP 4-959	M-7		Treatability of Dredged Material	TR D-76-2	E-5
MP 4-462	M-4		Treated Timber Structures	MR 76-4	CERC-10
MP 4-442	M-3		Treatment of Wastewater	MP Y-76-6	E-30
TR 3-753	M-24		Tree	TR M-69-3/1	M-25
CR /D	M-36		Branches and Stems	TR M-70-9	M-26
CR 3-108	M-39		Stand Productivity	MP M-72-7	M-10
MP 4-441	M-3		Stem	TR M-76-2	M-31
Fine-Grained Soils			Trenie-Placed Concrete	TM 2-241	C-27
Information from Aerial			Trencher - Evaluation of Alumi-		
Photographs	CR 4-20	M-39	nized Blasting Agents	TR 28	W-29
Loess Soils	MP 4-838	M-6	Trenching for Dewatering	MP D-77-4	E-4
Musket	MP 4-446	M-3	Treviso		
Observations	TR 3-609	M-20	I Airfield	TM 3-343/41	S-67
Prediction	MP	M-6	II Air Base	TM 3-343/42	S-67
Tropical Soils	TR M-70-8	M-26	Trexler Lake, Jordan Creek	TR Y-78-10	E-33
Sands	MP 4-355	M-2	Triangular Breakwaters	TM	H-34
Snow	MP 4-647	M-5	Triaxial		
Soils	MP 4-713	M-5	Apparatus	MP 3-473/1	S-15
	TM 3-414	M-19	Compression	MP 6-609/2	C-9
	MP 4-899	M-7		MP S-73-68	S-44
	TM	M-17	Machine	B 10	S-1
	TM 3-240	M-17	Test	MP S-74-19	S-45
	TM 3-331	M-13		MP S-76-2	S-48
				MP S-74-5	S-44
				MP S-70-8	S-32
				TR S-75-13	S-92
			Center Hill Dam		
			Cohesive Soils		

## 100-INDEX

Term	Report No.	Page	Term	Report No.	Page
Triaxial (Cont)			Trov Lock and Dam	MP C-78-b	C-26
Compression (Cont)				TR 2-517	H-43
Test (Cont)			Trumbull		
Crushed Napa Basalt	TR S-71-2/2	S-87	Lake Dam	MP C-74-15	C-22
Painted Rock Dam	TR S-71-2/3	S-87	Pond Dam	MP C-72-20	C-20
Watts Bar Nuclear Power Plant Site	MP S-74-9	S-44	Truss-Web		
Testing	B	S-1	Extruded Aluminum Airfield		
Soils	MP 3-473/10	S-15	Landing Mat	IR S-74-2	S-3
Compressive Strength of			Heavy-Duty Landing Mat	CR S-74-1	S-104
Crushed Napa Basalt	MP S-70-18	S-33		MP S-75-9	S-47
Creep Tests	MP S-76-15	S-49	TSE Ground Facilities	MP	W-10
Device	MP 4-150	S-3	Tsoying Harbor, Taiwan	TR 2-640	H-47
Equipment	CR 3-83/2	S-111	Tsunami	CETA 78-1	CERC-2
Research on Clay	CR 3-4/2	S-109		MP 0-76-1	MS-9
Results	MP S-70-5	S-48		MP S-73-1/15	S-39
Shear				SR 6	CERC-25
Research	TM	S-60		TM 25	CERC-27
Response of Cellular Concrete	MP S-73-32	S-42	Amplitude	TM 30	CERC-38
Tests	MP 3-368	S-13		RR H-75-4	H-29
Test	CR 3-26/2	S-109	Barrier, Hilo	RR H-76-2	H-29
	CR 3-84	S-106		TR 2-792	H-53
	CR S-76-1	S-102	Model	TR 2-742	H-51
	CR S-77-1	S-102		MP 2-883	H-10
	MP 5-805	C-13		RR 2-3	H-27
				RR 2-5	H-27
Data on Undrained Soil				TR H-69-9	H-55
Specimens	MP S-71-9	S-34		TR H-71-2	H-57
Device	TR S-71-15	S-88	Hilo Bay, Hawaii	CR 2-60	H-72
Lean Mass Concrete	TM 6-380	C-29	Predictions	TR H-74-3	H-60
Method of Finite Elements	TR S-73-4	S-89		TR H-75-17	H-63
Program on Taylor Shale			Runup	TR H-78-26	H-69
From Laneport Dam	TR S-71-6/3	S-87	Wave Elevation Frequency	TM 60	CERC 40
Sands, Reid Bedford Bend	R 5-3	P-1	TTR Tower, White Sands Missile	TR H-77-16	H-66
Saturated Fine Silty Sand	CR 3-26/11	S-110	Range		
Testing Techniques	MP S-76-6	S-48	Tubeless Tire	MP 4-580	S-18
Tribar				TR 3-516/1	M-20
Breakwater	MP 2-296	H-6	Tubes Buried in Sand	TR 3-516/2	M-20
	MP H-69-11	H-11	Tuff	MP 1-964	W-6
Tricalcium Aluminate	MP 6-201	C-4		CTIAC-20	C-41
Trief Cement	MP 6-39	C-2		MP C-69-1	C-16
Triggering Screens	MP N-75-8	W-12		MP C-76-7	C-24
TRINIDAD	TM 71-8	W-25	Material	MP S-73-59	S-43
	TR E-73-1	W-38	TUGBOAT	MP S-72-35	S-38
	TR E-74-1	W-39		TM 71-17	W-26
	TR H-77-7	H-66	Tulsa-to-Van Buren Reach	TR E-72-23	W-35
Trinity River, Texas				MBM 14-1	H-22
Tripline				MBM 24-1	H-23
Deployments	MP M-74-4	M-12	Tundra Ice	CR 2-71	W-47
Performances	MP M-78-2	M-16	Tunnel		Z-6
Tripoli, Libya	TM 3-343/79	S-69		MP 2-149	H-4
Tritium	TM 70-7	W-24		RR 1-6	W-19
	TM 70-8	W-25	Complexes	TR 3-769	M-24
Tropical			Destruction	MP S-77-25	S-52
Africa	CR 3-56	M-40		MP N-73-8	W-9
Areas	CR 3-34/2	M-40	Explorer Locator System	MP N-73-1	W-13
Climate Theater	TR M-70-7/II	M-26	Liner	IR	M-1
Environment	CR 3-154	M-35	Right-of-Ways	CR 6-160	C-46
Soil	MP 4-355	M-2	Site	TR S-78-17	S-96
Puerto Rico and Panama	CR 3-63/4	S-111	South Vietnam	MP S-73-3	S-40
Studies	IR	M-1	10, Fort Randall Dam	MP 4-919	M-7
Panama and Puerto Rico	MP 4-594	M-4	Turbidity	TR 2-626	M-46
Surface Soils	IR	M-7		CR D-76-4	E-23
	MP 4-961	M-7		TR D-77-14	E-7
	TR 3-732	M-24		TR D-78-21	E-16
Terrain	CR 3-34	M-40	Structure	TR D-78-30	E-17
	CR 3-57	M-40	Turbulence	RR H-73-2	H-28
Trotters			Mississippi River	CR 2-151	H-71
Mississippi	TM 3-316	S-64	Turbulent	R 10-2	R-2
	TM 3-341	S-65	Boundary Layer	MP 2-160	H-5
Shoals Spillway	TR H-73-7	H-59		MP 2-642	H-8



Term	Report No.	Page	Term	Report No.	Page
Turbulent (Cont)			Underground (Cont)		
Flow	TM 93	CERC-41	POL		
Stream	TM 97	CERC-42	Storage	MP N-72-4	W-8
Turf	R 10-1	P-2	Svstem	IR N-70-1	W-1
Turkey	TM 3-361	S-72	Protective Military Structures	MP N-68-7	W-7
Turnagain Arm, Alaska	TM 3-343/		Reinforced-Concrete Arches	TR 2-590	W-30
Turned Mode	09-75	S-69	Shock Measurements	MP 1-733	W-4
Turner Air Force Base		Z-11	Storage Facility	PNE 609F	W-15
Turning Basin	MP M-76-17	M-14	Structures	MP N-73-1	W-9
Tuttle Creek	TR M-76-9	M-32		CR 2-19	W-43
Tuscaloosa Lock and Dam	MP 4-93/1	S-6		CR 2-21	W-45
Turtle Creek Dam	MP 4-688	S-20		CR 2-47	W-46
TVA Containment Concrete		Z-12		CR 1-175	W-44
T-Walls	TR 2-765	H-52		CR N-70-1	W-44
	TM	C-27		MP N-77-3	W-12
	TM 2-396	H-41		TR N-76-9	W-40
	MP C-72-17	C-20	Underreamer	MP 3-454	S-15
		Z-6	Underseepage	TM	S-59
		Z-14	Commerce and Trotters,		
		Z-14	Mississippi	TM 3-316	S-54
TWDA			Mississippi River Levees	MP 3-131	S-7
Two-Dimensional				MP 3-205	S-9
Flow	MP H-68-5	H-10		TM 184-1	S-58
Problems	MP H-70-6	H-12		TM 3-424	S-73
2,4-D	MP K-77-5	MS-7	Alton to Gale	MP 3-430	S-73
Two-Layer System	CR A-77-2	M-52	Trotters, Mississippi	TM 3-341	S-65
Type K Shrinkage-Compensating	TR	M-48	Wolf River Levee	MP S-50	S-5
Cement	MP 4-102	S-6	Underwater		
	CTIAC-23	C-41	Cratering		
	MP C-78-2	C-25	Detonations	MP E-75-1	W-10
			Tests	TM 70-11	W-25
U-Frame			Explosion	MP 1-689	W-3
Lock		Z-6	Test	MP 1-689/2	W-3
Arkansas River Lock and Dam	MP S-78-11	S-53		TR 1-647/1	W-30
Program	TR K-76-1	MS-11	Sevier Bridge Reservoir	TM 2-397	W-27
UH-1H Downwash Velocity Meas-			Explosive Excavation	TM 71-9	W-25
urements	MP S-72-31	S-38	Nuclear Explosions	MP 1-800	W-4
Ultimate Strength	MP C-78-5	C-26	Protection of River Banks	TM 3-329	S-65
Ultrasonic			Shock	MP 2-553	W-3
Investigation of Cracking in				MP N-71-7	W-8
Kansas City Floodwall	MP 6-72	C-2	Wave	TM 71-14	W-25
Shear Wave Velocities	CR 3-26/23	S-111	Storage	MP 1-689	W-3
Testing			Structures	TR 2-512	W-30
Concrete	MP 6-48	C-2	Undisturbed		
Minutemen Facilities	MP 6-717	C-11	Sampling of Cohesionless		
F. E. Warren Auxiliary Sites	MP 6-585	C-9	Material	RR S-76-1	S-54
Waves	CR 3-26/14	S-110	Sands	TR S-73-9	S-95
Ultraviolet				TR S-73-10	S-95
Ozone Treatment	TR Y-78-1	E-33		TR S-73-11	S-95
Sensing Soil Moisture Meter	CR 3-176	S-106	Uniaxial Strain	MP S-65-17	S-27
Unpqua River	TM 2-277	H-37		MP S-73-32	S-42
	TR H-70-6	H-56		MP S-73-48	S-43
		Z-12	Unified Soil Classification		
Entrance			System	TM 3-357	S-72
Unconfined Subaqueous Disposal			Union Electric Company, St.		
Areas	CR D-74-8	E-25	Louis	MP 6-456	C-7
Unconsolidated Materials	MP S-77-18	S-51	Uniontown Locks and Dam	TR H-75-9	H-62
Underdrain	TM 183-1	S-58	United		
Pipe		Z-18	Arab Republic	MP 2-607	A-8
Underground			States		
Biomass Dynamics	TR D-77-28	E-10	Army		
Cavities	TR 3-648	S-81	Corps of Engineers	MP 5-458	MS-4
Emplacement of Nuclear			Hydrographic Survey	TR H-77-10	H-66
Explosives	PNE 5004F	W-17	Engineer Waterways Experi-		
Explosions	PNE 5004P	W-17	ment Station	MP 5-280	MS-4
	MP 1-778	W-4		MP 9-708	MS-5
	TR 7	W-28	helicopter Landing Pads	TR 3-686	S-81
	TR 2-438	W-30	Installations	TR M-75-211	M-31
Openings	CR N-69-1	W-45	Pioneer-Type Runways	TR 3-700	S-62

## 102-INDEX

Term	Report No.	Page	Term	Report No.	Page
United (Cont)			Variable		
States (Cont)			Moduli Material	CR S-68-1/5	S-118
Bureau of Reclamation	MP 5-458	MS-4	Modulus Material	CR S-64-1/4	S-118
Canadian Arctic Weather			Vascular Plant	TR D-77-38/D	E-12
Stations	MP 4-298	M-2		TR D-78-15/D	E-15
Desert	TR 3-630/5	S-80	Tissues	TR D-77-23/E	E-9
Highways 190 and 71	TM 3-284	S-63	Vault Wastes, Lake Ouachita		
Marine Hospital, Memphis	TM 90-1	S-56	and Lake Greeson	MP Y-72-1	E-29
Military			VCI/RCI Criteria	MP M-73-4	M-11
Academy	TR 3-591	S-78	Vegetation	CETA 82-3	CERC-4
Reservations	MP 4-726/1	S-78		CR /E	M-36
Naval Air Station, Alameda	TM 2-242	H-36		CR /F	M-36
Navv Ship Mooring Facility	TR 2-708	H-49		CR 3-31	M-38
Steel Landing Mat	MP 4-759	S-21		CR 3-43	M-43
	MP S-69-17	S-29		IR 10	M-1
USSR Scientific Exchange				MP 6-75	CERC-8
Program	CTIAC-35	C-42		MP 7-75	CERC-8
Universal Systems for Recording				MP 4-769	M-6
Vegetation	CR 3-31	M-38		MP 4-982	M-7
Unlined Openings in Infant Rock	CR N-69-1/2	W-45		MP D-78-7	E-4
Unsteady				MP M-12-1	M-10
Flow Compensations	TR H-74-8	H-61		MP M-73-8	M-11
Salinity Intrusion	TB 20	Z-11		MP M-73-10	M-11
Unsurfaced				MR 79-2	CERC-12
Forward-Area Airfields	MP S-70-14	S-82		R 78-2	CERC-20
Roads and Airfields	TR S-70-5	S-86		SR 3	CERC-25
Soil	MP 4-394	S-14		SR 9	CERC-25
	MP 4-712	S-20		TM 22	CERC-27
	MP S-71-27	S-36		TM 101	CERC-42
Upland Habitat Development	TR DS-78-15	E-27		TP 76-13	CERC-30
	TR DS-78-17	E-28		TR 5-625/D	M-21
Uplift Pressures	MP K-77-1	MS-7		TR 3-726/IV	M-23
Urban				TR 3-733/B	M-24
Areas	CR D-76-6	E-26		TR 3-783/E	M-24
Studies	MP H-74-8	H-14		TR D-76-4	E-5
	MP K-76-1	MS-7		TR D-77-23/A	E-8
Urea-Based Emulsion System	CR 3-172	S-104		TR D-78-25/C	E-16
User's Manual			Africa and Panama	CR 3-56	M-40
AXISYM	CR S-76-13	S-104	Characteristics	MP M-69-5/2	M-8
DUKFOR	CR S-69-5	S-104	Descriptive Techniques	CR 3-68	M-46
Utility Carrier	MP M-69-5	M-8	Diagrams		
			Eglin Air Force Base	CR 3-70-2	M-41
			Fort Benning	CR 3-70/3	M-41
			Florida Everglades	CR 3-72	M-37
			Geometry	CR 4-103	M-37
Varium			Mississippi River Stages in		
Filtration System	TR D-78-5	E-14	the St. Louis-to-Thebes		
Mixing of Concrete	MP 6-938	C-15	Reach	MBM 81-6	H-25
and Piston-Type Samplers	TM 3-315	S-64			
Processed Concrete	TM 6-225	C-27	Panama Canal Zone and Other		
Solar Telescope Site	MP 3-639	S-19	Tropical Areas	CR 3-34/2	M-40
	MP 3-763	S-21	Physiognomy	MP M-76-12	M-14
Treatment of Mass Concrete			Puerto Rico	CR 3-164	M-38
Surfaces	TM 0-353	C-28	Recording Systems	CR 3-153	M-35
Vaeriose Air Base	TM 3-343/59	S-68	Structural Characteristics	TR M-69-1	M-25
Valdivia River	TM 2-382	H-40	Structure	MP M-69-3	M-8
Valley Storage in the Cannelton			Vegetational		
Pool	MP H-77-7	H-18	Characteristics	MR 83-4	CERC-15
Valve			Study	CR Y-75-1	E-34
Position	TR H-68-4	H-53	Vegetative Study	MR 76-6	CERC-10
Prototype Tests	MP H-73-10	H-19	Vehicle	CR 3-152	M-45
Van Buren				CR 3-162	M-45
Little Rock Reach, Arkansas				MP	M-12
River	MP 2-331	H-6		MP 4-230	M-2
Pine Bluff	MBM 34-2	H-24		MP 4-362	M-3
Reach	MBM 14-2	H-22		MP M-68-4	M-8
Reach	TR H-74-7	H-61		MP M-69-4	M-8
Vance Air Force Base	MP 4-815	S-22		MP M-69-5/1	M-8
Vandel Air Base	TM 3-343/60	S-68		MP M-69-5/2	M-8
Vane Shear Investigation	MP 3-601	S-19		MP M-69-6	M-8

Term	Report No.	Page	Term	Report No.	Page
Vehicle (Cont)	MP M-70-4	M-9	Velocity (Cont)		
	MP M-70-7	M-9	Earthquake Intensity and		
	MP M-70-10	M-9	Magnitude	MP S-73-1/10	S-39
	MP M-74-6	M-12	Forces on Submerged Rocks	MP 2-255	H-5
	MP M-76-6	M-14	Gages	MP 0-70-7	MS-3
	MP S-70-14	S-32	Measurements, Ozark Lock and		
	MP S-72-34	S-38	Dam	TR H-77-0	H-66
	TM 3-240	M-17	Meter for Relief Wells	TM	S-63
		and	Profiles	TB 20	Z-11
		M-18	Tests of Concrete		
	TR 3-545	M-20	Retaining Wall, South		
	TR 3-666/8	M-22	Amsterdam, New York	MP 0-527	C-6
	TR 3-783/A	M-24	Riverside Wall	MP 0-456	C-7
	TR M-63-1	M-25	Venting Measurement	PNE 301F	W-14
	TR M-70-11/3	M-27	Venturi Meter	TM 139-1	MS-10
	TR M-72-1	M-28	Verdigris River	TR H-73-2	H-59
	TR M-73-5	M-29	Vermiculite Concrete	CR 0-33	C-46
	TR M-76-3	M-31	Vermilion		
	TR M-73-3	M-33	Bay	TR 2-494	H-43
Analysis for Remote-Area			Harbor, Ohio	TR H-70-5	H-56
Operation	MP 4-702	M-5	Vertical		
Classification	TM 3-240/3	M-17	Cut Belt Loader	MP M-76-2	M-13
Dynamics	CR 3-155	M-36	Lift Gates	TR 2-447/1	H-42
	MP M-69-2	M-8	Spillway Crests	MP 2-606	H-8
Mechanics	TR M-70-1	M-31	Sand Drains	MP S-75-8	S-47
Mobility	MP M-68-6	M-8	Vesic Crater Modeling	TM 08-14	J-23
	MP 4-241	M-2	Vessels	CR 2-5	H-71
	MP M-75-4	M-13		CR 2-7	H-71
	MP M-73-3	M-16		CR 2-131	H-70
Terms	PSTIAC-3	M-34		CTIAC-27	C-41
Research	TR M-73-1	M-29	Veterinary Diseases	MP C-77-12	C-25
	PSTIAC-1	M-34	VHF Radio Waves	MP D-78-1	E-4
	CR 4-16	M-45	Vibracore Study	MP 4-822	M-6
	CR 4-17	M-45		MR 80-10	CERC-13
	MP 4-350	M-2		MR 82-15	CERC-14
	TR 3-639	M-21	Vibracoring System	CETA 81-8	CERC-3
	TR 3-652	M-21	Vibrated Density	MP S-72-29	S-37
Soft Soils	MP 4-147	M-2	Vibrating		
Testing	CR 3-154	M-35	Slope Method	MP 0-849	C-14
Models	CR 3-33	M-36	Spade	TR 0-816	C-36
Off-Road Use in Remote Areas	MP 4-854	M-6	Vibration	CR 3-114/11	M-35
Performance	CR 3-120	M-45		MP 2-75	H-4
	MP M-72-2	M-10		MP 2-774	H-9
	TR 3-763	M-24		MP H-77-6	W-13
	TR M-70-7	M-26		TM 6-345	C-23
Prediction Equations	TM 3-240/20	M-18	bankhead Lock	TR 2-435	H-42
Vertical Obstacles	TR 3-783/C	M-24	Circular Footing on Sand	TR S-76-6	S-93
Reliability Model	TR M-70-11/4	M-27	Concrete	TR S-71-14/2	S-33
Ride Dynamics	TR M-74-3	M-30	Hydraulic	TR 0-780	C-35
Road Compatibility Analysis	CR 3-114	M-35	Control Gates		
and Modification Systems	TR S-73-13	S-90	Structures	CR H-69-1	H-71
Rut Depths	MP M-73-16	M-12	Measurement	MP 2-414	H-7
Sand	MP 4-535	M-4	North Fork Dam Model	MP H-77-0	W-13
Signature Study Sites	MP M-73-3	M-11	Ozark Lock and Dam	TR H-77-0	H-66
Snow	TM 3-414/1	M-19	Test	MP 4-636	S-10
Soft Soil	TR M-70-11/2	M-27		TR H-77-1	W-41
Speed	MP M-76-11	M-14		TR H-73-2	W-42
	TR 3-783/E	M-24	Vibrators	CR S-63-2	S-103
	TR M-68-1	M-25	Vibratory		
Synthalogous Theaters of			Compaction	MP S-76-10	S-49
Operation	TM M-70-7	M-26	Compactor	MP 4-190	S-9
Terrain	TR M-70-4	M-26	Coring Sampler	CETA 81-9	CERC-3
Vibration	CR 3-114/11	M-35	Cutting	CR 3-28	S-105
Vehicular Traffic	MP 3-14	S-4	Load	CR 3-33	S-114
Vela Uniform	MP 1-957	W-6	Piles	MP 3-686	S-20
Velocity	CR S-75-4/		Testing	TR S-69-10/1	S-86
	Suppl	S-102	Measurements	TR S-71-17/	
				III	S-85
					and
					S-89

## 104-INDEX

Term	Report No.	Page	Term	Report No.	Page
Vibratory (Cont)			Vulnerability (Cont)		
Nondestructive Testing		Z-10	Analyses		
Pavements	TR S-75-14/II	S-92	Mortars	TR N-69-8/2	H-35
Roller	MP 4-271	S-10	Parking Areas	TR N-69-3/6	H-35
	TM 3-271/10	S-62	Rockets	TR H-69-3/5	H-35
Sources	MP 4-859	S-23			
Technique	MP 4-691	S-20			
	MP 4-970	S-26			
	MP 4-971	S-26			
	TR S-72-5	S-89	W. G. Huxtable Pumping Plant	MP S-76-8	S-49
Testing of Pavements		Z-10	Wano Dam	MP 6-543	C-8
	TR S-75-14	S-92		TR S-71-6/5	S-87
Vibro/Seismic Survey	MP S-69-6	S-28	Waianae Small-Boat Harbor, Oahu,		
	MP S-71-26	S-36	Hawaii	TR H-76-8	H-64
	MP S-72-36	S-38	Waimanu Stream Flood Control	TR H-75-3	H-61
	MP S-73-3	S-39	Walker		
Vibropacker System	MP S-69-10	S-30	Air Force Base	MP 4-213/4	S-9
Vicksburg			Army Airfield	TR 3-466/7	S-75
Buckshot Clay	MP S-70-8/2	S-32	Lake Canal Pumping Plant	MP 3-40	S-5
Floodwall	TR 3-477	S-76		TM	S-62
Lean Clay	MP 4-95	S-6	Walkers Bar, Ohio River	P L	H-26
Limestone	MP 3-492	S-16	Walking Speed	MP 4-950	M-7
Loess Soil	MP 3-145	S-8	Wall	MP 6-856	C-14
	MP 3-151	S-8		TR S-77-6	S-14
Mississippi	MP M-74-1	M-12	Alignment	MP S-140	S-8
Mobility Exercise A	MP 4-702	H-5	Deflection Pipes	MP S-432	S-14
	MP 4-979	M-7	Structure	TR N-69-7	W-34
National Military Park	MP 3-504	S-16	Walnut Creek	TR 2-730	H-50
Siltv Clay	MP S-70-8/1	S-32	Channel Improvement Project	TR H-73-34	H-60
	MP S-73-25/1	S-41	Walter		
Victoria Channel, Texas	MP 2-812	M-9	F. George		
Vidalia Mattress Casting Plant	MP 6-635	C-10	Lock and Dam	MP M-70-3	M-9
Vieques Airfield	MP 4-18	M-2		TR 2-519	H-43
Vietnam	MP 4-549	M-4	Reservoir	MP S-69-32	S-30
	MP 4-919	M-7		MP S-70-17	S-33
	TR S-69-7	S-85	Reed Hospital	MP C-74-14	C-22
Vinsol Resin	TM 196-1	S-58	Wappapello Dam	TM 134-1	H-32
Vinyl Membrane	MP 4-54	S-5		TM 146-1	H-32
	TM 3-416	S-73		TR 3-460	S-75
Virgin Islands	MP S-76-26	S-50	Wareham-Marion, Massachusetts	TR 2-663	H-48
Virginia Beach	MP 6-64	CERC-7	Warlam Triaxial Apparatus	MP 3-478/1	S-15
	MR 77-12	CERC-11	Warm		
	TM 5	CERC-26	Creek	TR H-75-7	H-62
	TM 7	CERC-26	Springs Dam	TR H-73-3	H-59
	TM 9	CERC-26	Water Ring	R 31-4	CERC-22
	TM 113	CERC-43	Warren II Study Area, Wyoming	MP C-70-17	C-18
Viscoelastic Layered Systems	MP M-69-8	M-9	Warrior Dam	TR 2-485	H-42
Viscometer	MP H-74-3	H-14	Warwick River Sewage Treatment		
Viscous Flow Model	MP S-70-3/1	S-32	Plant	MP 2-951	H-10
Voids	MP 4-162	S-8	Wash-Bore Sampling	TM 40	CERC-28
Compacted Bituminous Paving			Washington Aluminum Company		
Mix	MP 4-118	S-7	AM2 Landing Mat	MP 4-753	S-21
Criteria	MP 4-46	S-5		MP S-69-3	S-28
Curves	MP 4-121	S-7	Waste		Z-15
Formed Concrete Surfaces	TR 6-788	C-36	Disposal	MP C-78-1	C-25
Voigt Waves	CR 1-170	W-44	Management	TR D-77-11	E-7
Volcanic Cinders	MP 4-179	S-8	Materials	MP D-76-5	E-3
Volume Change in Expansive Clays		Z-17	Wastewater	R 2-75	CERC-19
Volumetric			MP Y-74-3	E-29	
Equalities of the Crater	MP 1-754	W-4	MP Y-76-6	E-30	
Requirements for Dredged			Treatment	Z-17	
Material Containment Areas	TR D-73-41	E-18		MP Y-74-2	E-29
Vortex Formations	MP H-74-1	H-14	Watching Hill Blast Range	TR S-72-4	S-89
VRCAMS	TR S-73-13	S-90	Water	MP C-74-4	C-21
V/STOL Aircraft	MP 4-908	S-24		MP Y-75-2	E-30
VTOL Blast Controlling Platforms	CR 3-123	S-116		TR 5-440	C-31
	CR 3-166	S-105	Bodies	CR 3-78	M-35
Vulnerability	TR N-72-12	W-37		MP H-77-9	H-13
	TR S-78-3	S-95		MP M-76-10	M-14

Term	Report No.	Page	Term	Report No.	Page
Water (Cont)			Water (Cont)		
Cement Ratios	TR 6-804	C-35	Shock (Cont)		
Column	TR D-77-30/B	E-11	Wave (Cont)		
Content			Reflection	MP 1-825	W-9
Bituminous Mixtures	MP 4-301	S-11		TR 1-704	W-41
Fresh Concrete	MP C-73-7	C-21	Soluble Admixtures	MP C-75-9	C-26
Unconsolidated Materials	MP S-77-18	S-51	Supply Tests	MP H-75-5	H-16
Data Transmitter	TR Y-77-5	E-33	Surface		
Deposited Materials	CR 4-573-2	M-39	Roughness	TM 74	CERC-40
Discharge	MP H-77-13	H-18	Waves	TR N-72-3	W-37
Elliott Bay	TR D-77-24/D	E-9	Systems	TR Y-73-11	E-33
Growth	TR A-77-2	M-49	Table	MP 1-939	W-6
Insect Enemies	TR	M-43	Crossett, Arkansas	TM 2-331/9	M-39
Puerto Rico	MP M-73-13	M-11	Oregon Soils	CR M-70-1	M-38
Texas	TR	M-43	Temperature	TR 5	E-5
Jet Systems	CTIAC-54	C-44	Control Weir	TR H-70-1	H-56
Level	CETA 79-2	CERC-2	Tower, Mississippi Basin Model	TM	C-61
	CR H-74-1	H-70	Tunnel	TR 78-5	CERC-12
	TM 83	CERC-41	Usage	MP 1-76-1	E-29
	TR 80-7	CERC-12	Wave	CR 1-107/11	W-46
Measurement	TR 77-2	CERC-11		MP S-73-17/15	C-33
Plume	MP H-75-1	W-10		K 50-3	CERC-27
	TR H-72-4	W-37		K 62-6	CERC-24
Quality	MP H-76-6	H-16		RR H-75-1	H-29
	MP Y-77-3	E-30		TM 3	CERC-26
	TR D-77-23/H	E-9		TM 41	CERC-28
	TR D-78-15/A	E-15		TM 133	CERC-44
	TR H-69-10	H-54	Pressures	TR H-74-15	H-61
	TR H-74-14	H-61	Theory	RR 2-10	H-27
	TR H-76-3	H-64	Transmission	SH 1	CERC-25
	TR H-76-7	H-64	Waterbird	RR H-69-1	H-27
	MP M-76-22	H-15	Colonies	MP D-75-5	E-4
Data	TR H-77-4/2	M-33	Waterbury Dam	TR D-76-13	E-14
	MP Y-77-2	E-10	Waterfowl	CTIAC-53	C-46
	TR Y-77-2	E-12		TR A-76-2/1	
	TR Y-77-3	E-32		II	M-49
	TR Y-77-10	E-13		TR A-76-2/2	
	MP Y-77-4	E-30		III	M-50
Trexler Lake, Jordan Creek			Waterproof Membrane Systems	CTIAC-2	C-48
Fountain Lake				MP C-73-2	C-21
Impacts of Aquatic Dredged			Waterproofing	CR S-74-1	C-104
Material Disposal	TR DS-73-4	E-27	Concrete Structures	MP C-610	C-9
LaFarge Lake	MP Y-76-5	E-30	Materials	TR 3-53/12	E-77
Lake Conway	TR A-73-2/1		Membrane	MP 4-564	E-24
	/VI	M-49	Soil	MP 3-175	C-3
	TR A-76-2/2			TR 3-330	E-77
	/VI	M-50	Base Courses	MP S-65-13	C-27
	TR A-76-2/3		Structural-Plate Joint and		
	/VI	M-50	Beams	TR 3-773	C-34
	TR A-76-2/4		Waterstap	MP H-73-5	H-13
	/VI	M-50		TM 1-22	M-10
Monitoring Systems	TR Y-77-5	E-33		TR H-71-12	H-30
Parameter	TR D-77-6/B	E-6		TR 1-7744/1	M-33
	TR D-77-20/B	E-9	Geology	TM 136	CERC-44
	TR D-77-42/C	E-13	Waterstop	MP D-76-21	C-16
River-Reservoir Systems				TR 1-432	C-74
Model	MP Y-76-4	E-30		TR 1-542	C-32
Trogs-Hammond Lakes	TR H-76-11	H-64	Failure	MP 4-134	E-7
Towanda Lake	MP Y-78-3	E-31		MP 3-544	E-17
Repellents	TM 217-1	S-60	Waterway	TR H-76-17	H-59
Resources			Experiment Station	MP D-200	M-44
Assessment Methodology	MP Y-73-1	E-30		MP D-295	M-4
	TR Y-77-1	E-32		MP 3-706	M-5
Ecology Capability	CR D-69-1	MS-12		TR	MS-11
Elliott Bay	TR D-77-24/D	E-9	Lake Watershed	MP H-72-6	H-13
Shock	MP N-75-2	W-10	Relief Well Flow Meter	MP D-53	M-4
Induced Airblast	TR E-72-16	W-37	Terrain Analysis		
Loading	TR 2-512	W-30	Gamma	CR 4-100	M-41
Wave	MP 1-808	W-4	Radar	CR 4-96	H-41
	MP 1-814/1	W-5			
	TR 1-771	W-32			

Term	Report No.	Page	Term	Report No.	Page
Waterway (Cont)			Wave (Cont)		
Point Directory			Characteristics	TM 48	CERC-28
Atlantic Coast Area	MP H-76-2/F	H-15	Climate	R 31-3	CERC-22
Great Lakes Area	MP H-76-2/E	H-15		TP 70-5	CERC-30
Pacific Coast Area	MP H-76-2/G	H-15		TR 77-1	CERC-34
System Improvements	MP O-71-1	MS-8		TR H-76-1A	
WATSIM IV Login Manual	MP H-74-5	H-14		714	H-50
Watts Bar Nuclear Power Plant	MP S-74-9	S-44	Offshore LNG Sites	MP H-73-2/B	H-14
Wauna-Lower Westport Bar	TR 2-745/3-1	H-51	Onshore LNG Sites	MP H-73-2/A	H-14
Wave	B 3/2	H-1	Climatology	R 77-2	CERC-20
	CETA 31-14	CERC-4	Conditions	R 77-2	CERC-20
	CETA 32-2	CERC-4	Crescent City Harbor	TR 2-745/1	H-51
	CR 2-74-14	H-74	Dana Point Harbor	TR H-75-15	H-53
	CR H-68-2	H-70	Crest	TR H-68-6	H-54
	CR H-74-1	H-70	Damping Effects of Screens	TR 2-724	H-50
	MP H-74-11	H-14	Data	MR 33-1	CERC-14
	MR 33-6	CERC-15	Direction	R 77-4	CERC-20
	R 4-71	CERC-17		RR 2-12	H-27
	R 5-72	CERC-17		RR H-72-2	H-28
	R 23-73	CERC-18		MP H-77-9/2	H-10
	R 81-1	CERC-22		R 31-12	CERC-22
	TM 27	CERC-33		R 31-5	CERC-22
	TM 48	CERC-39		TP 77-7	CERC-33
	TM 57	CERC-39		TP 82-2	CERC-33
	TM 62	CERC-29		TR 79-1	CERC-34
	TM 116	CERC-43		R 3-74	CERC-19
	TM 132	CERC-44		R 77-3	CERC-20
	TP 77-11	CERC-31		TM 18	CERC-37
Absorber	MP H-76-22	H-17		MP 3-73-20	S-41
	MR H-73-3	H-28	Indicator		
Gary Harbor	TR 2-509	H-43	Dispersion		
Harbors	CR 2-122	H-72	Effects of Potential LNG		
Action	B 3/1	H-1	Terminal Sites	MP H-73-2	H-19
	B 4/1	H-2	Elevation	R 30-1	CERC-22
	MP 1-69	CERC-7		TR H-77-10	H-57
	MP 2-560	H-5	Energy	CETA 81-16	CERC-4
	R 3-67	CERC-16	Analyses	TM 18	CERC-20
	R 79-5	CERC-21	Loss	TR H-74-6/	
	TM 1	CERC-37		17-3	H-60
	TM 2	CERC-26	Spectra	TM 31	CERC-38
	TM 34	CERC-38	Entrainment	TM 46	CERC-39
	TM 68	CERC-40	Equation Analyses	CETA 30-5	CERC-3
	TM 75	CERC-40	Flume Facility	R 77-5	CERC-20
	TM 79	CERC-41	Force	TR S-75-5	S-91
	TM 115	CERC-43	Breakwaters	CR 2-50	H-72
Agate Bay Harbor	TM 203-1	H-34	Data	TM 15	CERC-26
and Breakwater			Piles	TM	H-33
East Beaver Bay Harbor	TM 2-295	H-37		TM 71	CERC-40
Half Moon Bay Harbor	TR 2-668	H-43		TM 89	CERC-40
Hamlin Beach Harbor	TR H-73-13	H-59		TM 111	CERC-42
Harbor of Refuge	TR 2-523	H-44	Bubble-Mound breakwaters		
Novo Harbor	TR 2-799	H-53	and Jetties	MP 2-453	H-7
Oswego Harbor	TM 2-291	H-37	Forecasting	TM 24	CERC-38
Port Washington Harbor	TM 2-334	H-35		TM 35	CERC-38
Superior Entry, Duluth-				TM 73	CERC-40
Superior Harbor	TR 2-616	H-46		TM 84	CERC-41
Tanonite Harbor	TM 2 405	H-41	Fronts in Sand	CR 3-26/25	S-111
Verillion Harbor	TR H-70-5	H-56	Gage	TM 30	CERC-27
Cellular Caisson Breakwaters	TM	H-34	Records	R 271	CERC-17
Grand Marais Harbor	TM 180-1	H-33	Gaging	R 5-74	CERC-19
	TM 180-2	H-33	Generated Ripples	TM 100	CERC-42
Marina del Rey	TR 2-071	H-45	Generation	RR H-72-1	H-19
Mission Bay Harbor	TR H-69-8	H-54	Generators	TM 70	CERC-40
Revetment	B 1/3	H-1	Height	TM 4	CERC-26
Triangular and Cellular				CDM 75-1	CERC-2
Caisson Breakwaters	TM	H-34		CETA 79-4	CERC-2
Attenuation	MR 76-9	CERC-10		CETA 79-5	CERC-2
	TP 80-8	CERC-32		CETA 80-1	CERC-2
Breaking	R 4-73	CERC-17		CETA 81-3	CERC-3
	RR H-68-2	H-27		R 4-70	CERC-16
				R 83-14	CERC-23

Term	Report No.	Page	Term	Report No.	Page
Wave (Cont)			Wave (Cont)		
Height (Cont)	TM 4	CERC-20	Run-Up	CETA 77-2	CERC-4
	TM 45	CERC-39		CETA 79-2	CERC-4
	TP 82-1	CERC-33		CETA 79-1	CERC-4
	TR 82-3	CERC-35		CETA 81-17	CERC-4
	TR 2-471	W-30		MP 32-75	CERC-9
	TR 1-047/4	W-30		R 19-73	CERC-10
Lake Erie	MP H-76-21	H-17		R 34-9	CERC-23
Large Craters	TR 2-471	W-30		TM 64	CERC-40
Measuring Devine	MP 5-231	MS-4		TM 67	CERC-40
Induced Oscillations				TM 109	CERC-42
Harbors	CR H-69-2	H-70		TP 73-2	CERC-32
	CR H-71-2	H-70	Experiments	MP 1-947	H-6
Small Moored Vessels	CR 2-131	H-70	Lake Okeechobee	TR 2-409	H-40
Intrusion			Setup	CETA 77-5	CERC-2
Monterey Harbor	TR N-69-4/1	W-34	Shoaling	CETA 83-1	CERC-4
San Diego Bay	TR N-69/4/2	W-34	Spectra	MP H-77-9	H-10
Loading	CETA 81-1	CERC-3		TM 118	CERC-43
Measurement	R 7-74	CERC-19		TR 82-2	CERC-35
	R 82-4	CERC-22		TM 57	CERC-39
Model			Spectrum	TM 56	CERC-39
Appurtenances	B 4/1	H-2	Analyzer		
Laboratory Apparatus	MP 2-242	H-5	Stability Study of Cellular		
Monitor	MR 82-11	CERC-14	Concrete Blocks	HH 2	H-5
Observations	MP 3-69	CERC-7	Statistics	TM 85	CERC-41
Overtopping	CETA 77-7	CERC-2		TM 86	CERC-41
	CETA 80-8	CERC-3		TM 87	CERC-41
	R 77-7	CERC-20		TM 88	CERC-41
	TM 64	CERC-40		TM 89	CERC-41
Periods	TM 53	CERC-39		TM 96	CERC-41
Powered Devines	MP 3-67	CERC-7	Hindcast	TM 95	CERC-39
Pressures	RR H-68-1	H-27		TM 97	CERC-39
Propagation	TM 32	CERC-27	Stilling Devine	MR 76-1	CERC-11
	TR S-72-2	S-89	Tank	CR 4-50	H-72
Code	TR S-71-12	S-88		TM 37	CERC-20
Computer Code	TR S-71-16	S-88	Tests	TM 51	CERC-29
Confined Soils	CR S-69-2	S-106	Tests	R 2-67	CERC-10
Dissipative Materials	MP 1-962	W-6	Theory	MP H-75-16	H-17
Jointed Rock Mass	TR N-73-7	W-39	Thrust Computations	R 82-5	CERC-23
Newburgh Locks and Dam	MP S-76-25	S-50	Transformation	CETA 82-7	CERC-4
Parameters	CR 3-91/2	S-117		TP 78-1	CERC-37
Patoka Dam	MP S-74-26	S-46	Transmission	TP 76-8	CERC-30
Sand	CR 3-25/21	S-111		TP 82-4	CERC-34
Soils	CR 3-91	S-117		TR 80-1	CERC-34
Velocity	CR 3-26/8	S-110	Coefficient	CETA 79-6	CERC-2
	CR 3-91/3	S-117		CETA 80-7	CERC-3
Protection	TR H-75-18	H-63	Floating Breakwater, Oak		
	TR H-76-8	H-64	Harbor	TR H-71-3	H-27
	TR H-77-20	H-67	Rock Structures	RR H-73-1	H-25
Chagrin River	TR H-70-11	H-50	Velocity	CR 3-25/4	S-110
Record	R 1-71	CERC-17		CR 3-26/24	S-111
	R 2-73	CERC-17	Field	CR 2-109	H-72
	R 6-74	CERC-19		CR 2-117	H-72
Program	MP 1-67	CERC-7	Wax Lake Outlet	M&M 31-8	H-24
Reflected from a Breakwater	CR 2-104	H-72	Weapon		
Reflection	TM 124	CERC-43	Effects	TR H-69-6/2	W-35
	TP 78-6	CERC-30		TR H-69-6/5	W-35
	TP 81-1	CERC-33		TR H-69-6/5	W-35
	TR 80-1	CERC-34	Foundations	CR 3-173	S-115
Refraction	CETA 81-12	CERC-4	Fragmentation	TR 1-69-3/1	W-34
	TM 6	CERC-26	Weasel	MP 4-282	H-2
	TM 21	CERC-37	Weather		
	TM 47	CERC-26	and Climate	TR 5-625/6	H-21
	TM 103	CERC-42	Records	MP 4-338	H-2
Theory	RR H-71-3	H-25	Stations	MP 4-296	H-2
Research at Waterways Experi-			Weathered Pretensioned Beams	TR 6-570/5	C-33
ment Station	MP 2-139	H-4	Weathering	CTIAC-50	C-43
Resulting from Explosions in			Test		
Deep Water	TR 1-647	W-30	Bituminous Pavement Samples	MP 4-170	S-8
Rock Masses	CR 1-170	W-44			

## 108-INDEX

Term	Report No.	Page	Term	Report No.	Page
Weathering (Cont)			Wet (Cont)		
Test (Cont)			Season Conditions	TR M-72-2/2	M-29
Concrete	MP 6-109	C-2		TR M-74-3	M-29
	TM	C-27	Trank Abrasion Test	IR 5-69-1	S-2
Webb Air Force Base	MP 4-498	S-14	Weathersfield, Essex, England	TM 4-343/101	S-70
Webbers Falls Lock and Dam	TR H-69-11	H-55	Wetland		
Wedge Method	MP K-76-3	MS-7	Alaska	TR Y-78-9	E-34
	MP K-77-1	MS-7	Gulf Coastal Plain	TR Y-78-5	E-34
Weed			Habitat Development	TR 00-78-15	E-27
Management	TR	M-48	Interior United States	TR Y-78-6	E-34
in Texas	TR	M-48	North Atlantic United States	TR Y-78-8	E-34
Weighing and Recording Equip-			Peninsular Florida	TR Y-78-2	E-34
ment for Concrete Batching	TM 6-407	C-29	Puerto Rico	TR Y-78-4	E-34
Wear	R 83-7	CERC-23	Soils	MP 1-74-4	E-29
	SR 8	CERC-25	South Atlantic United States	TR Y-78-7	E-34
	TR A-71-4	H-57	West Coast States	TR Y-78-4	E-34
Big Creek, La.	MP 3-78-2	S-52	Wheel	MP 4-163	M-4
Bouff and Texas Rivers	TR H-69-13	H-55		MI 4-626	M-5
Design	TR D-78-18	E-15		MP 4-757	M-5
Jetties	R 79-14	CERC-21		MP 4-758	M-6
Meramec Park Dam	TR H-70-1	H-56		MP 4-828	M-6
St. Clair River	MP 2-821	H-9		MP 4-375	M-6
Well	TM 3-425/B	S-73		MP 4-940	M-7
	TR 3-619/B	S-79		MP M-70-8	M-9
Arrays	TR 3-619/A	S-79		MP M-71-3	M-10
	TR 3-77-5	S-94		MP M-73-2	M-11
Cleaning Operations	TR 3-642/A-C	S-81		MP M-75-17	M-14
Harbor, Maine	TR H-78-18	H-69		TR 3-565	M-20
Mississippi River Levees	MP S-63-4/1	S-27		TR 3-570	M-22
Screens	TM 3-250	S-61		TR 3-329	M-24
Wells Harbor		Z-11		TR M-68-2	M-25
WES	MP 0-73-8	MS-8		TR M-70-15	M-27
Analytical Model	TR M-70-3	M-26		TR M-71-6	M-28
Concrete Stress Meter	MP 5-36	MS-4		TR M-71-7	M-28
Earth Pressure Cell	MP 4-240/1	M-2		TR M-71-10	M-28
High-Capacity Plane Strain				TR M-75-9	M-32
Shear Apparatus	TR S-71-2/1	S-87		TR S-74-7	S-91
Large Blast Load Generator	CR 1-90	W-45	Load	MP 4-379	M-6
Self-Recording Displacement				TR M-71-10/2	M-23
Gage	MP 1-644	W-3	Lunar Vehicles	MP M-70-4	M-9
Tunnel Explorer Locator System	IR	M-1		TR M-70-2	M-26
Underwater Explosion Test Site	TR 1-647/1	W-30	Performance	MP H-66-1	M-6
VCI/RGI Criteria to Helicopter	MP M-73-4	M-11		TR 3-606/6	M-25
WESTNET Data Communications			Sand	TR M-67-2	M-25
System Simulation	MP K-75-1	MS-6	Study Group	TR M-73-1	M-29
West			Trank Convertible Test Rig	MP M-74-1	M-12
Atchafalava Floodway	TM 3-284	S-63	Wheeled Vehicle	MP 4-535	M-4
	TR 3-487	S-76		MP M-68-4	M-6
Calumet Floodgates	TM	S-60		TM 3-240/19	M-18
Coast States	TR Y-78-4	E-33		TR 3-535	M-4
Culebra Slides	TR S-70-9/1	S-86		TR 3-545/2	M-20
German	TM 3-343/63	S-68		TR M-70-4	M-25
7-Ton MAN 6X6 Cargo Truck	MP M-77-4	M-15	Wheeltrack	MP 4-505	M-4
Terrain	TR M-70-6	M-26	Wheeler Air Base	TM 3-343/79	S-69
Germany	TR M-70-10	M-26	White		
Study Area	MP M-78-9	M-16	Amur	TR A-78-2/1	
	MP M-78-10	M-16		/VII	M-49
Monroe Levee Wall	MI 13-1	S-55		TR A-78-2/2	
Point Dam	TR 2-815	H-53		/VII	M-50
WESTAG	CR 4-100	M-41	Aquatic Plant Control	CR A-78-1	M-52
WESTAR	CR 4-96	M-41		IR A-77-1	M-46
WESTCO D-1 and D-2 Mud Control				TR A-78-2	M-49
Additives	MP 4-735	S-21		and	
Westhampton Beach, New York	MR 79-5	CERC-12		M-50	
Westover Air Force Base	MP S-73-41	S-42	River	TM 30-1	S-55
Westport Small-Boat Basin	MP H-75-8	H-15	Sands Missile Range	MP	S-48
	TR H-72-2/3	H-58		MP 4-479	S-16
				MP 4-580	S-18
Wet				MP 4-584	S-18
Medium Cratering Experiments	TR 3-699/1	S-82		MP 4-955	S-25



Term	Report No.	Page	Term	Report No.	Page
Whiteman Air Force Base	MP S-73-45	S-42	Wissla-Type Piezometer Probe	TR S-73-2	S-95
Whitestone Narrows, Alaska	TM 68-13	4-24	Water Dam	TR 4-508	S-77
Whitney Dam	TM 2-263	H-47	Wolf		
Whittier Narrows Flood-Control Basin	R 4-112	4-13	Creek Dam	TM 201-2	H-34
Wiener-Bose Theory	TR M-68-1/2	M-25	River	MP 4-140	S-8
Wiesbaden Air Base	TM 3-343/29	S-67		TM 3-247	S-61
Wildlife	TR D-77-23/D	E-8	Floodwall	TM	S-64
	TR D-77-38F	E-12		TM	S-65
	TR D-78-15	E-15	Levee	TM 4-297	S-64
	TR D-78-25/C	E-16	Walters Army Airfield	TR 6-381	C-34
	TR H-74-6	M-30	Wood Airplane Landing Mat	MP 3-50	S-5
Habitat			Woodbridge	TR 3-466/16	S-76
Data	TR H-77-4/1	M-34	Virginia	TM	S-56
Development	MP D-77-5	E-4	Suffolk, England	TM 4-343/102	S-70
	TR D-73-37	E-18	Woodlawn Bridge - Foundation	MP H-73-9	M-11
		4-12	Woonsocket, Rhode Island	TM	S-60
Willapa Bay			Woven Wire Landing Mat	TR 2-468	H-42
William Bacon Oliver Lock and Spillway	MP C-77-5	C-24	WRAM	TM	S-56
Willow				MP Y-73-1	E-30
Springs	TR 2-776	H-52		TR Y-77-1	E-32
Trees	TM 27	MS-10	Wright-Patterson Air Force Base	MP S-73-55	S-43
Wilman New Levee	TM 8-4	S-55	Wroughton, Wiltshire, England	TR 3-343/116	S-71
Wilmington			WSMR	MP	S-48
Harbor	TM 194-1	H-34	Wurtsmith Air Force Base	MP S-73-13	S-40
River Pollution	TR 2-560/III/5	H-45	WX18 Membrane Surfacing, Fort Campbell, Ky.	MP 4-855	S-23
Wilson Point, Louisiana	TM 3-299	S-63			
wind	CR H-74-1	H-70	X-Band Antenna Site, Waldorf, Maryland	MP 4-617	S-19
	MP 2-64	CERC-7	XC-142A Aircraft Flight Tests		
Action	TM 1	CERC-26	Landing Strip Evaluations	MP 4-931	S-25
Code	TM 119	CERC-42	XM-1 Chrysler and General Motors Trucks	MP H-77-9	M-15
Deposited Soils	TM 68-1	W-23	XM-18 Landing Mat	TR S-69-3	S-2
Driven	CR 4-6/5	M-39		MP S-70-5	S-32
Circulation Analysis	MP H-76-3/17/7	H-15	XM18E1 Landing Mat	MP S-72-16	S-37
	MP H-76-3/17/9	H-16	XM18Q Landing Mat	MP S-76-23	S-50
Currents	CR H-75-1/17/5	H-70	XM19 Landing Mat	MP S-69-51	S-31
Effects	MP H-73-2	H-19		MP S-74-14	S-45
Fetch	TM 83	CERC-41		TR S-69-4	S-2
Generated				MP S-70-21	S-33
Gravity Waves	TM 118	CERC-43		MP S-72-4	S-35
Waves	TM 67	CERC-40		MP S-72-16	S-37
	TM 50	CERC-41		MP S-74-12	S-45
	FP 76-12	CERC-30		MP S-76-23	S-50
Great Lakes	MP H-76-12	d-16	XM20		
Hodographs	TM 68-1	W-23	Landing Mat	MP S-69-39	S-36
Induced Waves	CR 2-1/14	H-74		MP S-70-6	S-32
Setup	TM 27	CERC-38	and XM20E1 Landing Mats	MP S-72-39	S-33
	TM 122	CERC-43	XM59E1 OVER Tests	TR H-70-3	M-26
	TM 74	CERC-40	XM713/741 Remote Anti-Armor Mine System	MP M-77-6	M-15
Shear Stress	TM 25	CERC-38	XM759 Logistical Carrier	MP 4-940	M-7
Stress	TM 93	CERC-41		MP H-70-9	M-9
	MP 2-65	H-4		TR 3-808	M-25
Tides	TM 61	CERC-40	XMUPGENS (Auxiliary Data Codes)	MP E-74-1	W-10
	TM 95	CERC-42	X-radiographv	MP 3-913	S-25
	TM 123	CERC-43	X-ray		
Wave	CEFA 77-6	CERC-2	Diffraction	CTIAC-4	C-40
	R 83-2	CERC-23		MP C-72-2	C-19
	TM 51	CERC-39	Data	MP C-76-5	C-23
	TM 72	CERC-40		CTIAC-31	C-42
	TM 81	CERC-41	Emission	MP C-78-7	C-26
Propagation	FP 77-12	CERC-31	Analysis of Portland Cement Spectroscopy	MP C-68-2	C-15
Windmill Point Marsh Development Site, James River	TR D-77-23	E-8	Measurement of Soil Densities	MP 6-604	C-9
Winfield Locks, Kanawha River	MP H-77-1	H-17		MP S-72-1	S-36
Wing-Tip Vortex	MP S-73-61	S-43			
Wire Rope	TR C-69-3/2	C-36			

## 110-INDEX

<u>Term</u>	<u>Report No.</u>	<u>Page</u>
XV5A Aircraft Flight Tests		
Landing Strip Evaluations	MP 4-844	S-23
XW18 Membrane	IR S-70-4	S-3
	TR S-73-3	S-89
Yaw Angle	TR M-71-7	M-28
Yazoo		
Backwater Project	MP 6-523	C-8
Basin	INR 5	Z-4
	TR 3-480	S-76
City Pumping Station	TR 3-524	S-77
River	INR 1	Z-4
	INR 4	Z-4
Basin	MP 3-215	S-9
	TR Y-75-2	E-32
	/F	Z-3
Yerba Buena Island	TM 116-1	S-56
Yieldable Heavy Bolts	TR S-76-14	S-93
Yorkshire, England	TM 3-343/	
	94-95	S-70
Young - Madrius	MP C-63-3	C-15
	MP S-78-12	S-53
Yuma, Arizona	TM 3-240/4	M-17
Analog		
No. 1	CR 3-11/1	M-42
No. 2	CR 3-11/2	M-42
No. 3	CR 3-11/3	M-42
No. 4	CR 3-11/4	M-42
No. 5	CR 3-11/5	M-42
No. 6	CR 3-11/6	M-42
No. 7	CR 3-11/7	M-42
No. 8	CR 3-11/8	M-42
Climate	CR 3-11	M-42
Proving Ground	MP M-77-10	M-15
Sand	TR 3-666/2	M-22
Terrain	TR 3-630	S-80
Test Station Area	CR 3-14	M-39
Zaragoza, Spain	TM 3-343/76	S-69
Zero		
Maintenance Paving Materials	MP C-77-14	C-25
Slump Concrete	MP S-76-16	S-49
Zinc in Sediments	MP D-76-18	E-3
Zooplankton	TR D-77-30/D	E-11
Assemblages	TK D-77-6/E	E-6
ZULU	TM 65-9	W-20
II	TM 68-9	W-23
	TM 69-3	W-24
	TR 3	W-28
	TR 5	W-28
Charges	TM 66-14	W-21
	TM 66-15	W-21
Crater Dimensions	TM 66-18	W-22
Moist Sand	TM 66-5	W-21