RAS

Primary

CSC/TM-81/6112

transfer edit notes from other copy

ISEE-3 PRODUCTION DATA PROCESSING PROCEDURES GUIDE

Prepared For

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Goddard Space Flight Center

Greenbelt, Maryland

CONTRACT NAS 5-24350

Task Assignment 607

MAY 1981

CSC

COMPUTER SCIENCES CORPORATION

generally, replace SEICC
by SB#IC

the clist library contains members which are not described in this document...

the lib.cntl library also has other members not covered here

9/23/83 PAS

Change-control #29

ISEE Cosmic Ray Programs

relink 3380 vsn of DAIO

task:	.OLOAD $AR	convert to .OLOAD	program/entry point	obsolete LOAD	relink	check new	CRBACK file (ISEBK1)	ARCHIVE	notes
					done →		12	A.LIB.LOAD.VØ784054 (2/23/84)	
SB#1C.LIB.LOAD members:									
			ALTBLK /ALTBLK		✓	✓			
		*	ASNENC /MAIN		✓	✓			
		*	ASSIGNL / MAIN		✓	✓			
			DPSELECT /MAIN						no ng to dread
			DPSRTLST /MAIN						obsolete
			DPTGEN /MAIN		already done ✓	✓			
			DPTSAVE /MAIN		✓	✓			
		*	EDRLOG /MAIN		✓	✓			
			EDRSAVE /MAIN		✓	✓			
			ENCYGEN /ENCGEN		✓	✓			
			FLUXPLOT /MAIN		✓	✓			
			IMATRIX / MAIN					redo	LINK parm=LET
			LIBLIST /MAIN		✓	✓			
			LOGLIST /MAIN		✓	✓			
			LSELECT /MAIN		✓	✓			
			QENCMRG /ENCMRG		✓	✓			
			REDOLIB /MAIN		✓	✓			
		*	REDR /MAIN		✓	✓			
		*	RAVENC /MAIN		✓	✓			
		*	RWORK /MAIN		already done				

* VSFortran checked & use SB#VG.GENERAL.LOAD

ISEE-3 PRODUCTION DATA PROCESSING PROCEDURES GUIDE

Prepared for

GODDARD SPACE FLIGHT CENTER

By

COMPUTER SCIENCES CORPORATION

Under

Contract No. NAS 5-24350
Task Assignment 607

Prepared by:

J.H. Broomhall 5/1/81
J.H. Broomhall Date

Approved by:

A R Stottlemyer 1 May 81
A.R. Stottlemyer Date
Section Manager

R.F. Williams 5/6/81
R.F. Williams Date
Department Manager

ABSTRACT

This procedures guide is a description of the Goddard Space Flight Center, Laboratory for High Energy Astrophysics (GSFC/LHEA) International Sun/Earth Explorer (ISEE-3) medium energy cosmic ray experiment standard production data processing procedure. This document contains all of the information necessary to run and maintain the ISEE-3 production data reduction software on the Science and Applications Computing Center (SACC) 360/91 OS/MVT computer (GSFC, Bldg. 1, Rm. 10).

The GSFC/LHEA ISEE-3 cosmic ray experiment data reduction software system was developed by CSC (task 606/02, 1979) for the purpose of creating a 900 sec. (15 min) average time history tape data base from the experiment data record (EDR) tapes received weekly from the Information Processing Division (IPD) at GSFC.

This guide is designed (1) to familiarize the user with ISEE-3 data processing log (an online cataloged disk data set on the SACC 360/91 computer); the purpose, attributes, format and interaction with production software during the various processing steps, (2) to give specific directions on each step necessary to execute this software system via Time Sharing Option (TSO) on the SACC 360/91 computer, (3) to describe all system utilities needed to create backups of critical production data sets and to maintain the ISEE-3 data processing log.

TABLE OF CONTENTS

Section 1 - Introduction 1-1

1.1 General Definition of the System 1-1

1.2 Prerequisites 1-1

1.3 Using the SACC 360/91 OS/MVT 1-1

a) Getting Started 1-1

b) Using Time Sharing Option (TSO) . . . 1-2

c) Using the Tape Library System (TLS) . 1-3

Section 2 - Medium Energy Cosmic Ray Data Processing Procedure 2-1

2.1 Description of the ISEE-3 Cosmic Ray Experiment Data Reduction System 2-1

2.2 Description of the ISEE-3 Data Processing Log 2-5

2.3 Reading the LOG 2-6

2.4 Listing the ISEE-3 Data Processing Log. . 2-19

2.5 Description and Preparation of the EDR Tapes 2-23

2.6 Data Reduction Procedures 2-31

2.7 Interpreting the Data Reduction Printouts 2-34

2.8 Backup and List the Data Processing Log . 2-35

2.9 Backup of the Current Library Tape. . . . 2-37

2.10 Backup of the Encyclopedia Tapes 2-39

Section 3 - Data Pool Data Processing Procedures . . 3-1

3.1 Purpose and Content of the Data Pool Tapes 3-1

3.2 Description of the Data Pool Data Processing System 3-1

3.3 Description of the ISEE-3 Data Pool Processing Log 3-5

3.4 Listing the Data Pool Log 3-10

3.5 Description and Preparation of the Data Pool Tapes. 3-11

TABLE OF CONTENTS (Cont'd)

Section 3 (Cont'd)

3.6 Adding the Data Pool Tape to the 6250 BPI Library Tape. 3-15
3.7 Backup and List of the Data Pool Log . . 3-16
3.8 Backup of the 6250 BPI Library Tape . . . 3-18

Section 4 - Utilities 4-1

4.1 LOG and TLS Maintenance Utilities 4-4
4.1.1 RESTLOG 4-4
4.1.2 DPLREST 4-6
4.1.3 ALTBLK 4-7
4.1.4 DPALTBLK 4-9
4.1.5 TLS 4-10
4.1.6 DPTLS 4-19
4.1.7 LABWORK 4-22
4.1.8 REDOLIB 4-24
4.1.9 RMVENC 4-25
4.1.10 ASNENC 4-27
4.2 Data Acquisition Utilities 4-31
4.2.1 STSCAN 4-31
4.2.2 EDRLIST 4-32
4.2.3 LIBLIST 4-34
4.2.4 LSELECT 4-36
4.2.5 TAPETST 4-38
4.3 TSO/OS System Aids 4-39
4.3.1 FT 4-39
4.3.2 QD 4-39
4.3.3 MAXAL 4-40
4.3.4 TSOLIST 4-40
4.3.5 UPDATEDS 4-41
4.3.6 AR 4-42
4.3.7 BK 4-43

TABLE OF CONTENTS (Cont'd)

Section 4 (Cont'd)

4.3.8	BGRA	4-44
4.3.9	BGRB	4-46
4.3.10	SAVEDS	4-47
4.3.11	BYE	4-49

SECTION 1 - INTRODUCTION

1.1 GENERAL DEFINITION OF THE SYSTEM

The ISEE-3 (ISEE-C) cosmic ray experiment standard production data reduction system is a series of computer programs which are executed via Time Sharing Opiton (TSO) on the SACC IBM 360/91 OS/MVT computing system for the purpose of updating and maintaining a final (ENCY) 15 minute average time history rates (counts per second) and PHA (pulse height analyzed) tape data base at 6250 bytes per inch (BPI) from the experiment data record (EDR) tapes received weekly from the Infromation Processing Division (IPD) at GSFC.

1.2 PREREQUISITES

Although this production data processing system is designed to be run and maintained by a data technician, a basic knowledge of the following SACC/IBM 360 items is needed:

1) IBM 360 Operating System/Job Control Language
2) IBM 360 Operating System/Time Sharing Option
3) IBM 360/OS and SACC Utilities (PATRICK, IEBGENER, VSCOPY, TAPESCAN, IEBUPDTE and LISTPDS)
4) SACC Tape Library System (TLS)

Video cassette courses are available for items 1 and 2. Documentation of all subjects may be obtained through the GSFC Assistant Technical Representative (ATR).

1.3 USING THE SACC 360/91 OS/MVT

The following pages will supply a new SACC 360 user with a great deal of information which is needed in order to completely understand and use the ISEE-3 production data processing system on the IBM 360.

Getting Started - First of all each new user should read Chapters 1-3 in the Science and Applications Computing Center User's Guide. This outlines the SACC Computer

June 20, 1979 volume

Facilities, SACC Policies and Standards, and Operating System Environment. Next the user should read Chapter 6, Sections 4 and 5 and Chapters 7 and 8 which will aid in understanding the uses for Time Sharing Option via the Remote Terminal System, SACC data set management and archival procedures, and some of the more commonly used SACC/OS utility programs available to the user. Finally Chapter 12 - Magnetic Tape Usage will also prepare the user for working with magnetic tape data sets.

Using TSO - The ISEE-3 project has been assigned its own USRID ~~and PASSWORD~~ which are used for logging on the SACC computers, cataloging ISEE-3 production disk data sets and TLS tape slots. The USRID ~~and PASSWORD~~ for this project is SB#1C SEICC. Individual users must have their own password for the SB#1C sponsor code. Figure 1.3.1 indicates the procedure for logging onto (establishing communications with) the SACC computers. Figure 1.3.2 is a hardcopy of an actual LOGON to the 360/91 computer on which the ISEE-3 production software is executed. After LOGON is complete three background jobs are submitted for execution. The first of these three jobs generates a listing of the ISEE-3 production job control language (JCL) partitioned data set (PDS) as well as the production command list (CLIST) PDS. These libraries contain all of the JCL and CLISTS necessary to maintain production data processing for the ISEE-3 cosmic ray experiment and the data pool requirement. They are cataloged on the DISKxx packs of the SACC computers and are named using the TSO standard naming convention; SB#1C ~~SEICC~~.LIB.CNTL for the JCL library SB#1C ~~SEICC~~.LIB.CLIST for the CLIST library. The second run produces a listing of the cosmic ray experiment data processing log (SB#1C ~~SEICC~~.LOG.DATA) which contains all of the processing information used by the production data processing system. A more detailed discussion of this log shall follow later in this text. The third run is a similar

listing to the second but it lists the data pool processing log (SEICC.DPLOG.DATA). Figure 1.3.3 is a list of all cataloged data sets which belong to USERID=SEICC.

The first thing a new user should do is to follow the steps indicated in Figure 1.3.2 and generate current listings of the JCL and CLIST libraries, the cosmic ray processing log, and the data pool log. The printouts for these runs will be delivered via the SACC courier service to the BF3 set of boxes which are in the hallway next to room 250, Bldg. 2. SEICC has its own box where the printouts will be filed. These printouts will be referenced later in this text.

Using TLS - The Tape Library System is software which monitors the magnetic tape library on the SACC computers. This program runs at all times the 360 computers are available to the users. This program cross references a user's volume tape number with its corresponding slot tape number. Each user owns certain tapes and TLS monitors the usage of these tapes. The SEICC user identifier owns a block of approximately 170 TLS slots. These slots may be manipulated at any time in any way which the user desires by using the TSO foreground program / CLIST=TLSUPDTE. A document exists which contains the syntax of the TLSUPDTE commands. Read it; it is not long, Figure 1.3.4 is a listing of the SEICC tapes listed in ascending order by volume serial number. Figure 1.3.5 is a listing of the SEICC tapes listed in ascending order by slot number. Tape titles are present on most of the tapes which indicate the function or contents of the tape. A current version of this listing should be obtained. The GSFC/ATR (H. Domchick) will generate this for you on request.

Figure 1.3.1

ISEE LOGON PROCEDURE

Step 1) LOCATE A FREE TERMINAL AND POWER ON.

Step 2-a) IF OMRON TYPE

1) ENTER SHIFT AND KSR MODE lighting small red light on KSR MODE key.
2) ENTER A 'CARRIAGE RETURN' TWICE computer responds with invalid-sw-chars go to Step 3.

-b) IF ANDERSON/JACOBSON TYPE

1) DIAL 344-4844 and WAIT FOR TONE
2) PLACE TELEPHONE RECEIVER IN THE ACOUSTIC DATA COUPLER
3) When the POWER SEND CARRIER red lights are all lit, ENTER A 'CARRIAGE RETURN' TWICE computer responds with invalid-sw-chars go to Step 3.

-c if IBM 3270 type enter aa^{CR} for MVS access

Step 3) SELECT A COMPUTER : ENTER 'BT91' for 360/91 btso for MVS
~~'BT75' for 360/75~~

computer responds with READY TO IBM.

Step 4) ENTER 'LOGON ~~SEICC/IICC~~ YOUR ID/PASSWORD' this identifies the user to the computer. After several messages are printed and some time delay the computer responds with READY.

Step 5) ENTER 'OMRON S' if on OMRON or 'AJ S' if on Anderson/Jacobson the computer responds with READY. At this point, you are ready to begin working.

Answer computer enquiry as to your terminal type

Step 6) Answer profile inquiry from START CLIST

(new - through the START CLIST in your lib. Clist after SB# HP Start)

Figure 1.3.2 - LISTING

1) JCL and CLIST LIBRARIES
2) cosmic ray data processing log
3) data pool data processing log

```
invalid-sw-chars
bt91 <----
ready to ibm
logon seicc/iicc <----
#SEICC LOGON IN PROGRESS AT 14:59:17 ON JULY 31, 1980
TIME LIMIT ON 75 IS 10 MINS 300K FOR ALL JOBS
***** COMTEN testing begun.  Use care editing and compressing. *****
ONLY 3 JOBS PER USER ID IN SYSTEM AT ONE TIME
NEW ABENDAID RELEASE ON BOTH MACHINES, REPORT PROBS TO PAC
***** Critical testing period.  TSO may die without warning. *****
TIME LIMIT FOR THE 91 IS 3 MIN...CLASS=A IS 10 MIN 500K
--54 TOTAL TSO USERS ON 360/91 M2
ATTR FB LRECL(80) BL(7280) IS SET UP
TODAY IS THU JUL 31,1980.
READY
 aj startup <----
SEICC.LIB.CLIST BEING CONCATENATED
READY
(1)
qed lib.cntl(tsolist) *<----
QED

list <----
00100 //SEICCLIB JOB (SB0132823B,P,ISEE03,H00H00),BF3
00200 //*LISTPDS TSO.LIBS
00300 //LISTPDS EXEC LISTPDS,OUT=8
00400 //SYSLIB  DD  DSN=SEICC.LIB.CNTL,DISP=SHR
00600 //        DD  DSN=SEICC.LIB.CLIST,DISP=SHR
00700 // EXEC NOTIFYTS
END OF DATA

submit  *  <----

JOB SEICCLIB SUBMITTED
QED
end n <----
READY
```

current member is LISTPDS

old, but adequate as an example

*NOTE: It is not necessary to 'QED' each of these members prior to issueing the 'SUBMIT *' command since they require no editing prior to submittal. The user may simply issue the command 'SUBMIT LIB.CNTL(MEMBER NAME)' (' ' OMITTED).

Figure 1.3.2 (Cont'd)

member log

```
READY
qed lib.cntl(listall) *
OED

list
00010 //SEICCLST JOB (SB0162823A,T,ISEE-3,H00H00),BF3
00020 //* SEICC LOG.DATA
00030 //LISTALL PROC
00040 // EXEC PGM=LOGLIST,REGION=150K
00050 //STEPLIB DD DSN=SEICC.PROCESS.LOAD,DISP=SHR
00060 //FT05F001 DD DDNAME=DATA5
00070 //FT06F001 DD DUMMY
00080 //FT10F001 DD SYSOUT=A,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=7265)
00090 //FT11F001 DD DUMMY
00100 //FT25F001 DD DSN=SEICC.LOG.DATA,UNIT=2314,DISP=SHR,
00110 //    DCB=(LRECL=64,RECFM=FB,BLKSIZE=7232)
00120 // PEND
00130 //  EXEC  LISTALL
00140 //DATA5 DD *
00150 BACKGRND SEICC.LOG.DATA
00151 07
00152    01    02
00160 06
00170 ISEE-3
00180 NO
00190 01
00200 F
00210 /*
00220 // EXEC NOTIFYTS
END OF DATA

submit *
JOB SEICCLST SUBMITTED
QED

end n
READY
```

Figure 1.3.2 (Cont'd)

```
READY
qed lib.cntl(dplstall) *
QED
list
00010 //SEICCDLT JOB (SB0132823A,T,HELIOS,H00H00),BF3
00020 //* SEICC DPLOG.DATA
00030 //DPLSTALL PROC
00040 // EXEC PGM=LOGLIST,REGION=150K
00050 //STEPLIB DD DSN=SEICC.PROCESS.LOAD,DISP=SHR
00060 //FT05F001 DD DDNAME=DATA5
00070 //FT06F001 DD DUMMY
00080 //FT10F001 DD SYSOUT=A,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=7265)
00090 //FT11F001 DD DUMMY
00100 //FT25F001 DD DSN=SEICC.DPLOG.DATA,UNIT=2314,DISP=SHR,
00110 //    DCB=(LRECL=64,RECFM=FB,BLKSIZE=7232)
00120 // PEND
00130 //  EXEC  DPLSTALL
00140 //DATA5 DD *
00150 BACKGRND SEICC.DPLOG.DATA
00160 06
00170 ISEE-3
00180 NO
00190 01
00200 /*
00210 // EXEC NOTIFYTS
END OF DATA

submit *
JOB SEICCDLT SUBMITTED
QED
end n
READY
```

FIGURE 1.3.3

THE FOLLOWING IS A LIST OF ALL SEICC PRODUCTION DATA SETS. THIS LIST INCLUDES JCL LIBRARIES, CLIST LIBRARIES, LOAD LIBRARIES, AND CATALOGS USED BY THE ISEE-3 DATA REDUCTION AND ANALYSIS SOFTWARE SYSTEM.
THEY ARE AS FOLLOWS:

SEICC.CATALOG.DATA ✓
SEICC.DPTSAVE.LOAD ✓ *
SEICC.LIB.CNTL ✓
SEICC.LIB.CLIST ✓
SEICC.MATRIX.LOAD * IMATRIX
SEICC.EDRSAVE.LOAD *
SEICC.ENCGEN.LOAD *
SEICC.DPLOG.DATA ✓
SEICC.LOG.DATA ✓
SEICC.ENCMRG.LOAD * GENCMRG
~~SEICC.PROCESS.LOAD~~
SEICC.SPRING.LOAD ? *
SEICC.RMVENC.LOAD *
SEICC.LIBLIST.LOAD ?
SBMJS.FLUX.LOAD * FLUXPLOT
SBMJS.NEWFLUX.LOAD *
SBMJS.EDRLOG.LOAD *
SEICC.LSELECT.LOAD
END OF DATA

SB#IC all

ASNENC.LOAD *
Intlog.load
DPINTLOG.load

LIST~~STAT~~.LOAD
~~DPT~~GEN *
LOGLIST *
SETATT ✓
Usergde.text
FOURICC.LOAD

* SB#IC.LIB.LOAD members
also ALTBLK
ASSIGNL
DPSRTLST
REDOLIB
REDR
RWORK

Figure 1.3.4

get updated list

JAN 02, 1980 REPORT OF ALL SLOTS AND VSNS CURRENTLY IN TLS BY VSN

SEICC

VOLUME SER.NO.	SLOT NO.	LAST USED	LAST USER	USE WSN	USE COUNT	ONLY USER	OPTIONS	TAPE TITLE	VSN ASSIGNED	SLOT OBTAINED
	62203	*			2			WAS: E TAP'S ES		76343
	62204	*			11			WAS: E TAP'S ES		76343
	62577	*			27			WAS: FU2733		76343
	62578	*			36			WAS: FU6044		76343
BOXGEN	37391	79197	ZB2NL	31	95		WRITE=DISALLOW	BOXGEN TABLE TP.	79101	75137
DPL001	62579	*70002	ZBTAS	210	214			DATA POOL LIBRARY TA	79177	76343
DPL002	62580	*79177	SEICC	1	1			DATA POOL LIBRARY TA	79177	76343
DPL003	62581	79353	SEICC	2	2			DATA POOL LIBRARY TA	79177	76343
DPL004	62582	*79177	SEICC	1	1			DATA POOL LIBRARY TA	79177	76343
DPL005	62583	*79177	SEICC	1	1			DATA POOL LIBRARY TA	79177	76343
DPW001	62584	*79178	SEICC	2	2			DATA POOL WORK TP	79177	76343
DPW002	62585	*79178	SEICC	1	6			DATA POOL WORK TP	79177	76343
DPW003	62586	*79178	SEICC	1	15			DATA POOL WORK TP	79177	76343
DPW004	62587	*79178	SEICC	1	8			DATA POOL WORK TP	79177	76343
DPW005	62588	*NEVER	ZBPAS		4			DATA POOL WORK TP	79177	76343
FLXOUT	33622	79339	SBTEV	5	53			TYCHOS FLUX OUTPUT	79130	75137
ICEK01	62595	79355		28	55	SEICC			79333	76343
ICEK02	62596	79351		3	18	SEICC			79333	76343
ICEK03	62597	79355		17	30	SDHEL			79333	76343
ICEK04	62598	79351		15	26	SDHEL			79333	76343
ICC001	33862	79337	ZBEWE	56	57			ISEE-3 ARCHIVE TAPE	78307	78106
ICC002	33812	79337	ZBEWE	20	21			ISEE-3 ARCHIVE TAPE	78307	78106
ICC003	34045	*79129	ZBEWE	1	2			ISEE-3 ARCHIVE TAPE	78307	78106
ICC004	34079	*79129	ZBEWE	1	2			ISEE-3 ARCHIVE TAPE	78307	78106
ICC005	34163	*79129	ZBEWE	1	2			ISEE-3 ARCHIVE TAPE	78307	78105
ICE001	62630	*79033	SEICC	8	8			ISEE-C ENCY BACKUPS	79046	76343
ICE002	62631	*79092	SEICC	3	29			ISEE-C ENCY BACKUPS	79046	76343
ICE003	62632	*79145	SEICC	8	9			ISEE-C ENCY BACKUPS	79046	76343
ICE004	62633	*79162	SEICC	13	13			ISEE-C ENCY BACKUPS	79046	76343
ICE005	62634	79219	SEICC	4	5			ISEE-C ENCY BACKUPS	79046	76343
ICE006	62635	79230	SEICC	5	5			ISEE-C ENCY BACKUPS	79046	76343
ICE007	62636	*NEVER						ISEE-C ENCY BACKUPS	79046	76343
ICE008	62637	*NEVER			2			ISEE-C ENCY BACKUPS	79046	76343
ICE009	62638	*NEVER						ISEE-C ENCY BACKUPS	79046	76343
ICE010	62639	*NEVER						ISEE-C ENCY BACKUPS	79046	76343
ICE023	61660	79355	SEICC	2	41		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE025	61661	79355	SEICC	2	24		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE036	61662	79332	SEICC	3	17		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE045	61663	79332	SEICC	3	18		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE050	61664	NEVER			16		LABEL=SL	ISEE-C ENCY TAPES	79319	75140
ICE051	61665	NEVER			31		LABEL=SL	ISEE-C ENCY TAPES	79319	75140
ICE052	61666	79346	ZBEWE	3	34		LABEL=SL	ISEE-C ENCY TAPES	79319	75140
ICE053	61667	79321	SEICC	4	32		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE054	61668	79331	SEICC	5	12		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE055	61669	79331	SEICC	6	18		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE056	61690	79311	SEICC		16		LABEL=SL	ISEE-C ENCY TAPES	79298	75140
ICE057	61691	79331	SEICC	7	51		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE058	61692	79331	SEICC	3	12		LABEL=SL	ISEE-C ENCY TAPES	79208	75140
ICE059	61693	79332	SEICC	2	20		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE060	61694	79332	SEICC	2	21		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE061	61695	79332	SEICC	2	12		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE062	61696	79332	SEICC	2	8		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE063	61697	79355	SEICC	2	8		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE064	61698	79355	SEICC	2	9		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE065	61699	79283	SEICC	1	86		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE066	61700	79288	SEICC	1	11		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE067	61701	79288	SEICC	1	54		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE068	61702	79283	SEICC	1	9		LABEL=SL	ISEE-C ENCY TAPES	79268	75140
ICE069	61703	79288	SEICC	1	7		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE070	61704	79288	SEICC	1	8		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE071	61705	79290	SEICC	1	6		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE072	61706	79290	SEICC	1	7		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE073	61707	79290	SEICC	1	9		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE074	61708	79290	SEICC	1	7		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE075	61709	79290	SEICC	2	13		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE076	61710	79290	SEICC	1	7		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE077	61711	79290	SEICC	1	15		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE078	61712	79290	SEICC	1	37		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE079	61713	79290	SEICC	1	15		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE080	61714	79290	SEICC	1	11		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE081	61715	79290	SEICC	1	8		LABEL=SL	ISEE-C ENCY TAPES	79288	75140
ICE082	61716	79290	SEICC	1	8		LABEL=SL	ISEE-C ENCY TAPES	79298	75140

Figure 1.3.4 (Cont'd)

update

JAN 02, 1980 REPORT OF ALL SLOTS AND VSNS CURRENTLY IN TLS BY VSN

SEICC

VOLUME SER.NO.	SLOT NO.	LAST USED	LAST USER	USR VSN	USR COUNT	ONLY USER	OPTIONS	TAPE TITLE	VSN ASSIGNED	SLOT OBTAINED
ICE083	61717	79290	SEICC	1	6		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE084	61718	79290	SEICC	1	8		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE085	61719	79290	SEICC	1	18		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE086	61720	79290	SEICC	1	7		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE087	61721	79290	SEICC	1	21		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE088	61722	79290	SEICC	1	19		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE089	61723	79290	SEICC	1	4		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE090	61724	79290	SEICC	1	4		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE091	61725	79290	SEICC	1	8		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE092	61726	79290	SEICC	1	5		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE093	61727	79290	SEICC	1	5		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE094	61728	79290	SEICC	1	28		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICE095	61729	79290	SEICC	1	33		LABEL=SL ISEE-C	ENCY TAPES	79288	75143
ICL008	22005	79355	SEICC	188	191		LABEL=SL BKUP SEICC.LOG.DATA		78348	77282
ICL001	22005	79267	ZBEWB	204	204		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL002	22006	79355	SEICC	81	81		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL003	22007	79267	SEICC	101	101		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL004	22008	79351	SEICC	45	45		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL005	22009	79331	SEICC	33	33		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL006	22010	79332	SEICC	18	18		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL007	22011	79263	SEICC	17	17		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL008	22012	79332	SEICC	23	23		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL009	22013	79274	SEICC	17	17		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL010	22014	79304	SEICC	14	14		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL011	22015	79354	SEICC	42	80		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL012	22016	79338	ZBEWB	11	11		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL013	22017	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL014	22018	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL015	22019	*78265	SEHGD	37	40		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL016	22020	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL017	22021	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL018	22022	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL019	22023	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL020	22024	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL021	22025	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL022	22026	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL023	22027	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL024	22028	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL025	22029	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL026	22030	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL027	22031	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL028	22032	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL029	22033	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL030	22034	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL031	22035	*78265	SEHGD	1	2		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL032	22036	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL033	22037	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL034	22038	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL035	22039	*78265	SEHGD	1	2		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL036	22040	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL037	22041	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL038	22042	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL039	22043	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL040	22044	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL041	22045	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL042	22046	*78265	SEHGD	1	2		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL043	22047	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL044	22048	*78265	SEHGD	1	2		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL045	22049	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL046	22050	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL047	22051	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL048	22052	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL049	22053	*78265	SEHGD	1	1		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICL050	22054	*78265	SEHGD	1	14		LABEL=SL ISEE-C	LIBRARY TAPES	78250	76343
ICW051	22055	79355	SEICC	7	99		LABEL=SL ISEE-C	WORK TAPES	79319	76343
ICW052	22056	79355	ZBEWB	1	47		LABEL=SL ISEE-C	WORK TAPES	79319	76343
ICW053	22057	79331	SEICC	11	39		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW054	22058	79321	SEICC	12	49		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW055	22059	79331	SEICC	4	27		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW056	22060	79331	SEICC	5	20		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW057	22061	79331	SEICC	4	33		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW058	22062	79334	ZBEWB	4	28		LABEL=SL ISEE-C	WORK TAPES	79278	76343

Figure 1.3.4 (Cont'd)

JAN 02, 1980 REPORT OF ALL SLOTS AND VSNS CURRENTLY IN TLS BY VSN

SEICC

VOLUME SER. NO.	SLOT NO.	LAST USED	LAST USER	USE VSN	USE COUNT	ONLY USER	OPTIONS	TAPE TITLE	VSN ASSIGNED	SLOT OBTAINED
ICW059	62263	79332	SEICC	3	14		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW060	62264	79332	SEICC	3	15		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW061	62265	79332	SEICC	3	70		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW062	62266	79353	ZBEHR	14	39		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW063	62267	79278	SEICC	1	10		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW064	62268	79278	SEICC	1	10		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW065	62269	79279	SEICC	1	69		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW066	62270	79278	SEICC	2	18		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW067	62271	79279	SEICC	1	12		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW068	62272	79278	SEICC	1	16		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW069	62273	79278	SEICC	1	10		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW070	62274	79278	SEICC	1	10		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW071	62275	79279	SEICC	1	10		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW072	62276	79273	SEICC	1	13		LABEL=SL ISEE-C	WORK TAPES	79278	76343
ICW073	62277	79278	SEICC	1	12		LABEL=SL ISEE-C	WORK TAPES	79281	76343
ICW074	62278	NEVER			18		LABEL=SL ISEE-C	WORK TAPES	79261	76343
ICW075	62279	NEVER			13					
[illegible]273	62181	*79177	SEICC	1	14		ISEE-C	EDR TAPES	79176	76343
[illegible]616	62184	79205	SEICC	1	11		ISEE-C	EDR TAPES	79205	76343
BT1638	62180	*79156	SEICC	1	44		ISEE-C	EDR TAPES	79166	76343
BK9083	62199	7932[illegible]	SEICC	1	2		ISEE-C	EDR TAPES	79321	76343
BL0706	62182	79184	SEICC	1	41		ISEE-C	EDR TAPES	79184	76343
BL12[illegible]5	62183	79190	SEICC	1	12		ISEE-C	EDR TAPES	7919[illegible]	76343
BL9[illegible]03	62185	79226	SEICC	1	11		ISEE-C	EDR TAPES	79226	76343
BMC425	62201	79321	SEICC	1	2		ISEE-C	EDR TAPES	79321	76343
BM[illegible]97	62576	79353	SEICC	1	28				79353	76343
BM2623	62191	79274	SEICC	1	6		ISEE-C	EDR TAPES	79274	76343
BM2727	62187	79236	SEICC	1	7		ISEE-C	EDR TAPES	79226	76343
BM3368	62186	79223	SEICC	1	10		ISEE-C	EDR TAPES	79226	76343
BM3369	62188	79274	SEICC	1	15		ISEE-C	EDR TAPES	79274	76343
BM[illegible]31[illegible]	62189	79273	SEICC	1	14		ISEE-C	EDR TAPES	79274	76343
[illegible]55	62190	7927[illegible]	SEICC	1	9		ISEE-C	EDR TAPES	79274	76343
BP1056	62194	79233	SEICC	3	9		ISEE-C	EDR TAPES	79274	76343
BP7912	62193	79313	SEICC	3	8		ISEE-C	EDR TAPES	79274	76343
BP3591	62192	79313	SEICC	4	13		ISEE-C	EDR TAPES	79274	76343
BP6784	62196	79319	SEICC	4	18		ISEE-C	EDR TAPES	79303	76343
BP9926	62195	79303	SEICC	3	5		ISEE-C	EDR TAPES	79281	76343
BS2022	62197	79319	SEICC	3	5		ISEE-C	EDR TAPES	79303	76343
BS3019	62198	79320	SEICC	3	10		ISEE-C	EDR TAPES	79303	76343
BS4639	62200	79321	SEICC	1	2		ISEE-C	EDR TAPES	79321	76343
BT0707	62202	79321	SEICC	1	7		ISEE-C	EDR TAPES	79321	76343
RU6513	62575	79353	SEICC	1	35		ISEE-C	EDR TAPES	79353	76343

Figure 1.3.5

update

JAN 02, 1980 REPORT OF ALL SLOTS AND VSNS CURRENTLY IN TLS BY SLOT

SZICC

SLOT NO.	VOLUME SER.NO.	LAST USED	LAST USER	USE VSN	JST COUNT	ONLY USER	OPTIONS	TAPE TITLE	VSN ASSIGNED	SLOT OBTAINED
23035	TCLOGB	79355	SZICC	138	191		LABEL=SL	BKUP SZICC.LOG.DATA	78348	77082
31623	FLXOUT	79339	SZTTY	5	58			TYCHOS FLUX OUTPUT	79130	75137
33832	TCC001	79317	ZBEWE	66	67			ISEL-3 ARCHIVE TAPE	78307	78306
33912	TCC002	79337	ZBEWE	20	21			ISEL-3 ARCHIVE TAPE	78307	78305
34049	TCC003	*79128	ZBEWE	1	2			ISEL-3 ARCHIVE TAPE	78307	78306
34079	TCC004	*79128	ZBEWE	1	2			ISEL-3 ARCHIVE TAPE	78307	78306
34160	TCC005	*79128	ZBEWE	1	2			ISEL-3 ARCHIVE TAPE	78307	78306
37391	ROXGEN	79197	ZBEWE	31	95		WRITE=DISALLOW	ROXGEN TABLE TP	79101	75137
61680	TCE022	79355	SZICC	2	41		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61681	TCE024	79355	SZICC	2	28		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61682	TCE026	79332	SZICC	3	17		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61683	TCL026	79332	SZICC	3	18		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61684	TCE050	NEVER			16		LABEL=SL	ISEL-3 EMCY TAPES	79319	75140
61685	TCE051	NEVER			31		LABEL=SL	ISEL-3 EMCY TAPES	79319	75140
61686	TCE052	79346	ZBEWE	3	34		LABEL=SL	ISEL-3 EMCY TAPES	79319	75140
61687	TCE053	79321	SZICC	4	32		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61688	TCE054	79331	SZICC	3	12		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61689	TCE055	79331	SZICC	3	18		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61690	TCE056	79331	SZICC	3	16		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61691	TCE057	79331	SZICC	7	51		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61692	TCE058	79331	SZICC	3	12		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61693	TCL059	79332	SZICC	3	20		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61694	TCE060	79332	SZICC	3	21		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61695	TCE061	79332	SZICC	2	12		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61696	TCE062	79332	SZICC	2	8		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61697	TCE063	79355	SZICC	2	8		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61698	TCE064	79355	SZICC	2	9		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61699	TCE065	79283	SZICC	1	86		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61700	TCE066	79283	SZICC	1	11		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61701	TCE067	79283	SZICC	1	54		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61702	TCE068	79283	SZICC	1	9		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61703	TCE069	79283	SZICC	1	7		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61704	TCE070	79284	SZICC	1	8		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61705	TCE071	79290	SZICC	1	6		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61706	TCE072	79290	SZICC	1	7		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61707	TCE073	79290	SZICC	1	9		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61708	TCE074	79290	SZICC	1	7		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61709	TCE075	79290	SZICC	2	13		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61710	TCE076	79293	SZICC	1	7		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61711	TCE077	79290	SZICC	1	15		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61712	TCE078	79290	SZICC	1	37		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61713	TCE079	79290	SZICC	1	15		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61714	TCE080	79290	SZICC	1	11		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61715	TCE081	79290	SZICC	1	8		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61716	TCE082	79290	SZICC	1	8		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61717	TCE083	79290	SZICC	1	6		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61718	TCE084	79290	SZICC	1	8		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61719	TCE085	79293	SZICC	1	18		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61720	TCE086	79293	SZICC	1	7		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61721	TCE087	79290	SZICC	1	21		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61722	TCE088	79290	SZICC	1	19		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61723	TCE089	79290	SZICC	1	4		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61724	TCE090	79290	SZICC	1	8		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61725	TCE091	79293	SZICC	1	4		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61726	TCE092	79290	SZICC	1	5		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61727	TCE093	79290	SZICC	1	5		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61728	TCE094	79293	SZICC	1	29		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
61729	TCE095	79290	SZICC	1	93		LABEL=SL	ISEL-3 EMCY TAPES	79288	75140
62180	EI1638	*79166	SZICC	1	44			ISEL-3 EDR TAPES	79166	76343
62181	EG9278	*79177	SZICC	1	14			ISEL-3 EDR TAPES	79176	76343
62182	EL0706	79184	SZICC	1	41			ISEL-3 EDR TAPES	79184	76343
62183	EL1245	79190	SZICC	1	12			ISEL-3 EDR TAPES	79190	76343
62184	EG6616	79205	SZICC	1	11			ISEL-3 EDR TAPES	79205	76343
62185	EL4463	79225	SZICC	1	11			ISEL-3 EDR TAPES	79226	76343
62186	EN3386	79226	SZICC	1	10			ISEL-3 EDR TAPES	79226	76343
62187	EN4737	79226	SZICC	1	7			ISEL-3 EDR TAPES	79226	76343
62188	EN5360	79274	SZICC	1	15			ISEL-3 EDR TAPES	79274	76343
62189	EN9314	79274	SZICC	1	14			ISEL-3 EDR TAPES	79274	76343
62190	EP0555	79274	SZICC	1	9			ISEL-3 EDR TAPES	79274	76343
62191	EN6623	79274	SZICC	1	6			ISEL-3 EDR TAPES	79274	76343
62192	EP2593	79318	SZICC	4	13			ISEL-3 EDR TAPES	79274	76343
62193	EP2512	79318	SZICC	3	8			ISEL-3 EDR TAPES	79274	76343

Figure 1.3.5 (Cont'd)

updates

JAN 02, 1990 REPORT OF ALL SLOTS AND VSNS CURRENTLY IN TLS BY SLOT

SEICC

SLOT NO.	VOLUME SER.NO.	LAST USED	LAST USER	TSI VSN	USE COUNT	ONLY USER	OPTIONS	TAPE TITLE	VSN ASSIGNED	SLOT OBTAINED
62194	RP1456	79293	SEICC	3	9			EDR TAPES	79274	76343
62195	RP9626	79300	SEICC	3	5			EDR TAPES	79261	76343
62196	RP8384	79319	SEICC	4	18			EDR TAPES	79303	76343
62197	RS3022	79319	SEICC	3	6			EDR TAPES	79303	76343
62198	RS3419	79322	SEICC	3	10			EDR TAPES	79303	76343
62199	RK9263	79321	SEICC	1	2			EDR TAPES	79321	76343
62200	RS4639	79321	SEICC	1	2			EDR TAPES	79321	76343
62201	RM0426	79321	SEICC	1	5			EDR TAPES	79321	76343
62202	RL00707	79321	SEICC	1	7			EDR TAPES	79321	76343
62203	*				2			TAPES		76343
62204	*				11			TAPES		76343
62205	TCLC01	79257	ZBEWB	204	204		LABEL=SL	LIBRARY TAPES	78250	76343
62206	TCLC02	79355	ZBEWB	81	81		LABEL=SL	LIBRARY TAPES	78250	76343
62207	TCLC03	79267	SEICC	101	101		LABEL=SL	LIBRARY TAPES	78250	76343
62209	TCLC04	79357	ZBEWB	45	45		LABEL=SL	LIBRARY TAPES	78250	76343
62209	TCLC05	79331	SEICC	33	33			LIBRARY TAPES	78250	76343
62210	TCLC06	79335	SEICC	18	18		LABEL=SL	LIBRARY TAPES	78250	76343
62211	TCLC07	79267	SEICC	17	17		LABEL=SL	LIBRARY TAPES	78250	76343
62212	TCLC08	79332	SEICC	29	29		LABEL=SL	LIBRARY TAPES	78250	76343
62213	TCLC09	79274	SEICC	17	17		LABEL=SL	LIBRARY TAPES	78250	76343
62214	TCLC10	79354	SEICC	14	14		LABEL=SL	LIBRARY TAPES	78250	76343
62215	TCLC11	79357	SEICC	82	80		LABEL=SL	LIBRARY TAPES	78250	76343
62216	TCLC12	79338	SEICC	11	11		LABEL=SL	LIBRARY TAPES	78250	76343
62217	TCLC13	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62218	TCLC14	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62219	TCLC15	*79045	ZBEWB	37	40		LABEL=SL	LIBRARY TAPES	78250	76343
62220	TCLC16	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62221	TCLC17	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62222	TCLC18	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62223	TCLC19	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62224	TCLC20	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62225	TCLC21	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62226	TCLC22	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62227	TCLC23	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62228	TCLC24	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62229	TCLC25	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62230	TCLC26	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62231	TCLC27	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62232	TCLC28	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62233	TCLC29	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62234	TCLC30	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62235	TCLC31	*78265	SEICC		2		LABEL=SL	LIBRARY TAPES	78250	76343
62236	TCLC32	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62237	TCLC33	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62238	TCLC34	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62239	TCLC35	*78265	SEICC		2		LABEL=SL	LIBRARY TAPES	78250	76343
62240	TCLC36	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62241	TCLC37	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62242	TCLC38	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62243	TCLC39	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62244	TCLC40	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62245	TCLC41	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62246	TCLC42	*78265	SEICC		2		LABEL=SL	LIBRARY TAPES	78250	76343
62247	TCLC43	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62248	TCLC44	*78265	SEICC		2		LABEL=SL	LIBRARY TAPES	78250	76343
62249	TCLC45	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62250	TCLC46	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62251	TCLC47	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62252	TCLC48	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62253	TCLC49	*78265	SEICC		1		LABEL=SL	LIBRARY TAPES	78250	76343
62254	TCLC50	*78265	SEICC		14		LABEL=SL	LIBRARY TAPES	78250	76343
62255	TCW051	79355	SEICC	7	99		LABEL=SL	WORK TAPES	79319	76343
62256	TCW052	79355	ZBEWB	1	37		LABEL=SL	WORK TAPES	79319	76343
62257	TCW053	79331	SEICC	11	39		LABEL=SL	WORK TAPES	79278	76343
62258	TCW054	79321	SEICC	12	49		LABEL=SL	WORK TAPES	79278	76343
62259	TCW055	79331	SEICC	8	27		LABEL=SL	WORK TAPES	79278	76343
62260	TCW056	79331	SEICC	5	20		LABEL=SL	WORK TAPES	79278	76343
62261	TCW057	79331	SEICC	8	33		LABEL=SL	WORK TAPES	79278	76343
62262	TCW058	79330	ZBEWB	8	28		LABEL=SL	WORK TAPES	79278	76343
62263	TCW059	79332	SEICC	3	14		LABEL=SL	WORK TAPES	79278	76343
62264	TCW060	79332	SEICC	3	15		LABEL=SL	WORK TAPES	79278	76343
62265	TCW061	79332	SEICC	3	70		LABEL=SL	WORK TAPES	79278	76343

Figure 1.3.5 (Cont'd)

update

JAN 02, 1990 REPORT OF ALL SLOTS AND VSNS CURRENTLY IN TLS BY SLOT

SEICC

SLOT NO.	VOLUME SER.NO.	LAST USED	LAST USER	USE VSN	USE COUNT	ONLY USER	OPTIONS	TAPE TITLE	VSN ASSIGNED	SLOT OBTAINED
62266	ICW062	79353	ZBEWB	14	39		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62267	ICW063	79278	SEICC	1	10		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62268	ICW064	79278	SEICC	1	12		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62269	ICW065	79278	SEICC	1	6		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62270	ICW066	79278	SEICC	2	18		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62271	ICW067	79278	SEICC	1	12		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62272	ICW068	79278	SEICC	1	16		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62273	ICW069	79278	SEICC	1	10		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62274	ICW070	79278	SEICC	1	10		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62275	ICW071	79278	SEICC	1	10		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62276	ICW074	79278	SEICC	1	13		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62277	ICW073	79278	SEICC	1	12		LABEL=SL	ISEE-C WORK TAPES	79278	76343
62278	ICW074	NEVER			18		LABEL=SL	ISEE-C WORK TAPES	79281	76343
62279	ICW075	NEVER			13		LABEL=SL	ISEE-C WORK TAPES	79281	76343
62275	SU0511	79353	SEICC	1	35				79353	76343
62276	PM5757	79353	SEICC	1	28				79353	76343
62277		*			27					76343
62278		*			26			WAS: EU2733		76343
62279		*			26			WAS: PU6044		76343
62579	DPLC01	*70032	ZBTAS	210	210			DATA POOL LIBRARY TA	79177	76343
62580	DPLC02	*79177	SEICC	1	1			DATA POOL LIBRARY TA	79177	76343
62581	DPLC03	79353	SEICC	2	2			DATA POOL LIBRARY TA	79177	76343
62582	DPLC04	*79177	SEICC	1	1			DATA POOL LIBRARY TA	79177	76343
62583	DPLC05	*79177	SEICC	1	1			DATA POOL LIBRARY TA	79177	76343
62584	DPW001	*79178	SEICC	2	2			DATA POOL WORK TP	79177	76343
62585	DPW002	*79178	SEICC	1	6			DATA POOL WORK TP	79177	76343
62586	DPW003	*79178	SEICC	1	15			DATA POOL WORK TP	79177	76343
62587	DPW004	*79178	SEICC	1	8			DATA POOL WORK TP	79177	76343
62588	DPW005	*NEVER	ZBPAS		8			DATA POOL WORK TP	79177	76343
62595	ICBK01	79353		24	55	SEICC			79353	76343
62596	ICBK02	79353		3	18	SEICC			79353	76343
62597	ICBK03	79356		17	20	SDHFL			79353	76343
62598	ICBK04	79351		15	26	SDHBL			79353	76343
62630	ICEB01	*79099	SEICC	8	8			ISEE-C ENCY BACKUPS	79046	76343
62631	ICEB02	*79093	SEICC	3	28			ISEE-C ENCY BACKUPS	79046	76343
62632	ICEB03	*79135	SEICC	8	8			ISEE-C ENCY BACKUPS	79046	76343
62633	ICEB04	*79169	SEICC	12	15			ISEE-C ENCY BACKUPS	79046	76343
62634	ICEB05	79232	SEICC	4	5			ISEE-C ENCY BACKUPS	79046	76343
62635	ICEB06	79235	SEICC	5	5			ISEE-C ENCY BACKUPS	79046	76343
62636	ICEB07	*NEVER						ISEE-C ENCY BACKUPS	79046	76343
62637	ICEB08	*NEVER			2			ISEE-C ENCY BACKUPS	79046	76343
62638	ICEB09	*NEVER						ISEE-C ENCY BACKUPS	79046	76343
62639	ICEB10	*NEVER						ISEE-C ENCY BACKUPS	79046	76343

SECTION 2 - MEDIUM ENERGY COSMIC RAY DATA PROCESSING PROCEDURES

The following sub-sections of this guide will describe the standard production processing procedures for the data reduction of the ISEE-3 cosmic ray experiment data record (EDR) data.

2.1 DESCRIPTION OF THE ISEE-3 COSMIC RAY EXPERIMENT DATA REDUCTION SYSTEM

The ISEE-3 medium energy cosmic ray data reduction software system is a series of computer programs which are executed via Time Sharing Option (TSO) on the IBM ~~360/91 OS/MVT~~ 3081/MVS computing systems for the purpose of updating and maintaining a 900 second (15 minute) average time history ENCY tape data base from the experiment data record (EDR) tapes received weekly from the Information Processing Division (IPD) at Goddard Space Flight Center (GSFC).

This System consists of four major programs which are Production jobs are all submitted through CLIST as follows:

1) EDRLOG - a TSO foreground CLIST/PROGRAM which lib.clist enters an EDR tape into the EDR BLOCK of the processing log and into the Tape Library System (TLS).

2) EDRSAVE - the first of a series of three runs which are submitted to batch processing on the SACC lib.cntl lib.clist ~~360/91~~ 3081 using the EXEC RELEASE option. This step copies the EDR data to a EDR LIBRARY tape, removing overlapping data segments, and modifies the directory block; EDR control block, and the EDR block in the LOG. see programmers guide for log description

3) ~~RUNENCY~~ ENCGEN (ENCYGEN) - the second of the three run lib.cntl job stream which monitors, summarizes and reformats lib.clist the data onto a WORK tape, also modifies the directory block, ENCY-attribute block, work and encyclopedia control, and the library block. Also creates a new work block.

4) QENCMRG (ENCMRG) - the third of the three run job stream which combines the WORK tape onto the encyclopedia (ENCY) data base and modifies the directory block, work control and work block and creates a new encyclopedia block.

lib.cntl
lib.clist

A more detailed description of each of these programs may be obtained by consulting the ISEE-3 Data Reduction Programmers Guide (CSC/TM-80/6208). Figures 2.1.1 and 2.1.2 show and define the production data processing flow including the standard maintenance utilities needed to maintain production processing. However, this flow chart does not show those utilities which are sometimes needed to remove EDR tapes and/or WORK tapes, re-assign ENCY tapes or other LOG maintenance routines. Descriptions of these may be found in the UTILITIES section of this guide.

Figure 2.1.1 - ISEE-3 Cosmic Ray Experiment
Production Data Processing Flow

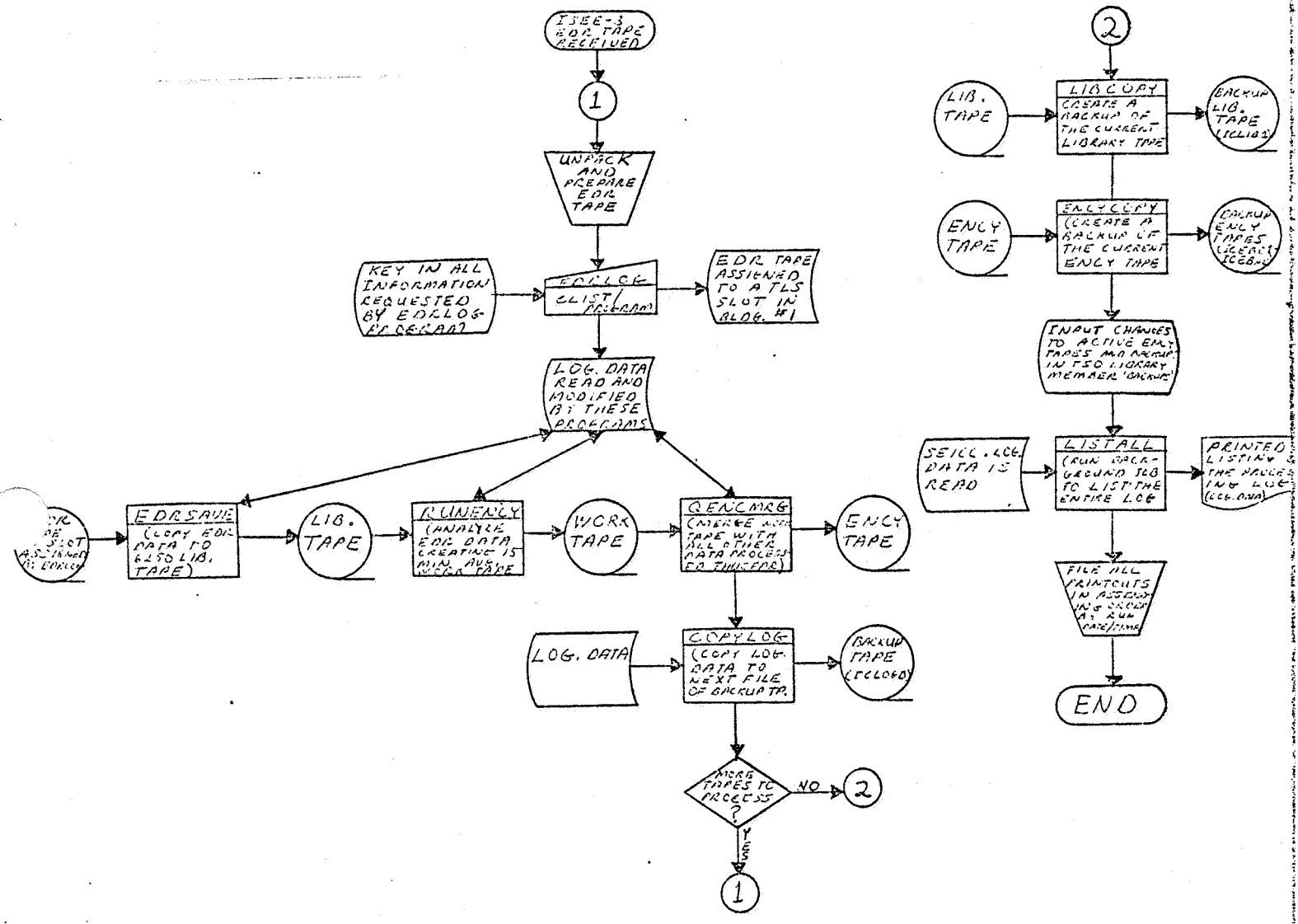


Figure 2.1.2

DESCRIPTION OF MEMBERS IN FIGURE 2.1.1

The following is a list of the TSO LIB.CNTL or LIB.CLIST member names used in FIGURE 2.1.1 and a brief description of their function in the data reduction procedures.

MEMBER	TYPE	FUNCTION
EDRLOG	CLIST	ENTER EDR INTO LOG.DATA AND TLS
EDRSAVE	CNTL	SAVE EDR ONTO LIB.TAPES
~~RUNENCY~~ ENCGEN	CNTL	ANALYZE EDR DATA ON LIB.TAPE CREATIVE 15 MIN. AVG. WORK TAPE
~~QENCMRG~~ ENCMRG	CNTL	MERGE WORK INTO ENCY DATA BASE
~~COPYLOG~~	~~CNTL~~	~~COPIES LOG TO NEXT FILE OF BACKUP TP.~~
✓ LIBCOPY	CNTL	COPIES THE ACTIVE LIB.TAPE
~~ENCYCOPY~~ ENCOPY	CNTL	COPIES THE ENCY TAPE TO A BACKUP
✓ BACKUPS	CNTL	CONTAINS LIST OF ALL ACTIVE ENCY TAPES, THEIR BACKUPS AND NO. OF BLOCKS ON EACH.
~~LISTALL~~ LOG	CNTL	LIST THE ENTIRE LOG.DATA

CLIST Controlled

CLIST controlled

CLIST controlled

CLIST loglist for foreground listings

The following is a list of all the data sets upon which the above members operate.

DATA SET MNEMONIC	DSNAME	MEMBERS THAT ACCESS	TYPE D=DISK T=TAPE
TLS	SYS2.TLS.SLOT		
	SYST.TLS.VSN	EDRLOG	D
LOG.DATA	SEICC.LOG.DATA	EDRLOG,EDRSAVE,RUNENCY, QENCMRG,COPYLOG,LISTALL	D
EDR	NONE	EDRSAVE	T
LIB	IC. tape no. assigned by user	EDRSAVE,RUNENCY,LIBCOPY	T
WORK	IC.WORK.ENCY	RUNENCY,QENCMRG	T
ENCY	IC.MASTER.ENCY	QENCMRG,ENCYCOPY	T

Updated names as above

2.2 DESCRIPTION OF THE ISEE-3 DATA PROCESSING LOG

The ISEE-3 data processing log is a sequential, cataloged disk data set. Its data set name (DSN) is ~~SEICC~~ SBAIC.LOG.DATA and its attributes and size in tracks are as follows:

```
map 'seicc.log.data'
------------------------------
SEICC.LOG.DATA
--RECFM-LRECL-BLKSIZE-DSORG-CREATED---EXPIRES---SECURITY
  FB     64     7232     PS     10/02/79  00/00/00  NONE
--VOLUMES--
  DISK16
TRACKS ALLOC   USED  UNUSED
         40      40      0
ENTENTS
  02
INPUT DATA SET  SEICC.LOG.DATA  IS NOT A PDS
------------------------------
```

The ISEE-3 LOG is the same as for Voyager (MJS) except in the EDR blocks where ISEE has the number of EDR files, in the library blocks where ISEE has seconds instead of FDSC counts and ISEE does not access the CIT blocks. A byte by byte description of each section of the LOG may be found in Appendix A of the ISEE-3 Data Reduction Programmers Guide (CSC/TM-80/6208).

2.3 READING THE LOG

This sub-section is to aid the user in reading and understanding the contents of the data processing log. Figure 2.3.1 is a XEROX reduction of an outdated LOG which will suffice for this discussion. The current listing of the LOG which you generated in Section 1.3 which had the JOBNAME = SEICCLST may be used also to follow this discussion.

1) EDR CONTROL BLOCK - is the fourth 64 byte block in the log and contains the following information which is relative to the user.
   a) 1ST EDR - block no. of the 1st EDR block
   b) LAST EDR - block no. of the last EDR block
   c) 1ST SLOT - TLS no. of the first slot which can contain an EDR tape.
   d) LAST SLOT- TLS no. of the last slot which can contain an EDR tape. There are 25 slots only available for EDR tapes. The EDRLOG program assigns the EDR tapes to these slots sequentially. When the last slot has been assigned (IE.62204) it is necessary to execute the TLS CLIST to remove EDR tapes (See UTILITIES section for a further description on the procedure for removing EDR tapes.

2) EDR BLOCKS - contain a block for each EDR tape received from IPD.
   a) BLOCK - no. of the block allocated to each entry
   b) CREATION - date EDRLOG was run
   c) JPL SER - obtained from the fact label on the EDR tape. Each tape has a unique serial no. which is seven digits long. The eighth digit is derived by repeating the last character of the serial number. The JPL SER is input to EDRLOG.

d) SLOT STAT - indicates the status of an EDR slot. The valid codes are as follows:
   1) CO = EDRLOG done
   2) EO = EDRSAVE done
   3) FO = TLS remove done

e) RECEIVED - date the user received the EDR. This is input to EDRLOG.

f) SLOT NO. - assigned by EDRLOG

g) @LIB - location of the library block which contains the EDR data after EDRSAVE

h) NO. REC - no. of records of EDR data

i) NO. ERR - no. of I/0 errors on EDR tape

j) ENTRY - no. of times an attempt was made to process an EDR. MAX=3. 4=bad tape.

k) LAST DISP - EO = EDRSAVE had no errors
   El = EDRSAVE had some errors
   OO = TOTALLY BAD EDR

l) ENTRY PROCESSED - date EDRSAVE ran.

3) LIBRARY CONTROL - contains the following information which is relative to the user:

a) 1ST LIB - location of 1ST LIB block

b) LST LIB - location of LAST LIB block

c) 1ST SER - 1ST volume serial in library block

d) LST SER - LAST volume serial in library block

e) 1ST SLOT - TLS location of 1ST SER

f) LST SER - TLS location of last SER

g) SER WRT - current volume serial being updated

h) SEQ - last file of SER WRT written

i) FEET - no. of feet written on SER WRT

j) MODEL DSN - IC.JPL.SER with last two repeat characters first (IE the DSN for the first EDR in the EDR block would be written as the DSN on the LIB tape as IC.GGQR2247

k) MODEL VOL - ICL000 where 000 is the three digit number between 1ST SER and LST SER (i.e. the volume serial of the 1ST SER is ICL001 etc.)

4) LIBRARY BLOCKS - contains an entry for each library file created by EDRSAVE
   a) BLOCK - no. of the block allocated to each entry
   b) CREATION - date the block was created
   c) START TIME - start time of the data
   d) END TIME - end time of the data
   e) SER - serial of the library tape where the data resides (i.e. 1 = ICL001)
   f) SEQ - file no. of the data on the library tape
   g) EDR - the EDR block no. of the corresponding group being processed
   h) PROCESSING NO. - no. of attempts to process the library file through RUNENCY (ENCYGEN)
   i) PROCESSING DISP - 80 = waiting for processing
      E0 = processed
      FA = failed processing
   j) DATE - date processed
   k) WORK - block no. of WORK block created by RUNENCY processing

5) WORK CONTROL - contains the following information which is relative to the user.
   a) 1ST WRK - location of first work block
   b) LST WRK - location of last work block
   c) 1ST SER - no. of 1ST work tape
   d) LST SER - no. of last work tape
   e) 1ST SLT - 1ST TLS slot of of WORK tape block
   f) LST SLT - LAST TLS slot no. of WORK tape block. There are only 25 slots available to WORK tapes. Therefore, the TLS utility program must be run occasionally when the SER WRT = LST SER. See UTILITIES section for this procedure.

g) MODEL DSN - all work tapes have this data set name (IC.WORK.ENCY).

h) MOD VOL - all work tapes have ICW000 numbers (ICW001 - ICWNNN).

i) SER WRT - last WORK tape created by RUNENCY program

6) WORK BLOCKS - contains an entry for each work tape created by RUNENCY program.

a) BLOCK - no. of the actual block

b) PREV - no. of the previous block

c) NEXT - no. of the next block

d) START RECORD - no. of the 15 minute interval since base year 1977. Exactly the same as the START TIME

e) START TIME - start time of the data

f) END RECORD - same as END TIME

g) END TIME - end time of the data

h) MERGE DISP - 80 = waiting to be merged
E0 = merged

i) CIT DISP - always 80. There are no CIT tapes for the ISEE-3 experiment.

j) SER - serial no. of the WORK tape (i.e. 1=ICW001 etc.)

7) ENCYCLOPEDIA CONTROL - contains the following information which is relative:

a) 1ST ENCY - block no. of the 1ST encyclopedia block.

b) LST ENC - block no. of the last encyclopedia block.

c) 1ST SER - volume serial of the first encyclopedia tape

d) LST SER - volume serial of the last encyclopedia tape

e) 1ST SLT - TLS slot no. of ENCY tape block

f) LST SLT - TLS slot no. of ENCY tape block. Only 50 slots are allocated for encyclopedia tapes. The user must occasionally execute the RMVENC CLIST to reassign inactive encyclopedia tapes when the LST SER (h) equals LST SER (d). See UTILITIES for RMVENC procedure.

g) MOD LAB - all encyclopedias have ICE000 numbers.

h) LST SER - last ENCY tape written

i) MAX BLKS - 5000 blocks of data is the maximum amount any ENCY tape can hold. = ~1 year.

8) ENCYCLOPEDIA BLOCKS - contains an entry for each encyclopedia tape created.

a) BLOCK - location of the actual block

b) PREV - no. of previous block

c) NEXT - no. of next block

d) START VOLUME - no. of 15 minute intervals since base year 1977. Exactly computes the START TIME

e) START TIME - start time of the data on that volume.

f) END VOLUME - same as end time.

g) END TIME - end time of the data on that volume.

h) SER - volume serial no. of the tape

i) BLOCKS - no. of block written on the volume.

j) STATUS - only the status code of 00 indicates an active tape. If 01 the volume is inactive and becomes a free slot.

k) FREE SLOT - slots which contain inactive encyclopedias. These tapes are recycled by the RMVENC CLIST/PROGRAM.

```
IEF236I ALLOC. FOR SEICCLST
IEF237I 324    ALLOCATED TO STEPLIB
IEF237I 450    ALLOCATED TO FT05F001
IEF237I 452    ALLOCATED TO FT10F001
IEF237I 235    ALLOCATED TO FT25F001

BACKGRND SEICC.LOG.DATA                                  00000150

 INPUT MENU NUMBER OF DESIRED LIST.
 7
INPUT START AND END RECORD NUMBERS RIGHT JUSTIFIED UNDER WORDS.
START   END
    1     2

    RECORD NO.    1

 004E0C0D  00000000  11A801FE  00010003  0106C9E2  C5C560F3  40404040  40400002  00000000  00000000  00000000

000000  00000000  00000000  00000000  00000000

    RECORD NO.    2

 014E0C0D  00000000  00030004  00050006  00070008  00000000  00000000  00000000  00000000  00000000  00000000

000000  00000000  00000000  00000000  00000000

 INPUT MENU NUMBER OF DESIRED LIST.
 6
INPUT SATELLITE IC.
ISEE-3
DC YOU WANT TO SEE A LIST OF LISTAL BLOCK TYPE CODES?(YES OR NO)
 LISTAL BLOCK TYPES:  01 FOR ALL BLOCKS.
                      02 FOR ENCY-ATTRIBUTE BLOCKS
                      03 FOR EDR BLOCKS
                      04 FOR LIBRARY BLOCKS
                      05 FOR WORK BLOCKS
                      06 FOR ENCYCLOPEDIA BLOCKS
                      07 FOR CIT-ENCY BLOCKS
INPUT LIST OF LISTAL BLOCK TYPES IN (I2,1X) FORMAT
 1  0  0  0  0  0  0  0  0  0

                 ENCY-ATTRIBUTE BLOCKS

 BLOCK  CREATION  VOL LEN  DOA ON  DOA OFF  VERSE     1ST   LAST  1ST   LAST  MNEM  1ST VOL LST VOL   TITLE
                  (SEC)    MASK    MASK     PRESENCE  WORK  WORK  ENCY  ENCY
     3  12/13/78    900     C3      03      FFFFFE00   197   509   201   510         56690  121058   IC.MASTER.ENCY

                 EDR CONTROL BLOCK

 BLOCK  CREATION  1ST EDR  LAST EDR  LAST MOD  1ST SLOT  LAST SLOT
     4  12/13/78       9       507       507     62180      62204

                 EDR BLOCKS

 BLOCK  CREATION  JPL SER   SLOT  RECEIVED  SLOT NO  @ LIB  NO. REC  NO. EDR  ENTRY  LAST ENTRY
                            STAT                                                    DISP PROCESS
     9  12/14/78  00224766  F0    10/ 1/78   62180    23     3923      0       1    E0   12/19/78
    10  12/15/78  00487BAA  F0    10/ 7/78   62181    24     3328      0       1    E0   12/19/78
    11  12/15/78  008844AA  F0    10/14/78   62182    25     3794      0       1    E0   12/19/78
    12  12/15/78  003267HH  F0    10/21/78   62183    31     3549      0       1    F0   1/15/79
    13  12/15/78  007698AA  F0    10/28/78   62184    32     3318      0       1    E0   1/15/79
    14  12/15/78  0X3068JJ  F0    10/30/78   62185    34     3641      0       2    E0   1/15/79
    15  12/15/78  0X6738JJ  F0    11/ 1/78   62186    38     3992      0       1    F0   1/15/79
    16  12/15/78  0Y0456AA  F0    11/ 2/78   62187    39     3774      0       1    E0   1/15/79
    17  12/15/78  0228560D  F0    11/16/78   62188    40     4307      0       1    E0   1/15/79
    18  12/15/78  0Y6203GG  F0    11/20/78   62189    50     4138      1       1    F1   1/17/79
    19  12/15/78  0Y7034DD  F0    11/28/78   62190    44     4293      0       1    F0   1/15/79
    20  12/15/78  FA6739II  F0    12/ 8/78   62191    45     4481      0       1    F0   1/16/79
    21  12/15/78  FA1006AA  F0    12/11/78   62192    51     4237      1       1    E1   1/17/79
    22  12/15/78  FA20JECE  F0    12/12/78   62193    52     4257      0       1    E0   1/17/79
    58   1/18/79  FA5669JJ  F0    1/ 4/79    62194    60     4322      0       1    F0   1/18/79
    59   1/18/79  FA6949KK  F0    1/ 8/79    62195    61     [illegible]      0       1    F0   1/18/79
    64   1/24/79  FA5181CC  F0    1/18/79    62196    69     3596      0       1    E0   1/25/79
    65   1/24/79  FA6303JJ  F0    1/18/79    62197    70     3891      0       1    F0   1/25/79
    66   1/24/79  F0260711  F0    1/18/79    62198    71     4308      0       1    F0   1/25/79
    67   1/24/79  F00441AA  F0    1/18/79    62199    72     4272      0       1    E0   1/25/79
```

68	1/24/7$	FD4513CC	F0	1/22/79	62200	73	4338	0	1	E0	1/25/79
79	2/ 6/7$	FC1274DB	F0	2/ 6/79	62201	80	4319	0	1	F0	2/ 6/79
83	2/ 9/7$	FC3781KK	F0	2/ 9/79	62202	85	70	0	1	F0	2/ 9/79
84	2/ 9/7$	FC3641BB	F0	2/ 9/79	62203	86	4359	0	1	F0	2/ 9/79
88	2/12/7$	DAY001XX	F0	2/12/79	62204	89	58	0	1	F0	2/14/79
98	2/26/7$	FD4506AA	F0	2/26/79	62180	100	4100	0	1	E0	2/27/79
99	2/26/7$	BD9S16EE	F0	2/26/79	62181	101	3490	0	1	E0	2/27/79
106	3/ 5/7$	FC5257HH	F0	3/ 5/79	62182	107	3962	0	1	F0	3/ 5/79
110	3/ 7/7$	RD9237HH	F0	3/ 7/79	62183	111	4320	0	1	E0	3/ 7/79
114	3/15/7$	BFA358HH	F0	3/15/79	62184	116	4329	0	1	E0	3/16/79
115	3/15/7$	BFA394KK	F0	3/15/79	62185	117	4331	0	1	E0	3/16/79
120	3/23/7$	FE0695BB	F0	3/23/79	62186	121	4131	0	1	E0	3/23/79
124	4/ 4/7$	FM4601GG	F0	4/ 3/79	62187	125	4233	0	1	E0	4/ 4/79
128	4/12/7$	FH5778GG	F0	4/12/79	62188	130	4331	0	1	F0	4/12/79
129	4/12/7$	FH5149JJ	F0	4/12/79	62189	131	4452	0	1	E0	4/12/79
135	5/ 1/7$	FH6709FF	F0	5/ 1/79	62190	136	4262	1	1	E1	5/ 1/79
140	5/14/7$	FJ2422CC	F0	5/10/79	62191	142	4432	0	1	E0	5/15/79
141	5/14/7$	FJ4202FF	F0	5/11/79	62192	143	4600	0	1	E0	5/15/79
146	5/18/7$	BE7C93HH	F0	5/18/79	62193	148	4393	0	1	F0	5/18/79
147	5/18/7$	RJ5335HH	F0	5/18/79	62194	149	4538	0	1	E0	5/18/79
153	5/29/7$	RG3494GG	F0	5/24/79	62195	134	4067	0	1	F0	5/29/79
157	6/ 6/7$	FJ8664CC	F0	6/ 1/79	62196	158	4380	0	1	F0	6/ 6/79
161	6/13/7$	RG6238BB	F0	6/ 9/79	62197	162	4556	0	1	E0	6/13/79
165	6/15/7$	FI1638HH	F0	6/ 9/79	62180	166	4547	0	1	E0	6/15/79
169	6/25/7$	RG9278DD	F0	6/25/79	62181	170	4585	0	1	E0	6/26/79
173	7/ 3/7$	FL0706BB	F0	6/29/79	62182	174	4651	0	1	E0	7/ 3/79
177	7/ 9/7$	RL1245AA	F0	7/ 9/79	62183	178	4725	0	1	E0	7/ 9/79
181	7/24/7$	FG9616KK	F0	7/24/79	62184	182	4688	0	1	E0	7/25/79
186	8/14/7$	FL9403II	F0	8/14/79	62185	189	4245	0	1	E0	8/14/79
187	8/14/7$	FN3368DD	F0	8/14/79	62186	190	4593	0	1	F0	8/14/79
188	8/14/7$	FN2737BB	F0	8/14/79	62187	191	4434	0	1	F0	8/14/79
294	10/ 1/7$	FN5360JJ	F0	10/ 1/79	62188	301	4320	0	1	E0	10/ 1/79
295	10/ 1/7$	FN9314BB	F0	10/ 1/79	62189	302	4693	0	1	E0	10/ 1/79
296	10/ 1/7$	RP0665EE	F0	10/ 1/79	62190	303	4425	0	1	E0	10/ 1/79
297	10/ 1/7$	FN0623JJ	F0	10/ 1/79	62191	304	4138	0	1	E0	10/ 1/79
298	10/ 1/7$	FP3593JJ	F0	10/ 1/79	62192	306	4197	0	1	E0	10/ 3/79
299	10/ 1/7$	RP2912II	F0	10/ 1/79	62193	307	1971	0	1	F0	10/ 3/79
300	10/ 1/7$	FP1456EE	F0	10/ 1/79	62194	312	3972	0	1	E0	10/10/79
311	10/ 8/7$	RP9826KK	F0	10/ 8/79	62195	0	0	96	4	00	0/ 0/ 0
320	10/30/7$	FP8364CC	F0	10/30/79	62196	323	4005	0	1	E0	11/15/79
321	10/30/7$	RS3022FF	F0	10/30/79	62197	324	4371	0	1	E0	11/15/79
322	10/30/7$	FS3419HH	F0	10/30/79	62198	327	4437	0	1	E0	11/16/79
330	11/17/7$	FK9283CC	F0	11/17/79	62199	334	4318	0	1	E0	11/17/79
331	11/17/7$	RS4639AA	F0	11/17/79	62200	335	4148	0	1	E0	11/17/79
332	11/17/7$	RM0426HH	F0	11/17/79	62201	336	4223	0	1	F0	11/17/79
333	11/17/7$	FU0707II	F0	11/17/79	62202	337	4433	0	1	E0	11/17/79
355	1/ 7/8$	FP2912II	F0	10/ 1/79	62180	361	4214	0	1	F0	1/ 7/80
376	1/ 9/8$	RU6134JJ	F0	11/30/79	62181	382	4423	0	1	E0	1/ 9/80
377	1/ 9/8$	FM5737HH	F0	12/ 8/79	62182	345	4249	0	1	F0	1/10/80
378	1/ 9/8$	RH5767GG	F0	12/ 8/79	62183	388	4249	0	1	E0	1/10/80
379	1/ 9/8$	FX0284DD	F0	12/20/79	62184	391	4411	0	1	E0	1/10/80
380	1/ 9/8$	FM4560II	F0	1/ 4/80	62185	394	4100	0	1	F0	1/11/80
381	1/ 9/8$	FH8955EE	F0	1/ 4/80	62186	397	3853	0	1	E0	1/11/80
400	1/11/8$	FX0183CC	F0	1/10/80	62187	402	4403	0	1	E0	1/11/80
401	1/11/8$	FN9148HH	F0	1/10/80	62188	406	4114	0	1	F0	1/11/80
409	2/ 1/8$	RX7E79CC	F0	1/24/80	62189	411	4066	0	1	E0	2/ 1/80
410	2/ 1/8$	FX3817GG	F0	2/ 1/80	62190	414	4370	0	1	E0	2/ 2/80
417	2/13/8$	FX8329CC	F0	2/11/80	62191	418	3790	0	1	E0	2/13/80
422	2/27/8$	FZ4347JJ	F0	2/27/80	62192	425	4216	0	1	F0	2/28/80
423	2/27/8$	FZ4939FF	F0	2/27/80	62193	426	3904	0	1	E0	2/28/80
424	2/27/8$	FZ3168JJ	F0	2/27/80	62194	427	3267	0	1	F0	2/29/80
430	4/15/8$	FZ4393II	F0	3/11/80	62195	434	4411	0	1	F0	4/15/80
431	4/15/8$	FT8838AA	F0	3/11/80	62196	435	3163	0	1	E0	4/15/80
432	4/15/8$	RW0218AA	F0	4/ 1/80	62197	436	3605	0	1	F0	4/15/80
433	4/15/8$	SB1772EE	F0	4/ 1/80	62198	438	3045	0	1	E0	4/16/80
443	4/17/8$	SH4806JJ	F0	4/17/80	62199	445	3501	0	1	E0	4/17/80
447	4/22/8$	SB7610HH	F0	4/17/80	62200	450	4052	0	1	E0	4/23/80
448	4/22/8$	RW7075HH	F0	4/21/80	62201	453	4269	0	1	F0	4/24/80
449	4/22/8$	SB9223II	F0	4/21/80	62202	454	3551	0	1	F0	4/24/80
457	5/ 7/8$	SB1066AA	F0	5/ 7/80	62203	458	3993	0	1	F0	5/ 7/80
462	5/12/8$	SB3010AA	F0	5/12/80	62204	463	4005	0	1	E0	5/12/80
466	5/15/8$	SB5300DD	E0	5/12/80	62180	469	4001	0	1	F0	5/21/80
467	5/20/8$	FY7219JJ	E0	5/20/80	62181	471	4256	0	1	E0	5/27/80
474	6/13/8$	FY9213AA	E0	6/12/80	62182	477	4373	0	1	F0	6/13/80
475	6/12/8$	SA2627CC	E0	6/12/80	62183	480	4325	0	1	F0	6/16/80
476	6/12/8$	SA1713AA	E0	6/12/80	62184	483	4362	0	1	E0	6/18/80
486	6/24/8$	SF0584AA	E0	6/24/80	62185	488	4554	0	1	F0	6/24/80
487	6/24/8$	SF2270AA	E0	6/24/80	62186	491	3955	0	1	E0	6/26/80
494	7/ 2/8$	SF4330JJ	E0	7/ 2/80	62187	496	3768	0	1	E0	7/ 2/80
495	7/ 2/8$	SF7663GG	E0	7/ 2/80	62188	500	3962	0	2	F0	7/12/80
503	7/12/8$	SC1416JJ	E0	7/11/80	62189	504	3651	(50)	1	E1	7/12/80

507 7/26/80 SF525911 E0 7/26/80 62190 508 3579 0 1 E0 7/26/80

3 LIBRARY CONTROL

BLOCK	CREATION	a) 1ST LIB	b) LST LIB	LST MOD	c) 1ST SER	d) LST SER	e) 1ST SLT	f) LST SLT	g) SEC. MGT	h) SEQ	i) FEET
5	12/13/78	23	508	0	1	50	62205	62254	18	5	1357

j) MODEL CSN IG. k) MOD VCL IGL000

4) LIBRARY BLOCK

a) BLOCK	b) CREATION	c) START TIME YR	DAY	SECONDS	d) END TIME YR	DAY	SECONDS	e) SER	f) SEQ	g) EOR	h) PROCESSING NO	i) DISP	j) CATE	ATTR	k) WORK
23	12/19/78	78	224	54707	78	232	6314	1	1	9	1	E0	9/10/79	3	197
24	12/19/78	78	232	6501	78	238	79251	1	2	10	1	E0	9/10/79	3	198
25	12/19/78	78	238	78502	78	246	4316	1	3	11	1	E0	9/10/79	3	199
31	1/15/79	78	246	4331	78	252	85808	1	4	12	1	E0	9/11/79	3	200
32	1/15/79	78	253	1520	78	260	3717	1	5	13	1	E0	9/11/79	3	203
34	1/15/79	78	260	6	78	267	39009	1	6	14	1	E0	9/11/79	3	207
38	1/16/79	78	267	3367	78	274	148	2	1	15	1	E0	11/20/79	3	354
39	1/15/79	78	274	167	78	280	82989	2	2	16	1	E0	9/17/79	3	210
40	1/18/79	78	881	843	78	888	4134	2	3	17	1	E0	9/18/79	3	212
44	1/16/79	78	288	4156	78	295	3310	2	4	19	1	E0	9/18/79	3	213
45	1/16/79	78	302	1600	78	309	2391	2	5	20	1	E0	9/18/79	3	216
50	1/17/79	78	295	3313	78	302	1984	2	6	18	2	E0	9/18/79	3	218
51	1/17/79	78	309	16754	78	316	2542	3	1	21	1	E0	9/18/79	3	219
52	1/17/79	78	316	2650	78	323	2930	3	2	22	1	E0	9/18/79	3	220
60	1/18/79	78	323	2617	78	330	1466	3	3	58	1	E0	9/18/79	3	221
61	1/18/79	78	330	1515	78	337	6110	3	4	59	1	E0	9/19/79	3	227
69	1/25/79	78	225	30765	78	252	77636	3	5	64	1	E0	9/19/79	3	228
70	1/25/79	78	253	3112	78	267	3367	4	1	65	1	E0	9/19/79	3	229
71	1/25/79	78	337	6128	78	343	83535	4	2	66	1	E0	9/19/79	3	230
72	1/25/79	78	344	73	78	351	7139	4	3	67	1	E0	9/19/79	3	231
73	1/25/79	78	351	7157	78	358	2416	4	4	68	1	E0	9/20/79	3	237
80	2/ 6/79	78	358	2450	78	365	6172	4	5	79	1	E0	9/20/79	3	238
85	2/ 9/79	78	295	176598	78	295	26265	4	6	83	1	E0	9/20/79	3	239
86	2/ 9/79	78	365	5673	79	6	82912	4	7	84	1	E0	9/21/79	3	243
89	2/14/79	78	365	0	79	1	72223	4	8	88	1	E0	9/21/79	3	244
100	2/27/79	79	7	6776	79	14	67933	5	1	98	2	E0	11/27/79	3	345
101	2/27/79	79	14	35047	79	21	63971	5	2	99	1	E0	9/24/79	3	247
107	3/ 5/79	79	21	64031	79	28	59161	5	3	106	1	E0	9/24/79	3	248
111	3/ 7/79	79	28	5558	79	35	57501	5	4	110	1	E0	9/24/79	3	249
116	3/16/79	79	35	57631	79	42	29681	5	5	114	1	E0	9/24/79	3	250
117	3/16/79	79	42	32611	79	49	62901	5	6	115	1	E0	9/25/79	3	251
121	3/23/79	79	49	62661	79	55	80715	6	1	120	1	E0	9/25/79	3	252
125	4/ 4/79	79	56	29671	79	63	62571	6	2	124	1	E0	9/25/79	3	253
130	4/12/79	79	63	62601	79	70	39081	6	3	128	2	E0	11/28/79	3	347
131	4/12/79	79	70	40731	79	77	49491	6	4	129	1	E0	9/25/79	3	254
136	5/ 1/79	79	77	49561	79	84	41981	6	5	135	1	E0	9/25/79	3	255
142	5/15/79	79	91	12461	79	98	44911	7	1	140	1	E0	9/25/79	3	256
143	5/15/79	79	98	45001	79	105	47921	7	2	141	1	E0	9/26/79	3	257
148	5/18/79	79	84	42001	79	91	12111	7	3	146	1	E0	9/26/79	3	258
149	5/18/79	79	105	47951	79	112	18281	7	4	147	1	E0	9/26/79	3	259
154	5/29/79	79	112	19111	79	119	46881	7	5	153	1	E0	9/26/79	3	260
168	6/ 6/79	79	119	47191	79	126	8511	8	1	157	1	E0	9/26/79	3	261
162	6/13/79	79	126	4131	79	133	35091	8	2	161	1	E0	9/26/79	3	262
166	6/15/79	79	133	38191	79	140	45441	8	3	165	2	E0	11/28/79	3	348
170	6/26/79	79	140	5351	79	147	87621	8	4	169	1	E0	9/26/79	3	263
174	7/ 3/79	79	147	78151	79	154	6151	8	5	173	1	E0	9/26/79	3	264
178	7/ 9/79	79	154	11131	79	161	29441	9	1	177	1	E0	9/27/79	3	265
182	7/24/79	79	161	30521	79	168	40281	9	2	181	1	E0	9/27/79	3	266
189	8/14/79	79	168	44031	79	175	26431	9	3	186	1	E0	9/27/79	3	267
190	8/14/79	79	182	33571	79	189	2021	9	4	187	1	E0	9/27/79	3	268
191	8/14/79	79	189	1531	79	196	16981	9	5	188	1	E0	9/27/79	3	269
301	10/ 1/79	79	175	26481	79	182	13273	10	1	294	1	E0	10/ 3/79	3	305
302	10/ 1/79	79	196	17581	79	203	43951	10	2	295	1	E0	10/ 3/79	3	306
303	10/ 1/79	79	203	44021	79	210	47441	10	3	296	1	E0	10/ 4/79	3	308
304	10/ 1/79	79	210	47471	79	217	9721	10	4	297	1	E0	10/ 4/79	3	308
306	10/ 3/79	79	217	11821	79	224	9481	10	5	298	2	E0	12/20/79	3	354
307	10/ 3/79	79	224	9001	79	227	30410	11	1	299	3	FA	0/ 0/ 0	3	0
312	10/10/79	79	231	17841	79	238	8461	11	2	300	3	E0	1/ 3/80	3	355
323	11/15/79	79	245	27331	79	252	28021	11	3	320	3	E0	1/ 3/80	3	355
324	11/15/79	79	252	28051	79	259	8781	11	4	321	3	E0	1/ 4/80	3	356
327	11/16/79	79	259	5051	79	266	56551	11	5	322	3	E0	1/ 4/80	3	356
334	11/17/79	79	266	66401	79	273	19901	11	6	330	3	E0	1/ 4/80	3	356
335	11/17/79	79	273	20381	79	280	2931	12	1	331	3	E0	1/ 4/80	3	357
336	11/17/79	79	279	82393	79	286	84607	12	2	332	3	E0	1/ 7/80	3	360

337	11/17/79	79	287	884	79	294	389	12	3	333	3	E0	1/ 4/80	3	357	
361	1/ 7/80	79	224	600	79	231	1777	12	4	369	1	E0	1/ 7/80	3	362	
382	1/ 9/80	79	294	353	79	301	3353	12	5	376	1	E0	1/ 9/80	3	383	
385	1/10/80	79	301	3359	79	308	3173	13	1	377	1	E0	1/10/80	3	386	
388	1/10/80	79	308	3180	79	315	2633	13	2	378	1	E0	1/10/80	3	389	
391	1/10/80	79	315	2636	79	322	4834	13	3	379	1	E0	1/10/80	3	392	
394	1/11/80	79	322	4844	79	329	6472	13	4	380	1	E0	1/11/80	3	395	
397	1/11/80	79	329	6474	79	336	2506	13	5	381	1	E0	1/11/80	3	398	
402	1/11/80	79	238	649	79	245	3497	14	1	400	1	E0	1/11/80	3	403	
406	1/11/80	79	336	2176	79	343	1919	14	2	401	1	E0	1/11/80	3	407	
411	2/ 1/80	79	343	1929	79	350	357	14	3	409	1	E0	2/ 1/80	3	412	
414	2/ 2/80	79	350	360	79	357	299	14	4	410	1	F0	2/ 2/80	3	415	
418	2/13/80	79	357	303	79	364	1260	14	5	417	1	E0	2/13/80	3	419	
425	2/28/80	80	6	2700	80	13	5819	14	6	422	1	E0	2/29/80	3	428	
426	2/28/80	80	13	6337	80	20	1864	15	1	423	1	E0	3/ 8/80	3	429	
427	2/28/80	80	20	1667	80	26	85945	15	2	424	1	E0	2/29/80	3	428	
434	4/15/80	79	364	1270	80	6	2694	15	3	430	1	E0	4/16/80	3	437	
435	4/15/80	80	27	15601	80	34	3030	15	4	431	1	E0	4/16/80	3	437	
436	4/15/80	80	34	1689	80	41	3524	15	5	432	1	E0	4/16/80	3	439	
438	4/16/80	80	41	3551	80	48	5391	15	6	433	1	E0	4/16/80	3	439	
445	4/17/80	80	48	5354	80	55	950	15	7	443	3	E0	5/20/80	3	486	
450	4/23/80	80	55	554	80	62	2586	16	1	447	1	E0	4/23/80	3	491	
453	4/24/80	80	62	2667	80	69	3624	16	2	448	1	E0	4/28/80	3	455	
454	4/24/80	80	69	3626	80	75	12470	16	3	449	1	E0	4/28/80	3	455	
458	5/ 7/80	80	76	4260	80	83	1731	16	4	457	2	E0	5/ 8/80	3	460	
463	5/12/80	80	83	4673	80	89	77759	16	5	462	1	E0	5/12/80	3	464	
469	5/21/80	80	90	2940	80	97	4864	16	6	466	1	E0	5/27/80	3	472	
471	5/27/80	80	97	4665	80	104	5391	17	1	467	1	E0	5/27/80	3	472	
477	6/13/80	80	104	5355	80	110	86393	17	2	474	1	E0	6/13/80	3	478	
480	6/16/80	80	111	65	80	118	1929	17	3	475	1	E0	6/16/80	3	481	
483	6/18/80	80	118	1921	80	125	2999	17	4	476	1	E0	6/18/80	3	484	
488	6/24/80	80	125	3004	80	132	1427	17	5	486	1	E0	6/24/80	3	489	
491	6/26/80	80	132	1431	80	138	58559	18	1	487	1	E0	6/27/80	3	492	
496	7/ 2/80	80	139	2036	80	146	7196	18	2	494	1	E0	7/ 3/80	3	497	
500	7/12/80	80	146	7199	80	153	5165	18	3	495	1	E0	7/12/80	3	501	
504	7/12/80	80	153	5171	80	160	1098	18	4	503	1	E0	7/12/80	3	505	
508	7/26/80	80	160	713	80	167	1109	18	5	507	1	E0	7/26/80	3	509	

5

WORK CONTROL

BLOCK	CREATION	a) 1ST WRK	b) LST WRK	c) 1ST SER	d) LST SER	e) 1ST SLT	f) LST SLT	g) MODEL DSN	h) MCD VOL	i) SER WRT
6	12/13/78	197	509	1	100	62255	62279	IC.WORK.ENCY	ICW000	86

WORK BLOCK

a) BLOCK	CREATION	ATTR	b) PREV	c) NEXT	NO IN LIST	d) START RECORD	START TIME YEAR	DAY	HR	MIN	e) END RECORD	END TIME YEAR	DAY	HR	MIN	f) MERGE DISP	ENCY	g) CIT DISP	CITENCY	h) SER
197	9/10/79	3	0	198 23	1	56690	78	226	12	15	57223	78	232	1	30	E0	0	80	0	1
198	9/10/79	3	197	199 24	1	57223	78	232	1	30	57880	78	238	21	45	E0	0	80	0	2
199	9/10/79	3	198	200 25	1	57880	78	238	21	45	58565	78	246	1	0	E0	0	80	0	3
200	9/11/79	3	199	205 31	1	58565	78	246	1	0	59232	78	252	23	45	E0	0	80	0	4
205	9/11/79	3	200	207 32	1	59234	78	253	0	15	59909	78	260	1	0	E0	0	80	0	5
207	9/11/79	3	205	209 34	1	59905	78	260	0	0	60581	78	267	1	0	E0	0	80	0	6
209	9/17/79	3	207	210 36	1	60581	78	267	1	0	60729	78	268	14	0	00	0	00	0	7
210	9/17/79	3	209	212 39	1	61249	78	274	0	0	61917	78	280	23	0	E0	0	80	0	8
212	9/18/79	3	210	213 40	1	61921	78	281	0	0	62597	78	288	1	0	E0	0	80	0	9
213	9/18/79	3	212	216 44	1	62597	78	288	1	0	63268	78	295	0	45	E0	0	80	0	10
216	9/18/79	3	213	218 45	1	63938	78	302	0	15	64611	78	309	0	30	E0	0	80	0	11
218	9/18/79	3	216	219 50	1	63268	78	295	0	45	63939	78	302	0	30	E0	0	80	0	12
219	9/18/79	3	218	220 51	1	64627	78	309	4	30	65283	78	316	0	30	F0	0	80	0	13
220	9/18/79	3	219	221 52	1	65283	78	316	0	30	65956	78	323	0	45	E0	0	80	0	14

221	9/18/79	3	220	227	1	65956	78	323	0:45	66626	78	330	0:15	E0	0	80	0	15
227	9/19/79	3	221	228	1	66626	78	330	0:15	67303	78	337	1:30	E0	0	80	0	16
228	9/19/79	3	227	229	1	66704	78	226	15:45	59323	78	252	21:30	E0	0	80	0	17
229	9/19/79	3	228	230	1	59236	78	253	0:45	60563	78	266	20:30	E0	0	80	0	18
230	9/19/79	3	229	231	1	67304	78	337	1:45	67965	78	343	23: 0	E0	0	80	0	19
231	9/19/79	3	230	237	1	67969	78	344	0: 0	68648	78	351	1:45	E0	0	80	0	20
237	9/20/79	3	231	238	1	68649	78	351	2: 0	69315	78	358	0:30	E0	0	80	0	21
238	9/20/79	3	237	239	1	69315	78	358	0:30	69991	78	365	1:30	E0	0	80	0	22
239	9/20/79	3	238	243	1	63284	78	295	4:45	63294	78	295	7:15	E0	0	80	0	23
243	9/21/79	3	239	244	1	69991	78	365	1:30	70653	79	6	23: 0	E0	0	80	0	24
244	9/21/79	3	243	247	1	70081	78	366	0: 0	70088	78	366	1:45	E0	0	80	0	25
247	9/24/79	3	244	248	1	71367	79	14	9:30	72008	79	21	1:45	E0	0	80	0	26
248	9/24/79	3	247	249	1	72008	79	21	1:45	72679	79	28	1:30	E0	0	80	0	27
249	9/24/79	3	248	250	1	72679	79	28	1:30	73351	79	35	1:30	E0	0	80	0	28
250	9/24/79	3	249	251	1	73351	79	35	1:30	74020	79	42	0:45	E0	0	80	0	29
251	9/25/79	3	250	252	1	74020	79	42	0:45	74695	79	49	1:30	E0	0	80	0	30
252	9/25/79	3	251	253	1	74696	79	49	1:45	75349	79	55	21: 0	E0	0	80	0	31
253	9/25/79	3	252	254	1	75364	79	56	0:45	76039	79	63	1:30	E0	0	80	0	32
254	9/25/79	3	253	255	1	76709	79	70	1: 0	77382	79	77	1:15	E0	0	80	0	33
255	9/25/79	3	254	256	1	77382	79	77	1:15	78053	79	84	1: 0	E0	0	80	0	34
256	9/25/79	3	255	257	1	78722	79	91	0:15	79397	79	98	1: 0	E0	0	80	0	35
257	9/26/79	3	256	258	1	79398	79	98	1:15	80070	79	105	1:15	E0	0	80	0	36
258	9/26/79	3	257	259	1	78053	79	84	1: 0	78722	79	91	0:15	E0	0	80	0	37
259	9/26/79	3	258	260	1	80070	79	105	1:15	80738	79	112	0:15	E0	0	80	0	38
260	9/26/79	3	259	261	1	80739	79	112	0:30	81414	79	119	1:15	E0	0	80	0	39
261	9/26/79	3	260	262	1	81414	79	119	1:15	82081	79	126	0: 0	E0	0	80	0	40
262	9/26/79	3	261	263	1	82081	79	126	0: 0	82756	79	133	0:45	E0	0	80	0	41
263	9/26/79	3	262	264	1	83426	79	140	0:15	84106	79	147	2:15	E0	0	80	0	42
264	9/26/79	3	263	265	1	84105	79	147	2: 0	84769	79	154	0: 0	E0	0	80	0	43
265	9/26/79	3	264	266	1	84770	79	154	0:15	85444	79	161	0:45	E0	0	80	0	44
266	9/27/79	3	265	267	1	85444	79	161	0:45	86117	79	168	1: 0	E0	0	80	0	45
267	9/27/79	3	266	268	1	86117	79	168	1: 0	86787	79	175	0:30	E0	0	80	0	46
268	9/27/79	3	267	269	1	87459	79	182	0:30	88129	79	189	0: 0	E0	0	80	0	47
269	9/27/79	3	268	305	1	88129	79	189	0: 0	88802	79	196	0:15	E0	0	80	0	48
305	10/ 3/79	3	269	308	2	88788	79	175	0:45	89477	79	203	1: 0	E0	0	80	0	49
308	10/ 4/79	3	305	354	2	89477	79	203	1: 0	90817	79	217	0: 0	E0	0	80	0	50
354	12/20/79	3	308	355	2	60581	78	267	1: 0	92833	79	238	0: 0	E0	0	80	0	51
355	1/ 3/80	3	354	356	2	92163	79	231	0:30	94180	79	252	0:45	E0	0	80	0	52
356	1/ 4/80	3	355	357	2	94180	79	252	0:45	96195	79	273	0:30	E0	0	80	0	53
357	1/ 4/80	3	356	360	2	96195	79	273	0:30	98209	79	294	0: 0	E0	0	80	0	54

360	1/ 7/80	3	357	362	1	96865	79	280	0: 0	97535	79	286	23:30	E0	0	80	0	55
362	1/ 7/80	3	360	363	1	91490	79	224	0:15	92162	79	231	0:15	E0	0	80	0	56
383	1/ 9/80	3	362	386	1	98209	79	294	0: 0	98884	79	301	0:45	E0	0	80	0	57
386	1/10/80	3	383	389	1	98884	79	301	0:45	99556	79	308	0:45	E0	0	80	0	58
389	1/10/80	3	386	392	1	99556	79	308	0:45	100227	79	315	0:30	E0	0	80	0	59
392	1/10/80	3	389	395	1	100227	79	315	0:30	100902	79	322	1:15	E0	0	80	0	60
395	1/11/80	3	392	398	1	100902	79	322	1:15	101576	79	329	1:45	E0	0	80	0	61
398	1/11/80	3	395	403	1	101576	79	329	1:45	102243	79	336	0:30	E0	0	80	0	62
403	1/11/80	3	398	407	1	92834	79	238	0:15	93508	79	245	0:45	E0	0	80	0	63
407	1/11/80	3	403	412	1	102244	79	336	0:45	102915	79	343	0:30	E0	0	80	0	64
412	1/ 1/80	3	407	415	1	102915	79	343	0:30	103585	79	350	0: 0	E0	0	80	0	65
415	1/ 2/80	3	412	419	1	103585	79	350	0: 0	104257	79	357	01 0	E0	0	80	0	66
419	1/12/80	3	415	428	1	104257	79	357	01 0	104930	79	364	0:15	E0	0	80	0	67
428	1/29/80	3	419	429	2	105604	80	6	0:45	107616	80	26	23:45	E0	0	80	0	68
429	1/ 8/80	3	428	437	1	106279	80	13	1:30	106946	80	20	0:15	E0	0	80	0	69
437	1/16/80	3	429	439	2	104930	79	364	0:15	108292	80	34	0:45	E0	0	80	0	70
439	1/16/80	3	437	451	2	108290	80	34	0:15	109638	80	48	1:15	E0	0	80	0	71
451	1/23/80	3	439	455	1	110306	80	55	0:15	110979	80	62	0:30	E0	0	80	0	72
455	1/28/80	3	451	460	2	110980	80	62	0:45	112238	80	75	3:15	E0	0	80	0	73
460	2/ 8/80	3	455	464	1	112325	80	76	1: 0	112994	80	83	0:15	E0	0	80	0	74
464	2/12/80	3	460	468	1	112957	80	83	1: 0	113655	80	89	21:30	E0	0	80	0	75
468	2/20/80	3	464	472	1	109639	80	48	1:30	110305	80	55	0: 0	E0	0	80	0	76
472	2/27/80	3	468	478	2	113668	80	90	0:45	115014	80	104	1:15	E0	0	80	0	77
478	3/ 3/80	3	472	481	1	115015	80	104	1:30	115680	80	110	23:45	E0	0	80	0	78
481	3/16/80	3	478	484	1	115681	80	111	0: 0	116355	80	118	0:30	E0	0	80	0	79
484	3/18/80	3	481	489	1	116355	80	118	0:30	117028	80	125	0:45	E0	0	80	0	80
489	3/24/80	3	484	492	1	117028	80	125	0:45	117698	80	132	0:15	E0	0	80	0	81
492	3/27/80	3	489	497	1	117698	80	132	0:15	118329	80	138	14: 0	E0	0	80	0	82
497	4/ 2/80	3	492	501	1	118371	80	139	0:30	119048	80	146	1:45	E0	0	80	0	83
501	4/12/80	3	497	505	1	119049	80	146	2: 0	119718	80	153	1:15	E0	0	80	0	84
505	4/12/80	3	501	509	1	119718	80	153	1:15	120386	80	160	0:15	E0	0	80	0	85
509	4/26/80	3	505	0	1	120385	80	160	0: 0	121058	80	167	0:15	E0	0	80	0	86

ENCYCLOPEDIA CONTROL

BLOCK	CREATION	a) 1ST ENC	b) LST ENC	c) 1ST SER	d) LST SER	e) 1ST SLT	f) LST SLT	g) MOD LAB	h) LST SER	i) MAX BLKS
7	12/13/78	201	510	1	136	61680	61729	ICE000	107	5000

j) MODEL DSN
IC.MASTER.ENCY

ENCYCLOPEDIA BLOCKS

a) BLOCK	CREATION	ATTR	b) PREV	c) NEXT	d) START VOLUME	e) START TIME YEAR DAY HR MIN	f) END VOLUME	g) END TIME YEAR DAY HR MIN	h) SER	i) BLOCKS	j) STATUS	k) FREE SLOT

201	9/11/79	3	0	202	66690	78	226	12:15	57223	78	232	1:30	1	276	01	0
202	9/11/79	3	201	203	66690	78	226	12:15	57880	78	238	21:45	2	590	01	0
203	9/11/79	3	202	204	66690	78	226	12:15	58565	78	246	1: 0	3	949	01	0
204	9/11/79	3	203	205	66690	78	226	12:15	59232	78	252	23:45	4	1305	01	0
206	9/11/79	3	204	208	66690	78	226	12:15	59909	78	260	1: 0	5	1629	01	0
208	9/11/79	3	206	211	66690	78	226	12:15	60581	78	267	1: 0	6	1995	01	0
211	9/17/79	3	208	214	66690	78	226	12:15	61917	78	280	23: 0	7	2397	01	0
214	9/18/79	3	211	215	66690	78	226	12:15	62597	78	288	1: 0	8	2836	01	0
215	9/18/79	3	214	222	66690	78	226	12:15	63268	78	295	0:45	9	3254	01	0
222	9/18/79	3	215	223	66690	78	226	12:15	64611	78	309	0:30	10	3687	01	0
223	9/19/79	3	222	224	66690	78	226	12:15	64611	78	309	0:30	11	4088	01	0
224	9/19/79	3	223	225	64627	78	309	4:30	65283	78	316	0:30	12	449	01	0
225	9/19/79	3	224	226	64627	78	309	4:30	65956	78	323	0:45	13	893	01	0
226	9/19/79	3	225	232	64627	78	309	4:30	66626	78	330	0:15	14	1316	01	0
232	9/20/79	3	226	233	64627	78	309	4:30	67303	78	337	1:30	15	1743	01	0
233	9/20/79	3	232	234	66690	78	226	12:15	64611	78	309	0:30	16	4305	01	0
234	9/20/79	3	233	235	66690	78	226	12:15	64611	78	309	0:30	17	4497	01	0
235	9/20/79	3	234	236	64627	78	309	4:30	67965	78	343	23: 0	18	2155	01	0
236	9/20/79	3	235	240	64627	78	309	4:30	68648	78	351	1:45	19	2630	01	0
240	9/20/79	3	236	241	64627	78	309	4:30	69315	78	358	0:30	20	3049	01	0
241	9/20/79	3	240	242	64627	78	309	4:30	69991	78	365	1:30	21	3463	01	0
242	9/20/79	3	241	245	66690	78	226	12:15	64611	78	309	0:30	22	4497	01	61680
245	9/21/79	3	242	246	64627	78	309	4:30	70663	79	6	23: 0	23	3886	01	0
246	9/21/79	3	245	270	64627	78	309	4:30	70653	79	6	23: 0	24	3893	01	61681
270	9/27/79	3	246	271	71367	79	14	9:30	72008	79	21	1:45	25	338	01	0
271	9/27/79	3	270	272	71367	79	14	9:30	72679	79	28	1:30	26	731	01	0
272	9/27/79	3	271	273	71367	79	14	9:30	73351	79	35	1:30	27	1152	01	0
273	9/27/79	3	272	274	71367	79	14	9:30	74020	79	42	0:45	28	1565	01	0
274	9/27/79	3	273	275	71367	79	14	9:30	74695	79	49	1:30	29	1987	01	0
275	9/27/79	3	274	276	71367	79	14	9:30	75349	79	55	21: 0	30	2454	01	0
276	9/27/79	3	275	277	71367	79	14	9:30	76039	79	63	1:30	31	2879	01	0
277	9/27/79	3	276	278	71367	79	14	9:30	77382	79	77	1:15	32	3372	01	0
278	9/27/79	3	277	279	71367	79	14	9:30	78063	79	84	1: 0	33	3788	01	0
279	9/27/79	3	278	280	78722	79	91	0:15	79397	79	98	1: 0	34	494	01	0
280	9/27/79	3	279	281	78722	79	91	0:15	80070	79	105	1:15	35	926	01	0
281	9/28/79	3	280	282	71367	79	14	9:30	79835	79	102	14:30	36	5000	01	61682
282	9/28/79	3	281	283	79836	79	102	14:45	80070	79	105	1:15	37	154	01	0
283	9/28/79	3	282	284	79836	79	102	14:45	80738	79	112	0:15	38	579	01	0
284	9/28/79	3	283	285	79836	79	102	14:45	81414	79	119	1:15	39	999	01	0
285	9/28/79	3	284	286	79836	79	102	14:45	82081	79	126	0: 0	40	1414	01	0
286	9/28/79	3	285	287	79836	79	102	14:45	82756	79	133	0:45	41	1853	01	0
287	9/28/79	3	286	288	79836	79	102	14:45	84106	79	147	2:15	42	2280	01	0
288	9/28/79	3	287	289	79836	79	102	14:45	84769	79	154	0: 0	43	2763	01	0
289	9/28/79	3	288	290	79836	79	102	14:45	85444	79	161	0:45	44	3304	01	0
290	9/28/79	3	289	291	79836	79	102	14:45	86117	79	168	1: 0	45	3783	01	0
291	9/28/79	3	290	292	79836	79	102	14:45	86787	79	175	0:30	46	4188	01	61683
292	9/28/79	3	291	293	67459	79	182	0:30	88129	79	189	0: 0	47	483	01	0
293	9/28/79	3	292	309	67459	79	182	0:30	88802	79	196	0:15	48	980	01	0
309	10/ 8/79	3	293	310	66788	79	175	0:45	89477	79	203	1: 0	49	1812	01	0
310	10/ 8/79	3	309	317	66788	79	175	0:45	90817	79	217	0: 0	50	2630	01	61684
317	10/19/79	3	310	318	66788	79	175	0:45	91489	79	224	0: 0	51	3039	01	61685
318	10/23/79	3	317	326	66788	79	175	0:45	92833	79	238	0: 0	52	3764	01	61686
326	11/16/79	3	318	329	63508	79	245	0:45	94849	79	259	0: 0	53	808	01	61687
329	11/17/79	3	326	341	63508	79	245	0:45	95527	79	266	1:30	54	1425	01	61688
341	11/27/79	3	329	342	63508	79	245	0:45	96195	79	273	0:30	55	1906	01	61689
342	11/27/79	3	341	343	63508	79	245	0:45	96865	79	280	0: 0	56	2286	01	61690
343	11/27/79	3	342	346	63508	79	245	0:45	97535	79	286	23:30	57	2675	01	61691
346	11/27/79	3	343	349	63508	79	245	0:45	98209	79	294	0: 0	58	3082	01	61692
349	11/28/79	3	346	350	70663	79	7	1:30	71336	79	14	1:45	59	400	01	61693
350	11/28/79	3	349	351	71367	79	14	9:30	79126	79	95	5:15	60	5000	01	61694
351	11/28/79	3	350	352	19127	79	95	5:30	79835	79	102	14:30	61	489	01	61695
352	11/28/79	3	351	363	79836	79	102	14:45	86787	79	175	0:30	62	4619	01	61696
363	12 8/80	3	352	364	66690	78	226	12:15	64609	78	309	0: 0	63	5000	00	0
364	12 8/80	3	363	365	64610	78	309	0:15	72626	79	27	12:15	64	5000	00	0
365	12 8/80	3	364	366	72627	79	27	12:30	80161	79	106	0: 0	65	5000	00	0
366	12 8/80	3	365	367	60162	79	106	0:15	87757	79	185	3: 0	66	5000	00	0
367	12 8/80	3	366	368	67758	79	185	3:15	92833	79	238	0: 0	67	3167	01	61701
368	12 8/80	3	367	369	67758	79	185	3:15	96077	79	271	19: 0	68	5000	01	61702
369	12 8/80	3	368	370	66078	79	271	19:15	98209	79	294	0: 0	69	1249	01	61703
370	12 8/80	3	369	371	67758	79	185	3:15	96077	79	271	19: 0	70	5000	01	61704
371	12 8/80	3	370	372	66078	79	271	19:15	98209	79	294	0: 0	71	1249	01	61705
372	12 8/80	3	371	373	66078	79	271	19:15	98209	79	294	0: 0	72	1249	01	61706
373	12 8/80	3	372	374	66078	79	271	19:15	98209	79	294	0: 0	73	1249	01	61707
374	12 8/80	3	373	375	67758	79	185	3:15	95755	79	268	10:30	74	5000	01	61708
375	12 8/80	3	374	384	65756	79	268	10:45	96077	79	271	19: 0	75	215	00	0
384	12 9/80	3	375	387	66078	79	271	19:15	98864	79	301	0:45	76	1647	01	61710
387	12/10/80	3	384	390	66078	79	271	19:15	99556	79	308	0:45	77	2036	01	61711
390	12/10/80	3	387	393	66078	79	271	19:15	100227	79	315	0:30	78	2453	01	61712
393	12/10/80	3	390	396	66078	79	271	19:15	100902	79	322	1:15	79	2903	01	61713

396	1/11/80	3	393	395	56078	79	271	19:15	101576	79	329	1:45	80	3285	01	61714
399	1/11/80	3	396	404	56078	79	271	19:15	102243	79	336	0:30	81	3634	01	61715
404	1/11/80	3	399	405	57758	79	185	3:15	95210	79	262	18:15	82	5000	00	0
405	1/11/80	3	404	408	55211	79	262	18:30	95755	79	268	10:30	83	486	00	0
408	1/11/80	3	405	413	56078	79	271	19:15	102915	79	343	0:30	84	4008	01	61718
413	2/ 2/80	3	408	416	56078	79	271	19:15	103585	79	350	0: 0	85	4387	01	61719
416	2/ 2/80	3	413	420	56078	79	271	19:15	104257	79	357	0: 0	86	4792	01	61720
420	2/13/80	3	416	421	56078	79	271	19:15	104701	79	361	15: 0	87	5000	00	0
421	2/13/80	3	420	440	104702	79	361	15:15	104930	79	364	0:15	88	139	01	61722
440	4/17/80	3	421	441	104702	79	361	15:15	107616	80	26	23:45	89	854	01	61723
441	4/17/80	3	440	442	104702	79	361	15:15	107616	80	26	23:45	90	1215	01	61724
442	4/17/80	3	441	444	104702	79	361	15:15	108292	80	34	0:45	91	1945	01	61725
444	4/17/80	3	442	452	104702	79	361	15:15	109638	80	48	1:15	92	2620	01	61726
452	4/23/80	3	444	456	104702	79	361	15:15	110979	80	62	0:30	93	3003	01	61727
456	4/29/80	3	452	461	104702	79	361	15:15	112238	80	75	3:15	94	3747	01	61728
461	5/ 8/80	3	456	465	104702	79	361	15:15	112994	80	83	0:15	95	4125	01	0
465	5/14/80	3	461	470	112997	80	83	1: 0	113655	80	89	21:30	96	384	01	0
470	5/21/80	3	465	473	104702	79	361	15:15	112994	80	83	0:15	97	4466	00	0
473	5/27/80	3	470	479	112997	80	83	1: 0	115014	80	104	1:15	98	1268	01	0
479	6/13/80	3	473	482	112997	80	83	1: 0	115680	80	110	23:45	99	1689	01	0
482	6/16/80	3	479	485	112997	80	83	1: 0	116355	80	118	0:30	100	2106	01	0
485	6/18/80	3	482	490	112997	80	83	1: 0	117028	80	125	0:45	101	2513	01	0
490	6/25/80	3	485	493	112997	80	83	1: 0	117698	80	132	0:15	102	2949	01	0
493	6/27/80	3	490	498	112997	80	83	1: 0	118329	80	138	14: 0	103	3319	01	0
498	7/ 3/80	3	493	502	112997	80	83	1: 0	119048	80	146	1:45	104	3680	01	0
502	7/12/80	3	498	506	112997	80	83	1: 0	119718	80	153	1:15	105	4062	01	0
506	7/12/80	3	502	510	112997	80	83	1: 0	120386	80	160	0:15	106	4415	01	0
510	7/26/80	3	506	0	112997	80	83	1: 0	121058	80	167	0:15	107	4759	00	0

CITENCY CCNTROL

BLOCK	CREATION	1ST CIT	LST CIT	1ST SER	LST SER	1ST SLT	LST SLT	MOD LAB	LST SER	MAX FT
0	0/ 0/ 0	0	0	0	0	0	0		0	0

MODEL CSN	FULL FLG
	0

INPUT MENU NUMBER OF DESIRED LIST.

```
IEF142I - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SEICC.PROCESS.LOAD                               KEPT        DDNAME=STEPLIB          0 EXCPS
IEF285I   VOL SER NOS= DISK06.
IEF285I   SYS80208.T120336.RV000.SEICCLST.S0000002         SYSIN       DDNAME=FT05F001         3 EXCPS
IEF285I   VOL SER NOS= SCR000.
IEF285I   SYS80208.T120336.RV000.SEICCLST.S0000002         DELETED     DDNAME=FT05F001         3 EXCPS
IEF285I   VOL SER NOS= SCR000.
IEF285I   SYS80208.T120336.SV000.SEICCLST.R0000001         SYSOUT      DDNAME=FT10F001         0 EXCPS
IEF285I   VOL SER NOS= SCR001.
IEF285I   SEICC.LOG.DATA                                   KEPT        DDNAME=FT25F001        21 EXCPS
IEF285I   VOL SER NOS= DISK16.
IEF373I STEP /        / START 80208.1203
IEF374I STEP /        / STOP  80208.1204 CPU    0MIN 01.30SEC MAIN 100K LCS    0K
                                                    STEP TIME =        .06 MINS=(CPU=       .02,IO=      .04)
- STEP 01 -        RETURN CODE = 000C           IO IN SECS. DISK=    2.88,DRUM=      .00,TAPE=      .00,CELL=     .00,OTHR=     .08
- SURCHARGES=(DRIVES ALLOC=000,TAPE MOUNTS=000,CORE=000,PAPER=000,PRIORITY=00000)SECS.   TOTAL STP TIME=      .06 MINS.
  // EXEC NOTIFYTS                                                     00000220
    XXDEFAULT  PROC MODE=,USRID=,MSG=,LSERID=,ID=  *LAR/21JUN79        00000010
    XXNOTIFYTS EXEC PGM=NOTIFYTS,REGION=20K,COND=EVEN,                 00000020
    XX          PARM='&MODE.&USRID&LSERID&ID.&MSG'                     00000030
    IEF653I SUBSTITUTION JCL - PARM=',,'
    XXSYSABEND DD SYSOUT=A,SPACE=(CYL,(0,5))                           00000040
IEF236I ALLOC. FOR SEICCLST NOTIFYTS
IEF237I 4E0   ALLOCATED TO SYSABEND
IEF142I - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SYS80208.T120336.SV000.SEICCLST.R0000003         DELETED     DDNAME=SYSABEND         0 EXCPS
IEF285I   VOL SER NOS= SCR000.
IEF373I STEP /NOTIFYTS/ START 80208.1204
IEF374I STEP /NOTIFYTS/ STOP  80208.1204 CPU    0MIN 00.02SEC MAIN    8K LCS    0K
                                                    STEP TIME =        .00 MINS=(CPU=       .00,IO=      .00)
- STEP 02 -        RETURN CODE = 000C           IO IN SECS. DISK=     .12,DRUM=      .00,TAPE=      .00,CELL=     .00,OTHR=     .06
- SURCHARGES=(DRIVES ALLOC=000,TAPE MOUNTS=000,CORE=000,PAPER=000,PRIORITY=00000)SECS.   TOTAL STP TIME=00000.00 MINS.
IEF375I  JOB /SEICCLST/ START 80208.1203
IEF376I  JOB /SEICCLST/ STOP  80208.1204 CPU    0MIN 01.32SEC                TIME=12.04.02.90 DATE=07-26-80
-   SYSTEM=EL21.RF (10-15-78) M2                       TOTAL TIME =       .07 MINS=(CPU=       .02,IO=      .05)
- JOB 0114-
```

2.4 LISTING THE ISEE-3 DATA PROCESSING LOG

There are two ways of listing the data processing log for this experiment. The first was discussed in SECTION 1.3 of this guide. That is submitting a background job via TSO. (i.e. SUB LIB.CNTL(~~LISTALL~~log)) The second is the TSO foreground CLIST which is useful when only a small portion of the LOG is to be outputed. The following graphics show (all)? possible options available to the user/programmer and secondly some of the cases where the foreground version of this program is useful. The program itself is self documenting and prompts the user for responses as it executes. This is known as interactive execution and it is initiated by typing the command LOGLIST under USRID=~~SEICC~~SPHIC. Figure 2.4.1 shows the procedure for initiating and executing some of the options. The user entered responses are in lower case. The user may terminate this program by entering a /* after the prompt of ENTER MENU NUMBER OF DESIRED LIST.

foreground execution at terminal = loglist

SUBCK log submits background loglist

Figure 2.4.1 - Foreground Loglist Options

```
bt91
ready to ibm
logon seicc/iicc
#SEICC LOGON IN PROGRESS AT 18:55:30 ON OCTOBER 2, 1980
****TIME LIMIT ON THE 75 IS 15 MINS****
ONLY THREE  JOBS PER USER ID IN SYS AT ONE TIME
THE TIME LIMIT FOR THE 91 IS 3 MIN. 10 MIN. CLASS N (500K)
****THE 360/75 WAS COLD STARTED AT 1830 HRS,2 OCT 1980**ALL JOBS AND OUTPUT LOST****
--14 TOTAL TSO USERS ON 360/91 M2
ATTR FB LRECL(80) BL(7280) IS SET UP
TODAY IS THU OCT 02,1980.
READY
loglist
DID YOU NAME A DSN FOR OUTLI? (YES/NO)
no
DO YOU WANT TO SEE THE LIST MENU? (YES/NO)
yes
MENU NO.     NAME       DESCRIPTION
   01        SHWEDR     DISPLAYS EDR TAPES MARKED FOR REMOVAL
   02        SHWCIT     DISPLAYS CIT TAPES MARKED FOR REMOVAL
   03        REMSLT     # TAPE SERIALS REMAINING IN SOME CONTROLS
   04        BAKLOG     BACK LOG ON A GIVEN PROCESS
   05        INCOMP     INCOMPLETE PROCESSES
   06        LISTAL     LISTALL BY BLOCKS
   07        DMPLOG     HEX DUMP OF THE LOG
ENTER MESSAGE FOR HARD COPY
seicc.log.data loglist demonstration.


 INPUT MENU NUMBER OF DESIRED LIST.
01
INPUT SATELLITE ID.
isee-3
     PLEASE REMOVE SD5300DD FROM SLOT  62180
     PLEASE REMOVE RY7219JJ FROM SLOT  62181
     PLEASE REMOVE RY9212AA FROM SLOT  62182
     PLEASE REMOVE SA2627CC FROM SLOT  62183
     PLEASE REMOVE SA1713AA FROM SLOT  62184
     PLEASE REMOVE SF6984AA FROM SLOT  62185
     PLEASE REMOVE SF2270AA FROM SLOT  62186
     PLEASE REMOVE SF4330JJ FROM SLOT  62187
     PLEASE REMOVE SF7853GG FROM SLOT  62188
     PLEASE REMOVE SC1416JJ FROM SLOT  62189
     PLEASE REMOVE SF5259II FROM SLOT  62190
     PLEASE REMOVE SF3243BB FROM SLOT  62191
     PLEASE REMOVE SC2741AA FROM SLOT  62192
     PLEASE REMOVE SJ2312FF FROM SLOT  62193
     PLEASE REMOVE SJ1153II FROM SLOT  62194
     PLEASE REMOVE SC9437DD FROM SLOT  62195
     PLEASE REMOVE SJ1250GG FROM SLOT  62196
     PLEASE REMOVE SJ3974BB FROM SLOT  62197
     PLEASE REMOVE SJ6472II FROM SLOT  62198
     PLEASE REMOVE SL0482DD FROM SLOT  62199


 INPUT MENU NUMBER OF DESIRED LIST.
```

OR aa15

Figure 2.4.1 (Cont'd)

```
04
INPUT SATELLITE ID.
isee-3
WOULD YOU LIKE TO SEE A LIST OF BACKLOG TYPE CODES? (YES OR NO)
yes
 BACKLOG TYPE:  03 FOR EDR PROCESSING
                04 FOR ENCYCLOPEDIA GEN. PROCESSING
                05 FOR MERGE AND CITENCY PROCESSING
                01 FOR ALL OF THE ABOVE
 INPUT BACKLOG TYPE.
01


  EDR BACKLOG

  BLOCK   JPL VOL   SLOT   SLOT     RECEIVED
                    STAT


  ENCYCLOPEDIA GEN. BACKLOG

  BLOCK      START TIME          END TIME          EDR    ATTR
         YR  DAY  SECONDS    YR  DAY  SECONDS
DO YOU WANT THE CIT DISPOSITION CHECKED? T OR F
f


  MERGE AND CITENCY BACKLOG

  BLOCK    ATTR   ST. RECORD   END RECORD   MERGE   CIT
                                            DISP   DISP


 INPUT MENU NUMBER OF DESIRED LIST.
06
INPUT SATELLITE ID.
isee-3
DO YOU WANT TO SEE A LIST OF LISTAL BLOCK TYPE CODES?(YES OR NO)
yes
 LISTAL BLOCK TYPES:  01 FOR ALL BLOCKS.
                      02 FOR ENCY-ATTRIBUTE BLOCKS
                      03 FOR EDR BLOCKS
                      04 FOR LIBRARY BLOCKS
                      05 FOR WORK BLOCKS
                      06 FOR ENCYCLOPEDIA BLOCKS
                      07 FOR CIT-ENCY BLOCKS
INPUT LIST OF LISTAL BLOCK TYPES IN (I2,1X) FORMAT
06

                  ENCYCLOPEDIA CONTROL

  BLOCK   CREATION   1ST ENC   LST ENC   1ST SER   LST SER   1ST SLT   LST SLT   MOD LAB   LST SER   MAX BLKS
    7     12/13/78     201       549        1       136      61680     61729     ICE000     117       5000

  MODEL DSN
  IC.MASTER.ENCY


DO YOU WANT ONLY ACTIVE ENCY BLOCKS? T OR F?
```

Figure 2.4.1 (Cont'd)

t

ENCYCLOPEDIA BLOCKS

BLOCK	CREATION	ATTR	PREV	NEXT	START VOLUME	START TIME YEAR	DAY	HR	MIN	END VOLUME	END TIME YEAR	DAY	HR	MIN	SER	BLOCKS	STATUS	FREE SLOT
363	1/ 8/80	3	352	364	56690	78	226	12	15	64609	78	309	0	0	63	5000	00	0
364	1/ 8/80	3	363	365	64610	78	309	0	15	72626	79	27	12	15	64	5000	00	0
365	1/ 8/80	3	364	366	72627	79	27	12	30	80161	79	106	0	0	65	5000	00	0
366	1/ 8/80	3	365	367	80162	79	106	0	15	87757	79	185	3	0	66	5000	00	0
375	1/ 8/80	3	374	384	95756	79	268	10	45	96077	79	271	19	0	75	215	00	0
404	1/11/80	3	399	405	87758	79	185	3	15	95210	79	262	18	15	82	5000	00	0
405	1/11/80	3	404	408	95211	79	262	18	30	95755	79	268	10	30	83	486	00	0
420	2/13/80	3	416	421	96078	79	271	19	15	104701	79	361	15	0	87	5000	00	0
470	5/21/80	3	465	473	104702	79	361	15	15	112994	80	83	0	15	97	4466	00	0
519	8/ 1/80	3	515	520	112997	80	83	1	0	121546	80	172	2	15	109	5000	00	0
520	8/ 1/80	3	519	524	121547	80	172	2	30	121658	80	173	6	15	110	53	00	0
549	9/20/80	3	545	0	121731	80	174	0	30	127105	80	230	0	0	117	2835	00	0

```
 INPUT MENU NUMBER OF DESIRED LIST.
03
INPUT SATELLITE ID.
isee-3
```

CONTROL	REM SER	1ST SER	LST SER	LAST USED SER	FIRST SLOT	LAST SLOT
LIBRARY	30	1	50	20	62205	62254
WORK	5	1	100	95	62255	62279
CITENCY	0	0	0	0	0	0

```
 INPUT MENU NUMBER OF DESIRED LIST.
/*
OUTPUT TO FT11F001 ON *
READY
```

2.5 DESCRIPTION AND PREPARATION OF THE EDR TAPES

Each ISEE-3 cosmic ray experiment EDR tape contains 1 week of data. Each week of data is defined by IPD as a GROUP. Each GROUP contains from between 80 and 110 files of data. The tapes are NL 1600 B.P.I. each file separated by a single tapemark. The actual data format of an EDR may be found in Appendix B of the ISEE-3 Data Reduction Programmers Guide.

The EDR tapes are shipped via GSFC transportation to the chief experimenter for the cosmic ray experiment (Dr. Tycho von Rosenvinge). He in turn delivers the tape to the responsible data technician for processing through the data reduction system.

The following steps explain the procedure for preparing an EDR tape for processing:

1) Remove the tape receipt from the outside of the shipping box. Save it for use later in this procedure. Figure 2.5.1 is a typical tape receipt.
2) Remove the tape and the shipping letter from the box. Trash the box. Figure 2.5.2 is a typical shipping letter.
3) Compare the tape inventory control number on the tape receipt with the one on the face of the tape volume. Compare the Decom run number with the GROUP number on the shipping letter. If equal, file the tape receipt in the ISEE-3 'Tape Receipt' notebook. If not equal, you may have been shipped the wrong tape, so consult the cognizant programmer.
4) A tab is then placed on the shipping letter containing the GROUP no. and six characters of the seven character volume no. This is done for easy reference to the EDR in the production processing binders.

Figure 2.5.1 - Typical Tape Receipt

NASA

E STAGING & STORAGE FACILITY
MATION PROCESSING DIVISION
NA GODDARD SPACE FLIGHT CENTER
GREENBELT ROAD
GREENBELT, MARYLAND 20771

IE33 X33 VCNFTAP
DR. TYCHO VCN RCSERVANCE
CODE 661
BLDG. 2, RM. 23
GSFC

TOTAL TAPES IN THIS SHIPMENT 1		DATE SHIPPED 7/22/80	
TAPE INVENTORY CONTROL NUMBER	DECOM RUN NUMBER/ SCENE IDENTIFICATION	TAPE INVENTORY CONTROL NUMBER	DECOM RUN NUMBER/ SCENE IDENTIFICATION
SF 5259 T	R0004621		

Please verify that the tape(s) described above have been received, then sign and date copy number 3 and return it in the accompanying pre-addressed penalty envelope. Copy number 2 may be retained for your records. A complete explanation of any shipping problems should accompany copy number 3 when returned.

DATE RECEIVED	SIGNATURE
BOX NUMBER 160403	COPY 3 RECEIPT

GSFC 22-58 (2/78)

Figure 2.5.2 - Typical Shipping Letter

ISEE-C SHIPPING GROUP ~~0098~~

R	MO	DY	START HR	START MN	STOP HR	STOP MN	KEY	EXP 22 T	EXP 22 F	EXP 23 T	EXP 23 F	EXP 24 T	EXP 24 F	EXP 25 T	EXP 25 F	EXP 26 T	EXP 26 F	EXP 27 T	EXP 27 F	EXP 28 T	EXP 28 F	EXP 29 T	EXP 29 F	EXP 3 T	EXP 3 F	EXP 31 T	EXP 31 F	EXP 32 T	EXP 32 F	EXP 33 T	EXP 33 F	EXP 34 T	EXP 34 F
.	06	08	00	11	02	09	8016000120101	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0
0	06	08	02	09	04	9	8016002100101	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	0	0
0	06	08	04	09	06	09	8016004100101	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	0	0
0	06	08	06	09	07	38	8016006100101	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	0	0
0	06	08	07	22	07	41	8016007220101	1	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5	0	0
0	06	08	07	41	09	35	8016007410101	1	6	1	6	1	6	1	6	1	6	1	6	1	6	1	6	1	6	1	6	1	6	1	6	0	0
	06	08	09	35	11	39	8016009350101	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	0	0
0	06	08	11	40	13	05	8016011390101	1	8	1	8	1	8	1	8	1	8	1	8	1	8	1	8	1	8	1	8	1	8	1	8	0	0
	06	08	12	59	14	29	8016013000101	1	9	1	9	1	9	1	9	1	9	1	9	1	9	1	9	1	9	1	9	1	9	1	9	0	0
0	06	08	14	29	15	59	8016014300101	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	0	0
.	06	08	15	52	19	58	8 16015530101	1	11	1	11	1	11	1	11	1	11	1	11	1	11	1	11	1	11	1	11	1	11	1	11	0	0
0	06	08	19	58	22	31	8016019580101	1	12	1	12	1	12	1	12	1	12	1	12	1	12	1	12	1	12	1	12	1	12	1	12	0	0
0	06	08	22	24	22	54	8 16022240101	1	13	1	13	1	13	1	13	1	13	1	13	1	13	1	13	1	13	1	13	1	13	1	13	0	0
0	06	08	23	13	23	57	8016023160101	1	14	1	14	1	14	1	14	1	14	1	14	1	14	1	14	1	14	1	14	1	14	1	14	0	0
0	06	09	00	10	01	29	8016100110101	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	0	0
0	06	09	02	25	04	26	8016102260101	1	16	1	16	1	16	1	16	1	16	1	16	1	16	1	16	1	16	1	16	1	16	1	16	0	0
0	06	09	04	26	06	27	8016104270101	1	17	1	17	1	17	1	17	1	17	1	17	1	17	1	17	1	17	1	17	1	17	1	17	0	0
	06	09	06	27	07	28	8016106270101	1	18	1	18	1	18	1	18	1	18	1	18	1	18	1	18	1	18	1	18	1	18	1	18	0	0
0	06	09	07	29	09	45	8016107350101	1	19	1	19	1	19	1	19	1	19	1	19	1	19	1	19	1	19	1	19	1	19	1	19	0	0
	06	09	09	50	11	51	8016109500101	1	20	1	20	1	20	1	20	1	20	1	20	1	20	1	20	1	20	1	20	1	20	1	20	0	0
0	06	09	11	51	13	56	8016111520101	1	21	1	21	1	21	1	21	1	21	1	21	1	21	1	21	1	21	1	21	1	21	1	21	0	0
	06	09	13	01	14	19	8016113010101	1	22	1	22	1	22	1	22	1	22	1	22	1	22	1	22	1	22	1	22	1	22	1	22	0	0
		09	14	19	15	22	8016114200101	1	23	1	23	1	23	1	23	1	23	1	23	1	23	1	23	1	23	1	23	1	23	1	23	0	0
		09	15	55	17	57	8 16115560101	1	24	1	24	1	24	1	24	1	24	1	24	1	24	1	24	2	1	1	24	1	24	1	24	0	0
		09	17	56	19	25	8016117560101	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25	2	2	1	25	1	25	1	25		0
0	06	09	19	3	20	35	8016119300101	1	26	1	26	1	26	1	26	1	26	1	26	1	26	1	26	2	3	1	26	1	26	1	26	0	0
	06	09	21	31	23	32	8016121320101	1	27	1	27	1	27	1	27	1	27	1	27	1	27	1	27	2	4	1	27	1	27	1	27		0
0	06	09	23	32	01	09	8 16123320101	1	28	1	28	1	28	1	28	1	28	1	28	1	28	1	28	2	5	1	28	1	28	1	28	0	0
0	06	10	01	09	03	11	8016201090101	1	29	1	29	1	29	1	29	1	29	1	29	1	29	1	29	2	6	1	29	1	29	1	29	0	0
0	06	10	03	34	05	35	8016203350101	1	30	1	30	1	30	1	30	1	30	1	30	1	30	1	30	2	7	1	30	1	30	1	30	0	0
0	06	10	05	35	07	41	8016205360101	1	31	1	31	1	31	1	31	1	31	1	31	1	31	1	31	2	8	1	31	1	31	1	31	0	0
0	06	10	18	40	19	02	8016218400101	1	32	1	32	1	32	1	32	1	32	1	32	1	32	1	32	2	9	1	32	1	32	1	32	0	0
	06	10	22	07	00	22	8016222070101		3	1	33	1	33	1	33	1	33	1	33	1	33	1	33	2	10	1	33	1	33	1	33	0	0
0	06	11	00	22	02	22	8016300220101	1	34	1	34	1	34	1	34	1	34	1	34	1	34	1	34	2	11	1	34	1	34	1	34	0	0
0	06	11	02	06	04	14	8016302060101	1	35	1	35	1	35	1	35	1	35	1	35	1	35	1	35	2	12	1	35	1	35	1	35	0	0
0	06	11	04	15	06	07	8016302050101	1	36	1	36	1	36	1	36	1	36	1	36	1	36	1	36	2	13	1	36	1	36	1	36	0	0
0	6	11	06	09	06	11	8 16306090101	1	37	1	37	1	37	1	37	1	37	1	37	1	37	1	37	2	14	1	37	1	37	1	37	0	0

a) TP: 96 for reference

b) 7/24/80 input date received

not done X c) BIK: 507 assigned by EDRLOG

d) Vol: SF5259II input volume #

not done X e) SLot: 62190 assigned by EDRLOG

f) # of files: 097 input to EDR

SA77
SF5259

Figure 2.5.2 (Cont'd)

ISEE-C SHIPPING GROUP 0096

R	MO	DY	START HR	START MN	STOP HR	STOP MN	-----KEY-----	EXP 22 T	EXP 22 F	EXP 23 T	EXP 23 F	EXP 24 T	EXP 24 F	EXP 25 T	EXP 25 F	EXP 26 T	EXP 26 F	EXP 27 T	EXP 27 F	EXP 28 T	EXP 28 F	EXP 29 T	EXP 29 F	EXP 30 T	EXP 30 F	EXP 31 T	EXP 31 F	EXP 32 T	EXP 32 F	EXP 33 T	EXP 33 F	EXP 34 T	EXP 34 F
1	00	11	06	11	07	08	8C16306110101	1	38	1	38	1	38	1	38	1	38	1	38	1	38	1	38	2	15	1	38	1	38	1	38	0	0
0	00	11	07	04	07	42	8C16307040101	1	39	1	39	1	39	1	39	1	39	1	39	1	39	1	39	2	16	1	39	1	39	1	39	0	0
	00	11	13	03	13	56	8C16313050101	1	40	1	40	1	40	1	40	1	40	1	40	1	40	1	40	2	17	1	40	1	40	1	40	0	0
0	0	11	13	41	16	01	8C16313540101	1	41	1	41	1	41	1	41	1	41	1	41	1	41	1	41	2	18	1	41	1	41	1	41	0	0
0	00	11	16	02	18	08	8C16316020101	1	42	1	42	1	42	1	42	1	42	1	42	1	42	1	42	2	19	1	42	1	42	1	42	0	0
	00	11	18	00	20	02	8C16318010101	1	43	1	43	1	43	1	43	1	43	1	43	1	43	1	43	2	20	1	43	1	43	1	43	0	0
0	00	11	20	02	21	37	8 16320020101	1	44	1	44	1	44	1	44	1	44	1	44	1	44	1	44	2	21	1	44	1	44	1	44	0	0
0	00	11	21	37	22	04	8C16321370101	1	45	1	45	1	45	1	45	1	45	1	45	1	45	1	45	2	22	1	45	1	45	1	45	0	0
0	00	11	21	58	22	34	8C16321580101	1	46	1	46	1	46	1	46	1	46	1	46	1	46	1	46	2	23	1	46	1	46	1	46	0	0
0	00	11	22	34	23	04	8C16322350101	1	47	1	47	1	47	1	47	1	47	1	47	1	47	1	47	2	24	1	47	1	47	1	47	0	0
0	00	11	22	58	00	05	8C16322590101	1	48	1	48	1	48	1	48	1	48	1	48	1	48	1	48	2	25	1	48	1	48	1	48	0	0
	00	12	00	16	02	00	8C16400160101	1	49	1	49	1	49	1	49	1	49	1	49	1	49	1	49	2	26	1	49	1	49	1	49	0	0
0	00	12	02	00	03	33	8C16402000101	1	50	1	50	1	50	1	50	1	50	1	50	1	50	1	50	3	1	1	50	1	50	1	50	0	0
	00	12	03	34	03	42	8C16403340101	1	51	1	51	1	51	1	51	1	51	1	51	1	51	1	51	3	2	1	51	1	51	1	51	0	0
0	00	12	03	36	04	27	8C16403360101	1	52	1	52	1	52	1	52	1	52	1	52	1	52	1	52	3	3	1	52	1	52	1	52	0	0
	00	12	04	27	05	06	8C16403780101	1	53	1	53	1	53	1	53	1	53	1	53	1	53	1	53	3	4	1	53	1	53	1	53	0	0
0	00	12	05	04	05	30	8C16405040101	1	54	1	54	1	54	1	54	1	54	1	54	1	54	1	54	3	5	1	54	1	54	1	54	0	0
0	00	12	05	31	05	59	8C16405300101	1	55	1	55	1	55	1	55	1	55	1	55	1	55	1	55	3	6	1	55	1	55	1	55	0	0
1	00	12	0	41	05	58	8C16405430101	1	56	1	56	1	56	1	56	1	56	1	56	1	56	1	56	3	7	1	56	1	56	1	56	0	0
0	00	12	05	58	06	37	8 16405580101	1	57	1	57	1	57	1	57	1	57	1	57	1	57	1	57	3	8	1	57	1	57	1	57	0	0
	00	12	06	37	07	42	8C16406380101	1	58	1	58	1	58	1	58	1	58	1	58	1	58	1	58	3	9	1	58	1	58	1	58	0	0
0	00	12	15	18	15	26	8C16415180101	1	59	1	59	1	59	1	59	1	59	1	59	1	59	1	59	3	10	1	59	1	59	1	59	0	0
		12	15	31	16	10	8C16415310101	1	60	1	60	1	60	1	60	1	60	1	60	1	60	1	60	3	11	1	60	1	60	1	60	0	0
		12	16	33	17	03	8C16416330101	1	61	1	61	1	61	1	61	1	61	1	61	1	61	1	61	3	12	1	61	1	61	1	61	0	0
		12	17	53	18	19	8 16417530101	1	62	1	62	1	62	1	62	1	62	1	62	1	62	1	62	3	13	1	62	1	62	1	62	0	0
0	00	12	18	05	18	21	8C16418050101	1	63	1	63	1	63	1	63	1	63	1	63	1	63	1	63	3	14	1	63	1	63	1	63	0	0
0	00	12	19	04	19	24	8C16419040101	1	64	1	64	1	64	1	64	1	64	1	64	1	64	1	64	3	15	1	64	1	64	1	64	0	0
0	00	12	19	16	21	29	8C16419200101	1	65	1	65	1	65	1	65	1	65	1	65	1	65	1	65	3	16	1	65	1	65	1	65	0	0
1	00	12	21	37	23	01	8 16421370101	1	66	1	66	1	66	1	66	1	66	1	66	1	66	1	66	3	17	1	66	1	66	1	66	0	0
0	00	12	23	31	01	31	8C16423310101	1	67	1	67	1	67	1	67	1	67	1	67	1	67	1	67	3	18	1	67	1	67	1	67	0	0
0	00	13	01	31	02	33	8C16531310101	1	68	1	68	1	68	1	68	1	68	1	68	1	68	1	68	3	19	1	68	1	68	1	68	0	0
0	00	13	02	33	03	45	8C16502330101	1	69	1	69	1	69	1	69	1	69	1	69	1	69	1	69	3	20	1	69	1	69	1	69	0	0
0	00	13	03	37	03	54	8C16503390101	1	70	1	70	1	70	1	70	1	70	1	70	1	70	1	70	3	21	1	70	1	70	1	70	0	0
0	00	13	03	53	04	33	8C16503530101	1	71	1	71	1	71	1	71	1	71	1	71	1	71	1	71	3	22	1	71	1	71	1	71	0	0
0	00	13	04	31	04	44	8C16504430101	1	72	1	72	1	72	1	72	1	72	1	72	1	72	1	72	3	23	1	72	1	72	1	72	0	0
0	00	13	04	57	05	59	8C16504570101	1	73	1	73	1	73	1	73	1	73	1	73	1	73	1	73	3	24	1	73	1	73	1	73	0	0
0	00	13	05	52	07	43	8C16505530101	1	74	1	74	1	74	1	74	1	74	1	74	1	74	1	74	3	25	1	74	1	74	1	74	0	0

Figure 2.5.2 (Cont'd)

ISEE-C SHIPPING GROUP 00[96]

	START		STOP			EXP 22		EXP 23		EXP 24		EXP 25		EXP 26		EXP 27		EXP 28		EXP 29		EXP 30		EXP 31		EXP 32		EXP 33		EXP 34	
R	MO DY	HR M.	HR MN		-----KEY-----	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
)	06 13	13 04	14 14		8016513050101	1	75	1	75	1	75	1	75	1	75	1	75	1	75	1	75	3	26	1	75	1	75	1	75	0	0
)	06 13	14 14	15 26		8016514150101	1	76	1	76	1	76	1	76	1	76	1	76	1	76	1	76	3	27	1	76	1	76	1	76	0	0
)	06 13	15 20	15 54		8016515200101	1	77	1	77	1	77	1	77	1	77	1	77	1	77	1	77	3	28	1	77	1	77	1	77	0	0
)	06 13	16 36	17 32		8016516360101	1	78	1	78	1	78	1	78	1	78	1	78	1	78	1	78	3	29	1	78	1	78	1	78	0	0
)	06 13	17 32	19 08		8016517320101	1	79	1	79	1	79	1	79	1	79	1	79	1	79	1	79	3	30	1	79	1	79	1	79	0	0
)	06 13	19 08	20 00		8016519080101	1	80	1	80	1	80	1	80	1	80	1	80	1	80	1	80	3	31	1	80	1	80	1	80	0	0
)	06 13	20 00	22 01		8016520000101	1	81	1	81	1	81	1	81	1	81	1	81	1	81	1	81	3	32	1	81	1	81	1	81	0	0
)	06 13	22 01	23 59		8016522010101	1	82	1	82	1	82	1	82	1	82	1	82	1	82	1	82	3	33	1	82	1	82	1	82	0	0
)	06 13	23 59	02 19		8016523590101	1	83	1	83	1	83	1	83	1	83	1	83	1	83	1	83	3	34	1	83	1	83	1	83	0	0
)	06 14	02 13	03 54		8016602140101	1	84	1	84	1	84	1	84	1	84	1	84	1	84	1	84	3	35	1	84	1	84	1	84	0	0
)	06 14	03 54	05 26		8016603540101	1	85	1	85	1	85	1	85	1	85	1	85	1	85	1	85	3	36	1	85	1	85	1	85	0	0
)	06 14	05 20	06 51		8016605200101	1	86	1	86	1	86	1	86	1	86	1	86	1	86	1	86	3	37	1	86	1	86	1	86	0	0
	06 14	06 51	07 05		8016606520101	1	87	1	87	1	87	1	87	1	87	1	87	1	87	1	87	3	38	1	87	1	87	1	87	0	0
)	06 14	07 08	07 15		8016607080101	1	88	1	88	1	88	1	88	1	88	1	88	1	88	1	88	3	39	1	88	1	88	1	88	0	0
)	06 14	07 17	07 46		8016607170101	1	89	1	89	1	89	1	89	1	89	1	89	1	89	1	89	3	40	1	89	1	89	1	89	0	0
)	06 14	13 05	14 21		8016613050101	1	90	1	90	1	90	1	90	1	90	1	90	1	90	1	90	4	1	1	90	1	90	1	90	0	0
	06 14	14 21	15 27		8016614220101	1	91	1	91	1	91	1	91	1	91	1	91	1	91	1	91	4	2	1	91	1	91	1	91	0	0
)	06 14	15 21	15 32		8016615210101	1	92	1	92	1	92	1	92	1	92	1	92	1	92	1	92	4	3	1	92	1	92	1	92	0	0
	06 14	16 16	17 24		8016616190101	1	93	1	93	1	93	1	93	1	93	1	93	1	93	1	93	4	4	1	93	2	1	1	93	0	0
)	06 14	17 23	17 40		8016617230101	1	94	1	94	1	94	1	94	1	94	1	94	1	94	1	94	4	5	1	94	2	2	1	94	0	0
)	06 14	17 41	19 57		8016617190101	1	95	2	1	1	95	1	95	1	95	1	95	1	95	1	95	4	6	1	95	2	3	1	95	0	0
	06 14	20 01	21 58		8016620010101	1	96	2	2	1	96	1	96	1	96	1	96	1	96	1	96	4	7	1	96	2	4	1	96	0	0
	06 14	21 58	00 13		8016621570101	1	97	2	3	1	97	1	97	1	97	1	97	1	97	1	97	4	8	1	97	2	5	1	97	0	0

TOTAL NO. OF FILES = 97

PLEASE ACKNOWLEDGE RECEIPT OF THE ABOVE BY RETURNING SIGNED CARD FORM TO:
APE STAGING AND STORAGE
CODE 564
GODDARD SPACE FLIGHT CENTER
GREENBELT, MARYLAND 20771

EXP 22 - ANDERSON
EXP 23 - BAME
EXP 24 - HYNDS
EXP 25 - HECKMAN
EXP 26 - MCESTADT
EXP 27 - MEYER
EXP 28 - OGILVIE
EXP 29 - STEINBERG
EXP 30 - SCARF
EXP 31 - SMITH
EXP 32 - STONE
EXP 33 - VON ROSENVINGE
EXP 34 - (SPARE)

pp. 96
7/26/80
X Blk: 507
Vol: SFS259II
X Slot. 62190
# of fls. 097

5) Next write the following information on the first and last page of the shipping letter.
   a) GROUP NO. - from top of shipping letter
   b) Date you received the tape
   c) BLOCK - leave blank until the block is assigned by EDRLOG
   d) VOL - the seven digit volume from the face of the EDR plus the repeat last character; eight digits in all
   e) SLOT - leave blank until the slot is assigned by EDRLOG. This is the location in the Bldg. 1 tape library where the tape is hung prior to processing.
   f) No. of files - obtained from the last page of of the shipping letter and is input to EDRLOG.
6) Execute the EDRLOG foreground program via TSO on the SACC 360/91. Figure 2.5.3 is a typical EDRLOG session. The shipping letter notes are used as input. A listing of the actual CLIST appears in Figure 2.5.4 at the end of sub-section 2.5.
7) Remove the tape from the canister and place a standard tape strap on it.
8) Place the small sticker on the side of the canister on the tape strap.
9) Place the TLS number assigned by EDRLOG in the place provided on the tape strap. Do not glue it on simply slide it in. It should stay on. These TLS stickers are reused over and over.
10) Take the tape to Bldg. 1 computer room and hang it in the TLS slot.

The EDR tape is now ready to be processed through the data reduction system. ~~However, due to the time restriction of three minutes per background job, the steps in the next section of this guide are executed after 16:00 hours or 4:00 PM.~~

Figure 2.5.3 - Cosmic Ray EDRLOG Proc.

```
-invalid-sw-chars
 bt91 <-
-ready to ibm
-logon seicc/iicc   <-
 #SEICC LOGON IN PROGRESS AT 11:24:48 ON JULY 26, 1980
-THE 75 WILL HAVE ONLY 120K AVAILABLE FOR THE REST OF THE DAY,,,,,,,,,
-3 JOBS ONLY PER USER ID ALLOWED IN SYSTEM
 THE TIME LIMIT FOR THE 91 IS 15 MIN TOTAL TIME.....................
-NEW ABENDAID RELEASE ON 360/91, REPORT PROBS TO PAC
-DISK00 restored 7/25 @13:30 from tape made 7/25 @01:00
 --05 TOTAL TSO USERS ON 360/91 M2
-ATTR FB LRECL(80) BL(7280) IS SET UP
-TODAY IS SAT JUL 26,1980.
-READY
-
-omron s   <-
 SEICC.LIB.CLIST being concatenated
-READY
-edrlog   <-

-INPUT SATELLITE ID
-XXXXXXXXXXX
 isee-3   <-
-ISEE-3
-ENTER 8 CHAR TAPE ID.   TO TERMINATE, ENTER /*.
 XXXXXXXX
-sf5259ii     <-
-ENTER NUMBER OF FILES ON EDR (I3)
 097   <-
-ENTER DATE TAPE WAS RECEIVED;  YEAR, MONTH AND DAY
-XX XX XX
 80 07 26   <-
-BLOCK   507 HAS BEEN ALLOCATED TO VOL-SER SF5259 IN TLS SLOT  62190
-
 ENTER 8 CHAR TAPE ID.   TO TERMINATE, ENTER /*.
-XXXXXXXX
-
 /*   <-
-READY
```

not done currently

Fill in the BLOCK and SLOT numbers on the shipping letter. A printed copy of the EDRLOG session is printed on the 1403 line printers on the 91. This listing will be returned by the SACC courier service to the SEICC box at the BF3 station. Retain this printout for filing with the shipping letter.

Figure 2.5.4 - EDRLOG CLIST

```
list 'seicc.lib.clist(edrlog)'
 'SEICC.LIB.CLIST(EDRLOG)'
00010 PROC  0
00020 CFREE F(SYSIN,SYSPRINT,FT05F001,FT06F001,FT10F001,FT11F001,FT25F001)
00030 CFREE A(FB)
00040 ALLOC F(FT05F001) DA(*)
00050 ALLOC F(FT06F001) DA(*)
00060 ALLOC F(FT10F001) SYSOUT
00070 ALLOC F(FT11F001) DUMMY
00080 ALLOC F(SYSIN) SPACE(5) TRACKS
00090 ALLOC F(SYSPRINT) SPACE(5) TRACKS
00100 ALLOC F(SLOT) DA('SYS2.TLS.SLOT') SHR
00110 ALLOC DA('SYS2.TLS.VSN') F(VSN) SHR
00120 ATTRIB FB RECFM(F B) LRECL(64)
00130 ALLOC DA('SEICC.LOG.DATA') F(FT25F001)  OLD  USING(FB)
00140 ALLOC F(PVTLIBDD) DA('SYS2.TLS.LOAD') SHR
00150 DO EDRLOG   TASKLIB('SEICC.PROCESS.LOAD')
00160 FREE DA('SEICC.LOG.DATA')
00170 FREE DA('SYS2.TLS.SLOT','SYS2.TLS.VSN','SYS2.TLS.LOAD')
00180 FREE F(SYSIN,SYSPRINT,FT05F001,FT06F001,FT11F001)
00190 FREE F(FT10F001) SYSOUT(A)
00200 FREE ATTRLIST(FB)
00210 ALLOC DA(*) F(SYSIN)
00220 ALLOC DA(*) F(SYSPRINT)
READY
```

old (not MVS)
per current SB# (C.LIB. CLIST (edrlog))

2.6 DATA REDUCTION PROCEDURE

In order to execute all steps of data reduction (EDRSAVE, ~~RUNENCY~~ ENCGEN (ENCYGEN), ~~QENCMRG~~ ENCMRG (ENCMRG)), it is necessary to submit three background jobs to the 360/91 for overnight processing. These jobs utilize the EXEC RELEASE procedure where SEICCEDR releases SEICCRU1 which releases SEICCMRG. Figure 2.6.1 below shows this procedure.

Figure 2.6.1 - Data Reduction Procedure

```
bt91
ready to ibm
logon seicc/iicc
#SEICC LOGON IN PROGRESS AT 20:52:08 ON OCTOBER 2, 1980
****TIME LIMIT ON THE 75 IS 15 MINS****
ONLY THREE  JOBS PER USER ID IN SYS AT ONE TIME
THE TIME LIMIT FOR THE 91 IS 3 MIN. 10 MIN. CLASS N (500K)
****THE 360/75 WAS COLD STARTED AT 1830 HRS,2 OCT 1980**ALL JOBS
--13 TOTAL TSO USERS ON 360/91 M2
ATTR FB LRECL(80) BL(7280) IS SET UP
TODAY IS THU OCT 02,1980.
READY
sub lib(edrsave)
JOB SEICCEDR SUBMITTED
READY
sub lib(runency)
JOB SEICCRU1 SUBMITTED
READY
sub lib(qencmrg)
JOB SEICCMRG SUBMITTED
READY
logoff
```

CHIST executed
Nancy does saves one day
encgen the next day
encmerg the next
run overnight

The printouts for these three jobs will be delivered via SACC courier to BF3 on the following working day. A listing of the actual job control language for these three jobs follows in Figure 2.6.2.

Figure 2.6.2 - Data Reduction JCL

a) EDRSAVE JCL

```
list 'seicc.lib.cntl(edrsave)'
 'SEICC.LIB.CNTL(EDRSAVE)'
00010 //SEICCEDR JOB (SB0132823A,P,ISEE-3,003006),BF3
00020 //* EXECUTE EDRSAVE
00030 //EDRSAVE  EXEC  PGM=EDRSAVE,REGION=320K
00040 //STEPLIB  DD  DSN=SEICC.EDRSAVE.LOAD,DISP=SHR
00050 //FT06F001  DD  SYSOUT=A,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=1100)
00060 //FT08F001  DD  UNIT=(6250,,DEFER),DISP=SHR,LABEL=(1,NL),
00070 // DCB=(RECFM=FB,LRECL=3528,BLKSIZE=3528,BUFNO=1,DEN=3),VOL=SER=ICDUM1
00080 //FT09F001  DD  UNIT=(6250,,DEFER),VOL=SER=ICDUM2,DISP=(NEW,PASS),
00090 // DCB=(RECFM=FB,LRECL=3528,BLKSIZE=3528,BUFNO=1,DEN=4)
00100 //FT25F001  DD  DSN=SEICC.LOG.DATA,DISP=OLD,DCB=(RECFM=F,LRECL=7232)
00110 //SYSUDUMP  DD  SYSOUT=A
00120 //FT05F001  DD  *
00130 ISEE-3       01 F
00140 /*
00150 // EXEC RELEASE,PARM=RU1
00160 // EXEC NOTIFYTS
READY
```

b) RUNENCY (ENCYGEN) JCL

```
list 'seicc.lib.cntl(runency)'
 'SEICC.LIB.CNTL(RUNENCY)'
00010 //SEICCRU1 JOB (SB0132823A,P,ISEE-3,004002),BF3,TYPRUN=HOLD
00020 //* EXECUTE ENCYGEN
00030 //ENCYGEN EXEC PGM=ENCYGEN,REGION=375K,PARM='3,N,0'
00040 //STEPLIB DD DSN=SEICC.ENCGEN.LOAD,DISP=SHR
00050 //* ENCYGEN LIBTAPE
00060 //FT08F001  DD DUMMY,UNIT=6250,VOL=SER=ICEDUM,DSN=IC.CARE,
00070 // DCB=(RECFM=VBA,LRECL=137,BLKSIZE=2560,BUFNO=1),
00080 //  DISP=(NEW,KEEP),LABEL=(1,SL)
00090 //FT10F001 DD UNIT=(6250,,DEFER),DISP=SHR,LABEL=(1,SL),
00100 // DCB=(RECFM=FB,LRECL=3528,BLKSIZE=3528,BUFNO=1,DEN=4),
00110 // DSN=IC.DSN,VOL=SER=ICL000
00120 //ENCY  DD  UNIT=(6250,,DEFER),DSN=IC.NOINFO,DISP=(NEW,KEEP),
00130 //  VOL=SER=ICW000,DCB=(DEN=4,RECFM=VB,BUFNO=1,LRECL=32000,
00140 //  BLKSIZE=32008),LABEL=(1,SL,,OUT)
00150 //FT25F001 DD  DSN=SEICC.LOG.DATA,DISP=SHR,DCB=(RECFM=F,LRECL=7232)
00160 //FT06F001 DD SYSOUT=A,SPACE=(CYL,(5,5)),DCB=(RECFM=VBA,
00170 //   LRECL=137,BLKSIZE=2560,BUFNO=1)
00180 //SYSUDUMP DD SYSOUT=A
00190 // EXEC RELEASE,PARM=MRG
00200 // EXEC NOTIFYTS
READY
```

Figure 2.6.2 (Cont'd)

c) QENCMRG (ENCMRG) JCL

```
list 'seicc.lib.cntl(qencmrg)'
 'SEICC.LIB.CNTL(QENCMRG)'
00010 //SEICCMRG JOB (SB0I32823A,P,ISEE-3,001002),BF3,TYPRUN=HOLD
00020 //* EXEC  QENCMRG
00030 //ENCMRG    PROC  SAT=ISEE,ID=3,MODE=Q
00040 //MERGE     EXEC  PGM=&MODE.ENCMRG,REGION=400K,PARM='&SAT.-&ID'
00050 //STEPLIB   DD    DSN=SEICC.ENCMRG.LOAD,DISP=SHR
00060 //WORK   DD  DSN=IC.WORK,LABEL=(,SL,,IN),VOL=SER=ICW01,
00070 //   DISP=OLD,UNIT=(1600,,DEFER),DCB=BUFNO=1
00080 //OLDENCY   DD  DSN=IC.OMAST,LABEL=(,SL,,IN),VOL=SER=ICE01,
00090 //   DISP=OLD,UNIT=(6250,,DEFER),DCB=BUFNO=1
00100 //NEWENCY   DD  DSN=IC.NMAST,LABEL=(,SL,,OUT),VOL=SER=ICE02,
00110 //   DISP=(NEW,KEEP),UNIT=(6250,,DEFER),
00120 //   DCB=(RECFM=VBA,LRECL=32008,BLKSIZE=32012,BUFNO=1)
00130 //FT10F001  DD  UNIT=2314,DISP=(NEW,DELETE),SPACE=(TRK,20),
00140 //   DCB=(RECFM=VBT,LRECL=32008,BLKSIZE=32012,BUFNO=1)
00150 //FT20F001  DD  UNIT=2314,DISP=(NEW,DELETE),SPACE=(TRK,20),
00160 //   DCB=(RECFM=VBT,LRECL=32008,BLKSIZE=32012,BUFNO=1)
00170 //FT30F001  DD  UNIT=2314,DISP=(NEW,DELETE),SPACE=(TRK,20),
00180 //   DCB=(RECFM=VBT,LRECL=32008,BLKSIZE=32012,BUFNO=1)
00190 //FT25F001  DD  DSN=SEICC.LOG.DATA,DISP=OLD,
00200 //   DCB=(RECFM=F,LRECL=7232)
00210 //PROTECT   DD  DSN=SEICC.IS.USING.THE.LOG,UNIT=3330,
00220 //   VOL=SER=SCR000,DISP=(NEW,DELETE,DELETE),SPACE=(TRK,1)
00230 //FT06F001  DD  SYSOUT=A
00240 //SYSUDUMP  DD  SYSOUT=A
00250 //ENCMRG  PEND
00260 // EXEC ENCMRG
00270 // EXEC NOTIFYTS
READY
```

2.7 INTERPRETING THE DATA REDUCTION PRINTOUTS

When you have the printouts generated by the data reduction processing, check the COND CODE and RETURN CODE from the first step of each run. If the RETURN CODE does not equal zero, then consult the cognizant programmer/analyst, and follow his directions as to the course toward rectifying the problem. If the RETURN CODE is zero for all three jobs (SEICCEDR, SEICCRU1 and SEICCMRG), continue with subsection 2.8. The user may refer to the Cosmic Ray Data Processing Binder #9 and examine the actual output from GROUP 96 data reduction in order to better understand a normal execution.

search for unusual messages

2.8 BACKUP AND LIST THE DATA PROCESSING LOG

In order to maintain system reliability and to prevent manual alterations to the LOG if an error which is transparent to the user exists, the data processing log is copied to a tape after data reduction processing of each group is complete. This member performs a PATRICK utility copy. The output file of the tape is incremented by one each time the COPYLOG utility is executed. Figure 2.8.1 below is a graphic of this procedure. The LOG is also listed.

not done but should be periodically

Figure 2.8.1 - Backup LOG/List LOG

```
READY

qed lib.cntl(copylog)        <-
QED

a 10   <-
//SEICC106 JOB (SB0132823A,P,ISEE-3,H00H00),BF3
       107   <-

a 30   <-
// EXEC PGM=PATRICK,PARM='9TN,001,001,106',REGION=150K
                                          107   <-

list   <-
00010 //SEICC107 JOB (SB0132823A,P,ISEE-3,H00H00),BF3
00020 //*COPYISEE LOG.DATA
00030 // EXEC PGM=PATRICK,PARM='9TN,001,001,107',REGION=150K
00040 //IN1  DD  DSN=SEICC.LOG.DATA,DISP=SHR,DCB=(RECFM=F,BLKSIZE=7232,
00050 //          LRECL=7232)
00060 //OUT1 DD  DSN=SEICC.LOG.DATA,DISP=SHR,LABEL=(,SL,,OUT),UNIT=6250,
00070 //          VOL=SER=ICLOGB,DCB=(RECFM=F,LRECL=7232,BLKSIZE=7232,DEN=4)
00080 //OUT2  DD  SYSOUT=A
00090 //SYSUDUMP  DD  SYSOUT=A
00110 // EXEC NOTIFYTS
END OF DATA

sve   <-
SAVED
READY
sub lib(copylog)   <-

JOB SEICC107 SUBMITTED
READY
sub lib(listall)   <-
JOB SEICCLST SUBMITTED
READY
```

When the output from the COPYLOG and LISTALL are received, check the one line message in the COPYLOG printout. It should read as follows:
END OF FILE 00001. THE NUMBER OF UNCORRECTABLE ERRORS IS 00000. THE NUMBER OF RECORDS IS 00040.
The RETURN CODE for both should be zero. Other RETURN CODES are unacceptable. If they occur, contact the cognizant programmer/analyst. File the shipping letter, EDRLOG, EDRSAVE, RUNENCY, QENCMRG, COPYLOG and LISTALL printouts in that order in the current cosmic ray data processing binder. If you have another cosmic ray EDR to run, return to subsection 2.5 and proceed. Otherwise, go on to subsection 2.9/2.10 and make backups of the current LIB tape and ENCY tape.

2.9 BACKUP OF THE CURRENT LIBRARY TAPE

A backup of the current LIBRARY tape is maintained as an extra precaution to prevent uncorrectable errors from occurring on the tape while awaiting more EDR groups. The active LIBRARY tape is the one listed under the SER WRT heading in the LIBRARY CONTROL BLOCK of the LOG. Only the interger number is displayed here in I3 format. Therefore, if the number is 18 then the tape number of the LIB tape is ICL018, 19=ICL019 etc. Also, make note of the SEQ number. It is the number of files written on the current LIB tape. This is used in determining the amount of computer time needed to copy the LIB tape. The following table indicates the time estimate needed relative to the SEQ number:

SEQ NO.	TIME EST (360/91)	TIME EST (360/75)
1	H00001	H00H01
2	H00002	H00003
3	H00003	H00H04
4	H00004	001H05
5	001005	001H06
6	001006	001H07
7	001007	H01H08
8	001008	H01010

Now, QED and EDIT lines 10, 20, and 50 in LIB.CNTL(LIBCOPY) as needed using the above information. Figure 2.9.1 is a graphic of this procedure where the SER is ICL018 and the SEQ is five for input. The tape number did not change in this case, only the time estimate is increased.

Figure 2.9.1 - LIB Tape Backup

```
bt91
ready to ibm
logon seicc/iicc
#SEICC LOGON IN PROGRESS AT 16:04:33 ON OCTOBER 3, 1980
ONLY THREE  JOBS PER USER ID IN SYS AT ONE TIME
THE TIME LIMIT FOR THE 91 IS 3 MIN. 10 MIN. CLASS N (500K)
****THE 360/75 WAS COLD STARTED AT 1830 HRS,2 OCT 1980**ALL JOBS AND OUTPUT I
--23 TOTAL TSO USERS ON 360/91 M2
ATTR FB LRECL(80) BL(7280) IS SET UP
TODAY IS FRI OCT 03,1980.
READY
aj
READY
qed lib.cntl(libcopy) same member name
list
QED
00010 //SEICCLBK JOB (SB0132823A,T,ISEE~3,H00004),BF3
00020 //*ICL018*  BACKUPTP
00030 //* JCL USE TO BACKUP ACTIVE LIBRARY TAPE
00040 // EXEC TAPESCAN,PARM=(COPY,NOVOLSER),TUNIT=6250,MOUNT=,
00050 //      VOL=ICL018
00060 //OUTPUT DD UNIT=(6250,,DEFER),VOL=SER=ICLIB1,
00070 // LABEL=(1,SL,,OUT),DCB=(DEN=4)
00080 //NOTIFY EXEC NOTIFYTS,MSG='LIBTPBACKUP'
END OF DATA
v
a 10
//SEICCLBK JOB (SB0132823A,T,ISEE~3,H00004),BF3
                                      001005
00010 //SEICCLBK JOB (SB0132823A,T,ISEE~3,001005),BF3
a 20
//*ICL018*  BACKUPTP

00020 //*ICL018*  BACKUPTP
a 50
//      VOL=ICL018

00050 //      VOL=ICL018
save
SAVED
end
READY
sub lib(libcopy)
JOB SEICCLBK SUBMITTED
READY
```

When the output is received for this run, check to make sure there are no I/O errors of any kind and file the output in the current data reduction binder.

2.10 BACKUP OF THE ENCYCLOPEDIA TAPES

Each time the QENCMRG is run, it creates a new active ENCY tape and marks the old one as inactive. At times, the program creates a new ENCY tape when the MAXBLK of 5000 is reached. When this occurs, two ENCY tapes are created the one which is filled and the new one. It is essential that backups of all ENCY tapes be maintained at all times. There is a group of tapes which have been allocated as ENCY backups. They are ICEB01 - ICEB15. A member has been created in SEICC.LIB.CNTL named BACKUPS. It contains all the information about the ENCY tapes and their backups and must be updated by the user when any changes have been made to the active ENCY tapes. The best way of determining the changes to this member is to first execute the foreground LOGLIST utility and list the active ENCY tapes. Then QED LIB.CNTL(BACKUPS) and do a 1 to 1 comparison of the ENCY tapes to the ones in the member BACKUPS. Figure 2.10.1 demonstrates this procedure. Make note of these changes and edit the member backups as necessary. In this graphic we see that tape ICE106 has been replaced by ICE107 and the BLOCKS have increased, but all else remains the same. Therefore, you only need to edit the last line in the member BACKUPS. If a new tape is created, a new line for it must be added to the member BACKUPS. The line should contain the same information about the new tape as was inputed for the others. The next backup tape (ICEBNN) should be the next number sequentially in the block of backup tapes.

Once you have completed this editing, the member ~~ENCYC~~OPY ENCOPY CNST is run to perform the actual tape copy. It must be run for each new ENCY tape. As can be seen in Figure 2.10.2 line 30 of this member contains the input ENCY tape and line 60 contains the output backup ENCY tape. The jobname in line 10 is changed to the same number as the active ENCY

Figure 2.10.1 - ENCY BACKUP PROCEDURE

```
READY
loglist
DID YOU NAME A DSN FOR OUT11? (YES/NO)
no
DO YOU WANT TO SEE THE LIST MENU? (YES/NO)
yes
MENU NO.     NAME       DESCRIPTION
   01        SHWEDR     DISPLAYS EDR TAPES MARKED FOR REMOVAL
   02        SHWCIT     DISPLAYS CIT TAPES MARKED FOR REMOVAL
   03        REMSLT     # TAPE SERIALS REMAINING IN SOME CONTROLS
   04        BAKLOG     BACK LOG ON A GIVEN PROCESS
   05        INCOMP     INCOMPLETE PROCESSES
   06        LISTAL     LISTALL BY BLOCKS
   07        DMPLOG     HEX DUMP OF THE LOG
ENTER MESSAGE FOR HARD COPY
seicc.log.data ency copy procedure demo. for procedures guide.


 INPUT MENU NUMBER OF DESIRED LIST.
06
INPUT SATELLITE ID.
isec~3
DO YOU WANT TO SEE A LIST OF LISTAL BLOCK TYPE CODES?(YES OR NO)
yes
 LISTAL BLOCK TYPES:  01 FOR ALL BLOCKS.
                      02 FOR ENCY-ATTRIBUTE BLOCKS
                      03 FOR EDR BLOCKS
                      04 FOR LIBRARY BLOCKS
                      05 FOR WORK BLOCKS
                      06 FOR ENCYCLOPEDIA BLOCKS
                      07 FOR CIT-ENCY BLOCKS
INPUT LIST OF LISTAL BLOCK TYPES IN (I2,1X) FORMAT
06

                    ENCYCLOPEDIA CONTROL

   BLOCK    CREATION    1ST ENC    LST ENC    1ST SER    LST SER    1ST SLT    LST SLT    MOD LAB    LST SER    MAX BLKS
       7    12/13/78        201        510          1        136      61680      61729     ICE000        107        5000



   MODEL DSN
   IC.MASTER.ENCY

DO YOU WANT ONLY ACTIVE ENCY BLOCKS? T OR F?
```

continued

Figure 2.10.1 (Cont'd)

b

ENCYCLOPEDIA BLOCKS

BLOCK	CREATION	ATTR	PREV	NEXT	START VOLUME	START TIME YEAR	DAY	HR	MIN	END VOLUME	END TIME YEAR	DAY	HR	MIN	SER	BLOCKS	STATUS	FREE SLOT
363	1/ 8/80	3	352	364	56690	78	226	12	15	64609	78	309	0	0	63	5000	00	0
364	1/ 8/80	3	363	365	64610	78	309	0	15	72626	79	27	12	15	64	5000	00	0
365	1/ 8/80	3	364	366	72627	79	27	12	30	80161	79	106	0	0	65	5000	00	0
366	1/ 8/80	3	365	367	80162	79	106	0	15	87757	79	185	3	0	66	5000	00	0
375	1/ 8/80	3	374	384	95756	79	268	10	45	96077	79	271	19	0	75	215	00	0
404	1/11/80	3	399	405	87758	79	185	3	15	95210	79	262	18	15	82	5000	00	0
405	1/11/80	3	404	408	95211	79	262	18	30	95755	79	268	10	30	83	486	00	0
420	2/13/80	3	416	421	96078	79	271	19	15	104701	79	361	15	0	87	5000	00	0
470	5/21/80	3	465	473	104702	79	361	15	15	112994	80	83	0	15	97	4466	00	0
510	7/26/80	3	506	0	112997	80	83	1	0	121058	80	167	0	15	107	4759	00	0

```
 INPUT MENU NUMBER OF DESIRED LIST.
/*
OUTPUT TO FT11F001 ON *
READY

qed lib.cntl(backups)
DATA SET NOT LINE NUMBERED-NONUM ASSUMED
QED
1
  THIS IS A TABLE OF THE ACTIVE ISEE-3 ENCY TAPES AND THEIR BACKUPS.

    ENCY TAPE          BACKUP          START AFN       END AFN       BLKS WRITTEN
    ICE063             ICEB01          56690           64609         5000
    ICE064             ICEB02          64610           72626         5000
    ICE065             ICEB03          72627           80161         5000
    ICE066             ICEB04          80162           87757         5000
    ICE075             ICEB05          95756           96077          215
    ICE082             ICEB06          87758           95210         5000
    ICE083             ICEB07          95211           95755          486
    ICE087             ICEB08          96078          104701         5000
    ICE097             ICEB09         104702          112994         4466
    ICE106             ICEB10         112997          119954         4415
END OF DATA

a
    ICE106             ICEB10         112997          119954         4415
        7                                                121058         4759
/
    ICE107             ICEB10         112997          121058         4759
sve
SAVED
READY
```

to input a new line type the following:

```
B
I
```

tape being copied. Perform the editing needed, following the graphic in Figure 2.10.2. The printouts will be delivered in the usual fashion to BF3 and should be filled in the cosmic ray data reduction binder if the RC = 00000 and the message:
END OF FILE 00001. THE NUMBER OF UNCORRECTABLE ERRORS IS 00000. THE NUMBER OF RECORDS IS NNNNN. (NNNNN is variable). RCs other than 0 are unacceptable therefore consult cognizant programmer/analyst when these occur. If this run abends with a code of S001 and the abending DDNAME is IN1 please run the TAPETST utility in subsection 4.2.5 before consulting cognizant programmer/analysts. If S001 and DDNAME is OUT1 replace the output tape with a new one, label it SL DEN4 and rerun ENGYCOPY.

This completes the data reduction processing procedures for the ISEE-3 cosmic ray experiment.

Nancy doesn't know about this

Figure 2.10.2 - COPYING THE ENCY TAPE

```
READY
qed lib.cntl(encycopy)   new CHIST
QED
1
00010 //SEICC106 JOB (SB0132823B,T,SA0001,002004),BF3
00015 //*ENCYLIB  BACKUPTP
00020 // EXEC PGM=PATRICK,PARM='9TN,001,001',REGION=150K
00030 //IN1 DD DSN=IC.MASTER.ENCY,LABEL=(,SL),VOL=SER=ICE106,
00040 // DISP=SHR,UNIT=6250,
00050 //    DCB=(RECFM=VBA,LRECL=32008,BLKSIZE=32012,BUFNO=1,DEN=4)
00060 //OUT1 DD DSN=IC.MASTER.ENCY,LABEL=(,SL,,OUT),VOL=SER=ICEB10,
00070 //    DISP=SHR,UNIT=(6250,,DEFER),
00080 //    DCB=(RECFM=VBA,LRECL=32008,BLKSIZE=32012,BUFNO=1,DEN=4)
00090 //OUT2 DD SYSOUT=A
00100 //NOTIFY EXEC NOTIFYTS
END OF DATA
v
a 10
//SEICC106 JOB (SB0132823B,T,SA0001,002004),BF3
         7
00010 //SEICC107 JOB (SB0132823B,T,SA0001,002004),BF3
a 30 /06
//IN1 DD DSN=IC.MASTER.ENCY,LABEL=(,SL),VOL=SER=ICE106,
                                                    7
00030 //IN1 DD DSN=IC.MASTER.ENCY,LABEL=(,SL),VOL=SER=ICE107,
sve
SAVED
READY
sub lib(encycopy)
JOB SEICC107 SUBMITTED
READY
```

government is publishing a revised procedures guide

SECTION 3 - DATA POOL DATA PROCESSING PROCEDURE

3.1 PURPOSE AND CONTENT OF THE DATA POOL TAPE

The primary purpose of the ISEE-3 data pool tape is to make basic quantities measured by ISEE-3 readily available beyond the individual experiment groups making the measurements. The time resolution and selection of data from each experiment is limited, however. Also the algorithm for transforming measured quantities are not as complex as those eventually used by individual expeiments in reducing their data. On the other hand, many users profit more by quick access to somewhat imperfect data than by eventual access to more refined data.

The data pool tape contains data from each experiment which is averaged by software developed at I.P.D. from algorithms provided by the individual experimenters. The ISEE-3 Medium Energy Cosmic Ray Experiment algorithm provides 15 minute averaged values from one of the high energy telescopes (HET-II) of two counting rates: 1) A1.A2.C4.G1 and 2) B1.B2.SB.C1.G1. A detailed discussion of the data pool tapes may be found in Notes on the ISEE-3 Data Pool Tapes by Mr. D. Bands and T. von Rosenvinge; May 1979 (GSFC).

3.2 DESCRIPTION OF THE ISEE-3 DATA POOL DATA PROCESSING SYSTEM

The ISEE-3 data pool processing system was developed utilizing the existing cosmic ray EDRSAVE software for the purpose of creating a 6250 bytes per inch (BPI) compressed library of all data pool tapes received weekly from I.P.D. The data pool system also utilizes a data processing log modeled after the cosmic ray processing log. However, the WORK, ENCYCLOPEDIA and CIT blocks of the data pool log are not used. Therefore, only two major processing steps are required. They are as follows:

1) DPEDRLOG - a TSO foreground CLIST/PROGRAM which enters a data pool tape into the EDR block of the processing log and into the Tape Library System (TLS).
2) DPTSAVE - a background job submitted via TSO which adds the data pool tape to the next sequencial file of the data pool 6250 BPI library and modifies the data pool processing log.

Figures 3.2.1 and 3.2.2 show and define the data pool tape processing flow including the standard maintenance utilities needed to maintain production processing. However,the flow chart does not show those utilities which are sometimes needed to remove data pool tapes (DPTLS) or to modify the data pool LOG (DPALTBLK). These are described in the UTILITIES section of this guide.

Once the data pool data has been written on the library tape, the data can be accessed by interested programmers or scientists using the procedure described in Section 6 of the PDP-11/70 Data Pool Several Plotting Package (CSC/TM-80/6087) to create a tape to be read and plotted on the PDP-11/70 in Building 2, GSFC.

system now includes a DPENCGEN and DPMERGE step

Figure 3.2.1 - ISEE-3 Data Pool
Tape Processing Flow

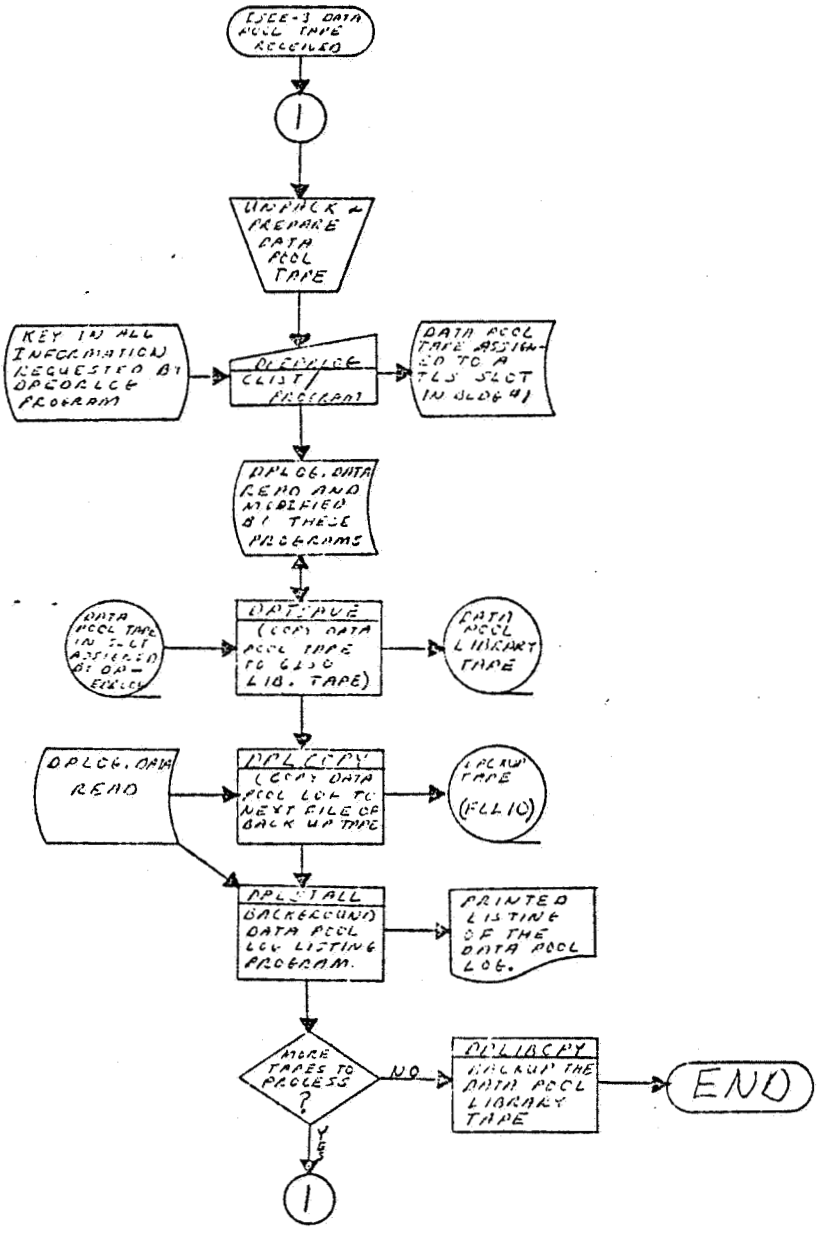


Figure 3.2.2

DESCRIPTION OF MEMBERS IN FIGURE 3.2.1

The following is a list of the TSO LIB.CNTL or LIB.CLIST member names used in Figure 3.2.1 and a brief description of their function in the data pool processing flow.

MEMBER	TYPE	FUNCTION
DPEDRLOG	CLIST	ENTER DATA POOL TAPE INTO LOG & TLS
DPTSAVE	CNTL	SAVE DATA POOL TAPE ON 6250 BPI LIBRARY
DPLCOPY	CNTL	COPIES DPLOG TO NEXT FILE OF FLL10
DPLSTALL	CNTL	LIST ENTIRE DPLOG.DATA
DPLIBCPY	CNTL	BACKUP 6250 BPI LIBRARY TAPE

The following is a list of the data sets upon which the above members operate.

DATA SET MNEMONIC	DSNAME	MEMBERS THAT ACCESS	TYPE D=DISK T=TAPE
TLS	SYS2.TLS.SLOT		
	SYS2.TLS.VSN	DPEDRLOG	D
DPLOG.DATA	SEICC.DPLOG.DATA	DPEDRLOG, DPTSAVE,DPLCOPY	D
DATA POOL	NONE	DPTSAVE	T
LIBRARY	IC. tape no.		
	assigned by user	DPTSAVE	T

3.3 DESCRIPTION OF THE ISEE-3 DATA POOL PROCESSING LOG

The ISEE-3 data pool processing log is a cataloged, sequencial disk data set. Its data set name (DSN) is SEICC.DPLOG.DATA and its attributes, location and size in tracks are as follows:

```
map 'seicc.dplog.data'
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
SEICC.DPLOG.DATA
--RECFM-LRECL-BLKSIZE-DSORG-CREATED----EXPIRES----SECURITY
  F      7232   7232     PS     09/03/80   00/00/00   NONE
--VOLUMES--
  DISK08
TRACKS ALLOC    USED   UNUSED
         10       10      0
EXTENTS
  01
INPUT DATA SET  SEICC.DPLOG.DATA  IS NOT A PDS
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

The data pool log is the same as for the cosmic ray data reduction system except the WORK, ENCYCLOPEDIA and CIT blocks are not used. Figure 3.3.1 is a listing of a non-current version of the data pool processing log. The user may refer to SECTION 2.3 of this guide for an aid in reading this log.

Figure 3.3.1 - Data Pool Log

(Non-Current Documentation Supplement)

```
IEF236I ALLOC. FOR SEICCDLT
IEF237I 324    ALLOCATED TO STEPLIB
IEF237I 450    ALLOCATED TO FT05F001
IEF237I 450    ALLOCATED TO FT10F001
IEF237I 234    ALLOCATED TO FT25F001

BACKGRND SEICC.DPLOG.DATA                                    00000150

 INPUT MENU NUMBER OF DESIRED LIST.
6
INPUT SATELLITE ID.
1SEE-3
DO YOU WANT TO SEE A LIST OF LISTAL BLOCK TYPE CODES?(YES OR NO)
 LISTAL BLOCK TYPES:  01 FOR ALL BLOCKS.
                      02 FOR ENCY-ATTRIBUTE BLOCKS
                      03 FOR EDR BLOCKS
                      04 FOR LIBRARY BLOCKS
                      05 FOR WORK BLOCKS
                      06 FOR ENCYCLOPEDIA BLOCKS
                      07 FOR CIT-ENCY BLOCKS
INPUT LIST OF LISTAL BLOCK TYPES IN (I2,1X) FORMAT
 1  0  0  0  0  0  0  0  0  0
```

ENCY-ATTRIBUTE BLOCKS

BLOCK	CREATION	VOL LEN (SEC)	DQA ON MASK	DQA OFF MASK	VERSE PRESENCE	1ST WORK	LAST WORK	1ST ENCY	LAST ENCY	MNEM	1ST VOL	LST VOL	TITLE
3	6/27/79	0	00	00	00000000	0	0	0	0		0	0	
129	12/ 4/79	0	00	00	00000000	0	0	0	0	DUPL	0	0	

EDR CONTROL-BLOCK

BLOCK	CREATION	1ST EDR	LAST EDR	LAST MOD	1ST SLOT	LAST SLOT
4	6/27/79	9	206	206	62575	62578

EDR BLOCKS

BLOCK	CREATION	JPL SER	SLOT STAT	RECEIVED	SLOT NO	# LIB	NO. REC	NO. ERR	ENTRY	LAST ENTRY DISP	LAST ENTRY PROCESS
9	6/27/79	RG1988FF	F0	6/27/79	62575	13	176	0	1	E0	7/ 2/79
10	6/28/79	RJ4745JJ	F0	6/28/79	62576	14	161	0	1	E0	7/ 2/79
11	6/28/79	RJ5056KK	F0	6/28/79	62577	15	160	0	1	E0	7/ 2/79
12	6/28/79	RJ4843FF	F0	6/28/79	62578	16	162	0	1	E0	7/ 2/79
17	7/10/79	RJ5099KK	F0	7/10/79	62575	21	187	0	1	E0	7/10/79
18	7/10/79	RI3292GG	F0	7/10/79	62576	22	185	0	1	E0	7/10/79
19	7/10/79	RI3375AA	F0	7/10/79	62577	23	176	0	1	E0	7/10/79
20	7/10/79	RJ9767FF	F0	7/10/79	62578	24	176	0	1	E0	7/10/79
25	7/25/79	RL4568CC	F0	7/25/79	62575	29	160	0	1	E0	7/25/79
26	7/25/79	RL3845II	F0	7/25/79	62576	30	162	0	1	E0	7/25/79
27	7/25/79	RL2867BB	F0	7/25/79	62577	31	160	0	1	E0	7/25/79
28	7/25/79	RL3874JJ	F0	7/25/79	62578	32	161	0	1	E0	7/25/79
33	7/31/79	RL3204II	F0	7/31/79	62575	37	168	0	1	E0	8/ 1/79
34	7/31/79	RL1300HH	F0	7/31/79	62576	38	161	0	1	E0	8/ 1/79
35	7/31/79	RL0356CC	F0	7/31/79	62577	39	61	45	1	E1	8/ 1/79
36	7/31/79	RL6125CC	F0	7/31/79	62578	40	161	0	1	E0	8/ 1/79
41	8/ 2/79	RL4292EE	F0	8/ 2/79	62575	45	158	0	1	E0	8/ 2/79
42	8/ 2/79	RI2403HH	F0	8/ 2/79	62576	46	161	0	1	E0	8/ 2/79
43	8/ 2/79	RL6420KK	F0	8/ 2/79	62577	47	158	0	1	E0	8/ 2/79
44	8/ 2/79	RL3931BB	F0	8/ 2/79	62578	48	161	0	1	E0	8/ 2/79
49	9/17/79	RN2441AA	F0	9/17/79	62575	53	162	0	1	E0	9/17/79
50	9/17/79	RN5510CC	F0	9/17/79	62576	54	155	0	1	E0	9/17/79
51	9/17/79	RN57d4FF	F0	9/17/79	62577	55	161	0	1	E0	9/17/79
52	9/17/79	RN0672CC	F0	9/17/79	62578	56	160	0	1	E0	9/17/79
57	9/17/79	RP0528JJ	F0	9/17/79	62575	61	159	0	1	E0	9/18/79
58	9/17/79	RN6212GG	F0	9/17/79	62576	62	161	0	1	E0	9/18/79
59	9/17/79	RP2685GG	F0	9/17/79	62577	63	162	0	1	E0	9/18/79
60	9/17/79	RP3567CC	F0	9/17/79	62578	64	161	0	1	E0	9/18/79
65	10/19/79	RP4563FF	F0	10/19/79	62575	69	161	0	1	E0	10/23/79
66	10/19/79	RP7428EE	F0	10/19/79	62576	70	161	0	1	E0	10/23/79
67	10/19/79	RP4306GG	F0	10/19/79	62577	71	157	0	1	E0	10/23/79
68	10/19/79	RD3578HH	F0	10/19/79	62578	72	160	0	1	E0	10/23/79
73	10/24/79	RP8702GG	F0	10/24/79	62575	77	157	0	1	E0	10/25/79
74	10/24/79	RS1044DD	F0	10/24/79	62576	78	160	0	1	E0	10/25/79
75	10/24/79	RN2175EE	F0	10/24/79	62577	79	159	0	1	E0	10/25/79
76	10/24/79	RS2064DD	F0	10/24/79	62578	80	160	0	1	E0	10/25/79
81	10/27/79	RS1776II	F0	10/27/79	62575	85	159	0	1	E0	10/27/79
82	10/27/79	RS4790II	F0	10/27/79	62576	86	159	0	1	E0	10/27/79

83	10/27/79	RS6484AA	F0	10/27/79	62577	87	160	0	1	E0	10/27/79
84	10/27/79	RS6516BB	F0	10/27/79	62578	88	160	0	1	E0	10/27/79
89	10/27/79	RP1024II	F0	10/27/79	62575	93	160	0	1	E0	10/27/79
90	10/27/79	RP9191EE	F0	10/27/79	62576	94	160	0	1	E0	10/27/79
91	10/27/79	RS2120GG	F0	10/27/79	62577	95	160	0	1	E0	10/27/79
92	10/27/79	RS6351AA	F0	10/27/79	62578	96	158	0	1	E0	10/27/79
97	10/29/79	RS2621II	F0	10/29/79	62575	101	159	0	1	E0	10/29/79
98	10/29/79	RS3902HH	F0	10/29/79	62576	102	162	0	1	E0	10/29/79
99	10/29/79	RS4383FF	F0	10/29/79	62577	103	159	0	1	E0	10/29/79
100	10/29/79	RS8070II	F0	10/29/79	62578	104	159	0	1	E0	10/29/79
105	11/ 6/79	RS6562AA	F0	11/ 6/79	62575	109	158	0	1	E0	11/ 6/79
106	11/ 6/79	RS6999II	F0	11/ 6/79	62576	110	160	0	1	E0	11/ 6/79
107	11/ 6/79	RS5738AA	F0	11/ 6/79	62577	111	160	0	1	E0	11/ 6/79
108	11/ 6/79	RS6587EE	F0	11/ 6/79	62578	112	158	0	1	E0	11/ 6/79
113	11/ 7/79	RS9208KK	F0	11/ 7/79	62575	117	159	0	1	E0	11/17/79
114	11/ 7/79	RK9303EE	F0	11/ 7/79	62576	118	159	0	1	E0	11/17/79
115	11/ 7/79	RK9438HH	F0	11/ 7/79	62577	119	161	0	1	E0	11/17/79
116	11/ 7/79	RS9098BB	F0	11/ 7/70	62578	120	162	0	1	E0	11/17/79
121	11/17/79	RU1108FF	F0	11/17/79	62575	125	162	0	1	E0	11/17/79
122	11/17/79	RU1406HH	F0	11/17/79	62576	126	159	0	1	E0	11/17/79
123	11/17/79	RU5165AA	F0	11/17/79	62577	127	162	0	1	E0	11/17/79
124	11/17/79	RN5484HH	F0	11/17/79	62578	128	159	0	1	E0	11/17/79
130	12/ 4/79	RS1607JJ	F0	12/ 4/79	62575	134	162	0	1	E0	12/ 4/79
131	12/ 4/79	RS0894BB	F0	12/ 4/79	62576	135	185	0	1	E0	12/ 4/79
132	12/ 4/79	RP8818EE	F0	12/ 4/79	62577	136	161	0	1	E0	12/ 4/79
133	12/ 4/79	RS2206FF	F0	12/ 4/79	62578	137	160	0	1	E0	12/ 4/79
138	12/ 5/79	RS7287BB	F0	12/ 5/79	62575	142	157	0	1	E0	12/ 5/79
139	12/ 5/79	RU0442EE	F0	12/ 5/79	62576	143	160	0	1	E0	12/ 5/79
140	12/ 5/79	RU2733FF	F0	12/ 5/79	62577	144	159	0	1	E0	12/ 5/79
141	12/ 5/79	RU6044CC	F0	12/ 5/79	62578	145	159	0	1	E0	12/ 5/79
146	12/ 5/79	RU6540DD	F0	12/ 5/79	62575	147	161	0	1	E0	12/ 5/79
148	12/12/79	RU6489KK	F0	12/12/79	62576	149	159	0	1	E0	12/12/79
150	12/19/79	RU8513KK	F0	12/19/79	62575	152	160	0	1	E0	12/19/79
151	12/19/79	RM5797FF	F0	12/19/79	62576	153	159	0	1	E0	12/19/79
154	1/22/80	RM9137CC	F0	1/11/80	62575	157	160	0	1	E0	1/22/80
155	1/22/80	RM7649II	F0	1/21/80	62576	158	160	0	1	E0	1/22/80
156	1/22/80	RU4855II	F0	1/11/80	62577	159	159	0	1	E0	1/22/80
160	1/23/80	RM6094HH	F0	1/21/80	62578	161	159	0	1	E0	1/23/80
162	1/29/80	RX6664EE	F0	1/26/80	62575	163	160	0	1	E0	1/29/80
164	2/ 1/80	RX7904KK	F0	2/ 1/80	62576	165	159	0	1	E0	2/ 1/80
166	2/20/80	RX6378FF	F0	2/20/80	62577	167	163	0	1	E0	2/20/80
168	3/17/80	RZ8254KK	F0	3/17/80	62578	169	46	0	1	E0	3/19/80
170	3/28/80	RW0995GG	F0	3/28/80	62575	174	116	0	1	E0	3/28/80
171	3/28/80	RZ9369FF	F0	3/28/80	62576	175	161	0	1	E0	3/28/80
172	3/28/80	RW0430DD	F0	3/28/80	62577	176	158	0	1	E0	3/28/80
173	3/28/80	SB1069DD	F0	3/28/80	62578	177	161	0	1	E0	3/28/80
178	5/ 1/80	SB5160EE	F0	4/20/80	62575	182	158	0	1	E0	5/ 1/80
179	5/ 1/80	RW5704CC	F0	4/20/80	62576	183	162	0	1	E0	5/ 1/80
180	5/ 1/80	SB7140CC	F0	4/20/80	62577	184	163	0	1	E0	5/ 1/80
181	5/ 1/80	SD0145HH	F0	4/20/80	62578	185	162	0	1	E0	5/ 1/80
186	5/ 2/80	SD1799DD	F0	0/ 0/ 0	62575	188	161	0	1	E0	5/ 2/80
187	5/ 2/80	SD2649EE	F0	5/ 2/80	62576	189	161	0	1	E0	5/ 2/80
190	5/30/80	RY5598JJ	F0	5/30/80	62577	192	164	0	1	E0	6/13/80
191	5/30/80	RY9310JJ	F0	5/30/80	62578	193	157	0	1	E0	6/13/80
194	7/ 2/80	SF8834HH	F0	7/ 2/80	62575	196	161	0	1	E0	7/ 2/80
195	7/ 2/80	SF8978II	F0	7/ 2/80	62576	197	159	0	1	E0	7/ 3/80
198	7/12/80	SM1632JJ	F0	7/11/80	62575	201	160	0	1	E0	7/12/80
199	7/12/80	SH1645KK	F0	7/11/80	62576	202	160	0	1	E0	7/12/80
200	7/12/80	SH1691JJ	F0	7/11/80	62577	203	163	0	1	E0	7/12/80
204	7/25/80	SH4400HH	F0	7/24/80	62578	205	160	0	1	E0	7/26/80
206	7/26/80	SD6104GG	E0	7/26/80	62575	207	160	0	1	E0	7/26/80

LIBRARY CONTROL

BLOCK	CREATION	1ST LIB	LST LIB	LST MOD	1ST SER	LST SER	1ST SLT	LST SLT	SER WRT	SEQ	FEET
5	6/27/79	13	207	0	1	5	62579	62583	1	99	1074

MODEL DSN: DP.
MOD VOL: DPL000

LIBRARY BLOCK

BLOCK	CREATION	START TIME YR	START TIME DAY	START TIME SECONDS	END TIME YR	END TIME DAY	END TIME SECONDS	SER	SEQ	EDR	PROCESSING NO	PROCESSING DISP	DATE	ATTR	WORK
13	7/ 2/79	78	224	83310	78	232	6298	1	1	9	1	80	0/ 0/ 0	3	0
14	7/ 2/79	78	232	5883	78	239	4526	1	2	10	1	80	0/ 0/ 0	3	0
15	7/ 2/79	78	239	4174	78	246	4286	1	3	11	1	80	0/ 0/ 0	3	0
16	7/ 2/79	78	246	4318	78	252	85777	1	4	12	1	80	0/ 0/ 0	129	0

21	7/10/79	78	253	1488	78	260	3712	1	5	17	1	80	0/ 0/ 0	3	0			
22	7/10/79	78	260	2	78	267	3888	1	6	18	1	80	0/ 0/ 0	129	0			
23	7/10/79	78	267	3345	78	274	131	1	7	19	1	80	0/ 0/ 0	3	0			
24	7/10/79	78	274	162	78	280	82964	1	8	20	1	80	0/ 0/ 0	3	0			
29	7/25/79	78	309	2382	78	316	2526	1	9	25	1	80	0/ 0/ 0	3	0			
30	7/25/79	78	288	4129	78	295	3281	1	10	26	1	80	0/ 0/ 0	3	0			
31	7/25/79	78	295	3281	78	302	1953	1	11	27	1	80	0/ 0/ 0	3	0			
32	7/25/79	78	302	1601	78	309	2385	1	12	28	1	80	0/ 0/ 0	3	0			
37	8/ 1/79	78	281	626	78	288	4129	1	13	33	1	80	0/ 0/ 0	3	0			
38	8/ 1/79	78	316	2526	78	323	2925	1	14	34	1	80	0/ 0/ 0	3	0			
39	8/ 1/79	78	323	10058	78	325	63716	1	15	35	1	80	0/ 0/ 0	129	0			
40	8/ 1/79	78	330	1502	78	337	6092	1	16	36	1	80	0/ 0/ 0	129	0			
45	8/ 2/79	78	337	6123	78	343	83519	1	17	41	1	80	0/ 0/ 0	3	0			
46	8/ 2/79	78	344	62	78	351	7114	1	18	42	1	80	0/ 0/ 0	3	0			
47	8/ 2/79	78	351	7179	78	358	2395	1	19	43	1	80	0/ 0/ 0	3	0			
48	8/ 2/79	78	358	2427	78	365	6154	1	20	44	1	80	0/ 0/ 0	3	0			
53	9/17/79	79	7	5752	79	14	5991	1	21	49	1	80	0/ 0/ 0	3	0			
54	9/17/79	79	14	35034	79	21	3511	1	22	50	1	80	0/ 0/ 0	3	0			
55	9/17/79	79	21	6390	79	28	4839	1	23	51	1	80	0/ 0/ 0	3	0			
56	9/17/79	79	28	5542	79	35	2966	1	24	52	1	80	0/ 0/ 0	3	0			
61	9/18/79	79	35	5749	79	41	85991	1	25	57	1	80	0/ 0/ 0	3	0			
62	9/18/79	79	42	3238	79	49	3317	1	26	58	1	80	0/ 0/ 0	3	0			
63	9/18/79	79	133	3790	79	140	863	1	27	59	1	80	0/ 0/ 0	3	0			
64	9/18/79	79	140	928	79	147	6412	1	28	60	1	80	0/ 0/ 0	3	0			
69	10/23/79	78	330	1501	78	337	5164	1	29	65	1	80	0/ 0/ 0	3	0			
70	10/23/79	79	56	2948	79	63	2933	1	30	66	1	80	0/ 0/ 0	129	0			
71	10/23/79	79	147	7787	79	153	83776	1	31	67	1	80	0/ 0/ 0	129	0			
72	10/23/79	79	154	1086	79	161	2733	1	32	68	1	80	0/ 0/ 0	129	0			
77	10/25/79	78	323	10058	78	330	191	1	33	73	1	80	0/ 0/ 0	3	0			
78	10/25/79	78	365	5864	79	7	3353	1	34	74	1	80	0/ 0/ 0	3	0			
79	10/25/79	79	49	6293	79	55	84902	1	35	75	1	80	0/ 0/ 0	3	0			
80	10/25/79	79	63	6258	79	70	3171	1	36	76	1	80	0/ 0/ 0	3	0			
85	10/27/79	79	84	4193	79	90	84308	1	37	81	1	80	0/ 0/ 0	3	0			
86	10/27/79	79	98	4480	79	105	1362	1	38	82	1	80	0/ 0/ 0	3	0			
87	10/27/79	79	112	1888	79	119	2671	1	39	83	1	80	0/ 0/ 0	3	0			
88	10/27/79	79	196	1787	79	203	3050	1	40	84	1	80	0/ 0/ 0	3	0			
93	10/27/79	79	70	4067	79	77	4274	1	41	89	1	80	0/ 0/ 0	3	0			
94	10/27/79	79	77	4946	79	84	3139	1	42	90	1	80	0/ 0/ 0	3	0			
95	10/27/79	79	91	1330	79	98	1409	1	43	91	1	80	0/ 0/ 0	3	0			
96	10/27/79	79	105	4784	79	111	85154	1	44	92	1	80	0/ 0/ 0	3	0			
101	10/29/79	79	161	3022	79	168	829	1	45	97	1	80	0/ 0/ 0	3	0			
102	10/29/79	79	175	2636	79	182	11959	1	46	98	1	80	0/ 0/ 0	3	0			
103	10/29/79	79	182	2332	79	189	141	1	47	99	1	80	0/ 0/ 0	3	0			
104	10/29/79	79	189	141	79	195	84350	1	48	100	1	80	0/ 0/ 0	3	0			
109	11/ 6/79	79	119	4687	79	125	85057	1	49	105	1	80	0/ 0/ 0	3	0			
110	11/ 6/79	79	126	384	79	133	2032	1	50	106	1	80	0/ 0/ 0	3	0			
111	11/ 6/79	79	203	4393	79	210	3449	1	51	107	1	80	0/ 0/ 0	3	0			
112	11/ 6/79	79	210	4728	79	216	84747	1	52	108	1	80	0/ 0/ 0	3	0			
117	11/17/79	79	217	1161	79	223	85370	1	53	113	1	80	0/ 0/ 0	3	0			
118	11/17/79	79	224	889	79	230	85097	1	54	114	1	80	0/ 0/ 0	3	0			
119	11/17/79	79	231	1769	79	237	83705	1	55	115	1	80	0/ 0/ 0	3	0			
120	11/17/79	79	238	823	79	245	1414	1	56	116	1	80	0/ 0/ 0	3	0			
125	11/17/79	79	245	2727	79	252	598	1	57	121	1	80	0/ 0/ 0	3	0			
126	11/17/79	79	252	2805	79	259	134	1	58	122	1	80	0/ 0/ 0	3	0			
127	11/17/79	79	259	933	79	266	4594	1	59	123	1	80	0/ 0/ 0	3	0			
128	11/17/79	79	266	5522	79	272	85700	1	60	124	1	80	0/ 0/ 0	3	0			
134	12/ 4/79	78	246	4318	78	252	84370	1	61	130	1	80	0/ 0/ 0	3	0			
135	12/ 4/79	78	260	2	78	267	3345	1	62	131	1	80	0/ 0/ 0	3	0			
136	12/ 4/79	79	56	2948	79	63	2933	1	63	132	1	80	0/ 0/ 0	3	0			
137	12/ 4/79	79	154	1086	79	161	2733	1	64	133	1	80	0/ 0/ 0	3	0			
142	12/ 5/79	79	147	7787	79	153	83776	1	65	138	1	80	0/ 0/ 0	3	0			
143	12/ 5/79	79	273	2020	79	279	85363	1	66	139	1	80	0/ 0/ 0	3	0			
144	12/ 5/79	79	279	86387	79	286	83203	1	67	140	1	80	0/ 0/ 0	3	0			
145	12/ 5/79	79	287	866	79	293	83282	1	68	141	1	80	0/ 0/ 0	3	0			
147	12/ 5/79	79	294	368	79	301	1343	1	69	146	1	80	0/ 0/ 0	3	0			
149	12/12/79	79	168	4380	79	175	2188	1	70	148	1	80	0/ 0/ 0	3	0			
152	12/19/79	79	301	3358	79	308	3053	1	71	150	1	80	0/ 0/ 0	3	0			
153	12/19/79	79	308	3149	79	314	85822	1	72	151	1	80	0/ 0/ 0	3	0			
157	1/22/80	79	315	2620	79	322	3340	1	73	154	1	80	0/ 0/ 0	3	0			
158	1/22/80	79	322	4842	79	329	4217	1	74	155	1	80	0/ 0/ 0	3	0			
159	1/22/80	79	329	6457	79	336	106	1	75	156	1	80	0/ 0/ 0	3	0			
161	1/23/80	79	336	3144	79	342	85817	1	76	160	1	80	0/ 0/ 0	3	0			
163	1/29/80	79	343	1913	79	349	85736	1	77	162	1	80	0/ 0/ 0	3	0			
165	2/ 1/80	79	350	327	79	356	84536	1	78	164	1	80	0/ 0/ 0	3	0			
167	2/20/80	79	357	278	79	364	677	1	79	166	1	80	0/ 0/ 0	3	0			
169	3/19/80	79	364	1253	79	365	83736	1	80	168	1	80	0/ 0/ 0	3	0			
174	3/28/80	80	1	86	80	6	2162	1	81	170	1	80	0/ 0/ 0	3	0			
175	3/28/80	80	6	2675	80	13	3712	1	82	171	1	80	0/ 0/ 0	3	0			
176	3/28/80	80	13	5311	80	19	85681	1	83	172	1	80	0/ 0/ 0	3	0			
177	3/28/80	80	20	1841	80	26	85248	1	84	173	1	80	0/ 0/ 0	3	0			

```
 182   5/ 1/80  80  27  19798  80  34    846  1  85  178  1  80  0/ 0/ 0   3   0
 183   5/ 1/80  80  34   1581  80  41    637  1  86  179  1  80  0/ 0/ 0   3   0
 184   5/ 1/80  80  48   5385  80  54  84475  1  87  180  1  80  0/ 0/ 0   3   0
 185   5/ 1/80  80  55    923  80  62   1353  1  88  181  1  80  0/ 0/ 0   3   0
 188   5/ 2/80  80  62   2665  80  69   3063  1  89  186  1  80  0/ 0/ 0   3   0
 189   5/ 2/80  80  69   3608  80  76   2566  1  90  187  1  80  0/ 0/ 0   3   0
 192   6/13/80  80  41   3547  80  48   5161  1  91  190  1  80  0/ 0/ 0   3   0
 193   6/13/80  80  83   4052  80  89  74250  1  92  191  1  80  0/ 0/ 0   3   0
 196   7/ 2/80  80  90   2916  80  97   2387  1  93  194  1  80  0/ 0/ 0   3   0
 197   7/ 3/80  80 104   5377  80 110  83795  1  94  195  1  80  0/ 0/ 0   3   0
 201   7/12/80  80  97   4851  80 104   3618  1  95  198  1  80  0/ 0/ 0   3   0
 202   7/12/80  80 111     82  80 117  84610  1  96  199  1  80  0/ 0/ 0   3   0
 203   7/12/80  80 118   1921  80 125   2671  1  97  200  1  80  0/ 0/ 0   3   0
 205   7/26/80  80 125   2991  80 132   1407  1  98  204  1  80  0/ 0/ 0   3   0
 207   7/26/80  80 132   1407  80 138  86191  1  99  206  1  80  0/ 0/ 0   3   0

                 WORK CONTROL

BLOCK   CREATION   1ST WRK   LST WRK   1ST SER   LST SER   1ST SLT   LST SLT   MODEL DSN              MOD VOL    SER WRT
  6     6/27/79       0         0         1         5      62584     62588    DP.WORK.ENCY           DPW000       0

                 ENCYCLOPEDIA CONTROL

BLOCK   CREATION   1ST ENC   LST ENC   1ST SER   LST SER   1ST SLT   LST SLT   MOD LAB   LST SER   MAX BLKS
  7     6/27/79       0         0.        0         0         0         0                   0         0
MODEL DSN

                 CITENCY CONTROL

BLOCK   CREATION   1ST CIT   LST CIT   1ST SER   LST SER   1ST SLT   LST SLT   MOD LAB   LST SER   MAX FT
  8      0/ 0/ 0      0         0         0         0         0         0                   0         0
        MODEL DSN          FULL FLG
                              0

INPUT MENU NUMBER OF DESIRED LIST.

IEF142I - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SEICC.PROCESS.LOAD                              KEPT         DDNAME=STEPLIB          0 EXCPS
IEF285I   VOL SER NOS= DISK06.
IEF285I   SYS80208.T120824.RV000.SEICCDLT.S0000002        SYSIN        DDNAME=FT05F001         3 EXCPS
IEF285I   VOL SER NOS= SCR000.
IEF285I   SYS80208.T120824.RV000.SEICCDLT.S0000002        DELETED      DDNAME=FT05F001         3 EXCPS
IEF285I   VOL SER NOS= SCR000.
IEF285I   SYS80208.T120824.SV000.SEICCDLT.R0000001        SYSOUT       DDNAME=FT10F001         4 EXCPS
IEF285I   VOL SER NOS= SCR000.
IEF285I   SEICC.DPLOG.DATA                                KEPT         DDNAME=FT25F001         7 EXCPS
IEF285I   VOL SER NOS= DISK08.
IEF373I STEP /        / START 80208.1208
IEF374I STEP /        / STOP  80208.1208 CPU    0MIN 00.84SEC MAIN 100K LCS    0K
- STEP 01 -     RETURN CODE = 0000                                 STEP TIME =      .05 MINS=(CPU=      .01,IO=      .04)
                              IO IN SECS. DISK=    2.46,DRUM=     .00,TAPE=      .00,CELL=      .00,OTHR=      .08
- SURCHARGES=(DRIVES ALOC=000,TAPE MOUNTS=000,CORE=000,PAPER=000,PRIORITY=00000)SECS.    TOTAL STP TIME=      .05 MINS.  -
     // EXEC NOTIFYTS                                                         00000210
     XXDEFAULT  PROC MODE=,USRID=,MSG=,USERID=,ID=   *LAR/21JUN79             00000010
     XXNOTIFYTS EXEC PGM=NOTIFYTS,REGION=20K,COND=EVEN,                       00000020
     XX              PARM='&MODE,&USRID&USERID&ID,&MSG'                       00000030
      IEF653I SUBSTITUTION JCL - PARM=',,'
     XXSYSABEND DD SYSOUT=A,SPACE=(CYL,(0,5))                                 00000040
IEF236I ALLOC. FOR SEICCDLT NOTIFYTS
IEF237I 450    ALLOCATED TO SYSABEND
IEF142I - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SYS80208.T120824.SV000.SEICCDLT.R0000003        DELETED      DDNAME=SYSABEND         0 EXCPS
IEF285I   VOL SER NOS= SCR000.
IEF373I STEP /NOTIFYTS/ START 80208.1208
IEF374I STEP /NOTIFYTS/ STOP  80208.1208 CPU    0MIN 00.04SEC MAIN   8K LCS    0K
- STEP 02 -     RETURN CODE = 0000                                 STEP TIME =      .00 MINS=(CPU=      .00,IO=      .00)
                              IO IN SECS. DISK=     .12,DRUM=     .00,TAPE=      .00,CELL=      .00,OTHR=      .06
- SURCHARGES=(DRIVES ALOC=000,TAPE MOUNTS=000,CORE=000,PAPER=000,PRIORITY=00000)SECS.    TOTAL STP TIME=00000.00 MINS.  -
```

3.4 LISTING THE DATA POOL LOG

Refer to Section 2.4 of this guide for the methods of listing the data pool log. The user must simply substitute the member name DPLSTALL for LISTALL or DPLOGLST for LOGLIST. The following is the actual JCL for running DPLSTALL. SEICC.LIB.CNTL(DPLSTALL)

```
//SEICCDPL JOB (S00132823B,T,SA0001,H0CF00),BF3,MSGLEVEL=1
//* SEICC DPLOG.DATA
//DPLSTALL PROC
// EXEC PGM=LOGLIST,REGION=150K
//STEPLIB DD DSN=SEICC.PROCESS.LOAD,DISP=SHR
//FT05F001 DD DDNAME=DATA5
//FT06F001 DD DUMMY
//FT10F001 DD SYSOUT=A,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=7265)
//FT11F001 DD DUMMY
//FT25F001 DD DSN=SEICC.DPLOG.DATA,UNIT=3314,DISP=SHR,
//    DCB=(LRECL=64,RECFM=FB,BLKSIZE=7232)
// PEND
//  EXEC  DPLSTALL
//DATA5 DD *
BACKGRND SEICC.DPLOG.DATA
06
ISEE-3
NO
01
/*
// EXEC NOTIFYTS
```

This is the actual CLIST for executing DPLOGLST in the TSO foreground.
SEICC.LIB.CLIST(DPLOGLST)

```
PROC 0 LOG('SEICC.DPLOG.DATA') OUT11(*)
CFREE F(FT05F001,FT06F001,FT10F001,FT11F001,FT25F001)
CFREE ATTR(OUT,LOG)
ATTR OUT BLKSIZE(2400) LRECL(120) RECFM(F B)
ATTR LOG BLKSIZE(7232) LRECL(64) RECFM(F B)
ALLOC F(FT05F001) DA(*)
ALLOC F(FT06F001) DA(*)
ALLOC F(FT10F001) SYSOUT
ASK 'DID YOU NAME A DSN FOR OUT11? (YES/NO)'
SYSRC (EQ 4) GO TO LABEL TERM
SRCHDS &OUT11
WHEN SYSRC(LE 4)
ALLOC DA(&OUT11.) NEW SPACE(60) TRACKS
ALLOC F(FT11F001) DA(&OUT11.) USING(OUT) MOD
GO TO LABEL FT25
LABEL TERM
ALLOC F(FT11F001) DA(&OUT11.)
LABEL FT25
ALLOC F(FT25F001) DA(&LOG.) USING(LOG) OLD
ASK 'DO YOU WANT TO SEE THE LIST MENU? (YES/NO)'
SYSRC (EQ 4) GO TO LABEL CALL
TPRINT 'MENU NO.     NAME       DESCRIPTION'
TPRINT '    01        SHWEDR     DISPLAYS EDR TAPES MARKED FOR REMOVAL'
TPRINT '    02        SHWCIT     DISPLAYS CIT TAPES MARKED FOR REMOVAL'
TPRINT '    03        REMSLT     # TAPE SERIALS REMAINING IN SOME CONTROLS'
TPRINT '    04        BAKLOG     BACK LOG ON A GIVEN PROCESS'
TPRINT '    05        INCOMP     INCOMPLETE PROCESSES'
TPRINT '    06        LISTAL     LISTALL BY BLOCKS'
TPRINT '    07        DMPLOG     FLA DUMP OF THE LOG'
LABEL CALL
CALL 'SEICC.PROCESS.LOAD(LOGLIST)'
FREE F(FT10F001) SYSOUT(A)
TPRINT 'OUTPUT TO FT11F001 ON &OUT11.'
FREE F(FT25F001)
```

3.5 DESCRIPTION AND PREPARATION OF THE DATA POOL TAPES

Each ISEE-3 data pool tape contains 1 week of data. Each week is a GROUP. Each GROUP of data pool data is contained on one file. This file is repeated 3 times on the data pool tape for redundency backup. The tapes are NL 1600 BPI each of the three duplicate data files are separated by a single tapemark (EOF). The actual format of the data pool tape may be found in Notes on the ISEE-3 Data Pool Tapes, Bank/von Rosenvinge, GSFC, et al 1979.

The following steps explain the procedures for preparing a data pool tape for processing:

1) Remove the tape from the shipping box along with the shipping letter. Figure 3.5.1 is a typical shipping letter.
2) Compare the INVENTORY # on the shipping letter with the one on the face of the tape volume. Compare the GROUP #s also. If not equal you may have been shipped the wrong tape, so consult the cognizant programmer for help.
3) Add the following information to the shipping letter:
   a) Date you received the tape
   b) BLOCK-leave blank until the block is assigned by DREDRLOG
   c) SLOT-leave blank until slot is assigned by DREDRLOG
   d) Repeat last character of the INVENTORY # to make the eight character tape number which is inputed to DPEDRLOG
   e) Remember that all data pool tape have only one (1) file to be processed
4) Execute the DPEDRLOG foreground program via TSO. Figure 3.5.2 is a typical DPEDRLOG session. The shipping letter notes are used as input. A listing

not the same

Figure 3.5.1 - Typical Data Pool Shipping Letter

ISEE-C

(IE03)

DATAPOOL

7/26/80
BIK: 206
Slot: 62575

GROUP 092

START (YDDD) 80132[illegible]

STOP (YDDD) 80132[illegible]

EXPERIMENTER X33

INVENTORY# SD6104G

of the actual CLIST appears in Figure 3.5.3 at the end of this subsection.

Figure 3.5.2 - DPEDRLOG

```
invalid-sw-chars
bt91  <-
ready to ibm
logon seicc/iicc  <-
#SEICC LOGON IN PROGRESS AT 11:47:54 ON JULY 26, 1980
THE 75 WILL HAVE ONLY 120K AVAILABLE FOR THE REST OF THE DAY,,,,,,,,,,
3 JOBS ONLY PER USER ID ALLOWED IN SYSTEM
THE TIME LIMIT FOR THE 91 IS 15 MIN TOTAL TIME.....
NEW ABENDAID RELEASE ON 360/91, REPORT PROBS TO PAC
DISK00 restored 7/25 @13:30 from tape made 7/25 @01:00
--04 TOTAL TSO USERS ON 360/91 M2
ATTR FB LRECL(80) BL(7280) IS SET UP
TODAY IS SAT JUL 26,1980.
READY
dpedrlog  <-
INPUT SATELLITE ID
XXXXXXXXXXX
isee-3  <-
ISEE-3
ENTER 8 CHAR TAPE ID.   TO TERMINATE, ENTER /*.
XXXXXXXX
sd6104gg  <-
ENTER NUMBER OF FILES ON EDR (I3)
001  <-
ENTER DATE TAPE WAS RECEIVED;  YEAR, MONTH AND DAY
XX XX XX
80 07 26  <-
BLOCK   206 HAS BEEN ALLOCATED TO VOL-SER SD6104 IN TLS SLOT  62575

ENTER 8 CHAR TAPE ID.   TO TERMINATE, ENTER /*.
XXXXXXXX

/*  <-
READY — PLACE DATA POOL TAPE IN SLOT IN BLOCK #1,
```

Fill in the BLOCK and SLOT numbers on the shipping letter. The printed copy of this DPEDRLOG session will be delivered to BF3. Retain it for filing. File the shipping letter in the Data Pool notebook.

5) Remove the tape from the canister and put a standard tape strap on it.

5 Slots are available

6) Place the small sticker on the side of the canister on the tape strap.

7) Place the TLS number assigned by DPEDRLOG on the tape strap.

8) Put the tape in the TLS slot.

Figure 3.5.3 - DPEDRLOG CLIST

SEICC.LIB.CLIST(DPEDRLOG)

```
PROC  0
CFREE F(SYSIN,SYSPRINT,FT05F001,FT06F001,FT10F001,FT11F001,FT25F001)
CFREE A(FB)
ALLOC F(FT05F001) DA(*)
ALLOC F(FT06F001) DA(*)
ALLOC F(FT10F001) SYSOUT
ALLOC F(FT11F001) DUMMY
ALLOC F(SYSIN) SPACE(5) TRACKS
ALLOC F(SYSPRINT) SPACE(5) TRACKS
ALLOC F(SLOT) DA('SYS2.TLS.SLOT') SHR
ALLOC DA('SYS2.TLS.VSN') F(VSN) SHR
ATTRIB FB RECFM(F B) LRECL(64)
ALLOC DA('SEICC.DPLOG.DATA') F(FT25F001) OLD USING(FB)
ALLOC F(PVTLIBDD) DA('SYS2.TLS.LOAD') SHR
DO EDRLOG   TASKLIB('SEICC.PROCESS.LOAD')
FREE DA('SEICC.DPLOG.DATA')
FREE DA('SYS2.TLS.SLOT','SYS2.TLS.VSN','SYS2.TLS.LOAD')
FREE F(SYSIN,SYSPRINT,FT05F001,FT06F001,FT11F001)
FREE F(FT10F001) SYSOUT(A)
FREE ATTRLIST(FB)
ALLOC DA(*) F(SYSIN)
ALLOC DA(*) F(SYSPRINT)
```

old

3.6 ADDING THE DATA POOL TAPE TO THE 6250 BPI LIBRARY TAPE

The data pool tape is added to the 6250 BPI library tape by entering the following command on the 360/91:

```
sub lib(dptsave)  ←
JOB SEICCDS1 SUBMITTED
READY
```

This job (SEICCDS1) executes in the minimum time estimate possible on the 360 computers. Therefore, turn around is very quick. A list of the JCL for DPTSAVE follows:

use w CHIST

```
READY
qed lib.cntl(dptsave)
QED
list
00010 //SEICCDS1 JOB (SB0132823A,P,ISEE-3,H00H00),BF3
00020 //* EXECUTE DPTSAVE
00030 //DPTSAVE  EXEC  PGM=DPTSAVE,REGION=200K   SB#IC.HB.LOAD
00040 //STEPLIB  DD  DSN=SEICC.DPTSAVE.LOAD,DISP=SHR
00050 //FT06F001  DD  SYSOUT=A,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=1100)
00060 //FT08F001  DD  UNIT=(6250,,DEFER),DISP=SHR,LABEL=(1,NL),
00070 // DCB=(RECFM=FB,LRECL=3240,BLKSIZE=3240,BUFNO=1,DEN=3),VOL=SER=ICDUM1
00080 //FT09F001  DD  UNIT=(6250,,DEFER),VOL=SER=ICDUM2,DISP=(NEW,PASS),
00090 // DCB=(RECFM=FB,LRECL=3240,BLKSIZE=3240,BUFNO=1,DEN=4)
00100 //FT25F001  DD  DSN=SEICC.DPLOG.DATA,DISP=OLD,DCB=(RECFM=F,LRECL=7232)
00110 //SYSUDUMP  DD  SYSOUT=A
00120 //FT05F001  DD  *
00130 ISEE-3       01 F
00140 /*
00150 // EXEC NOTIFYTS
END OF DATA
```

When the listing for this job is received, check the RETURN CODE to be sure it is 00000. If not, consult cognizant programmer/analyst. If OK, continue with the next subsection (3.7).

3.7 BACKUP AND LIST THE DATA POOL LOG

After DPTSAVE has completed normally, it is necessary to copy the data pool log to the next file of the backup tape (FLL10) to allow for recovery of all GROUPS if errors occur later. It is also good to list the data pool log so as to have a current listing of it on hand in the Data Pool Processing Binder. Figure 3.7.1 demonstrates this procedure. The jobname in line 10 is altered as well as the output file in line 30. Both are incremented by 1. When the output from these jobs is received, check them for errors. If there are more data pool tapes to process, return to subsection 3.5. If not, proceed with subsection 3.8, which follows.

check this should also be done periodically

Figure 3.7.1 - BACKUP & LIST THE DATA POOL LOG

```
READY
qed lib.cntl(dplcopy) <------
QED
list <------
00010 //SEICCD49 JOB (SB0132823A,P,ISEE-3,H00H00),BF3
00020 //*COPYISEE LOG.DATA
00030 // EXEC PGM=PATRICK,PARM='9TN,001,001,049',REGION=150K
00040 //IN1  DD  DSN=SEICC.DPLOG.DATA,DISP=SHR,DCB=(RECFM=F,BLKSIZE=7232,
00050 //          LRECL=7232)
00060 //OUT1 DD  DSN=SEICC.DPLOG.DATA,DISP=SHR,LABEL=(,SL,,OUT),UNIT=6250,
00070 //          VOL=SER=FLL10,DCB=(RECFM=F,LRECL=7232,BLKSIZE=7232,DEN=4)
00080 //OUT2  DD  SYSOUT=A
00090 //SYSUDUMP  DD  SYSOUT=A
00110 // EXEC NOTIFYTS
END OF DATA

a 10 <------
//SEICCD49 JOB (SB0132823A,P,ISEE-3,H00H00),BF3
         50
a 30 <------
// EXEC PGM=PATRICK,PARM='9TN,001,001,049',REGION=150K
                                          50
list <------
00010 //SEICCD50 JOB (SB0132823A,P,ISEE-3,H00H00),BF3
00020 //*COPYISEE LOG.DATA
00030 // EXEC PGM=PATRICK,PARM='9TN,001,001,050',REGION=150K
00040 //IN1  DD  DSN=SEICC.DPLOG.DATA,DISP=SHR,DCB=(RECFM=F,BLKSIZE=7232,
00050 //          LRECL=7232)
00060 //OUT1 DD  DSN=SEICC.DPLOG.DATA,DISP=SHR,LABEL=(,SL,,OUT),UNIT=6250,
00070 //          VOL=SER=FLL10,DCB=(RECFM=F,LRECL=7232,BLKSIZE=7232,DEN=4)
00080 //OUT2  DD  SYSOUT=A
00090 //SYSUDUMP  DD  SYSOUT=A
00110 // EXEC NOTIFYTS
END OF DATA
sve <------
SAVED
READY
submit lib(dplcopy) <------
JOB SEICCD50 SUBMITTED
READY
submit lib(dplstall) <------
JOB SEICCDLT SUBMITTED
READY
```

no current JCL in SB#IC.LIB.CNTL

3.8 BACKUP THE 6250 BPI LIBRARY TAPE

The following graphic indicates the procedure for copying the 6250 BPI library tape. It uses the SACC 360 utility TAPESCAN. Only the time estimate should be edited if necessary. The estimate of 001008 should be adequate for copying this tape on the 360/91.

```
READY
qed lib.cntl(dplibcpy)   <-   use CLIST dplibcpy
OED
1   <-
00010 //SEICCDLK JOB (SB0132823A,T,ISEE-3,001H06),BF3
00020 //*COPYISEE DP-LIBTP
00030 // EXEC TAPESCAN,VOL=DPL001,PARM=(COPY,NOVOLSER,NOHEX,LIST01),
00040 //    REGION=80K,MOUNT=
00050 //OUTPUT DD UNIT=(6250,,DEFER),VOL=SER=DPLB01,
00060 //  LABEL=(1,SL),DISP=(NEW,KEEP),DCB=DEN=4
00070 // EXEC NOTIFYTS
END OF DATA

a 10   <-
//SEICCDLK JOB (SB0132823A,T,ISEE-3,001H06),BF3
                                          008   <-
1   <-
00010 //SEICCDLK JOB (SB0132823A,T,ISEE-3,001008),BF3
00020 //*COPYISEE DP-LIBTP
00030 // EXEC TAPESCAN,VOL=DPL001,PARM=(COPY,NOVOLSER,NOHEX,LIST01),
00040 //    REGION=80K,MOUNT=
00050 //OUTPUT DD UNIT=(6250,,DEFER),VOL=SER=DPLB01,
00060 //  LABEL=(1,SL),DISP=(NEW,KEEP),DCB=DEN=4
00070 // EXEC NOTIFYTS
END OF DATA
sve   <-
SAVED
READY
submit lib(dplibcpy)   <-
JOB SEICCDLK SUBMITTED
READY
```

When this printout is returned, check for I/O errors on the input tape, then file all of the printouts generated (DPEDRLOG, DPTSAVE, DPLCOPY, DPLSTALL and DPLIBCPY) in the ISEE-3 Data Pool Processing binder. This completes the procedure for data pool tape processing.

SECTION 4 - UTILITIES

INTRODUCTION

This section of the ISEE-3 Production Data Processing Procedures Guide defines and demonstrates the execution of various utility programs developed for the purpose of LOG/TLS maintenance, data acquisition, and TSO/OS system aides which are not normally executed during the production data processing for either the cosmic ray or data pool systems. Therefore, this section has been divided into the three major subsections described above. The following mnemonics table defines the member name, type and function for each of the three major subsections.

ISEE-3 UTILITIES MNEMONICS TABLE

SUB-SECTION	INDEX	MEMBER NAME	TYPE	FUNCTION
4.1 LOG/TLS MAINTENANCE UTILITIES	4.1.1	RESTLOG	CNTL	RESTORES AN OLD VERSION OF THE COSMIC RAY LOG (SEICC.LOG.DATA).
	4.1.2	DPLREST	CNTL	RESTORES AN OLD VERSION OF THE DATA POOL LOG (SEICC.DPLOG.DATA).
	4.1.3	ALTBLK	CLIST	ALTERS BYTES IN COSMIC RAY LOG.
	4.1.4	DPALTBLK	CLIST	ALTERS BYTES IN DATA POOL LOG.
	4.1.5	TLS	CLIST	REMOVES EDR AND WORK TAPES, PLUS ASSIGNS NEW WORK TAPES TO THE COSMIC RAY LOG AND TLS.
	4.1.6	DPTLS	CLIST	REMOVE DATA POOL TAPES FROM DATA POOL LOG AND TLS.
	4.1.7	LABWORK	CNTL	JCL TO LABEL NEW WORK TAPES.
	4.1.8	REDOLIB	CLIST	MODIFIES THE LIBRARY BLOCK SPECIFIED TO ALLOW FOR ANOTHER PROCESSING ATTEMPT.

(continued)

ISEE-3 UTILITIES MNEMONICS TABLE (Cont'd)

SUB-SECTION	INDEX	MEMBER NAME	TYPE	FUNCTION
	4.1.9	RMVENC	CLIST	MARKS INACTIVE ENCY TAPES FOR REMOVAL FROM THE COSMIC RAY LOG AND TLS.
END 4.1	4.1.10	ASNENC	CLIST	REASSIGNS THE REMOVED ENCY TAPES TO NEW VOLUME NUMBERS, SLOT NUMBERS AND CREATES A DATA SET CONTAINING THE LABEL JCL
4.2 DATA ACQUISITION UTILITIES	4.2.1	STSCAN	CLIST	TAPESCAN ANY ISEE PRODUCTION TAPE.
	4.2.2	EDRLIST	CNTL	LIST DATA FROM RAW EDR TAPE.
	4.2.3	LIBLIST	CNTL	LIST EDR DATA FROM LIBRARY TAPE.
	4.2.4	LSELECT	CNTL	LIST DATA FROM WORK OR ENCYCLOPEDIA TAPES.
END 4.2	4.2.5	TAPETST	CNTL	TESTS ENCYCLOPEDIA TAPES FOR SHORT RECORDS.
4.3 TSO/OS SYSTEM AIDS	4.3.1	FT	CLIST	RENAME A MEMBER IN LIB.CNTL.
	4.3.2	QD	CLIST	QEDs A MEMBER IN LIB.CNTL
	4.3.3	MAXAL	CLIST	FINDS MAXIMUM ALLOCATION IN TRACKS ON ALL DISKXX PACKS AND ON THE 91 ONLY TRANS1 PACK.
	4.3.4	TSOLIST	CNTL	LISTS LIB.CNTL AND LIB.CLIST
	4.3.5	UPDATEDS	CLIST	LISTS DATA SETS ARCHIVED OR BACKED UP BY ASM2 THE LAST TIME ASM2 WAS RUN.
	4.3.6	AR	CLIST	ARCHIVES CATALOGED DISK DATA SETS IN THE SACC S/360 ASM2 ARCHIVE SYSTEM
	4.3.7	BK	CLIST	BACKUP CATALOGED DISK DATA SETS IN THE SACC S/360 ASM2 BACKUP SYSTEM EACH TIME THEY ARE MODIFIED.
	4.3.8	BGRA	CLIST	RESTORE AN ARCHIVED DISK DATA SET FROM ASM2 ARCHIVE TAPE.

ISEE-3 UTILITIES MNEMONICS TABLE (Cont'd)

SUB-SECTION	INDEX	MEMBER NAME	TYPE	FUNCTION
	4.3.9	BGRB	CLIST	RESTORE A BACKED UP DISK DATA SET FROM ASM2 BACKUP TAPE.
	4.3.10	SAVEDS	CNTL/ CLIST	OPENS AND CLOSES DISK DATA SETS TO PREVENT ARCHIVAL BY ASM2 SYSTEM.
END 4.3	4.3.11	BYE	CLIST	TERMINATES A TSO SESSION WHEN USING 'OMRON' TYPE TERMINALS ONLY!

4.1 LOG/TLS MAINTENANCE UTILITIES

This section contains the utility programs which operate on the data processing logs or the Tape Library System tapes and slots.

4.1.1 RESTLOG

The RESTLOG member resides in SEICC.LIB.CNTL and is run only when errors have occurred in one of the cosmic ray data reduction runs and the responsible programmer/analyst requests that you reload the LOG. As you know, the processing log is copied to the next sequencial file of the backup tape (ICLOGB) by the COPYLOG member after each group is processed. (See Section 2.8). Therefore, the user must refer to the 'Cosmic Ray Data Reduction Binders' to determine the tape file sequence number which contains the last good version of the LOG. When this is known, the following procedure is used to restore the LOG:

1) Make a temporary backup of the existing LOG, which is done in the following way using TSO on the 360/91:

```
bt91
ready to ibm
logon seicc/iicc
#SEICC LOGON IN PROGRESS AT 16:09:11 ON OCTOBER 8, 1980
*** THE TIME LIMIT ON THE 91 IS 15 MINUTES ***
ONLY THREE  JOBS PER USER ID IN SYS AT ONE TIME
****TIME LIMIT ON THE 75 IS 15 MINS****
---55 TOTAL TSO USERS ON 360/91 M2
ATTR FB LRECL(80) BL(7280) IS SET UP
TODAY IS WED OCT 08,1980.
READY
aj
READY
alloc da(templog.data) n t sp(40)
READY
copy log.data templog.data nonum
READY
```

2) Then, the member RESTLOG is QEDed, edited, submitted and saved in the following way:

```
READY
qed lib.cntl(restlog)
QED
1
00010 //SEICC107 JOB (SB0132823B,P,ISEE0A,H00H00),BF3
00020 //*RESTISEE LOG.DATA
00030 // EXEC PGM=PATRICK,PARM='9TN,107,107,001',REGION=150K
00040 //OUT1 DD  DSN=SEICC.LOG.DATA,DISP=SHR,DCB=(RECFM=F,BLKSIZE=7232,
00050 //          LRECL=7232)
00060 //IN1  DD  DSN=SEICC.LOG.DATA,DISP=SHR,LABEL=(,SL),UNIT=6250,
00070 //          VOL=SER=ICLOGB,DCB=(RECFM=F,LRECL=7232,BLKSIZE=7232,DEN=4)
00080 //OUT2  DD  SYSOUT=A
00090 //SYSUDUMP  DD  SYSOUT=A
00110 // EXEC NOTIFYTS
END OF DATA
a 10
//SEICC107 JOB (SB0132823B,P,ISEE0A,H00H00),BF3
       nnn
a 30
```

nnn = The backup file sequence number of the log which is being reloaded.

```
// EXEC PGM=PATRICK,PARM='9TN,107,107,001',REGION=150K
                              nnn nnn
1
00010 //SEICCNNN JOB (SB0132823B,P,ISEE0A,H00H00),BF3
00020 //*RESTISEE LOG.DATA
00030 // EXEC PGM=PATRICK,PARM='9TN,NNN,NNN,001',REGION=150K
00040 //OUT1 DD  DSN=SEICC.LOG.DATA,DISP=SHR,DCB=(RECFM=F,BLKSIZE=7232,
00050 //          LRECL=7232)
00060 //IN1  DD  DSN=SEICC.LOG.DATA,DISP=SHR,LABEL=(,SL),UNIT=6250,
00070 //          VOL=SER=ICLOGB,DCB=(RECFM=F,LRECL=7232,BLKSIZE=7232,DEN=4)
00080 //OUT2  DD  SYSOUT=A
00090 //SYSUDUMP  DD  SYSOUT=A
00110 // EXEC NOTIFYTS
END OF DATA
sub *
sve
JOB SEICCNNN SUBMITTED
QED
SAVED
READY
```

3) When this run completes with a return code of zero (0), run the background log listing utility (i.e. SUB LIB(LISTALL)) and check this output to be sure you have reloaded the correct LOG.

4.1.2 DPLREST

DPLREST is the data pool system counterpart of the cosmic ray RESTLOG utility. The exact procedure is followed for restoring the data pool log as for the cosmic ray log, except these few changes are inputed in the each step as follows:

1) Instead of SEICC.LOG.DATA type SEICC.DPLOG.DATA
2) Instead of OEDing LIB.CNTL(RESTLOG) type LIB.CNTL(DPLREST)
3) Instead of SUB LIB (LISTALL) type SUB LIB (DPLSTALL)

A listing of the JCL for DPLREST follows:

```
list 'seicc.lib.cntl(dplrest)'
'SEICC.LIB.CNTL(DPLREST)'
00010 //SEICCR53 JOB (SB0132823B,T,SA0001,H00H00),BF3,MSGLEVEL=1
00020 //*RESTISEE LOG.DATA
00030 // EXEC PGM=PATRICK,PARM='9TN,053,053,001',REGION=150K
00040 //OUT1 DD  DSN=SEICC.DPLOG.DATA,DISP=SHR,DCB=(RECFM=F,BLKSIZE=7232,
00050 //          LRECL=7232)
00060 //IN1  DD  DSN=SEICC.DPLOG.DATA,DISP=SHR,LABEL=(,SL),UNIT=6250,
00070 //          VOL=SER=FLL10,DCB=(RECFM=F,LRECL=7232,BLKSIZE=7232,DEN=4)
00080 //OUT2  DD  SYSOUT=A
00090 //SYSUDUMP  DD  SYSOUT=A
00100 // EXEC NOTIFYTS
```

Old, but keep for reference

4.1.3 ALTBLK

ALTBLK is a CLIST/program which executes in TSO foreground. This program is used to modify any byte within any block of the cosmic ray data processing log (SEICC.LOG.DATA). This program is only to be executed by members of the programming staff, however. Therefore it should suffice for this discussion to inform the user of some cases where he may request that ALTBLK be run in order to correct errors in the cosmic ray log. They are as follows:

a) User makes an incorrect entry during an EDRLOG session such as:
   1) Wrong tape no. entered
   2) Wrong no. of files entered
   3) Wrong date received entered

b) An excessive number of errors were encountered during EDRSAVE processing and a record of this bad EDR tape in the LOG but a new tape is to be ordered for that GROUP of data.

Appendix A of the 'ISEE-3 Data Reduction Programmer's Guide' (CSC/TM-80/6208) contains the byte by byte description of each block in the LOG. Figure 4.1.3.1 is a listing of the ALTBLK CLIST.

Figure 4.1.3.1 - ALTBLK CLIST

```
PROC 0
SRCHDS 'SEICC.LOGBK.DATA'
SYSRC (EQ 0) GO TO LABEL QCOPY
ALLOC DA('SEICC.LOGBK.DATA') NEW TRACKS SPACE(40)
GO TO LABEL COPY
CC
LABEL QCOPY
ASK 'DO YOU WANT TO BACKUP SEICC.LOG.DATA? (YES/NO)'
SYSRC (EQ 4) GO TO LABEL FREE
CC
LABEL COPY
CFREE F(SYSUT1,SYSUT2,SYSIN,SYSPRINT) A(LOG)
ATTR LOG BLKSIZE(7232) LRECL(7232) RECFM(F) BUFNO(1)
ALLOC F(SYSUT1) DA('SEICC.LOG.DATA') SHR USING(LOG)
ALLOC F(SYSUT2) DA('SEICC.LOGBK.DATA') SHR USING(LOG)
ALLOC F(SYSPRINT) DUMMY
ALLOC F(SYSIN) DUMMY
DO IEBGENER
CFREE F(SYSUT1,SYSUT2,SYSIN,SYSPRINT)
ALLOC F(SYSIN) DA(*)
ALLOC F(SYSPRINT) DA(*)
TPRINT 'SEICC.LOG.DATA BACKED ONTO SCRATCH SEICC.LOGBK.DATA'
CC
LABEL FREE
CFREE F(FT05F001,FT06F001,FT10F001,FT25F001)
CFREE ATTR(LOG)
ALLOC F(FT05F001) DA(*)
ALLOC F(FT06F001) DA(*)
ALLOC F(FT10F001) SYSOUT
ATTR LOG BLKSIZE(7232) LRECL(7232) RECFM(F)
ALLOC F(FT25F001) DA('SEICC.LOG.DATA') OLD USING(LOG)
CALL 'SEICC.PROCESS.LOAD(ALTBLK)'
CFREE F(FT25F001) A(LOG)
FREE F(FT10F001) SYSOUT(A)
END
```

old vsn.

4.1.4 DPALTBLK

DPALTBLK performs the same function on the data pool log (SEICC.DPLOG.DATA) as ALTBLK does for the cosmic ray log. The same restrictions exist for the use of this CLIST as well as the same reasons for requesting its execution. Below is a listing of the DPALTBLK CLIST.

DPALTBLK

```
PROC 0
SRCHDS 'SEICC.DPLOGBK.DATA'
SYSRC (EQ 0) GO TO LABEL QCOPY
ALLOC DA('SEICC.DPLOGBK.DATA') NEW TRACKS SPACE(10)
GO TO LABEL COPY
CC
LABEL QCOPY
ASK 'DO YOU WANT TO BACKUP SEICC.DPLOG.DATA? (YES/NO)'
SYSRC (EQ 4) GO TO LABEL FREE
CC
LABEL COPY
CFREE F(SYSUT1,SYSUT2,SYSIN,SYSPRINT) A(DPLOG)
ATTR DPLOG BLKSIZE(7232) LRECL(7232) RECFM(F) BUFNO(1)
ALLOC F(SYSUT1) DA('SEICC.DPLOG.DATA') SHR USING(DPLOG)
ALLOC F(SYSUT2) DA('SEICC.DPLOGBK.DATA') SHR USING(DPLOG)
ALLOC F(SYSPRINT) DUMMY
ALLOC F(SYSIN) DUMMY
DO IEBGENER
CFREE F(SYSUT1,SYSUT2,SYSIN,SYSPRINT)
ALLOC F(SYSIN) DA(*)
ALLOC F(SYSPRINT) DA(*)
TPRINT 'SEICC.DPLOG.DATA BACKED ONTO SCRATCH SEICC.DPLOGBK.DATA'
CC
LABEL FREE
CFREE F(FT05F001,FT06F001,FT10F001,FT25F001)
CFREE ATTR(DPLOG)
ALLOC F(FT05F001) DA(*)
ALLOC F(FT06F001) DA(*)
ALLOC F(FT10F001) SYSOUT
ATTR DPLOG BLKSIZE(7232) LRECL(7232) RECFM(F)
ALLOC F(FT25F001) DA('SEICC.DPLOG.DATA') OLD USING(DPLOG)
CALL 'SEICC.PROCESS.LOAD(ALTBLK)'

CFREE F(FT25F001) A(DPLOG)
FREE F(FT10F001) SYSOUT(A)
END
```

Old VSN

4.1.5 TLS

TLS is a foreground executing CLIST/program which has two functions: 1) When the EDR slots in TLS and the cosmic ray log have been used, the TLS CLIST is used to remove all processed EDR tapes from TLS and the LOG is marked with the code F0 in the SLOT STAT halfword of the EDR block. 2) When the last serial (LSTSER) in the WORK CONTROL block equals the SER WRT, TLS must be used to remove WORK tapes from TLS. At this time, it is also necessary to add the next sequencial block of 25 WORK tapes to the LOG and TLS which is the second step of the TLS CLIST when used for WORK tape maintenance.

The following pages will describe the procedure for performing either of these two functions of TLS.

1) Removing EDR tapes using the TLS CLIST
   a) First, run the foreground LOGLIST utility and list the EDR tapes marked for removal. (See Figure 4.1.5.1).
   b) Next, run the foreground TLS utility and remove the EDR tapes from TLS and the LOG (See Figure 4.1.5.2) using the first six digits of the volume numbers from the LOGLIST run as input.
   c) Physically remove the EDR tapes from the slots in Building 1 and return them to Building 2, Room 238.
   d) Remove all of the TLS numbers from the straps and place them in assending order.
   e) Put the EDR tapes in the tape rack with others until enough of them have accumulated to warrent sending them to the Tape Stagging and Storage Facility. Consult GSFC ATR for this procedure.

Figure 4.1.5.1 - LISTING EDR TAPES MARKED FOR REMOVAL

```
bt91
ready to ibm
logon seicc/iicc
#SEICC LOGON IN PROGRESS AT 13:38:34 ON OCTOBER 10, 1980
****TIME LIMIT ON THE 75 IS 8 MINS.CLASS=N IS 10 MINS(300K)****
ONLY THREE JOBS PER USER ALLOWED IN SYSTEM AT ONE TIME **********
SACC computers will not operate Monday,Oct. 13th,Columbus Day
TIME LIMIT FOR THE 91 IS 3 MIN. CLASS N 10 MIN. (500K)
--54 TOTAL TSO USERS ON 360/91 M2
ATTR FB LRECL(80) BL(7280) IS SET UP
TODAY IS FRI OCT 10,1980.
READY
aj
READY
loglist
DID YOU NAME A DSN FOR OUT11? (YES/NO)
no
DO YOU WANT TO SEE THE LIST MENU? (YES/NO)
yes
MENU NO.     NAME       DESCRIPTION
   01        SHWEDR     DISPLAYS EDR TAPES MARKED FOR REMOVAL
   02        SHWCIT     DISPLAYS CIT TAPES MARKED FOR REMOVAL
   03        REMSLT     # TAPE SERIALS REMAINING IN SOME CONTROLS
   04        BAKLOG     BACK LOG ON A GIVEN PROCESS
   05        INCOMP     INCOMPLETE PROCESSES
   06        LISTAL     LISTALL BY BLOCKS
   07        DMPLOG     HEX DUMP OF THE LOG
ENTER MESSAGE FOR HARD COPY
seicc.log.data demo. for tls remove edr procedure.


 INPUT MENU NUMBER OF DESIRED LIST.
01
INPUT SATELLITE ID.
isee-3
     PLEASE REMOVE SD5300DD FROM SLOT  62180
     PLEASE REMOVE RY7219JJ FROM SLOT  62181
     PLEASE REMOVE RY9212AA FROM SLOT  62182
     PLEASE REMOVE SA2627CC FROM SLOT  62183
     PLEASE REMOVE SA1713AA FROM SLOT  62184
     PLEASE REMOVE SF6984AA FROM SLOT  62185
     PLEASE REMOVE SF2270AA FROM SLOT  62186
     PLEASE REMOVE SF4330JJ FROM SLOT  62187
     PLEASE REMOVE SF7853GG FROM SLOT  62188
     PLEASE REMOVE SC1416JJ FROM SLOT  62189
     PLEASE REMOVE SF5259II FROM SLOT  62190
     PLEASE REMOVE SF3243BB FROM SLOT  62191
     PLEASE REMOVE SC2741AA FROM SLOT  62192
     PLEASE REMOVE SJ2312FF FROM SLOT  62193
     PLEASE REMOVE SJ1153II FROM SLOT  62194
     PLEASE REMOVE SC9437DD FROM SLOT  62195
     PLEASE REMOVE SJ1250GG FROM SLOT  62196
     PLEASE REMOVE SJ3974BB FROM SLOT  62197
     PLEASE REMOVE SJ6472II FROM SLOT  62198
     PLEASE REMOVE SL0482DD FROM SLOT  62199
```

Note all tapes listed here must be removed.

```
 INPUT MENU NUMBER OF DESIRED LIST.
/*
OUTPUT TO FT11F001 ON *
READY
```

Figure 4.1.5.2 - REMOVING EDR TAPES

```
READY
tls
DATA SET 'SEICC.PRINT.DATA' NOT IN CATALOG
DATA SET 'SEICC.SYSIN.DATA' NOT IN CATALOG
DATA SET SEICC.LOGBK.DATA                                IS NOT IN CATALOG
SEICC.LOG.DATA BACKED ONTO SCRATCH SEICC.LOGBK.DATA
DO YOU WANT TO REMOVE EDR TAPES?
yes
INPUT SATELLITE ID
XXXXXXXXXXXX
isee-3
ISEE-3
INPUT 6-DIGIT VOL-SER
sd5300
VOL-SER =   SD5300 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
ry7219
VOL-SER =   RY7219 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
ry9212
VOL-SER =   RY9212 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sa2627
VOL-SER =   SA2627 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sa1713
VOL-SER =   SA1713 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sf6984
VOL-SER =   SF6984 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sf2270
VOL-SER =   SF2270 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sf4330
VOL-SER =   SF4330 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sf7853
VOL-SER =   SF7853 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sc1416
VOL-SER =   SC1416 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sf5259
VOL-SER =   SF5259 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sf3243
VOL-SER =   SF3243 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sc2741
VOL-SER =   SC2741 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sj2312
VOL-SER =   SJ2312 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sj1153
VOL-SER =   SJ1153 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sc9437
VOL-SER =   SC9437 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sj1250
VOL-SER =   SJ1250 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sj3974
VOL-SER =   SJ3974 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
```

Figure 4.1.5.2 (Cont'd)

```
sj6472
VOL-SER =   SJ6472 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sl0482
VOL-SER =   SL0482 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
/*
DO YOU WANT TO REMOVE WORK TAPES?
no
DO YOU WANT TO ASSIGN WORK OR CIT TAPES?
no
HERE IS A SUMMARY OF TLS REQUESTS
 'SEICC.SYSIN.DATA'
      REMOVE VOL=  SL0482
HERE IS A SUMMARY OF TLS RESPONSES
 'SEICC.PRINT.DATA'
80/284    14:56:57     TLSUPDTE 1.4 LISTING - SEICC
*GO
  @62 199 REMOVED VOL SL0482
---END O F TLSUPDTE LISTING          NUMBER OF ERRORS-     0          RETURN CODE-
READY
```

next run loglist to be sure you did not miss any.

```
loglist
DID YOU NAME A DSN FOR OUT11? (YES/NO)
no
DO YOU WANT TO SEE THE LIST MENU? (YES/NO)
no
ENTER MESSAGE FOR HARD COPY
seicc.log.data after edr tape removal on 10/10/80.


 INPUT MENU NUMBER OF DESIRED LIST.
01
INPUT SATELLITE ID.
isee-3
```

Now no EDR tapes are marked for removal.

```
 INPUT MENU NUMBER OF DESIRED LIST.
/*
OUTPUT TO FT11F001 ON *
READY
```

then check the tls slot to see if they also are empty.

Figure 4.1.5.2 (Cont'd)

```
tlsupdte
 80/284   15:05:17     TLSUPDTE 1.4 LISTING - SEICC
*GO
s s=62180,count=25
     @62180 IS EMPTY
     @62181 IS EMPTY
     @62182 IS EMPTY
     @62183 IS EMPTY
     @62184 IS EMPTY
     @62185 IS EMPTY
     @62186 IS EMPTY
     @62187 IS EMPTY
     @62188 IS EMPTY
     @62189 IS EMPTY
     @62190 IS EMPTY
     @62191 IS EMPTY
     @62192 IS EMPTY
     @62193 IS EMPTY
     @62194 IS EMPTY
     @62195 IS EMPTY
     @62196 IS EMPTY
     @62197 IS EMPTY
     @62198 IS EMPTY
     @62199 IS EMPTY
     @62200 IS EMPTY
     @62201 IS EMPTY
     @62202 IS EMPTY
     @62203 IS EMPTY
     @62204 IS EMPTY
end
----END OF TLSUPDTE LISTING          NUMBER OF ERRORS-     0          RETURN CODE- 0
READY
```

f) A printed copy of the LOGLIST and TLS output will be delivered to BF3. Please file these in the 'Cosmic Ray Data Reduction Binders'.

g) Run the COPYLOG and LISTALL utilities as per instructions in Section 2.8 of this guide.

This completes the procedure for removing EDR tapes from the cosmic ray log. A listing of the actual clist for TLS appears at the end of this subsection.

2) Removing and adding WORK tapes using the TLS utility:

The ISEE-3 cosmic ray LOG only has 25 TLS slots allocated to the WORK CONTROL block. These slots are 62255-62279. Since each RUNENCY (ENCGEN) run creates one WORK tape, the block of WORK tapes in the LOG is used up after 25 groups are processed. When this occurs, the WORK tapes which have been used must be removed from TLS. To determine when this is to be done, simply compare the LST SER and the SER WRT in the WORK CONTROL block. If they are equal, perform the following procedure to remove the used WORK tapes and to add 25 more:

1) Determine the FIRST and LAST work tape to be removed. Since there are 25 slots, the FIRST is the (LST SER - 25)+1 = FIRST (i.e. 75 - 25 = 50 + 1 = 51 ; therefore FIRST = 51 , LAST = 75 in this case). These numbers are input to the TLS CLIST.
2) Next, execute the TLS CLIST following the graphic in Figure 4.1.5.3. Note that TLS must be executed on the large region of TSO on the 360/75 computer.

Figure 4.1.5.3 - REMOVING AND ADDING WORK TAPES

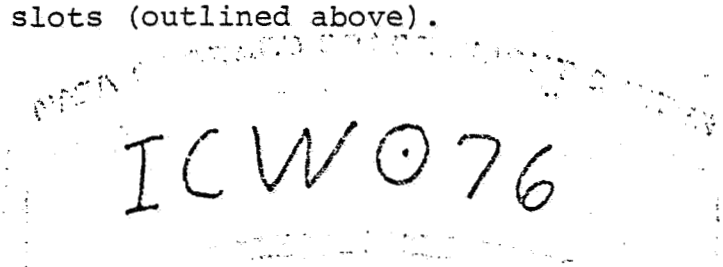
```
bt75

logon seicc/iicc s(150)
SEICC LOGON IN PROGRESS AT 18:02:01 ON OCTOBER 14, 1980
TIME LIMIT FOR JOBS ON 91 IS 15 MINS
ONLY THREE JOBS PER USER ALLOWED IN SYSTEM AT ONE TIME **********
****TIME LIMIT ON THE 75 IS 15 MINS****
THE 91 WAS COLD STARTED AT 11.00AM TODAY
Enter NEWS for info about 3 new disk packs and end of K3USR8/9
--01 TOTAL TSO USERS ON 360/75 K3
ATTR FB LRECL(80) BL(7280) IS SET UP
TODAY IS TUE OCT 14,1980.
READY
aj
READY
tls
DATA SET 'SEICC.PRINT.DATA' NOT IN CATALOG
DATA SET 'SEICC.SYSIN.DATA' NOT IN CATALOG
DATA SET SEICC.LOGBK.DATA                                IS NOT IN CATALOG
SEICC.LOG.DATA BACKED ONTO SCRATCH SEICC.LOGBK.DATA
DO YOU WANT TO REMOVE EDR TAPES?
no
DO YOU WANT TO REMOVE WORK TAPES?
yes
INPUT SATELLITE ID
XXXXXXXXXXX
isee-3
DO YOU WANT THE CIT DISPOSITION CHECKED.? T OR F
f
INPUT TAPE SERIALS (3-DIGIT INTEGER, RIGHT JUSTIFIED UNDER WORDS)
FIRST  LAST
  051   075
VOL-SER =    ICW051 HAS BEEN REMOVED.
VOL-SER =    ICW052 HAS BEEN REMOVED.
VOL-SER =    ICW053 HAS BEEN REMOVED.
VOL-SER =    ICW054 HAS BEEN REMOVED.
VOL-SER =    ICW055 HAS BEEN REMOVED.
VOL-SER =    ICW056 HAS BEEN REMOVED.
VOL-SER =    ICW057 HAS BEEN REMOVED.
VOL-SER =    ICW058 HAS BEEN REMOVED.
VOL-SER =    ICW059 HAS BEEN REMOVED.
VOL-SER =    ICW060 HAS BEEN REMOVED.
VOL-SER =    ICW061 HAS BEEN REMOVED.
VOL-SER =    ICW062 HAS BEEN REMOVED.
VOL-SER =    ICW063 HAS BEEN REMOVED.
VOL-SER =    ICW064 HAS BEEN REMOVED.
VOL-SER =    ICW065 HAS BEEN REMOVED.
VOL-SER =    ICW066 HAS BEEN REMOVED.
VOL-SER =    ICW067 HAS BEEN REMOVED.
VOL-SER =    ICW068 HAS BEEN REMOVED.
VOL-SER =    ICW069 HAS BEEN REMOVED.
VOL-SER =    ICW070 HAS BEEN REMOVED.
VOL-SER =    ICW071 HAS BEEN REMOVED.
VOL-SER =    ICW072 HAS BEEN REMOVED.
VOL-SER =    ICW073 HAS BEEN REMOVED.
VOL-SER =    ICW074 HAS BEEN REMOVED.
VOL-SER =    ICW075 HAS BEEN REMOVED.
DO YOU WANT TO ASSIGN WORK OR CIT TAPES?
```

Figure 4.1.5.3 (Cont'd)

```
yes
INPUT SATELLITE ID
XXXXXXXXXXX
isee-3
ISEE-3
INPUT TAPE TYPE.(WORK OR CIT)
work
INPUT MAXIMUM AMOUNT OF SLOTS TO  ASSIGN. (FORMAT I2, .LE.  25)
25
VOL-SER =    ICW076 HAS BEEN ASSIGNED  TO SLOT  62255
VOL-SER =    ICW077 HAS BEEN ASSIGNED  TO SLOT  62256
VOL-SER =    ICW078 HAS BEEN ASSIGNED  TO SLOT  62257
VOL-SER =    ICW079 HAS BEEN ASSIGNED  TO SLOT  62258
VOL-SER =    ICW080 HAS BEEN ASSIGNED  TO SLOT  62259
VOL-SER =    ICW081 HAS BEEN ASSIGNED  TO SLOT  62260
VOL-SER =    ICW082 HAS BEEN ASSIGNED  TO SLOT  62261
VOL-SER =    ICW083 HAS BEEN ASSIGNED  TO SLOT  62262
VOL-SER =    ICW084 HAS BEEN ASSIGNED  TO SLOT  62263
VOL-SER =    ICW085 HAS BEEN ASSIGNED  TO SLOT  62264
VOL-SER =    ICW086 HAS BEEN ASSIGNED  TO SLOT  62265
VOL-SER =    ICW087 HAS BEEN ASSIGNED  TO SLOT  62266
VOL-SER =    ICW088 HAS BEEN ASSIGNED  TO SLOT  62267
VOL-SER =    ICW089 HAS BEEN ASSIGNED  TO SLOT  62268
VOL-SER =    ICW090 HAS BEEN ASSIGNED  TO SLOT  62269
VOL-SER =    ICW091 HAS BEEN ASSIGNED  TO SLOT  62270
VOL-SER =    ICW092 HAS BEEN ASSIGNED  TO SLOT  62271
VOL-SER =    ICW093 HAS BEEN ASSIGNED  TO SLOT  62272
VOL-SER =    ICW094 HAS BEEN ASSIGNED  TO SLOT  62273
VOL-SER =    ICW095 HAS BEEN ASSIGNED  TO SLOT  62274
VOL-SER =    ICW096 HAS BEEN ASSIGNED  TO SLOT  62275
VOL-SER =    ICW097 HAS BEEN ASSIGNED  TO SLOT  62276
VOL-SER =    ICW098 HAS BEEN ASSIGNED  TO SLOT  62277
VOL-SER =    ICW099 HAS BEEN ASSIGNED  TO SLOT  62278
VOL-SER =    ICW100 HAS BEEN ASSIGNED  TO SLOT  62279
HERE IS A SUMMARY OF TLS REQUESTS
'SEICC.SYSIN.DATA'
ASSIGN VOL=ICW100,S=62279
HERE IS A SUMMARY OF TLS RESPONSES
'SEICC.PRINT.DATA'
1 80/288   18:10:16     TLSUPDTE 1.4 LISTING - SEICC    ::::
-*GO/288
      ICW100 ASSIGNED @62279PDTE
-----END OF TLSUPDTE LISTING          NUMBER OF ERRORS-     0          RETURN CODE
READY
```

3) Make up (1) as many as are needed for what you are doing ~~25~~ face labels like the one below using the VOL - SERs assigned by TLS (outlined above), take these labels to Building 1 computer room and place them over the existing labels on the tapes in the slots (outlined above).



4) Execute the LABWORK procedure in subsection 4.1.7 of this guide.

TLS CLIST

```
PROC 0
DELETE 'SEICC.PRINT.DATA'
DELETE 'SEICC.SYSIN.DATA'
SRCHDS 'SEICC.LOGBK.DATA'
SYSRC (EQ 0) GO TO LABEL QCOPY
ALLOC DA('SEICC.LOGBK.DATA') NEW TRACKS SPACE(40)
GO TO LABEL COPY
CC
LABEL QCOPY
ASK 'DO YOU WANT TO BACKUP SEICC.LOG.DATA?'
SYSRC (EQ 4) GO TO LABEL FREE
CC
LABEL COPY
CFREE F(SYSUT1,SYSUT2,SYSIN,SYSPRINT) A(LOG)
ATTR LOG BLKSIZE(7232) LRECL(7232) RECFM(F) BUFNO(1)
ALLOC F(SYSUT1) DA('SEICC.LOG.DATA') SHR USING(LOG)
ALLOC F(SYSUT2) DA('SEICC.LOGBK.DATA') SHR USING(LOG)
ALLOC F(SYSPRINT) DUMMY
ALLOC F(SYSIN) DUMMY
DO IEBGENER
CFREE F(SYSUT1,SYSUT2,SYSIN,SYSPRINT)
TPRINT 'SEICC.LOG.DATA BACKED ONTO SCRATCH SEICC.LOGBK.DATA'
CC
LABEL FREE
CFREE F(FT05F001,FT06F001,FT10F001,FT25F001) A(LOG)
ALLOC F(FT05F001) DA(*)
ALLOC F(FT06F001) DA(*)
ALLOC F(FT10F001) SYSOUT
ATTR LOG RECFM(F) LRECL(7232) BLKSIZE(7232)
ALLOC F(FT25F001) DA('SEICC.LOG.DATA') USING(LOG) OLD
CC
CFREE F(SYSIN,SYSPRINT,VSN,PVTLIBDD,SLOT)
CFREE A(PRINT,IN)
ALLOC DA('SEICC.SYSIN.DATA') NEW TRACKS SPACE(2)
ALLOC DA('SEICC.PRINT.DATA') NEW CYL SPACE(1,1)
ATTR PRINT RECFM(V B) LRECL(137) BLKSIZE(7265) BUFNO(1)
ATTR IN RECFM(F B) LRECL(80) BLKSIZE(80)
ALLOC F(SYSIN) DA('SEICC.SYSIN.DATA') SHR USING(IN)
ALLOC F(SYSPRINT) DA('SEICC.PRINT.DATA') SHR USING(PRINT)
ALLOC F(VSN) DA('SYS2.TLS.VSN') SHR
ALLOC F(PVTLIBDD) DA('SYS2.TLS.LOAD') SHR
ALLOC F(SLOT) DA('SYS2.TLS.SLOT') SHR
CC
ASK 'DO YOU WANT TO REMOVE EDR TAPES?'
SYSRC (EQ 4) GO TO LABEL WORK
CALL 'SEICC.PROCESS.LOAD(REDR)'
CC
LABEL WORK
ASK 'DO YOU WANT TO REMOVE WORK TAPES?'
SYSRC (EQ 4) GO TO LABEL ASSIGN
CALL 'SEICC.PROCESS.LOAD(RWORK)'
CC
LABEL ASSIGN
ASK 'DO YOU WANT TO ASSIGN WORK OR CIT TAPES?'
SYSRC (EQ 4) GO TO LABEL CLOSE
CALL 'SEICC.PROCESS.LOAD(ASSIGNL)'
CC
LABEL CLOSE
CFREE F(FT10F001) SYSOUT(A)
CFREE F(FT25F001)
CFREE F(SYSIN,SYSPRINT,VSN,PVTLIBDD,SLOT)
ALLOC F(SYSIN) DA(*)
ALLOC F(SYSPRINT) DA(*)
TPRINT 'HERE IS A SUMMARY OF TLS REQUESTS'
LIST 'SEICC.SYSIN.DATA'
TPRINT 'HERE IS A SUMMARY OF TLS RESPONSES'
LIST 'SEICC.PRINT.DATA'
DELETE 'SEICC.PRINT.DATA'
DELETE 'SEICC.SYSIN.DATA'
END
```

old VSN

4.1.6 DPTLS

The DPTLS CLIST/program is used to remove data pool tapes from the data pool LOG and TLS. There are only four slots allocated to data pool tapes in the LOG and TLS so the DPTLS CLIST must be executed after four groups are processed. This is done in the same ways as for the cosmic ray EDR tape removal (Subsection 4.1.5; Step 1 - Removing EDR tapes) with the following changes:

1) In step a, type DPLOGLST instead of LOGLIST
2) In step b, type DPTLS instead of TLS
3) On page 2 of Figure 4.1.5.2, type DPLOGLST instead of LOGLIST
4) On page 3 of Figure 4.1.5.3, type slot numbers of the data pool tapes which are 62575, COUNT = 4
5) In step f, put the output in the the 'Data Pool Processing Binders'
6) In step g, run DPLCOPY instead of COPYLOG and DPLSTALL instead of LISTALL

Figure 4.1.6.1 is a graphic of a previous DPTLS session. Figure 4.1.6.2 is a listing of the actual CLIST.

Figure 4.1.6.1 - DPTLS SESSION

```
READY

dptls  <--

)ATA SET SEICC.DPLOGBK.DATA                          IS ON M2SCR5
DO YOU WANT TO BACKUP SEICC.DPLOG.DATA?
no  <--
DO YOU WANT TO REMOVE EDR TAPES?
yes  <--
INPUT SATELLITE ID
XXXXXXXXXXXX
isee-3  <--
ISEE-3
INPUT 6-DIGIT VOL-SER
sml632  <--
VOL-SER =   SM1632 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
shl645  <--
VOL-SER =   SH1645 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
shl691  <--
VOL-SER =   SH1691 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER
sh4400  <--
VOL-SER =   SH4400 REMOVED FROM TLS & LOG.
INPUT 6-DIGIT VOL-SER

/*  <--
DO YOU WANT TO REMOVE WORK TAPES?
no  <--
)O YOU WANT TO ASSIGN WORK OR CIT TAPES?
no  <--
HERE IS A SUMMARY OF TLS REQUESTS
 'SEICC.SYSIN.DATA'
      REMOVE VOL=  SH4400
HERE IS A SUMMARY OF TLS RESPONSES
 'SEICC.PRINT.DATA'
80/208    10:59:51     TLSUPDTE 1.4 LISTING - SEICC
*GO
  @62 578 REMOVED VOL SH4400
---END O F TLSUPDTE LISTING          NUMBER OF ERRORS-     0        RETURN CODE-
READY
```

Figure 4.1.6.2 - DPTLS CLIST

```
PROC 0
DELETE 'SEICC.PRINT.DATA'
DELETE 'SEICC.SYSIN.DATA'
SRCHDS 'SEICC.DPLOGBK.DATA'
SYSRC (EQ 0) GO TO LABEL QCOPY
ALLOC DA('SEICC.DPLOGBK.DATA') NEW TRACKS SPACE(40)
GO TO LABEL COPY
CC
LABEL QCOPY
ASK 'DO YOU WANT TO BACKUP SEICC.DPLOG.DATA?'
SYSRC (EQ 4) GO TO LABEL FREE
CC
LABEL COPY
CFREE F(SYSUT1,SYSUT2,SYSIN,SYSPRINT) A(LOG)
ATTR LOG BLKSIZE(7232) LRECL(7232) RECFM(F) BUFNO(1)
ALLOC F(SYSUT1) DA('SEICC.DPLOG.DATA') SHR USING(LOG)
ALLOC F(SYSUT2) DA('SEICC.DPLOGBK.DATA') SHR USING(LOG)
ALLOC F(SYSPRINT) DUMMY
ALLOC F(SYSIN) DUMMY
DO IEBGENER
CFREE F(SYSUT1,SYSUT2,SYSIN,SYSPRINT)
TPRINT 'SEICC.DPLOG.DATA BACKED ONTO SCRATCH SEICC.DPLOGBK.DATA'
CC
LABEL FREE
CFREE F(FT05F001,FT06F001,FT10F001,FT25F001) A(LOG)
ALLOC F(FT05F001) DA(*)
ALLOC F(FT06F001) DA(*)
ALLOC F(FT10F001) SYSOUT
ATTR LOG RECFM(F) LRECL(7232) BLKSIZE(7232)
ALLOC F(FT25F001) DA('SEICC.DPLOG.DATA') USING(LOG) OLD
CC
CFREE F(SYSIN,SYSPRINT,VSN,PVTLIBDD,SLOT)
CFREE A(PRINT,IN)
ALLOC DA('SEICC.SYSIN.DATA') NEW TRACKS SPACE(2)
ALLOC DA('SEICC.PRINT.DATA') NEW CYL SPACE(1,1)
ATTR PRINT RECFM(V B) LRECL(137) BLKSIZE(7265) BUFNO(1)
ATTR IN RECFM(F B) LRECL(80) BLKSIZE(80)
ALLOC F(SYSIN) DA('SEICC.SYSIN.DATA') SHR USING(IN)
ALLOC F(SYSPRINT) DA('SEICC.PRINT.DATA') SHR USING(PRINT)
ALLOC F(VSN) DA('SYS2.TLS.VSN') SHR
ALLOC F(PVTLIBDD) DA('SYS2.TLS.LOAD') SHR
ALLOC F(SLOT) DA('SYS2.TLS.SLOT') SHR
CC
ASK 'DO YOU WANT TO REMOVE EDR TAPES?'
SYSRC (EQ 4) GO TO LABEL WORK
CALL 'SEICC.PROCESS.LOAD(REDR)'
CC
LABEL WORK
ASK 'DO YOU WANT TO REMOVE WORK TAPES?'
SYSRC (EQ 4) GO TO LABEL ASSIGN
CALL 'SEICC.PROCESS.LOAD(RWORK)'
CC
LABEL ASSIGN
ASK 'DO YOU WANT TO ASSIGN WORK OR CIT TAPES?'
SYSRC (EQ 4) GO TO LABEL CLOSE
CALL 'SEICC.PROCESS.LOAD(ASSIGNL)'
CC
LABEL CLOSE
CFREE F(FT10F001) SYSOUT(A)
CFREE F(FT25F001)
CFREE F(SYSIN,SYSPRINT,VSN,PVTLIBDD,SLOT)
ALLOC F(SYSIN) DA(*)
ALLOC F(SYSPRINT) DA(*)
TPRINT 'HERE IS A SUMMARY OF TLS REQUESTS'
LIST 'SEICC.SYSIN.DATA'
TPRINT 'HERE IS A SUMMARY OF TLS RESPONSES'
LIST 'SEICC.PRINT.DATA'
DELETE 'SEICC.PRINT.DATA'
DELETE 'SEICC.SYSIN.DATA'
END
```

4.1.7 LABWORK

After the WORK tapes have been removed, added, and the new face labels have been affixed to their respective VOL-SER, the LABWORK utility is used to relabel those tapes. As you know from Chapter 12 of the SACC User's Guide, 'Magnetic Tape Usage', each tape must be initialized before it can be used on the SACC IBM/360 computers. This is done with the SACC LABEL procedure. The ISEE-3 WORK tapes are labeled with IBM standard labels (SL) where the actual face volume is written on the tape. When relabeling SL tapes, it is necessary to specify not only the new volume number (VOL) but the old volume number (OLDVOL) as well. The following procedure is used to relabel the WORK tapes for ISEE-3. (See Figure 4.1.7.1). 3081

1) Logon the ~~360/75 in the small~~ region. (i.e. BT75 select the computer, ready to ibm, computer responds LOGON SEICC/IICC no size specified).
2) Send the operator the tape numbers which are to be labeled. (i.e. the SEND command) SEND 'SEICCLA JOBS USE ICW076-ICW100' OPERATOR would be sent in this case.
3) Follow the procedure in Figure 4.1.7.1 to QED, list, edit, save and submit the first label job.
4) Then QED, edit, list, and submit the remaining four label jobs using the graphic in Figure 4.1.7.1 starting at the #4). Do not save after the first job is submitted to retain the integrity of this procedure.
5) Each step of each of the five jobs must get RO or the label was unsuccessful. Please check the NOTIFYTS message or printouts closely.

Figure 4.1.7.1 - RELABELING WORK TAPES

3)
```
READY
qed lib.cntl(labwork)
QED
1
00010 //SEICCLA1 JOB (SB0132823A,P,SEICC1,H00001),BF3
00020 //*LABEL-IC WORKTAPE
00030 // EXEC LABEL,VOL=ICW051,OLDVOL=ICW026,DEN=4
00040 // EXEC LABEL,VOL=ICW052,OLDVOL=ICW027,DEN=4
00050 // EXEC LABEL,VOL=ICW053,OLDVOL=ICW028,DEN=4
00060 // EXEC LABEL,VOL=ICW054,OLDVOL=ICW029,DEN=4
00070 // EXEC LABEL,VOL=ICW055,OLDVOL=ICW030,DEN=4
00080 // EXEC NOTIFYTS
END OF DATA
a 30 70 /0
// EXEC LABEL,VOL=ICW051,OLDVOL=ICW026,DEN=4
                          76              51
// EXEC LABEL,VOL=ICW052,OLDVOL=ICW027,DEN=4
                          77              52
// EXEC LABEL,VOL=ICW053,OLDVOL=ICW028,DEN=4
                          78              53
// EXEC LABEL,VOL=ICW054,OLDVOL=ICW029,DEN=4
                          79              54
// EXEC LABEL,VOL=ICW055,OLDVOL=ICW030,DEN=4
                          80              55
QED
sve
SAVED
READY
sub lib(labwork)
JOB SEICCLA1 SUBMITTED  - here the first label job is submitted.
```

4)
```
READY
qed lib.cntl(labwork)
QED
a 10 /1
//SEICCLA1 JOB (SB0132823A,P,SEICC1,H00001),BF3
          2
a 30 70 /0
// EXEC LABEL,VOL=ICW076,OLDVOL=ICW051,DEN=4
                          81              56
// EXEC LABEL,VOL=ICW077,OLDVOL=ICW052,DEN=4
                          82              57
// EXEC LABEL,VOL=ICW078,OLDVOL=ICW053,DEN=4
                          83              58
// EXEC LABEL,VOL=ICW079,OLDVOL=ICW054,DEN=4
                          84              59
// EXEC LABEL,VOL=ICW080,OLDVOL=ICW055,DEN=4
                          81              60
QED
1
00010 //SEICCLA2 JOB (SB0132823A,P,SEICC1,H00001),BF3
00020 //*LABEL-IC WORKTAPE
00030 // EXEC LABEL,VOL=ICW081,OLDVOL=ICW056,DEN=4
00040 // EXEC LABEL,VOL=ICW082,OLDVOL=ICW057,DEN=4
00050 // EXEC LABEL,VOL=ICW083,OLDVOL=ICW058,DEN=4
00060 // EXEC LABEL,VOL=ICW084,OLDVOL=ICW059,DEN=4
00070 // EXEC LABEL,VOL=ICW081,OLDVOL=ICW060,DEN=4
00080 // EXEC NOTIFYTS
END OF DATA
sub *

JOB SEICCLA2 SUBMITTED
QED
```

continue with this procedure until all 25 work tapes are re-labeled then type

end ns

4.1.8 REDOLIB

The REDOLIB CLIST/program is used to modify the library blocks in the cosmic ray data processing log (SEICC.LOG.DATA) so that the RUNENCY (ENCGEN) program may be rerun for a group of data. This is not normally necessary unless errors have been found in the data or software which need correction or the work tape generated by RUNENCY is unreadable during the merge (QENCMRG) processing step. These conditions are unlikely but in the event of their occurrence the user may reset the LOG using REDOLIB. Input to this CLIST/program is simply the block number (BLOCK), attribute (ATTR), and the disposition (DISP). Figure 4.1.8.1 is an example of a typical REDOLIB execution. The user should consult with the cognizant programmer/data analyst for the correct input to this program.

Figure 4.1.8.1 - Typical REDOLIB Execution

```
redolib
DATA SET SEICC.LOGBK.DATA                                    IS ON M2SCR4
DO YOU WANT TO BACKUP SEICC.LOG.DATA? (YES/NO)
yes
DATA SET UTILITY - GENERATE

PROCESSING ENDED AT EOD
SEICC.LOG.DATA BACKED ONTO SCRATCH SEICC.LOGBK.DATA

INPUT LIBRARY BLOCK NO., ATTRIBUTE AND DISPOSITION(I5,1X,I4,1X,Z4)  /* TO END.
BLOCK ATTR DISP
  772  603 8000
         ENTRY 2 HAS BEEN UPDATED AS FOLLOWS.
             2    80   0/ 0/ 0     603       0
BLOCK ATTR DISP
/*
READY
```

4.1.9 RMVENC

The RMVENC CLIST/program is the first step of a three step procedure which is used to recycle inactive encyclopedia (ENCY) tapes back into the LOG and TLS. This step simply removes the inactive ENCY tapes from TLS and marks them in the LOG as free slots which can be reused. Figure 4.1.9.1 is an example of a typical RMVENC session. Note that only 10 ENCY tapes may be removed in one pass but that the program allows you any number of passes until all inactive ENCY tapes have been processed. Once RMVENC has been executed, proceed with the ASNENC CLIST/program in the next subsection (4.1.10).

Figure 4.1.9.1 - Typical RMVENC Session

```
rmvenc
YOU SHOULD BE LOGGED ON UNDER ID SEICC
YOU SHOULD ALSO BE IN LARGE REGION.
DATA SET SEICC.LOGBK.DATA                                    IS NOT IN CATALOG
DATA SET UTILITY - GENERATE

PROCESSING ENDED AT EOD
SEICC.LOG.DATA BACKED ONTO SCRATCH SEICC.LOGBK.DATA

INPUT SATELLITE ID,E.G.,ISEE-3,AND DEBUG
123456789012 D
isee-3
ISEE-3       F  SATELLITE ID AND DEBUG

INPUT MAX. NO. OF TAPES TO REMOVE, LESS THAN 11, RIGHT JUSTIFIED.
NO
10
VOL-SER =    ICE174 REMOVED FROM SLOT 61688
VOL-SER =    ICE193 REMOVED FROM SLOT 61715
VOL-SER =    ICE195 REMOVED FROM SLOT 61719
VOL-SER =    ICE197 REMOVED FROM SLOT 61721
VOL-SER =    ICE198 REMOVED FROM SLOT 61723
VOL-SER =    ICE200 REMOVED FROM SLOT 61726
VOL-SER =    ICE201 REMOVED FROM SLOT 61727
VOL-SER =    ICE202 REMOVED FROM SLOT 61692
VOL-SER =    ICE203 REMOVED FROM SLOT 61693
VOL-SER =    ICE204 REMOVED FROM SLOT 61694
DO YOU WANT TO REMOVE FROM ANOTHER SATELLITE? (YES/NO)
yes

INPUT SATELLITE ID,E.G.,ISEE-3,AND DEBUG
123456789012 D
isee-3       f
ISEE-3       F  SATELLITE ID AND DEBUG

INPUT MAX. NO. OF TAPES TO REMOVE, LESS THAN 11, RIGHT JUSTIFIED.
NO
10


    THERE ARE NO ENCYCLOPEDIA TAPES READY FOR REMOVAL.
DO YOU WANT TO REMOVE FROM ANOTHER SATELLITE? (YES/NO)
no
READY
```

4.1.10 ASNENC

The ASNENC CLIST/program is the second of the three step procedure for recycling the inactive encyclopedia (ENCY) tapes back into the LOG and TLS. This step of the procedure has two functions:

1) Assigns the next N (where N is a user specified number between 1 and 10) ENCY tapes to their respective TLS locations and modifies the LST SER word in the encyclopedia control block to indicate the last serial assigned.
2) Creates a data set on one of the user disks containing the LABEL exec cards needed to relabel the encyclopedia tapes assigned. Figure 4.1.10.1 is an example of a typical ASNENC execution. As can be seen from this graphic, the data set 'SEICC.LABEL.CNTL' contains the necessary LABEL exec cards needed to relabel the ENCY tapes. Once ASNENC has been executed, proceed with subsection 4.1.11 using the output from this step as an aid in locating the correct slots in the SACC S/360 computer room.

Figure 4.1.10.1 - Typical ASNENC Execution

```
asnenc
YOU SHOULD BE LOGGED ON UNDER ID SEICC
YOU SHOULD ALSO BE IN LARGE REGION.
DATA SET 'SEICC.PRINT.DATA' NOT IN CATALOG
DATA SET 'SEICC.SYSIN.DATA' NOT IN CATALOG
DATA SET SEICC.LOGBK.DATA                                    IS ON M2SCR4
DO YOU WANT TO BACKUP SEICC.LOG.DATA? (YES/NO)
yes
DATA SET UTILITY - GENERATE

PROCESSING ENDED AT EOD
SEICC.LOG.DATA BACKED ONTO SCRATCH SEICC.LOGBK.DATA
DATA SET SEICC.LABEL.CNTL                                    IS NOT IN CATALOG
DISK01 BEING USED FOR ALLOCATION

ENTER SATELLITE, E.G.ISEE-3, AND DEBUG
123456789012 D
isee-3       f
ISEE-3       F  INPUT TO ASNENC
INPUT MAX. NO. OF ENCY. TAPES TO ASSIGN IN I2 FORMAT AND .LE. 10
10
VOL-SER =   ICE222  ASSIGNED SLOT 61688.  OLD SER = 174
VOL-SER =   ICE223  ASSIGNED SLOT 61692.  OLD SER = 202
VOL-SER =   ICE224  ASSIGNED SLOT 61693.  OLD SER = 203
VOL-SER =   ICE225  ASSIGNED SLOT 61694.  OLD SER = 204
VOL-SER =   ICE226  ASSIGNED SLOT 61715.  OLD SER = 193
VOL-SER =   ICE227  ASSIGNED SLOT 61719.  OLD SER = 195
VOL-SER =   ICE228  ASSIGNED SLOT 61721.  OLD SER = 197
VOL-SER =   ICE229  ASSIGNED SLOT 61723.  OLD SER = 198
VOL-SER =   ICE230  ASSIGNED SLOT 61726.  OLD SER = 200
VOL-SER =   ICE231  ASSIGNED SLOT 61727.  OLD SER = 201
DO YOU WANT TO REMOVE FROM ANOTHER SATELLITE? (YES/NO)
no
JCL FOR LABEL JOBS IN SEICC.LABEL.CNTL
PUT VOL-SER FACE LABELS BEFORE RUNNING LABEL JOBS.
READY
```

EACH label job must be run separately

4.1.11 Relabeling ENCY Tapes

The following is the method used to relabel ENCY tapes for reuse in the ISEE-3 production systems.

1) Prepare face labels for each VOL=SER assigned by the ASNENC step of this procedure.
2) Using the output from ASNENC to locate the slots in the computer room, physically place these face labels on their respective tape volumes.
3) QED 'SEICC.LABEL.CNTL' (as in Figure 4.1.11.1) and list it. Then type END NS.
4) Use the following time algorithm to determine the job time estimate for the LABEL job.
   a) 1-4 tapes = H00H00
   b) 5 tapes = H00001
   c) 6-10 tapes= H00001 plus 1 min I/O for each tape over 5. (i.e. 7 tapes would take H00003, 10 = H00006).
5) Next stab a job into the 360/75 as follows using the time estimate you calculated:

```
STAB LAB T(     )  NOSCAN
='SEICC.LIB.CNTL(JC)'
//*LABEL THISDATE
='SEICC.LABEL.CNTL'
//EXEC NTSO
ENDINPUT
```

6) Once this is submitted, send a message to the 360/75 operator informing him of the ICE tape numbers which are being labeled.

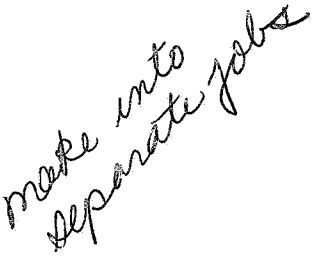
When SEICCLAB has completed, check the Return Code from each step to ensure all are zero. If so, you have completed this procedure.

change to MVS estimates

each tape must be a separate job

Figure 4.1.11.1

```
qed 'seicc.label.cntl'
DATA SET NOT LINE NUMBERED-NONUM ASSUMED
QED
1
// EXEC LABEL,VOL=ICE222,OLDVOL=ICE174,TUNIT=6250,DEN=4
// EXEC LABEL,VOL=ICE223,OLDVOL=ICE202,TUNIT=6250,DEN=4
// EXEC LABEL,VOL=ICE224,OLDVOL=ICE203,TUNIT=6250,DEN=4
// EXEC LABEL,VOL=ICE225,OLDVOL=ICE204,TUNIT=6250,DEN=4
// EXEC LABEL,VOL=ICE226,OLDVOL=ICE193,TUNIT=6250,DEN=4
// EXEC LABEL,VOL=ICE227,OLDVOL=ICE195,TUNIT=6250,DEN=4
// EXEC LABEL,VOL=ICE228,OLDVOL=ICE197,TUNIT=6250,DEN=4
// EXEC LABEL,VOL=ICE229,OLDVOL=ICE198,TUNIT=6250,DEN=4
// EXEC LABEL,VOL=ICE230,OLDVOL=ICE200,TUNIT=6250,DEN=4
// EXEC LABEL,VOL=ICE231,OLDVOL=ICE201,TUNIT=6250,DEN=4
END OF DATA
```



4.2 DATA ACQUISITION UTILITIES

This subsection will define and demonstrate those programs which are used for examination of physical tape volumes or the data which resides on them.

4.2.1 ~~STSCAN~~ TPSCAN is available in SB#HP.LIB.CLIST

The STSCAN CLIST was created to allow the user to scan physical tape volumes using the SACC TAPESCAN utility with minimum input from the user. The SACC User's Guide, Section 4.5.1, page 224, provides a description of this utility. Input to the STSCAN CLIST is the three character job identifier and the tape number of the tape to be scanned. The following graphic is a listing of the STSCAN CLIST and a typical execution.

```
READY
list 'seicc.lib.clist(stscan)'
 'SEICC.LIB.CLIST(STSCAN)'
00010 PROC 2 ID V TUNIT(6250) TERMON OUT(A) T(001H02)
00020 QED TS.CNTL NEW EMODE
00030 IN //SEICC&ID. JOB (SB0132823A,P,ISEE3C,&T.),BF3
00040 IN // EXEC TAPESCAN,VOL=&V,TUNIT=&TUNIT,OUT=&OUT,MOUNT=
00050 IN // EXEC NTSO,MSG='TAPESCAN'
00060 &TERMON SUB *
00070 END N
READY


stscan 120 icl020
JOB SEICCL20 SUBMITTED
READY
```

4.2.2 EDRLIST

LIBLIST is a formatted list of the library tapes for ISEE-3. EDRLIST is a formatted list of the EDR tapes that are compressed onto the library tapes. The differences lie in that the EDR is a NL multifile tape density 1600, whereas the LIB tape is a SL tape and each EDR tape has been written onto one library file. Each LIB file has the EDR file headers as individual records throughout the tape, and overlaps between files have been eliminated by EDRSAVE.

```
**********************************************************************
TO RUN LIBLIST THE USER ACCESSES 'SEICC.LIB.CNTL(LIBLIST)'
TO RUN THE EDRLIST THE USER ACCESSES 'SEICC.LIB.CNTL(EDRLIST)'
**********************************************************************
THE JCL TO RUN EDRLIST APPPEARS IN FIGURE 4.2.2-1
DATA CARDS
THERE IS ONE DATA CARD THE PARAMETERS ARE AS FOLLOWS
TYPE     A*4  TIME OR FILE FOR LISTING BY TIME OR BY FILES
FLS      I*3  FIRST FILE TO START LISTING FROM
FLE      I*3  LAST FILE TO LIST
SKIPS    I*5  NUMBER OF RECORDS TO SKIP BEFORE LISTING
LISTS    I*5  NUMBER OF RECORDS TO LIST
H        L*1  REQUEST FOR HEX DUMP (T OR F)
L        L*1  FLAG FOR LIBRARY TAPE (T) OR EDR TAPE (F)
DYS      I*3  DAY TO START TIME LISTING (TIME PARAMETERS IGNORED FOR FIL
MSSTARTSI*8  MILLISECONDS TO START LISTING
DYE      I*3  DAY TO END TIME LISTING
MILSECSEI*8  MILLISECONDS TO END TIME LISTING
YR       I*2  YEAR OF LISTING
PAM      I*1  FLAG FOR ACCEL DATA 1=ACCEL 0=NORMAL
DTAPES   A*6  TAPE VOLUME, IGNORED FOR LIBLIST
**********************************************************************
THE DATA CARD CAN BE REPEATED FOR MORE THAN ONE INTERVAL
**********************************************************************
THE LOAD LIBRARY IS IN 'SEICC.LIBLIST.LOAD(LIBLIST)'


C  MODIFIED TO INCLUDE LISTING OF ACCELERATOR DATA 'EDR' TAPES:
         THE DATA CARD ABOVE HAS ONE ADDITIONAL PARAMETER  WHICH IF
         OTHER THAN BLANK OR ZERO, WILL ACCESS A ROUTINE TO PRINT
         OUT THE ACCELERATOR FILE HEADERS IN A DIFFERENT FORMAT.
     TO VIEW ACCELERATOR DATA, USE EDRLIST AS USUAL, EXCEPT CODE A 1
         IN COLUMN 60 OF THE EDR DATA CARD
END OF DATA
```

Figure 4.2.2.1

```
'SEICC.LIB.CNTL(EDRLIST)'
00010 //SEICCEDR JOB (SB0132823B,T,SA0001,H00001),033,NOTIFY=SEICC
00020 //* EDRLIST THISDATE
00030 //EDRLIST EXEC PGM=LIBLIST,REGION=200K
00040 //STEPLIB DD DSN=SEICC.LIBLIST.LOAD,DISP=SHR
00050 //FT06F001 DD SYSOUT=A,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=7265)
00060 //FT20F001 DD UNIT=(6250,,DEFER),DISP=SHR,LABEL=(,NL),
00070 // DCB=(RECFM=FB,LRECL=3528 BLKSIZE=3528,BUFNO=1,DEN=3),
00080 // DSN=DUMM3,VOL=SER=DUMM3
00090 //SYSUDUMP DD SYSOUT=A
00100 //FT25F001 DD DSN=SEICC.LOG.DATA,DISP=SHR,
00110 // DCB=(RECFM=F,LRECL=7232,BLKSIZE=7232)
00120 //* DATA CARDS DESCRIPTION
00130 //* ITYPE    01-04 LISTING TYPE,TIME OR FILE MODE
00140 //* IFILE    06-08 START FILE(SET TO 1 FOR TIME MODE)
00150 //* LFILE    10-12 LAST FILE (SET TO 999 FOR TIME MODE)
00160 //* NSKIP    14-18 NUMBER OF RECORDS TO SKIP BEFORE LISTING
00170 //* NLIST    20-24 NUMBER OF RECORDS TO LIST IN EACH FILE
00180 //* QHEX        26 HEX LISTING OF EACH RECORD
00190 //* QLIB        27 LIBRARY TAPE (DTAPES NOT SPECFIED)
00200 //* JDAYS    29-31 START DAY FOR TIME
00210 //* JMSS     33-40 START MILLISECONDS
00220 //* JDAYE    42-44 END DAY FOR TIME
00230 //* JMSE     46-53 END MS  FOR TIME
00240 //* IYEAR    55-56 YEAR FOR TIME
00250 //* IPAM        60 REQUEST FOR ACCELERATOR TAPE (0 = NON ACCEL)
00260 //* DTAPE    62-67 ACCEL OR EDR TAPE NAME
00270 //*4-FLS-FLF-SKIPS-LISTS-HL-DYS-MSSTARTS-DYE-MILSECSE-YR---A-DTAPES
00280 //FT05F001 DD *
00290 FILE 001 001 00000 00100 FF 000 00000000 000 00000000 00--- -SZ029(
00300 // EXEC NOTIFYTS
READY
```

SB#IC.LIB.LOAD

4.2.3 LIBLIST

LIBLIST is a formatted list of the library tapes for ISEE-3. EDRLIST is a formatted list of the EDR tapes that are compressed onto the library tapes. The differences lie in that the EDR is a NL multifile tape density 1600, whereas the LIB tape is a SL tape and each EDR tape has been written onto one library file. Each LIB file has the EDR file headers as individual records throughout the tape, and overlaps between files have been eliminated by EDRSAVE.

```
**********************************************************************
TO RUN LIBLIST THE USER ACCESSES 'SEICC.LIB.CNTL(LIBLIST)'
TO RUN THE EDRLIST THE USER ACCESSES 'SEICC.LIB.CNTL(EDRLIST)'
**********************************************************************
THE JCL TO RUN LIBLIST APPPEARS IN FIGURE 4.2.3.1
DATA CARDS
THERE IS ONE DATA CARD THE PARAMETERS ARE AS FOLLOWS
TYPE     A*4  TIME OR FILE FOR LISTING BY TIME OR BY FILES
FLS      I*3  FIRST FILE TO START LISTING FROM
FLE      I*3  LAST FILE TO LIST
SKIPS    I*5  NUMBER OF RECORDS TO SKIP BEFORE LISTING
LISTS    I*5  NUMBER OF RECORDS TO LIST
H        L*1  REQUEST FOR HEX DUMP (T OR F)
L        L*1  FLAG FOR LIBRARY TAPE (T) OR EDR TAPE (F)
DYS      I*3  DAY TO START TIME LISTING (TIME PARAMETERS IGNORED FOR FIL
MSSTARTSI*8  MILLISECONDS TO START LISTING
DYE      I*3  DAY TO END TIME LISTING
MILSECSEI*8  MILLISECONDS TO END TIME LISTING
YR       I*2  YEAR OF LISTING
PAM      I*1  FLAG FOR ACCEL DATA 1=ACCEL 0=NORMAL
DTAPES   A*6  TAPE VOLUME, IGNORED FOR LIBLIST
**********************************************************************
THE DATA CARD CAN BE REPEATED FOR MORE THAN ONE INTERVAL
**********************************************************************
THE LOAD LIBRARY IS IN 'SEICC.LIBLIST.LOAD(LIBLIST)'

END OF DATA
```

Figure 4.2.3.1

```
LIB.CNTL(LIBLIST)
00010 //SEICCLIB JOB (SB0132823B T,SA0001,H00001),033,NOTIFY=SEICC
00020 //* LIBLIST THISDATE
00030 //LIBLIST EXEC PGM=LIBLIST,REGION=200K
00040 //STEPLIB DD DSN=SEICC.LIBLIST.LOAD,DISP=SHR
00050 //FT06F001 DD SYSOUT=A,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=7265)
00060 //FT20F001 DD UNIT=(6250,,DEFER),DISP=SHR,LABEL=( SL),
00070 // DCB=(RECFM=FB,LRECL=3528 BLKSIZE=3528,BUFNO=1,DEN=4),
00080 // DSN=DUMM3,VOL=SER=DUMM3
00090 //SYSUDUMP DD SYSOUT=A
00100 //FT25F001 DD DSN=SEICC.LOG DATA,DISP=SHR,
00110 // DCB=(RECFM=F,LRECL=7232,BLKSIZE=7232)
00120 //* DATA CARDS DESCRIPTION
00130 //* ITYPE    01-04 LISTING TYPE,TIME OR FILE MODE
00140 //* IFILE    06-08 START FILE(SET TO 1 FOR TIME MODE)
00150 //* LFILE    10-12 LAST FILE (SET TO 999 FOR TIME MODE)
00160 //* NSKIP    14-18 NUMBER OF RECORDS TO SKIP BEFORE LISTING
00170 //* NLIST    20-24 NUMBER OF RECORDS TO LIST IN EACH FILE
00180 //* QHEX        26 HEX LISTING OF EACH RECORD
00190 //* QLIB        27 LIBRARY TAPE (DTAPES NOT SPECFIED)
00200 //* JDAYS    29-31 START DAY FOR TIME
00210 //* JMSS     33-40 START MILLISECONDS
00220 //* JDAYE    42-44 END DAY FOR TIME
00230 //* JMSE     46-53 END MS  FOR TIME
00240 //* IYEAR    55-56 YEAR FOR TIME
00250 //* IPAM        60 REQUEST FOR ACCELERATOR TAPE (0 = NON ACCEL)
00260 //* DTAPE    62-67 ACCEL OR EDR TAPE NAME
00270 //*4-FLS-FLE-SKIPS-LISTS-HL-DYS-MSSTARTS-DYE-MILSECSE-YR---A-DTAPES
00280 //FT05F001 DD *
00290 TIME 001 999 00000 00100 FT 267 03345625 268 00000000 79--- -
00300 // EXEC NOTIFYTS
READY
```

LIB.LOAD

4.2.4 LSELECT

LSELECT is a program which lists the contents of a WORK or ENCY tape. LSELECT can also create an output tape of the data being listed for use on the PDP-11/70. This program is normally run by programmers/scientists. However, the user should be aware of its existence and method of execution.

The LSELECT JCL is in the form of an in-stream PROC where various keyword JCL parameters are defaulted by symbolic parameters. These symbolic parameters may be overridden by the user at execution time. The following graphic is a listing of this PROC and an example of how the user may envoke the procedure with the // EXEC JCL statement on line #290.

The input card which follows the //INPUT DD * JCL statement is defined as follows:

1) FIRST - first volume number to be listed from the specified SER and SOURCE from the EXEC card.
2) LAST - last volume number to be listed.
3) HLC - HEX, LIST, COPY logical variables
   a) HEX - create a hexidecimal listing of the data.
   b) LIST - create a formatted decimal listing of the data.
   c) COPY - copies the data to the specified 'STAPE', 'SLABEL' with a data set name of IC. 'TYPE' specified on the EXEC card.
4) MASK - these are a string of logical flags which are used to create various types of lists of various types of data from the specified SER. (See JCL comments).

```
READY
list 'seicc.lib.cntl(lselect)'
 'SEICC.LIB.CNTL(LSELECT)'
00010 //* LSELECT ICW051
00020 //LSELECT PROC SER=,     MASTER/WORK VOL-SER, 3 DIGITS VOL-SER
00030 //             SOURCE=MASTER,  SOURCE ENCYCLOPEDIA. MASTER/WORK
00040 //             STAPE=SCRTCH,       SELECT-VERSE TAPE VOLUME SERIAL NUMEER
00050 //             SLABEL=SL,  SELECT-VERSE TAPE LABEL OPTION (SL/NL)
00060 //             TYPE=UNKNOWN USER ASSIGNED NAME (UPTO 8 CHARACTERS,
00070 //*                          FIRST CHARACTER MUST BE ALPHAABETIC)
00080 //*                         THIS NAME IS PART OF DATA SET NAME
00090 //LSELECT EXEC PGM=LSELECT,REGION=200K
00100 //STEPLIB DD DSN=SEICC.LSELECT.LOAD,DISP=SHR
00110 //FT06F001 DD SYSOUT=A,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=1100)
00120 //TAPEUNIT DD UNIT=(6250,,DEFER),DISP=SHR,DSN=IC.DONTCARE,
00130 // VOL=SER=ICNNO
00140 //ENCY    DD DDNAME=&SOURCE
00150 //WORK    DD DSN=IC.WORK.ENCY,UNIT=AFF=TAPEUNIT,DISP=SHR,
00160 //  VOL=SER=ICW&SER,DCB=(BUFNO=1,DEN=3)
00170 //MASTER  DD DSN=IC.MASTER.ENCY,UNIT=AFF=TAPEUNIT,DISP=SHR,
00180 //  VOL=SER=ICE&SER,DCB=(BUFNO=1)
00190 //FT20F001 DD DSN=IC.&TYPE.,UNIT=(6250,,DEFER),DISP=(NEW,KEEP),
00200 // VOL=SER=&STAPE,LABEL=(1,&SLABEL),DCB=(DEN=3,RECFM=U,BLKSIZE=20000)
00210 //FT05F001 DD DDNAME=INPUT
00220 //LSELECT PEND
00230 //* MASK:
00240 //* 1=RAW RATE,2=CC MAP,3=RATE SUM,4=VLET PHA SUM,5=HET PHA SUM
00250 //* 6=HET-I AST HIGH GAIN,7=LOW GAIN,8=BSTP HI,9=BSTE HI,10=BST LO
00260 //* 11=PENH,12=PENL,13=HET-II AST HI,14=AST LO,15=BSTP HI
00270 //* 16=BSTE HI,17=BSE LO,18=PENH,19=PENL,20=VLETI-I 0,21=1
00280 //* 22=VLET II 0,23=1,24=SC WDS
00290 // EXEC LSELECT,SER=051,SOURCE=WORK
00300 //*FIRST    LAST HLC MASK45678901234567890123
00310 //INPUT DD *
00320    60589   60596 FTF TFTTTFFFFFFFFFFFFFFFFFFF
00330 // EXEC NOTIFYTS
READY
```

LIB.LOAD

Once the LSELECT member has been QEDed, edited, and saved the user may submit this program to background processing as follows:

```
STAB 001 T(TIMEST)
=:LIB(JC)
=:LIB(LSELECT)
ENDINPUT
```

4.2.5 TAPETST

TAPETST is a utility which tests the ENCY tapes for short records which are sometimes erroneously written by the tape drives on the SACC computers. This problem rarely occurs, but can be diagnosed when the abend code of S001 occurs on the ENCYCOPY run of the cosmic ray data reduction system, and the abending DDNAME is IN1. (See Figure 2.10.2). When this occurs, the TAPETST utility may be run as a second test of the bad tape. This is run by QEDing and editing line #30 to the correct input ENCY tape, then save it and STAB it in with a H00H01 time estimate.

```
READY
list 'seicc.lib.cntl(tapetst)'

 'SEICC.LIB.CNTL(TAPETST)'
00005 =:LIB(JC)
00010 // EXEC PGM=PATRICK,PARM='TST,001,001',REGION=150K
00020 //* RUNNING PATRICK TST
00030 //IN1 DD DSN=IC.MASTER.ENCY,LABEL=(,SL,,IN),VOL=SER=ICE063,
00040 //    DISP=OLD,UNIT=(6250,,DEFER),
00050 //    DCB=(RECFM=VBA,LRECL=32008,BLKSIZE=32012,BUFNO=1,DEN=4)
00060 //OUT2 DD SYSOUT=A
00070 //NOTIFY EXEC NOTIFYTS
READY
```

TO SUBMIT TYPE:

```
STAB BAD (H00H01)
=:LIB(TAPETST)
ENDINPUT
```

jcl is not in LIB.CNTL as this name

4.3 TSO/OS SYSTEM AIDS

The following utilities may or may not be used by the user. They basically are CLISTs which somewhat shorten input required by the user on various TSO commands. Only TSOLIST is really needed.

4.3.1 FT

FT is a CLIST which renames any member in SEICC.LIB.CNTL to any new member name. The following is a listing of this CLIST.

```
READY
list 'seicc.lib.clist(ft)'
 'SEICC.LIB.CLIST(FT)'
00010 PROC 2 FROM TO
00020 RENAME 'SEICC.LIB.CNTL(&FROM.)' 'SEICC.LIB.CNTL(&TO.)'
```

This CLIST is envoked by typing FT OLDMEM NEWNAME However, the renaming of members in this library could cause the procedures defined in this guide to be inaccurate, therefore only execute this CLIST on members which you have stowed not on existing members described in this guide.

4.3.2 QD

QD is a shortened version of the QED command. Instead of typing QED LIB.CNTL(MEMNAME) the user may simply type QD MEMNAME.

```
READY
list 'seicc.lib.clist(qd)'
 'SEICC.LIB.CLIST(QD)'
00010 PROC 1 MEMBER
00020 QED LIB.CNTL(&MEMBER.)
00030 TPRINT '$(84) $(2F) LIB.CNTL(&MEMBER.)/' ASIS
READY
```

(i.e. QED LIB.CNTL(COPYLOG) = QD COPYLOG)

4.3.3 MAXAL

MAXAL is a CLIST which returns the volume name of the user disk which contains the maximum amount of track space available which can be allocated to a single data set. The CLIST first scans the permanent user disks (DISK01 - DISK16), and then the 1-week user disks (K3USR8 and K3USR9). The following is a listing of this CLIST and an execution.

```
READY
list 'seicc.lib.clist(maxal)'
 'SEICC.LIB.CLIST(MAXAL)'
00010 PROC 0 M(/)
00020 TPRINT 'FOR DISK 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16'
00030 MAXALLOC  (DISK00&M.DISK01&M.DISK02&M.DISK03&M.DISK04&M.DISK05&M.DISK06-
00040 &M.DISK07&M.DISK08&M.DISK09&M.DISK10&M.DISK11&M.DISK12&M.DISK13&M.DISK1-
00050 4&M.DISK15&M.DISK16))
00060 TPRINT 'FOR K3USR8 K3USR9'
00070 MAXALLOC (K3USR8&M.K3USR9)
READY

maxal

FOR DISK 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16
0033 MAX ALLOCATION ON DISK14
FOR K3USR8 K3USR9
0122 MAX ALLOCATION ON K3USR9
READY
```

4.3.4 TSOLIST

TSOLIST is a LISTPDS for the two production libraries. A listing and execution of this utility follow:

```
READY
list 'seicc.lib.cntl(tsolist)'
 'SEICC.LIB.CNTL(TSOLIST)'
00100 //SEICCLIB JOB (SB0132823B,P,ISEE03,H00H00),BF3
00200 //*LISTPDS TSO.LIBS
00300 //LISTPDS EXEC LISTPDS,OUT=A
00400 //SYSLIB  DD  DSN=SEICC.LIB.CNTL,DISP=SHR
00600 //         DD  DSN=SEICC.LIB.CLIST,DISP=SHR
00700 // EXEC NOTIFYTS
READY

submit lib.cntl(tsolist)
JOB SEICCLIB SUBMITTED
READY
```

4.3.5 UPDATEDS

UPDATEDS is a CLIST which when executed returns a list of all data sets cataloged under SEICC which were either archived or backed up by the ASM2 system the last time ASM2 was run on the SACC computers. A listing and an execution of this CLIST follow:

can use if desired.

```
READY
list 'seicc.lib.clist(updateds)'
 'SEICC.LIB.CLIST(UPDATEDS)'
00010 PROC 0
00020 CC
00030 TPRINT ' DATASET ARCHIVED AND BACKED UP LAST NIGHT BY $ASM2 '
00040 $AI U(SEICC) CYCLE(1)
00050 $BI U(SEICC) CYCLE(1)
00060 END
READY
```

```
READY
updateds
 DATASET ARCHIVED AND BACKED UP LAST NIGHT BY $ASM2
LIST OF ARCHIVED DATASETS WHICH MEET FOLLOWING CRITERIA:
***** DATASET NAME BEGINS:  SEICC
***** DATASET HAS BEEN ARCHIVED WITHIN PAST 1    DAY
***** NOTE: THIS LIST INCLUDES RESTORED DATASETS-----
***** INDICATED BY "-RL"

TRKS LASTUSE  ARCHIVED UTIME REASON  EXPR      **** DATASET NAME ******
   2  9-24-80 10-10-80  2:42 SYSTEM  365      SEICC.WRTLST.SORT
                    Data set inactive
  35  9-24-80 10-10-80  2:42 SYSTEM  365 -RL  SEICC.LISTHS2.SOURCE
                    Data set inactive

     37 TRACKS CONTAINED IN ARCHIVES
END OF '$AI' COMMAND
LIST OF BACKED UP DATASETS WHICH MEET FOLLOWING CRITERIA:
***** DATASET NAME BEGINS:  SEICC
***** DATASET HAS BEEN BACKED UP WITHIN PAST 1    DAY
***** NOTE: THIS LIST INCLUDES RESTORED DATASETS-----
***** INDICATED BY "-RC"

TRKS LASTUSE BACKED-UP UTIME REASON  EXPR      **** DATASET NAME ******
  31 10-09-80 10-10-80  3:18 IBKUP   020      SEICC.LIB.CNTL

     31  TRACKS CONTAINED ON BACKUP TAPES
'$BI' ENDED
READY
```

4.3.6 AR

FUNCTION - The AR command is used when the user desires a cataloged disk data set archived permanently in the SACC S/360 ASM2 archive system. Execution of this CLIST will enqueue the data set to be archived the next time ASM2 is run by the SACC systems personnel. Once archived, the data set is deleted from the disk and the system catalog.

OPERANDS - This command has only one operand which is required:

a) Fully qualified - 'USRID.QUAL.QUAL' or
b) Without quotes and USRID when data set begins with SEICC user id.. (i.e. QUAL.QUAL)

SYNTAX - AR 'DSN' as in a) above.
AR DSN as in b) above.

CLIST - The CLIST being executed is as follows:

```
ced 'seicc.lib.clist(ar)'
CED
1
00010 PROC 1 DSN
00020 ALTERCL '$ALL' LIB(&DSN.)
00030 $AR '$ALL' RETPD(999)
END OF DATA
```

4.3.7 BK

FUNCTION - The BK command is used to flag a data set for backup by the SACC S/360 ASM2 backup system. Execution of this CLIST enqueues the specified data set to be backed up to the ASM2 backup tapes the next time ASM2 is run, and also each time changes are made to the specified data set. Therefore, only one BK need be done on any data set the user desires a backup for. The data set is not deleted from disk.

OPERANDS - As in the AR command, the only operand is the DSN. (See subsection 4.3.6).

SYNTAX - BK 'DSN'
BK DSN

CLIST - The CLIST being executed is as follows:

```
qed 'seicc.lib.clist(bk)'
QED
1
00010 PROC 1 DSN
00020 ALTERCL '$ALL' LIB(&DSN.)
00030 $BK '$ALL'
00040 END
END OF DATA
```

4.3.8 BGRA

FUNCTION - The BGRA command is used when the user wishes to restore a data set from the ASM2 archive system. Unlike the standard ASM2 $RA sub-command, which must be issued on the S/360/91 only and ties up the users terminal until the data set is completely restored to disk, the BGRA command submits a background job which may run on either the 91 or 75. In most cases, the 75 is even preferable because of the typical 2.5 minute I/O execution time required for a restore. During prime shift, 9:00 AM - 6:00 PM, jobs totaling 3 minutes in time estimate rarely run on the 91. However, turn around on the 75 during these hours is quite good for this length of job.

OPERANDS - This command has only one required operand and several keyword operands which may be over-ridden by the user. These are as follows:

1) DSN - required data set name of the data set to be restored. The data set name may be inputed as follows:
   a) Fully qualified - 'USRID.QUAL.QUAL', or
   b) Without quotes and USRID when data set begins with the SEICC user id. - QUAL.QUAL
2) TIME(H00H02) - the TIME keyword parameter is defaulted to H00H02. To over-ride, simply type TIME(CPUI/O). However, the user should never supply an I/O time less than 2.5 minutes.
3) ID($RA) - if omited, the job ID of the restore run will be SEICC$RA. However, if multiple jobs are to be submitted, the user may want to over-ride the job ID so that unique jobnames are loaded into the system.
4) NOTE(SEICC) - if omitted, the user ID SEICC will be notified when the background restore job has ended.

5) CLASS(A) - this should be over-ridden only to CLASS(N) when the restoration of a data set is critical.

SYNTAX - BGRA 'DSN' - when data set does not begin with SEICC
BGRA DSN - when data set begin with SEICC

EXAMPLES - the following show how over-riding is done:

1) To over-ride time est;
BGRA 'DSN' TIME(H00003):
2) To over-ride the job ID.;
BGRA 'DSN' ID(RA1):
3) To over-ride all keyword parameters;
BGRA 'DSN' TIME(H00004) ID(RA2) NOTE(USRID):

CLIST - The actual CLIST executed when the BGRA command is issued is as follows:

```
qed 'seicc.lib.clist(bgra)'
QED
1
00010 PROC 1 DSN TIME(H00H02) ID($RA) NOTE(SEICC) CLASS(A)
00020 ALTERCL '$ALL' LIB(&DSN.)
00030 QED TEMP.DATA NEW EMODE
00040 IN //SEICC&ID. JOB (SB0132823B,P,ISEE-3,&TIME.),BF3,CLASS=&CLASS.
00050 IN // EXEC ASM2
00060 IN //SYSIN  DD  *
00070 IN $RA '$ALL'
00080 IN // EXEC NTSO,ID=&NOTE.
00090 SUB *
00100 END NS
00110 END
END OF DATA
```

4.3.9 BGRB

FUNCTION - The BGRB command is identical to the BGRA command (subsection 4.3.8) except this command restores data sets from the backup tapes in the ASM2 system rather than the archive tapes.

OPERANDS - same as BGRA.

SYNTAX - same as BGRA, except BGRB is used.

CLIST - The actual CLIST which is executed when the BGRB command is issued is as follows:

```
qed 'seicc.lib.clist(bqrb)'
QED
1
00010 PROC 1 DSN TIME(H00H02) ID($RB) NOTE(SEICC) CLASS(A)
00020 ALTERCL '$ALL' LIB(&DSN.)
00030 QED TEMP.DATA NEW EMODE
00040 IN //SEICC&ID. JOB (SB0132823B,P,SA0001,&TIME.),BF3,CLASS=&CLASS.
00050 IN // EXEC ASM2
00060 IN //SYSIN  DD  *
00070 IN $RB '$ALL'
00080 IN // EXEC NTSO,ID=&NOTE.
00090 SUB *
00100 END NS
00110 END
END OF DATA
```

4.3.10 SAVEDS

FUNCTION - The SAVEDS utility program is used to update the usage count in the system catalog for all data set names referenced, following the //DSNAMES dd card (See Figure 4.3.10.1). The usage count is used by the ASM2 disk archival system to determine which data sets are to be archived for the reason 'INACTIVITY'. Therefore, SAVEDS must be run at least once per week to prevent ASM2 from archiving key production data sets for the above reason.

METHOD OF EXECUTION - The SAVEDS program may be executed by the SEICC user in the following ways:

1) SUB LIB(SAVEDS) will submit the JCL listed in Figure 4.3.10.1.
2) SAVEDS command will execute the CLIST in 4.3.10.2. (See Figure 4.3.10.3).

EXECUTION FROM OTHER USERIDs - This JCL may be submitted from other USERIDs in the following ways:

1) SUB 'SEICC.LIB.CNTL(SAVEDS)'
2) EX 'SEICC.LIB.CLIST(SAVEDS)'

done from SB# HP only

Figure 4.3.10.1 - THE 'SAVEDS' JCL

```
list 'seicc.lib.cntl(saveds)'
 'SEICC.LIB.CNTL(SAVEDS)'
00010 //SEICCSAV JOB (SE0132823E,P,ISEE-3,H00001),033,NOTIFY=SEICC
00020 //*SAVE-ALL DATASETS
00030 //*  THIS PROCEDURE WILL OPEN AND CLOSE ALL DATA SETS USED BY THE
00040 //* THE ISEE-3 DATA REDUCTION AND ANAYLISIS SYSTEM. IT SHOULD BE
00050 //* RUN AT LEAST ONCE A WEEK (PREFERABLY TWICE) TO PREVENT ANY OF
00060 //* THE DATA SETS FROM BEING SCRATCHED BY THE SYSTEMS PERSONNEL.
00070 //*  THIS IS SUBMITTED WITH A (H00001) TIME EST.
00080 //* I.E.  SUB 'SEICC.LIB.CNTL(USAVEDS)'  OR ...
00090 //*  SAVEDS WHEN LOGGED ON THE SEICC USERID.
00100 //* AND THATS IT.
00110 //*                                                    J. H. B.
00120 // EXEC PGM=SAVEDS,COND=EVEN
00130 //STEPLIB DD DSN=SEPIO.SBCID.OPIONEER.LOAD,DISP=SHR
00140 //DISK00 DD UNIT=2314,VOL=SER=DISK00,DISP=SHR
00150 //DISK01 DD UNIT=2314,VOL=SER=DISK01,DISP=SHR
00160 //DISK02 DD UNIT=2314,VOL=SER=DISK02,DISP=SHR
00170 //DISK03 DD UNIT=2314,VOL=SER=DISK03,DISP=SHR
00180 //DISK04 DD UNIT=2314,VOL=SER=DISK04,DISP=SHR
00190 //DISK05 DD UNIT=2314,VOL=SER=DISK05,DISP=SHR
00200 //DISK06 DD UNIT=2314,VOL=SER=DISK06,DISP=SHR
00210 //DISK07 DD UNIT=2314,VOL=SER=DISK07,DISP=SHR
00220 //DISK08 DD UNIT=2314,VOL=SER=DISK08,DISP=SHR
00230 //DISK09 DD UNIT=2314,VOL=SER=DISK09,DISP=SHR
00240 //DISK10 DD UNIT=2314,VOL=SER=DISK10,DISP=SHR
00250 //DISK11 DD UNIT=2314,VOL=SER=DISK11,DISP=SHR
00260 //DISK12 DD UNIT=2314,VOL=SER=DISK12,DISP=SHR
00270 //DISK13 DD UNIT=2314,VOL=SER=DISK13,DISP=SHR
00280 //DISK14 DD UNIT=2314,VOL=SER=DISK14,DISP=SHR
00290 //DISK15 DD UNIT=2314,VOL=SER=DISK15,DISP=SHR
00300 //DISK16 DD UNIT=2314,VOL=SER=DISK16,DISP=SHR
00310 //DISK17 DD UNIT=2314,VOL=SER=DISK17,DISP=SHR
00320 //DISK18 DD UNIT=2314,VOL=SER=DISK18,DISP=SHR
00330 //OUTPUT DD SYSOUT=X
00340 //SYSABEND DD SYSOUT=A
00350 //DSNAMES DD *
00360 SEICC.DPTSAVE.LOAD
00370 SEICC.LIB.CNTL
00380 SEICC.LIB.CLIST
00390 SEICC.MATRIX.LOAD
00400 SEICC.EDRSAVE.LOAD
00410 SEICC.ENCGEN.LOAD
00420 SEICC.DPLOG.DATA
00430 SEICC.LOG.DATA
00440 SEICC.ENCMRG.LOAD
00450 SEICC.PROCESS.LOAD
00460 SEICC.SPRING.LOAD
00470 SEICC.RMVENC.LOAD
00480 SBMJS.FLUX.LOAD
00490 SBMJS.NEWFLUX.LOAD
00500 SBMJS.EDRLOG.LOAD
00510 SEICC.LSELECT.LOAD
00520 SEICC.ISEE.DUMMY
00530 /*
00540 //NOTIFY EXEC NOTIFYTS,MSG='SAVEDS'
READY
```

Figure 4.3.10.2 - THE 'SAVEDS' CLIST

```
list 'seicc.lib.clist(saveds)'
 'SEICC.LIB.CLIST(SAVEDS)'
00070 SUB 'SEICC.LIB.CNTL(SAVEDS)'
READY
```

Figure 4.3.10.3 - EXECUTION OF 'SAVEDS'

```
saveds
 JOB 1165 ON READER11 -- SEICCSAV  033H
READY
```

4.3.11 BYE

FUNCTION - The BYE command is used as an alternate method of LOGOFF when using OMRON type terminals only!

OPERANDS - None.

SYNTAX - BYE.

CLIST - The CLIST being executed follows:

```
qed 'seicc.lib.clist(bye)'
1
QED
00010 TPRINT '$H$J' ASIS TRANS(STD)
00020 TPRINT 'B$D$BB$D$BB$D$BB$D$BB$D$BB$D$BB$D$BB$HBBB$BB$D$BB' ASIS TRANS(STD)
00030 TPRINT '$D$B$DB$D$DBB$BB$D$BB$D$B$DB$D$DE' ASIS TRANS(STD)
00040 TPRINT '$A$A$A$A$A$A$C$C$C$C' ASIS TRANS(STD)
00050 TPRINT 'Y$BY$BY$BY$AY$AY$AY' ASIS TRANS(STD)
00060 TPRINT '$D$B$D$B$D$B$DY$D$BY$D$BY$D$BY' ASIS TRANS(STD)
00070 TPRINT '$A$A$A$A$A$A$C$C$C$CE$D$BE$D$BE$D$BE$D$B' ASIS TRANS(STD)
00080 TPRINT 'E$B$DE$B$DE' ASIS TRANS(STD)
00085 TPRINT '$H$C$C$C$C$C$C$C$C$C' ASIS TRANS(STD)
00090 TPRINT '$C$C$C$C$C$CEEEE$D$D$D$D$B$B$BEE$D$D$B$B$BEEEE' ASIS TRANS(STD)
00100 TPRINT '$G$B$B$B$B' ASIS TRANS(STD)
00200 LOGOFF
END OF DATA
```