920260-TL

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TITLE: INDEX OF CONFIDENTIAL WORKPAPERS
PERIOD: TYE 12/31/92
DATE: DECEMBER 14, 1993
AUDITOR: RKY

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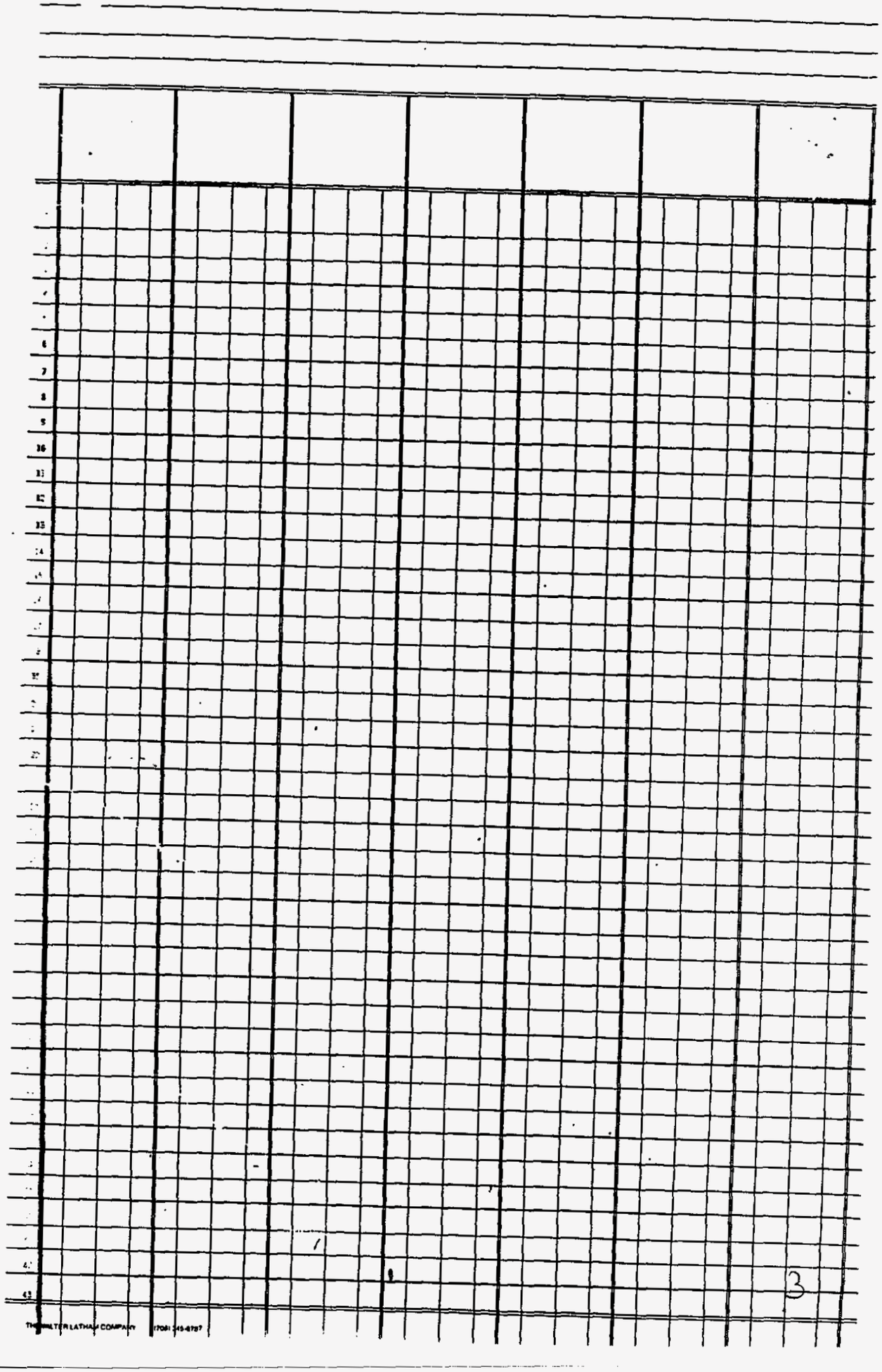
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RW 12/14/93

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44-1
44-2

According to Deloite and Touche there are three primary modules utilized in the Wassp process (1) sample selection (2) Data collection (3) and Data Analysis.

PSC staff believes there are two further areas to the process, DISPATCH, AND PERFORMANCE OF WORK.

The following is an overview of all five areas. Details are on subsequent workpapers noted here.

1. DISPATCH

45

In order for the service technicians to get their work, the following process occurs:

Requests for telephone service (service orders) go through a system called SOCS and requests for maintenance go through a systems called LMOS. (Service Order Communications System -- Loop Maintenance Operations Systems)

The input into SOCS and LMOS go into Mapper and are dispatched to the technician from Mapper via the technicians's Computer Access Terminal (CAT), which they carry around with them. Work completed dispatched through Mapper are documented on the Display Craft Work Summary (DCWS)

Requests for Designed Circuits go through SOCS and requests for maintenance of designed troubles go through Work Force Administration Control (WFA-C).

The input here for service orders of Designed ciruciuts and maintenance of these are dispatched through a system called RADS -G (Route and Dispatch System and the technician receives via the CAT.

PSC staff visited the customer service office and observed how orders are taken and put into SOCS. Staff visited the Customer Rapair Service Analysis Bureau where trouble are taken and input into LMOS. Then staff visited an Installation and Maintenance Center (IMc) where service orders and troubles are dispatched from. Staff did not ~~visit the offices where the~~ observe RADs dispatch system

See wp no. 45 for details of visits and observations and controls.

Staff questioned Rick King, Steve Venderberg, Steve Shaw and John Long how the troubles and service orders are dispatched out of Mapper. This is a coaplex program developed and maintained by AT&T. There are six criteria used to assign the troubles. They are 1) time to commitment, 2) Distance to Job, 3) Distance to Home, 4)Out of Service, 5)Subsequent Jobs and 6)Priority.

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Staff also questioned what controls were in place to make sure this was working properly and could not be manipulated.

See wp no.45 for details of disptach program and controls.

II. PERFORMANCE OF WORK

PSC staff rode in the truck with a service technician from the POTS category and a ~~service~~ Facility technician from the cable repair category. Both are dispatched out the Mapper.

Staff observed how the technician accessed his jobs through the CAT, did his jobs, closed out jobs through the CAT, filled out his RF 152 time sheet and filled out his Work Activity Log for the sample.

See wp no46 for details of how service tech does his job and controls so that he fills out the from correctly.

III. Sample Selection

44-1
44-2

According to D&T report dated March 1993 a Stat Sample of technicians is taken from the Payroll Master Data Base (PMDB). This is a BellSouth Data Base used to maintain employee information. The sample program called Extract stratified the universe of employees into homogenous categories based on state and JFC. The SAMPLER program selects random sample of techs to participate in work activity log portion. Those selected will participate for one week. The SAMPLER program also generates a random sample of the above techs to participate in the technical analyst interview (about 30% of sample). Logs for 3 days are selected for tech analyst review procedures. These procedures are described in wp No . 44-1 p. 16

Sample size and structure of sample has been designed so that a 3-month Network Technician Labor distribution Profile is targeted to achieve a 95% confidence level with a precision of +or - 3% for each field reporting code. The precision corresponds to approximately + or - 15 minutes. Technicians selected are oversampled in the sample selection Module to account for days not there (vacation, illness, weekend/weekday shifts.)

Staff interviewed the statistician, Keith Johnson, who wrote the program for the sample and explained his program in detail. See WP. No47 for details of how the program works and the controls.

cont

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WP NO.

IV. A. DATA COLLECTION
B. TECHNICAL ANALYST PROCEDURES

Per Rick King, Management Control Position in WASSP the program generates a sample every month as explained above. He inputs the data that generates the sample.

Per D&T the technical analyst sends prior to making the logs for the week samples 1) a list of technicains selected 2) the appropriate logs, and 3) Instructions to the Technicians Manager. The Tech Manager gives to tech supervisor. According to my conversations with Rick King, Steve Vanderberg and Steve Shaw, the technical analyst does not send the samples out, Rick King and Steve Vanderberg send the samples out. Also, in my conversations with Rick King, Steve Venderberg and Steve Shaw, the whole month of sample selection is sent to the tech manager at one time and sent to the tech supervisor at one time. Also, the tech supervisor notifies the tech to be sampled the Friday before his week.

44-1
44-2

Per D&T the tech's report time in 15 minute intervals on the logs. Staff observed this also. When completed the techs give logs to supervisor and any discrepancies resolved. The supervisor sends to the technical analyst for additional review.

See WP No. 48 for PSC staff observations regarding data collection and controls and observations regarding technical analysts interviews and controls.

V. DATA ANALYSIS

Per D&T, the data derived from the Logs are input into Wassp data base processor. INPUT program provides for input and storage of data by work group.

44-1
44-2

IMOUT program develops time distribution ratios and other data anlaysis for each work group. Wassp distributes the increments of hours reported to each FRC and calculated % of time assigned to each FRC.

According to my conversations with Rick King, Steve Venderberg, and Steve Shaw, the profile for each month is a total of 3 months samples(not average). The profile is applied two months later. For example, October profile consists of Aug, Sept and Oct data. This profile is applied to December.

See wp no. 49 for detailed information re data analysis.

Conf P3

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TITLE: OVERVIEW OF WASSP PROCESS
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AUDITOR: RKY

WP NO. 44, P 4

OTHER ITEMS OBSERVED

WP 8

While reviewing D&T work staff noted that for cost saving analysis, D&T relied upon BST assumption that each service technician would save 15 minutes per day by not having to fill out the MTR forms.

WP 5

PSC staff questioned Rick King and Steve Vanderberg as to how they came up with the 15 minute assumption. They said that it was through observation, conversations and review with technicians. There was no formal study done. While PSC staff observed the time it took two technicians to fill out their forms and it appears that 15 minutes is reasonable, staff only saw two technicians and cannot draw a conclusion. Recommend that if use 15 minutes as time saver a formal study be performed and documented.

Corg

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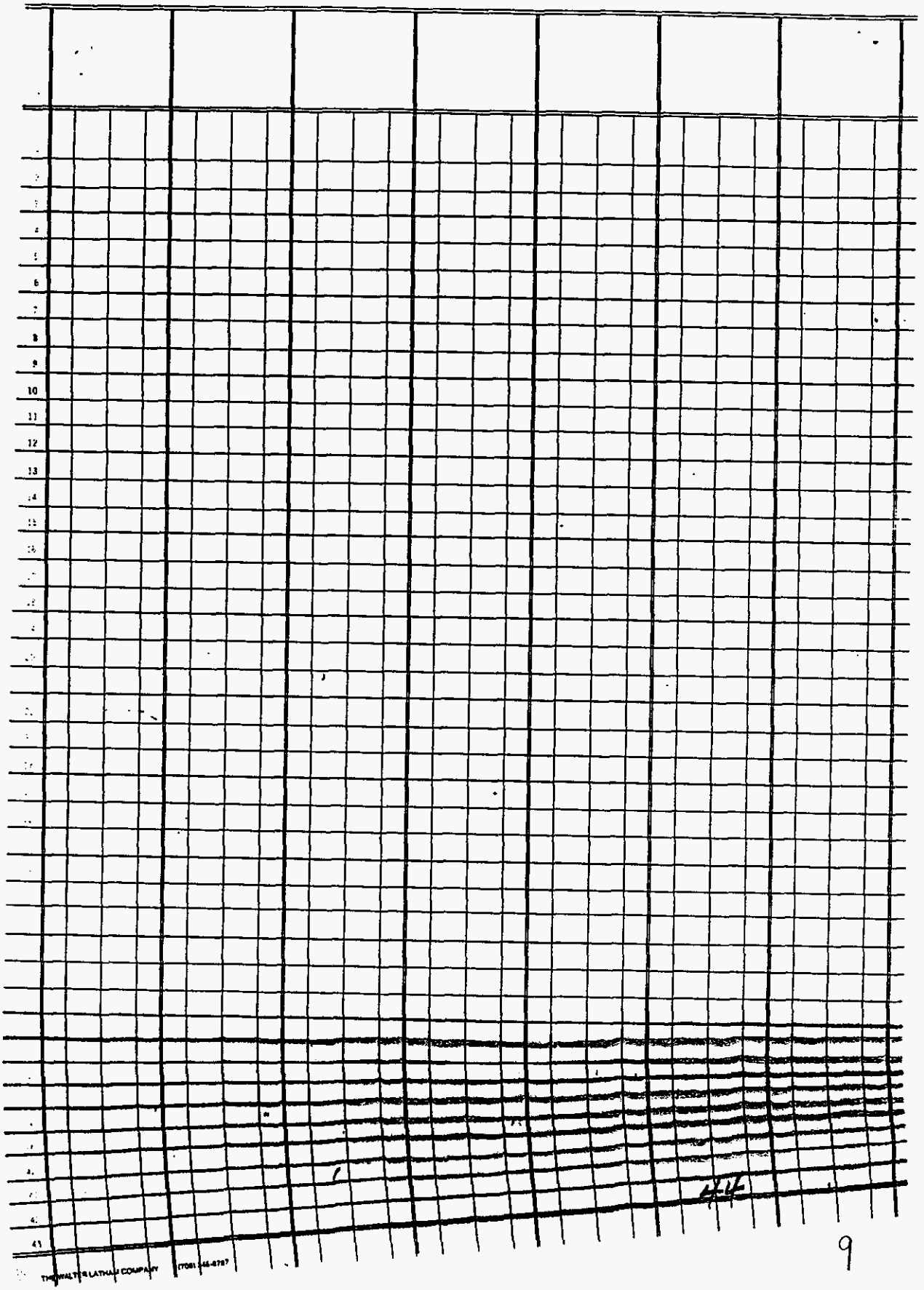

BELLSOUTH CORPORATION

SUPPLEMENT TO THE SPECIAL STUDY OF THE WORK ACTIVITY STATISTICAL SAMPLING PROCESS JULY 1993

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Conf

Deloitte & Touche

Suite 1700
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Atlanta, Georgia 30303-1943

Telephone: (404) 220-1500
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July 14, 1993

BellSouth Corporation
1155 Peachtree Street, N.E.
Atlanta, Georgia 30367

Dear Sirs:

We are pleased to present the results of our special study to assess certain aspects of BellSouth Telecommunications, Inc.'s (BellSouth) Work Activity Statistical Sampling Process (WASSP).

BACKGROUND

The WASSP methodology is a statistically-based time reporting methodology proposed to replace existing time reporting methods utilized by certain groups of network technicians. WASSP is intended to enhance the measurement of work activities which form the basis for the separation of costs of network technicians' regulated telecommunications work activities from the costs of nonregulated work activities.

We have previously issued a report, dated March 5, 1993, pertaining to the assessment of the functionality of the WASSP methodology and other qualitative factors. This report is supplementary to the previously issued report and should be read with that understanding.

The remainder of this report presents the scope and methodology employed in this supplementary study and our resulting findings, conclusions and recommendations, which are presented in separate reports attached as Exhibits.

SCOPE OF SUPPLEMENT TO SPECIAL STUDY

Our special study was performed at the request of BellSouth to provide an external assessment of the proposed WASSP methodology, which has been implemented on a parallel basis in all nine states in the BellSouth geographic region, awaiting regulatory approval. Our procedures are intended to provide information to respond to the Federal Communications Commission (FCC) and state regulators, and this report should not be used for any other purpose. This supplement to the special study included three primary activities - Assessing System Functionality, Examining the Internal Control Structure over Financial Reporting, and Assessing the Policies and Procedures Associated with Training of the Technical Analyst.

Assessing System Functionality

We performed an assessment of the functionality of the WASSP methodology to measure network technicians' regulated and nonregulated work activity in the state of Florida during the three-month period ended June 30, 1993. Our report is included herein as Exhibit A.

This assessment was made by conducting an examination of the system's actual measurement of network technicians' work activities in the state of Florida for the three months ended June 30, 1993 in compliance with BellSouth's policies for time reporting under Part 32 - Uniform System of Accounts. Our examination was made in accordance with standards established by the American Institute of Certified Public Accountants and, accordingly, included such procedures as we considered necessary in the circumstances. As shown in Exhibit A, our opinion pertaining to the examination is unqualified.

The specific procedures we employed generally paralleled the three primary modules utilized in the WASSP process - Sample Selection, Data Collection and Data Analysis. A summary of our primary procedures performed to test each of those modules is included in Exhibit B. Those procedures were performed, together with other procedures, to form our opinion included in Exhibit A.

Examining the Internal Control Structure Over Financial Reporting

The second activity performed was an examination of BellSouth WASSP management's assertion that BellSouth maintained an effective internal control structure over financial reporting for the segment of the internal control structure pertaining to the WASSP process during the three-month period ended June 30, 1993.

Our examination was made in accordance with standards established by the American Institute of Certified Public Accountants and, accordingly, included obtaining an understanding of the applicable segment of the internal control structure; testing, and evaluating the design and operating effectiveness of the internal control structure; and performing such other procedures as we considered necessary in the circumstances as shown in Exhibit C. Our opinion pertaining to the examination is unqualified.

The specific control criteria established by BellSouth WASSP management to maintain an effective internal control structure are included in an appendix to Exhibit C

Assessing Policies and Procedures Associated with Training of the Technical Analyst

For the assessment of the policies and procedures associated with the training of the technical analysts, the approach utilized and our summary findings are as follows:

Our approach to assessing the policies and procedures associated with the training of the technical analysts included consideration of several aspects, such as:

- Entry level and continuing education courses,
- Analyst policies and procedures manual,
- Knowledge of FCC time reporting requirements,
- Effectiveness of the interview process, and
- Error resolution.

Our approach consisted of obtaining an understanding of the policies and procedures associated with the above aspects of the technical analyst through:

- Interviewing and observing job performance of the analysts to understand their duties, job functions, background, experience, training, knowledge of FCC time reporting rules and effective interview techniques,

- Interviewing management who have supervisory responsibility over the analysts to assess their perception of the analyst's ability to perform identified job functions.

- Assessing the information available to the analysts to perform identified job duties including the following;

  - Analyst policies and procedures manual
  - BellSouth time reporting manuals, and
  - Access to source data of network technician time reporting.

Based on our assessment, the policies and procedures relating to the training of the technical analysts allow for effective entry level and continuing education of technical analysts based on established criteria for this position. Technical analysts are selected through an interview process from a pool of candidates that possess knowledge of and experience in outside plant architecture, network technician time reporting, including knowledge of FCC time reporting rules and regulations, and exhibit strong interpersonal skills.

Once selected, technical analysts are trained through a combination of the following:

- Reading the Technical Analyst Reference Manual, WASSP Policies and Procedures Manual and the Technical Analyst Handbook,

- Technical analyst staff meetings covering BellSouth time reporting policies and practices regularly conducted by WASSP management,

- Periodic performance appraisals conducted via WASSP management's observation of "live" analyst phone interviews. These appraisals focus on the analyst's interview and error resolution techniques, and

- Continuing education courses that combine both a base time reporting curriculum as well as a curriculum specifically tailored for the needs of the individual technician as periodically reviewed and approved by WASSP management.

Training of the technical analysts is arranged and/or conducted by WASSP management with considerable experience in FCC time reporting requirements. The current centralization of the analyst location further facilitates efficient training.

Implementation of Prior Recommendations

In conjunction with the above activities, we assessed management's responses pertaining to the implementation of our procedural recommendations associated with the WASSP process, included in our report dated March 5, 1993. We have also formed additional observations relating to various aspects of

the WASSP process. Our assessment of the status of the implementation of these original observations, as well as our additional recommendations, are included in our Letter of Recommendations at Exhibit D.

Additionally, we were requested to perform certain procedures to test management's analysis of the reporting impacts associated with the proposed implementation of the WASSP process in the BellSouth nine-state geographic region pertaining to the application of Part 32, Part 64, Part 36, and Part 69 of the Rules and Regulations of the FCC. The procedures we performed and our findings are included in a report under separate cover.

* * * * *

We would like to acknowledge the excellent cooperation and assistance given our study team during the course of our study. We would be pleased to discuss any aspect of our report with you.

We appreciate this opportunity to be of service.

Very truly yours,

Deloitte & Touche

EXHIBIT A

Deloitte & Touche

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INDEPENDENT ACCOUNTANTS' ATTESTATION REPORT

BellSouth Corporation
Atlanta, Georgia

We have examined the accompanying Statement of Network Technician Labor Distribution Profiles for the state of Florida for the three-month period ended June 30, 1993. Our examination was made in accordance with standards established by the American Institute of Certified Public Accountants and, accordingly, included such procedures as we considered necessary in the circumstances. This Statement is the responsibility of the Company's management. Our responsibility is to express an opinion on the Statement based on our examination.

The Statement of Network Technician Labor Distribution Profiles was derived from BellSouth Telecommunications, Inc.'s Work Activity Statistical Sampling Process (WASSP) on the basis described in the Notes to the Statement of Network Technician Labor Distribution Profiles.

In our opinion, the Statement of Network Technician Labor Distribution Profiles for the state of Florida referred to above presents, in all material respects, the Network Technician Labor Distribution Profiles for the state of Florida for the three-month period ended June 30, 1993 in conformity with the basis described in the Notes.

Deloitte & Touche

July 14, 1993

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF FLORIDA
THREE-MONTH PERIOD ENDED JUNE 30, 1993
(Continued)

WORK GROUP - I&M POTS
JOB FUNCTION CODE - 4100

Field Reporting Code	Description	Labor Distribution Percentage
22M	AERIAL CBL-METALLIC	3.74%
45M	BURIED CBL-METALLIC	16.05%
248C	AERIAL SVC WIRE (DROPS)	1.88%
248M	AERIAL SVC WIRE (DROPS)	7.45%
548C	BURIED SVC-WIRE (DROPS)	2.80%
548M	BURIED SVC-WIRE (DROPS)	8.01%
12M	AERIAL CBL-METALLIC-BLDG ENT	2.18%
52M	INTRABLDG NETWK CBL-METALLIC	0.16%
68E	OTH NON-CPE EQPT EXP-NETWK TERM WIRE INSTL	2.55%
68M	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	3.27%
257M	CIRC EQPT-DIGITAL-SUB PR GN SYS	0.05%
257R	CIRC EQPT-DIGITAL-SUB PR GN SYS	0.28%
377M	DIGITAL ELECTRONIC SWITCH EQPT	0.04%
F257M	CIRCUIT EQPT-SUBSCRIBER PAIR GAIN SYS-FIBER OPTIC FEEDER	0.10%
F257R	CIRCUIT EQPT-SUBSCRIBER PAIR GAIN SYS-FIBER OPTIC FEEDER	0.24%
97BI	INSIDE WIRE-BASIC-INSTL & REARRANGE	4.45%
97BW	INSIDE WIRE-BASIC-WARRANTY	0.84%
97BP	INSIDE WIRE-BASIC-SVC PLAN	10.41%
97BR	INSIDE WIRE-BASIC-MTCE	0.80%
98EI	INSIDE WIRE-NON BASIC INSTL & REARRANGE	0.59%
98EW	INSIDE WIRE-NON BASIC WARRANTY	0.16%
98ER	INSIDE WIRE-NON BASIC TIME & MTL	0.25%
5532	MISC MEETINGS	4.38%
5533	UNION ACTIVITIES (PAID)	0.04%
5534	EXCELLENCE THROUGH QUALITY (QWL)	1.04%
5535	GEN CLASSROOM TRAINING	2.04%
5536	OTH UNCLASSIFIED PROD COSTS (E.G., NO ACCESS)	2.51%
553A	NO TROUBLE FOUND	3.75%
5539	OTH MTCE EXP	0.01%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF FLORIDA
THREE-MONTH PERIOD ENDED JUNE 30, 1993
(Continued)

WORK GROUP - I&M POTS
JOB FUNCTION CODE - 4100
(Continued)

Field Reporting Code	Description	Labor Distribution Percentage
510C	STOREROOM	0.66%
F257C	DIGITAL SUBSCRIBER PAIR GAIN-FIBER	0.02%
248X	AERIAL SVC WIRE (DROPS)-ACCUM DEPR	0.01%
548X	BURIED SVC WIRE (DROPS)-ACCUM DEPR	0.01%
257C	CIRCUIT EQPT-DIGITAL-SUB PR GN SYS	0.23%
TRVL	TRAVEL & BREAKS	19.00%
	TOTAL - I&M POTS	100.00%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF FLORIDA
THREE-MONTH PERIOD ENDED JUNE 30, 1993
(Continued)

WORK GROUP - I&M SPECIAL SERVICES (SSI&M)
JOB FUNCTION CODE - 4110

Field Reporting Code	Description	Labor Distribution Percentage
22M	AERIAL CBL-METALLIC	1.66%
45M	BURIED CBL-METALLIC	11.52%
248C	AERIAL SVC WIRE (DROPS)	0.43%
248M	AERIAL SVC WIRE (DROPS)	0.86%
548C	BURIED SVC WIRE (DROPS)	0.30%
548M	BURIED SVC WIRE (DROPS)	0.81%
12M	AERIAL CBL-METALLIC-BLDG ENT	5.64%
52M	INTRABLDG NETWK CBL-METALLIC	2.09%
68E	OTH NON-CPE EQPT EXP-NETWK TERM WIRE-INSTL	9.64%
68M	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	6.26%
68Y	OTH NON-CPE EQPT EXP-NETWK TERMINATING WIRE-RMVL	0.60%
257M	CIRC EQPT-DIGITAL-SUB PR GN SYS	0.52%
257R	CIRC EQPT-DIGITAL-SUB PR GN SYS	0.59%
377M	DIGITAL ELECTRONIC SWITCH EQPT	0.23%
F257M	CIRCUIT EQPT-SUBSCRIBER PAIR GAIN SYS-FIBER OPTIC FEEDER	0.67%
F257R	CIRCUIT EQPT-SUBSCRIBER PAIR GAIN SYS-FIBER OPTIC FEEDER	0.50%
758M	OTH TERM EQPT-SUB PR GN EQPT	0.32%
378C	OTH TERM EQPT DIGITAL NON-CPE NCTE	2.46%
378M	OTH TERM EQPT DIGITAL NON-CPE NCTE-REG	1.05%
358NM	OTH TERM EQPT DIGITAL NON-CPE NCTE	0.03%
558C	OTH TERM EQPT-ANALOG NCTE	3.68%
558M	OTH TERM EQPT-ANALOG NCTE	4.67%
418M	STA APPARATUS-BOC OWNED-REGULATED	3.03%
97BI	INSIDE WIRE-BASIC-INSTL & REARRANGE	0.20%
97BP	INSIDE WIRE-BASIC-SVC PLAN	0.32%
97BR	INSIDE WIRE-BASIC-MTCE	0.01%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF FLORIDA
THREE-MONTH PERIOD ENDED JUNE 30, 1993
(Continued)

WORK GROUP - I&M SPECIAL SERVICES (SSI&M)
JOB FUNCTION CODE - 4110
(Continued)

Field Reporting Code	Description	Labor Distribution Percentage
98EI	INSIDE WIRE-NON BASIC INSTL & REARRANGE	3.37%
98EW	INSIDE WIRE-NON BASIC WARRANTY	0.38%
98ER	INSIDE WIRE-NON BASIC TIME & MTL	1.52%
728C	COMPANY COMM STAND ALONE	0.05%
658M	COMPANY COMM EQPT	0.08%
628C	COMPANY COMM INTRASYS	0.23%
730C	DATA CONTROLLERS & WORKSTATIONS	0.39%
630M	DATA CONTROLLERS & WORKSTATIONS	0.15%
628X	CO COMM INTRSYSTEM-ACCUM DEPR	0.08%
730X	DATA CONTROLLERS & WORKSTATIONS-ACCUM DEPR	0.03%
5532	MISC MEETINGS	3.70%
5534	EXCELLENCE THROUGH QUALITY (QWL)	0.60%
5535	GEN CLASSROOM TRAINING	2.79%
5536	OTH UNCLASSIFIED PROD COSTS (E.G., NO ACCESS)	1.48%
553A	NO TROUBLE FOUND	2.80%
5539	OTH MTCE EXP	0.07%
510C	STOREROOM	1.75%
F257C	CIRC EQPT-SUB PR GN SYS-FIBER OPTIC FEEDER	0.13%
F758M	OTH TERM EQPT-SUBPR GN EQPT-FIBER OPTIC FEEDER	0.03%
158C	LGE PBX-911 INSTALLATIONS	0.14%
257C	CIRCUIT EQPT-DIGITAL-SUB PR GN SYS	2.14%
558X	OTH TERM EQPT-ANALOG NCTE-ACCUM DEPR	0.54%
758X	OTH TERM EQ-SUB PR GN EQ	0.01%
378X	OTH TERM EQ-DIG NONCPE-ACCUM DEPR	0.13%
117M	OPERATOR SYSTEMS	0.02%
TRVL	TRAVEL & BREAKS	19.30%
	TOTAL - I&M SPECIAL SERVICES (SSI&M)	100.00%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF FLORIDA
THREE-MONTH PERIOD ENDED JUNE 30, 1993

WORK GROUP - I&M CORPORATE COMMUNICATIONS
JOB FUNCTION CODE - 4120

Field Reporting Code	Description	Labor Distribution Percentage
22M	AERIAL CBL-METALLIC	0.12%
45M	BURIED CBL-METALLIC	0.29%
248M	AERIAL SVC WIRE (DROPS)	0.03%
548M	BURIED SVC WIRE (DROPS)	0.74%
12M	AERIAL CBL-METALLIC-BLDG ENT	1.05%
52M	INTRABLDG NETWK CBL-METALLIC	0.89%
68E	OTH NON-CPE EQPT EXP-NETWK TERM WIRE-INSTL	0.93%
68M	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	0.53%
68Y	OTH NON-CPE EQPT EXP-NTWK TERMINATING WIRE-RMVL	0.07%
257M	CIRC EQPT-DIGITAL-SUB PR GN SYS	0.01%
257R	CIRC EQPT-DIGITAL-SUB PR GN SYS	0.01%
377M	DIGITAL ELECTRONIC SWITCH EQPT	0.01%
F257R	CIRCUIT EQPT-SUBSCRIBER PAIR GAIN SYS-FIBER OPTIC FEEDER	0.04%
758M	OTH TERM EQPT-SUB PR GN EQPT	0.12%
378C	OTH TERM EQPT DIGITAL NON-CPE NCTE	2.06%
378M	OTH TERM EQPT DIGITAL NON-CPE NCTE-REG	0.35%
558C	OTH TERM EQPT-ANALOG NCTE	0.83%
558M	OTH TERM EQPT-ANALOG NCTE	1.33%
418M	STA APPARATUS-BOC OWNED-REGULATED	0.18%
728C	COMPANY COMM STAND ALONE	1.44%
658M	COMPANY COMM EQPT	11.26%
658C	COMPANY COMM EQPT-PBX INSTALLATIONS	1.38%
628C	COMPANY COMM INTRASYS	8.12%
730C	DATA CONTROLLERS & WORKSTATIONS	17.13%
630M	DATA CONTROLLERS & WORKSTATIONS	29.52%
728X	CO COMM EQ-STA APPARATUS EQ-ACCUM DEPR	0.12%
658X	COMPANY COMM EQUIP-PBX-ACCUM DEPR	0.10%
628X	CO COMM INTRSYSTEM-ACCUM DEPR	0.28%
730X	DATA CONTROLLERS AND WORKSTATIONS-ACCUM DEPR	0.97%
5532	MISC MEETINGS	1.90%
5533	UNION ACTIVITIES (PAID)	0.04%
5535	GEN CLASSROOM TRAINING	1.77%
5536	OTH UNCLASSIFIED PROD COSTS (E.G., NO ACCESS)	0.16%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF FLORIDA
THREE-MONTH PERIOD ENDED JUNE 30, 1993
(Continued)

WORK GROUP - I&M CORPORATE COMMUNICATIONS
JOB FUNCTION CODE - 4120
(Continued)

Field Reporting Code	Description	Labor Distribution Percentage
553A	NO TROUBLE FOUND	0.07%
5539	OTH MTCE EXP	0.71%
510C	STOREROOM	1.20%
558X	OTH TERM EQPT-ANALOG NCTE-ACCUM DEPR	0.11%
TRVL	TRAVEL AND BREAKS	14.13%
	TOTAL - I&M CORPORATE COMMUNICATIONS	100.00%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF FLORIDA
THREE-MONTH PERIOD ENDED JUNE 30, 1993
(Continued)

WORK GROUP - I&M PUBLIC COMMUNICATIONS (COIN)
JOB FUNCTION CODE - 4180

Field Reporting Code	Description	Labor Distribution Percentage
22M	AERIAL CBL-METALLIC	0.78%
45M	BURIED CBL-METALLIC	2.62%
248C	AERIAL SVC WIRE (DROPS)	0.24%
248M	AERIAL SVC WIRE (DROPS)	0.70%
548C	BURIED SVC WIRE (DROPS)	0.37%
548M	BURIED SVC WIRE (DROPS)	0.99%
12M	AERIAL CBL-METALLIC-BLDG ENT	0.28%
52M	INTRABLDG NETWK CBL-METALLIC	0.05%
68E	OTH NON-CPE EQPT EXP-NETWK TERM WIRE-INSTL	0.28%
68M	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	0.27%
68Y	OTH NON-CPE EQPT EXP-NTWK TERM WIRE-RMVL	0.01%
257M	CIRC EQPT-DIGITAL-SUB PR GN SYS	0.10%
257R	CIRC EQPT-DIGITAL-SUB PR GN SYS	0.01%
377M	DIGITAL ELECTRONIC SWITCH EQPT	0.02%
F257M	CIRCUIT EQPT-SUBSCRIBER PAIR GAIN SYS-FIBER OPTIC FEEDER	0.01%
98EI	INSIDE WIRE-NON BASIC INSTL & REARRANGE	0.05%
98EW	INSIDE WIRE-NON BASIC WARRANTY	0.02%
98ER	INSIDE WIRE-NON BASIC TIME & MTL	0.10%
88E	PUB TEL TERM EQPT UNIV-INSTL	0.01%
88M	PUB TEL TERM EQPT UNIV	0.69%
88Y	PUB TEL TERM EQPT UNIV-RMVL	0.23%
188E	PUB TEL TERM EQPT-COIN OP-INSTL	5.95%
188M	PUB TEL TERM EQPT-COIN OP	35.88%
188Y	PUB TEL TERM EQPT-COIN OP-RMVL	3.27%
288E	PUB TEL TERM EQPT-COINLESS INSTALLATION	0.32%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF FLORIDA
THREE-MONTH PERIOD ENDED JUNE 30, 1993
(Continued)

WORK GROUP - I&M PUBLIC COMMUNICATIONS (COIN)
JOB FUNCTION CODE - 4180
(Continued)

Field Reporting Code	Description	Labor Distribution Percentage
288M	PUB TEL TERM EQPT-COINLESS	1.90%
288Y	PUB TEL TERM EQPT-COINLESS-RMVL	0.07%
988E	PUB TEL TERM EQPT INSTALLATION	0.08%
988M	PUB TEL TERM EQPT	0.01%
988Y	PUB TEL TERM EQPT-RMVL	0.01%
5532	MISC MEETINGS	4.70%
5533	UNION ACTIVITIES (PAID)	0.01%
5534	EXCELLENCE THROUGH QUALITY (QWL)	1.61%
5535	GEN CLASSROOM TRAINING	0.22%
5536	OTH UNCLASSIFIED PROD COSTS (E.G., NO ACCESS)	1.09%
553A	NO TROUBLE FOUND	3.54%
5539	OTH MTCE EXP	0.02%
510C	STOREROOM	4.70%
TRVL	TRAVEL & BREAKS	28.81%
	TOTAL - I&M PUBLIC COMMUNICATIONS (COIN)	100.00%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF FLORIDA
THREE-MONTH PERIOD ENDED JUNE 30, 1993
(Continued)

WORK GROUP - CABLE/FACILITIES MAINTENANCE
JOB FUNCTION CODES - 4250/4260

Field Reporting Code	Description	Labor Distribution Percentage
22M	AERIAL CBL-METALLIC	7.01%
45M	BURIED CBL-METALLIC	33.48%
248C	AERIAL SVC WIRE (DROPS)	0.05%
248M	AERIAL SVC WIRE (DROPS)	0.37%
548C	BURIED SVC WIRE (DROPS)	0.13%
548M	BURIED SVC WIRE (DROPS)	1.34%
12M	AERIAL CBL-METALLIC-BLDG ENT	0.73%
52M	INTRABLDG NETWK CBL-METALLIC	0.86%
68E	OTH NON-CPE EQPT EXP-NETWK TERM WIRE-INSTL	0.56%
68M	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	0.14%
5M	UG CBL-METALLIC	4.78%
68Y	OTH NON-CPE EQPT EXP-NETWK TERMINATING WIRE-RMVL	0.05%
257M	CIRC EQPT-DIGITAL-SUB PR GN SYS	2.69%
257R	CIRC EQPT-DIGITAL-SUB PR GN SYS	4.44%
377M	DIGITAL ELECTRONIC SWITCH EQPT	0.10%
F257M	CIRCUIT EQPT-SUBSCRIBER PAIR GAIN SYS-FIBER OPTIC FEEDER	5.88%
F257R	CIRCUIT EQPT-SUBSCRIBER PAIR GAIN SYS-FIBER OPTIC FEEDER	2.74%
758M	OTH TERM EQPT-SUB PR GN EQPT	0.54%
378C	OTH TERM EQPT DIGITAL NON-CPE NCTE	1.89%
378M	OTH TERM EQPT DIGITAL NON-CPE NCTE-REG	3.47%
97BI	INSIDE WIRE-BASIC-INSTL & REARRANGE	0.00%
97BW	INSIDE WIRE-BASIC-WARRANTY	0.02%
97BP	INSIDE WIRE-BASIC-SVC PLAN	0.07%
98EI	INSIDE WIRE-NON BASIC INSTL & REARRANGE	0.14%
630M	DATA CONTROLLERS & WORKSTATIONS	0.06%
5532	MISC MEETINGS	2.22%
5533	UNION ACTIVITIES (PAID)	0.04%
5534	EXCELLENCE THROUGH QUALITY (QWL)	0.65%
5535	GEN CLASSROOM TRAINING	1.18%
5536	OTH UNCLASSIFIED PROD COSTS (E.G., NO ACCESS)	0.58%
553A	NO TROUBLE FOUND	0.18%
5539	OTH MTCE EXP	0.11%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF FLORIDA
THREE-MONTH PERIOD ENDED JUNE 30, 1993
(Continued)

WORK GROUP - CABLE/FACILITIES MAINTENANCE
JOB FUNCTION CODES - 4250/4260
(Continued)

Field Reporting Code	Description	Labor Distribution Percentage
510C	STOREROOM	0.18%
F257C	CIRC EQPT-SUB PR GN SYS-FIBER OPTIC FEEDER	2.58%
F758C	OTH TERM EQPT-SUB PR GN EQPT-FIBER OPTIC FEEDER	0.11%
52C	INTRABLDG NETWK CBL-METALLIC	0.05%
257C	CIRCUIT EQPT-DIGITAL-SUB PR GN SYS	6.18%
378X	OTH TERM EQ-DIG NONCPE-ACCUM DEPR	0.01%
TRVL	TRAVEL & BREAKS	14.39%
	TOTAL - CABLE REPAIR	100.00%

BELLSOUTH CORPORATION

NOTES TO STATEMENT OF NETWORK TECHNICIAN
LABOR DISTRIBUTION PROFILES FOR THE STATE OF FLORIDA
FOR THE THREE-MONTH PERIOD ENDED JUNE 30, 1993

1. BASIS OF PRESENTATION

The accompanying Statement of Network Technician Labor Distribution Profiles presents, in summary form, the result of BellSouth Telecommunications, Inc.'s (BellSouth) Work Activity Statistical Sampling Process (WASSP) applied to measure the activities of groups of network technicians in the State of Florida during the three-month period ended June 30, 1993 for reporting in accordance with BellSouth's policies pertaining to the application of Part 32 - Uniform System of Accounts. WASSP was applied to measure the work activities of network technicians operating in four Installation and Maintenance (I&M) work groups and Cable/Facilities Maintenance work group using statistical sampling and evaluation techniques, as follows:

I&M - POTS
I&M - Special Services (SSI&M)
I&M - Corporate Communications
I&M - Public Communications
Cable/Facilities Maintenance

For each I&M and Cable/Facilities Maintenance work group, the Statement presents a three-month composite profile of the percentages of work activity summarized by specific work activity descriptions which correspond to defined field reporting codes. Field reporting codes form the basis for reporting of network technician time into BellSouth's financial systems.

2. DESCRIPTION OF THE WORK ACTIVITY STATISTICAL SAMPLING PROCESS (WASSP)

WASSP is a statistical methodology designed to gather sample data and statistically estimate the work activity of work reporting groups. WASSP consists of three related process modules for sample selection, data collection, and data analysis. Each of these process modules are described below:

The Sample Selection Module

The Sample Selection Module has been designed to select a statistically valid sample of network technicians from the Payroll Master Database (PMDB), a BellSouth database used to maintain employee information. The EXTRACT program of the Sample Selection Module searches the PMDB and stratifies the universe of employees into homogenous categories based upon state boundaries and work groups (by job function code). For each job function code, the SAMPLER program generates a random sample of technicians to participate in the work activity log completion portion of the Data Collection Module. Network technicians selected will participate in the process ~~for one work week~~. The SAMPLER program of the Sample Selection Module simultaneously generates a random sample of the above sampled technicians to participate in the technical analyst interview portion of the Data Collection Module. Work Activity Logs (Logs) for three days of the selected network technician's work week are randomly selected for technical analyst review procedures described in the Data Collection Module.

Sample size and the structure of the sample has been designed so that a three-month Network Technician Labor Distribution Profile is targeted to achieve a 95% confidence level with a precision of ±3% for each field reporting code profile percentage estimated by WASSP. The precision corresponds to approximately ± fifteen minutes, the lowest increment of time reporting for network technicians under the WASSP time reporting process. Technicians selected are oversampled in the Sample Selection Module to account for days on which the technicians are not present (i.e., vacations, illness, and days off).

The Data Collection Module

Prior to the month sampled, a list of the technicians to be sampled, the appropriate Logs, and instructions are forwarded to WASSP field management by the WASSP Center. The field management then disseminates the Logs and instructions to a supervisor for dispersal to the selected technicians. Technicians participating in WASSP report their time by work activity in minimum increments of fifteen minutes. Logs have been developed for each work group listing predominant work activities of each subject work group.

Once completed by the network technician, the Logs are submitted to the supervisor who reviews the Logs. Arithmetical discrepancies are resolved and the Logs are forwarded to the technical analyst for detailed review.

Telephone interviews of the technician's supervisor are conducted to test a random sample of network technician's Logs. The selection of those to be interviewed is determined through the Sample Selection Module. The interviews are generally conducted within three business days of the Log preparation date and prior to the input of the work activity data into the WASSP database processor. The interviews are conducted by the technical analysts and are accomplished through telephone interviews with the selected technician's supervisor. The interviews consist of the supervisor reviewing the source documentation with the analyst who compares such information to that recorded on the Log. If errors are detected and cannot be resolved, the technical analyst contacts the network technician directly. Once resolved, errors are corrected by the technical analyst on the Log.

The Data Analysis Module

Work activity data, derived from the Logs, are input into the WASSP database processor. The INPUT program of the WASSP database processor provides for the input of the sampled data and stores the input data in files by work group. Data in the files can be changed, appended, or deleted using the INPUT program.

The IMOUT program of the WASSP database processor develops the time distribution ratios and other data analysis for each work group for which labor distribution percentages are estimated by WASSP. WASSP distributes the increments of hours reported to each field reporting code and calculates the percentage of time assigned to each field reporting code.

Data generated by WASSP is available to interfacing MTR systems with no changes to formats or requirements. The WASSP allocation profiles are available to be input into the MTR time reporting tables and would be available for MTR off-line processing to create a report detailing the field codes which have been generated and passed to the Company's Financial Processor (FP).

EXHIBIT B

BELLSOUTH CORPORATION

SUMMARY OF PRIMARY PROCEDURES PERFORMED

Exhibit A includes an attestation report pertaining to an examination of the Statement of Network Technician Labor Distribution Profiles for the state of Florida for the three-month period ended June 30, 1993. This summary presents the primary procedures we performed as part of our examination. These procedures represent only a partial listing and were conducted to form our opinion included in Appendix A but not to express an opinion on any of the individual WASSP processes.

The procedures we performed were structured to parallel the three modules in the WASSP statistical estimation process as follows:

Test of Sample Selection Module
Test of Data Collection Module
Test of Data Analysis Module

Test of Sample Selection Module

Perform tests to verify the completeness and accuracy of network technician input information from which samples are selected. The primary procedures for this phase include:

- Assess the statistical design and review the program logic of the computer programs which perform the statistical selection process of network technicians for implementation of the statistical design,
- Assess the effect of creating a three month profile on the statistical sampling and evaluation process, and
  How many a year?
- Test the completeness of the database which provides network technician information for sampling. Test the accuracy of the employee information (i.e., name, responsibility code, social security number, job function code, etc.) by referencing, via random sample, both to and from independent source documents.

Test of Data Collection Module

Obtain an understanding of and test the administration of the collection of network technician data. The primary procedures for this phase include:

- Document the procedures and related oversight controls associated with the data collection process,
- Test compliance with the stated procedures by selecting field technicians and examining documentary evidence of compliance with data collection procedures, and
- Test the effectiveness of data collection procedures to accurately reflect the field technician description of work activity to the appropriate Field Reporting Code by comparing the reported work activity for a limited number of selected field technicians to independent source documents (i.e., assignment records, trouble tickets, dispatch records, etc.).

Test of Data Analysis Module

Test the computer applications utilized to process the data. The procedures for this phase include:

- Assess the statistical evaluation and preparation of profiles of the reported work activities of the selected network technicians,
- Review the program logic of the computer program which processes network technician work activity,
- Assess the computer program's implementation of the statistical function,
- Test the validity of the computer allocation of work activity by reprocessing the data obtained in the data collection module under audit control,
- Test the validity of input data by agreeing the network technicians' work activity as selected in the data collection module to the related input program source, and
- Test the validity of output data by agreeing the network technicians' work activity, as selected above, to the proper inclusion in the output file.

Deloitte & Touche

EXHIBIT C

Suite 1700
100 Peachtree Street
Atlanta, Georgia 30303-1943

Telephone: (404) 220-1500
Facsimile: (404) 220-1583

INDEPENDENT ACCOUNTANTS' REPORT

BellSouth Corporation
Atlanta, Georgia

We have examined management's assertion, included in its representation letter dated July 14, 1993, that BellSouth Corporation maintained an effective internal control structure over financial reporting for the segment of the internal control structure pertaining to the Work Activity Statistical Sampling Process (WASSP) during the three-month period ended June 30, 1993. Management's description of the WASSP process to which the internal control structure pertains and specific control criteria established by management are included in the Appendix.

Our examination was made in accordance with standards established by the American Institute of Certified Public Accountants and, accordingly, included obtaining an understanding of the internal control structure over financial reporting, testing and evaluating the design and operating effectiveness of the internal control structure, and such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Because of inherent limitations in any internal control structure, errors or irregularities may occur and not be detected. Also, projections of any evaluation of the internal control structure over financial reporting to future periods are subject to the risk that the internal control structure may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assertion that BellSouth Corporation maintained an effective internal control structure over financial reporting for the segment of the internal control structure pertaining to the WASSP process during the three-month period ended June 30, 1993 is fairly stated in all material respects, based upon the control criteria included in the Appendix.

This report is intended solely for the information and use of BellSouth management and to assist you in responding to inquiries from the Federal Communications Commission and state regulatory authorities, and should not be used for any other purpose.

Deloitte & Touche

July 14, 1993

BELLSOUTH CORPORATION

BELLSOUTH MANAGEMENT'S DESCRIPTION OF WORK ACTIVITY STATISTICAL SAMPLING PROCESS TO WHICH THE INTERNAL CONTROL STRUCTURE PERTAINS AND RELATED CONTROL CRITERIA FOR THE THREE MONTHS ENDED JUNE 30, 1993

The Work Activity Statistical Sampling Process (WASSP) is a statistical methodology designed to gather sample data and statistically estimate the work activity of work reporting groups. WASSP consists of three related process modules for sample selection, data collection, and data analysis. Each of these process modules and the related primary control criteria established by management are described below:

The Sample Selection Module

The Sample Selection Module has been designed to select a statistically valid sample of network technicians from the Payroll Master Database (PMDB), a BellSouth database used to maintain employee information. The EXTRACT program of the Sample Selection Module searches the PMDB and stratifies the universe of employees into homogenous categories based upon state boundaries and work groups (by job function code). For each job function code, the SAMPLER program generates a random sample of technicians to participate in the work activity log completion portion of the Data Collection Module. Network technicians selected will participate in the process for one work week. The SAMPLER program of the Sample Selection Module simultaneously generates a random sample of the above sampled technicians to participate in the technical analyst interview portion of the Data Collection Module. Work Activity Logs (Logs) for three days of the selected network technician's work week are randomly selected for technical analyst review procedures described in the Data Collection Module.

Sample size and the structure of the sample has been designed so that a three-month Network Technician Labor Distribution Profile is targeted to achieve a 95% confidence level with a precision of ±3% for each field reporting code profile percentage estimated by WASSP. The precision corresponds to approximately ± fifteen minutes, the lowest increment of time reporting for network technicians under the WASSP time reporting process. Technicians selected are oversampled in the Sample Selection Module to account for days on which the technicians are not present (i.e., vacations, illness, and days off).

The primary control criteria include:

- Structural Query Language (SQL) used in the module appropriately specifies the relevant Job Function Codes to be extracted;
- Personnel files are adequately maintained and contain updated and proper Job Function Codes;
- Appropriate diskette handling procedures are utilized from the point of extraction and sample selection;
- Security administration procedures and program change controls control against unauthorized changes to the Extract Process;
- Usage of the relevant input files (current period diskettes) is verified by management;

- The program is designed to produce a valid sample;
- Management reviews results of sample selection for appropriate size and reasonableness; and,
- Security administration procedures and program change controls control against unauthorized changes to the sample selection process.

The Data Collection Module

Prior to the month sampled, a list of the technicians to be sampled, the appropriate Logs, and instructions are forwarded to WASSP field management by the WASSP Center. The field management then disseminates the Logs and instructions to a supervisor for dispersal to the selected technicians. Technicians participating in WASSP report their time by work activity in minimum increments of fifteen minutes. Logs have been developed for each work group listing predominant work activities of each subject work group.

Once completed by the network technician, the Logs are submitted to the supervisor who reviews the Logs. Arithmetical discrepancies are resolved and the Logs are forwarded to the technical analyst for detailed review.

Telephone interviews of the technician's supervisor are conducted to test a random sample of network technician's Logs. The selection of those to be interviewed is determined through the Sample Selection Module. The interviews are generally conducted within three business days of the Log preparation date and prior to the input of the work activity data into the WASSP database processor. The interviews are conducted by the technical analysts and are accomplished through telephone interviews with the selected technician's supervisor. The interviews consist of the supervisor reviewing the source documentation with the analyst who compares such information to that recorded on the Log. If errors are detected and cannot be resolved, the technical analyst contacts the network technician directly. Once resolved, errors are corrected by the technical analyst on the Log.

The primary control criteria include:

- Field supervisor receives selection notification via E-Mail and agrees the list to a follow-up list;
- Supervisor controls access to work activity logs;
- Supervisor reviews (signs) the work activity logs after completion;
- Work Activity Logs (WALs) are sorted by State and placed into respective bins for receipt by analyst;
- Analysts agree the WALs to the sample selection list;
- Analysts review WALs for reasonableness; and,
- Analysts perform subsample testing by interviewing employees and comparing data to the source documents.

The Data Analysis Module

Work activity data, derived from the Logs, are input into the WASSP database processor. The INPUT program of the WASSP database processor provides for the input of the sampled data and stores the input

data in files by work group. Data in the files can be changed, appended, or deleted using the INPUT program.

The IMOUT program of the WASSP database processor develops the time distribution ratios and other data analysis for each work group for which labor distribution percentages are estimated by WASSP. WASSP distributes the increments of hours reported to each field reporting code and calculates the percentage of time assigned to each field reporting code.

Data generated by WASSP is available to interfacing MTR systems with no changes to formats or requirements. The WASSP allocation profiles are available to be input into the MTR time reporting tables and would be available for MTR off-line processing to create a report detailing the field codes which have been generated and passed to the Company's Financial Processor (FP).

The primary control criteria include:

- WAL is logged in by input personnel and agreed to the sample list;
- On-line edit checks are performed during data entry;
- Data entry personnel print queries that are agreed to the WALs by independent data entry personnel;
- Management performs an on-line query to verify completeness of sample using social security numbers;
- Security administration procedures and program change controls in the system control against unauthorized access and changes to the input and analysis process;
- The generation of profiles is performed by management only, monthly and quarterly; and,
- Management reviews the Profile Precision report for completeness and reasonableness.

Deloitte & Touche

EXHIBIT D

Suite 1700
100 Peachtree Street
Atlanta, Georgia 30303-1943

Telephone: (404) 220-1500
Facsimile: (404) 220-1583

July 14, 1993

BellSouth Corporation
1155 Peachtree Street, N.E.
Atlanta, Georgia 30367

Dear Sirs:

This report pertains to our observations and recommendations related to certain matters noted during our special study pertaining to the BellSouth Telecommunications, Inc. Work Activity Statistical Sampling Process (WASSP).

We have previously issued our report, dated March 5, 1993, which included our observations and recommendations resulting from our special study of WASSP conducted during the three-month period ended December 31, 1992.

For this report, we have included all observations and recommendations included in our report dated March 5, 1993, together with BellSouth management's responses concerning the implementation status of these recommendations. Based on our procedures performed for the three-month period ended June 30, 1993, the responses are representative of the status of actions taken by management to implement our recommendations. We have also included additional observations and recommendations that will be useful to you in enhancing the WASSP process.

This report is intended solely for the use of BellSouth management and to assist you in responding to inquiries from the Federal Communications Commission and state regulatory authorities.

Yours truly,

Deloitte & Touche

BELLSOUTH CORPORATION

WORK ACTIVITY STATISTICAL SAMPLING PROCESS

A. STATUS OF OBSERVATIONS AND RECOMMENDATIONS IN OUR REPORT DATED MARCH 5, 1993

I. POLICIES AND PROCEDURES

SOURCE DOCUMENTS USED FOR ANALYST INTERVIEWS

Observation and Background

The technical analyst is required to perform a detailed review of selected Logs from the total population of Logs returned to the analyst. The detail review consists of a technical analyst's phone interview with the supervisor of the technician whose Log was randomly selected by the WASSP sample selection program. The technical analyst requests the supervisor to describe the activities as reported by the technician on source documentation maintained at the supervisor location. However, the technical analyst does not have access to source documentation created by the technician to evidence his/her activities and used by the supervisor to review completed Logs.

Recommendation

Require source documentation to be forwarded to the technical analyst concurrently with the completed and reviewed Logs. Absent hard copy source documentation, allow analyst on-line access to this information, where applicable.

BellSouth Management Response

Effective April 1993, all technical analysts have on-line access to Loop Maintenance Operations Systems (LMOS) which contains the documentation created via craft access (Display Craft Work Summary/Display Job Information (DCWS/DJI) FULL CLOCK NARRATIVE). This will allow the analyst to view source documentation for the majority (approximately 85% of technicians use craft access) of the sample technicians. For those subselected technicians not on craft access, source documentation will be submitted along with the work activity logs. this will provide the analysts with the greatest amount of information available for verification of the work activity logs.

POLICIES AND PROCEDURES IN THE EVENT OF A NATURAL DISASTER

Observation and Background

Currently there are no formal policies and procedures pertaining to the application of the WASSP methodology in the event of a natural disaster. Consequently, formal guidance is not available as to the effect of a natural disaster on the areas of sample selection, work activities performed by network technicians, reporting procedures, analyst and supervisor review procedures and methodology associated with data analysis. Formal policies and procedures would promote an effective operation of the process in the event of a natural disaster.

Recommendation

Create, document and implement formal policies and procedures pertaining to the application of the WASSP methodology in the event of a natural disaster.

BellSouth Management Response

The WASSP Policies and Procedures Manual documents the WASSP disaster recovery policy developed in February 1993. This policy, which was communicated in a February 22, 1993 letter to the BellSouth Telecommunications (BST) MTR Methods and Programming Staffs as well as the BULL Time Share Administration group located at the BIS Data Center, ensures that BST will be able to continue the timely collection and processing of the appropriate work activity information in the event of a disaster.

POLICIES, PROCEDURES AND CONTROLS MANUAL

Observation and Background

Currently, a policies, procedures and controls manual in relation to the implementation and operation of the WASSP process does not exist. A policies, procedures and controls manual will provide an effective resource in terms of WASSP process consistency and integrity and would reduce disruption in the event of various events such as organizational changes, employee turnover, and natural disasters.

Recommendation

Create and maintain a policies, procedures and controls manual to incorporate all critical aspects of the WASSP process. Disseminate this manual to those time reporting personnel who will benefit from its use.

BellSouth Management Response

BST has established, within the WASSP organization, a manager position with responsibility for all network time reporting policies and procedures. This position will issue/concur in procedures to the field forces related to the WASSP process and be responsible for all other documentation for WASSP.

Concurrent with approval, WASSP will become the "official" time reporting system for outside plant forces. As such, all appropriate documentation (WASSP Policies and Procedures Manual, BellSouth System Practices (BSP) as well as updated MTR documentation) has been distributed to the affected BST personnel for use upon approval.

TECHNICIAN USE OF PERSONAL LOGS

Observation and Background

Network technicians in certain of the states in the BellSouth geographic region are maintaining informal logs of trouble jobs received and work performed in addition to that required by the current Craft Access System. This occurs via the documentation of specific trouble job information on form #6025 or #6571. The maintenance of informal trouble job logs represents an inefficient and unnecessary utilization of BellSouth resources and is currently not required by WASSP management or BellSouth time reporting personnel.

Recommendation

Eliminate network technician use of informal logs in areas where the Craft Access System is utilized.

BellSouth Management Response

BST agrees that a practice of the kind described here is an inefficient use of company resources and on January 21, 1993 issued instructions to the field forces re-emphasizing to them that such a practice should be stopped.

LOG-OFF PROCEDURES FOR THE CRAFT ACCESS SYSTEM

Observation and Background

Network technicians at times "log off" of the Craft Access System at a time subsequent to the actual time of completion of the trouble job even though the time shown on the Log is correct. This can occur if the technician logs off on a current trouble job after receipt of and travel to a new trouble job. As technical analysts are placing reliance on the Detail Craft Work Summary (DCWS) generated by the Craft Access System as a source document, differences relating to the above must be investigated.

Recommendation

Require technicians to "log off" of the Craft Access System immediately upon completion of each trouble job. Consider the feasibility of Craft Access System modification such that a technician may not receive orders for his next job without "logging off" of the current job.

BellSouth Management Response

BST has reviewed the recommendation above and is of the opinion that implementation of such a requirement is not cost effective and that it would create operational inefficiencies for the technician. Also, since the "log off" procedures for the Craft Access System have no impact on the classification of a technician's time to the appropriate work functions, BST has no plans to pursue this enhancement with the vendors at this time. what about having tech log off when finish?

RECEIPT AND REVIEW OF WORK ACTIVITY LOGS

Observation and Background

Interviews conducted by technical analysts do not always occur within three working days as prescribed under established WASSP criteria. Delays in analyst interviews occasionally occur due to the remote location of the technician which requires an additional day for the supervisor's review before mailing to the technical analyst. Additionally, Logs forwarded to the technical analyst via fax machine are delayed due to the volume of fax transmissions.

Recommendation

Provide one-day mail service from remote locations and obtain additional fax machines to ensure the timely receipt of Logs.

BellSouth Management Response

BST installed three additional fax machines during the first week of April 1993 bringing to nine the total number of machines available for receipt of work activity logs. Additionally, BST uses one-day mail service form the major metropolitan locations.

TIMELY SUPERVISOR REVIEW OF WORK ACTIVITY LOGS

Observation and Background

Supervisors are required to review Logs the day after the Logs are completed by the network technicians. We observed instances in which such review was substantially beyond the one day requirement. Additionally, in some of the remote offices the supervisors do not have printers. Consequently, if the supervisors use the DCWS in their review procedures, they must obtain hard copies of DCWS source documents from other offices via mail. These situations cause delays in the supervisor review and forwarding of Logs to the technical analysts. However, in these remote locations, we observed that the supervisor often has on-line access to the DCWS.

Recommendation

Instruct supervisors to perform Log reviews the day subsequent to completion by the technician. Additionally, advise supervisors who choose to use the DCWS in their review process to perform Log reviews via on-line inquiry of the Craft Access System if hard copy documentation is not readily available.

BellSouth Management Response

The supervisors have been reinstructed to review and forward the completed logs to the WASSP Center by the next business day. The supervisory review is intended to be a test for reasonableness for items such as work group of the technician, mathematical accuracy, completeness of the log, as well as other unique items particular to a supervisor's group. It is not intended for the supervisor to trace every work function to the source documentation, as the in-depth review is performed by the technical analyst.

The technical analyst conducts the detailed review and tracing of work performed to source documentation using the supervisor and technician as "conduits" for information on an as-needed basis.

Therefore, BST has no plans to pursue any changes in our current practices relative to the review of the work activity logs.

TRAINING OF TECHNICAL ANALYSTS

Observation and Background

There is currently no formal training program for the technical analysts involved in the WASSP Process pertaining to work procedures, FCC time reporting rules, effective interview techniques, error resolution and other matters.

Recommendation

Develop, document, and implement a formal training program for the technical analysts. This program should encompass entry level training courses as well as continuing education training courses to inform the analysts of any updates or changes in FCC time reporting requirements, any updates or changes in the WASSP Process and other pertinent subjects. This program would be an essential ingredient in the consistent implementation of the analyst function.

BellSouth Management Response

The expertise of the technical analysts is critical to the success of the WASSP process. As such, the BST comptrollers organization (owners of the WASSP process) rely on rotational employees from the Network organization to fill the positions of technical analysts. In order to qualify for an analyst position, the candidate must have an in-depth knowledge of, as well as experience in, outside plant architecture and areas of the telecommunications business related to time reporting for outside technicians. This includes a great familiarity with actual work performed by the technicians as well as knowledge of FCC rules and reporting requirements (particularly nonregulated activities).

Given the above requirements for job assignment, initial training consists of obtaining a complete understanding of the process through review of WASSP documentation including the WASSP Policies and Procedures Manual. BST recognizes the need for continuing education as a critical part of the WASSP process. As such, the Technical Analysts have received an overview of the Joint Cost Order and a refresher on BST's Functional Accounting process by the respective subject matter experts. The analysts have also attended a three-day Integrated Internal Controls Training class as well as the Network Manager's Administrative Conference.

As a part of the overall documentation of the process as mentioned earlier, BST has incorporated into that documentation a "Technical Analyst Handbook" which includes the references used by the analysts, as well as a suggested training curriculum designed to ensure the continued high level of knowledge required for this position. This continuing education training curriculum is agreed to by the analysts and their supervisor based on individual need.

ROTATION AND COVERAGE FOR ABSENT TECHNICAL ANALYSTS

Observation and Background

Technical analysts are assigned to review Logs for one particular state. No plan currently exists for the rotation of technical analysts nor does a plan exist to cover for an analyst in the event of illness or vacation.

Recommendation

Develop, document, and implement a rotation plan whereby the technical analysts are required to periodically rotate their states of responsibility. Additionally, develop, document, and implement a plan in the event of analyst absence due to illness or vacation.

BellSouth Management Response

Effective April 1993, BST implemented an Analysts Coverage Schedule detailing the analysts' primary and backup state responsibilities through December 1993. These assignments will be rotated every six months beginning January 1994 to ensure that there is adequate coverage for all states in the absence of any of the analysts.

EXPANSION OF THE CRAFT ACCESS SYSTEM DOCUMENTATION

Observation and Background

During the review of the Log, the supervisor, at times, determines if the technician's time is charged to the proper work activity by comparing the activities as reported on Logs to source documentation. Currently source documentation includes Detail Craft Work Summaries (DCWS) generated from the computerized Craft Access System and/or existing Mechanized Time Report (MTR) forms prepared by the technician. The current space allowed for description on the Craft Access System DCWS for each distribution number (42 characters) is not always large enough to fully describe the task performed by the technician. This situation can occur if more than one service is performed on the same trouble job. As such, the technician is required to continue the description of the work performed on this trouble job on the manually completed MTR form. This situation does not currently present a problem due to the dual reporting nature of the WASSP and MTR time reporting processes. However, as the MTR form will be eliminated once the WASSP process is fully implemented, the Craft Access System will become the chief source of documentation medium available to the technician and sufficient space should be given to the technician to allow him to perform an efficient reporting of time.

Recommendation

Add additional space in the Craft Access System field for description of each trouble job performed by the technician. This will allow sufficient information to be recorded in the Craft Access System and to promote accurate reporting of technician work activity.

BellSouth Management Response

Expansion of the Craft Access System to allow additional narrative space is not practical in the near term. BST, as it is not allowed to manufacture software, is not the "owner" of all aspects of craft access. Therefore, it must rely on outside vendors in order to effect expansions and/or changes to craft access and certain operations systems that are involved.

The issue of additional narrative space has been, and will continue to be, investigated along with all other proposed craft access enhancements. However, the costs of such changes and associated impacts on other features within the system do not make this a realistic option for BST.

It is important to note that in 95%+ of the occurrences the existing narrative space is adequate for technicians to describe work performed. In those rare instances when craft access narrative space is limited, BST will issue procedures instructing involved technicians to use From 6025-1-SC or Form 6571-C (Work Ticket) to provide supplemental documentation on work performed.

WORK ACTIVITY LOG SIGN-OFF BY SUPERVISOR AND DATA INPUT PERSONNEL

Observation and Background

Supervisor and data input personnel signature on the Logs, although required upon completion of these individual's assigned duties, is not consistently obtained. Although it appears that the assigned duties are generally performed by these individuals, consistently requiring a signature will provide a means of documenting accountability.

Recommendation

Require all supervisors to sign and date the Logs after their review. Require all data input personnel to sign and date the Logs upon entering the Log data into the WASSP system.

BellSouth Management Response

BST's Procedures for Verification of Work Activity Data Input, which were developed and implemented in April 1993, require the input personnel to initial the work activity logs after input and the verifying personnel to initial the system printout after they have compared it to the appropriate work activity log. Also, WASSP Center management personnel periodically review a sample of the logs and associated printouts to monitor the effectiveness of this control.

As a result of this recommendation, the field supervisors have been instructed to sign the completed logs prior to submission to the WASSP Center.

II. STATISTICAL METHODS

PROSPECTIVE UNIVERSE TECHNIQUE

Observation and Background

Currently, all samples of network technicians throughout the three-month profile period are generated from an extract of the PMDB as of the beginning of the three-month profile period. This methodology will not account for changes in technician composition since the initial extraction. Such changes may include network technician employment, transfer, or termination.

Recommendation

Develop procedures to account for changes in the composition of network technicians subsequent to the date of the data extract.

BellSouth Management Response

Effective with the July 1993 sample selections processed in June 1993, BST implemented a monthly data extract program to select the universe of technicians to be sampled from the Payroll Masterfile Data Base (PMDB). This revised procedure will ensure that the composition of the network technicians is the most current available. (See Note 1.)

QUALITY CONTROL SAMPLE SIZE

Observation and Background

As the WASSP process is implemented in the nine-state BellSouth geographic region, the pool of network technicians for the entire BellSouth region may be viewed as one population for network technician quality control sampling purposes. If this view is acceptable, then a reasonably high level of assurance in regard to error rates can be obtained through the use of Acceptance Sampling techniques. This can be accomplished with much less work than is presently contemplated.

Recommendation

Consider reducing the number of network technician quality control interviews through the use of one region-wide interview sample versus separate interview samples for each state.

BellSouth Management Response

Because of state public service commission considerations, the WASSP process will continue to stratify the universe of technicians to be sampled into homogenous categories based upon state boundaries and job functions (work groups) for a while. However, BST will take this recommendation under advisement.

SELECTING THE NUMBER OF WEEKS IN A MONTH

Observation and Background

It is the system user's responsibility, for the SAMPLER application, to input the number of weeks in any particular month. An error in the number of weeks input parameter could result in a reporting week being improperly excluded from the sampling population.

Recommendation

Adopt a more simplistic decision rule, as follows:

If a Wednesday at the end of the month falls in the current month, that month has five weeks.

Further, we recommend that a table of months and weeks be input at the beginning of the year and reviewed by supervisory personnel to minimize the necessity for clerical decision and controls throughout the year, similar to the way parameters are codified in the Data Analysis Module of the WASSP process.

BellSouth Management Response

In April 1993, the Sample Selection User's Guide was prepared as Section 2 of the WASSP Policies and Procedures Manual. The purpose of this section of the manual is to provide the documentation and instructions necessary to process the Sample Selection Module of WASSP. Exhibit 4 in this user's guide is a table that lists the number and dates for each week in each month for 1993. This will eliminate the need for the sample selection operator having to assume responsibility for determining the number of weeks of each month as well as the date each week begins. This exhibit will be updated in November of each year for use in making the sample selections in the following year.

TRACKING AND EVALUATION OF WORK ACTIVITY LOG ERRORS

Observation and Background

A feedback system is not currently used to track and evaluate the number and type of errors being detected by the supervisors during their review of the technician's Logs or by the technical analysts during their review and interview procedures. Any errors noted by supervisors or technical analysts while performing their duties should be evaluated to determine any adverse impact on the sufficiency of the initial statistical sample of network technicians and to confirm that the extent of oversampling is sufficient to maintain targeted levels of statistical assurance.

Recommendation

Develop, document, and implement a feedback program to accumulate and statistically evaluate the continued validity of the Network Technician Labor Profiles for any errors identified by the supervisors and technical analysts on the Logs during their review procedures. Provide a mechanism within this process to evaluate the effect of any errors on the precision of the profiles and on the number of selections of network technicians required to participate in the WASSP Process.

BellSouth Management Response

A Summary of Adjustments process has been developed and documented in the Technical Analyst Handbook. However, this process has not yet been activated due to the fact that BST has been reviewing 100% of the work activity logs during the development phase of the WASSP project.

III. COMPUTER PROCESSING APPLICATIONS AND CONTROLS

EXTRACT FILE CREATION

Observation and Background

Improper changes to the SQL routines may be made and not be detected. Mistakes could be made in entering the QMF and ISPF/PC commands while creating and down loading files.

Recommendation

Create five versions of the SQL routine, one for each sampling population. Add program statements to automatically save the files in the correct format and libraries. Add these programs to the automatic job scheduler.

BellSouth Management Response

The SQL routine was replaced with a data extract application that no longer requires the operator to input the QMF and ISPF/PC commands. This will eliminate the concern over input errors while creating and downloading the files. Also, a DBASE IV program is now used to automatically format the universe of technicians into the appropriate text records, create a back up of the text files and print an output report listing the input and output files, file names and number of employees on each file. These reformatted records are distributed to 45 text files (one per state, per JFC work group, i.e., C:/WASSP/AL/4100.TXT) for mechanical input into the Sample Selection program. (See Note 1.)

Observation and Background

Files with similar names could be interchanged, resulting in improper processing in later stages of the WASSP process.

Recommendation

Maintain a manual log to detail the times, dates, and sizes of the files created. The log should also indicate the state for each file, the external label of the diskette, and the directory in which the files are stored. Require the operator to initial and date each entry in the log as documentation of procedure performance. Additionally, place external labels on diskettes that clearly indicate the states and time periods of the files contained on the diskettes. Finally, use naming conventions (e.g., "FL0193") when creating DOS directories to separate files and identify them to their time periods and states. Modify the programs described above to print an audit trail report showing the pertinent details of processing: file names, file sizes, file creation dates, any exceptions in processing.

BellSouth Management Response

Effective with the July 1993 sample selections processed in June, a DBASE IV program was used to reformat the text records containing the universe of technicians. These reformatted records are distributed to 45 text files (one per state, per JFC work group, i.e., C:\WASSP\AL\4100.TXT). These text files are backed up to a diskette labeled C:\CDATA\CPRS1.TXT for X month and year. This DBASE IV program also prints an audit trail report listing the Input Files, Output Files, Date Last Processed and the Number Of Employees on each output file. (See Note 1.)

LOTUS 1-2-3

Observation and Background

Improper changes to work sheets and macro routines may be made and not be detected.

Recommendation

Modify file attributes in DOS to read-only. Modify macros to close the work sheet (without saving) automatically upon completing processing.

BellSouth Management Response

Effective with the May 1993 Sample Selections processed in April, the Sample Selection program was modified to incorporate the above recommendations.

Observation and Background

The IMPORT.WK3 macro may not execute as intended if the window and other global work sheet settings are not created as expected.

Recommendation

Modify the logic of the macro to set all window and global work sheet settings at the beginning of processing. Replace the {BIGRIGHT} command with program steps to position the cursor to a specific location prior to importing data into the NET1, NET2, NET3, NET4, and NET5 ranges.

BellSouth Management Response

Effective with the May 1993 Sample Selections processed in April, the Sample Selection program was modified to incorporate the above recommendations.

Observation and Background

The IMPORT.WK3 macro is designed to require the operator to enter the name of the file (including sub-directory) to which the results of processing are to be saved. If the operator chooses a misleading name, errors may result in later processes.

Recommendation

Require the operator to maintain an audit trail of processing and use appropriate conventions (e.g., "\FL0192\NETWORK1.WK3") for naming files. Also require the operator to document in a log the names and contents of files created and to document any deviations from the expected procedures.

BellSouth Management Response

The Sample Selection User's Guide documents the standardized sub-directory and file names (state abbreviations, quarter and year) required for the sample selection macro. A run log for documenting the date(s), names and contents of the files created will be added to incorporate these guidelines as soon as possible.

Observation and Background

Once the WASSP process is fully operational the operator will be required to execute the LASTSAMP.WK3 program 45 times each processing cycle once for each of the five network technician work groups in each of the nine states in the BellSouth geographic region, which is inefficient.

Recommendation

Modify the logic of the LASTSAMP.WK3 macro to automatically execute all 45 network technician samples.

BellSouth Management Response

The macro was modified in April 1993 to run an entire state at once so that the macro is only executed nine times.

Observation and Background

The LASTSAMP.WK3 work sheet is designed to allow the operator to:

- Enter invalid sample choices (i.e., something other than 1, 2, 3, 4, or 5);
- Enter an incorrect file name to be read into the work sheet;
- Enter the sample period without a prompt; and
- Modify the Sample Size and Number of Weeks parameters incorrectly.

Recommendation

Modify the logic of the LASTSAMP.WK3 macro to perform additional edit checks and only allow valid responses.

BellSouth Management Response

The macro was revised in April 1993 to accept only firmly established naming conventions for input files, to prompt the operator for the appropriate sample period and to only allow sample size within a range from an established minimum up to the universe size.

FORTRAN APPLICATIONS

Observation and Background

Improper changes may be made to the FORTRAN programs and not be documented.

Recommendation

Place the source code versions of the FORTRAN programs into a "test" environment to which the operator does not have access. Restrict the operator's access to FORTRAN source code and means for compiling programs into the production environment.

BellSouth Management Response

Beginning in April 1993, a specific User ID has been reserved for use by the Statistician. Permission for all programs accessed by WASSP Center Personnel has been changed to Execute only.

Observation and Background

File naming conventions do not identify the year of the period to be processed.

Recommendation

Modify the FORTRAN programs to use a file naming convention that includes the year of the period to be processed.

BellSouth Management Response

Since file storage limitations do not allow more than three months of data to be stored on-line at any one time, there can be only one JAN4150, for example, stored at any given time. Thus, BST does not consider the modification recommended to be necessary.

Observation and Background

Errors can be made when maintaining the CODES and COUNT files.

Recommendation

Add programs for maintaining the CODES and COUNT files. These programs should contain edit routines to ensure that the records in the CODES and COUNT files are all in the proper format, and it should maintain a log of maintenance activity. Use password protection techniques to control maintenance using edit utilities or means other than the maintenance programs.

BellSouth Management Response

The CODES and COUNT files were password protected in April 1993 with the password coded into the appropriate FORTRAN programs. Since these programs have Execute only permission the user is not able to retrieve the password.

Note 1 to BellSouth Management Response

Certain recommendations in Part II and Part III, as noted, were implemented subsequent to Deloitte & Touche's test period. However, it should be noted that BST has and will continue to have compensating controls in place and operating that mitigate the concerns raised by Deloitte & Touche. Thus, BST demonstrated that there were no impacts on the classification of the technician's time to the appropriate work function.

BELLSOUTH CORPORATION

WORK ACTIVITY STATISTICAL SAMPLING PROCESS

B. ADDITIONAL OBSERVATIONS AND RECOMMENDATIONS RESULTING FROM PROCEDURES PERFORMED FOR THE THREE-MONTH PERIOD ENDED JUNE 30, 1993

REVIEW OF WORK ACTIVITY LOGS

Observation and Background

Interviews conducted by technical analysts do not always occur within the time requirement as prescribed under established WASSP criteria. Delays in analyst interviews occur primarily due to delays in the forwarding of Logs to the analyst as prescribed under established WASSP criteria.

Recommendation

Reinforce WASSP policies with supervisors to forward the completed and reviewed Logs to the analyst within the time requirements as prescribed under the established WASSP criteria.

WORK ACTIVITY LOG SIGN-OFF BY SUPERVISOR

Observation and Background

Analyst, supervisor, and data input personnel signatures on the Logs, although required upon completion of these individual's assigned duties, are not consistently obtained. Although it appears that the assigned duties are performed by these individuals, consistently requiring a signature will provide a means of documenting accountability.

Recommendation

Reinforce WASSP policies which require all analysts and supervisors to sign and date the Logs after their review. Reinforce similar WASSP policies with data input personnel.

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BELLSOUTH CORPORATION

Special Study of the Work Activity Statistical Sampling Process

March 1993

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BELLSOUTH CORPORATION

SPECIAL STUDY OF THE WORK ACTIVITY STATISTICAL SAMPLING PROCESS
MARCH 1993

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March 5, 1993

BellSouth Corporation
1155 Peachtree Street, N.E.
Atlanta, Georgia 30367
Dear Sirs:

We are pleased to present the results of our special study to assess certain aspects of BellSouth Telecommunications, Inc.'s Work Activity Statistical Sampling Process (WASSP).

The WASSP methodology is a statistically-based time reporting methodology proposed to replace existing time reporting methods utilized by certain groups of network technicians. WASSP is intended to enhance the measurement of work activities which form the basis for the separation of costs of network technicians' regulated telecommunications work activities from the costs of nonregulated work activities.

The remainder of this report presents the scope and methodology employed in the study and our findings, conclusions and recommendations resulting from the study, which are presented in separate reports attached as Exhibits.

SCOPE OF STUDY

Our study was performed at the request of BellSouth Corporation to provide an external assessment of the proposed WASSP methodology, which is in effect as a test system, not yet in production and awaiting regulatory approval. Our external assessment is intended to provide information to respond to the Federal Communications Commission (FCC) and state regulators, and this report should not be used for any other purpose.

Our study was performed pursuant to our proposal, dated December 1, 1992, and included two primary forms of assessment activity - Assessing System Functionality and Assessing Other Qualitative Factors.

Assessing System Functionality

The first form of assessment activity we performed was intended to assess the functionality of the WASSP methodology which was being applied as a test system to measure network technicians' regulated and nonregulated work activity in the state of Alabama during the three-month period ended December 31, 1992. Our report is included herein as Exhibit A.

This assessment was made by conducting an examination of the system's actual measurement of network technicians' work activities for the three months ended December 31, 1992 in compliance with BellSouth's policies for time reporting under Part 32 - Uniform System of Accounts. Our examination was made in accordance with standards established by the American Institute of Certified Public Accountants and, accordingly, included such procedures as we considered necessary in the circumstances. As shown in Exhibit A, our opinion pertaining to the examination is unqualified. During the course of our work, we also formed observations relating to internal accounting controls and have included recommendations pertaining thereto in our Letter of Recommendations at Exhibit C.

The specific procedures we employed generally paralleled the three primary modules utilized in the WASSP process - Sample Selection, Data Collection and Data Analysis. A summary of our primary procedures performed to test each of those modules is included in Exhibit B. Those procedures were performed, together with other procedures, to form our opinion included in Exhibit A.

Assessing Qualitative Issues

In addition to performing the examination to test the functionality of the WASSP process applied on a test basis, we also performed a series of procedures to assess certain aspects of WASSP which would not be comprehended by the aforementioned test of system functionality. Our procedures in these areas were conducted to assess specific aspects of the WASSP process, evaluate and conclude on our findings and suggest recommendations for improvement or modifications to existing or proposed practices. The qualitative issues comprehended by these procedures included:

- Estimated annual net cost savings associated with the implementation of the WASSP process in the nine-state BellSouth geographic region,
- Analysis of the reporting impacts associated with the proposed implementation of the WASSP process in the state of Alabama and an estimate of impacts for the BellSouth nine-state geographic region, based on the Alabama data, pertaining to the application of Part 32, Part 64, Part 36, and Part 69 of the Rules and Regulations of the FCC,
- Assessment of the suitability of the WASSP methodology for time reporting by network technicians in all nine states in the BellSouth geographic region,
- Assessment of policies and procedures associated with the technical analyst,
- Assessment of controls associated with the WASSP process, and
- Assessment of the relevance and suitability of WASSP reporting procedures in the event of possible natural disasters, including disaster recovery procedures pertaining to the WASSP computer-based systems.

For two of the issues listed above, the estimated annual net cost savings associated with the implementation of the WASSP process and the analysis of the reporting impacts pertaining to the application of Part 32, Part 64, Part 36 and Part 69 of the Rules and Regulations of the FCC, the procedures we performed and our findings are included in separate reports presented in Exhibits D and E, respectively.

For each of the remaining qualitative issues described above, the approach utilized in our procedures and our summary findings and recommendations are as follows:

I. Suitability of The WASSP Methodology for Time Reporting by Network Technicians in all Nine States in the BellSouth Geographic Region

Our approach to assessing the suitability of the WASSP methodology for time reporting by network technicians in all nine states in the BellSouth geographic region included the following:

- Obtained an understanding of the critical attributes of the WASSP time reporting process (i.e., input information, forms, organizational infrastructure, sampling methodology, review procedures and data analysis) and the transferability of the existing attributes between states. This included:
  - Reading applicable WASSP literature,
  - Interviewing management, technical analysts, supervisors, BellSouth's staff statistician, and network technicians to obtain an understanding of their job duties and to solicit their views of differences in job functions across the nine states,
  - Examining forms and reports used in the WASSP process (i.e., instructions, Work Activity Logs ("Logs") and IMOUT allocation reports).
- Assessed the consistency of applicable policies and procedures of network technicians pertaining to time reporting between states in which the WASSP methodology is being trialed. This included:
  - Accompanying network technicians in the states of Alabama, Tennessee, and Kentucky on actual trouble jobs to assess the similarities in job duties and time reporting procedures,
  - Interviewing network technicians supervisors and technical analysts to assess the similarities in job duties,
  - Observing technical analysts in the performance of the job duties to assess the similarities in review procedures,
  - Examining applicable WASSP time reporting forms to assess the consistency of network technician work groups and field reporting codes between states.
- Interviewed time reporting management in each of the nine states in the BellSouth geographic region to assess the consistency of time reporting practices and state demographic differences under existing MTR and proposed WASSP methodologies.

Based on our assessment, the WASSP process appears to be a suitable methodology in all nine states in the BellSouth geographic region. The critical attributes of the WASSP process (i.e., input information, forms, organizational infrastructure, sampling methodology, review procedures, and data analysis) appear to be substantially identical in the states currently utilizing the WASSP process on a trial basis. Further, our assessment did not disclose the absence of any critical attributes that would

be required for the implementation of WASSP in the remaining states in which trials have not been performed.

Based upon our assessment, we have recommended that BellSouth:

- Create and maintain a policies and procedures manual to incorporate all aspects of the WASSP process and disseminate this manual to those time reporting personnel who will benefit from its use.

- Eliminate network technician use of informal logs in areas where the Craft Access System is utilized.

- Consider reducing the number of analyst interviews through the use of one region-wide interview sample versus separate interview samples for each state.

The detailed recommendations pertaining to these items are included in our Letter of Recommendations at Exhibit C.

II. Policies and Procedures Associated with the Technical Analyst

Our approach to assessing the policies and procedures associated with the technical analyst included consideration of several aspects, such as:

- Supervision,
- Knowledge of FCC time reporting requirements,
- Ability to question supervisor or technician or challenge the time reported by the technician,
- Effectiveness of the interview process,
- Rotation,
- Absences due to sickness or vacation, and
- Training.

Our approach consisted of obtaining an understanding of the policies and procedures associated with the above aspects of the technical analyst through:

- Interviewing and observing job performance of the technical analysts to understand their duties, job functions, background, experience, training, knowledge of FCC time reporting rules and effective interview techniques,

- Interviewing supervisors and technicians to assess their perceptions of the effectiveness of the analyst interview process, and

- Interviewing management who have supervisory responsibility over the analysts to assess their perception of the analyst's ability to perform identified job functions.

- Assessed the information available to the analysts to perform identified job duties including the following;

  - BellSouth time reporting manuals, and
  - Access to source data of network technician time reporting.

Based on our assessment, the policies and procedures relating to the technical analysts appear to allow for effective administration of the WASSP process based on established criteria for this position. Supervision of the technical analysts is conducted by WASSP management with considerable experience in FCC time reporting requirements. The current centralization of the analyst location further facilitates efficient supervision. Technical analysts appear to have sufficient knowledge of FCC time reporting requirements through practical work experience and a working knowledge of BellSouth time reporting policies.

The format of the technical analyst interview process is structured to permit technical analyst phone interviews with supervisors of randomly selected network technicians who have submitted Logs. The interview requires the supervisor to describe the network technician's work activities based on source documentation maintained at the supervisors location.

This process appears reasonably effective; however, the effectiveness of the function could be enhanced in several respects and, based upon our assessment, we recommend that:

- Source documentation of network technicians work activities be forwarded to the technical analyst concurrently with the completed Logs,

- Develop, document, and implement a formal training program for technical analysts, and

- Develop, document, and implement a plan for rotation and coverage during absence or illness of the technical analysts.

The detailed recommendations pertaining to these items are included in our Letter of Recommendations at Exhibit C.

III. Controls Associated with the WASSP Process

We assessed the controls associated with the WASSP process to include general computer controls and application system controls in the following areas:

General Computer Controls

- Security
- Program Changes
- Computer Operations

Application System Controls

- Sample Selection Module
- Data Collection Module
- Data Analysis Module

Our approach to assessing general computer controls included the following:

- Assessed mechanized and manual measures for securing the WASSP systems,
- Assessed program testing and quality control procedures, and
- Assessed the schedule for processing of WASSP programs and related procedures.

Our approach to assessing applications system controls included the following:

- Assessed the procedures for creating data extract files, transferring of such files to diskettes, and maintenance of such diskettes after transfer,
- Analyzed each field in the data extract to determine how the field is used to satisfy the sampling plan,
- Analyzed the contents of Lotus 1-2-3 files after extract import to identify the state and time period being processed,
- Assessed the mechanized and manual measures that all data is accurately and completely obtained and processed,
- Analyzed data entry procedures and edits, and
- Analyzed input edits, program logic, and statistical methodology associated with the EXTRACT, SAMPLER, and IMOUT computer applications.

Based upon our assessment, recommendations have been made in the following general areas:

- "Extract" file creation and maintenance
- Lotus 1-2-3 file creation and maintenance
- Fortran programming controls.

The detailed recommendations pertaining to these items and detailed recommendation on controls resulting from the attestation engagement are included in our Letter of Recommendations at Exhibit C.

IV. Relevance and Suitability of WASSP Reporting Procedures in the Event of Natural Disasters

To assess the relevance and suitability of WASSP reporting procedures in the event of natural disasters, including disaster recovery procedures pertaining to WASSP computer-based systems, our approach consisted of first obtaining an understanding of BellSouth's policies and procedures. We conducted interviews of management, technical analysts, supervisors, and network technicians to solicit their views on the effect of a natural disaster on the following:

- Sample selection,
- Work activities performed by network technicians,
- Reporting procedures,

- Analyst and Supervisor review procedures, and
- Allocation of work activities between regulated and nonregulated services.

We also conducted interviews and reviewed written backup and recovery procedures pertaining to disaster recovery procedures for WASSP computer-based systems.

Backup policies and procedures have been prepared for cases where the WASSP process is not available to be utilized due to a disaster affecting the WASSP system. Disaster recovery plans included offsite storage, maintenance of manual records of network technician work activities, backup of WASSP programs and data, and the use of the most recent WASSP-generated network technician labor profiles until the system is restored.

Management believes that the WASSP system would continue to be functional in the event of a natural disaster and proposes to instruct users of the methodology to continue to use the system, as permitted by the circumstances. Based upon our assessment, we have recommended that BellSouth develop written policies in relation to the effect of a natural disaster on the various aspects of WASSP process to include:

- Sample selection,
- Performance of work activities,
- Reporting procedures,
- Supervisor and analyst review procedures,
- Analysis of work activity data, etc.

The detailed recommendation pertaining to this item is included in our Letter of Recommendations in Exhibit C.

* * * * *

We would like to acknowledge the excellent cooperation and assistance given our study team during the course of our study. We would be pleased to discuss any aspect of our report with you.

We appreciate this opportunity to be of service.

Very truly yours,

INDEPENDENT ACCOUNTANTS' ATTESTATION REPORT

BellSouth Corporation
Atlanta, Georgia

We have examined the accompanying Statement of Network Technician Labor Distribution Profiles for the state of Alabama for the three-month period ended December 31, 1992. Our examination was made in accordance with standards established by the American Institute of Certified Public Accountants and, accordingly, included such procedures as we considered necessary in the circumstances. This Statement is the responsibility of the Company's management. Our responsibility is to express an opinion on the Statement based on our examination.

The Statement of Network Technician Labor Distribution Profiles was derived from BellSouth Telecommunications, Inc.'s Work Activity Statistical Sampling Process (WASSP) on the basis described in the Notes to the Statement of Network Technician Labor Distribution Profiles.

In our opinion, the Statement of Network Technician Labor Distribution Profiles for the state of Alabama referred to above presents, in all material respects, the Network Technician Labor Distribution Profiles for the state of Alabama for the three-month period ended December 31, 1992 in conformity with the basis described in the Notes.

Atlanta, Georgia
March 5, 1993

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF ALABAMA
THREE-MONTH PERIOD ENDED DECEMBER 31, 1992

WORK GROUP - I&M CORPORATE COMMUNICATIONS
JOB FUNCTION CODE - 4130

Field Reporting Code	Description	Labor Distribution Percentage
22R	AERIAL CBL-METALLIC	.13%
45M	BURIED CBL-METALLIC	.60%
45R	BURIED CBL-METALLIC	.18%
548M	BURIED SVC WIRE (DROPS)	.02%
52M	INTRABLDG NETWK CBL-METALLIC	.10%
52R	INTRABLDG NETWK CBL-METALLIC	.24%
68E	OTH NON-CPE EQPT EXP-NETWK TERM WIRE-INSTI	.37%
68M	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	.02%
68R	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	.04%
257R	CIRC EQPT-DIGITAL-SUB PR GN SYS	.02%
758M	OTH TERM EQPT-SUB PR GN EQPT	.05%
378C	OTH TERM EQPT DIGITAL NON-CPE NCTE	.11%
378M	OTH TERM EQPT DIGITAL NON-CPE NCTE-REG	.05%
558C	OTH TERM EQPT-ANALOG NCTE	.25%
558M	OTH TERM EQPT-ANALOG NCTE	.18%
728C	COMPANY COMM STAND ALONE	7.03%
658M	COMPANY COMM EQPT	23.41%
658C	COMPANY COMM EQPT-PBX INSTALLATIONS	.75%
628C	COMPANY COMM INTRASYS	3.21%
730C	DATA CONTROLLERS & WORKSTATIONS	21.98%
630M	DATA CONTROLLERS & WORKSTATIONS	23.21%
5532	MISC MEETINGS	.61%
5534	EXCELLENCE THROUGH QUALITY (QWL)	.38%
5535	GEN CLASSROOM TRAINING	.61%
5536	OTH UNCLASSIFIED PROD COSTS (E.G., NO ACCESS)	.05%
553A	NO TROUBLE FOUND	.63%
TRVL	TRAVEL & BREAKS	12.01%
68Y	OTH NON-CPE EQPT EXP-NTWK TERMINATING WIRE-RMVL	.05%
628X	CO COMM INTRSYSTEM - ACCUM DEPR	.17%
728X	CO COMM EQ-STA APPARATUS EQ-ACCUM DEPR	1.41%
730X	DATA CONTROLLERS & WORKSTATIONS-OTH COSTS-ACCUM DEPR	1.98%
510C	STOREROOM	.02%
658X	REMOVAL OF CORPORATE EQUIPMENT - ACCUM DEPR	.04%
845M	BURIED CABLE - FIBER	.09%
	TOTAL - I&M CORPORATE COMMUNICATIONS	100.00%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF ALABAMA
THREE-MONTH PERIOD ENDED DECEMBER 31, 1992
(Continued)

WORK GROUP - I&M POTS
JOB FUNCTION CODE - 4150

Field Reporting Code	Description	Labor Distribution Percentage
22M	AERIAL CBL-METALLIC	2.72%
22R	AERIAL CBL-METALLIC	4.89%
45M	BURIED CBL-METALLIC	5.24%
45R	BURIED CBL-METALLIC	7.46%
248C	AERIAL SVC WIRE (DROPS)	5.23%
248M	AERIAL SVC WIRE (DROPS)	6.95%
248R	AERIAL SVC WIRE (DROPS)	4.01%
548C	BURIED SVC-WIRE	2.92%
548M	BURIED SVC-WIRE	2.02%
548R	BURIED SVC-WIRE	2.86%
52M	INTRABLDG NETWK CBL-METALLIC	.03%
52R	INTRABLDG NETWK CBL-METALLIC	.01%
68E	OTH NON-CPE EQPT EXP-NETWK TERM WIRE INSTL	.94%
68M	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	.44%
68R	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	.54%
257M	CIRC EQPT-DIGITAL-SUB PR GN SYS	.05%
257R	CIRC EQPT-DIGITAL-SUB PR GN SYS	.53%
377M	DIGITAL ELECTRONIC SWITCH EQPT	.22%
377R	DIGITAL ELECTRONIC SWITCH EQPT	.02%
378C	OTH TERM EQPT DIGITAL NON-CPE NCTE	.01%
97BI	INSIDE WIRE-BASIC-INSTL & REARRANGE	3.28%
97BW	INSIDE WIRE-BASIC-WARRANTY	.24%
97BP	INSIDE WIRE-BASIC-SVC PLAN	7.39%
97BR	INSIDE WIRE-BASIC-MTCE	.64%
98EI	INSIDE WIRE-NON BASIC INSTL & REARRANG	.72%
98EW	INSIDE WIRE-NON BASIC WARRANTY	.01%
98ER	INSIDE WIRE-NON BASIC TIME & MTL	.12%
5532	MISC MEETINGS	1.82%
5533	UNION ACTIVITIES (PAID)	.18%
5534	EXCELLENCE THROUGH QUALITY (QWL)	.80%
5535	GEN CLASSROOM TRAINING	.29%
5536	OTH UNCLASSIFIED PROD COSTS (E.G., NO ACCESS)	1.08%
553A	NO TROUBLE FOUND	2.77%
TRVL	TRAVEL & BREAKS	33.17%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF ALABAMA
THREE-MONTH PERIOD ENDED DECEMBER 31, 1992
(Continued)

WORK GROUP - I&M POTS
JOB FUNCTION CODE - 4150
(Continued)

Field Reporting Code	Description	Labor Distribution Percentage
3C	AERIAL WIRE	.23%
3M	AERIAL WIRE	.02%
3R	AERIAL WIRE	.12%
248X	AERIAL SVC WIRE (DROPS)-ACCUM DEPR	.02%
68Y	OTH NON-CPE EQPT EXP-NTWK TERMINATING WIRE-RMVL	.01%
	TOTAL - I&M POTS	100.00%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF ALABAMA
THREE-MONTH PERIOD ENDED DECEMBER 31, 1992
(Continued)

WORK GROUP - I&M PUBLIC COMMUNICATIONS (COIN)
JOB FUNCTION CODE - 4180

Field Reporting Code	Description	Labor Distribution Percentage
22M	AERIAL CBL-METALLIC	.15%
22R	AERIAL CBL-METALLIC	.87%
45M	BURIED CBL-METALLIC	1.24%
45R	BURIED CBL-METALLIC	1.02%
248C	AERIAL SVC WIRE (DROPS)	1.05%
248M	AERIAL SVC WIRE (DROPS)	.64%
248R	AERIAL SVC WIRE (DROPS)	1.03%
548C	BURIED SVC WIRE (DROPS)	.88%
548M	BURIED SVC WIRE (DROPS)	.07%
548R	BURIED SVC WIRE (DROPS)	.43%
68E	WIRE-INSTI	.58%
68R	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	.07%
257R	CIRC EQPT-DIGITAL-SUB PR GN SYS	.03%
98EW	INSIDE WIRE-NON BASIC WARRANTY	.02%
98ER	INSIDE WIRE-NON BASIC TIME & MTL	.10%
88M	PUB TEL TERM EQPT UNIV	.37%
88Y	PUB TEL TERM EQPT UNIV RMVL	.08%
188E	PUB TEL TERM EQPT-COIN OP-INSTL	5.45%
188M	PUB TEL TERM EQPT-COIN OP	39.16%
188Y	PUB TEL TERM EQPT-COIN OP RMVL	3.05%
288E	PUB TEL TERM EQPT-COINLESS INSTALLATION	.06%
288M	PUB TEL TERM EQPT-COINLESS	1.44%
288Y	PUB TEL TERM EQPT-COINLESS-EXP-RMVL	.39%
78E	PUB TEL TERM EQPT PUB-CPE-INSTL	.13%
78Y	PUB TEL TERM EQPT PB-CPE RMVL	.02%
988E	PUB TEL TERM EQPT-INSTALLATION	.21%
988M	PUB TEL TERM EQPT	.76%
988Y	PUB TEL TERM EQPT-RMVL	.19%
5532	MISC MEETINGS	3.97%
5533	UNION ACTIVITIES (PAID)	.15%
5535	GEN CLASSROOM TRAINING	.32%
5536	OTH UNCLASSIFIED PROD COSTS (E.G., NO ACCESS)	.47%
553A	NO TROUBLE FOUND	1.22%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF ALABAMA
THREE-MONTH PERIOD ENDED DECEMBER 31, 1992
(Continued)

WORK GROUP - I&M PUBLIC COMMUNICATIONS (COIN)
JOB FUNCTION CODE - 4180
(Continued)

Field Reporting Code	Description	Labor Distribution Percentage
TRVL	TRAVEL & BREAKS	33.29%
248X	AERIAL SVC WIRE (DROPS)-ACCUM DEPR	.06%
68Y	OTH NON-CPE EQPT EXP-NTWK TERMINATING WIRE-RMVL	.05%
510C	STOREROOM	.98%
	TOTAL - I&M PUBLIC COMMUNICATIONS (COIN)	100.00%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF ALABAMA
THREE-MONTH PERIOD ENDED DECEMBER 31, 1992
(Continued)

WORK GROUP - I&M SPECIAL SERVICES (SSI&M)
JOB FUNCTION CODE - 4190

Field Reporting Code	Description	Labor Distribution Percentage
22M	AERIAL CBL-METALLIC	2.54%
22R	AERIAL CBL-METALLIC	1.58%
45M	BURIED CBL-METALLIC	10.45%
45R	BURIED CBL-METALLIC	3.10%
248C	AERIAL SVC WIRE (DROPS)	1.42%
248M	AERIAL SVC WIRE (DROPS)	.67%
248R	AERIAL SVC WIRE (DROPS)	.82%
548C	BURIED SVC WIRE (DROPS)	.26%
548M	BURIED SVC WIRE (DROPS)	.09%
548R	BURIED SVC WIRE (DROPS)	.17%
12M	AERIAL CBL-METALLIC-BLDG ENT	1.49%
12R	AERIAL CBL-METALLIC-BLDG ENT	.41%
52M	INTRABLDG NETWK CBL-METALLIC	.63%
52R	INTRABLDG NETWK CBL-METALLIC	.35%
68E	OTH NON-CPE EQPT EXP-NETWK TERM WIRE-INSTL	16.22%
68M	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	2.42%
68R	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	1.70%
257M	CIRC EQPT-DIGITAL-SUB PR GN SYS	.91%
257R	CIRC EQPT-DIGITAL-SUB PR GN SYS	.23%
F257R	OPTIC FEEDER	.16%
758M	OTH TERM EQPT-SUB PR GN EQPT	.04%
378C	OTH TERM EQPT DIGITAL NON-CPE NCTE	1.07%
378M	OTH TERM EQPT DIGITAL NON-CPE NCTE-REG	.63%
358NM	OTH TERM EQPT DIGITAL CPE NCTE	.01%
558C	OTH TERM EQPT-ANALOG NCTE	2.86%
558M	OTH TERM EQPT-ANALOG NCTE	2.22%
418M	STA APPARATUS-BOC OWNED-REGULATED	2.65%
97BI	INSIDE WIRE-BASIC-INSTL & REARRANGE	.06%
97BW	INSIDE WIRE-BASIC-WARRANTY	.04%
97BP	INSIDE WIRE-BASIC-SVC PLAN	.34%
97BR	INSIDE WIRE-BASIC-MTCE	7.37%
98EW	INSIDE WIRE-NON BASIC WARRANTY	.12%
98ER	INSIDE WIRE-NON BASIC TIME & MTL	.43%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF ALABAMA
THREE-MONTH PERIOD ENDED DECEMBER 31, 1992
(Continued)

WORK GROUP - I&M SPECIAL SERVICES (SSI&M)
JOB FUNCTION CODE - 4190
(Continued)

Field Reporting Code	Description	Labor Distribution Percentage
730C	DATA CONTROLLERS & WORKSTATIONS	.12%
5532	MISC MEETINGS	2.31%
5533	UNION ACTIVITIES (PAID)	.06%
5534	EXCELLENCE THROUGH QUALITY (QWL)	2.33%
5535	GEN CLASSROOM TRAINING	.50%
5536	OTH UNCLASSIFIED PROD COSTS (E.G., NO ACCESS)	.31%
553A	NO TROUBLE FOUND	2.29%
TRVL	TRAVEL & BREAKS	26.94%
248X	AERIAL SVC WIRE (DROPS)-ACCUM DEPR	.01%
68Y	OTH NON-CPE EQPT EXP-NTWK TERMINATING WIRE-RMVL	1.33%
158M	LGE PBX BOC OWNED-911 INSTALLATIONS	.09%
540M	OTH WORK EQPT PLANT CHARGES	.11%
558X	OTH TERM EQPT-ANALOG NCTE-ACCUM DEPR	.14%
	TOTAL - I&M SPECIAL SERVICES (SSI&M)	100.00%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF ALABAMA
THREE-MONTH PERIOD ENDED DECEMBER 31, 1992
(Continued)

WORK GROUP - CABLE REPAIR
JOB FUNCTION CODES - 4230, 4240

Field Reporting Code	Description	Labor Distribution Percentage
22M	AERIAL CBL-METALLIC	1.15%
22R	AERIAL CBL-METALLIC	17.44%
45M	BURIED CBL-METALLIC	1.59%
45R	BURIED CBL-METALLIC	13.06%
248C	AERIAL SVC WIRE (DROPS)	.25%
248M	AERIAL SVC WIRE (DROPS)	1.01%
248R	AERIAL SVC WIRE (DROPS)	3.70%
548C	BURIED SVC WIRE (DROPS)	.17%
548M	BURIED SVC WIRE (DROPS)	.57%
548R	BURIED SVC WIRE (DROPS)	2.39%
68E	OTH NON-CPE EQPT EXP-NETWK TERM WIRE-INSTI	.03%
68M	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	.02%
68R	OTH NON-CPE EQPT EXP-NETWK TERM WIRE	.25%
5M	UG CBL-METALLIC	1.82%
5R	UG CBL-METALLIC	2.21%
257M	CIRC EQPT-DIGITAL-SUB PR GN SYS	8.18%
257R	CIRC EQPT-DIGITAL-SUB PR GN SYS	3.39%
377M	DIGITAL ELECTRONIC SWITCH EQPT	.01%
377R	DIGITAL ELECTRONIC SWITCH EQPT	.03%
F257M	OPTIC FEEDER	.29%
758M	OTH TERM EQPT-SUB PR GN EQPT	.09%
97BI	INSIDE WIRE-BASIC-INSTL & REARRANGE	.08%
97BW	INSIDE WIRE-BASIC-WARRANTY	.01%
97BP	INSIDE WIRE-BASIC-SVC PLAN	3.80%
97BR	INSIDE WIRE-BASIC-MTCE	.70%
98EI	INSIDE WIRE-NON BASIC INSTL & REARRANG	.03%
98EW	INSIDE WIRE-NON BASIC WARRANTY	.01%
98ER	INSIDE WIRE-NON BASIC TIME & MTL	.21%
728C	COMPANY COMM STAND ALONE	.05%
658M	COMPANY COMM EQPT	.30%
730C	DATA CONTROLLERS & WORKSTATIONS	.15%
630M	DATA CONTROLLERS & WORKSTATIONS	.05%
5532	MISC MEETINGS	1.48%
5534	EXCELLENCE THROUGH QUALITY (QWL)	.79%
5535	GEN CLASSROOM TRAINING	1.25%
5536	OTH UNCLASSIFIED PROD COSTS (E.G., NO ACCESS)	.82%
553A	NO TROUBLE FOUND	2.28%
5539	OTH MTCE EXP	.13%

BELLSOUTH CORPORATION

STATEMENT OF NETWORK TECHNICIAN LABOR DISTRIBUTION PROFILES
FOR THE STATE OF ALABAMA
THREE-MONTH PERIOD ENDED DECEMBER 31, 1992
(Continued)

WORK GROUP - CABLE REPAIR
JOB FUNCTION CODES - 4230, 4240
(Continued)

Field Reporting Code	Description	Labor Distribution Percentage
TRVL	TRAVEL & BREAKS	29.71%
3C	AERIAL WIRE	.18%
3M	AERIAL WIRE	.01%
3R	AERIAL WIRE	.17%
248X	AERIAL SVC WIRE (DROPS)-ACCUM DEPR	.01%
510C	STOREROOM	.01%
845M	BURIED CABLE - FIBER	.12%
	TOTAL - CABLE REPAIR	100.00%

BELLSOUTH CORPORATION

NOTES TO STATEMENT OF NETWORK TECHNICIAN
LABOR DISTRIBUTION PROFILES FOR THE STATE OF ALABAMA
FOR THE THREE-MONTH PERIOD ENDED DECEMBER 31, 1992

1. BASIS OF PRESENTATION

The accompanying Statement of Network Technician Labor Distribution Profiles presents, in summary form, the result of BellSouth Telecommunications, Inc.'s (BellSouth) Work Activity Statistical Sampling Process (WASSP) applied to measure the activities of groups of network technicians in the State of Alabama during the three-month period ended December 31, 1992 for reporting in accordance with BellSouth's policies pertaining to the application of Part 32 - Uniform System of Accounts. WASSP was applied to measure the work activities of network technicians operating in five Installation and Maintenance (I&M) work groups using statistical sampling and evaluation techniques, as follows:

I&M - Corporate Communications
I&M - POTS
I&M - Public Communications
I&M - Special Services (SSI&M)
Cable Repair

For each I&M and Cable Repair work group, the Statement presents a three-month composite profile of the percentages of work activity summarized by specific work activity descriptions which correspond to defined field reporting codes. Field reporting codes form the basis for reporting of network technician time into BellSouth's financial systems.

2. DESCRIPTION OF THE WORK ACTIVITY STATISTICAL SAMPLING PROCESS (WASSP)

WASSP is a statistical methodology designed to gather sample data and statistically estimate the work activity of work reporting groups. WASSP consists of three related process modules for sample selection, data collection, and data analysis. Each of these process modules are described below:

The Sample Selection Module

The Sample Selection Module has been designed to select a statistically valid sample of network technicians from the Payroll Master Database (PMDB), a BellSouth database used to maintain employee information. The EXTRACT program of the Sample Selection Module searches the PMDB and stratifies the universe of employees into homogenous categories based upon state boundaries and work groups (by job function code). For each job function code, the SAMPLER program generates a random sample of technicians to participate in the work activity log completion portion of the Data Collection Module. Network technicians selected will participate in the process for one work week. The SAMPLER program of the Sample Selection Module simultaneously generates a random sample of the above sampled technicians to participate in the technical analyst interview portion of the Data Collection Module. Logs (Logs) for three days of the selected network technician's work week are randomly selected for technical analyst review procedures described in the Data Collection Module.

Sample size and the structure of the sample has been designed so that a three-month Network Technician Labor Distribution Profile is targeted to achieve a 95% confidence level with a precision of ±3% for each field reporting code profile percentage estimated by WASSP. The precision corresponds to approximately ± fifteen minutes, the lowest increment of time reporting for network technicians under the WASSP time reporting process. Technicians selected are oversampled in the Sample Selection Module to account for days on which the technicians are not present (i.e., vacations, illness, and weekend/weekday shifts).

The Data Collection Module

Prior to the week sampled, a list of the technicians to be sampled, the appropriate Logs, and instructions are forwarded to each sampled technician's manager by the technical analyst. The manager then disseminates the Logs and instructions to a supervisor for dispersal to the selected technicians. Technicians participating in WASSP report their time by work activity in minimum increments of fifteen minutes. Logs have been developed for each work group listing predominant work activities of each subject work group.

Once completed by the network technician, the Logs are submitted to the supervisor who reviews the Logs. Discrepancies are resolved and the Logs reviewed by the supervisor are forwarded to the technical analyst for additional review.

Telephone interviews of the technician's supervisor are conducted to test a random sample of network technician's Logs. The selection of those to be interviewed is determined through the Sample Selection Module. The interviews are generally conducted within three business days of the Log preparation date and prior to the input of the work activity data into the WASSP database processor. The interviews are conducted by the technical analysts and are accomplished through telephone interviews with the selected technician's supervisor. The interviews consist of the supervisor reviewing the source documentation with the analyst who compares such information to that recorded on the Log. If errors are detected and cannot be resolved, the technical analyst contacts the network technician directly. Once resolved, errors are corrected by the technical analyst on the Log.

The Data Analysis Module

Work activity data, derived from the Logs, are input into the WASSP database processor. The INPUT program of the WASSP database processor provides for the input of the sampled data and stores the input data in files by work group. Data in the files can be changed, appended, or deleted using the INPUT program.

The IMOUT program of the WASSP database processor develops the time distribution ratios and other data analysis for each work group for which labor distribution percentages are estimated by WASSP. WASSP distributes the increments of hours reported to each field reporting code and calculates the percentage of time assigned to each field reporting code.

Data generated by WASSP is available to interfacing MTR systems with no changes to formats or requirements. The WASSP allocation profiles are available to be input into the MTR time reporting tables and would be available for MTR off-line processing to create a report detailing the field codes which have been generated and passed to the Company's Financial Processor (FP).

BELLSOUTH CORPORATION

SUMMARY OF PRIMARY PROCEDURES PERFORMED

Exhibit A includes an attestation report pertaining to an examination of the Statement of Network Technician Labor Distribution Profiles for the state of Alabama for the three-month period ended December 31, 1992. This summary presents the primary procedures we performed as part of our examination. These procedures represent only a partial listing and were conducted to form our opinion included in Appendix A but not to express an opinion on any of the individual WASSP processes.

The procedures we performed were structured to parallel the three modules in the WASSP statistical estimation process as follows:

Test of Sample Selection Module
Test of Data Collection Module
Test of Data Analysis Module

Tests of Sample Selection Module

Perform tests to verify the completeness and accuracy of network technician input information from which samples are selected and to validate the computer applications utilized to process such information. The primary procedures for this phase include:

- Test the completeness of the database which provides network technician information for sampling. Test the accuracy of the employee information (i.e., name, responsibility code, social security number, job function code, etc.) by referencing, via random sample, both to and from independent source documents.

- Review and test the methodology and the program logic of the computer applications in the sample selection module as to the applications' statistical selection process.

Test of Data Collection Module

Obtain an understanding of and test the administration of the collection of network technician data. The primary procedures for this phase include:

- Document the procedures and related oversight controls associated with the data collection process,

- Test compliance with the stated procedures by selecting field technicians and examining documentary evidence of compliance with data collection procedures, and

- Test the effectiveness of data collection procedures to accurately reflect the field technician assignment of work activity to the appropriate Field Reporting Code by comparing the reported work activity for a limited number of selected field technicians to independent source documents (i.e., assignment records, trouble tickets, dispatch records, etc.).

Test of Data Analysis Module

Review the data analysis methodology and test the computer applications utilized to process the data. The procedures for this phase include:

- Review the statistical methodology associated with the analysis of information obtained from the Data Collection Module,
- Obtain an understanding of design and coding of the data analysis specifications to process the network technician work activity,
- Test the validity of the computer allocation of work activity by reprocessing the data obtained in the data collection module under audit control,
- Test the validity of input data by agreeing the network technicians' work activity as selected in the data collection module to the related input program source, and
- Test the validity of output data by agreeing the network technicians' work activity, as selected above, to the proper inclusion in the output file.

EXHIBIT C

March 5, 1993

BellSouth Corporation
1155 Peachtree Street, N.E.
Atlanta, Georgia 30367

Dear Sirs:

This report contains observations and recommendations related to certain matters noted during our special study pertaining to the BellSouth Telecommunications, Inc. Work Activity Statistical Sampling Process (WASSP). We believe the observations and recommendations will be useful to you in improving the WASSP process.

This report is intended solely for the use of BellSouth management and to assist you in responding to inquiries from the Federal Communications Commission or state regulatory authorities. We would be please to discuss these comments with you and, if desired, to assist you in implementing any of them.

Yours truly,

BELLSOUTH CORPORATION

WORK ACTIVITY STATISTICAL SAMPLING PROCESS

OBSERVATIONS AND RECOMMENDATIONS

I. POLICIES AND PROCEDURES

SOURCE DOCUMENTS USED FOR ANALYST INTERVIEWS

Observation and Background

The technical analyst is required to perform a detailed review of selected Logs from the total population of Logs returned to the analyst. The detail review consists of a technical analyst's phone interview with the supervisor of the technician whose Log was randomly selected by the WASSP sample selection program. The technical analyst requests the supervisor to describe the activities as reported by the technician on source documentation maintained at the supervisor location. However, the technical analyst does not have access to source documentation created by the technician to evidence his/her activities and used by the supervisor to review completed logs.

Recommendation

Require source documentation to be forwarded to the technical analyst concurrently with the completed and reviewed Logs. Absent hard copy source documentation, allow analyst on-line access to this information, where applicable.

POLICIES AND PROCEDURES IN THE EVENT OF A NATURAL DISASTER

Observation and Background

Currently there are no formal policies and procedures pertaining to the application of the WASSP methodology in the event of a natural disaster. Consequently, formal guidance is not available as to the effect of a natural disaster on the areas of sample selection, work activities performed by network technicians, reporting procedures, analyst and supervisor review procedures and methodology associated with data analysis. Formal policies and procedures would promote an effective operation of the process in the event of a natural disaster.

Recommendation

Create, document and implement formal policies and procedures pertaining to the application of the WASSP methodology in the event of a natural disaster.

POLICIES, PROCEDURES AND CONTROLS MANUAL

Observation and Background

Currently, a policies, procedures and controls manual in relation to the implementation and operation of the WASSP process does not exist. A policies, procedures and controls manual will provide an effective resource in terms of WASSP process consistency and integrity and would reduce disruption in the event of various events such as organizational changes, employee turnover, and natural disasters.

Recommendation

Create and maintain a policies, procedures and controls manual to incorporate all critical aspects of the WASSP process. Disseminate this manual to those time reporting personnel who will benefit from its use.

TECHNICIAN USE OF PERSONAL LOGS

Observation and Background

Network technicians in certain of the states in the BellSouth geographic region are maintaining informal logs of trouble jobs received and work performed in addition to that required by the current Craft Access System. This occurs via the documentation of specific trouble job information on form #6025 or #6571. The maintenance of informal trouble job logs represents an inefficient and unnecessary utilization of BellSouth resources and is currently not required by WASSP management or BellSouth time reporting personnel.

Recommendation

Eliminate network technician use of informal logs in areas where the Craft Access System is utilized.

TRACKING AND EVALUATION OF WORK ACTIVITY LOG ERRORS

Observation and Background

A feedback system is not currently used to track and evaluate the number and type of errors being detected by the supervisors during their review of the technician's Logs or by the technical analysts during their review and interview procedures. Any errors noted by supervisors or technical analysts while performing their duties should be evaluated to determine any adverse impact on the sufficiency of the initial statistical sample of network technicians and to confirm that the extent of oversampling is sufficient to maintain targeted levels of statistical assurance.

Recommendation

Develop, document, and implement a feedback program to accumulate and statistically evaluate the continued validity of the Network Technician Labor Profiles for any errors identified by the supervisors and technical analysts on the Logs during their review procedures. Provide a mechanism within this process to evaluate the effect of any errors on the precision of the profiles and the number of selections of network technicians required to participate in the WASSP process.

LOG-OFF PROCEDURES FOR THE CRAFT ACCESS SYSTEM

Observation and Background

Network technicians at times "log off" of the Craft Access System at a time subsequent to the actual time of completion of the trouble job even though the time shown on the Log is correct. This can occur if the technician logs off on a current trouble job after receipt of and travel to a new trouble job. As technical analysts are placing reliance on the Detail Craft Work Summary ("DCWS") generated by the Craft Access System as a source document, differences relating to the above must be investigated.

Recommendation

Require technicians to "log off" of the Craft Access System immediately upon completion of each trouble job. Consider the feasibility of Craft Access System modification such that a technician may not receive orders for his next job without "logging off" of the current job.

RECEIPT AND REVIEW OF WORK ACTIVITY LOGS

Observation and Background

Interviews conducted by technical analysts do not always occur within three working days as prescribed under established WASSP criteria. Delays in analyst interviews occasionally occur due to the remote location of the technician which requires an additional day for the supervisor's review before mailing to the technical analyst. Additionally, Logs forwarded to the technical analyst via fax machine are delayed due to the volume of fax transmissions.

Recommendation

Provide one-day mail service from remote locations and obtain additional fax machines to ensure the timely receipt of Logs.

TIMELY SUPERVISOR REVIEW OF WORK ACTIVITY LOGS

Observation and Background

Supervisors are required to review Logs the day after the Logs are completed by the network technicians. We observed instances in which such review was substantially beyond the one day requirement. Additionally, in some of the remote offices the supervisors do not have printers. Consequently, if the supervisors use the DCWS in their review procedures, they must obtain hard copies of DCWS source documents from other offices via mail. These situations cause delays in the supervisor review and forwarding of Logs to the technical analysts. However, in these remote locations, we observed that the supervisor often has on-line access to the DCWS.

Recommendation

Instruct supervisors to perform Log reviews the day subsequent to completion by the technician. Additionally, advise supervisors who choose to use the DCWS in their review process to perform Log reviews via on-line inquiry of the Craft Access System if hard copy documentation is not readily available.

TRAINING OF TECHNICAL ANALYSTS

Observation and Background

There is currently no formal training program for the technical analysts involved in the WASSP process pertaining to work procedures, FCC time reporting rules, effective interview techniques, error resolution and other matters.

Recommendation

Develop, document, and implement a formal training program for the technical analysts. This program should encompass entry level training courses as well as continuing education training courses to inform the analysts of any updates or changes in FCC time reporting requirements, any updates or changes in the WASSP process and other pertinent subjects. This program would be an essential ingredient in the consistent implementation of the analyst function.

ROTATION AND COVERAGE FOR ABSENT TECHNICAL ANALYSTS

Observation and Background

Technical analysts are assigned to review logs for one particular state. No plan currently exists for the rotation of technical analysts nor does a plan exist to cover for an analyst in the event of illness or vacation.

Recommendation

Develop, document, and implement a rotation plan whereby the technical analysts are required to periodically rotate their states of responsibility. Additionally, develop, document, and implement a plan in the event of analyst absence due to illness or vacation.

EXPANSION OF THE CRAFT ACCESS SYSTEM DOCUMENTATION

Observation and Background

During the review of the Log, the supervisor determines if the technician's time is charged to the proper work activity by comparing the activities as reported on Logs to source documentation. Currently source documentation includes Detail Craft Work Summaries (DCWS) generated from the computerized Craft Access System and/or existing Mechanized Time Report (MTR) forms prepared by the technician. The current space allowed for description on the Craft Access System DCWS for each distribution number (42 characters) is not always large enough to fully describe the task performed by the technician. This situation can occur if more than one service is performed on the same trouble job. As such, the technician is required to continue the description of the work performed on this trouble job on the manually completed MTR form. This situation does not currently present a problem due to the dual reporting nature of the WASSP and MTR time reporting processes. However, as the MTR form will be eliminated once the WASSP process is fully implemented, the Craft Access System will become the chief source of documentation medium available to the technician and sufficient space should be given to the technician to allow him to perform an efficient reporting of time.

Recommendation

Add additional space in the Craft Access System field for description of each trouble job performed by the technician. This will allow sufficient information to be recorded in the Craft Access System and to promote accurate reporting of technician work activity.

WORK ACTIVITY LOG SIGN-OFF BY SUPERVISOR AND DATA INPUT PERSONNEL

Observation and Background

Supervisor and data input personnel signature on the Logs, although required upon completion of these individual's assigned duties, is not consistently obtained. Although it appears that the assigned duties are generally performed by these individuals, consistently requiring a signature will provide a means of documenting accountability.

Recommendation

Require all supervisors to sign and date the Logs after their review. Require all data input personnel to sign and date the Logs upon entering the Log data into the WASSP system.

II. STATISTICAL METHODS

PROSPECTIVE UNIVERSE TECHNIQUE

Observation and Background

Currently, all samples of network technicians throughout the three-month profile period are generated from an extract of the PMDB as of the beginning of the three-month profile period. This methodology will not account for changes in technician composition since the initial extraction. Such changes may include network technician employment, transfer, or termination.

Recommendation

Develop procedures to account for changes in the composition of network technicians subsequent to the date of the data extract.

QUALITY CONTROL SAMPLE SIZE

Observation and Background

As the WASSP process is implemented in the nine-state BellSouth region, the pool of network technicians for the entire BellSouth region may be viewed as one population for network technician quality control sampling purposes. If this view is acceptable, then a reasonably high level of assurance in regard to error rates can be obtained through the use of Acceptance Sampling techniques. This can be accomplished with much less work than is presently contemplated.

Recommendation

Consider reducing the number of network technician quality control interviews through the use of one region-wide interview sample versus separate interview samples for each state.

SELECTING THE NUMBER OF WEEKS IN A MONTH

Observation and Background

It is the system user's responsibility, for the SAMPLER application, to input the number of weeks in any particular month. An error in the number of weeks input parameter could result in a reporting week being improperly excluded from the sampling population.

Recommendation

Adopt a more simplistic decision rule, as follows:

If a Wednesday at the end of the month falls in the current month, that month has five weeks.

Further, we recommend that a table of months and weeks be input at the beginning of the year and reviewed by supervisory personnel to minimize the necessity for clerical decision and controls throughout the year, similar to the way parameters are codified in the Data Analysis Module of the WASSP process.

III. COMPUTER PROCESSING APPLICATIONS AND CONTROLS

EXTRACT FILE CREATION

Observation and Background

Improper changes to the SQL routines may be made and not be detected. Mistakes could be made in entering the QMF and ISPF/PC commands while creating and down loading files.

Recommendation

Create five versions of the SQL routine, one for each sampling population. Add program statements to automatically save the files in the correct format and libraries. Add these programs to the automatic job scheduler.

Observation and Background

Files with similar names could be interchanged, resulting in improper processing in later stages of the WASSP process.

Recommendation

Maintain a manual log to detail the times, dates, and sizes of the files created. The log should also indicate the state for each file, the external label of the diskette, and the directory in which the files are stored. Require the operator to initial and date each entry in the log as documentation of procedure performance. Additionally, place external labels on diskettes that clearly indicate the states and time periods of the files contained on the diskettes. Finally, use naming conventions (e.g., "FL0193") when creating DOS directories to separate files and identify them to their time periods and states. Modify the programs described above to print an audit trail report showing the pertinent details of processing: file names, file sizes, file creation dates, any exceptions in processing.

LOTUS 1-2-3

Observation and Background

Improper changes to work sheets and macro routines may be made and not be detected.

Recommendation

Modify file attributes in DOS to read-only. Modify macros to close the work sheet (without saving) automatically upon completing processing.

Observation and Background

The IMPORT.WK3 macro may not execute as intended if the window and other global work sheet settings are not created as expected.

Recommendation

Modify the logic of the macro to set all window and global work sheet settings at the beginning of processing. Replace the {BIGRIGHT} command with program steps to position the cursor to a specific location prior to importing data into the NET1, NET2, NET3, NET4, and NET5 ranges.

Observation and Background

The IMPORT.WK3 macro is designed to require the operator to enter the name of the file (including sub-directory) to which the results of processing are to be saved. If the operator chooses a misleading name, errors may result in later processes.

Recommendation

Require the operator to maintain an audit trail of processing and use appropriate conventions (e.g., "\FL0192\NETWORK1.WK3") for naming files. Also require the operator to document in a log the names and contents of files created and to document any deviations from the expected procedures.

Observation and Background

Once the WASSP process is fully operational the operator will be required to execute the LASTSAMP.WK3 program 45 times each processing cycle once for each of the five network technician work groups in each of the nine states in the BellSouth geographic region, which is inefficient.

Recommendation

Modify the logic of the LASTSAMP.WK3 macro to automatically execute all 45 network technician samples.

Observation and Background

The LASTSAMP.WK3 work sheet is designed to allow the operator to:

- Enter invalid sample choices (i.e., something other than 1, 2, 3, 4, or 5)
- Enter an incorrect file name to be read into the work sheet
- Enter the sample period without a prompt
- Modify the Sample Size and Number of Weeks parameters incorrectly.

Recommendation

Modify the logic of the LASTSAMP.WK3 macro to perform additional edit checks and only allow valid responses.

FORTRAN APPLICATIONS

Observation and Background

Improper changes may be made to the FORTRAN programs and not be documented.

Recommendation

Place the source code versions of the FORTRAN programs into a "test" environment to which the operator does not have access. Restrict the operator's access to FORTRAN source code and means for compiling programs into the production environment.

Observation and Background

File naming conventions do not identify the year of the period to be processed.

Recommendation

Modify the FORTRAN programs to use a file naming convention that includes the year of the period to be processed.

Observation and Background

Errors can be made when maintaining the CODES and COUNT files.

Recommendation

Add programs for maintaining the CODES and COUNT files. These programs should contain edit routines to ensure that the records in the CODES and COUNT files are all in the proper format, and it should maintain a log of maintenance activity. Use password protection techniques to control maintenance using edit utilities or means other than the maintenance programs.

EXHIBIT D

March 5, 1993

BellSouth Corporation
1155 Peachtree Street, N.E.
Atlanta, Georgia 30367

Dear Sirs:

We have performed the procedures requested by you, as described below, to the accompanying Schedule of Estimated Annual Net Cost Savings and associated supporting schedules of Estimated Annual Gross Cost Savings and Estimated Annual Cost of Implementation of the BellSouth Telecommunications, Inc. Work Activity Statistical Sampling Process. This report is solely for your information and is not to be referred to or distributed to anyone who is not a member of BellSouth management or the Federal Communications Commission for any purpose. Our procedures performed and our findings are as follows.

A. Schedule A - Schedule of Estimated Annual Net Cost Savings

1. We compared the "Estimated Annual Gross Cost Savings" amount to Schedule B and found them to be in agreement.

2. We compared the "Estimated Annual Cost of Implementation" amount to Schedule C and found them to be in agreement.

3. We determined that Schedule A was mathematically accurate.

B. Schedule B - Schedule of Estimated Annual Gross Cost Savings

1. We compared the "Number of Technicians" to the BSCMS report "BellSouth Region Forces as of March 1, 1993" and found them to be in agreement.

2. We compared the "Estimated Hours Saved Per Day" to a BellSouth prepared analysis and found them to be in agreement. BellSouth management assumes that technicians will save fifteen minutes daily completing Logs compared to the existing Mechanized Time Reporting ("MTR") form.

3. We compared the "Estimated % of Employees Not Reporting Under WASSP" to a BellSouth prepared analysis and found them to be in agreement.

4. We recalculated the "Estimated Hours Saved Per Year" by multiplying the "Number of Technicians" by the "Estimated Hours Saved Per Day" by the "Estimated % of Employees Not Reporting Under WASSP" by 20 workdays per month by 12 months per year and found the amounts to be in agreement. Management has made the assumption that technicians will work an average of 20 workdays per month during the year.

5. We compared the "Average Technician Hourly Cost" to the management report named "Analysis of Direct Labor and Related Costs-Craft Forces" for the period ending December 1992 and found such amounts to be in agreement. The Average Technician Pay Rate includes benefits.

6. We recalculated the "Estimated Annual Gross Cost Savings" by multiplying the "Estimated Hours Saved Per Year" by the "Average Technician Hourly Cost" and found such amounts to be in agreement.

7. We compared the "Total Estimated Annual Gross Cost Savings" to the sum the estimated annual gross cost savings for each job function code and found them to be in agreement.

C. Schedule C - Schedule of Estimated Annual Cost of Implementation

1. We recalculated the "Estimated Cost of Payroll at Full Implementation" by multiplying the number of employees which WASSP management has represented it is approved to hire by an estimated average salary per employee provided to us by BellSouth and found the amounts to be in agreement.

2. We agreed the "Estimated Data Processing Cost," "Estimated Equipment Cost," and "Estimated Telecommunications Cost" to BellSouth prepared analyses and found them to be in agreement.

3. We recalculated the "Annual Depreciation of Equipment" assuming a 5-year life and straight-line depreciation.

4. We recalculated the "Estimated Travel and Training Cost" by multiplying BellSouth estimates of ten training personnel by $2,000 in cost per week by 25 weeks per year.

5. We determined that Schedule C was mathematically accurate.

Because the procedures we performed were not sufficient to constitute an audit in accordance with generally accepted auditing standards, we do not express an opinion on the accompanying Schedules referred to above. In performing these procedures, however, no matters came to our attention that caused us to believe that such schedules should be adjusted. Had we performed additional procedures, matters might have come to our attention that would have been reported to you. This report relates only to the items specified above, and does not extend to BellSouth Corporation's financial statements taken as a whole for any date or period.

Yours truly,

SCHEDULE A

BELLSOUTH TELECOMMUNICATIONS, INC.

WORK ACTIVITY STATISTICAL SAMPLING PROCESS
SCHEDULE OF ESTIMATED ANNUAL NET COST SAVINGS

	(000's)
ESTIMATED ANNUAL GROSS COST SAVINGS (Schedule B)	$24,618
ESTIMATED ANNUAL COST OF IMPLEMENTATION (Schedule C)	(1,782)
ESTIMATED ANNUAL NET COST SAVINGS	$22,836

SCHEDULE B

BELLSOUTH TELECOMMUNICATIONS, INC.

WORK ACTIVITY STATISTICAL SAMPLING PROCESS
SCHEDULE OF ESTIMATED ANNUAL GROSS COST SAVINGS

Job Function Code	Number of Technicians	Estimated Hours Saved Per Day	Estimated % of Employees Not Reporting Under WASSP	Estimated Hours Saved Per Year	Average Technician Hourly Cost	($000) Estimated Annual Gross Cost Savings
4150 I&M POTS	7,422	0.25	90%	400,788	$39.59	$15,867
4130 I&M Corporate	292	0.25	75%	13,140	39.59	520
4180 I&M Public	440	0.25	75%	19,800	39.59	784
4190 I&M Special Services	1,144	0.25	85%	58,344	39.59	2,310
42XX I&M Cable Repair	2,584	0.25	80%	124,032	41.42	5,137
Total Estimated Annual Gross Cost Savings						$24,618

SCHEDULE C

BELLSOUTH TELECOMMUNICATIONS, INC.

WORK ACTIVITY STATISTICAL SAMPLING PROCESS
SCHEDULE OF ESTIMATED ANNUAL COST OF IMPLEMENTATION

	(000's)	
Estimated Cost of Payroll at Full Implementation		$1,133
Estimated Data Processing Cost		100
Equipment Cost:		
PCs	100	
Fax Machines	20	
Total Estimated Equipment Cost	120	
Estimated Annual Depreciation of Equipment		24
Estimated Telecommunications Cost		25
Estimated Travel and Training Cost		500
Total Estimated Annual Cost of Implementation		$1,782

EXHIBIT E

March 5, 1993

BellSouth Corporation
1155 Peachtree Street, N.E.
Atlanta, Georgia 30367

Dear Sirs:

We have performed the procedures requested by you, as described below, to the accompanying schedules pertaining to the implementation of the Work Activity Statistical Sampling Process in the state of Alabama for the month of January 1993 for BellSouth Telecommunications, Inc. as follows:

- Schedule of the Part 32 reporting impacts
- Schedule of the Part 64 reporting impacts on account 6362
- Schedule of the Part 36 interstate reporting impacts and the Part 69 application to access elements

This report is solely for your information and is not to be referred to or distributed to anyone who is not a member of BellSouth management or the Federal Communications Commission for any purpose. Our procedures performed and our findings are as follows.

A. Schedule A - Schedule of Part 32 Reporting Impacts

1. We compared the amounts of "Reported Dollars" to a management report that applies labor and benefit rates to the hours reported by the network technicians under the Mechanized Time Reporting (MTR) system and found them to be in agreement.

2. We compared the amounts of "Profiled Dollars" to a management report that applies labor and benefit rates to the network technician hours as distributed in the WASSP process and found them to be in agreement.

3. We determined that Schedule A was mathematically accurate.

B. Schedule B - Schedule of Part 64 Reporting Impacts

1. We compared the amount of "Reported Dollars" and "Profiled Dollars" to a management report that summarizes all account 6362 field reporting codes and found them to be in agreement.

2. We compared the amounts of the "Total Account 6362" for "Reported Dollars" and "Profiled Dollars" to amounts presented in Schedule A and found them to be in agreement.

3. We determined that Schedule B was mathematically accurate.

C. Schedule C - Schedule of Part 36 Interstate Reporting Impacts and the Part 69 Application to Access Elements

1. We compared the amounts of "Difference Actual Versus Profile" to amounts presented in Schedule A and found them to be in agreement.

2. We compared the amounts of "Part 36 Interstate Separations" to a management report that separates the "Difference Actual Versus Profile" amounts between the interstate and intrastate components and found them to be in agreement.

3. We compared the "Part 69 Application to Access Elements" to a management report that allocates the "Part 36 Interstate Separations" between the "Common Line," "Traffic Sensitive," "Special Access," and "Inter-Exchange" components and found them to be in agreement.

4. We compared the amounts of "Total Balance Sheet" and "Total Income Statement" for the "Difference Actual Versus Profile" to amounts presented in Schedule A and found them to be in agreement.

5. We determined that Schedule C was mathematically accurate.

Because the procedures we performed were not sufficient to constitute an audit in accordance with generally accepted auditing standards, we do not express an opinion on the accompanying Schedules referred to above. In performing these procedures, however, no matters came to our attention that caused us to believe that such schedules should be adjusted. Had we performed additional procedures, matters might have come to our attention that would have been reported to you. This report relates only to the items specified above, and does not extend to BellSouth Corporation's financial statements taken as a whole for any date or period.

Yours truly,

SCHEDULE A

BELLSOUTH TELECOMMUNICATIONS, INC.

SCHEDULE OF THE PART 32 REPORTING IMPACTS RESULTING FROM THE IMPLEMENTATION OF THE WORK ACTIVITY STATISTICAL SAMPLING PROCESS IN THE STATE OF ALABAMA FOR THE MONTH OF JANUARY 1993

Part 32 Account	Reported Dollars	Profiled Dollars	Difference
Balance Sheet			
2123	$ 73,228	$ 44,658	$ (28,570)
2124	118,053	92,730	(25,323)
2220	395		(395)
2232	49,079		(49,079)
2341	5,343		(5,343)
2362	37,215	40,140	2,925
2411	117		(117)
2421	272,482	312,308	39,826
2422	6,606		(6,606)
2423	147,564	171,249	23,685
2426	303		(303)
2431	11,783	19,635	7,852
3100	22,574	17,006	(5,568)
Total	$ 744,742	$ 697,726	$ (47,016)
Income Statement			
6116	$ 751	$ 1,060	$ 309
6123	57,210	103,218	46,008
6124	118,061	92,511	(25,550)
6211	1,199		(1,199)
6212	14,620	14,544	(76)
6231	5,086		(5,086)
6232	294,236	513,264	219,028
6311	7,681	25,553	17,872
6341	6,486	824	(5,662)
6351	161,078	156,985	(4,093)
6362	1,337,298	1,312,138	(25,160)
6411	541		(541)
6421	2,123,816	2,016,495	(107,321)
6422	164,625	159,100	(5,525)
6423	1,845,905	1,806,205	(39,700)
6424	849		(849)
6426	12,080	13,182	1,102
6431	21,638	14,907	(6,731)
6441	73		(73)
6512	863	3,616	2,753
6533	906		(906)
6534	761,002	749,477	(11,525)
6728	59		(59)
Total	$6,936,063	$6,983,079	$ 47,016

SCHEDULE B

BELLSOUTH TELECOMMUNICATIONS, INC.

SCHEDULE OF THE PART 64 REPORTING IMPACTS RESULTING FROM THE IMPLEMENTATION OF THE WORK ACTIVITY STATISTICAL SAMPLING PROCESS IN THE STATE OF ALABAMA FOR THE MONTH OF JANUARY 1993

Description	Part 32 Account 6362 Reported Dollars	Profiled Dollars	Difference
Nonregulated	$ 969,117	$ 950,001	$ (19,116)
Regulated	368,181	362,137	(6,044)
Total Account 6362	$1,337,298	$1,312,138	$ (25,160)

SCHEDULE C

BELLSOUTH TELECOMMUNICATIONS, INC.

SCHEDULE OF THE PART 36 INTERSTATE REPORTING IMPACTS AND THE PART 69 APPLICATION TO ACCESS ELEMENTS RESULTING FROM THE IMPLEMENTATION OF THE WORK ACTIVITY STATISTICAL SAMPLING PROCESS IN THE STATE OF ALABAMA FOR THE MONTH OF JANUARY 1993

Part 32 Account	Difference Actual Versus Profile	Part 36 Interstate Separations	Part 69 Application To Access Elements			
			Common Line	Traffic Sensitive	Special Access	Inter-Exchange
Balance Sheet						
2123	$ (28,570)	$ (5,763)	$ (1,597)	$ (3,067)	$ (1,095)	$ (4)
2124	(25,323)	(5,108)	(1,415)	(2,719)	(970)	(4)
2220	(395)					
2232	(49,079)	(16,883)	(5,522)	(7,431)	(3,927)	(3)
2341	(5,343)	(1,299)	(1,298)		(1)	
2362	2,925	711	711			
2411	(117)	(29)	(26)	(1)	(2)	
2421	39,826	9,785	8,691	433	661	
2422	(6,606)	(1,623)	(1,441)	(72)	(110)	
2423	23,685	5,819	5,168	258	393	
2426	(303)	(74)	(66)	(3)	(5)	
2431	7,852	1,929	1,714	85	130	
3100	(5,568)					
Total Balance Sheet	(47,016)	(12,535)	4,919	(12,517)	(4,926)	(11)

SCHEDULE C
(Continued)

BELLSOUTH TELECOMMUNICATIONS, INC.

SCHEDULE OF THE PART 36 INTERSTATE REPORTING IMPACTS AND THE PART 69 APPLICATION ACCESS ELEMENTS RESULTING FROM THE IMPLEMENTATION OF THE WORK ACTIVITY STATISTICAL SAMPLING PROCESS IN THE STATE OF ALABAMA FOR THE MONTH OF JANUARY 1993

Part 32 Account	Difference Actual Versus Profile	Part 36 Interstate Separations	Part 69 Application Access Elements			
			Common Line	Traffic Sensitive	Special Access	Inter-Exchange
Income Statement						
6116	$ 309	$ 63	$ 35	$ 21	$ 7	
6123	46,008	9,514	2,640	5,056	1,811	$ 7
6124	(25,550)	(5,284)	(1,466)	(2,809)	(1,005)	(4)
6211	(1,199)	(285)	(64)	(176)	(45)	
6212	(76)	(18)	(4)	(11)	(3)	
6231	(5,086)	(1,216)	(270)	(752)	(193)	(1)
6232	219,028	52,348	11,658	32,356	8,292	42
6311	17,872	1,968	1,966		2	
6341	(5,662)	(623)	(623)			
6351	(4,093)	(451)	(451)			
6362	(25,160)	(2,770)	(2,768)		(2)	
6411	(541)	(133)	(118)	(6)	(9)	
6421	(107,321)	(26,369)	(23,424)	(1,165)	(1,780)	
6422	(5,525)	(1,357)	(1,205)	(60)	(92)	
6423	(39,700)	(9,755)	(8,666)	(431)	(658)	
6424	(849)	(208)	(185)	(9)	(14)	
6426	1,102	271	241	12	18	
6431	(6,731)	(1,654)	(1,469)	(73)	(112)	
6441	(73)	(18)	(16)	(1)	(1)	
6512	2,753	631	397	169	65	
6533	(906)	(202)	(123)	(58)	(21)	
6534	(11,525)	(2,570)	(1,571)	(735)	(263)	(1)
6728	(59)	(13)	(7)	(5)	(1)	
Total Income Statement	47,016	11,869	(25,493)	31,323	5,996	43
Total Accounts	$ -	$ (666)	$(20,574)	$18,806	$ 1,070	$32

94

DFT

Report on Alabama,

B 12/9/93

COMPANY: BST
TITLE: DISPATCH PROCESS
PERIOD: TYE 12/31/93
DATE: DEC 9, 1993
AUDITOR: RKY

WP NO.

1. DISPATCH

PSC staff was provided with the practice for "Adjusting Dispatch Weights using ADW and DPVAL. This on on wp NO. 45-6.

From out observation and review, Staff determined that controls were needed in the Mapper, and for the person who changes the weights in the Mapper system.

Mapper:

Per answer to Req 9, Attchment 4, the company states that Mapper has no knowledge of who the sampled technicians are. 45-5 This needs to be confirmed in an audit of mapper itself.
Also, troubles cannot be predetermined as regulated or nonregulated when going into Mapper. Although, there is a description, the public is not always knowledgeable as to what is regulated and deregulated. Also, there may be a problems that looks regulated, but turns out to be deregulated or vise versa. 45-5

Person who changes the weights: (Control Dispatcher)

In an interview with Roberto Suarez, Manger, Network Support, Steve Shaw, Staff, Manager, Network Support and Earl Mergelberg, Staff Manager, Network Support, the following was determined:

I asked hypothetically if a service tech and a control dispatcher could get together and somehow have the dispatcher only give him reg jobs of if the dispatcher knew he was in the sample and weight all the reg jobs heavily so that he could have a better change of getting a reg job.

45-4 The Company answered as follows: The Control Dispatcher is not in the flow of the system of the service tech, they do not know who is sampled. This needs to be
There is no mechanical separation for a quick see of reg and dereg in the system. The control dispatcher would have to look at each one separately and when he has 500 to 600 in the system, it is not possible to start selecting certain jobs and weighting them differently.

The Dispatcher sets commitments and is responsible to meet these commitments. If the weights are changed, he might not meet commitments.

If commitments are not met, there are huge fines by the PSC.

In answer to PSC Request No. 3, the company stated that there was no recommended weighting policy, each IMC determines their own based on the needs of that center. 45-3 p 2

1 of 2 96

COMPANY: BST
TITLE: DISPATCH PROCESS
PERIOD: TYE 12/31/93
DATE: DEC 9, 1993
AUDITOR: RKY

12/14/93

WP NO. 45

1. DISPATCH

GENERAL OVERVIEW

In order for the service technicians to get their work, the following process occurs:

Requests for telephone service (service orders) go through a system called SOCS and requests for maintenance go through a systems called LMOS. (Service Order Communications System -- Loop Maintenance Operations Systems)

The input into SOCS and LMOS go into Mapper and are dispatched to the technician from Mapper via the technicians's Computer Access Terminal (CAT), which they carry around with them. Work completed dispatched through Mapper are documented on the Display Craft Work Summary (DCWS)

45-1

Requests for Designed Circuits go through SOCS and requests for maintenance of designed troubles go through Work Force Administration Control (WFA-C).

The input here for service orders of Designed ciruciuts and maintenance of these are dispatched through a system called RADS -6 (Route and Dispatch System and the technician receives via the CAT.

PSC staff visited the customer service office and observed how orders are taken and put into SOCS. Staff visited the Customer Repair Service Analysis Bureau where trouble are taken and input into LMOS. Then staff visited an Installation and Maintenance Center (IMc) where service orders and troubles are dispatched from. Staff did not visit the office where the RADs dispatch system is.

FACTS:

A detailed descirption of the visits is on wp No. 45-2.
The following questions and answers regarding controls resulted from these visits and observations.

The service orders and troubles are dispatched out of Mapper. According to Answer to Req 9, atttachment 4, Mapper is a system developed and maintained by ATT. 45-5

In our interview with John Long we were told that the troubles and service orders are weighted in the computer system and this determines how they are dispatched out. When a service tech dials in from his terminal he gets the next weighted job based on certain criteria. Criteria are on WP no. 45-2.1 p 3.

Cont pg 1

97

COMPANY: BST
TITLE: DISPATCH PROCESS
PERIOD: TYE 12/31/93
DATE: DEC 9, 1993
AUDITOR: RKY

WP NO.

1. DISPATCH

All management personnel within the IMC have the ability to adjust weights if necessary.

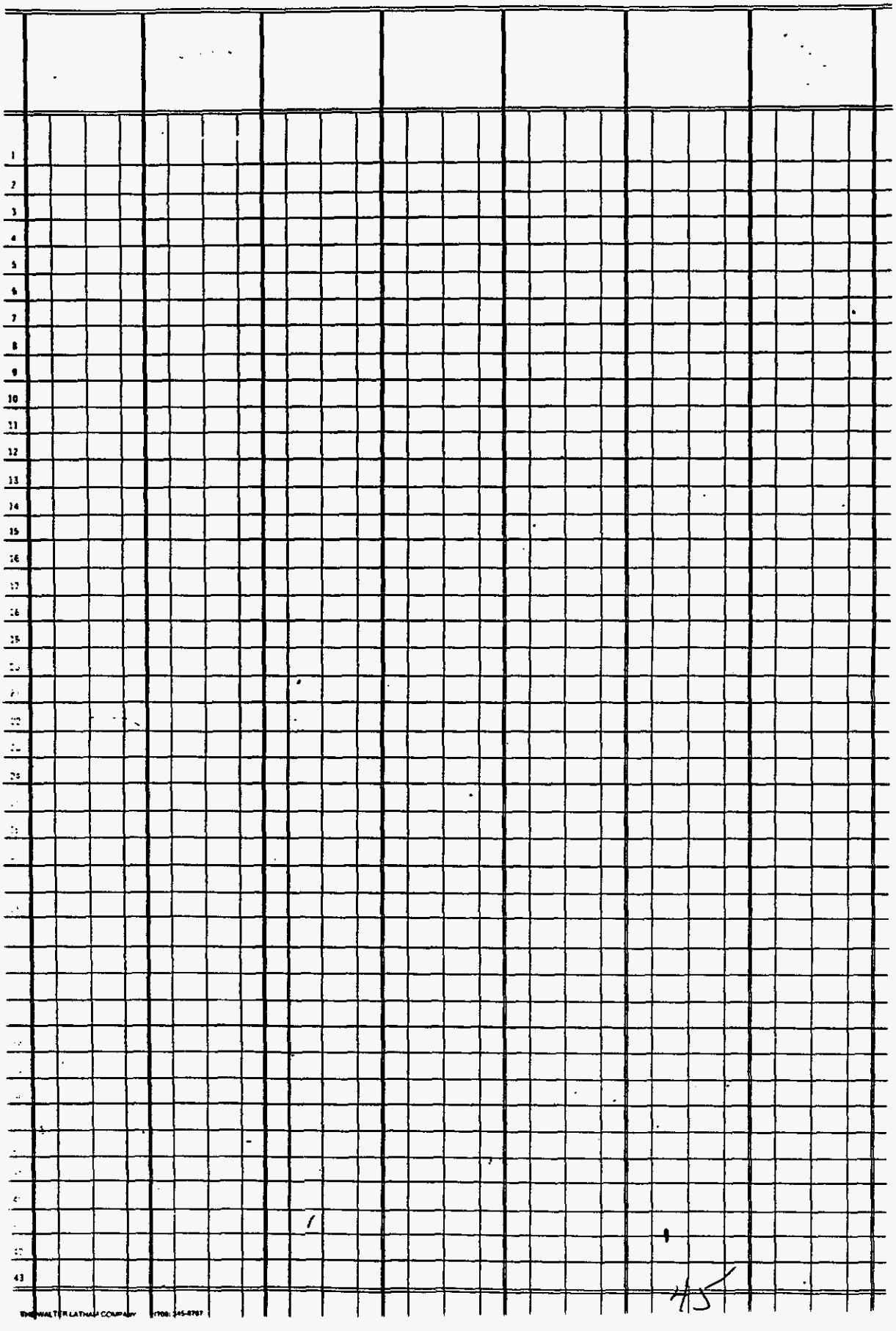
Also, IMC is not concerned with which techs are in the sample basis, jobs are not categorized in the Mapper as reg or dereg; therefore changing weight factors cannot bias the sample.

In answer to Req. 9,Attachment 4, the company stated: "The company must have the ability, for operational efficiency reasons, to assign work to particular tech or groups..." Also "the company must have the necessary flexibility in order to meet the needs of the business." Examples and scenarios of why are provided by the company and are on wp no. 45-5.

Another control is "... a Supervisor of the technical analysts as well as a Management Control Position ..review the profiles as developed by the WASSP process for reasonableness and investigate and resolve any anomalies." 45-5

CONCLUSION:

Based on my observations of the system and being in the field, it appears that there is reasonable assurance that the dispatch system cannot bias the sample. (the system does not know which service techs are being sampled and the system according to the company does not have the capability to separate reg and dereg work). It also appears that even though the weights can be changed without any approval, it is necessary to do this for flexibility in the field to serve the customer. Results of the profiles of the sample could display any unusual circumstances that need to be checked.



6/30/93 PSC
BST Reply

Items 4 & 5

Input → Input →

Requests for provisioning on Plain Old Telephone Services (POTS), Non Designed Special Services and Public Communications (Coin) are input into SOCS which is the Service Order Communications System. Requests for maintenance on these same services are input into LMOS which is the Loop Maintenance Operations System.

Dispatch →

The Service Order requests (provisioning) and trouble reports (maintenance) for those services input into SOCS and LMOS are dispatched out of MAPPER and received by the technician via their Computer Access Terminal (CAT).

Work Completed for those services dispatched through MAPPER are documented on the Display Craft Work Summary (DCWS).

Request for provisioning of Designed Circuits are input into the Service Order Communications System (SOCS). Requests for maintenance on Designed Troubles are received through the Work Force Administration Control (WFA-C). These services are dispatched through the Route and Dispatch System - 6 (RADS-6), and received by the technician via their Craft Access Terminal (CAT).

Work completed for those services dispatched through RADS are documented on Field Work Tickets 6571.

B&T
Input + Despatch
WASSP

RB 12/3/93

KW 12/14/93

RB

45-1

COMPANY: BST
TITLE: OBSERVATIONS OF WORK AT DIFFERENT OFFICES AND OBSERVATIONS OF SERVICE TECH WORK
PERIOD: TYE 12/31/93
DATE: NOVEMBER 29, 1993
AUDITOR: RKY

RKW 12/14/93

WP NO. 45-2

MONDAY, NOV. 22

1. Visited customer service office where orders are taken.
Sat with service rep and listened in on how they take a service order or any other request that they get.

All the information for new service orders or new feature orders is put into computer (SOCS) and sent to where the information is used to put the services in order.

Their input goes to the Installation and Maintenance Center (IMC) where it is then dispatched out of Mapper. See below.

2. Visited Customer Repair Service Analysis Bureau (CRSAB).
Sat with customer repair rep and listened in on how she handled repair calls and enters into system.

Each trouble goes through an automatic MLT test which does 42 tests on the line. Company personnel said that about 50% of the troubles do not go to dispatch and are fixed in the Central Office.

Those troubles that need human touch go to the IMC into the LMOS system where it is then dispatched out of Mapper. See below.

The CRSAB is open 24 hours.

3. Visited an IMC where the troubles are dispatched from.

Before describing how the trouble are dispatched, explain how the Service Techs get the troubles.

Each service tech has a hand held computer access terminal on his person. He dials into the terminal and a repair job automatically comes up on the terminal giving him information on where and sometimes what the problem is. Most service techs go directly from their home and some go to the Maintenance Center before going in the filed.

How are the troubles dispatched? SOCS and LMOS input -- Dispatched out of Mapper.

Interview with John Long, System Administrator at the IMC.
Steve Shaw, Staff Manager, Miami
Rick King, Manager, Comptrollers, Birmingham
Steve Venderberg, Manager, Comptrollers, Brimingham

COMPANY: BST
TITLE: OBSERVATIONS OF WORK AT DIFFERENT OFFICES AND OBSERVATIONS OF SERVICE TECH WORK
PERIOD: TYE 12/31/93
DATE: NOVEMBER 29, 1993
AUDITOR: RKY

WP NO.

There are six categories of dispatch in the maintenance office.

1. General Residence TRoubles
2. General Business TRoubles
3. general residence service order
4. general business service order.
5. special circuits (network tech)
6. cable dispatch.

The troubles and service orders are weighted in the computer system and this determines how they are dispatched out. When a service tech dials in from his terminal he gets the next weighted job.

There are 5 categories of service techs.
Three categories dispatched from LMOS (POTS 1,2,3,4 above), Cable (6 above) and Coin (not listed above). There are 2 categories dispatched from RADS. Special Circuits (network tech) and System Technicians (these people work on BST only).
PSC staff did not look at RADS dispatch system.
How are the troubles and service orders weighted? Weighted to provide the best possible serivce. Each district weights differently.

How many district offices are there in Florida? name them.
Provide general weighting for the district office we observed.
Provide general weight for all offices in Florida.
Explain how the general weighting is determined
Explain how the general weighting can be changed. What procedures in each office.
Explain how the weighting can be changed manually how in each office.
Who has accesss to the system in each office to change weights.
What controls are in place so that no one person can change weighting.
Do they get reports of which have been changed and follow up if reasonable. Provide reports. If not, recommend follow up.

As explained takes a big deal to change the general weighting The Control supervisor has to talk to the Manager, and Staff manager before makes a change in weights. The Control supevisor, Assistant Manager and Manger has access to the system.

It was also explained to us that in this office, one person Rocky put on weights on the hottest items. The small stuff he does alone.

Can change weight on the RTE Mask on the bottom.

COMPANY: BST
TITLE: OBSERVATIONS OF WORK AT DIFFERENT OFFICES AND OBSERVATIONS OF SERVICE TECH WORK
PERIOD: TYE 12/31/93
DATE: NOVEMBER 29, 1993
AUDITOR: RKY

WP NO.

The two sections are as follows as far as disptach and weighting.
For the service tech:
1. What you do by title?
2. Where you are? area.

For the types of troubles and Service Orders.

1. What work need to get done.
    a. title
    b. priortiy within a geographic area
        1. irate customer
        2. type of customer -- illness
        3. poles down or wire tap
        4. time to commitment
        5. distance to home
        6. subsequent reports, calls twice on same trouble.

        weights build all by themselves.

The logistics of how the computer works? ATT computer programs in three large volumes --week long course.

How can this be maneuvered so that it can bias a sample? Example, if the control supervisor knew a service tech was in the sample and that service tech was in a certain area, he would weight all the regulated jobs higher than the nonregualted jobs in the area for that week, giving the service tech a better chance of pulling up a regulated job on his computer access terminal. Can this happen? What controls are in place so this doesn't happen? Service Orders area of concern. Maybe make recommendation, need more controls. — See Consumer 45-4

TUESDAY, NOV 23

Went to Maintenance Center to meet service technician to ride with him. Daniel Martin.

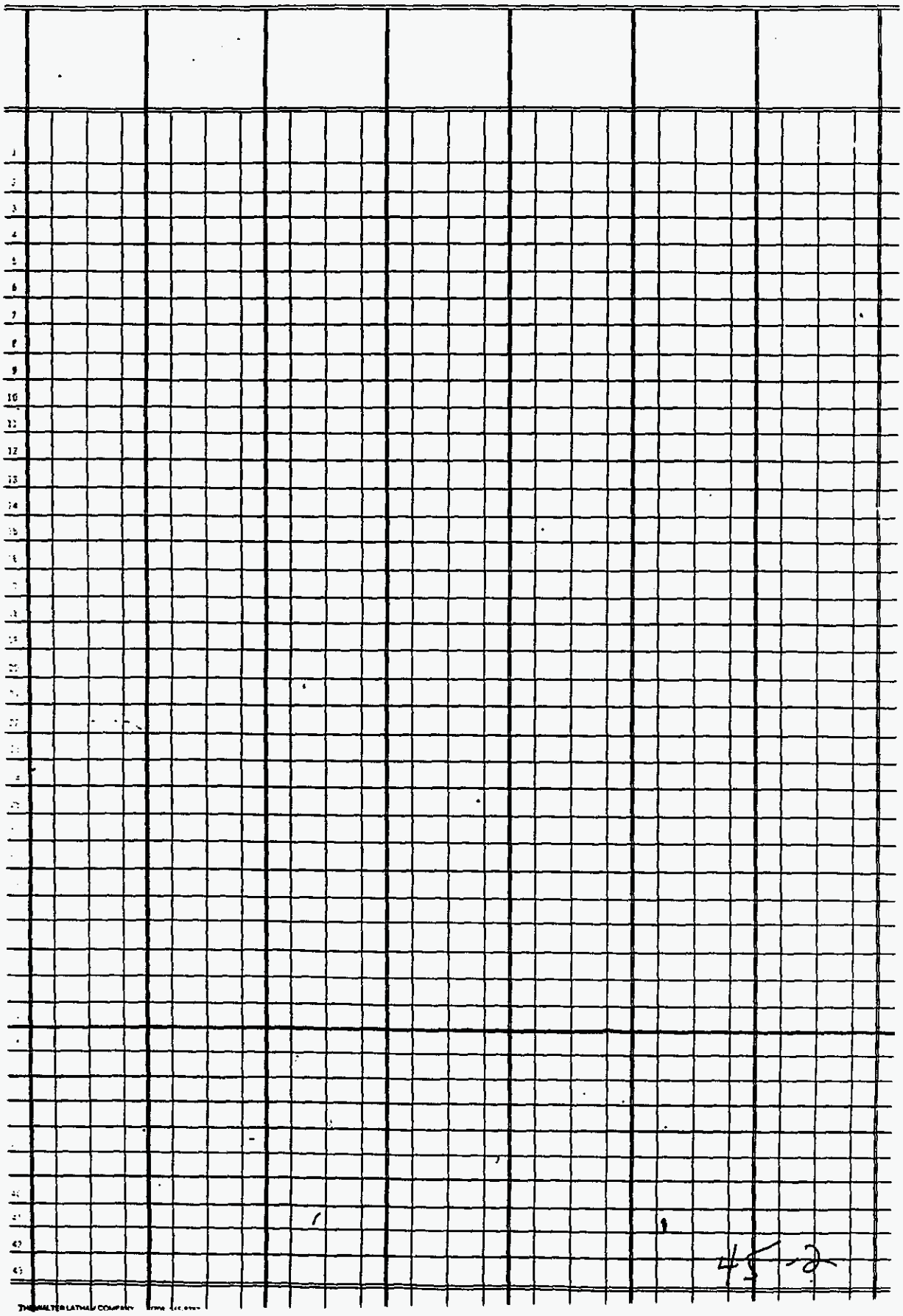
he accessed his first job through the Computer Access Terminal (CAT). Itwas a service order and had to go to the cross box in the street, then to the meter room in the nursing home where the service order was requested. Went to the room of the person involved.
Went back to cross box and back to meter room. Service installed.
Used CAT to test that service was OK.

Charged all time to cable time 45M and charged it to meter room 68B on his time sheet.

Then he filled out the sample form on which he checked off what he did.

104

(3)



WASSP REQUEST 3

11/30/93

PROVIDE BY 12/3/93

Re: Weighting of Dispatch items.

A. Please list the IMC offices in the state of Florida.

b. Provide general weighting for each IMC office

C. Explain how general weighting is determined for each office.

D. Explain how general weighting can be changed using the computer generated system. What procedures in each office. Document if available.

E. Explain how the weighting can be changed manually in each office. What procedures in each office. Document if available.

F. Who has access to the system in each office to change weights:
Who changes and who approves.
Names and positions.

1. general wighting through the computer
2. manaual changes.

G. What controls are in place so that no one person can change weighting? Document if available.

H. Are there reports of changes in weighting, either manual or computer. Is If so provide for the IMC office I visited for the month of October. If there are reports, is there a follow up review to determine if the change in weighting is reasonable?

If there are no reports for changes in weighting, is there any type of follow up for the changes that take place to determine if they are reasonable?

I. In our visit to the IMC center in Miami, we were told that it takes a big deal to change the general weighting. The control Supervisor has to talk to the Manager and Staff Manager before makes a change in weights. We were also told that in that office one person put on the weights, that is the control supervisor. He also can change certain "hot" items himself without approval. Please explain what "hot" items means.

J. Referring to I above, please answer the following hypothetical question:

If the Control supervisor knew a service tech was in the sample and that service tech was in a certain area, he could weight all the regulated jobs higher than the nonregulated jobs in the area for that week, giving the service tech a better chance of pulling up a regulated job on his comupter access terminal. Can this happen? What controls are in place so this doesn't happen?

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FPSC request3

RE: Weighting of dispatch items

a.

North Dade	West Palm Beach
South Dade	Indian River
Central Dade	Gainseville
South Broward	Jacksonville
North Broward	Orlando
Coastal	West Florida

b. There is no Company recommended weighting policy.

c. Each IMC determines its' own weighting based on the needs of the business.

d. There is no programmable computer generated methods to adjust weights.

e. Weighting can be changed manually in each office via the ADW or RTE/ITE transaction. Each office has local procedures regarding weight adjustment. There is no Company recommended weighting policy.

f. All management personnel within the IMC have access to change weights. Weight changes are generally performed by the control supervisor. No approvals are necessary, changes are made by management personnel.

1. As stated in d. above there is no computerized method to adjust weights.
2. Manual changes are generally performed by the control supervisor position.

g. All management personnel within the IMC have the ability to adjust weights if necessary based on the needs of the business.

h. There are no reports generated or maintained on weight changes.

i. Hot items are those reports that generally require an immediate dispatch due to circumstances surrounding the report, ie; medical emergency, line in road, etc.

j. IMC is not concerned with which technicians are in the sample base. In addition, jobs are not categorized as regulated or deregulated in Mapper. Therefore weight factors cannot be used to determine regulated or deregulated work items.

BSP
Rey 3

KW 12/14/93
B 12/3

4/5-3

INTERVIEW WITH

ROBERTO SUAREX, MANBAGER, NETWORK SUPPORT
STEVE SHAW, STAFF MANAGER, NETWORK SUPPORT
EARL MERGELBERG, STAFF MANAGER, NETWORK SUPPORT.

THESE THREE PEOPLE ARE THE IMPLEMENTATION STAFF FOR WASSP FOR 3 GEOGRAPHIC AREAS.

Rick King and Steve Venderberg are the core staff for Brimingham.

Wassp not controlled by network. Controlled by comptrollers, and implemented by network.

Earl supports the dispatch function.

The Supervisor said that John Long who we had our interview with at the IMC was not the supervisor of the office and he might have led us astray in some of his answers and he wanted to clear that up.

When the Service Orders and trouble come int• MAPPER they are not weighted yet. Mapper will plot mechanically for geographic location then then go through the algorythms in the system based on the ADW (weighting) criteria.

The algorythms stay the same, but the factors are changed. The person who changes the factors is the Dispatch Control Supervisor. I asked how he knows what to put in the system. Based on trial and error in experience in the MAP. Most changes are geographic locations. Controls for changes in weighting. There are no standards -- no reports. Depends on dispatch area, different points for different areas.

For example, will weight residence heavily starting at 8 in the morning because business is not open yet. Then at 9 or 10 will change the weight to businesses because they are open.

The weights. Controls how far somebody will drive. Weekends are different. The Dispatch Control Supervisor, sets up each AM or the night before. The dipatch is from 7 to 7. The priority is to make all commitments set.

John Long said that when any change in weighting need manager and asistant manager (not right. found out later)

The Dispatch Controls Supervior's job is to clean up the MAP, do today's work today. He does not need manager or assistant manager to change weights. Have to change weights according to what is happening in the field.

I asked about checks and balances -- missed appointments. They have to meet the Commission rule on commitments. And have to report all missed appointments. Report goes to Tallahassee.

(1)

INTERVIEW WITH
INTERVIEW WITH

ROBERTO SUAREZ, MANAGER, NETWORK SUPPORT
STEVE SHAW, STAFF MANAGER, NETWORK SUPPORT
EARL MERGELBERG, STAFF MANAGER, NETWORK SUPPORT.

THESE THREE PEOPLE ARE THE IMPLEMENTATION STAFF FOR WASSP FOR 3 GEOGRAPHIC AREAS.

Rick King and Steve Venderberg are the core staff for Brimingham.

Nature of Repairs:
Company says people who call in really don't know the nature of repairs. Sometimes they say it is inside and it is really outside and vice versa.

If the Company really knew what the exact problems were, then they could have separate groups for reg and nonreg work.

Explanation of DAA and AA.

DAA are Dispatch Administrative Areas. Each supervisor is assigned a "home DAA". A supervisor could have more than one DAA. It is a geographical area broken into DAA.

Each DAA is broken doesn into AA. Allocation Areas are a cross box area. There may be two cross boxes in an AA. They could be 1 to 25 AA's in a DAA. The DAA and AA's are assigned based on trouble history. The ares are change and numbers are changed depending on where the trouble are. Needs a daily look on factors in society. Cannot be aset guidline because it changes every day.

The Mapper systems is used nationally-- since 1978 here in Florida.

I asked if a service tech and a control dispatcher could get together and somehow have the dispacther only give him reg jobs or if the dispatcher knew he was in the sample weight all the reg jobs heavily so that he could have a better chance of getting a reg job.

Company said that if a service tech were to do only reg work, it would set the system awry. There are 500-600 jobs pending a day, not really possible to look at picture of each trouble or service order to reset weight. The dispatcher is responsible to make his commitments.

The control dispatcher is not in the flow of the system of the service tech, they do not know who is sampled.

Also, there is no mechanical separation for quick see of reg and dereg. Also the information in the system could indicate it is a reg job and when the service tech gets out there it is a dereg job. The public does not know all the time what is reg and dereg. the data put in the system is not absolute.

Cont

INTERVIEW WITH

ROBERTO SUAREX, MANBAGER, NETWORK SUPPORT
STEVE SHAW, STAFF MANAGER, NETWORK SUPPORT
EARL MERGELBERG, STAFF MANAGER, NETWORK SUPPORT.

THESE THREE PEOPLE ARE THE IMPLEMENTATION STAFF FOR WASSP FOR 3 GEOGRAPHIC AREAS.

Rick King and Steve Venderberg are the core staff for Brimingham.

The Dispatcher is also responsible for setting the commitment.

The Company says there are huge fines for not making commitments. The dispatcher is highly concerned with comitments.

Per Company
If the Factors are changed via the ADW, that is if adjust one fact in AdW, all the jobs in the Maintenance Center will change, all jobs will change because of this factor.

If the factor is changed in a mask via RTE/ITE -- the only factor that can be changed for one job is the Priority. Can access a job and change the priority factor. This will not change any other job in the center.

When asked again if the dispatcher could talk to a ST and set the reg jobs at higher priority, company said would have to know the phone number anmd pull up the job and then change priority. There are 500-600 jobs scheduled in a day, would take a lot of time to look up each job individually and change the priority.

Cont

BSP
Interview w/ Network Support

RW
12/14/93 12/3

45 -4

112

BELLSOUTH TELECOMMUNICATIONS

Controls To Prevent "Pre-Determination" of Work Performed by Outside Technicians

Most troubles are dispatched mechanically via Mechanized Mapper Assignment (MMA), a system developed and maintained by AT&T. The MMA system uses the following criterion for assigning technicians to troubles: 1) Time to commitment 2) Distance to Job 3) Distance to Home 4) Out of Service 5) Subsequent Jobs 6) Priority. The System maintains all appropriate information relating to technicians based on Assignment Areas (AAs), in order to maximize assignment efficiences.

When the technician "logs in" for an assignment, MMA selects the most desirable job available based on all the criterion described above.

RESIDENT CONTROL: MMA has no knowledge of who "sampled" technicians are. This needs to be confirmed by an audit of MAPOR itself.

With the exception of certain nonregulated troubles reported (such as "jack out of wall"), customer troubles cannot be identified as regulated or nonregulated at the time of dispatch. Generally, the type work needed to be performed to clear the trouble will not be known until the technician begins the job assignment. All instances of reported trouble are screened to the greatest extent possible, and the company dispatches a technician only when other efforts to clear the condition are not successful. Therefore, as stated above, trouble conditions are usually unknown at the time of dispatch.

RESIDENT CONTROL: Troubles cannot be predetermined as regulated or nonregulated.

The Company must have the ability, for operational efficiency reasons, to assign work to particular technician(s) or technician group(s). Some examples of why and when the company uses this assignment method are as follows:

Not all technicians are as qualified to do all

113

Conf Conf (1)

types of work as others. A Services Technician should not be dispatched to repair a cable cut on a 200 pair cable. It is much more efficient for a Cable Repair Technician to do this work.

There are instances where work on a particular job is incomplete at the end of a work day. In many of these instances, it only makes good business sense to have the same technician complete this work because of knowledge of the existing job. So, the company must be able to pre-assign this task.

Certain technicians have expertise on certain types of facilities as well as for certain customers. As an example, a technician might be assigned to do all work for a large airport due to the unique knowledge required. The company must have the ability to assign this technicians work uniquely.

4/5-5
1

In the event of disasters such as hurricanes or floods, the company must be able to assign work in "bulk" in order to restore service as quickly as possible.

The technician must have the ability to remove a job if circumstances dictate. For example, if a technician receives a trouble at 8:00 and in the remarks section the order says "access after 1:00", the technician would call the Maintenance Center to have this job reassigned for efficiencies sake. However, in these instances, the source documentation received by the technicians' supervisor as well as the technical analysts in the WASSP center would indicate each job that has been removed. These removed jobs are subject to review by the analysts as well as supervisors.

As displayed above, the company must have this necessary flexibility in order to meet the needs of the business.

RESIDENT CONTROL: None of the involved systems or individuals have knowledge of which technicians are selected for the sample.

114
(2)
Conf

As an additional control, the company has in place a Supervisor of the technical analysts as well as a Management Control Position, who each review the profiles as developed by the Work Activity Statistical Sampling Process for reasonableness and would investigate and resolve any anomalies.

115

Conf (3)

DSS

10/3/13

Wassp Request 6

11/30/93

PROVIDE BY 12/3/93

Re: Bulk Dispatch

Please explain "bulk" Jobs. Explain and give examples on how this does ot distort the sample. Are bulk jobs dispatched through the CAT? If so, how? If not, how dispatched.

n/c.

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45-5 p1

1

FPSC Request 6

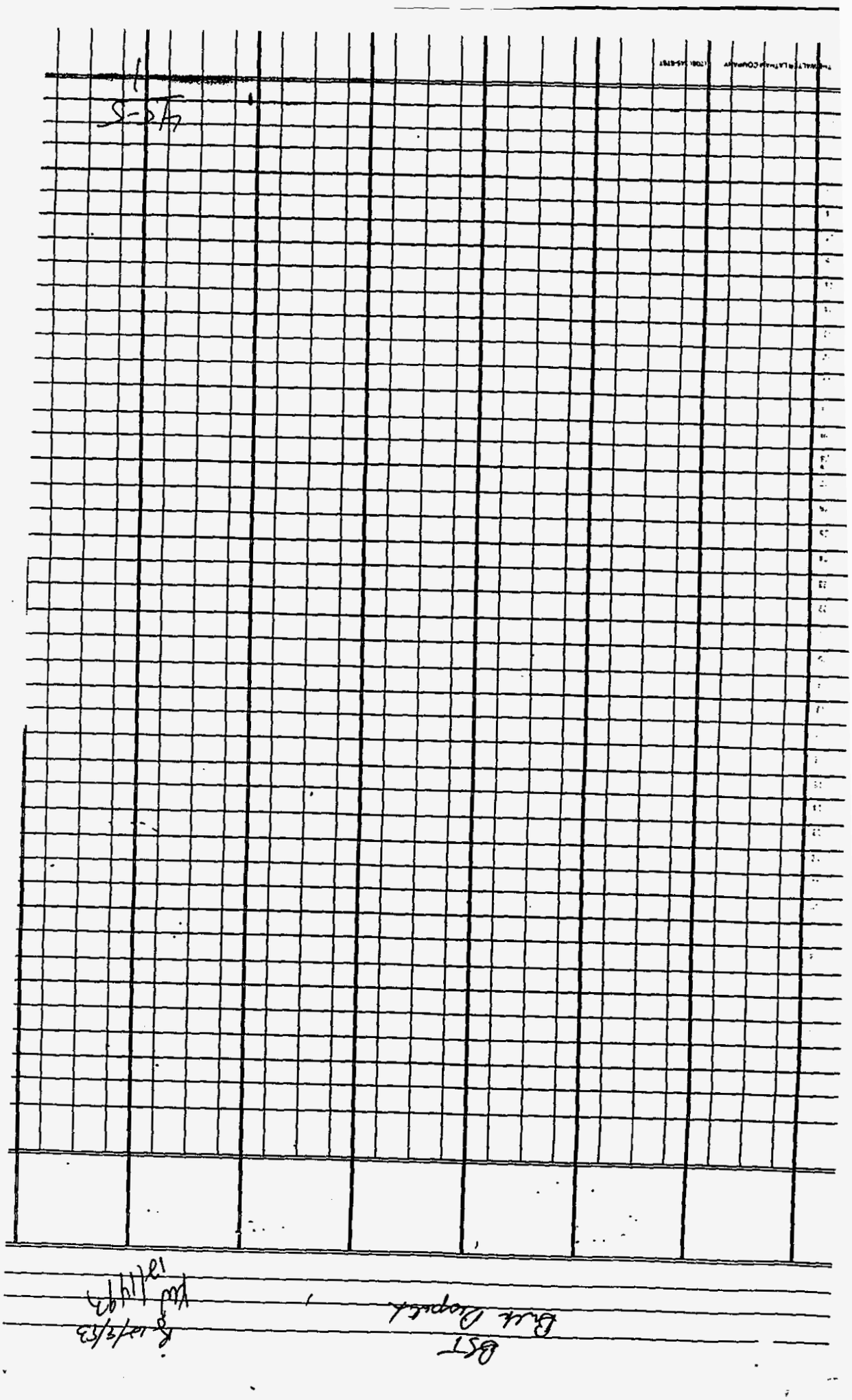
BULK JOBS

"Bulking" of jobs is a method of efficiently dispatching technicians on more than one job at a time in order to reduce unnecessary travel between jobs by mechanically selecting jobs in close proximity to one another. The bulking of technicians is mechanized. Jobs that are bulked to technicians are dispatched through the CAT terminal.

Bulking cannot distort the WASSP sample. There is no category of regulated or deregulated work items. The Bulk program determines which jobs to assign technicians based on (1) which DAA has the most work, (2) which AA has the most work, and (3) common FZ (final distribution facility). The local IMC can also add a additional sort item for service orders based on customer request of morning or afternoon appointments.

45-5 p2

118



nfe_mmagen.adw_oper

PBC

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

INTRODUCTION With LMOS 11/70 Generic 3, the Mechanized Mapper/Assigner (MMA) features were introduced, which enabled LMOS to automatically determine and dispatch the best job for a craft. In addition, it also provided report capabilities to monitor the dispatch process, and several transactions allowing the area control supervisor to control the job selection process.

The MMA dispatch job selection formula is controlled by each dispatch Management Center (MC), or Super dispatch MC for their own craft force by means of the ADW - Assign Dispatch Weights transaction, as described in the section entitled "The ADW Transaction - Assign Dispatch Weights" (nfe_mmagen.adw). This transaction lets you assign parameters, and set flags which determine how jobs are assigned to your craftpersons.

The DPVAL report allows the user to see the numerical results of applying the job selection formula to a set of work items and the results of changing them. It is described in the section entitled "DPVAL Report - Display Dispatch Values" (nfe_rcmd.dpval). The "TOTAL" column on the report provides the values that result from running the dispatch algorithm on each work item. The job that has the largest value in this column is the job that would be dispatched to a craft now if she/he were dispatched from the location specified on the report.

Changes in the controlling parameters can be implemented at any time, and become effective immediately. The settings of these parameters will affect the efficiency of your MC. Therefore, it is important that the effects of changing the parameters are well understood by the MC management.

This guide provides an overview of the effect of changes to the ADW parameters, and explains how changing any parameter affects the operations of the entire center. Several basic examples are given to demonstrate the results of changing them on the operation of the system. This document concludes with a brief section explaining one way that group turfs can be used to increase dispatch efficiency.

JOB SELECTION PARAMETERS There are two kinds of entries on the ADW mask. The first tells the system which jobs to consider for dispatch and whether to test the line of the job that is dispatched, while the second defines the weights for the algorithm that determines which one of these jobs is actually dispatched. Figure 1 shows a typical ADW mask, as it would look on your screen. The options that control which jobs will be considered and the testing options are:

- TEST ON DISPATCH?
- TEST ON RETURN?
- TIME DELTA?

120

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

```
ADW      MC 170      EC 170                                  01-08-87 1059A

   DISPATCH PARAMETERS                          EXIST. WGT   NEW WGT
       ESTIMATED COMPLETION TIME                   150
       ACCESS WINDOW INCREMENT                       0
       DISPATCH PARAMETER WEIGHTS
         TIME TO COMMITMENT                        100
         DISTANCE TO JOB                            36
         DISTANCE TO HOME                            7
         OUT-OF-SERVICE                             80
         SUBSEQUENTS                                40
         PRIORITY                                   40
         JOB TYPES:
            PDO 0 PDF 4 PDM   PDG 0 PDS 0 PDC 0
            PDB 6 PD2 0 PD3 0 PD4 0 PD5 0      PWS • PWF •

   DISPATCH SELECTION AND TEST OPTIONS
      TURF DISPATCH  N                      WITH I OPTION? N
      CONSIDER FUTURE COMMITMENTS Y         WITH APPOINTMENTS? N MIFI? N
      TEST ON DISPATCH? N                   TEST ON RETURN? N

   TIME DELTA 0
```

Figure 1. A typical ADW mask

- TURF DISPATCH? (New in G2)
- WITH I OPTION? (New in G2)
- CONSIDER FUTURE COMMITMENTS? (New in G2)
- WITH APPOINTMENTS? (New in G2)
- MIFI? (New in G2)

These entries will NOT be discussed in this document, since they do not numerically affect the dispatch formula. They are discussed in nfe_mmagen.adw, however. The other entries on the mask are parameters that are used to calculate the value used to select the best job for a craft from those considered. These parameters are:

1. ESTIMATED COMPLETION TIME - The estimated completion time parameter is used to determine when an extra 200 points are added to the TOTAL column by the dispatch formula for those jobs just about to miss their commitment. This parameter specifies the amount of time remaining to

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commitment, at which time the extra 200 points are to be added. The estimated completion time parameter is specified in minutes to the nearest half hour. For example, if the parameter is set to 240 minutes, the 200 extra points is added to all jobs with commitments that are missed, or due within four hours. The estimated completion time parameter can have a maximum value of 900.

2. ACCESS WINDOW INCREMENT - (New with Generic 2) The access window increment parameter determines how many extra points are added to the TOTAL column by the dispatch formula for those jobs that are currently in, or one half hour before their access window. That is, if there is an access requirement of after 10:00 AM and before 5:00 PM for a job, the job will have these points added from 9:30 AM until 5:00 PM. The extra half hour at the beginning of the window represents the time for the craft to travel to the next job, and assumes that the craft will not arrive at the job site too long before the access window begins. The access window increment parameter can have a maximum value of 200.

3. DISPATCH PARAMETER WEIGHTS - The MMA job selection formula evaluates six characteristics of each job before adding them to the total. You get the weights for each of these on the ADW mask, and then MMA multiplies them by the actual values of the characteristics of the job, rather than an on/off basis like the Estimated Completion Time and the Access Window Increment. By getting the weight to be used on each of these characteristics, you can control the relative importance the formula gives to each one. The maximum weight value that can be set is 200, and the minimum value is zero. Each of these parameter weights has its own column on the DPVAL report, so you can see how they interact with each other.

   These characteristics are:

   A. TIME TO COMMITMENT - How much time is left between the time when the dispatch formula is looking for a new job for assignment, and the commitment time associated with the job. The derivation of the actual numerical value for this characteristic may be found in the "nfe_rcmd.dpval" document. For our purposes, it is sufficient to know that the final value associated with the Time to Commitment parameter increases by the value of the weight for every half hour before the commitment. For example, if the "Time to Commitment" weight is set to 100, and a certain job is due at 5:00 PM today, the Time to Commitment value for this job, as shown on the DPVAL report, will be 100 points higher at 2:30 PM than it was at 2:00 PM.

   B. DISTANCE TO JOB - The travel time between the craftperson's current location, and the location associated with the job.

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The weight you entered on the ADW mask is multiplied by the travel time to the job. Since you want to select jobs that are closer to the craft, this parameter is actually subtracted from the TOTAL value, so it is preceded by a minus sign when displayed in its own column. The travel times are determined by the MMA geography tables for your MC, and represent an estimate of the average amount of time between a location in one area and a location in another area. The numbers in the geography tables usually represent minutes, but they may represent another unit of time in some areas. If you have any questions about the units of travel time used in your geography tables, check with your staff organization that sets up and maintains them. For the purposes of this document, the use of minutes is assumed.

C. DISTANCE TO HOME - The travel time between the craftperson's home location, and the location associated with the job. This parameter is handled just like the Distance to Job parameter when the dispatch value is computed.

D. OUT-OF-SERVICE - If the job is associated with an out-of-service condition, points are added to the TOTAL value equal to 10 times the weight entered on the ADW mask.

E. SUBSEQUENTS - The number of subsequent reports associated with the job is multiplied by 10, and then by this weight. These are then added to the TOTAL.

F. PRIORITY - The priority value associated with the job. This is determined by multiplying the number of priority flags by 0, and adding the priority ranking factor for the line record associated with the job. (This number is limited to 255.) This priority value is then multiplied by the weight shown on the ADW mask. The priority flags are set by customer line record information (the priority line flag, PRI), and by information entered when the work item is created (the customer irate, CIR, and customer comment, CC, flags).

4. JOB TYPES - The job type parameters reflect the weights of different job types in the job selection formula. For each job type, except programmable work, you can enter a parameter value from 0 to 9. The parameter value that represents the job type of the work item is multiplied by 100 and added to the TOTAL value.

SUGGESTIONS FOR ADJUSTING THE DISPATCH WEIGHTS From our experience, any "reasonable" set of weights will provide good results. However, you can get better results by reviewing and adjusting the values several times a day to

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

reflect the changing conditions in the area served by your Management Center (MC). The following guidelines should be combined with experience from your local center to achieve the best results. In this section, we describe a step-by-step form to help you, and then present a set of suggestions for adjusting these settings to fit certain circumstances in the center. The suggestions do not attempt to cover all conditions that may occur, but instead are a set of examples for you to use as a guide.

As we describe the method, pieces of the form will be included with the text to demonstrate how the calculations might be performed.

- ESTIMATED CLEARING TIME (ECT) and TIME TO COMMITMENT (TTC) - The estimate of length of time to clear a job should be the first ADW parameter set. This determines when a "bonus" of 200 points is added to the TOTAL, because the job is approaching its commitment, and if it isn't dispatched soon, the commitment will be missed. The parameter value itself should be based on the actual average clearing time for your center. Round this value UP to the next half hour. This insures that the "bonus" is put into effect soon enough. If the clearing times for your center vary greatly from one craftperson to another, you may want to increase this value by an additional half-hour or two. This helps insure that the job will be completed even if a slower craft gets it.

  Once the Estimated Clearing Time (ECT) has been set, the Time to Commitment (TTC) weight should be set. This will form the base on which the settings of most of the rest of the parameters and weights will be made. The value of the TTC parameter also determines how much the ECT "bonus" affects the TOTAL, so it is best to check back to see if the ECT "bonus" is what you want it to be, compared to the TTC parameter. If not, adjust the TTC parameter to get the right value. A simple calculation can tell you how much sooner a job will be dispatched if it is "about to miss" its commitment: If you divide 100 by the TTC, the answer is the average number of hours earlier that a job with the ECT "bonus" would be dispatched than the same job without the bonus. A suggested starting value for the TTC weight is 100, which would dispatch these potential missed commitments one hour sooner. If a larger ECT "bonus" is desired, decrease the TTC weight.

  If you would rather not give a bonus for "about to miss commitment" jobs, you have two alternatives" First, if the ECT parameter is set to zero, this means the bonus is only given to those jobs that have already missed their commitment. With this alternative, the same procedure for setting the TTC should be followed. The second alternative is to effectively negate the bonus entirely. This is done by getting the ECT to its maximum value, 900, and will serve to add the bonus to ALL jobs due today (assuming that your workday is less

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than 15 hours long). If this alternative is chosen, the selection of the TTC weight is not critical at this stage, and should be set to 100.

1	Do you want to give a bonus to jobs that are about to miss their commitment?		XXXXXXXXX XXXXXXXXX
2	If line 1 is YES, skip to line 6. Otherwise, do you want to give a bonus to jobs that have missed their commitment?		XXXXXXXXX XXXXXXXXX XXXXXXXXX
3	If line 2 is NO, enter 900 here and on line 11.		XXXXXXXXX
4	If line 2 is NO, enter 100 here and on line 12. Skip to line 13.		XXXXXXXXX XXXXXXXXX
5	Enter 0 here and on line 11.		XXXXXXXXX
6	Enter 100 here.	100	XXXXXXXXX
7	How much of a bonus do you want to give? (hours)		XXXXXXXXX
8	Divide line 6 by line 7. Enter the result here and on line 12.		XXXXXXXXX XXXXXXXXX
9	If line 1 is NO, skip to line 13. Otherwise, enter the average clearing time for your center.		XXXXXXXXX XXXXXXXXX
10	Round line 9 up to the next number divisible by 30. Enter it here and on line 11.		XXXXXXXXX XXXXXXXXX
11	This is the ECT parameter.	XXXXXXXXX	
12	This is the TTC weight.	XXXXXXXXX	

Figure 2. ADW Weight Calculation Table--Part 1

- DISTANCE TO JOB - The Distance to Job (DTJ) weight and the TTC weight work together to determine the relative merit of traveling a little farther to take a job that might be due earlier. There are several ways one may look at this relationship between the DTJ and the TTC, two of which are discussed next.

  The obvious relationship between the DTJ and the TTC is, "How much more do I want to travel to take a job that is due one hour sooner?" Usually this value will be not more than a few minutes. From this relationship, the simplest way to calculate the DTJ weight is the following:

13	Multiply line 12 by 2.		XXXXXXXXX
14	How many minutes farther do you want a craft to travel to take a job that is due an hour earlier?		XXXXXXXXX XXXXXXXXX
15	Divide line 13 by line 14. This is the DTJ weight.		XXXXXXXXX
16	If you want to check to see whether all your jobs can be handled, continue. Otherwise, skip to line 25.	XXXXXXXXX XXXXXXXXX XXXXXXXXX	XXXXXXXXX XXXXXXXXX XXXXXXXXX

Figure 3. ADW Weight Calculation Table--Part 2

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Another way to look at the DTJ and TTC relationship, and thereby set the DTJ weight is to ask, "Can I take this nearby job without missing other jobs with earlier commitments in a given area, assuming the ECT is an accurate estimate of the time I need to do each job?" The answer is yes, unless it is physically impossible to do all the work before the commitment times. To insure this result, first describe the area you wish to cover. This will usually be a DAA or supervisor turf. Determine the greatest distance that a craft would travel in this area from the geography tables. Also, determine the current number of jobs and craft in the area. Now the following steps can be used to calculate the maximum value of the DTJ weight that will not cause any unnecessary missed commitments.

17	Multiply line 11 by line 12.		XXXXXXXXX
18	Enter the number of craft in the area of interest		XXXXXXXXX
19	Multiply line 17 by line 18.		XXXXXXXXX
20	Enter the number of jobs in the area of interest.		XXXXXXXXX
21	Divide line 19 by line 20.		XXXXXXXXX
22	Enter the largest distance in the area of interest.		XXXXXXXXX
23	Divide line 18 by the greatest distance.		XXXXXXXXX
24	Divide line 19 by 30. This is the largest value of the DTJ parameter that will not cause any unnecessary missed commitments.		XXXXXXXXX XXXXXXXXX XXXXXXXXX
25	Enter the number from either line 15 or 24, based on your own judgement. This is the DTJ weight.	XXXXXXXXX XXXXXXXXX	

Figure 4. ADW Weight Calculation Table--Part 3

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The basic philosophy behind this approach is that, assuming no more work comes in, and all jobs are handled as planned, the same craft can take the job that is due first after he/she finishes another job and still have time to complete it before the commitment expires. It is important to note that this is the greatest value of DTJ that insures no UNNECESSARY missed commitments. Often, however, it is advantageous to use a higher value: If the load is very heavy, and you must miss commitments anyway, you might as well miss ones that are far away, rather than waste craft time driving.

Again, we remind you that these are only guidelines. If the experience in your own center suggests otherwise, do not hesitate to use your own judgement.

The remaining weights can all be set in two different ways: they can be compared with the TTC weight (How much sooner do I want to dispatch this job?), or with the DTJ weight (How much farther would I travel to take this job?). Either way yields an equivalent result. The next few parts of the form will have two sections. The first, or 'A' section of the form (Figures 5 and 7) should be filled out if you want to compare them with the TTC weight, and the second, or 'B' section of the form (Figures 6 and 8) if you want to compare them with the DTJ weight.

- JOB TYPE PRIORITIES - The Job Type Priority weights should be set next. These determine which types of jobs you want to be dispatched first, if all other factors are equal. When you select either the number of hours earlier or minutes farther the craft will travel to take the higher priority job, remember to include additional time if the type of job usually takes longer to fix, as well as the emphasis you want to place on it.

  Two sample pieces of the form are displayed below. In these samples, we use the PDF and PDO job types. The same process should be repeated for all your job types, comparing each (in the example, PDF) against the job type with the lowest priority (in the example, PDO).

A 26	Divide line 12 by 50, keeping 2 decimal places. Enter the result here.		XXXXXXXXX XXXXXXXXX
A 27	How many hours earlier do you want to dispatch a PDB job than a PDO job?		XXXXXXXXX XXXXXXXXX
A 28	Multiply line 26 by line 27. This is the difference between the weight of a PDB job and a PDO job.	XXXXXXXXX XXXXXXXXX	

The same procedure continues for each job type (lines A29 through A42) of the form.

Figure 5. ADW Weight Calculation Table--Part 4A (partial)

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B 26	How many hours earlier do you want to dispatch a PDF job than a PDO job?		XXXXXXXXX XXXXXXXXX
B 27	Multiply line 21 by line 12.		XXXXXXXXX XXXXXXXXX
B 28	Divide line 22 by 50. This is the difference between the weight of a PDF job and a PDO job.	XXXXXXXXX XXXXXXXXX	

The same procedure continues for each job type (lines B29 through B42) of the form.

Figure 6. ADW Weight Calculation Table--Part 4B (partial)

- OUT-OF SERVICE (OOS), SUBSEQUENTS (SUB), AND PRIORITY FLAGS (PRI) - These three parameters all function in the same manner, and will be discussed together. Their interactions are like those of the job type priorities above, and the only changes are the constants in the calculation. The same two methods (TTC and DPJ) also apply to these calculations, for example:

A 43	How many hours earlier do you want to dispatch a job that is Out of Service?		XXXXXXXXX XXXXXXXXX
A 44	Multiply line 43 by line 12.		XXXXXXXXX XXXXXXXXX
A 45	Divide line 44 by 5. This is the OOS weight.	XXXXXXXXX XXXXXXXXX	
A 46	How many hours earlier do you want to dispatch a job for each Subsequent Report?		XXXXXXXXX XXXXXXXXX
A 47	Multiply line 46 by line 12.		XXXXXXXXX XXXXXXXXX
A 48	Divide line 47 by 5. This is the SUB weight.	XXXXXXXXX XXXXXXXXX	
A 49	How many hours earlier do you want to dispatch a job for each Priority Factor?		XXXXXXXXX XXXXXXXXX
A 50	Multiply line 49 by line 12.		XXXXXXXXX XXXXXXXXX
A 51	Divide line 50 by 5. This is the PRI weight.	XXXXXXXXX XXXXXXXXX	

Figure 7. ADW Weight Calculation Table--Part 5A

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B 43	How much farther would you send a craft to take a job that is Out of Service?		XXXXXXXXX XXXXXXXXX
B 44	Multiply line 43 by line 25.		XXXXXXXXX XXXXXXXXX
B 45	Divide line 44 by 10. This is the OOS weight.	XXXXXXXXX XXXXXXXXX	
B 46	How much farther would you send a craft to take a job for each Subsequent Report?		XXXXXXXXX XXXXXXXXX
B 47	Multiply line 46 by line 25.		XXXXXXXXX XXXXXXXXX
B 48	Divide line 47 by 10. This is the SUB weight.	XXXXXXXXX XXXXXXXXX	
B 49	How much farther would you sent a craft to take a job for each Priority Factor?		XXXXXXXXX XXXXXXXXX
B 50	Multiply line 49 by line 25.		XXXXXXXXX XXXXXXXXX
B 51	Divide line 50 by 10. This is the PRI weight.	XXXXXXXXX XXXXXXXXX	

Figure 8. ADW Weight Calculation Table--Part 5B

It is important to note that the number of subsequents and priority flags can be substantially greater than one for a job. This means that these factors, if weighted heavily, could easily override everything else in an extreme case. For example, if a customer has called in five subsequent reports, the value added to the formula will be five times that of a job with a single subsequent report. Caution is advised against getting these weights too high.

- DISTANCE TO HOME (DTH) - This last parameter reflects how strongly you desire the craft force to be forced toward their home location. One common strategy of dispatching craft is to assign a first morning job for the craft near the edge of their turf, and then work the craft back to the home location during the day. Increasing the value of this parameter increases the strength of the pull. In theory, this causes the craft to be dispatched to jobs that are p percent of the way from their current location to their home location, on the average, where -

$$p = \frac{100\ (DTH)}{DTJ + DTH}$$

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

This parameter actually works on a two-level basis. If the craftperson is in the same DAA as the home location, the craft would tend to move toward AAs closer to the home location. However, if the craftperson is in an outlying DAA, the parameter only affects movement across DAA boundaries-- it has no effect within the outlying DAA, because every job in that DAA is assumed to be the same distance to the home location.

No guidelines or formula have been devised to determine the best value for this parameter, but a rule of thumb based on experience in several companies is that a good value for the DTH weight is about 15% - 25% of the DTJ weight, which generates a value of p which is also around 20%. The DTH value should be modified by your own experience, of course.

- ACCESS WINDOW INCREMENT (AWI) [New with Generic 2] - The Access Window Increment parameter creates a bonus to get jobs dispatched within their access windows. This parameter is not meant to be a major contributor to the TOTAL value, but rather to make the difference between jobs when all other factors are equal. If you don't want a bonus for jobs in the access window, just set the parameter to zero. Otherwise, getting the AWI weigth to twice the TTC weight will provide a one hour bonus to jobs in their access window.

  This parameter is an all-or-nothing value. Jobs with an access window will either have this parameter set, or will not be considered for dispatch. Jobs without an access window can be worked anytime, and are never given these points.

CHANGING THE DISPATCH WEIGHTS TO REFLECT CHANGING MC CONDITIONS Different conditions in the MC require different settings from the base weights described above. The following situations are just a few of those that you will experience in your MC. Good adjustment of the parameters will keep the MC running smoother.

- MORNING APPOINTMENTS - In the morning, many MCs emphasize getting all of their appointments out of the way. If there is a heavier than usual load of morning work, raising the time to commitment weight will increase the probability of dispatching a morning job, and therefore will handle the heavy load of morning work. This makes the morning jobs more important, and helps insure that they are dispatched soon enough. If you have a Generic 2 system, increasing the Access Window Increment to its maximum value of 200 will also help solve this problem.

- END OF THE DAY - Near the end of the day, you may have finished the work committed for today. When the craft request another job at this

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

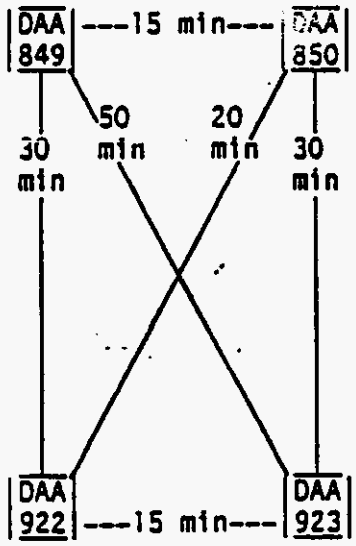
time, a job is dispatched that is due tomorrow. (This option can be turned off on G2 systems, if you want.) Since you have extra time and flexibility in dispatching, many MCs choose to work on the jobs that will most negatively affect their service results first. Therefore, increase the out-of-service, subsequent, and priority flag weights. Also, you may not want any unnecessary travel, so a slight increase in the distance to home weight might also be beneficial.

- HEAVY OVERLOAD - Occasionally during severe weather, your MC may be totally swamped with work. In this case, it is important to dispatch the most urgent jobs first. However, since many of the jobs that a craft will complete will have already missed their commitments anyway, it is a good idea not to waste craft time traveling. Boosting the out-of-service and distance to job weight, and possibly also decreasing the time to commitment weight, is advised in this situation.

A SIMPLE EXAMPLE OF THE EFFECTS OF CHANGING DISPATCH WEIGHTS The following simple example will demonstrate the effects of changing the dispatch weights. First, we will describe the area we are dealing with in the example, and then we will demonstrate getting the base dispatch weights. This will allow us to show some of the effects of changing them.

GEOGRAPHY FOR OUR EXAMPLE In our example, we are going to use a simplified MC which has only four DAAs, and AAs within each DAA as follows:

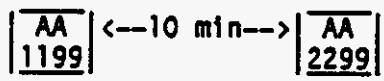
DAA Geography:



ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

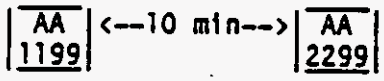
AA Geographies:

DAA 849:



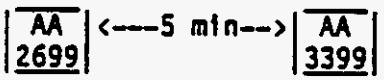
(1 minute within each AA.)

DAA 922:



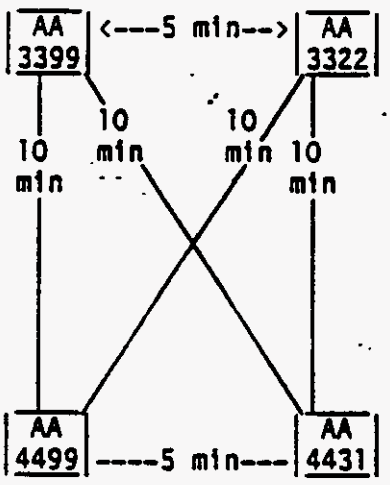
(1 minute with each AA.)

DAA 923:



(1 minute within each AA.)

DAA 850:



ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

(1 minute within AAs 3322 and 4431, 3 minutes within AAs 3399 and 4499.)

This MC is covered by two supervisor groups, 'A' and 'C', each having 8 craft working for them. Normally, supervisor A is responsible for jobs in DAAs 849 and 850, and supervisor C is responsible for DAAs 922 and 923. However, craft from each group are allowed to take jobs from one of the DAAs in the other turf, to help each other out when necessary. For this reason the two turfs overlap: the turf for group A also includes DAA 922, and the turf for group C also includes DAA 850. This is shown by the following two DTD reports:

```
MCMD DTD      MC 170  DAA      SUPV GRP A  EMP CODE      PRTR      REQ BY
PAGE      ARG

ESPOSITO,R   GROUP: A     HOME DAA 849

                      849 *        850 *

                      922 *                 923

PAGE 1 - END
```

```
MCMD DTD      MC 170  DAA      SUPV GRP C  EMP CODE      PRTR      REQ BY
PAGE      ARG

KIRBY,J.L.   GROUP: C     HOME DAA 923

                      849 *        850 *

                      922 *                 923*

PAGE 1 - END
```

Figure 9, DTD Masks for the MC in the example.

Today we have a moderate load in our sample MC, overall. However, a very local thunderstorm passed through last night, causing a large number of reports in DAA 850. The following jobs are pending dispatch right now:

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

```
MCMD DPJ      MC 170  DAA      SUPV GRP     EMP CODE       PRTR       REQ BY
PAGE      ARG

          JOBS PENDING DISPATCH FOR MC: 170 01-08-87 0901A

 DAA   IST RTE   TTN      TN          LOCATION     COMMIT    TIME   MCM OOS SUBS L
 849   PDO 400 0312768 815-6262015                01-08-87  0600P       *
                                     815254-1199 A         B
       PDO 400 0312799 815-6262018                01-08-87  0600P
                                     815254-2299 A         B
       PDO 400 0312830 815-6262028                01-08-87  0600P       *
                                     815254-2299 A         B
 850   PDO 101 0312489 815-6262003                01-08-87  0100P       *
                                     815254-3399 A         B
       PDO 102 0312551 815-6262005                01-08-87  0300P       *
                                     815254-4431 A         B
       PDO 102 0312582 815-6262007                01-08-87  0600P       *
                                     815254-4431 A         B
       PDF 400 0312613 815-6262011                01-08-87  0600P       *
                                     815254-3322 A         B
       PDO 400 0312644 815-6262085                01-08-87  0600P

PAGE 1 - MORE
```

```
MCMD DPJ      MC 170  DAA      SUPV GRP     EMP CODE       PRTR       REQ BY
PAGE 2    ARG

                                     815254-3322 A         B
       PDO 400 0312675 815-6262086                01-08-87  0600P       *
                                     815254-3322 A         B
       PDB 400 0312706 815-6262031                01-08-87  0600P       *
                                     815254-3399 A         B
       PDO 400 0312737 815-6262035                01-08-87  0600P       *
                                     815254-3399 A         B
 922   PDO 102 0407567 217-5462001                01-08-87  0600P       *
                                     217315-2299 A         B
       PDO 102 0407598 217-5462002                01-08-87  0600P       *
                                     217315-2224 A         B
 923   PDO 102 0407629 217-5462005                01-08-87  0600P       *
                                     217315-2606 A         B

PAGE 2 - END
```

Figure 10. DPJ Report for the MC in the Example

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

AN INITIAL SETTING OF THE DISPATCH WEIGHTS The first step in setting the dispatch weights is to gather the information and make the decisions that form the basis of calculation of the weights. For this example we have decided:

- Based on TREAT reports, we know that our average clearing time for a simple (PDO) job is about 138 minutes.
- To set our Distance To Job (DTJ) weight, we decided that we would want craft to drive about five minutes farther to take a job due 10 minutes sooner. As an additional check we want to be absolutely sure to close all the storm-related troubles today, if we can. The area that we will consider is our "problem" area (SUPV group A, who has 11 jobs in DAAs 849 and 850). Remember that although DAA 922 is in SUPV A's turf, it is not his main responsibility. We also make the additional assumptions that we have 8 craft to cover the area, and that our longest distance to travel is 10 minutes (from the geography).
- Next, we will set the weights for the specific job types. We know that a PDF job takes almost two hours longer than a PDO job.
- Troubles on business circuits average about one hour longer than residence, but our district manager insists that we provide our best service to them. To handle this, we add an additional two hours on top of the one hour to insure that there is no risk of missing these commitments.
- For our other weights, we want to give a 4 hour "bonus" if the trouble is Out Of Service (OOS), and 2 hours for each Priority Flag (PRI) or Subsequent Report (SUB).

Once we have this information, we can enter it in the ADW Weight Calculation Table and compute our weights:

1	Do you want to give a bonus to jobs that are about to miss their commitment?	YES	XXXXXXXXX XXXXXXXXX
2	If line 1 is YES, skip to line 6. Otherwise, do you want to give a bonus to jobs that have missed their commitment?		XXXXXXXXX XXXXXXXXX XXXXXXXXX
3	If line 2 is NO, enter 900 here and on line 11.		XXXXXXXXX
4	If line 2 is NO, enter 100 here and on line 12. Skip to line 13.		XXXXXXXXX XXXXXXXXX
5	Enter 0 here and on line 11.		XXXXXXXXX
6	Enter 100 here.	100	XXXXXXXXX
7	How much of a bonus do you want to give? (hours)	1	XXXXXXXXX
8	Divide line 6 by line 7. Enter the result here and on line 12.	100	XXXXXXXXX XXXXXXXXX

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

9	If line 1 is NO, skip to line 13. Otherwise, enter the average clearing time for your center.	138	XXXXXXXXX XXXXXXXXX
10	Round line 9 up to the next number divisible by 30. Enter it here and on line 11.	150	XXXXXXXXX XXXXXXXXX
11	This is the ECT parameter.	XXXXXXXXX	150
12	This is the TTC weight.	XXXXXXXXX	100
13	Multiply the TTC parameter by 2.	200	XXXXXXXXX
14	How many minutes farther do you want a craft to travel to take a job that is due an hour earlier?	5	XXXXXXXXX XXXXXXXXX
15	Divide line 13 by line 14. This is the DTJ weight.	40	XXXXXXXXX
16	If you want to check to see whether all your jobs can be handled, continue. Otherwise, skip to line 25.	XXXXXXXXX XXXXXXXXX XXXXXXXXX	XXXXXXXXX XXXXXXXXX XXXXXXXXX
17	Multiply line 11 by line 12.	15000	XXXXXXXXX
18	Enter the number of craft in the area of interest	8	XXXXXXXXX
19	Multiply line 17 by line 18.	12000	XXXXXXXXX
20	Enter the number of jobs in the area of interest.	11	XXXXXXXXX
21	Divide line 19 by line 20.	10909	XXXXXXXXX
22	Enter the largest distance in the area of interest.	10	XXXXXXXXX
23	Divide line 18 by the greatest distance.	1091	XXXXXXXXX
24	Divide line 19 by 30. This is the largest value of the DTJ parameter that will not cause any unnecessary missed commitments.	36	XXXXXXXXX XXXXXXXXX XXXXXXXXX
25	Enter the number from either line 15 or 24, based on your own judgement. This is the DTJ weight.	XXXXXXXXX XXXXXXXXX	36
	Section A To be used if you want to calculate your other parameters relative to the TTC parameter.		
A 26	Divide line 12 by 50, keeping 2 decimal places. Enter the result here.	2	XXXXXXXXX XXXXXXXXX
A 27	How many hours earlier do you want to dispatch a PDB job than a PDO job?	1+2 = 3	XXXXXXXXX XXXXXXXXX
A 28	Multiply line 26 by line 27. This is the difference between the weight of a PDB job and a PDO job.	XXXXXXXXX XXXXXXXXX	6
A 29	How many hours earlier do you want to dispatch a PDF job than a PDO job?	2	XXXXXXXXX XXXXXXXXX
A 30	Multiply line 26 by line 29. This is the difference between the weight of a PDF job and PDO job.	XXXXXXXXX XXXXXXXXX	4
	Continue for the remaining 6 job types ...		

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

A 43	How many hours earlier do you want to dispatch a job that is Out of Service?	4	XXXXXXXXX XXXXXXXXX
A 44	Multiply line 43 by line 12.	400	XXXXXXXXX XXXXXXXXX
A 45	Divide line 44 by 5. This is the OOS weight.	XXXXXXXXX XXXXXXXXX	80
A 46	How many hours earlier do you want to dispatch a job for each Subsequent Report?	2	XXXXXXXXX XXXXXXXXX
A 47	Multiply line 46 by line 12.	200	XXXXXXXXX XXXXXXXXX
A 48	Divide line 47 by 5. This is the SUB weight.	XXXXXXXXX XXXXXXXXX	40
A 49	How many hours earlier do you want to dispatch a job for each Priority Factor?	2	XXXXXXXXX XXXXXXXXX
A 50	Multiply line 49 by line 12.	200	XXXXXXXXX XXXXXXXXX
A 51	Divide line 50 by 5. This is the PRI weight.	XXXXXXXXX XXXXXXXXX	40
	Section B To be used if you want to calculate your other parameters relative to the DTJ parameter.		
B 26	Divide line 25 by 100, keeping 2 decimal places. Enter the result here.		XXXXXXXXX XXXXXXXXX
B 27	How much farther would you send a craft to take a PDB job than a PDO job?		XXXXXXXXX XXXXXXXXX
B 28	Multiply line 26 by line 27. This is the difference between the weight of a PDB job and a PDO job.	XXXXXXXXX XXXXXXXXX	
B 29	How much farther would you send a craft to take a PDF job than a PDO job?		XXXXXXXXX XXXXXXXXX
B 30	Multiply line 26 by line 29. This is the difference between the weight of a PDF job and a PDO job.	XXXXXXXXX XXXXXXXXX	
	Continue for the remaining 6 job types ...		
B 43	How much farther would you send a craft to take a job that is Out of Service?		XXXXXXXXX XXXXXXXXX
B 44	Multiply line 43 by line 25.		XXXXXXXXX
B 45	Divide line 44 by 10. This is the OOS weight.	XXXXXXXXX XXXXXXXXX	
B 46	How much farther would you send a craft to take a job for each Subsequent Report?		XXXXXXXXX XXXXXXXXX
B 47	Multiply line 46 by line 25.		XXXXXXXXX XXXXXXXXX
B 48	Divide line 47 by 10. This is the SUB weight.	XXXXXXXXX XXXXXXXXX	

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

B 49	How much farther would you send a craft to take a job for each Priority Factor?		XXXXXXXXX XXXXXXXXX
B 50	Multiply line 49 by line 25.		XXXXXXXXX XXXXXXXXX
B 51	Divide line 50 by 10. This is the PRI weight.	XXXXXXXXX XXXXXXXXX	

Figure 11. ADW Weight Calculation Table--Example

Finally for our Distance To Home (DTH) weight, we choose 20% of the DTJ value (line 25 of the form), or 7. These weights, as entered, are shown on the following ADW mask:

```
ADW      MC 170      EC 170                                  01-08-87 1059A

  DISPATCH PARAMETERS                    EXIST. WGT   NEW WGT
      ESTIMATED COMPL TIME                  150
      ACCESS WINDOW INCREMENT                 0
      DISPATCH PARAMETER WEIGHTS
        TIME TO COMMITMENT                  100
        DISTANCE TO JOB                      36
        DISTANCE TO HOME                      7
        OUT-OF-SERVICE                       80
        SUBSEQUENTS                          40
        PRIORITY                             40
        JOB TYPES:
           PDO 0 PDF 4 PDM   PDG 0 PDS 0 PDC 0
           PDB 6 PD2 0 PD3 0 PD4 0 PD5 0       PWS * PWF *

  DISPATCH SELECTION AND TEST OPTIONS
     TURF DISPATCH  N                        WITH I OPTION? N
     CONSIDER FUTURE COMMITMENTS  Y          WITH APPOINTMENTS?  N MIFI? N
     TEST ON DISPATCH? N                     TEST ON RETURN? N

  TIME DELTA 0
```

Figure 12. ADW Mask for the MC in the Example

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

CASE 1: Now that we know what is happening in our area, let's take a look at the DPVAL reports for it. First, we'll look at the jobs in C's turf, from a craft located in the same AA (DAA 923, AA 2699) as the home location for the supervisor:

```
MCMD DPVAL     MC 170  DAA      SUPV GRP C EMP CODE      PRTR     REQ BY
PAGE       ARG

          DISPATCH EVALUATIONS FOR MC: 170 01-08-87 1101A


DAA AA     ISTRTE TTN EST AWI SA   SUBS COMM  PRI  DIS   HOME   TOT
                  150 000 0080 0040 0100  0040 0036  0007

                          PDO  PDG  PDF  PDC  PDM   PDS
                          0000 0000 0004 0000       0000
                          PDB  PD2  PD3  PD4  PD5
                          0006 0000 0000 0000  0000

850 3399 PDO101 0312489       0800 0000 12100 0000 -01080 -00210 011810
    4431 PDO102 0312551       0800 0000 11700 0000 -01080 -00210 011210
    4431 PDO102 0312582       0800 0000 11100 0000 -01080 -00210 010610
    3322 PDF400 0312613       0800 0000 11100 0000 -01080 -00210 011010
    3322 PDO400 0312644       0000 0000 11100 0000 -01080 -00210 009810
    3322 PDO400 0312675       0800 0000 11100 0000 -01080 -00210 010610


PAGE 1  - MORE
```

```
MCMD DPVAL     MC 170  DAA      SUPV GRP C  EMP CODE      PRTR     REQ BY
PAGE 2     ARG

    3399 PDB400 0312706    0800 0000 11100 0000 -01080 -00210 011210
    3399 PDO400 0312737    0800 0000 11100 0000 -01080 -00210 010610
 922 2299 PDO102 0407567   0800 0000 11100 0000 -00540 -00105 011255
    2224 PDO102 0407598    0800 0000 11100 0000 -00540 -00105 011255
 923 2606 PDO102 0407629   0800 0000 11100 0000 -00036 -00007 011857



PAGE 2 - END
```

Figure 13. Example DPVAL Report #1

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

In this case, the craft will be dispatched to the job with the highest index next (TTN 0407629), unless another craft has already been dispatched on it. Notice that the craft will tend to stay near his home location. This is true even when there is heavy load in the system. This craft may end up helping out in DAA 850 later in the day, but not until all the work in DAAs 922 and 923 is dispatched, according to the above report.

CASE 2: Our next report shows a similar situation for a craft in group 'A' that is also currently working in the same AA as his home location (DAA 849, AA 1199):

```
MCMD DPVAL     MC 170  DAA      SUPV GRP A  EMP CODE      PRTR      REQ BY
PAGE       ARG

          DISPATCH EVALUATIONS FOR MC: 170 01-08-87 1101A


DAA AA     ISTRTE TTN EST AWI SA   SUBS COMM  PRI  DIS   HOME   TOT
                      150 000 0080 0040 0100  0040 0036  0007

                                PDO  PDG  PDF   PDC  PDM   PDS
                                0000 0000 0004  0000       0000
                                PDB  PD2  PD3   PD4  PD5
                                0006 0000 0000  0000 0000

849 1199   PDO400 0312768    0800 0000 11100 0000 -00036 -00007 011857
    2299   PDO400 0312799    0000 0000 11100 0000 -00180 -00035 010885
    2299   PDO400 0312830    0800 0000 11100 0000 -00180 -00035 011685
850 3399   PDO101 0312463    0800 0000 12100 0000 -00540 -00105 012455
    4431   PDO102 0312551    0800 0000 11700 0000 -00540 -00105 011855
    4431   PDO102 0312582    0800 0000 11100 0000 -00540 -00105 011255

PAGE 1  - MORE
```

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

```
MCMD DPVAL     MC 170  DAA      SUPV GRP A  EMP CODE      PRTR      REQ BY
PAGE 2     ARG

     3322  PDF400 0312613    0800 0000 11100 0000 -00540 -00105 011655
     3322  PDO400 0312644    0000 0000 11100 0000 -00540 -00105 010455
     3322  PDO400 0312675    0800 0000 11100 0000 -00540 -00105 011255
     3399  PDB400 0312706    0800 0000 11100 0000 -00540 -00105 011855
     3399  PDO400 0312737    0800 0000 11100 0000 -00540 -00105 011255
 922 2299  PDO102 0407567    0800 0000 11100 0000 -01080 -00210 010610
     2224  PDO102 0407598    0800 0000 11100 0000 -01080 -00210 010610


PAGE 2  - END
```

Figure 14. Example DPVAL Report #2

In this case, the commitment time becomes the overriding factor. The best job for the craft is TTN 0312489, even though it requires traveling to another DAA to get it. Note that this job is less than two hours from its commitment and will probably be missed, but barely. Even so, the system makes an effort to dispatch it.

CASE 3: Assume that this craft does call in, and is dispatched on TTN 0312489. What if the next craft calls in from group A, and he is also in AA 1199? The jobs that are available for him are the same ones as before, so we can use the same DPVAL report, just ignoring the job that was already dispatched. Notice the three jobs with the highest values that are still on the list, namely TTNs 0312768, 0312551, and 0312706. These are extremely close in value. This implies that the order they are dispatched depends a lot on the weights. One job is close to the craft's current location, another is a PDB job, and the third is due at 3:00, rather than 6:00. The balance is very fine, and very small changes in the parameters would determine which of the jobs to dispatch.

CASE 4: However, the next craft that calls is in DAA 850 and AA 3322. The DPVAL report changes significantly, since the craft is in a different location:

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

```
MCMD DPVAL     MC 170  DAA      SUPV GRP A  EMP CODE      PRTR      REQ BY
PAGE          ARG D850 A3322

              DISPATCH EVALUATIONS FOR MC: 170 01-08-87 1108A

DAA           ISTRTE TTN EST AWI SA   SUBS COMM  PRI  DIS   HOME   TOT
                     150 000 0080 0040 0100  0040 0036  0007

                                 PDO  PDG  PDF  PDC  PDM   PDS
                                 0000 0000 0004 0000       0000
                                 PDB  PD2  PD3  PD4  PD5
                                 0006 0000 0000 0000 0000

849 1199  PDO400 0312768         0800 0000 11100 0000 -00540 -00007 011353
    2299  PDO400 0312799         0000 0000 11100 0000 -00540 -00035 010525
    2299  PDO400 0312830         0800 0000 11100 0000 -00540 -00035 011325

850 4431  PDO102 0312551         0800 0000 11700 0000 -00360 -00105 012035
    4431  PDO102 0312582         0800 0000 11100 0000 -00360 -00105 011435
    3322  PDF400 0312613         0800 0000 11100 0000 -00036 -00105 012159

PAGE 1  - MORE
```

```
MCMD DPVAL     MC 170  DAA      SUPV GRP A  EMP CODE      PRTR      REQ BY
PAGE 2        ARG D850 A3322

    3322  PDO400 0312644     0000 0000 11100 0000 -00036 -00105 010959
    3322  PDO400 0312675     0800 0000 11100 0000 -00036 -00105 011759
    3399  PDB400 0312706     0800 0000 11100 0000 -00180 -00105 012215
    3399  PDO400 0312737     0800 0000 11100 0000 -00180 -00105 011615
 922 2299 PDO102 0407567     0800 0000 11100 0000 -00720 -00210 010970
    2224  PDO102 0407598     0800 0000 11100 0000 -00720 -00210 010970

PAGE 2  - END
```

Again, notice the three jobs with the highest values. All have different reasons for having a high value. The highest value is a nearby business (PDB) job, TTN 0312706, and will be the job that is dispatched to the craft. Next is the nearby PDF job TTN 0312613. The third highest job, TTN 0312551, has an earlier commitment (3:00) than the others. If the same report for the same

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

jobs is run two hours from now, the early commitment job will be selected, rather than the PDB job. This would be caused by the "bonus" given to jobs within their Estimated Completion Time.

CASE 5: In this case, our next craft is in DAA 849, AA 1199. He/she has the same location as case 3, but we have decided to change the dispatch weights in the meantime. We set the new DTJ weight at 30, instead of 36:

```
ADW      MC 170      EC 170                                  01-08-87 1111A

  DISPATCH PARAMETERS                    EXIST. WGT   NEW WGT
      ESTIMATED COMPL TIME                   150
      ACCESS WINDOW INCREMENT                  0
      DISPATCH PARAMETER WEIGHTS
        TIME TO COMMITMENT                   100
        DISTANCE TO JOB                       30
        DISTANCE TO HOME                       7
        OUT-OF-SERVICE                        80
        SUBSEQUENTS                           40
        PRIORITY                              40
        JOB TYPES:
           PDO 0 PDF 4 PDM   PDG 0 PDS 0 PDC 0
           PDB 6 PD2 0 PD3 0 PD4 0 PD5 0      PWS * PWF *

  DISPATCH SELECTION AND TEST OPTIONS
     TURF DISPATCH  N                        WITH I OPTION? N
     CONSIDER FUTURE COMMITMENTS  Y          WITH APPOINTMENTS?  N MIFI? N
     TEST ON DISPATCH? N                     TEST ON RETURN? N

  TIME DELTA 0
```

Figure 15. ADW Mask After Changing the DTJ Weight

This change will reduce the value given to nearby jobs, so the craft will travel farther to take a job that is due an hour earlier than he/she would have before. Notice that the faraway jobs (TTN 312541 and 312706) now have higher values than the nearby job (TTN 0312768) in the following DPVAL report:

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

```
MCMD DPVAL     MC 170  DAA      SUPV GRP A  EMP CODE      PRTR      REQ BY
PAGE        ARG

            DISPATCH EVALUATIONS FOR MC: 170 01-08-87 1112A

DAA AA      ISTRTE TTN EST AWI SA   SUBS COMM  PRI  DIS   HOME   TOT
                       150 000 0080 0040 0100  0040 0030  0007

                                PDO  PDG  PDF  PDC  PDM   PDS
                                0000 0000 0004 0000       0000
                                PDB  PD2  PD3  PD4  PD5
                                0006 0000 0000 0000 0000

849 1199  PDO400 0312768        0800 0000 11100 0000 -00030 -00007 011863
    2299  PDO400 0312799        0000 0000 11100 0000 -00150 -00035 010915
    2299  PDO400 0312830        0800 0000 11100 0000 -00150 -00035 011715
850 4431  PDO102 0312551        0800 0000 11700 0000 -00450 -00105 011945
    4431  PDO102 0312582        0800 0000 11100 0000 -00450 -00105 011345
    3322  PDF400 0312613        0800 0000 11100 0000 -00450 -00105 011745

PAGE 1  - MORE
```

```
MCMD DPVAL     MC 170  DAA      SUPV GRP A  EMP CODE      PRTR      REQ BY
PAGE 2      ARG

     3322  PDO400 0312644     0000 0000 11100 0000 -00450 -00105 010545
     3322  PDO400 0312675     0800 0000 11100 0000 -00450 -00105 011345
     3399  PD8400 0312706     0800 0000 11100 0000 -00450 -00105 011945
     3399  PDO400 0312737     0800 0000 11100 0000 -00450 -00105 011345
 922 2299  PDO102 0407567     0800 0000 11100 0000 -00900 -00210 010790
     2224  PDO102 0407598     0800 0000 11100 0000 -00900 -00210 010790

PAGE 2  - END
```

CASE 6: Up to this point, none of the troubles we have considered have had either subsequent reports or priority flags set. Now, several calls are received at the CRSAB. Two subsequents are taken against TTN 0312613, and one against TTN 0312644. In addition, the last caller was angry that the phone hadn't been fixed, so the RSA set both the Customer Irate (CIR) and Customer Commented (CC) flags. Now, when we look at the DPJ report to list our jobs, we see:

ADJUSTING DISPATCH HEIGHTS USING ADW AND DPVAL

```
MCMD DPJ      MC 170  DAA       SUPV GRP A  EMP CODE      PRTR      REQ BY
PAGE      ARG

          JOBS PENDING DISPATCH FOR MC: 170 01-08-87 1117A

 DAA   IST RTE   TTN      TN        LOCATION    COMMIT   TIME   MCM OOS SUBS L
 849   PDO 400 0312768 815-6262015              01-08-87 0600P       *
                                   815254-1199 A        B
       PDO 400 0321799 815-6262018              01-08-87 0600P
                                   815254-2299 A        B
       PDO 400 0312830 815-6262028              01-08-87 0600P       *
                                   815254-2299 A        B
 850   PDO 102 0312551 815-6262005              01-08-87 0300P       *
                                   815254-4431 A        B
       PDO 102 0312582 815-6262007              01-08-87 0600P       *
                                   815254-4431 A        B
       PDF 400 0312613 815-6262013              01-08-87 0600P       *   2
                                   815254-3322 A        B
       PDO 400 0312644 815-6262085              01-08-87 0600P       *   1
                                   815254-3322 A        B
       PDO 400 0312675 815-6262086              01-08-87 0600P       *

PAGE 1 - MORE
MCMD DPJ      MC 170  DAA       SUPV GRP    EMP CODE      PRTR      REQ BY
PAGE 2    ARG

                                   815254-3322 A        B
       PDB 400 0312706 815-6262031              01-08-87 0600P       *
                                   815254-3399 A        B
       PDO 400 0312737 815-6262035              01-08-87 0600P       *
                                   815254-3399 A        B
 922   PDO 102 0407567 217-5462001              01-08-87 0600P       *
                                   217315-2299 A        B
       PDO 102 0407598 217-5462002              01-08-87 0600P       *
                                   217315-2224 A        B
 923   PDO 102 0407629 217-5462005              01-08-87 0600P       *
                                   217315-2606 A        B

PAGE 2 - END
```

Figure 16. DPJ Report for the Example After Subsequent Reports

The corresponding DPVAL report (assuming group A, and in DAA 849, AA 1199? is:

nfe_mmagen.adw_oper

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

```
MCMD DPVAL     MC 170  DAA      SUPV GRP A  EMP CODE      PRTR      REQ BY
PAGE       ARG

           DISPATCH EVALUATIONS FOR MC: 170 01-08-87 1118A

DAA AA     ISTRTE TTN EST AWI SA   SUBS COMM  PRI  DIS   HOME   TOT
                      150 000 0080 0040 0100  0040 0030  0007

                                PDO  PDG  PDF  PDC  PDM   PDS
                                0000 0000 0004 0000       0000
                                PDB  PD2  PD3  PD4  PD5
                                0006 0000 0000 0000 0000

849 1199  PDO400 0312768        0800 0000 11100 0000 -00030 -00007 011863
    2299  PDO400 0312799        0000 0000 11100 0000 -00150 -00035 010915
    2299  PDO400 0312830        0800 0000 11100 0000 -00150 -00035 011715
850 4431  PDO102 0312551        0800 0000 11700 0000 -00450 -00105 011945
    4431  PDO102 0312582        0800 0000 11100 0000 -00450 -00105 011345
    3322  PDF400 0312613        0800 0800 11100 0000 -00450 -00105 012545

PAGE 1  - MORE
```

```
MCMD DPVAL     MC 170  DAA      SUPV GRP A  EMP CODE      PRTR      REQ BY
PAGE 2     ARG

    3322  PDO400 0312644     0800 0400 11100 0800 -00450 -00105 012545
    3322  PDO400 0312675     0800 0000 11100 0000 -00450 -00105 011345
    3399  PDB400 0312706     0800 0000 11100 0000 -00450 -00105 011945
    3399  PDO400 0312737     0800 0000 11100 0000 -00450 -00105 011345
 922 2299 PDO102 0407567     0800 0000 11100 0000 -00900 -00210 010790
    2224  PDO102 0407598     0800 0000 11100 0000 -00900 -00210 010790


PAGE 2  - END
```

Note that these subsequents can dramatically change which job is dispatched. The two jobs with the highest values are now the two that have the subsequent reports and priority factors.

nfe_mmagen.adw_oper

ADJUSTING DISPATCH WEIGHTS USING ADW AND DPVAL

The purpose of these examples is to give you a broad overview of how the parameters interact. Experience in adjusting the parameters cannot be gained by just studying examples, therefore remember to let your own experience in your center guide your decisions.

EFFECTS OF GROUP TURF SIZE ON THE JOB SELECTION FORMULA The size of the pool of jobs that craft can work often affects the efficiency of the job selection formula. The job assigned to each supervisor group is a limit on the distance a craft can travel to obtain a "hot" job. If the turfs are strictly limited, a craft may not be able to cross into another area without manual intervention, and the "hot" job may not be dispatched right away, but have to wait until a craft needs a job in that little area. Overlapping turfs also allow the craft to flow into nearby areas with high workloads without intervention by a supervisor when the jobs in their home turf have been completed. This, again, is a decision to be made by management, and reflects your individual philosophy for handling the center. Detailed information about how to modify group turfs may be found in the document entitled "The AGT Transaction - Assign Group Turfs" (nfe_mmagen.agt).

One way to combine group turfs with dispatch weights to produce better results is to allow a little flexibility in the turfs that are assigned to supervisor groups. Rather than strictly limiting supervisor groups to small turfs that are mutually exclusive, they allow the craft to also take jobs from some of the neighboring DAAs in the turfs of other supervisors. Craft in other groups will likewise be able to cover parts of the first turf. If desired, the distance tables can be slightly modified to provide an extra penalty for traveling into the DAAs of another supervisor. This is done by increasing the distances between the outlying DAAs and the DAAs within the turf. (This is only necessary where the difference in the distances from the DAAs in the home turf and the neighboring DAAs is small. In most cases, just using a higher distance to home parameter will be sufficient.) In effect, this only puts another penalty on the craft: it makes the distance to home penalty even larger for moving to the neighboring DAAs. Therefore, on a normal basis, craft will only be assigned outside their home turf if there are very urgent jobs in the outlying DAAs.

NOTE: Before any changes to the distance tables are made, be sure that the group responsible for maintaining the tables is aware of, and approves these changes.

SUMMARY Many factors affect the performance of your MC. Effective adjustment of the dispatch weights can be used to compensate for these factors, but this is only a tool to be used, and not a solution to every problem. This document shows one method of adjusting the dispatch weights, and offers suggestions for changing them. Using your own experience is recommended, because every center is unique, in terms of load, workforce, local practices, and management. Take the time to plan in advance your response to changes in MC conditions; it will be well rewarded.

B8T

Weighting of Disputed Inputs

8/4/93

COMPANY: BST
TITLE: PERFORMANCE OF WORK
PERIOD: TYE 12/31/93
DATE: DEC 9. 1993
AUDITOR: RKY

12/14/93

WP NO. 46, p 1

PSC staff rode in the truck with a service technician from the POTS category and a service technician from the cable repair category. Both are dispatched out the Mapper.

Staff observed how the technician accessed his jobs through the CAT, did his jobs, closed out jobs through the CAT, filled out his RF 152 time sheet and filled out his Work Activity Log for the sample.

WP NO 46-1 is the detail of staff observation.

PSC STAFF QUESTIONS

PSC staff noted three places where there might be a possibility for maneuvering the sample and asked questions to determine what controls were in place so there could be no maneuvering or bias.

The first two questions on on WP no. 46-2 and the company answers are on the same workpaper pages 2 and 3.

These questions involve when the ST's call in rather than accessing the jobs through the CAT and if the dispatcher can assign the tech a regulated job if the dispatcher knew the tech was in the sample.

Generally, the answer was that the dispatcher goes into Mapper himself and may verbally dispatch a job and, as stated in wp 45, "the system does not categorize work as regulated or deregulated." Also, the dispatcher "...is not provided with, or has reason to be conerned with which technicians are being sampled.
See wp no 46-2, page 2

The third question involves what controls are in place so that the work performed by the service tech is entered in the sample and on his timesheet. How does the company make sure the service tech does what he says?

Besides filling out time sheets and the WAL in the smaple, the ST has to code into the CAT the disposition code of the work he did, and also type in a narrative of the work he did. Staff observed this in the field.

Conf

46 p 1

COMPANY: BST
TITLE: PERFORMANCE OF WORK
PERIOD: TYE 12/31/93
DATE: DEC 9. 1993
AUDITOR: RKY

WP NO. 46 p 2

The coding and narrative in the CAT produce source documentation which is compared to the time sheet or WAL by the technical analyst in the Wassp Center in Birmingham. See wp no. 48-1.
This is inclouded in procedures for the technical analysts for the WALs, and in procedures for the tech supervisors for positive time reporting.
Also see Company answer to this third question on wp 46-3.

CONCLUSION:

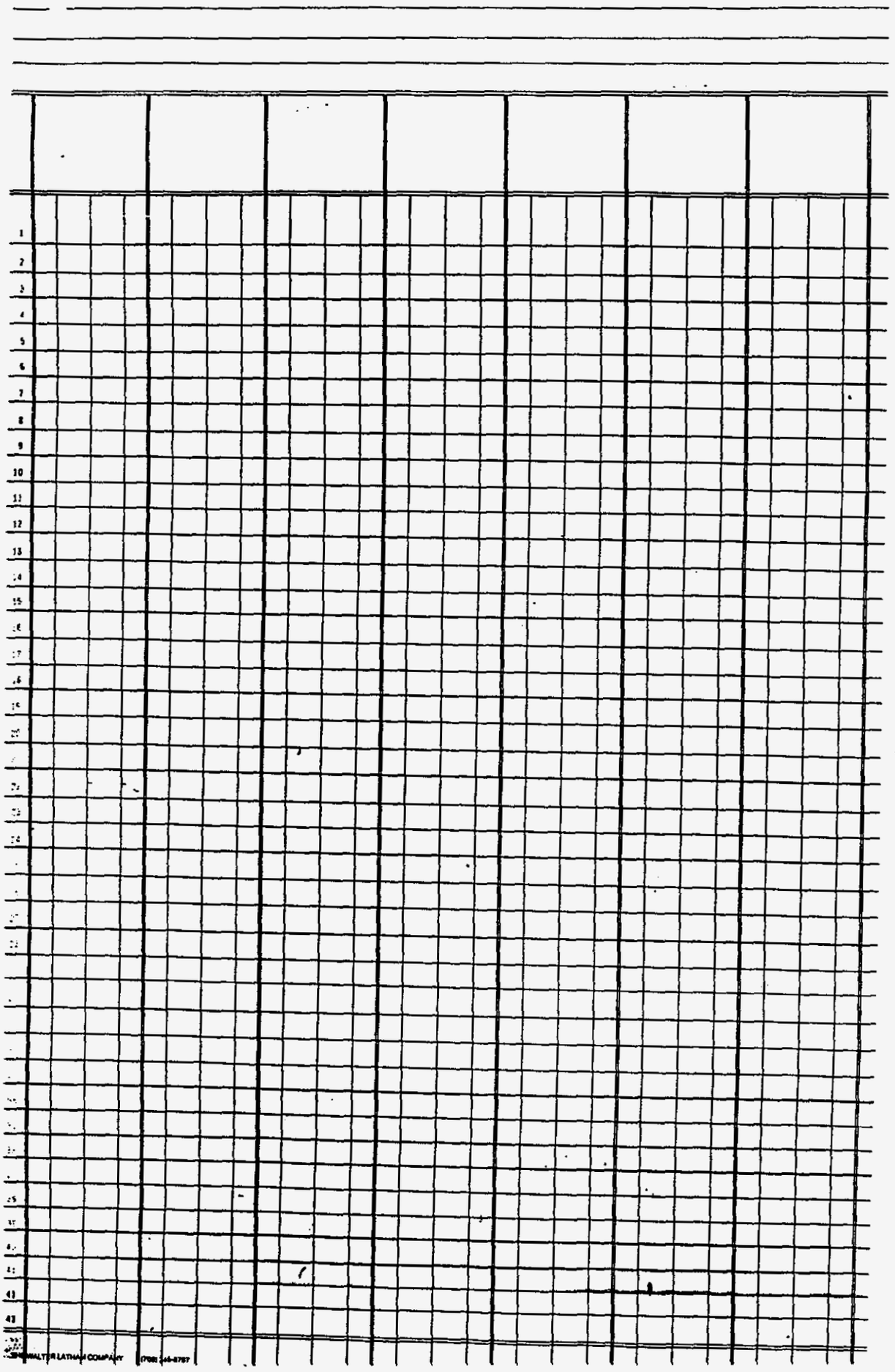
The first two questions are really a part of the dispatch system and conclusions regarding that are on wp 45.

The third question is answered by the company showing that there are procedures for the technical analysts to follow to verify the WAL. Also there are procedures for the tech supervisor in the positive time reporting system to verify the time reports.

Also, a part of this question is where do you stop looking over employees shoulders and go on trust. It would be virtually impossible to follow ST around and make sure they are reporting what they are doing.

Also, see 45 for Technical Analyst supervisors role in determining whether there is anything unusual in the profiles which are generated from this whole system.

46 p 2



COMPANY: BST
TITLE: OBSERVATIONS OF WORK AT DIFFERENT OFFICES
AND OBSERVATIONS OF SERVICE TECH WORK
PERIOD: TYE 12/31/93
DATE: NOVEMBER 29, 1993
AUDITOR: RKY

RKW 12/14/93

WP NO. 46

TUESDAY, NOV 23

Went to Maintenance Center to meet service technician to ride with him.
Daniel Martin.

He accessed his first job through the Computer Access Terminal (CAT).
It was a service order and had to go to the cross box in the street, then
to the meter room in the nursing home where the service order was requested.
Went to the room of the person involved.
Went back to cross box and back to meter room. Service installed.
Used CAT to test that service was OK.

Charged all time to cable time 45M and charged it to meter room 68E
on his time sheet.

Then he filled out the sample form on which he checked off what he did.

He accessed a second job from the CAT. This was a No Dial Tone.
Checked box back of house.
Checked Cross box
Checked Aerial drop
Changed protector.

Use CAT to test that service was OK.

Charged his time at the cross box to 45M and at the
aerial drop 248M.

He accessed a third job through the CAT. This was for an inside Jack.
This was deregulated work and charged to 97BI, He put a new
protector on the outside and that is regulated, charged to 248M.
Used CAT to test that service was OK.

When he tried to access a fourth job through the CAT, the CAT did not
have a job for him. He had to call in the Maintenance Center and was
verbally given another job.

I did not go on this fourth job with him.

COMPANY: BST
TITLE: OBSERVATIONS OF WORK AT DIFFERENT OFFICES
AND OBSERVATIONS OF SERVICE TECH WORK
PERIOD: TYE 12/31/93
DATE: NOVEMBER 29, 1993
AUDITOR: RKY

WP NO.

PSC staff questions:

46-2 p 2 When the CAT did not have any jobs for him and he called in, what controls are in place so that the person who is giving him the job does not arbitrarily give him a regulated job since he is in the sample?

46-2 p 2 What prevents the service tech who is in the sample from notifying the dispatcher and getting only regulated jobs if he calls in.

46-3 & 46 p 2 What controls are there so that you know what the service tech does is entered on the sample and on his time sheet. For example, on this second job, he said the trouble could be inside or outside As it happens the job was outside and he charged it to outside. But, what what if it was inside (dereg) and he charged it to outside (reg). What controls are there to stop this from happening.
This would still happen if time sheets were used -- still an area where can be manipulated if supervisor told them to do it.

45-5 / 1 Please explain "bulk" jobs. Explain and give examples on how this does not distort the sample. How are they dispatched throug CAT.

WEDNESDAY, NOV 24

Went to Maintenance Center to meet service technician who is assigned to cable. Kerry.

He said he accessed his first job the night before because if he needed a digging team he could order them the night before and not wait when got to the job, which he did. He showed me how he accessed it on his CAT.

Went to site and encountered many obstacles (non English speaking, locked gate, and dog in yard) before able to get to drop and complete his job. 3 hours.

Sometime in the beginning when there was a lack of communication and the tech could not figure out the problem the customer was complaining about, he said he would call in and get another job, get another job so that he can use his diggers as they were there with his already. He was going to do this to save time and money.

However, the customer got her husband on the phone who spoke English and explained to the Service Tech the problem. He never called in for another job at that point.

He finished the job, closed it out on his CAT and tested OK. Wrote up his time sheet and his sample sheet.

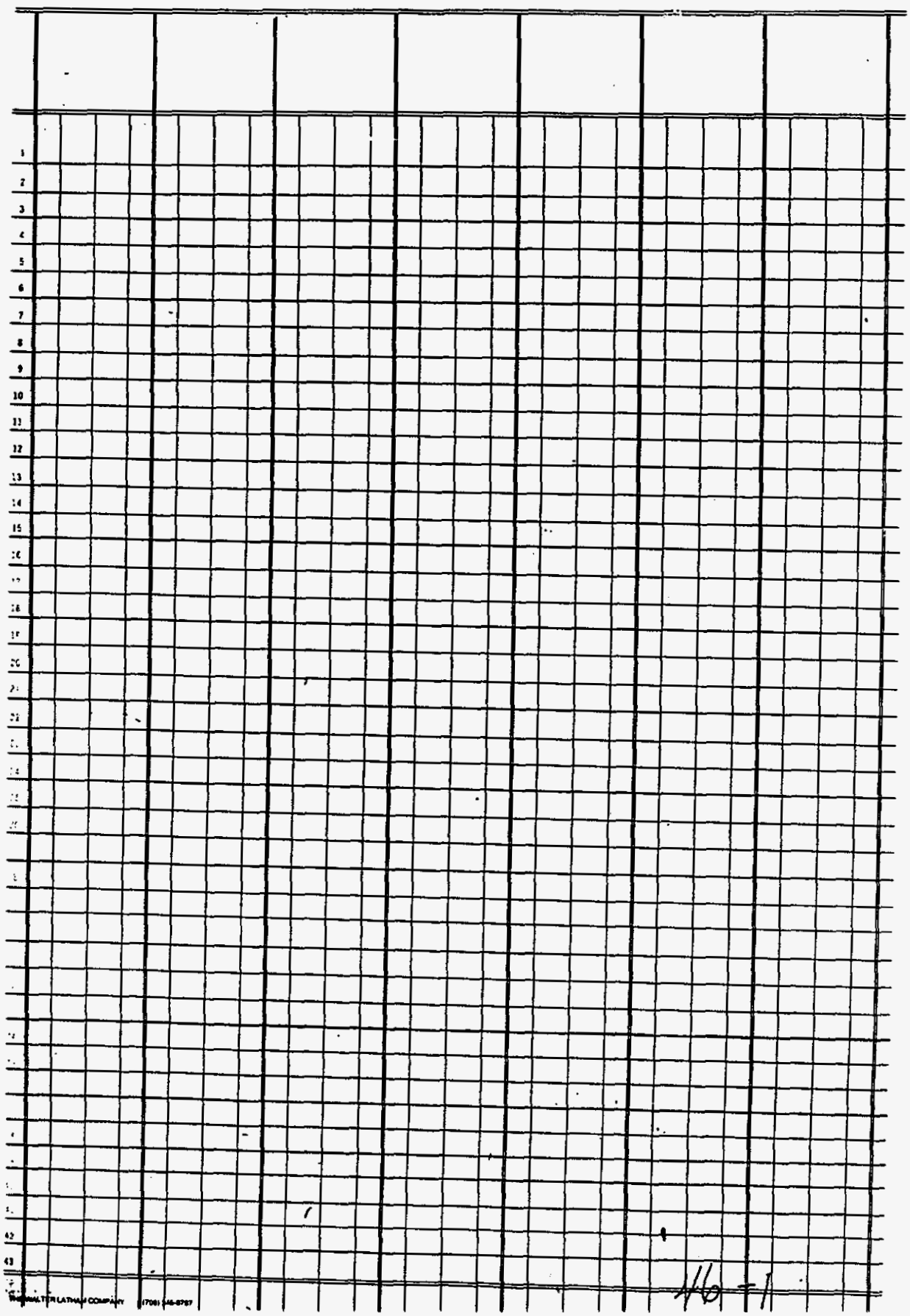
COMPANY: BST
TITLE: OBSERVATIONS OF WORK AT DIFFERENT OFFICES
AND OBSERVATIONS OF SERVICE TECH WORK
PERIOD: TYE 12/31/93
DATE: NOVEMBER 29, 1993
AUDITOR: RKY

WP NO.

He then accessed another job through the CAT. This job he needed his diggers for. This was a cut cable. Went with him to the next job and saw the cut cable and then left. It was lunch time.

If he could call in and get a job that he needed a digger for, could that distort the sample? When the service tech calls in, what is the procedure for assigning the job? What controls are there that the sample is not distorted. Please explain and give examples.

Also, request results of all parallel time reporting to date by maintenance center in Florida.



WASSP REQUEST 4

11/30/93

PROVIDE BY 12/3/93

RE: DISPATCH SYSTEM

A. In my observation of a POTS service technician on Tuesday, Nov 23, when he went into his CAT to pull up his fourth job, there was no job available. He had to call in to the maintenance center and was given another job.

Please answer these hypothetical questions:

1. When the CAT did not have any jobs for him and called in, what controls are in place so that the person who is giving him the job does not arbitrarily give him a regulated job since he is in the sample.

2. What controls are in place to prevent the service tech who is in the sample from notifying the dispatcher and getting only regulated jobs if he calls in.

B. In my observtion of a cable technician on Wed. Nov 24, there was a point in the first job that he thought he might have to leave the job and go to another because of certain obstacles (this did not happen). However, he said that instead of calling in on the CAT, he would call the maintenance center and try to get a job where he needed his diggers since they were called out on this job with him. He said this would save time and money as they were already there and did not have to go back and out again. This did not happen because to obstacles were met.

However, please answer this hypothetical question:

If he could call in and get a job that he needed a digger for, could that distort the sample? When the cable service tech calls in, what is the procedure for assigning the job? What controls are there that the sample is not distored. Please explain, give examples, and documentation.

Answer the same hypothetical question for the POTS service technician.

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FPSC Request 4

PBC

Question A (1)

When the CAT did not have any jobs for him and called in, what controls are in place so that the person who is giving him the job does not arbitrarily give him a regulated job since he is in the sample.

Answer A (1)

The technicians are assigned to a DAA (DISPATCH ADMINISTRATION AREA). In the event the assigned DAA is cleared of all work items, the technicians CAT terminal will respond "no jobs available". The technician will call the IMC, and request instructions. The control supervisor will usually reassign the technician to another DAA with work available, or randomly select a future committed job in the same area if the drive time to the other DAA is excessive. In the event the technician is moved to another DAA the control supervisor may verbally dispatch the technician on a random job during the telephone call. The system does not categorize work items as regulated or de-regulated.

Question A (2)

What controls are in place to prevent the service technician who is in the sample from notifying the dispatcher and getting only regulated jobs if he calls in.

Answer A (2)

The system does not categorize troubles as regulated or deregulated. The technicians almost exclusively are dispatched on randomly selected jobs through their CAT terminal. In those instance when a live dispatch is required, the system will select a random job for dispatch. In addition, the IMC is not provided with, or has a reason to be concerned with which technicians are being sampled.

A Separate audit of the Mapped system would determine that the system does not categorize troubles as reg + dereg.

p2 157

Question B

If a technician (FT) could call in and get a job that required a digger, could that distort the sample? When the cable tech calls in, what is the procedure for assigning the job? What controls are there that the sample is not distorted. Please explain, give examples and documentation.

Provide the answer to the question for POTS service technicians.

Answer B

The cable control supervisor is not aware of which technicians are being sampled. In the November 24, 1993 the FT had a outside contractor digging crew on the job site with him. The technician, in question primarily works in encapsulated plant based on his assigned DAA. In the event the original assignment needed to be left incomplete the technician stated he would call and request any known buried cable troubles due to the availability of outside contract labor. This would not distort the sample as the technician in question is generally performing the same work each day regardless of his status on the sample. In addition, unless the cable supervisor is aware of a known cut buried cable or major outage he could not be absolutely certain that the item of plant involved in the dispatched task is buried.

This situation would not occur with POTS service technicians.

BST

Dispatch System

BJ 12/9/13

WASSP REQUEST 7

11/30/93

PROVIDE BY 12/3/93

Re: Service Tech Time Reporting

What controls are there so that you know what the service tech does is entered on the sample and on his time sheet. For example, for the second job of the POTS service Tech, he said the trouble could be inside or outside. At it happens the job was outside and he charged it to outside. But what if it was inside (dereg) and he charged it to outside (reg). What controls are there to spp this from happening. (Staff realizes that this hypothetical situtation could happen with both time reporting and the statistical sampling method.).

Provide documentation, if any.

Conf

FPSC Request 7

PBC

Service Technician Time Reporting

FPSC

There are certain controls in place to ensure accurate time reporting by technicians.

In the Positive Time Reporting mode field supervisors will verify 2 time labor reports per week per employee for accuracy against all source documents (BSP Section 620-700-001SV Paragraph 4.3 Labor Statistic Reports). In addition district and staff audits of the process are performed.

In the WASSP or Sampling mode, source documents must be verified for accuracy against Work Activity Logs (WAL's) for ALL sampled technicians EVERY day by the Technical Analyst (BSP Section 620-700-002 Paragraph 4.0 Technical Analyst Group Responsibilities).

In both situations if a discrepancy or error is detected it must be corrected.

Conf

PBC

4.3 The supervisor is responsible for reviewing Form 9360-AL to ensure reasonableness of time reported. A minimum of two (2) RF-152-I's per employee per pay period must be compared to the output provided on Form 9360-AL. Evidence of this review must be apparent in the review process. This evidence may include (but is not limited to) highlights, notes, or supervisor initials/signature on Form 9360-AL for each employee reviewed. If discrepancies are detected, the supervisor must ensure that the appropriate corrective actions are taken.

4.4 After verification, supervisory approval of Form 9360-AL is mandatory in order to provide the FCC evidence of supervisory review of time reporting records. The supervisor MUST sign and date Form 9360-AL in the space provided, and like the RF-152-I must be retained for at least one (1) year after the close of the fiscal year.

NOTE: **Where Company policy, Federal, State or Local Regulatory Agencies require retention of this documentation for a period longer than that specified above, those directives will prevail.**

5. SOURCE DOCUMENTATION

5.1 The FCC states that support documentation is required to support the entries on an employee's MTR Time-Labor Report (RF-152-I). This source documentation [e.g., RF-152-I, DCWS/DJI, Form 6025-1-SC (SCB), Form 6571 (SB), Form RF-299-CPE-LMOS] provides assurance that the information reported to the employee's RF-152-I is reliable.

5.2 Source documentation may consist of mechanical or paper records depending on the origination of a particular work assignment. The type(s) of work assignments and the system(s) out of which these are dispatched to the technician determine what source documentation is required to provide an audit trail.

POTS AND NON-DESIGNED SPECIALS

5.3 Service order related services which are classified as Plain Old Telephone Service (POTS) and Non-Designed Specials are input into the Service Order Communications System (SOCS). POTS trouble reports are provided out of the Loop Maintenance Operations Systems (LMOS).

5.4 Service orders and trouble reports which are dispatched out of MAPPER/TRACKER are provided to the technician via the Computer Access Terminal. When this occurs, a Display Craft Work Summary/Display Job Information (DCWS/DJI) FULL CLOCK NARRATIVE must be requested and retained as the source documentation (Exhibit 3).

5.5 The supervisor is responsible for obtaining the DCWS/DJI's on a daily basis. This effort should be coordinated with the appropriate management personnel in the IMC. Where the Administrative Supervisor position exists in a Field Manager's group, he/she should be responsible for obtaining the DCWS/DJI's. Detailed information pertaining to the scheduling of DCWS/DJI printouts can be found in the **Sched Transaction - Scheduler** section of the **AT&T LMOS/WM SOLID DOCUMENTATION.**

5.6 The DCWS/DJI FULL CLOCK NARRATIVE report displays the complete job information associated with each work assignment performed in a given day by each technician. To satisfy audit trail requirements for source documentation, a complete DCWS/DJI must contain the following NARRATIVE information:

- Actual work performed to explain each Field Code reported
- Trouble/work activity location if other than customer's premises
- Any other narrative required to provide complete closeout information, such as Service Order changes, reason for maintenance billing, Missed Appointment information, etc.

WASSP

2.8 Sampled technicians complete a Work Activity Log (WAL) of the functions he/she performs for the sampled work day. This log includes time spent by work function as well as associated items that give rise to the work, i.e., service order, trouble report, etc. Functions are not converted to Field Reporting Codes (FRCs) by the sampled technician.

2.9 Completed Work Activity Logs are forwarded daily to the Technical Analysts centralized location for review and conversion to appropriate Field Reporting Codes (FRCs) for financial purposes.

2.10 An integral part of the Technical Analysts review of the Work Activity Log consists of a detailed review of selected technician logs. This review compares data reported by the technician on the Work Activity Log with the Source Documentation prepared by the sampled technician.

2.11 Technical Analysts accumulate and summarize all sampled data for input into the Mechanized Time Reporting (MTR) System via a unique data base.

3. *TECHNICIAN SAMPLE SELECTION*

3.1 The technician sample selection uses a data extract from the Payroll Masterfile Data Base (PMDB) and an Employee Selection Program to extract a random sample of technicians. PMDB is a BellSouth employee master database that is used to maintain information about an employee, i.e., Responsibility Code, Job Function Code, Social Security Number, etc.

3.2 Each state represents a unique sampling universe with each work group (job function) being a unique sub-universe within a particular state.

3.3 By the 20th of each month, the lists of technicians to be sampled in the following month are distributed via E-mail, CAT Terminal and/or paper copy to the appropriate state contacts and field management. Field management should then distribute the Work Activity Logs to the selected technician's supervisor for coverage with the technician.

3.4 Sample periods will cover a period of seven (7) calendar days, Sunday through Saturday.

3.5 Field management will not have the latitude to make any substitutions for selected technicians nor change any dates of the period being sampled.

4. TECHNICAL ANALYST GROUP RESPONSIBILITIES

4.1 The WASSP process is managed primarily through a centralized group of Technical Analysts with supervisory and technical Network expertise and knowledge of accounting classifications.

4.2 The primary functions of the Technical Analyst Group are as follows:

- Receive the daily Work Activity Log sheets from field forces selected to be sampled for the week.
- Track the return of all Work Activity Log sheets for each sampled technician by use of the Sample Selection/WAL Review Document.
- Review the Work Activity Log sheets for completeness.

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- Review the Work Activity Log sheets for reasonableness of data reported and the accuracy of Total Hours reported versus hours shown in the individual work categories.
- Conduct telephone interviews with the sampled technicians as required.
- Ensure accuracy of technician time reported on Work Activity Log sheets by comparing each original source document against the activity recorded on the Work Activity Log.
- Correct any errors found on the Work Activity Log sheets and tally the errors and other results of the interview process.

5. FIELD RESPONSIBILITIES

5.1 Field Management should ensure distribution of the Work Activity Logs to the Supervisors of those technicians selected for the sample.

5.2 Field Supervisors or equivalent have the responsibility of distributing the Work Activity Logs to those technicians under their responsibility who have been selected to be sampled as well as notifying those technicians sub-selected for telephone interviews.

5.3 Field Supervisors and sampled Technicians must fully understand and accurately follow the guidelines for completing the Work Activity Logs and the requirements for completing the telephone interview process.

5.4 Field Supervisors or their equivalent must ensure that sampled Technicians complete the *Work Activity Logs after each work assignment.*

5.5 Field Supervisors or their equivalent must review each completed Work Activity Log against the appropriate source documentation for completeness and accuracy. All mechanized source documentation narrative errors identified through this review process must be corrected to include LMOS DATH/WATH or WFA/DO Work Request Event Log (DOLOG) transactions as required. All non-mechanized source documentation (i.e., work tickets) narrative errors must be corrected manually as appropriate.

5.6 All completed Work Activity Logs and non-mechanized source documentation (i.e., work tickets) must be returned to the Technical Analysts in the WASSP Center by the next business day. Normal business days for the WASSP Center are Monday through Friday.

5.7 Technicians in the sub-selection sample must call the WASSP Center within two (2) business days for interview purposes.

5.8 In the absence of a technician who has been selected for sampling, i.e., vacation, illness, leave of absence, school, etc., the Supervisor or equivalent has the responsibility of completing the Work Activity Logs for that employee for the duration of the sample period.

NOTE: Refer to the Exception Reporting Section of this practice for details in reporting employee absence from normal duties.

5.9 Supervisors or equivalent must ensure that accurate Source Documentation is generated by all technicians being sampled and that this Source Documentation is retained in accordance with Company retention guidelines.

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BSP

Service Task Performance

B 12/9/93

46-3

THE WALTER LATHAM COMPANY (708) 246-8787

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COMPANY: BST
TITLE: SAMPLE SELECTION
PERIOD: TYE 12/31/92
DATE: DEC 9, 1993
AUDITOR: RKY

KW 2/14/93

WP NO. 47

III. Sample Selection

According to O&T report dated March 1993 a Stat Sample of technicians is taken from the Payroll Master Data Base (PMDB). This is a BellSouth Data Base used to maintain employee information. The sample program called Extract, stratified the universe of employees into homogenous categories based on state and JFC. The SAMPLER program selects random sample of techs to participate in work activity log portion. Those selected will participate for one week. The SAMPLER program also generates a random sample of the above techs to participate in the technical analyst interview (about 30% of sample). Logs for 3 days are selected for tech analyst review procedures. These procedures are described in wp No . 44-1 p.16

Sample size and structure of sample has been designed so that a 3-month Network Technician Labor distribution Profile is targeted to achieve a 95% confidence level with a preciaion of +or - 3% foreach field reporting code. The precision corresponds to approximately + or - 15 minutes. Technicians selected are over sampled in the sample selection Module to account for days not there (vacation, illness, weekend/weekday shifts.)

Staff interviewed the statistician, Keith Johnson, who wrote the program for the sample and explained his program in detail. See WP. No. 47-1 for details of how the program works and the controls.

According to Keith and Rick King, Keith is the person who wrote the program, and the only person who can change the program for the sample selection.

If necessary, Keith said anyone of the people he works with in his area could get into the program and understand it. It would take them a week to do this.

Bell South has a guide to Computer Asset Protection -- It is is Executive Directive 001. WP 47-4 is a quick reference guide. From this appears that each persons progrms are protected. Staff did not further work on this.

We were supplied with documentation of the program written by Keith Johnson for the sample program. We are including this for future reference. If we audit the system we have this to start with.
wp no. 47-5

CONCLUSION:

From interview with Keith Johnson, 47-1, it appears that every service tech in the universe has a change of being in the sample each month.

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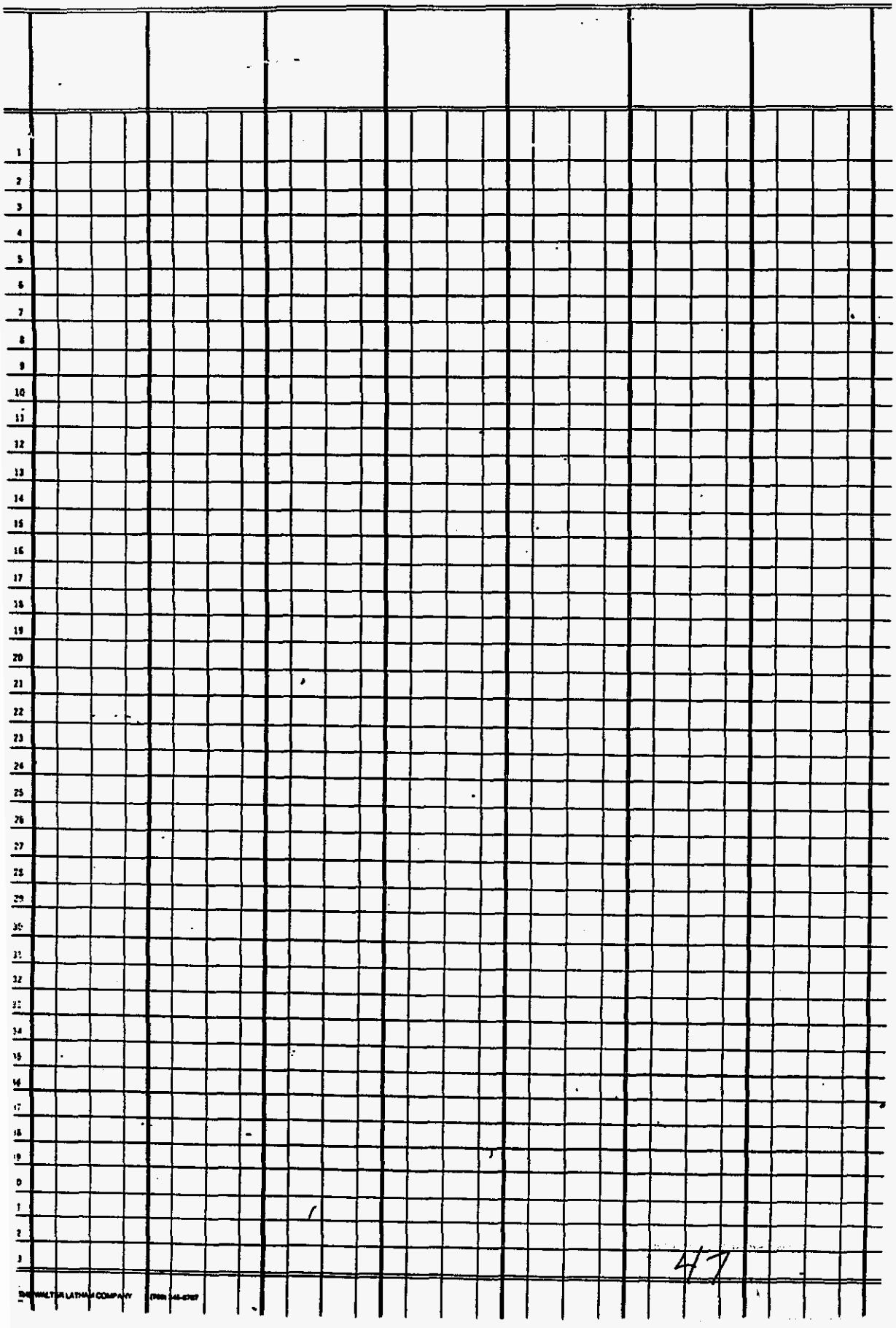

COMPANY: BST
TITLE: INTERVIEW WITH KEITH JOHNSON,
PERSON WHO WROTE PROGRAM TO SELECT THE SAMPLE
PERIOD: TYE 12/31/93
DATE: DECEMBER 8, 1993
AUDITOR: RKY

12/14/93

WP NO.

Interview Keith Johnson at BST in Birmingham on Monday, Dec 6. Per Keith , he is the person who wrote the program to select the sample of service technicians (ST's) to sample in a particular month.

Rick has direct access to a copy of the payroll master file. He downloads five categories to the system in the WASSP center. (The payroll master filed is updated every week. Rick downloads to WASSP harddrive and then backs up the payroll master file and also backup and store the sample also to WASSP diskettes.
Have on paper on on diskette too.

I. Keith's fields look as follows:

Responsibility code	Name	SS #	Week # to be audited 1-4 or 1-5	Random num 0-1	random num 0-100
				example 0.376281	0-2.999
				0.761142	3-5.999
					6-9.999
				for sel ect of ST	27 - 30
					30 up
				Sort from lowest to highest	randomly chooses the numbers. randomly assignes the schedule for interviews

anyone over 30 are not interviewed.

This is considered simple random sampling.
Formula to select the sample:

@Round (@Rand * number of weeks + 0.5,0)
Simultaneously, everybody gets a week and everybody gets an interview schedule. Then a sort takes place in ascending order then cut off at the number you need for the sample.

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(1)

COMPANY: BST
TITLE: INTERVIEW WITH KEITH JOHNSON,
PERSON WHO WROTE PROGRAM TO SELECT THE SAMPLE
PERIOD: TYE 12/31/93
DATE: DECEMBER 8, 1993
AUDITOR: RKY

WP NO.

Per Rick King this is sampling without replacement. a 95% confidence level with a + or - 3% precision. The precision of three percent was arrived at by considering 15 minutes of an 8 hour day.

Confident that no further than 3% away from the truth. 95% sure that no more than 3% away from the truth.

The number of weeks is determined by the number of Wednesdays in the month. However the week goes from Sunday through Saturday.

When the sample and interview schedule is selected, all five week go out at once frm Rick's office. They usually leave 10 days to get to supervisors. The supervisors per Steve Shaw usually tell the techs the Friday before the week they are being sample.

See wpNo. 48-3 for the way the service techs fill out forms.

see wp no. 48-1 for the way the Work Activity Logs (WAL's) are collected reviewed, checked, interviewed, and input into the system in order to obtain a profile.

A three month total (not average) is determined for each months profile. E.G. the month of October is a profile of three months total (Aug. Sept & Oct). (the profile for the month of Oct is applied to December dollars). The profile includes the Field reporting Code, The type (Reg, dereg, tvl or comm), the hours for each field reporting code. the % of hours for each field reporting code to the total and then the precision. This precision is used to determine the sample for the next month.
(See next page

Conf

COMPANY: BST
TITLE: INTERVIEW WITH KEITH JOHNSON,
PERSON WHO WROTE PROGRAM TO SELECT THE SAMPLE
PERIOD: TYE 12/31/93
DATE: DECEMBER 8, 1993
AUDITOR: RKY

WP NO.

Explanation of the Precision column.

For Pots ST, there are 2067 for Oct profile, 30 were selected every month, so there is 90 in the three month total.

49.1 The % of hours for Field reporting code 22M is 90 measurements of the # of hours on 22M. The % came out to 3.59% of all the hours spent in the field.

49.1

In the example here on wp....., for 22M there were 126 hours spent which were was 3.59% of the total hours spent. The precision column for this was 1.19%.

Precision Column:

		(number of observations in profile sometimes more or less.)
person week	1	3.26 Look at those 90 and ask how much did they vary
person week	2	4.83 round that answer. Precision closer to +_ 3%
person week	3	3.57 more variation. at 0 no variation.

See workpaper NO. with forsula for precision 49.2

A very simplistic explanation of the precision number and how it is calcualted is look at the average % for a given code, in this case 3.59% for all 90 people. Somewhere in the formuls add up all the differences between the individaul weeks per person and compare with the average %, and come up with the precision.

If going to have person for a week, get all kinds of work, may not get for a day. Helps them manage the sample. For example may get ~~forecasting work of person weeks.~~ all some type of jobs for one day but unlikely to get same job full week.

49.2 The sample size for the next month is based on the precision of the previous month. It is based on desired precision, in this case .03.

$$N1 = \frac{d \text{ squared} * N}{d(\text{one}) \text{ squared}}$$

E.G. 6Bm Preicision = .0269 (See wp 49-1

$$\frac{.0269 \text{ squared} * 90}{.03 \text{ squared } (407.4074)} = 72$$

72 for three months
divide by three and the sample size of approximately 25.
The forsula is set up so that the sample is no less than 30. in a particular month.

COMPANY: BST
TITLE: INTERVIEW WITH KEITH JOHNSON,
PERSON WHO WROTE PROGRAM TO SELECT THE SAMPLE
PERIOD: TYE 12/31/93
DATE: DECEMBER 8, 1993
AUDITOR: RKY

WP NO.

I asked how they selected a number to sample at the beginning.
They said (*)____________

The sample size as explained to me varies
For example, POTS in Florida doesn't vary much
Cable in Florida has a high sample size because of diverse work (manhole, Network terminating Wire,)
Corporate Communications is very varied, therefoe a higher sample size.

(*) Rick King (12/13) said it was started in Fl. He said 50 techs were asked to fill out logs in the 3 areas of Fl for a total of 150. He & Steve Vanderberg went from Center to Center & gathered data. Then the profiles were [illegible] generated & math took over from there. The number formula is based on the precision - See 47-2 & pg 3 here

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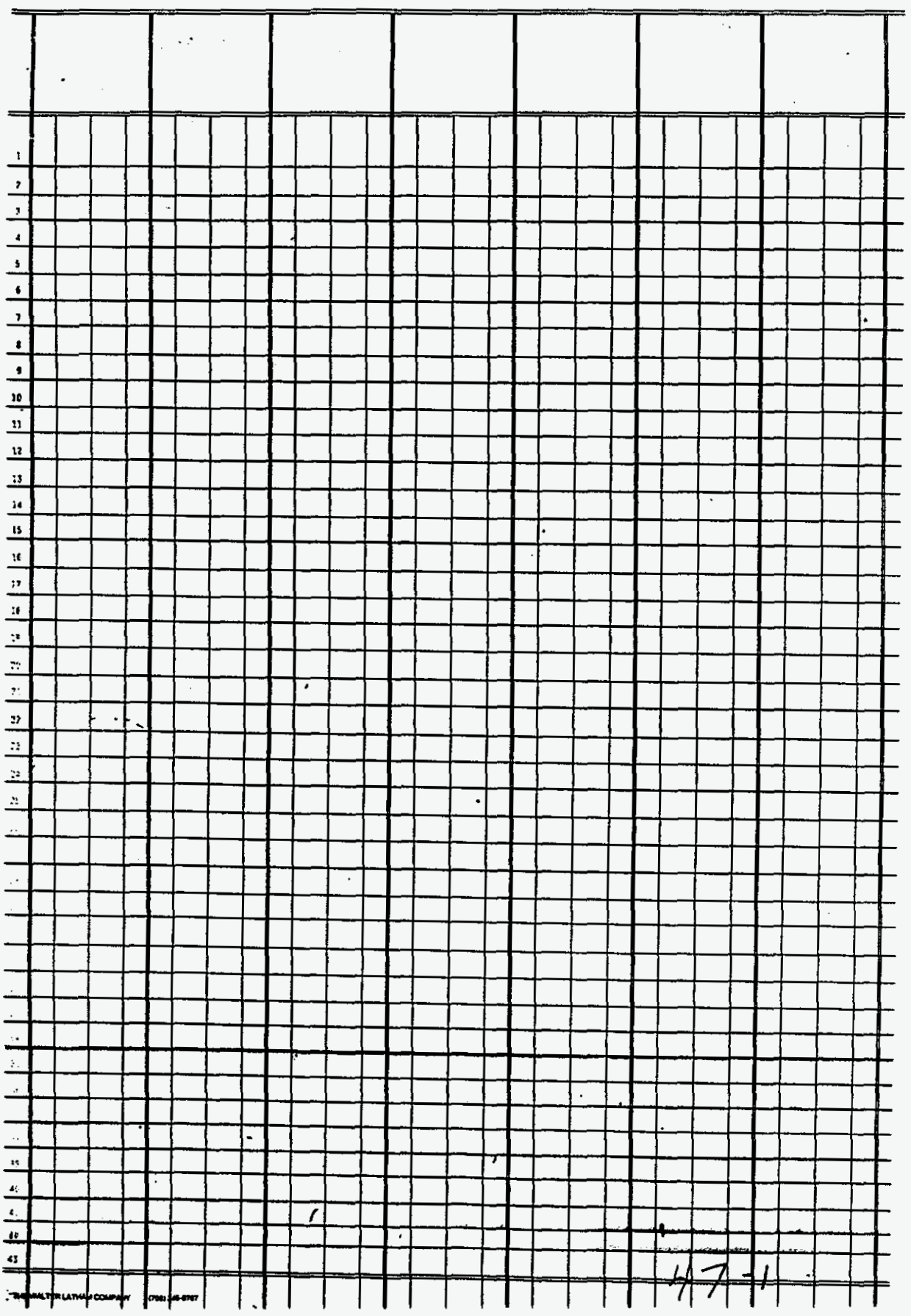
(4) 171



PBC

Ref 1c

$r = \sum \frac{x_i}{y_i}$ x_i = hours in category for i^{th} technician during work sampling

y_i = total hours reported by i^{th} technician during work sampling

Precision formula

$$\hat{V}(r) = \frac{1}{\bar{y}^2} \frac{N-n}{nN} \frac{\sum (x_i - r y_i)^2}{n-1} = \frac{1}{\bar{y}^2} \frac{N-n}{nN} \hat{S}_d^2$$

$d^2 = z^2 \hat{V}(r)$ Yamane pp 343-5

$= z^2 \frac{1}{\bar{y}^2} \frac{N-n}{N} \cdot \frac{1}{n} \hat{S}_d^2$ letting $\frac{N-n}{N} = 1$

$$d^2 = \frac{z^2 \hat{S}_d^2}{\bar{y}^2 n} \Rightarrow d^2 n = \frac{z^2 \hat{S}_d^2}{\bar{y}^2}$$

Assuming that $\frac{z^2 \hat{S}_d^2}{\bar{y}^2}$ is constant we have, for the desired precision, d_1

$d_1^2 n_1 = \frac{z^2 \hat{S}_d^2}{\bar{y}^2}$ so that

$d_1^2 n_1 = d^2 n \Rightarrow$ number of samples

$$n_1 = \frac{d^2 n}{d_1^2}$$

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NOTE: $\sum (x_i - r y_i)^2 = \sum x_i^2 + r^2 \sum y_i^2 - 2r \sum x_i y_i$

Pan 1 Yamane p 344

$\bar{J}$ = Average hours (wk) per technician

N = Universe size (tot # of technicians in JFC)

n = sample size

z = ~~[illegible]~~ Reliability as z-score set at $z=2 \Rightarrow 95\%$ certainty

d = Relative Precision

NOTE: $n_1 = \frac{d^2 n}{d_1^2}$ gives new sample size based on desired precision d_1, With $d_1 = 0.03$ and adding 11% "cushion" the new sample size for a 1 month period is

$n_1 = 1222.22 * d^2 n$

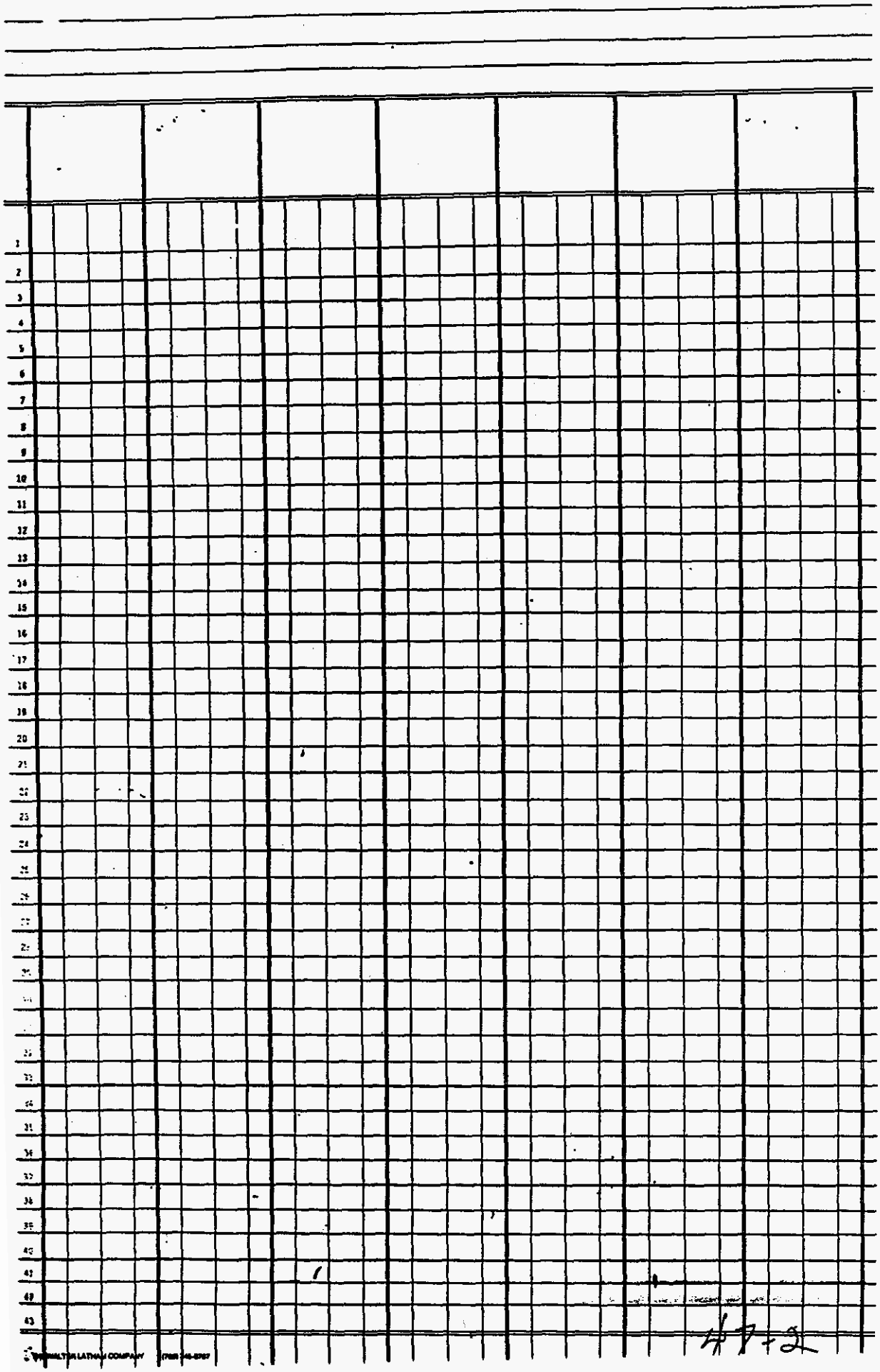
n.1

Dividing By 3 to get a 1-month sample size yield:

$$n_1 = 407.4074 * d^2 * n$$

where d = Highest observed precipitation

n = 3-month sample size used



PBC

FLORIDA

Reg 10

Profile - One month for example use 3 month Total Profile for actual

OCT 1993

I&M POTS (4100)

NO. OF EMPLOYEES = 2077

NO. IN SAMPLE = 30

Example ~~One month~~

	FIELD CODE	TYPE	HOURS	%	PRECISION
2	22M	REG	66.25	5.39%	2.53%
3	22R	REG	57.50	4.68%	
4	45M	REG	230.00	18.71%	4.61%
5	45R	REG	141.75	11.53%	
6	248C	REG	17.25	1.40%	0.96%
7	248M	REG	73.75	6.00%	2.49%
8	248R	REG	56.25	4.58%	
9	548C	REG	47.50	3.86%	2.21%
10	548M	REG	81.00	6.59%	2.14%
11	548R	REG	62.00	5.04%	
12	12M	REG	21.75	1.77%	1.58%
13	12R	REG	3.50	0.28%	
14	52M	REG	1.50	0.12%	0.17%
16	68E	REG	19.50	1.59%	0.90%
17	68M	REG	78.75	6.41%	6.50%
18	68R	REG	63.25	5.15%	
29	257C	REG	0.50	0.04%	0.08%
30	257M	REG	1.50	0.12%	0.18%
31	257R	REG	1.00	0.08%	0.16%
33	377R	REG	0.25	0.02%	0.04%
34	F257M	REG	0.50	0.04%	0.08%
35	F257R	REG	0.75	0.06%	0.12%
39	F257C	REG	2.50	0.20%	0.28%
50	97BI	DREG	56.00	4.56%	1.86%
51	97BW	DREG	3.75	0.31%	0.34%
52	97BP	DREG	148.50	12.08%	2.66%
53	97BR	DREG	14.00	1.14%	0.52%
56	98ER	DREG	4.00	0.33%	0.37%
80	78M	REG	2.25	0.18%	0.38%
90	5532	COMM	33.75	2.75%	0.97%
94	5536	COMM	33.75	2.75%	1.13%
95	553A	COMM	47.75	3.89%	1.32%
	TOTAL	REG	646.50	52.60%	5.49%
	TOTAL	DREG	226.25	18.41%	3.21%
	TOTAL	COMM	115.25	9.38%	2.27%
	TOTAL	TRVL	241.00	19.61%	2.70%

TOTAL SAMPLE HOURS 1229.00

ESTIMATED TOTAL HOURS 340351.18

ESTIMATED MONTHLY SAMPLE REQ'D 52

177

Copy (1)

=1003

OCT4100 FLORIDA

		1003	1004	1005	1006	1007	1008	1009
2	22M	0.	0.	0.	0.25	0.	0.	0.
3	22R	0.	0.	2.75	0.	1.25	2.00	1.00
4	45M	0.	0.	0.	0.25	0.	0.	0.
5	45R	0.	0.	0.	0.	1.75	1.50	0.75
6	248C	0.	0.	0.	2.00	1.00	0.	0.
8	248R	0.	0.	0.50	1.00	1.00	3.00	2.25
9	548C	0.	0.	0.	0.	1.00	0.	0.
10	548M	0.	0.	0.	1.00	0.	0.	0.
11	548R	0.	0.	0.50	0.	0.	0.	0.
50	97BI	0.	0.	0.	0.	0.25	0.	0.
51	97BW	0.	0.	0.	1.50	0.	0.	0.
52	97BP	0.	0.	4.50	2.25	0.	0.50	2.75
95	553A	0.	0.	0.	0.	0.	1.25	0.
99	TRVL	0.	0.	1.25	1.00	2.50	2.50	2.50

		1003	1004	1005	1006	1007	1008	1009
4	45M	0.	3.00	1.00	1.50	2.75	0.	0.
5	45R	0.	0.	0.	0.	0.	0.	3.00
6	248C	0.	0.	0.	0.	2.50	0.	0.
9	548C	0.	2.00	3.00	3.50	1.50	0.	0.
10	548M	0.	1.00	0.	1.00	0.	0.	0.
11	548R	0.	0.	1.75	0.	0.	0.	0.
33	377R	0.	0.	0.	0.	0.	0.	0.25
50	97BI	0.	0.	0.	0.	0.25	0.	0.
52	97BP	0.	0.	1.75	1.50	0.	0.	2.25
94	5536	0.	0.	0.	0.75	1.00	0.	0.
95	553A	0.	3.00	0.	0.	0.	0.	0.50
99	TRVL	0.	1.00	0.50	0.75	0.50	0.	2.00

178

(2)

1 OCT4100 FLORIDA

2

3			1003	1004	1005	1006	1007	1008	1009
4	3	22R	0.	1.00	0.75	0.75	0.50	1.00	0.
5	4	45M	0.	0.	0.50	1.25	0.50	0.	0.
6	5	45R	0.	0.	0.	0.50	0.	0.	0.
7	7	248M	0.	0.	0.	2.50	1.50	0.50	0.
8	8	248R	0.	2.50	1.00	0.	0.	0.	0.
9	9	548C	0.	0.	0.75	0.	0.	0.	0.
10	10	548M	0.	0.	0.	0.	0.	2.25	0.
11	11	548R	0.	0.75	2.00	0.	0.	0.	0.
12	50	97BI	0.	0.	1.25	0.25	0.	0.	0.
13	52	97BP	0.	0.50	1.50	0.75	4.25	0.75	0.
14	90	5532	0.	1.00	0.	0.	0.	2.00	0.
15	99	TRVL	0.	2.25	1.25	2.00	1.25	1.50	0.

16

			1003	0000	0000	0000	0000	0000	0000

OCT4100 FLORIDA

		1003	1004	1005	1006	1007	1008	1009
2	22M	0.	1.25	3.00	0.	0.	0.	0.
3	22R	0.	0.	0.	0.	1.00	0.	0.50
4	45M	0.	0.	0.	0.75	0.	0.	0.
5	45R	0.	0.	0.	0.	0.75	3.25	0.50
6	248C	0.	0.	0.	0.	0.	0.	1.75
8	248R	0.	0.	0.	0.	0.	0.	1.75
16	68E	0.	0.	0.	0.	1.00	0.	0.
17	68M	0.	0.	0.	0.	0.	1.50	1.50
18	68R	0.	0.50	0.	0.	0.	0.	0.
50	97BI	0.	0.	0.50	0.	0.	0.	0.50
51	97BW	0.	0.	0.	0.	0.	1.00	0.
52	97BP	0.	2.00	0.75	3.50	1.00	0.	0.
53	97BR	0.	1.75	0.	0.	0.	0.	0.
90	5532	0.	0.	0.50	1.50	0.50	0.50	0.
94	5536	0.	1.00	0.50	1.00	1.25	0.	0.75
95	553A	0.	0.	1.00	1.00	2.50	0.75	0.
99	TRVL	0.	1.50	0.75	1.25	0.75	1.50	0.75

		1003	1004	1005	1006	1007	1008	1009
18	68R	0.	0.	0.	0.	0.	0.	1.25
52	97BP	0.	0.	0.	0.	0.	0.	0.50
80	78M	0.	0.	0.	0.	0.	0.	2.25
94	5536	0.	0.	0.	0.	0.	0.	3.50
95	553A	0.	0.	0.	0.	0.	0.	0.50
99	TRVL	0.	0.	0.	0.	0.	0.	1.00

1 OCT4100 FLORIDA

2

3			1003	1004	1005	1006	1007	1008	1009
4	3	22R	0.	0.	0.	0.	0.	0.	0.50
5	4	45M	0.	0.	0.	0.	0.	0.	1.00
6	5	45R	0.	0.	0.	0.	0.	0.	1.75
7	7	248M	0.	0.	0.	0.	0.	0.	0.50
8	11	548R	0.	0.	0.	0.	0.	0.	1.25
9	18	68R	0.	7.50	8.50	8.50	9.50	7.50	0.
10	50	97BI	0.	0.	0.	0.	0.	0.	0.50
11	94	5536	0.	0.	0.	0.	0.	0.	0.75
12	99	TRVL	0.	0.50	0.50	0.50	0.50	0.50	1.75

13

		1003	1004	1005	1006	1007	1008	1009
2	22M	0.	2.00	0.	0.	0.	0.	0.
4	45M	0.	0.	4.50	5.50	1.50	1.00	4.00
5	45R	0.	0.	0.	0.	0.	0.	2.50
11	548R	0.	0.	0.	0.	0.	4.00	0.
12	12M	0.	1.75	0.	0.	4.25	0.	0.
16	68E	0.	0.	0.75	1.00	0.	0.	1.50
17	68M	0.	0.	0.	0.	0.50	0.	0.
18	68R	0.	1.00	0.	0.	0.	0.	0.
50	97BI	0.	0.	1.00	0.	0.	0.	0.25
52	97BP	0.	1.00	0.	0.	0.	0.	0.
53	97BR	0.	0.	0.	0.	1.00	0.	0.
90	5532	0.	0.	2.00	0.	0.	0.	0.
94	5536	0.	0.	0.	0.25	1.25	0.	0.
95	553A	0.	1.25	0.	0.	0.	3.50	0.
99	TRVL	0.	2.50	0.75	2.25	2.00	1.50	1.25

/ OCT4100 FLORIDA

2

		1003	1004	1005	1006	1007	1008	1009
3	22R	0.	0.	1.75	0.	1.50	1.25	1.00
4	45M	0.	0.	0.	0.	0.	1.75	0.
5	45R	0.	3.50	4.00	2.50	4.00	0.	0.75
8	248R	0.	0.	0.	0.	1.25	2.00	0.50
9	548C	0.	0.	0.	0.	1.50	0.	0.
11	548R	0.	2.25	0.50	1.75	0.	0.	0.75
13	12R	0.	0.	0.	0.	0.	1.25	0.
18	68R	0.	0.	0.	1.50	0.	0.	0.
50	97BI	0.	0.	0.	0.	1.25	0.	0.
52	97BP	0.	1.00	1.50	2.75	0.50	2.50	2.75
94	5536	0.	0.25	0.50	0.	0.	0.	0.50
95	553A	0.	0.	0.	0.	0.	0.	0.75
99	TRVL	0.	1.50	1.25	1.50	1.50	1.75	1.00

OCT4100 FLORIDA

		1010	1011	1012	1013	1014	1015	1016
4	45M	0.	0.50	1.00	0.50	1.00	0.	0.
5	45R	0.	2.00	0.	0.	0.	0.	0.
6	248C	0.	0.	0.	0.	4.00	0.	0.
16	68E	0.	0.	1.00	0.50	2.00	0.	0.
17	68M	0.	0.25	0.	0.	0.	0.	0.
18	68R	0.	0.	0.	0.50	0.	0.	0.
30	257M	0.	0.	0.	0.50	0.	0.	0.
50	97BI	0.	0.25	1.00	1.25	0.	1.00	0.
52	97BP	0.	1.75	1.00	0.	0.	1.50	0.
90	5532	0.	0.50	1.00	0.50	0.75	0.50	0.
94	5536	0.	0.	0.	0.75	0.	0.	0.
95	553A	0.	0.	0.50	0.75	0.	2.00	0.
99	TRVL	0.	2.75	2.50	2.75	0.25	3.00	0.

		1010	1011	1012	1013	1014	1015	1016
4	45M	0.	0.	0.50	1.00	1.00	0.	0.75
5	45R	0.	4.50	1.75	0.	0.	2.25	0.
9	548C	0.	0.	0.	2.00	2.25	0.	0.
10	548M	0.	1.00	1.25	0.50	0.	0.	0.
11	548R	0.	0.75	1.50	1.50	0.	1.00	1.50
29	257C	0.	0.	0.	0.50	0.	0.	0.
50	97BI	0.	0.	0.	0.	1.75	0.	0.
52	97BP	0.	0.	1.25	0.	0.	1.50	2.25
53	97BR	0.	0.	0.	0.	0.	0.	0.75
90	5532	0.	0.	0.	1.00	0.	1.50	0.
94	5536	0.	0.	0.	0.	0.	0.75	0.
95	553A	0.	0.	0.	0.	1.50	0.	0.
99	TRVL	0.	1.75	1.75	1.50	1.50	1.00	2.75

OCT4100 FLORIDA

		1010	1011	1012	1013	1014	1015	1016
3	22R	0.	1.00	1.00	0.	0.	0.	0.
5	45R	0.	2.00	3.50	6.00	0.	0.	0.
18	68R	0.	0.	0.25	0.	0.	0.	0.
52	97BP	0.	2.50	2.25	0.	5.25	1.50	0.
90	5532	0.	0.	0.	0.	1.50	1.50	0.
95	553A	0.	0.	0.	0.75	0.	0.	0.
99	TRVL	0.	2.50	1.00	1.25	1.25	1.00	0.

		1010	1011	1012	1013	1014	1015	1016
4	45M	0.	0.25	0.	0.50	0.	0.50	0.
5	45R	3.75	0.	1.75	0.50	2.25	2.25	0.50
8	248R	0.50	0.	0.	0.	0.	0.	0.
10	548M	0.	0.25	0.	0.50	0.	0.	0.
11	548R	0.	2.50	0.	0.50	0.	0.	1.25
17	68M	0.	0.	0.	0.	0.	1.75	0.
18	68R	0.25	0.	0.	1.25	0.	0.	0.
50	97BI	0.	0.25	0.50	0.25	0.	0.	0.
52	97BP	0.75	0.75	2.00	0.25	0.	0.50	2.00
53	97BR	0.	0.	0.	0.	1.00	0.	0.
90	5532	0.	1.50	0.	0.	1.00	0.	0.
94	5536	0.	0.	0.	0.	1.00	0.	0.
95	553A	0.	0.	0.75	1.00	0.	0.	0.75
99	TRVL	2.75	2.50	3.00	3.25	2.75	3.00	3.50

OCT4100 FLORIDA

		1010	1011	1012	1013	1014	1015	1016
3	22R	0.	0.	0.	0.	0.	0.	1.50
4	45M	0.	0.	0.	0.50	1.00	0.75	0.
5	45R	0.	1.00	1.75	0.	0.50	2.50	0.
8	248R	0.	2.00	0.50	1.50	2.50	0.	2.50
9	548C	0.	0.	0.	1.50	0.	0.	0.
11	548R	0.	1.25	0.	0.	0.	1.00	0.
12	12M	0.	0.	0.50	0.	0.	0.	0.
14	52M	0.	0.	0.75	0.	0.	0.	0.
50	97BI	0.	0.	0.	1.50	0.	0.	0.
52	97BP	0.	1.25	2.25	1.75	1.50	1.50	0.50
53	97BR	0.	0.	0.	0.	0.	0.	1.50
90	5532	0.	0.50	0.25	0.	0.	0.	0.
94	5536	0.	0.	0.	0.	1.25	0.	0.
95	553A	0.	0.75	0.75	0.	0.	0.75	0.75
99	TRVL	0.	1.25	1.25	1.25	1.25	1.50	1.25

		1010	1011	1012	1013	1014	1015	1016
4	45M	0.	0.75	2.25	0.	1.00	4.75	0.
5	45R	0.	1.50	0.	2.75	0.	0.	1.00
6	248C	0.	0.	2.00	0.	0.	0.	0.
7	248M	0.	0.50	0.	0.	0.	0.	0.
8	248R	0.	0.	0.75	1.00	3.00	0.	0.
9	548C	0.	0.	0.	0.	0.	1.50	0.
11	548R	0.	0.	0.	0.	0.	0.	3.25
14	52M	0.	0.75	0.	0.	0.	0.	0.
16	68E	0.	0.75	0.50	0.	0.	0.	0.
18	68R	0.	0.50	0.	2.00	0.	0.	0.
50	97BI	0.	0.50	1.50	0.	0.	1.00	0.
52	97BP	0.	1.00	0.	0.50	4.00	0.	1.00
53	97BR	0.	0.	0.	0.	0.	0.	1.00
90	5532	0.	0.25	0.50	0.	0.	0.	0.
94	5536	0.	1.00	0.75	0.	0.	0.75	0.50
95	553A	0.	0.	0.	1.00	0.	0.	0.
99	TRVL	0.	2.00	1.75	2.75	1.50	1.50	1.25

OCT4100 FLORIDA

		1010	1011	1012	1013	1014	1015	1016
3	22R	0.	0.	0.50	0.	0.	0.	0.
4	45M	0.	2.00	1.50	0.	0.	0.	0.
5	45R	2.75	0.	0.	0.	0.	0.	0.
7	248M	0.	0.	2.50	0.	0.	0.	0.
10	548M	0.	1.50	0.	0.	0.	0.	0.
11	548R	1.00	0.	0.	0.	0.	0.	0.
12	12M	0.	0.	0.	7.00	0.	0.	0.
50	97BI	0.	1.00	0.	0.	0.	0.	0.
52	97BP	0.75	0.	1.50	0.75	0.	0.	0.
90	5532	0.	2.00	0.	0.	0.	0.	0.
94	5536	0.50	0.50	0.	0.	0.	0.	0.
99	TRVL	3.00	1.00	2.50	2.25	0.	0.	0.

		1010	1011	1012	1013	1014	1015	1016
3	22R	0.	0.75	0.	1.00	0.75	0.	0.
4	45M	0.	0.	0.	1.50	0.25	0.	1.50
5	45R	0.	3.50	1.25	0.	0.	0.	0.
7	248M	0.	0.50	0.	0.	0.	0.	0.
8	248R	0.	1.75	0.	0.	0.	0.	0.
10	548M	0.	0.	0.	0.	0.	0.	2.00
12	12M	0.	0.	0.25	0.50	0.25	1.50	0.50
13	12R	0.	0.	0.	0.50	0.	1.00	0.
18	68R	0.	0.	0.	0.	1.75	1.50	0.
50	97BI	0.	0.75	0.	0.	2.25	0.75	0.
52	97BP	0.	0.	3.00	2.75	1.25	0.	0.
53	97BR	0.	0.	0.	0.	0.	0.	0.25
90	5532	0.	0.	0.	0.	0.	1.00	0.
94	5536	0.	0.	2.25	0.	0.25	0.75	1.25
95	553A	0.	0.	0.	0.75	0.	1.00	0.
99	TRVL	0.	0.75	1.25	1.00	1.25	1.00	2.50

OCT4100 FLORIDA

		1017	1018	1019	1020	1021	1022	1023
4	45M	0.	0.	0.25	0.	1.50	0.50	0.
5	45R	0.	0.	0.	0.	0.	0.	1.25
7	248M	0.	0.	1.25	0.	0.	0.	0.
8	248R	0.	0.	1.25	0.	0.	1.25	0.
9	548C	0.	0.	0.	0.	3.50	0.	0.
11	548R	0.	0.	0.	0.	0.	0.	2.50
12	12M	0.	0.	0.	0.	0.50	0.	0.
17	68M	0.	0.	0.50	0.	0.	0.25	0.
50	97BI	0.	0.75	0.	0.	0.	0.	0.
52	97BP	0.	3.00	0.50	0.	0.	3.75	1.25
90	5532	0.	0.	0.	0.	0.75	0.	0.
94	5536	0.	0.75	0.	0.	0.	0.	0.
95	553A	0.	0.75	1.00	0.	0.	0.	0.
99	TRVL	0.	2.75	3.25	0.	1.75	2.25	3.00

		1017	1018	1019	1020	1021	1022	1023
4	45M	0.	1.00	1.25	2.00	1.00	1.00	0.
5	45R	0.	0.	2.75	0.	0.	1.00	0.
8	248R	0.	4.50	0.	0.75	0.	0.	0.
9	548C	0.	0.75	2.50	0.	4.00	1.00	0.
10	548M	0.	0.75	0.	0.	0.	0.	0.
16	68E	0.	0.	0.	2.50	0.	0.	0.
18	68R	0.	0.	0.	0.50	2.00	0.	0.
39	F257C	0.	0.	0.	0.	0.50	0.75	0.
50	97BI	0.	0.	0.50	0.25	0.75	1.50	0.
52	97BP	0.	0.	0.	0.	0.	1.25	0.
95	553A	0.	0.50	0.	0.	0.	0.	0.
99	TRVL	0.	1.00	1.00	2.25	0.75	1.50	0.

1 OCT4100 FLORIDA

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		1017	0000	0000	0000	0000	0000	0000

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		1017	1018	1019	1020	1021	1022	1023
4	45M	0.	0.50	0.	0.25	0.50	0.	0.
5	45R	0.	0.	2.25	0.	0.	0.75	0.
9	548C	0.	0.	0.	0.	0.	0.25	0.
10	548M	0.	0.	0.	0.25	0.	0.	0.
11	548R	0.	1.75	1.50	0.	0.	2.00	0.
16	68E	0.	1.00	0.	0.50	0.	0.	0.
34	F257M	0.	0.	0.	0.50	0.	0.	0.
50	97BI	0.	0.25	0.	0.75	0.	0.25	0.
51	97BW	0.	0.	1.25	0.	0.	0.	0.
52	97BP	0.	2.00	0.50	0.	3.25	2.50	0.
53	97BR	0.	0.	0.75	0.50	0.	0.	0.
90	5532	0.	0.	0.75	0.50	0.	0.	0.
94	5536	0.	0.50	0.	0.	0.50	0.	0.
95	553A	0.	0.	0.25	1.75	0.75	0.	0.
99	TRVL	0.	2.00	1.75	3.00	3.00	2.25	0.

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OCT4100 FLORIDA

		1017	1018	1019	1020	1021	1022	1023
3	22R	0.	0.75	0.	0.	0.	0.	0.
4	45M	0.	0.50	1.50	0.	0.	1.75	0.50
5	45R	0.	0.75	0.50	1.75	2.50	0.50	0.75
8	248R	0.	0.	0.	0.	2.25	0.	0.
9	548C	0.	0.	1.00	1.00	0.	0.	0.
10	548M	0.	1.00	0.	0.	0.	0.	0.
11	548R	0.	0.	0.	1.00	1.50	0.	1.25
16	68E	0.	0.50	0.	0.	0.	2.25	0.
17	68M	0.	0.50	0.	0.	0.	0.	0.
18	68R	0.	0.	0.50	0.25	0.	0.	0.50
35	F257R	0.	0.	0.	0.	0.	0.	0.75
39	F257C	0.	0.25	0.	0.	0.	1.00	0.
50	97BI	0.	0.25	0.	0.75	0.	0.	0.25
52	97BP	0.	0.	2.25	1.00	0.50	1.00	1.75
53	97BR	0.	0.	0.25	0.	0.50	0.	0.
56	98ER	0.	0.75	0.	0.	0.	0.	0.
90	5532	0.	0.	0.	0.50	0.	0.	0.
94	5536	0.	0.	0.	0.	0.	0.	0.25
95	553A	0.	1.25	0.50	1.00	0.75	1.50	0.50
99	TRVL	0.	2.00	2.50	2.25	1.50	1.50	2.50

		1017	1018	1019	1020	1021	1022	1023
4	45M	0.	2.00	2.25	0.50	0.50	0.	0.
9	548C	0.	1.50	0.	0.	1.00	0.	0.
12	12M	0.	0.	0.	0.50	0.	0.	0.
18	68R	0.	0.	0.	2.00	0.	0.	0.
50	97BI	0.	2.00	2.00	1.50	1.50	0.	0.
52	97BP	0.	0.	0.	1.00	0.	0.	0.
53	97BR	0.	0.	0.	0.50	0.	0.	0.
95	553A	0.	1.50	1.00	0.	0.	0.	0.
99	TRVL	0.	2.00	2.75	2.00	1.00	0.	0.

1 OCT4100 FLORIDA

2

		1017	1018	1019	1020	1021	1022	1023
3	22R	0.	1.25	0.	0.50	0.	0.	1.75
4	45M	0.	1.50	1.00	1.50	2.50	1.00	0.50
5	45R	0.	0.	0.50	0.	0.	0.50	0.75
9	548C	0.	1.50	3.00	0.	0.	0.50	0.
10	548M	0.	0.50	0.	0.	0.	0.	0.
11	548R	0.	0.	0.	1.00	3.00	1.50	0.
16	68E	0.	0.	0.50	0.50	0.25	0.	0.
17	68M	0.	0.	0.	1.00	0.	0.50	2.25
50	97BI	0.	0.	1.75	0.	1.25	0.50	1.25
52	97BP	0.	0.50	1.50	2.25	0.75	1.00	0.
53	97BR	0.	0.	0.	0.50	0.	0.	0.
90	5532	0.	2.25	0.	0.	0.	0.50	0.
94	5536	0.	0.	0.	0.	0.	1.00	0.
95	553A	0.	0.	0.	0.	0.	0.	0.50
99	TRVL	0.	1.50	0.75	1.75	1.25	2.00	1.50

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OCT4100 FLORIDA

		1024	1025	1026	1027	1028	1029	1030
3	22R	0.	1.75	1.75	0.	0.	1.25	0.
4	45M	0.	0.75	0.50	0.	0.50	0.	0.
5	45R	0.	1.75	0.	0.	1.00	0.	0.
6	248C	0.	0.	0.	0.	1.00	0.	0.
7	248M	0.	0.25	0.75	1.25	2.50	0.	0.
8	248R	0.	0.	0.	0.	1.00	1.00	0.
9	548C	0.	1.00	1.50	1.00	0.	0.	0.
11	548R	0.	0.	0.	0.	0.	2.50	0.
17	68M	0.	0.	1.75	0.	0.	0.	0.
18	68R	0.	0.	0.50	0.	0.	0.	0.
30	257M	0.	0.	0.	1.00	0.	0.	0.
50	97BI	0.	1.00	1.25	0.	0.50	0.	0.
52	97BP	0.	1.00	0.50	3.00	0.50	1.25	0.
53	97BR	1.50	0.	0.	0.	0.	0.75	0.
90	5532	0.	0.	0.	0.	0.50	0.	0.
94	5536	0.	0.	0.	0.	0.	0.25	0.
99	TRVL	0.	0.50	0.50	1.75	1.50	1.00	0.

	1024	0000	0000	0000	0000	0000	0000

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OCT4100 FLORIDA

		1024	1025	1026	1027	1028	1029	1030
2	22M	0.	2.25	0.	0.	0.	0.	0.
3	22R	0.	1.25	0.	1.25	0.	2.00	0.25
5	45R	0.	0.	0.50	0.	0.	0.	0.50
8	248R	0.	1.25	0.	0.	2.75	1.75	2.25
9	548C	0.	0.	0.	2.00	0.	0.	0.
16	68E	0.	0.50	0.	0.	0.	0.	0.
17	68M	0.	0.	0.75	0.	0.	1.25	0.
18	68R	0.	0.	0.	0.	0.75	0.	0.
50	97BI	0.	2.75	1.50	1.50	0.75	3.00	0.
52	97BP	0.	0.	1.25	2.75	1.00	0.	1.00
53	97BR	0.	0.	1.00	0.	0.	0.	0.
90	5532	0.	0.	0.50	1.00	0.	0.	0.
94	5536	0.	0.	0.	0.	0.	0.	2.25
95	553A	0.	0.	1.25	0.	0.75	0.	0.
99	TRVL	0.	1.00	2.25	1.75	3.00	1.00	1.75

		1024	1025	1026	1027	1028	1029	1030
3	22R	0.	0.	1.50	4.50	0.	0.	0.
5	45R	0.	5.50	5.00	2.50	6.50	7.00	0.
90	5532	0.	1.50	0.	0.	0.	0.	0.
99	TRVL	0.	1.00	1.50	1.00	1.50	1.00	0.

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15 16

OCT4100 FLORIDA

		1024	1025	1026	1027	1028	1029	1030
4	45M	0.	0.75	0.	0.	0.	0.	0.
5	45R	0.	3.50	1.50	1.00	0.	0.	0.
6	248C	0.	0.	0.	2.00	0.	0.	0.
7	248M	0.	0.	0.25	0.	0.	0.	0.
8	248R	0.	0.75	1.50	0.	0.50	0.	0.
10	548M	0.	0.	0.25	0.25	0.	0.	0.
11	548R	0.	0.	0.	2.75	6.25	0.	0.
16	68E	0.	0.50	0.	0.75	0.	0.	0.
17	68M	0.	0.50	0.	0.	0.	0.	0.
18	68R	0.	0.	0.75	0.	0.	0.	0.
31	257R	0.	0.	1.00	0.	0.	0.	0.
50	97BI	0.	2.25	0.75	0.	0.	0.	0.
52	97BP	0.	0.25	0.75	0.75	2.00	0.	0.
53	97BR	0.	0.	0.	0.50	0.	0.	0.
56	98ER	0.	0.	1.50	0.	0.	0.	0.
90	5532	0.	0.	0.	0.50	0.	0.	0.
99	TRVL	0.	1.50	1.75	1.50	1.00	0.	0.

		1024	1025	1026	1027	1028	1029	1030
3	22R	1.75	2.25	1.25	4.00	2.25	1.25	0.
4	45M	0.	1.50	0.	0.	0.	0.	1.00
5	45R	0.	0.	0.75	0.	2.50	1.50	1.75

A17

6	248C	0.	0.	0.	0.	0.	0.	1.00
7	248M	0.75	0.25	0.25	0.75	0.75	0.	0.
8	248R	0.	0.	0.75	0.	0.	0.	0.
10	548M	0.50	0.25	1.00	0.	0.50	1.50	0.
11	548R	1.00	0.	0.	0.	0.	0.	0.
12	12M	0.	0.75	0.	0.	0.	0.	0.
13	12R	0.	0.75	0.	0.	0.	0.	0.
16	68E	0.	0.	0.	0.	0.	0.	0.75
17	68M	0.	0.75	0.	0.	0.	0.	0.
18	68R	0.75	0.	0.	0.	0.	1.00	0.
50	97BI	0.	0.	0.	0.	0.	0.	1.25
52	97BP	0.50	1.25	0.	1.50	0.75	1.75	0.
56	98ER	0.	0.	1.75	0.	0.	0.	0.
90	5532	0.	0.	0.	0.	0.75	0.	0.
94	5536	0.75	0.	0.50	0.50	0.	0.50	0.50
95	553A	0.	0.	1.50	1.00	0.	0.	0.
99	TRVL	2.00	2.25	2.25	2.25	2.50	2.50	1.75

OCT4100 FLORIDA

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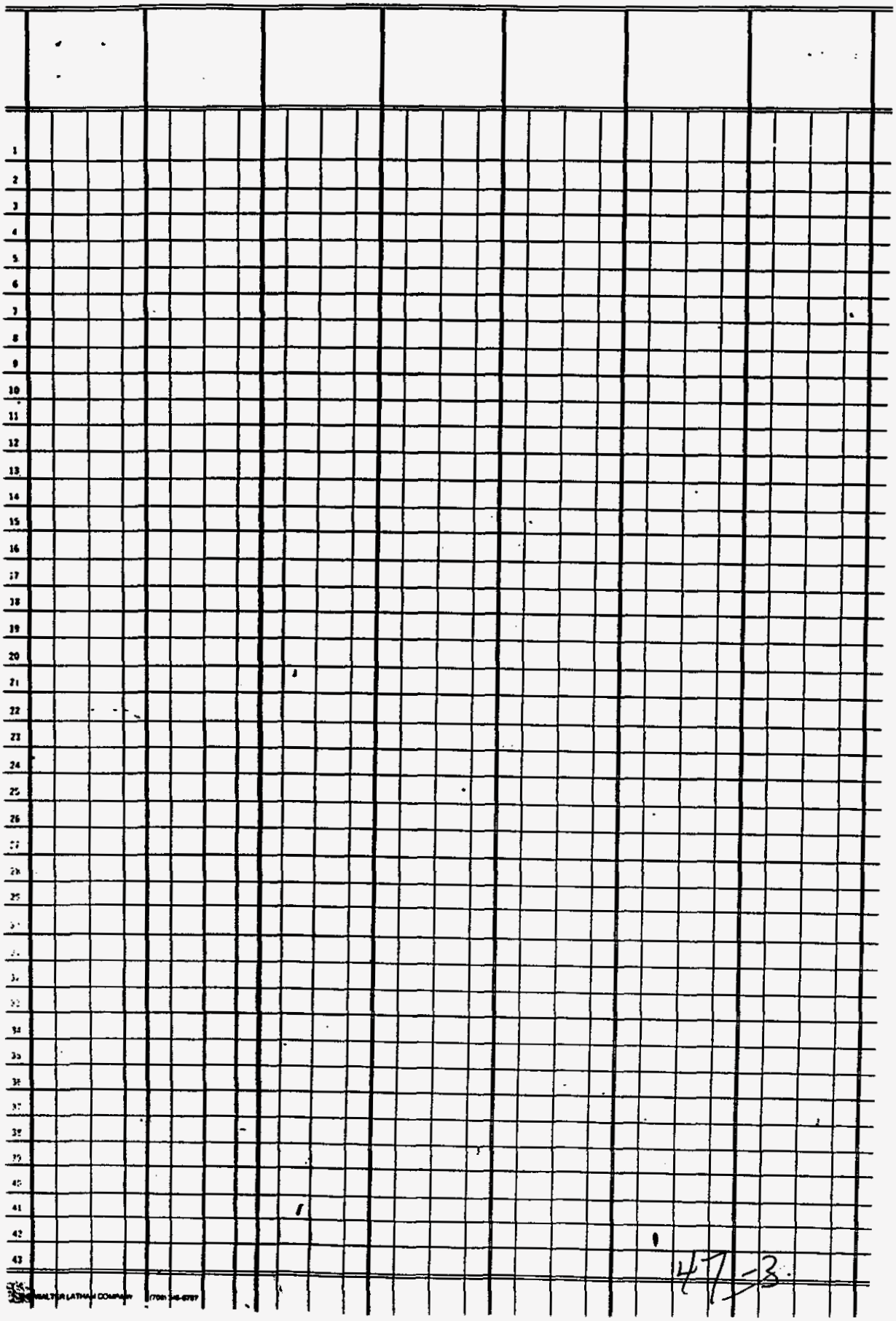
6

ENTER SSN
ENTER -1 TO DO ALL SSN'S IN THIS FILE
ENTER 1 TO LIST SSN'S IN THIS FILE
ENTER 0 (OR 'ENTER') TO TERMINATE PROGRAM RUN

19 195



BellSouth

Computer Asset Protection Quick Reference Guide

This document highlights major areas of importance in BellSouth's Computer Asset Protection (CAP) Policies, Executive Instructions and Standards.

Further details, clarification and other CAP rules are included in Executive Directive 001, Executive Instructions Number 15 and BSP008-140-XXXSV.

Questions or variance requests should be referred to a CAP Team representative or the CAP organization at 205 988-1370.

CAP

NOTICE

Executive Directive Highlights

* Employees shall access only authorized systems, applications, networks and data. Employees shall not access public or private computer bulletin boards from BellSouth facilities or assets.

* Employees shall not access vendor computer services without written authorization.

* Employees shall not import, use or distribute public domain software in BellSouth.

Executive Instruction Highlights

* All computer systems, applications, and computer communications networks will be designed, implemented and operated by or for the Company in accordance with CAP standards.

* Employees and contracted agents are to comply with CAP instructions, standards, practices and guidelines.

* A device or software will not be configured to avoid manually entering an ID and password.

* Files, software or data will not be uploaded or downloaded between a BellSouth and a non-BellSouth computer, system, or network unless specifically approved by CAP. However, employees may use personally owned computers to perform Company business if they ensure no jeopardy to BellSouth.

* Workstations, terminals, PCs, etc. will be logged off when unattended.

* Output media, printed material and magnetic media will be marked with the appropriate proprietary information warning and will be disposed of properly.

Helpful CAP Tips

* Be extremely careful about giving information over the phone or sending something outside the Company to someone you do not know. Identify recipients of information.

* Shred anything that could help an intruder.

* Protect the confidentiality of data. Treat copies like originals.

* Do not create unauthorized in—dial access paths to Company computers.

* If you use a company PC:

  Use company supplied software.

  Do not use or make unauthorized copies of software.

  Make and keep good backup files in another area away from your PC.

  Protect diskettes with software or important files from theft.

  Ensure that diskettes are disposed of properly.

  Write protect software to avoid virus contamination.

CAP Variances

A request for a variance from a CAP standard should be discussed first among CAP team members. Official requests must have concurrence from the originating department AVP and will be submitted to the AVP for Information Systems-Technical Planning/ Corporate Communications.

1. USER IDENTIFICATION

- Each system user will be uniquely identified. IDs will not be shared.
- ID mechanisms will not be bypassed.
- BellSouth common user ID format will be used.
- System users and administrators will be reidentified at least annually.
- IDs inactive for 60 days will be disabled.

2. USER AUTHENTICATION

- User IDs must be authenticated (proven) by passwords or other approved means.
- Authentication mechanisms will not be bypassed by anyone.
- Passwords will not be shared.
- Passwords will be user assignable, known only to the user and be able to be changed at least daily.
- User passwords must be at least 6 characters. Privileged user, administrative or critical system passwords should be 8 characters.
- Passwords must contain at least 2 alpha and 2 numeric characters, and should contain at least one special character.
- Passwords will be aged every 60 days; 30 days on critical systems or for privileged users.
- Users will only be allowed to self-restore expired passwords for 15 days. Privileged users or users of critical systems should not be allowed to restore their own expired passwords.
- Systems will encrypt and further protect stored passwords.

3. ACCCESS CONTROL OR AUTHORIZATION

- System access will be allowed, denied and otherwise controlled by authorization mechanisms.
- Access control/authorization will be based on authenticated user ID.
- Users and administrators will be allowed access to only necessary commands and data.
- Access control mechanisms, data files and tables will be protected.
- Users and administrators will be disconnected or reauthenticated after 30 minutes or less of non-use.
- In-dial access will be protected with an additional level of authentication outside the system.
- Dial back is not an acceptable primary means of in-dial protection.
- In-dial access to a Network Element or OAM&P (Operations, Administrations, Maintenance and Provisioning) support systems will be through a protected network.
- Remote diagnostic access will be controlled and made available only by specific authorization at the time of access.
- Access to a data network or systems via in-dial will not be allowed unless the user has at some point been individually identified and authenticated, and an audit trail has been established.
- Systems and networks will recognize a hang up or other communications interruption and terminate the user session.
- Interrupted in-dial access sessions will not be reestablished without the use of identification and authentication procedures.
- A system or network's login process will abort if incorrectly attempted 3 times.
- Access to Company systems by non-employees will be in accordance with the BSP.

4. CONFIDENTIALITY

- Access control and/or authorization mechanisms must be used to help keep transmitted and stored data confidential.
- Encryption should be used to protect private, sensitive or other critical stored data.
- Encryption should be used to protect private, sensitive or other critical data transmitted by other than point-to-point communications or other trusted means.
- Keys used to decrypt data will be transmitted directly from person to person or via private paper mail.

5. DATA INTEGRITY

- Ensure that stored data cannot be modified by unauthorized entities.
- After-the-fact integrity checks should be accomplished through audit activity.
- Error detection protocols, edits, check sum programs, etc., will be used.
- File system and disk integrity checks will be run on a regular basis.
- Systems will be able to identify the origin of received/maintained data.

6. SERVICE AVAILABILITY

- Systems will be designed and maintained to ensure that scheduled services are available.
- Approved disaster recovery and contingency processing plans, and off-site storage programs for data and software must ensure the continuation of critical functions.

7. ACCOUNTABILITY

- Personal accountability will be accomplished by tracing activity back to the responsible party via audit mechanisms.
- An after-the-fact audit process must include the creation and use of both audit records for appropriate activities and procedures for the timely analysis of such activities.
- Key questions for audit trails are who did (or accessed) what, when and (from) where.
- Intrusion and improper activity detection in real-time will be strongly considered.
- Audit log access will be "read only" by authorized persons and the log will be protected from both modification and destruction.

BST

Computer Access Protection

3/4/93

KW 10/14/93

47-4

THE WALTER LATHAM COMPANY (708) 345-8787

PBC

Post-it™ brand fax transmittal memo 7671	# of pages ▸ 4
To STEVE SHAW	From K JOHNSON
Co.	Co.
Dept.	Phone # 305-977-2818
Fax # 305-261-2318	Fax #

```
U                       0
\X,\0       /WGDOUDQ
            {GOTO}INFO~
            /RIINFO~
            {NS}
            {DATA}
            {PS}
            {FOR CATX,1,5,1,RUN}
            /WGDOUEQ/WEYY

RUN         {HOME}{GOTO}A~
            /RE.{R}{END}{D}{L}{END}{U}~
          6 {FOR KK,1,S,1,DPG}
            {GOTO}SAMP~
          2 {FOR IP,1,CATX,1,DOWN}              CATX            1
            /C~S~
            {IF S<2}{BRANCH END}
            /RENET~/RVNAME~NET~                 NAME      NET2
            {GOTO}A~/C
            NET2                                          1 NET2
            ~~                                            2 NET1
            {IF @VALUE(U)<S}{BRANCH EXIT}                 3 NET3
            {GOTO}AA~X~                                   4 NET4
            /RE.{L}{END}{D}{R}{END}{U}{R 24}~             5 NET5
            /CFORM~.
            {L 18}{END}{D}{R 18}~
            {GOTO}AA~
            {CALC}~
            /RV.{R 24}{END}{D}~~
            /DSRD.{R 24}{END}{D}~PAP8~A~G
         36 {FOR L,1,S,1,DOWN}
            /RE.{R 24}{END}{D}~
            {GOTO}AA~
            /DSRD.{R 22}{END}{D}~PW1~A~SS1~A~E~T1~A~G
         36 {FOR K,2,S,1,SPACE}
            {GOTO}HEAD~
            {GOTO}WK~
         36 {FOR J,2,S,1,TEST}
            {GOTO}AA~                                   SAVE    {GOTO}HEAD~
            /RLCAB88.AN999~                                     /FXV{CE}C:\WASSP\
            :PRCRS.{L}{END}{D}{R}{END}{U}{R 22}~G               ?
            {SAVE}                                              \
END         {GOTO}HEAD~                                             ERR
                                                                ~.{R 22}{END}{D}{END}{D}~
                                                                /PF{CE}C:\WASSP\
                                                                ?
                                                                \
                                                                    ERR
                                                                ~
DOWN        {D}                    EXIT   {GOTO}AP1~            CRR.{R 22}{END}{D}{END}{D}{L 2}~
                                          {GETLABEL "",AW1}     GQ
SPACE       {D}/WIR~                      /WGDOUEQ/WEYY
            /CFORM2~~
            {D}

PAGE        :WPRQ

TEST        /C~TEMPWK~
            {D 2}{CALC}~
            {IF @CELLPOINTER("CONTENTS")<>TEMPWK}{PAGE}

DPG         {D 2}
            :WPDQ
```

Confidential.

200

(1)

	DAYS					
10 ALABAMA	0	•	•	•		
20 KENTUCKY	3	•	•		•	
30 LOUISIANA	6	•	•			•
40 MISSISSIPPI	9	•		•	•	
50 TENNESSEE	12	•		•		•
60 GEORGIA	15	•			•	•
71 FLORIDA	18		•	•	•	
72 FLORIDA	21		•	•		•
73 FLORIDA	24		•		•	•
80 NORTH CAROL	27			•	•	•
90 SOUTH CAROL	30					

INFO FILL IN THE FOLLOWING INFORMATION REGARDING THIS SAMPLE
(USE RIGHT ARROW TO PROCEED TO NEXT ITEM)

SAMPLE MONTH & YEAR (E.G., JANUARY 1993) ?

BEGINNING DATES (SUN) FOR SAMPLE WEEKS (E.G., APR 03) - INCL WEEK IN THIS MONTH'S SAMPLE IF AND ONLY IF WED OF THIS WEEK IS IN THE SPECIFIED MONTH

1	2	3	4	5
?	?	?	?	

SAMPLE SIZES FOR
-I&M POTS (4100) ?
-I&M SPEC SVCS (4110) ?
-I&M CORP COMM (4120) ?
-I&M PUBLIC COMM (4180) ?
-CABLE/FAC MTCE (4250) ?

STATE (AL, KY, LA, MS, TN, FL, GA, NC, SC)) ?

WASSP SUBDIRECTORY FOR OUTPUT STORAGE
(E.G., FOR PATH C:\WASSP\JAN93 ENTER JAN93) ?

SAMP 5

START

1	2	3	4	5
?	?	?		0

201

(2)

FORM

```
A:S79: [W11] @MID(A79,81,8)
A:T79: [W19] @MID(A79,12,19)
A:V79: [W10] @LEFT(A79,10)
A:W79: (F0) [W3] @ROUND(@RAND*$NWK+0.5,0)
A:Y79: [W10] @HLOOKUP(W79,$START,1)
A:AA79: [W1] '|
A:AC79: [W1] '|
A:AD79: [W5] @VLOOKUP($AQ79,$DAYS,1)
A:AE79: [W1] '|
A:AF79: [W5] @VLOOKUP($AQ79,$DAYS,2)
A:AG79: [W1] '|
A:AH79: [W5] @VLOOKUP($AQ79,$DAYS,3)
A:AI79: [W1] '|
A:AJ79: [W5] @VLOOKUP($AQ79,$DAYS,4)
A:AK79: [W1] '|
A:AL79: [W5] @VLOOKUP($AQ79,$DAYS,5)
A:AM79: [W1] '|
A:AO79: [W1] '|
A:AP79: @RAND
A:AQ79: @RAND*100
```

202

(3)

FORM2

(4)

203

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 1

To STEVE SHAW	From K JOHNSON
Co.	Co.
Dept.	Phone # 205-977-2818
Fax # 305-261-2318	Fax #

UNIVERSE SIZE = 0
SAMPLE SIZE = 2
OF WKS IN MONTH 4

ERR
ERR
?

HEAD RC NAME SSN WK WK BEGINS

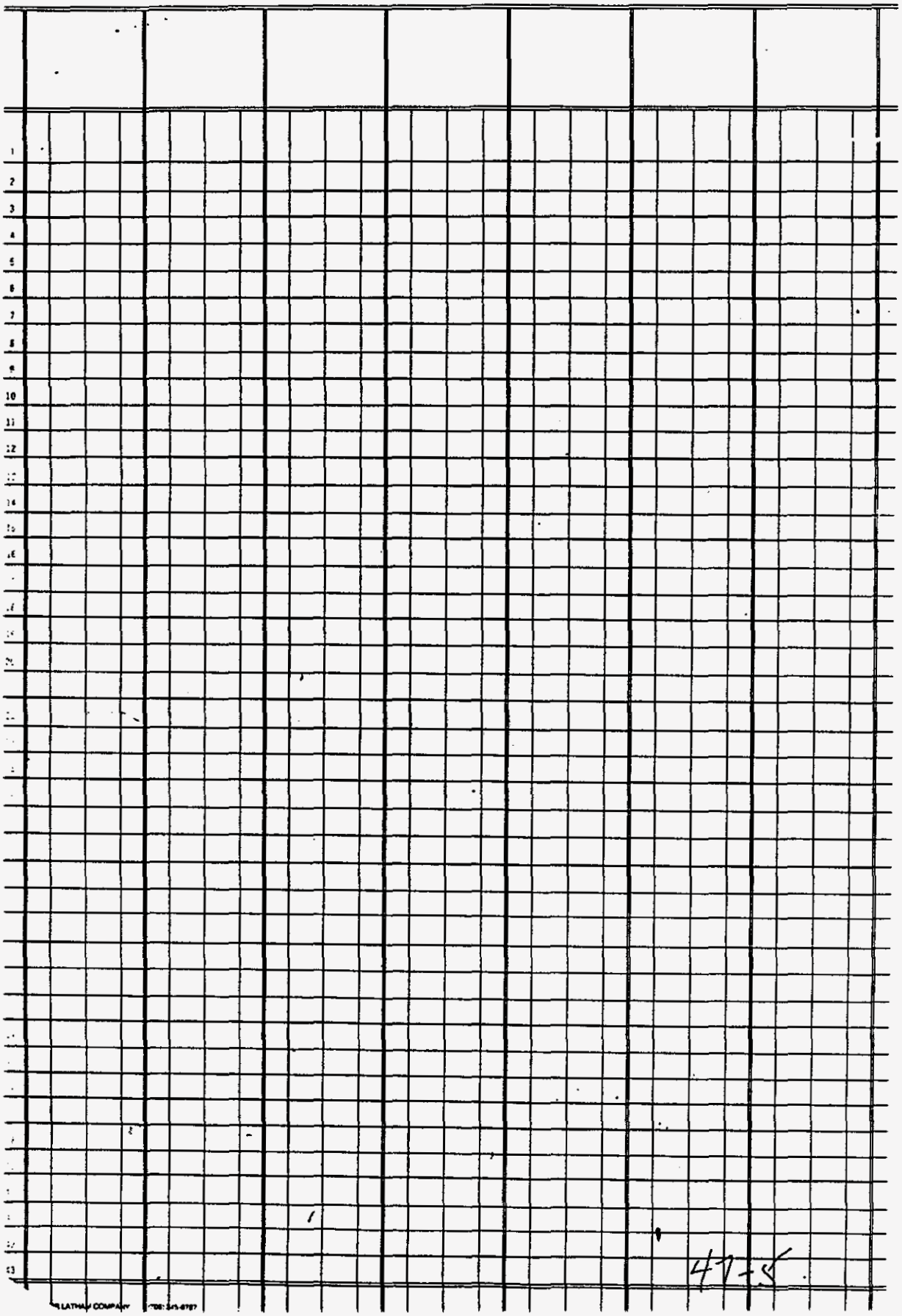
INTERVIEWS
S M T W T F S

204

J

BSP
Program for Sample Selection

BS 12/13/93
KW 12/14/93



47-5

COMPANY: BST
TITLE: DATA COLLECTION
TECHNICAL ANALYST PROCEDURES
PERIOD: TYE 12/31/93
DATE: DEC 9. 1993
AUDITOR: RKY

KW 12/14/93

WP NO.

IV. A. DATA COLLECTION
B. TECHNICAL ANALYST PROCEDURES

Per Rick King,the program generates a sample every month as explained in wp 45. He inputs the data that generates the sample.

44-1
44-2

Per D&T the technical analyst sends prior to the week samples 1) a list of technicains selected 2) the apprporiate logs, and 3) Instructions to the Technicians Manager. The Tech Manager gives to tech supervisor. According to my conversations with Rick King, Steve Vanderberg and Steve Shaw, the technical analyst does not send the samples out, Rick King and Steve Venderberg send the samples out. Also, in my conversations with Rick King, Steve Venderberg and Steve Shaw, the whole month of sample selection is sent to the tech manager at one time and sent to the tech supervisor at one time. Also, the tech supervisor notifies the tech to be sampled the Friday before his week.

44-1
44-2

Per D&T the tech's report time in 15 minute intervals on the logs. Staff observed this also. When completed the techs give logs to supervisor and any discrepancies resolved. The supervisor sends to the technical analyst for additional review.

48-1

See ~~next page~~ for PSC staff observations regarding data collection and controls and observations regarding technical analysts interviews and controls.

CONCLUSIONS:

I. Procedures are instituted so that:

All WALS received are checked against the names of the ones that are supposed to be received.

All WALS received are agreed to all appropriate documentation by the technical analyst.

All WALS are received at Wassp center next business day.

Approximately 30% of the sample selected are interviewed for three days of sample week.

The Service Tech himself is interveiwed as required by the FCC rather than the service tech supervisor.

The interviewer observed (technical analyst) follows the interview technique training.

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cont'd (1)

COMPANY: BST
TITLE: DATA COLLECTION
TECHNICAL ANALYST PROCEDURES
PERIOD: TYE 12/31/93
DATE: DEC 9. 1993
AUDITOR: RKY

WP NO.

There are no documented procedures for correcting the WAL sample or the DCWS's of the sample. There are documentated procedures for this for the positive time reporting. There are documental procedures for correcting WAL's also - See WP. No. 48-2 Item 4.2 See 48-2 Items 5.5 + 5.6.

RECOMMENDATION:

Document procedures for Wassp corrections.

II. The controls to determine that the TA does his job correctly are not documented. As explained by Steve Vanderberg, he is the Technical Analyst Supervisor and he reviews the technical Analysts work in terms of consistency and he provides interpretation to the anlyst based on his knowledge of the FCC and PSC.

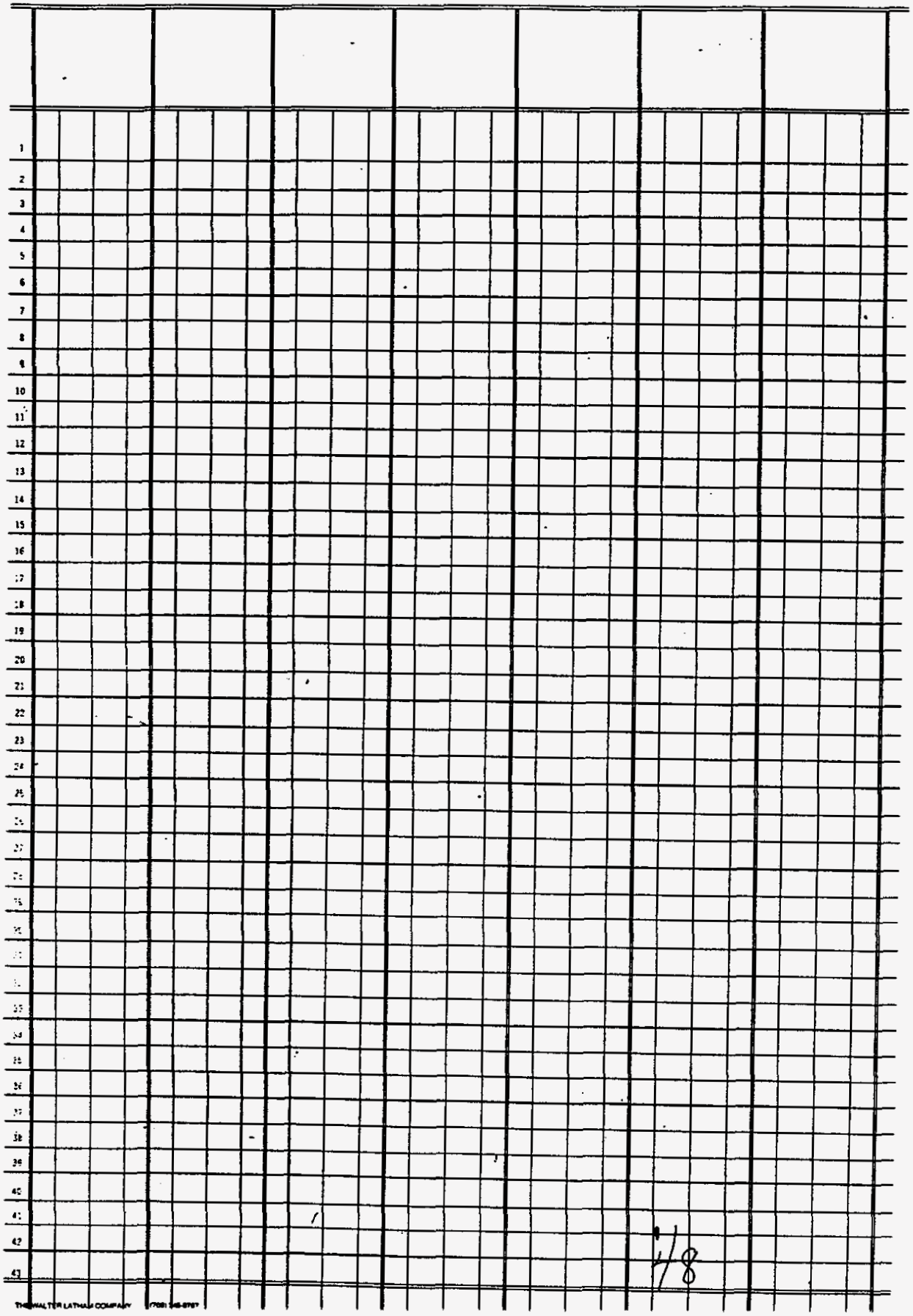
Steve does periodic reviews, nothing specific at this point, informal. he sits in on interviews and looks at TA completed work; compares WALs to source documentation. Steve said that because of all the audits he has been doing this almost 100%.

He stated that as part of performance reviews for next year, they are going to set up a specific number of interviews that he will observe and do periodic spot checks on the accuracy of the WAL and interpretation of analyst. A number will be set.

RECOMMENDATION:

Document how the supervisor will review the technical analyst's work.

III. The ST knows he is being sampled usually the Friday before the week sampled. Based on all the conclusions drawn in WP 45,46,47 and 48, it does not appear that this will bias the sample.



208

COMPANY: BST
TITLE: OBSERVATION OF TECHNICAL ANALYST
PERIOD: TYE 12/31/93
DATE: DEC 8, 1993
AUDITOR: RKY

RW 12/14/93

WP NO. 48-1

PSC staff sat and observed the job routine of Ronnie McFarland, the technical analyst for Florida.

I listened in on three interviewes and observed Mr. McFarland side of the interview on three others.

According to the WASSP procedures 30% of all ST sampled have to be interviewed.

PSC Staff Observations

The ST faxes in their WAL's when completed.
If ticket involved, faxes that too. The TA pulls up the ST DCWS for each WAL. Pulls up by Employee code and prints out.

48-2 Per FCC each WAL should be checked (everyone is checked 100%) by TA to source documents (DCWS, tickets) to see if they agree. The technical analyst said if there is an error or questions in those that are checked to agree, the TA calls the supervisor, not the tech. The supervisor talks to the tech and tries to straighten this out. The supervisor will call the TA back. If there is an error on the DCWS, a DATH will be produced by the supervisor. The DATH is a corrected DCWS. The TA pulls this up and adds to documentation.

Partly TA If there is an error on the WAL, the TA can change this, but sometimes the ST after speaking to his supervisor sends in a corrected WAL.

48-2 According the Wassp procedures, the supervisors are to be interviewed for 30% of the WAL's. FCC required that the TA interview the ST rather than the supervisor, that is what is happening per RY observation. Per new procedures wp no 48-2/1 and 48-2/2.

RY observation of the interview process by the TA.

On the interview, the tech analyst answers the call ins (the ST call in). The tech analyst states the phone number from the WAL he is looking at and then asks the ST what he did. The TA sees if what the ST says agrees with the WAL and source doc'a. If there is an error, the TA talks directly to the ST and asks the ST to have his supervisor call the TA. If the error is on the DCWS (incomplete narrative, fiber or copper is missing, wrong) then the supervisor puts in a corrected DATH and this becomes part of the documentation. Supervisor has to talk to the ST and find out exactly what he did. If there is a an error on the WAL, the ST may send a corrected one, but the TA can change the WAL after interview if put on wrong line; as long as it agrees with the source documentation. But the TA cannot change the DCWS. Needs to be changed by the supervisor.

WP 48-3 has examples of WAL and source documentation and verification output.

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Conf

48-1P 1

COMPANY: BST
TITLE: OBSERVATION OF TECHNICAL ANALYST
PERIOD: TYE 12/31/93
DATE: DEC 8, 1993
AUDITOR: RKY

WP NO.

TA can pull up the DCWS by the ST employee number. To see if there is a corrected DCWS (DATH) pulls up by telephone number.

The DATH is the Display Abbreviated Trouble History vs the DLETH (Display Long extended trouble history.)

The last thing the TA does is ask the ST how many hours he worked that day.

It appears to me that the questions asked by the TA are open ended and asked in a way that the ST will do the talking -- not the TA. It appears that the analyst follows the interview technique training as recommended by the FCC 48-2/3.

I asked how far in advance the supervisor knows who will be sampled and how far in advance the ST is notified that he has to fill out the logs.

Steve Shaw says he sends the sample to the supervisors about 10 days before the month. The supervisors notify the ST around Friday of the week before.

For what the tech supervisors are supposed to do, see wp no. 48-2/1, pg 4 of 8. Staff did not observe this.

48-3/5

The technical analyst has a procedure for checking off the WAL's as he checks them 100% to the souce documentation.(See wp 48-3/5 for sample list of what the TA checks off). He also has a procedure for checking off the interviews he does. Supposedly each technical analyst does the same so one can pick up for another. This is documented in the Technical Analyst Handbook.

Also, Per Rick King, the TA are switched every so often from state to state. Check this with Rick.

The TA brings his weeks work to the input area and logs in what he brings in. The input clerks put into system and log in what they put in. In my observation they made sure the hours added up each day to the total on the WAL.

Then a verification sheet is printed of the data that is input. Someone else checks this. Talk to Rick about this.

COMPANY: BST
TITLE: OBSERVATION OF TECHNICAL ANALYST
PERIOD: TYE 12/31/93
DATE: DEC 8, 1993
AUDITOR: RKY

WP NO.

I also spoke with the supervisor of the Technical Analyst, Steve Vanderberg in Brimingham.

I asked him what controls were in place so that the TA does his job correctly.

He said the the TA is hired for his network tech experience as well as his accounting experience.

Once they are hired there are sessions of training in the WASSP process and in FASC (Functional Accounting Sytem Code). After that the Tech Analyst is assigned a state.

Steve Vanderberg said that he reviews the TA work in terms of consistency, he provides interpretation to the analyst based on his knowledge of the FCC and PSC.

He does periodic reviews, nothing specific at this point. kind of informal. He goes in and sits in on inverviews. He also looks at the completed WAL and compared with the source documentation to make sure the TA did the right thing.

Doesn't have a specific number because of all audits going on is doing almost 100% checking on the TA's and he doesn't think that is warranted.

As part of peformance reviews for next year, they are going to set up specific number of interviews that Steve will sit in on and go in and do periodic spot checks on the accuracy of the WAL and interpretation of analyst, set a number.

Steve Venderberg also goes in and check the verifications sheets after input. Goes in and looks at what has been verified. Look at what individuals are doing in terms of input.

Steve also sent out the sample.

48.2 The FCC is requiring the WAL to be at the WASSP center no later than the next business day. Interview no later than 2 business days. Then they go to Steve V. Part of the TA responsibilities is to close out within the specified time. This is auditable.

Cont,

48/p3 211

48-1

212

PBC

BELLSOUTH

Maurice P. Talbot, Jr.
Director-Federal Regulatory

Suite 900
1133-21st Street, N.W.
Washington, D.C. 20036
202 463-4113

October 25, 1993

Ken Moran, Chief
Accounting & Audits Division
Federal Communications Commission
2000 L Street, NW, Room 812
Washington, D.C. 20554

RE: Enhancements to BellSouth's Work Activity Statistical Sampling Process (WASSP)

Dear Mr. Moran:

As a result of the meeting on September 16, 1993, between representatives of BellSouth and Commission staff members, BellSouth agreed to make certain enhancements to its WASSP process. BellSouth also agreed to inform the staff as to the status and the completion of the implementation of these enhancements. The purpose of this letter is to notify you that BellSouth has completed the implemention of the enhancements and recommendations made by the FCC staff.

Following are the five FCC staff requested enhancements to the WASSP process and the corresponding action taken by BellSouth to implement each requirement.

1. The field supervisor must review the WASSP Work Activity Log (WAL) for accuracy and completeness and transmit to the WASSP center no later than the business day following the completion of the work.

No observation of this by PSC staff

48-2
1

BellSouth has implemented the procedure described in Item 1. See Attachment 1(BellSouth Practice -WASSP Time Reporting Procedures For Technicians) paragraphs 5.5 and 5.6. pg 4 & 18

2. Analysts must perform a 100% review of submitted WALs each day. Also, the analysts will conduct technician telephone interviews on a sub-selection of the technicians in the overall sample.

BellSouth has implemented the procedure described in Item 2. See attachment 1(BellSouth Practice

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(1)

48-2 / 1 pp. 3 of 18, 4 of 18 48-2 / 5 p. 2

- WASSP Time Reporting Procedures For Technicians) paragraphs 4.2 and 5.7. Also see Attachment 2 (WASSP Policies and Procedures Manual) paragraph 6.04.

3. The WASSP analyst (instead of supervisor) must interview field technicians within two business days of work completion. Toll-free numbers have been established to facilitate this process.

48-2 / 1 p 3 1/8, 4 1/8

BellSouth has implemented the procedure described in Item 3. See Attachment 1(BellSouth Practice WASSP Time Reporting Procedures For Technicians) paragraphs 4.2 and 5.7. BellSouth has also installed an automated call distribution device to allow technicians to contact the appropriate analyst for an interview.

4. Analysts must receive interview technique training.

All analysts and the analysts' supervisor have completed an "Interviewing Skills Workshop" training course. This course was designed specifically for the WASSP technical analysts by a senior instructor with the BellSouth Leadership Institute.

48-2 / 3

The course focused on the interview skills required for successful data gathering, centering mainly around the use of "open-ended" questioning techniques. The course also utilized role-playing as a training method to insure each analyst could become familiar with ways in which to probe for information through the interview process, and be critiqued on his/her performance.

Included as Attachment 3 is training material from the workshop.

5. A technician / supervisor training package must be documented. This training package will be in the form of the updated BellSouth Practice.

A conference was held involving all the State WASSP Coordinators to cover each of the required enhancements resulting from the meeting with the FCC staff. This conference produced the required revisions to the pre-existing Time Reporting Procedures.

48-2 / 1

Attachment 1 is the updated BellSouth Practice for Time Reporting Procedures for field forces involved in the WASSP process, this includes the technicians as well as supervisors and other managers. This

214

updated practice has been covered in each network district in each of BellSouth's states.

Also provided herein is the following information requested by the FCC staff at our meeting of September 16, 1993.

45-5

6. Write-up on how work is dispatched

See Attachment 4.

7. Analyst / Technician interview. (Illustrative questions).

48-2/3

See Attachment 3, page 14.

8. Notification that states have been informed of process enhancements.

All states have been notified in writing of the WASSP process changes.

BellSouth has implemented all enhancements and recommendations proposed by the FCC staff and is prepared to proceed solely with the WASSP process . BellSouth respectfully seeks your expeditious approval prior to November 29, 1993, so that we may discontinue the dual time reporting and proceed with WASSP.

Sincerely,

Maurice P. Talbot, Jr.

Maurice P. Talbot, Jr.
Director - Federal Regulatory

cc: Ken Ackerman

Attachments

215

(3)

BST

BST to FCC [illegible]

B 12/9/93

[illegible] 12/14/93

THE WALTER LATHAM COMPANY

48-2

216

WORK ACTIVITY STATISTICAL SAMPLING PROCESS
TIME REPORTING PROCEDURES
FOR TECHNICIANS

(1) 217

WORK ACTIVITY STATISTICAL SAMPLING PROCESS
TIME REPORTING PROCEDURES
FOR TECHNICIANS

224

AFFILIATE COMPANY BILLING

rsday,
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·Labor

Exhibit 4 – Relieving Supervisor

230

Exhibit 6 – Working Outside "Normal" Job Function Code

Exhibit 7 – Schedule Change Reporting

233

Exhibit 8 – Incomplete Job On Work Activity Log

234

BST

Procedure for WASSP

Bg 1/9

1/8-2

THE WALTER LATHAM COMPANY

235

Records System (CPRS) and a Employee Selection Program to extract a random sample of technicians that will participate in the sample data collection process. CPRS is a BellSouth employee master database that is used to maintain information about an employee (e.g., Responsibility Code, Job Function Code, Social Security Number).

5.05 Sample sizes and the structure of the sample are designed so that the three (3) month rolling total for a given State will obtain a precision equivalent to plus (+) or minus (-) 15 minutes per person-day. The Employee Selection Program searches the whole universe of technicians from the CPRS and uses the sample size by Work Group to identify the technicians who will participate in the data collection process. All technicians selected to participate in the data collection process are sampled every day for one (1) week (7 days).

DATA COLLECTION

6.01 By the 20th of each month, the lists of the technicians to be sampled in the following month are distributed via E-mail, CAT terminal and/or paper copy to the state contacts and field management. Field management then disseminates the Work Activity Logs (WALs) to the selected technician's supervisor for coverage with the technician.

6.02 Technicians participating in WASSP report their time by work activity in minimum increments of fifteen (15) minutes. WALs have been developed for each Work Group listing the predominant work activities of that Work Group. Though most inclusive, the WALs may not include every work activity. "Write-in" activities are reviewed by the Technical Analyst and assigned accounting codes. Any exceptions to normal work activities, such as non-productive time paid (e.g., vacation, jury duty, illness) and overtime hours paid must be reported individually through the existing Payroll Exception process.

6.03 Prior to submitting the completed WALs to the Technical Analyst, the Supervisor (or appropriate field personnel) of the sampled technician(s) should compare the work activity information reflected on the WAL to the relevant source documentation.

6.04 To ensure the accuracy of work activities reported by those technicians sampled through WASSP, the Technical Analysts conduct telephone interviews with a sample of the sampled technicians. For the remainder of the sampled technicians, the TA compares the logs to the source documentation. The

48-2

Conf

number of interviews as well as the days to be verified via the interview process, are determined by the Statistics and Econometrics group as a part of the Sample Selection process. If errors are detected on the WAL, the Technical Analyst corrects the information reflected on the WAL.

BST

Procedures for WAS88 — Bg 12/2/93

458
2

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COMPANY: BST
TITLE: DATA COLLECTION
TECHNICAL ANALYST PROCEDURES
PERIOD: TYE 12/31/93
DATE: DEC 9. 1993
AUDITOR: RKY

12/14/93

WP NO. 48-3

Part of this section is an example of the work product of the process.

wp 48-3/1 This is the verification printout of the input from the WAL.

wp 48-3/1-1 These are the WAL that agree with the verification printout for two days
wp 48-3/1-2 for one ST.

wp 48-3/1-2/1 These are part of the source doucmentation backing up the WAL. This is a ticket.

wp 48-3/1-2/2 These are part of the source doucmentation backing up the WAL. This is the DCWS.

wp 48-3/1-3 These are the WAL that agree with the verification printout for two days for one ST.

wp 48-3/1-3/1 These are part of the source doucmentation backing up the WAL. This is a ticket.

wp 48-3/1-3/2 These are part of the source doucmentation backing up the WAL. This is the DCWS.

wp 48-3/2 and entire section is the same thing as above, but for another service technician.

Other Work products of the process,

wp 48-4 Procedures for correcting MTR RF-152 and DCWS for Positive Time Reporting. This is not for Wassp.

wp 48-5 Example of the sample produced and used by the Technical Analyst to check off his reviews.

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PBC

Verification printout ★

★ Included in total for month
See 48-3 for Profile for Oct.
6

Pg 1 is total for Oct + all pages behind make up total on Page 1
This SS# appears on page 12

OCT4100 FLORIDA

			1024	1025	1026	1027	1028	1029	1030
			48-3 1-1	48-3 1-2	48-3 1-3				
4	4	45M	0.	0.75	0.	0.	0.	0.	0.
5	5	45R	0.	3.50	1.50	1.00	0.	0.	0.
6	6	248C	0.	0.	0.	2.00	0.	0.	0.
7	7	248M	0.	0.	0.25	0.	0.	0.	0.
8	8	248R	0.	0.75	1.50	0.	0.50	0.	0.
9	10	548M	0.	0.	0.25	0.25	0.	0.	0.
10	11	548R	0.	0.	0.	2.75	6.25	0.	0.
11	16	68E	0.	0.50	0.	0.75	0.	0.	0.
12	17	68M	0.	0.50	0.	0.	0.	0.	0.
13	18	68R	0.	0.	0.75	0.	0.	0.	0.
14	31	257R	0.	0.	1.00	0.	0.	0.	0.
15	50	97BI	0.	2.25	0.75	0.	0.	0.	0.
16	52	97BP	0.	0.25	0.75	0.75	2.00	0.	0.
17	53	97BR	0.	0.	0.	0.50	0.	0.	0.
18	56	98ER	0.	0.	1.50	0.	0.	0.	0.
19	90	5532	0.	0.	0.	0.50	0.	0.	0.
20	99	TRVL	0.	1.50	1.75	1.50	1.00	0.	0.

			1024	1025	1026	1027	1028	1029	1030
3	3	22R	1.75	2.25	1.25	4.00	2.25	1.25	0.
4	4	45M	0.	1.50	0.	0.	0.	0.	1.00
5	5	45R	0.	0.	0.75	0.	2.50	1.50	1.75
6	6	248C	0.	0.	0.	0.	0.	0.	1.00
7	7	248M	0.75	0.25	0.25	0.75	0.75	0.	0.

241

B8T
Verification Printout

[illegible] 12/14/93
B 12/9/93

✓ = Traced to WAL
✓ [illegible] 48-3 / 1-1
✗ = Traced & [illegible] on WAL

48-3

242

5

I&M - POTS JFC 4100

FLORIDA

Revised: 09/01/93
Page 1 of 3

GENERAL INFORMATION	DISTRIBUTED HOURS BY ACTIVITY Tel No., CKID, or Misc. Activity									TOTAL HOURS WORKED:	
Name Steven D. Kauzlick											
Date 10-24-93 LMOS ID # 304											
SSN											
Resp. Code NS330304											
Supv. Name Roy Goodson											
Supv. Tel/Pager # (407) 936-7538	1	2	3	4	5	6	7	8	9	TOT HRS	FRC
MISCELLANEOUS MEETINGS (Describe) e.g., Bond Drive, APP, Meeting w/Supv.											90
CLASSROOM TRAINING (Describe)											
QUALITY OF WORK LIFE (QWL)											92
UNION ACTIVITIES - COMPANY PAID											91
NO TROUBLE FOUND - ACCESS GAINED											95
TRAVEL & BREAKS											99
OTHER (Describe)											

OFF DAY

R. W. Goodson

OFFICE USE ONLY

RTP

Verified by _____ OCT 25 1993
Technical Analyst

Date _____

Reviewed _____ by _____

Date _____ Time _____

Correction Required (Check One) Yes ____ No ____

****

Input by _____ VS Date 11/3

Comp

FLORIDA

Name: Steven D. Kauzlick

Date: 10-24-93

	DISTRIBUTED HOURS BY ACTIVITY									TOT HRS	FRC
	1	2	3	4	5	6	7	8	9		
AERIAL CABLE (Includes Air Pressure)											
* PXJ/Rearrange/Routine/Reuse											2
* Repair/Pair Change/Came Clear											3
BURIED CABLE (Includes Air Pressure)											
* PXJ/Rearrange/Routine/Reuse											4
* Repair/Pair Change/Came Clear											5
AERIAL SERVICE WIRE (DROP/NI/PROT/GRND)											
* Install (New)											6
* Rearrange/Routine/Reuse											7
* Repair/Replace											8
BURIED SERVICE WIRE (DROP/NI/PROT/GRND)											
* Install (New)											9
* Rearrange/Routine/Reuse											10
* Repair/Replace											11
BUILDING ENTRANCE CABLE											
* PXJ/Rearrange/Routine/Reuse											12
* Repair/Pair Change/Came Clear											13
INTRABUILDING NETWORK CABLE											
* PXJ/Rearrange/Routine/Reuse											14
* Repair/Pair Change/Came Clear											15
DIGITAL CENTRAL OFFICE (Includes Channel Units & Testing)											
* Place/Change/Rearrange/Routine											32
* Repair/Replace/Re-insert/Came Clear											33
NETWORK TERMINATING WIRE (Includes NI)											
* Install (New)											16
* PXJ/Rearrange/Routine/Reuse											17
* Repair/Replace											18
* Disconnect/Removal											21

FLORIDA

Steven D. Kauzlick 10-24-93	DISTRIBUTED HOURS BY ACTIVITY 1 2 3 4 5 6 7 8 9	TOT HRS	FRC
'AL SUBSCRIBER PAIR GAIN .es Channel Units & Testing)	Report Appropriate Alpha Designation Below For Each 'Activity'		
: (F) or Metallic (M) ——→			
office (I), Feeder (F) or Distribution (D) ——→			
ace (New - Service Order Authority)			
nge/Rearrange/Routine			
epair/Replace/Re-insert/Came Clear			
LIC CPE - COCOT CO Facilities Between Bldg Term. & NI)			
stallation			79
epair/Replace/Rearrange/Routine/Reuse			80
Disconnect/Removal			81
Trouble Isolated to COCOT Equip. (Charges Apply)			56
LIC INSIDE WIRE (Includes Materials)			
Install & Rearrange			50
Repair - Warranty (Within 30 Days of New Install.)			51
Repair - Maintenance Plan			52
Repair - No Plan (Isolate/Set Trbl/T.D. Only)			53
N-BASIC INSIDE WIRE (Includes Materials)			
Install & Rearrange			54
Repair - Warranty (Within 1 Year of New Install.)			55
Repair/Isolate/CPE Trbl (Charges Apply)			56
) ACCESS - TROUBLE INSIDE (Tested at NI)			
• Maintenance Plan (Basic)			52
• No Maintenance Plan (Basic)			53
• Non-Basic			56
O ACCESS, SL, SO, SR, CANCEL • Non-Combination Job, Report Reg/DeReg Activity			
• Combination (Reg/DeReg) INSTALLATION Job			94
• To the Network Interface (Trouble Unknown)			94

BSP B 6/8/93

Sample WAL

KW 8/14/93

4-3
1-7

WASSP WORK ACTIVITY LOG

I&M - POTS JFC 4100

A B C D E

PBC

FLORIDA

Revised: 09/01/93
Page 1 of 3

GENERAL INFORMATION	DISTRIBUTED HOURS BY ACTIVITY									TOTAL HOURS WORKED: 10 ✓	
Name Steven D. Kauzlick 48.3 1.5 2	Tel No, CKID, or Misc. Activity										
Date 10-25-93 LMOS ID # 304											
SSN											
Resp. Code NS330304											
Supv. Name Roy Goodson											
Supv. Tel/Pager # (407) 936-7538	1	2	3	4	5	6	7	8	9	TOT HRS	FRC
MISCELLANEOUS MEETINGS (Describe) e.g., Bond Drive, APP, Meeting w/Supv.											90
CLASSROOM TRAINING (Describe)											
QUALITY OF WORK LIFE (QWL)											92
UNION ACTIVITIES - COMPANY PAID											91
NO TROUBLE FOUND - ACCESS GAINED										X	95
TRAVEL & BREAKS		.50	.50	.25	.25					1.5	99
OTHER (Describe)											

OFFICE USE ONLY

RTP

Verified by OCT 25 1993
Technical Analyst

Date

Reviewed DEWS by

Date 10-26-93 Time 10:27 am

Correction Required (Check One) Yes ___ No ✓

Input by VS Date 11/3

Conf

I&M - POTS JFC 4100
FLORIDA

Name Steven D. Kauzlick
Date 10-25-93

	DISTRIBUTED HOURS BY ACTIVITY									TOT HRS	FRC
	1	2	3	4	5	6	7	8	9		
AERIAL CABLE (Includes Air Pressure)											
* PXJ/Rearrange/Routine/Reuse											2
* Repair/Pair Change/Came Clear											3
BURIED CABLE (Includes Air Pressure)											
* PXJ/Rearrange/Routine/Reuse		.50	.25							.75	4
* Repair/Pair Change/Came Clear	1.00		1.25	1.25						3.50	5
AERIAL SERVICE WIRE (DROP/NI/PROT/GRND)											
* Install (New)											6
* Rearrange/Routine/Reuse											7
* Repair/Replace	.75									.75	8
BURIED SERVICE WIRE (DROP/NI/PROT/GRND)											
* Install (New)											9
* Rearrange/Routine/Reuse											10
* Repair/Replace											11
BUILDING ENTRANCE CABLE											
* PXJ/Rearrange/Routine/Reuse											12
* Repair/Pair Change/Came Clear											13
INTRABUILDING NETWORK CABLE											
* PXJ/Rearrange/Routine/Reuse											14
* Repair/Pair Change/Came Clear											15
DIGITAL CENTRAL OFFICE (Includes Channel Units & Testing)											
* Place/Change/Rearrange/Routine											32
* Repair/Replace/Re-insert/Came Clear											33
NETWORK TERMINATING WIRE (Includes NI)											
* Install (New)			.50							.50	16
* PXJ/Rearrange/Routine/Reuse		.50								.50	17
* Repair/Replace											18
* Disconnect/Removal											21

I&M - POTS JFC 4100
FLORIDA

Name Steven D. Kauzlick
Date 10-25-93

	DISTRIBUTED HOURS BY ACTIVITY									TOT HRS	FRC
	1	2	3	4	5	6	7	8	9		
DIGITAL SUBSCRIBER PAIR GAIN (Includes Channel Units & Testing)	Report Appropriate Alpha Designation Below For Each 'Activity'										
Fiber (F) or Metallic (M) →											
Interoffice (I), Feeder (F) or Distribution (D) →											
* Place (New - Service Order Authority)											
* Change/Rearrange/Routine											
* Repair/Replace/Re-insert/Came Clear											
PUBLIC CPE - COCOT (TELCO Facilities Between Bldg Term. & NI)											
* Installation											79
* Repair/Replace/Rearrange/Routine/Reuse											80
* Disconnect/Removal											81
* Trouble Isolated to COCOT Equip. (Charges Apply)											56
BASIC INSIDE WIRE (Includes Materials)											
* Install & Rearrange		.25								2.25	50
* Repair - Warranty (Within 30 Days of New Install.)											51
* Repair - Maintenance Plan					.25					.25	52
* Repair - No Plan (Isolate/Set Trbl/T.D. Only)											53
NON-BASIC INSIDE WIRE (Includes Materials)											
* Install & Rearrange											54
* Repair - Warranty (Within 1 Year of New Install.)											55
* Repair/Isolate/CPE Trbl (Charges Apply)											56
NO ACCESS - TROUBLE INSIDE (Tested at NI)											
* Maintenance Plan (Basic)											52
* No Maintenance Plan (Basic)											53
* Non-Basic											56
NO ACCESS, SL, SO, SR, CANCEL											
* Non-Combination Job, Report Reg/DeReg Activity											94
* Combination (Reg/DeReg) INSTALLATION Job											94
* To the Network Interface (Trouble Unknown)											

FO1A93W 0000161

BSP

Sample WAL

B 12/9/93

YW 12/14/93

483

1-8

THE WALTER LATHAM COMPANY (708) 345-6757

BSP
Sample Ticket

B 12/9/93
VW 12/14/93

10-26-93 07:20 AM FROM BELLE GLADE 996 8324 P004

PB

0671-C (5-90)

Outside Plant Field Ticket

Customer Name
Address
Due Date 10/26/93
CKT/SO # 6184564
Access Information

PTY	Cable	Pair	BP	Color	Term Or Pole Address
6-501	F1	473	548		700 Palm Bch Rd
603	F2	225	25		RIIO Avo la Hacz
	F3				
	F4				

Cust. Rpt. ✓ Repeat no O.O.S. no Emp. Rpt. Routine
Trbl. Rept. Rlocke Type Ticket Cls. Ser. EB R. Z.
Emp. I.D. 304 Ticket # 5 W. C. 226 A A.
Com. Time Mo 10 Dy 25 Yr 93 Rpt. Source Codes
Dispatch Time 5 30 Category
Service Restored Disposition Code
Repair Completed Cause Code
Total Hours # Def. Prs. Clrd.

Field Code	AA	Hours	Field Code	AA	Hours	LTT
2R					.25	C. L.
45R			Trill		.25	N. H.
5R			47BP			G
6R						Trans Code

Customer

Main. Comment TDC
Delay Code
Spec. Equ. Stat. / S/O Stat.
Trouble Address
Cause Of Trouble

400, 600, 1000, 1300, 1700, 2000, 2300, 2600, 3000, 3200, Steady, C-Notch, Imp., Total
SWO, OPN, RAML, NFE, REA, LST-A, LST-B, LST-I, LST-S, COO, OCB-Y, OCB-N, Time, Hrs.

Work Done
Replaced Defective / open
Living Room RJ11C

Remarks/B&E
Incomplete See 10/26 lmTE

FROM BELLE GLADE 996 8324 407-996-8324 10-26-93 06:16AM P004 #43

See 48-3
12 P3

conf

F01A93W 0000162

251

48-3

```
MCMD DCWS      MC 962  DAA       SUPV GRP     EMP CODE 304  PRTR       REQ BY
PAGE 3      ARG MON FULL DJI NARR CLOCK OSC

                        304                          FST  0837A  1:38         0401
NARR: :0C 600 UNK/CHG BF1 TO 9X1336X286/PL A ONI
closed        TN:                          COMM: 10-25-93 0600P  REACH:
A                                          ACCESS: A        B        JP FELD

                                           *NMC *                LAST CLRD: 10-27-92
TROUBLE: OOSN TRAN   LXD WTH 9969320; ACN 9927676
VER:  6  SUMMARY: SPEECH                                                CTTN:
SCRN RSLT:      NARR: (OVR) 1 RING LOUD BURST OF STATIC THEN CUTS OUT
FAC       CABLE                                    RESTRICTED SERV
 F1           8 0591 0391                        F 1401 NW AVENUE D
 F2
 FZ  1401NWAVD 0243 0000 O-W+Y-G                  R 625 NW 14TH ST
OE:  AA07-0-13-31          WKG TTR
  ON   0151252   992  304 4079927333             DPO  0839A
                        304                       CCA  1230P  3:51
                        304                       FST  0128P  4:49         0190
NARR: :41 500 CP/3BPXJ/PL 3NTW@BLDG TRM/I3 VCA& RJ11C


PAGE 3  - MORE
```

PBC

Conf.

252

```
MCMD DCWS      MC 962  DAA       SUPV GRP     EMP CODE 304  PRTR       REQ BY
PAGE 4      ARG MON FULL DJI NARR CLOCK OSC

closed        TN:                          COMM: 10-25-93 1200P  REACH:
                                           ACCESS: A        B 1200P AC: X    EST: 021
                                           SN: RPWJ938        T: N SC:       IBI:
                                           AHN:           RO: N  RTE:
ACC RMK 0900-1700; 9-5 CCON JOANNE DOYLE/RMK 992-8600
S&E: TN:3MTN          /*I3 RJ11C/*I3 VCA/*I3 EBN/*I3
60/NLC Y3/*I3 TTB/TN                       CREX4/TN
FAC       CABLE PAIR  BP  COLOR            TERMINAL ADDRESS
 F1           3 2484 59                                                    [I]
 F2       802SM  550 50                                                    [I]
/F1 /PXJ /F2 /PIW #/           IF1/CA 3/PR 2482/BP 57/TEA
IOE  AA01-1-04-28 02 /PXJ/IF2/CA 802SM/PR 523/BP 23/TEA I
  ON   0359851   992                        DPO  0128P
                         304                CCA  0345P  2:17
                         304                FST  0346P  2:18        0190
NARR: :45 500 CP/BPXJ/CH BF2 802SMX623/INST NTW & INI
closed        TN:                          COMM: 10-25-93 0500P  REACH:
                                           ACCESS: A 1200P B      AC: W    EST: 009
```

PAGE 4 - MORE

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1  MCMD DCWS      MC 962  DAA       SUPV GRP     EMP CODE 304  PRTR       REQ BY
2  PAGE 5      ARG MON FULL DJI NARR CLOCK OSC
3                                              SN: RH7W395        T: N SC: 1FB   IBI:
                           *CHANGE*            AHN:           RO: N  RTE:
4  ACC RMK SEE PHRMACIST 9AM TO 9PM
5  S&E: DEL I1 VCA& DEL I1 RJ11C&&
6  FAC       CABLE PAIR  BP  COLOR                TERMINAL ADDRESS
7   F1           3 2414 14                        - ---                          [I]
8   F2       802SM  621 21                                                      [I]
9  /F1 /PXJ /BCF BP 14 TEA                    /PDW
10 IOE  AA00-1-02-0
11   ON    0002452   992  304                     DPO  0346P
                        304                     CCA  0515P  1:29
                        304                     FST  0521P  1:35        0401
12 NARR: : 0 600 UNK/CHGD B F2 TO 802SMX400X100
13 closed       TN:                         COMM: 10-26-93 0200P  REACH:
14                                          ACCESS: A       B       MELBA
15                                          CS:       SC:         RTE:
16                                                                LAST CLRD: 10-01-82

  PAGE 5  - MORE
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254

BSP
Sample DCWS

8/5/93
12/14/93

WASSP WORK ACTIVITY LOG

I&M - POTS JFC 4100

PBC A B C D E

FLORIDA

Revised: 09/01/93

GENERAL INFORMATION	DISTRIBUTED HOURS BY ACTIVITY									TOTAL HOURS WORKED: 10.00	
	Tel No., CKID, or Misc. Activity										
Name Steven D. Kauzlick 48-3 1-3 1		1									
Date 10-26-93 LMOS ID # 304											
SSN											
Resp. Code NS330304 48-3 1-3		2									
Supv. Name Roy Goodson 1-3											
Supv. Tel/Pager # (407) 936-7538	1	2	3	4	5	6	7	8	9	TOT HRS	FRC
MISCELLANEOUS MEETINGS (Describe) e.g., Bond Drive, APP, Meeting w/Supv.											90
CLASSROOM TRAINING (Describe)											
QUALITY OF WORK LIFE (QWL)											92
UNION ACTIVITIES - COMPANY PAID											91
NO TROUBLE FOUND - ACCESS GAINED										4	95 -
TRAVEL & BREAKS	.25	.75	.25	.25	.25					1.75	99
OTHER (Describe)											
Travel time to Pkg Supplies & drop off WASSP Log											

R.W. Goodson

OFFICE USE ONLY

RTP

Verified by OCT 27 1993
Technical Analyst

Date

Reviewed by

Date Time

Correction Required (Check One) Yes No

Input by VS Date 11/3

256

FO1A93W 0000171

Comb

Name: Steven D. Kauzlick

Date: 10-26-93

	DISTRIBUTED HOURS BY ACTIVITY									TOT HRS	FRC
	1	2	3	4	5	6	7	8	9		
AERIAL CABLE (Includes Air Pressure)											
* PXJ/Rearrange/Routine/Reuse											2
* Repair/Pair Change/Came Clear											3
BURIED CABLE (Includes Air Pressure)											
* PXJ/Rearrange/Routine/Reuse											4
* Repair/Pair Change/Came Clear		1.50								1.50	5
AERIAL SERVICE WIRE (DROP/NI/PROT/GRND)											
* Install (New)											6
* Rearrange/Routine/Reuse					.25					.25	7
* Repair/Replace		1.50								1.50	8
BURIED SERVICE WIRE (DROP/NI/PROT/GRND)											
* Install (New)											9
* Rearrange/Routine/Reuse				.25						.25	10
* Repair/Replace										--	11
BUILDING ENTRANCE CABLE											
* PXJ/Rearrange/Routine/Reuse											12
* Repair/Pair Change/Came Clear											13
INTRABUILDING NETWORK CABLE											
* PXJ/Rearrange/Routine/Reuse											14
* Repair/Pair Change/Came Clear											15
DIGITAL CENTRAL OFFICE (Includes Channel Units & Testing)											
* Place/Change/Rearrange/Routine											32
* Repair/Replace/Re-Insert/Came Clear											33
NETWORK TERMINATING WIRE (Includes NI)											
* Install (New)											16
* PXJ/Rearrange/Routine/Reuse											17
* Repair/Replace		.75								.75	18
* Disconnect/Removal											21

I&M - POTS JFC 4100
FLORIDA

Name: Steven D. Kauzlick
Date: 10-26-93

	DISTRIBUTED HOURS BY ACTIVITY									TOT HRS	FRC
	1	2	3	4	5	6	7	8	9		
DIGITAL SUBSCRIBER PAIR GAIN (Includes Channel Units & Testing)	Report Appropriate Alpha Designation Below For Each 'Activity'										
Fiber (F) or Metallic (M) ----------→	M										
Interoffice (I), Feeder (F) or Distribution (D) ----→	F										
* Place (New - Service Order Authority)											
* Change/Rearrange/Routine											
* Repair/Replace/Re-insert/Came Clear	1.00									1.00	51
PUBLIC CPE - COCOT (TELCO Facilities Between Bldg Term. & NI)											
* Installation											79
* Repair/Replace/Rearrange/Routine/Reuse											80
* Disconnect/Removal											81
* Trouble Isolated to COCOT Equip. (Charges Apply)											56
BASIC INSIDE WIRE (Includes Materials)											
* Install & Rearrange		.75								.75	50
* Repair - Warranty (Within 30 Days of New Install.)											51
* Repair - Maintenance Plan	.50			.25						.75	52
* Repair - No Plan (Isolate/Set Trbl/T.D. Only)											53
NON-BASIC INSIDE WIRE (Includes Materials)											
* Install & Rearrange											54
* Repair - Warranty (Within 1 Year of New Install.)											55
* Repair/Isolate/CPE Trbl (Charges Apply)			1.50							1.50	56
NO ACCESS - TROUBLE INSIDE (Tested at NI)											
* Maintenance Plan (Basic)											52
* No Maintenance Plan (Basic)											53
* Non-Basic											56
NO ACCESS, SL, SO, SR, CANCEL * Non-Combination Job, Report Reg/DeReg Activity											
* Combination (Reg/DeReg) INSTALLATION Job											94
* To the Network Interface (Trouble Unknown)											94

BSP
Sample WAL

By 12/9/93
WW 12/14/93

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$\frac{48-3}{1-3}$

10-27-93 11:30 AM FROM BELLE GLADE 996 8324 P004

BSP Sample TKTS

PBO

Outside Plant Field Ticket

6571-C (5-85)

48-3 / 1-3

Customer Name	Tel. #
Address	
Due Date 10/26/93	CKT/BO # 0404564
Access Information	RSN #

PTY	Cable	Pair	BP	Color	Term Or Pole Address
PL501	F1 473	518			F 700 Palm Bch RD
L03	F2 225	25			R160 NW 10th AV
	F3				
	F4				

Cust. Rpt. ✓ Repeat 13 O.O.S. 13 Emp. Rpt. Routine
Trbl. Rept. Type Test Cls. Ser. 1FB R. Z.
Emp. I.D. 304 Ticket # W. C. 226 A. A.
Com. Time Mo. 10 Dy. 26 Yr. 93 Rpt. Basis Codes
Dispatch Time 7 00 Category
Service Restored Disposition Code 2 1 0
Repair Completed Cause Code 0 3 0 0
Total Hours # Of # Def. Prs. Clrd.

Field Code	AA	Hours	Field Code	AA	Hours	LTT
2R						C L
4SR				aul	.25	N Pl
5R				257m	1.00	B G
6R				978P	.50	Trans Code

Misc. Contract TIP TDO Bill TM IPC
OM Y N BB Y N Delay Code Delay Min. Imp.

Trouble Address

Cause Of Trouble

Work Done: Replaced Def. Kitchen Jck / Isolated Light ground in. D/C

Remarks/S&E: Incomplete from 10/25-

Spec. Svc. Stat.		S/O Stat.	
400		SWO	
650		DPN	
1000		RAML	
1300		NFE	
1700		REA	
2000		LST-A	
2300		LST-B	
2800		LST-I	
3000		LST-S	
3200		COC	
Steady		OCB-Y	
C-Notch		OCB-N	
Imp.		Time	
Total		Hrs.	

Advise Customer

Outside Plant Field Ticket

(5-85)

48-3 / 1-3

Customer Name	Tel. #
Address	
Due Date 10/26	CKT/BO # DRJR 1971
Access Information	RSN #
	Reach #

PTY	Cable	Pair	BP	Color	Term Or Pole Address
PL501	F1	745	295		F1030 Palm Bch RD
L03	F2	1139	4		R106 NW 11th AV
	F3				
	F4				

Cust. Rpt. ✓ Repeat O.O.S. Emp. Rpt. Routine
Trbl. Rept. Type Test Cls. Ser. 1FB R. Z.
Emp. I.D. 304 Ticket # Z W. C. 226 A. A.
Com. Time Mo. 10 Dy. 26 Yr. 93 Rpt. Basis Codes
Dispatch Time 8 45 Category
Service Restored Disposition Code
Repair Completed Cause Code
Total Hours # Of # Def. Prs. Clrd.

Field Code	AA	Hours	Field Code	AA	Hours	LTT
2R					.75	C L
4SR					1.50	N Pl
5R				1.50	978C .75	B G
6R				1.25		Trans Code

Misc. Contract TIP TDCI Bill TM IPC
OM Y N BB Y N Delay Code Delay Min. Imp.

Trouble Address: Chg BF1 to PL501 x MSW. Chg BF2 to L03 X 331 APX5. Replaced NTW/INI

Cause Of Trouble: ASW / CSC

Work Done: Installed 1 VCA & 1 RBC

Remarks/S&E: Insufficient Room in the Remark Section

Spec. Svc. Stat.		S/O Stat.	
400		SWO	
650		DPN	
1000		RAML	
1300		NFE	
1700		REA	
2000		LST-A	
2300		LST-B	
2800		LST-I	
3000		LST-S	
3200		COC	
Steady		OCB-Y	
C-Notch		OCB-N	
Imp.		Time	
Total		Hrs.	

Advise Customer

S.D. Krauzlick #304 10-26-93

FOIA93W 0000174

R-96X FROM BELLE GLADE 996 8324 407-996-8324 10-27-93 09:27AM P004 #14

48-3 / 1-3 / 1

THE WALTER LATHAM COMPANY (708) 345-8787

260

PBC

MCMD DCWS MC 962 DAA SUPV GRP EMP CODE 304 PRTR REQ BY
PAGE 7 ARG MON FULL DJI NARR CLOCK OSC

F1 9 0534 0134 1100 CENTER RD
F2
FZ 1100CR 0535 0000
OE: AA07-0-19-12 WKG TTR
ON 0484564 994 304 DPO 0523P
TTN: 0484564 TN: 407 COMM: 10-26-93 0700P REACH:
ACCESS: A 0400P B 0700P MS SUB
CS: SC: RTE: 407
LAST CLRD: 04-15-91
TROUBLE: PHYS OOSN LIVING RM JCK NWKG FALLING OUT OF WALL
VER: LU SUMMARY: LINE IN USE CTTN:
SCRN RSLT: NARR: DEF JK/IW CALL B4 GOING (OVR)
FAC CABLE CCS IWP
F1 PG501 0473 0548 F
F2
FZ 603 0225 0025 R
OE: ZR01-1-03-00 WKG TTR
INC 994 304 0634P

PAGE 7 - MORE

Comb

261

MCMD DCWS MC 962 DAA SUPV GRP EMP CODE 304 PRTR REQ BY
PAGE 8 ARG MON FULL DJI NARR CLOCK OSC

OFF 994 304 0635P
NARR: INCOMPLT/RPL DEF LR RJ11C/SEE 10/26 MTR

PAGE 8 - END

BSP
Sample OCWS

R 12/9/13
WW 12/4/13

Venquista P/O

PBC

/ OCT4100 FLORIDA

			1010	1011	1012	1013	1014	1015	1016
3									
4	3	22R	0.	0.	0.	0.	0.	0.	1.50
5	4	45M	0.	0.	0.	0.50	1.00	0.75	0.
6	5	45R	0.	1.00	1.75	0.	0.50	2.50	0.
7	8	248R	0.	2.00	0.50	1.50	2.50	0.	2.50
8	9	548C	0.	0.	0.	1.50	0.	0.	0.
9	11	548R	0.	1.25	0.	0.	0.	1.00	0.
10	12	12M	0.	0.	0.50	0.	0.	0.	0.
11	14	52M	0.	0.	0.75	0.	0.	0.	0.
12	50	97BI	0.	0.	0.	1.50	0.	0.	0.
13	52	97BP	0.	1.25	2.25	1.75	1.50	1.50	0.50
14	53	97BR	0.	0.	0.	0.	0.	0.	1.50
15	90	5532	0.	0.50	0.25	0.	0.	0.	0.
16	94	5536	0.	0.	0.	0.	1.25	0.	0.
17	95	553A	0.	0.75	0.75	0.	0.	0.75	0.75
18	99	TRVL	0.	1.25	1.25	1.25	1.25	1.50	1.25

19

			48-3 2-1 1010	48-3 2-2 1011	1012	1013	1014	1015	1016
4	45M		0.	0.75	2.25	0.	1.00	4.75	0.
5	45R		0.	1.50	0.	2.75	0.	0.	1.00
6	248C		0.	0.	2.00	0.	0.	0.	0.
7	248M		0.	0.50	0.	0.	0.	0.	0.
8	248R		0.	0.	0.75	1.00	3.00	0.	0.
9	548C		0.	0.	0.	0.	0.	1.50	0.
11	548R		0.	0.	0.	0.	0.	0.	3.25
14	52M		0.	0.75	0.	0.	0.	0.	0.
16	68E		0.	0.75	0.50	0.	0.	0.	0.
18	68R		0.	0.50	0.	2.00	0.	0.	0.
50	97BI		0.	0.50	1.50	0.	0.	1.00	0.
52	97BP		0.	1.00	0.	0.50	4.00	0.	1.00
53	97BR		0.	0.	0.	0.	0.	0.	1.00
90	5532		0.	0.25	0.50	0.	0.	0.	0.
94	5536		0.	1.00	0.75	0.	0.	0.75	0.50
95	553A		0.	0.	0.	1.00	0.	0.	0.
99	TRVL		0.	2.00	1.75	2.75	1.50	1.50	1.25

Conf

BST
Verification Printout

R 12/9/93
[illegible] 12/14/93

4[illegible]3
2

THE WALTER LATHAM COMPANY (708) 345-8787

265

WASP WORK ACTIVITY LOG

I&M - POTS JFC 4100

FLORIDA

Revised: 09/01/93

GENERAL INFORMATION	DISTRIBUTED HOURS BY ACTIVITY									TOTAL HOURS WORKED:
Name Kevin Yates	Tel No., CKID, or Misc. Activity									
Date 10/10/93 LMOS ID # 285	OFF		OFF DAY							
SSN										
Resp. Code NS330301										
Supv. Name Jim Dunlop										
Supv. Tel/Pager # (407) 936-7587	1	2	3	4	5	6	7	8	9	TOT HRS / FRC
MISCELLANEOUS MEETINGS (Describe) e.g., Bond Drive, APP, Meeting w/Supv.										90
CLASSROOM TRAINING (Describe)										
QUALITY OF WORK LIFE (QWL)										92
UNION ACTIVITIES - COMPANY PAID										91
NO TROUBLE FOUND - ACCESS GAINED										95
TRAVEL & BREAKS										99
OTHER (Describe)										

RTP **OFFICE USE ONLY**

OCT 1 1 1993

Verified by _____
Technical Analyst

Date _____

Reviewed _____ by _____

Date _____ Time _____

Correction Required (Check One) Yes ____ No ____

Input by _____ Date 10/20

F01A93W 0000132

I&M - POTS JFC 4100
FLORIDA

Name Keyin Yates	DISTRIBUTED HOURS BY ACTIVITY									TOT HRS	FRC
Date 10/10/93	1	2	3	4	5	6	7	8	9		
AERIAL CABLE (Includes Air Pressure)											
* PXJ/Rearrange/Routine/Reuse											2
* Repair/Pair Change/Came Clear											3
BURIED CABLE (Includes Air Pressure)											
* PXJ/Rearrange/Routine/Reuse											4
* Repair/Pair Change/Came Clear											5
AERIAL SERVICE WIRE (DROP/NI/PROT/GRND)											
* Install (New)											6
* Rearrange/Routine/Reuse											7
* Repair/Replace											8
BURIED SERVICE WIRE (DROP/NI/PROT/GRND)											
* Install (New)											9
* Rearrange/Routine/Reuse											10
* Repair/Replace											11
BUILDING ENTRANCE CABLE											
* PXJ/Rearrange/Routine/Reuse											12
* Repair/Pair Change/Came Clear											13
INTRABUILDING NETWORK CABLE											
* PXJ/Rearrange/Routine/Reuse											14
* Repair/Pair Change/Came Clear											15
DIGITAL CENTRAL OFFICE (Includes Channel Units & Testing)											
* Place/Change/Rearrange/Routine											32
* Repair/Replace/Re-insert/Came Clear											33
NETWORK TERMINATING WIRE (Includes NI)											
* Install (New)											16
* PXJ/Rearrange/Routine/Reuse											17
* Repair/Replace											18
* Disconnect/Removal											21

i&M - POTS JFC 4100
FLORIDA

09/01/93

Name Kevin Yates	DISTRIBUTED HOURS BY ACTIVITY									TOT HRS	FRC
Date 10/10/93	1	2	3	4	5	6	7	8	9		
DIGITAL SUBSCRIBER PAIR GAIN (Includes Channel Units & Testing)	Report Appropriate Alpha Designation Below For Each 'Activity'										
Fiber (F) or Metallic (M) ——→											
Interoffice (I), Feeder (F) or Distribution (D) ——→											
* Place (New - Service Order Authority)											
* Change/Rearrange/Routine											
* Repair/Replace/Re-insert/Came Clear											
PUBLIC CPE - COCOT (TELCO Facilities Between Bldg Term. & NI)											
* Installation											79
* Repair/Replace/Rearrange/Routine/Reuse											80
* Disconnect/Removal											81
* Trouble Isolated to COCOT Equip. (Charges Apply)											56
BASIC INSIDE WIRE (Includes Materials)											
* Install & Rearrange											50
* Repair - Warranty (Within 30 Days of New Install.)											51
* Repair - Maintenance Plan											52
* Repair - No Plan (Isolate/Set Trbl/T.D. Only)											53
NON-BASIC INSIDE WIRE (Includes Materials)											
* Install & Rearrange											54
* Repair - Warranty (Within 1 Year of New Install.)											55
* Repair/Isolate/CPE Trbl (Charges Apply)											56
NO ACCESS - TROUBLE INSIDE (Tested at NI)											
* Maintenance Plan (Basic)											52
* No Maintenance Plan (Basic)											53
* Non-Basic											56
NO ACCESS, SL, SO, SR, CANCEL * Non-Combination Job, Report Reg/DeReg Activity											
* Combination (Reg/DeReg) INSTALLATION Job											94
* To the Network Interface (Trouble Unknown)											94

BST
Sample WAL

B 12/8/93
W 12/14/93

PBC

WASSP WORK ACTIVITY LOG

I&M - POTS JFC 4100

FLORIDA A B C D E 48.3 F 2.2 G H

Revised: 09/01/93

GENERAL INFORMATION	DISTRIBUTED HOURS BY ACTIVITY									TOTAL HOURS WORKED: 9.50	
Name Kevin Yates	Tel No., CKID, or Misc. Activity										
Date 10-11-93 LMOS ID # 285											
SSN											
Resp. Code NS330301											
Supv. Name Jim Dunlop											
Supv. Tel/Pager # (407) 936-7587	1	2	3	4	5	6	7	8	9	TOT HRS	PRC
MISCELLANEOUS MEETINGS (Describe) e.g., Bond Drive, APP, Meeting w/Supv.											
Meet w/SUP						.25				.25	90
CLASSROOM TRAINING (Describe)											
QUALITY OF WORK LIFE (QWL)											92
UNION ACTIVITIES - COMPANY PAID											91
NO TROUBLE FOUND - ACCESS GAINED											95
TRAVEL & BREAKS		.25	.50	.25		.50		.50		2.00	99
OTHER (Describe) 553L WEATHER DLY							.50			.50	94
NO ACCESS TO NI ~~NO Access~~ KY								.50		.50	94

OFFICE USE ONLY

RTP

OCT 12 1993

Verified by _____
Technical Analyst

Date _____

Reviewed _____ by _____

Date _____ Time _____

Correction Required (Check One) Yes ____ No ____

****

Input by _____ Date 10/20

Conf

(1) 270

I&M - POTS JFC 4100
FLORIDA

Name Kevin Yates
Date 10/11/93

	DISTRIBUTED HOURS BY ACTIVITY									TOT HRS	FRC
	1	2	3	4	5	6	7	8	9		
AERIAL CABLE (Includes Air Pressure)											
* PXJ/Rearrange/Routine/Reuse											2
* Repair/Pair Change/Came Clear											3
BURIED CABLE (Includes Air Pressure)											
* PXJ/Rearrange/Routine/Reuse		.25			.50					.75	4
* Repair/Pair Change/Came Clear	1.50									1.50	5
AERIAL SERVICE WIRE (DROP/NI/PROT/GRND)											
* Install (New)											6
* Rearrange/Routine/Reuse						.50				.50	7
* Repair/Replace											8
BURIED SERVICE WIRE (DROP/NI/PROT/GRND)											
* Install (New)											9
* Rearrange/Routine/Reuse											10
* Repair/Replace											11
BUILDING ENTRANCE CABLE											
* PXJ/Rearrange/Routine/Reuse											12
* Repair/Pair Change/Came Clear											13
INTRABUILDING NETWORK CABLE											
* PXJ/Rearrange/Routine/Reuse				.75						.75	14
* Repair/Pair Change/Came Clear											15
DIGITAL CENTRAL OFFICE (Includes Channel Units & Testing)											
* Place/Change/Rearrange/Routine											32
* Repair/Replace/Re-insert/Came Clear											33
NETWORK TERMINATING WIRE (Includes NI)											
* Install (New)		.25			.50					.75	16
* PXJ/Rearrange/Routine/Reuse											17
* Repair/Replace			.50							.50	18
* Disconnect/Removal											21

(2)

I&M - POTS JFC 4100
FLORIDA

Name Kevin Yates
Date 10/4/93

	DISTRIBUTED HOURS BY ACTIVITY									TOT HRS	FRC
	1	2	3	4	5	6	7	8	9		
DIGITAL SUBSCRIBER PAIR GAIN (Includes Channel Units & Testing)	Report Appropriate Alpha Designation Below For Each 'Activity'										
Fiber (F) or Metallic (M) ----------►											
Interoffice (I), Feeder (F) or Distribution (D) ----------►											
• Place (New - Service Order Authority)											
• Change/Rearrange/Routine											
• Repair/Replace/Re-insert/Came Clear											
PUBLIC CPE - COCOT (TELCO Facilities Between Bldg Term. & NI)											
* Installation											79
* Repair/Replace/Rearrange/Routine/Reuse											80
* Disconnect/Removal											81
* Trouble Isolated to COCOT Equip. (Charges Apply)											56
BASIC INSIDE WIRE (Includes Materials)											
* Install & Rearrange		.25				.25				.50	50
* Repair - Warranty (Within 30 Days of New Install.)											51
* Repair - Maintenance Plan							1.00			1.00	52
* Repair - No Plan (Isolate/Set Trbl/T.D. Only)											53
NON-BASIC INSIDE WIRE (Includes Materials)											
* Install & Rearrange											54
* Repair - Warranty (Within 1 Year of New Install.)											55
* Repair/Isolate/CPE Trbl (Charges Apply)											56
NO ACCESS - TROUBLE INSIDE (Tested at NI)											
* Maintenance Plan (Basic)											52
* No Maintenance Plan (Basic)											53
* Non-Basic											56
NO ACCESS, SL, SO, SR, CANCEL * Non-Combination Job, Report Reg/DeReg Activity											
* Combination (Reg/DeReg) INSTALLATION Job											94
* To the Network Interface (Trouble Unknown)										(3)	94

8571-C (5-90)

Outside Plant Field Ticket

Customer Name | Tel

Address

Due Date 10-13-93 | CKT/SO #

Access Information | RSN # | Reach #

PTY	Cable	Pair	BP	Color	Term Or Pole Address
	F1 3	317	17		F1608 SEMINOLE
1608	F2 50	1586	0011		R2645 SAGINAW
	F3				
	F4				

Cust. Rpt. X | Repeat | O.O.S. | Emp. Rpt. | Routine

Trbl. Rept. STATIC | Type Test GRD | Cls. Ser. IFR | R. Z.

Emp. I.D. 255 | Ticket # 8 | W. C 225 | A A.

	Mo.	Dy.	Hr.	Min.
Com. Time ▸	10	13	10	00
Dispatch Time		12	59	00
Service Restored				
Repair Completed		13	2	00
Total Hours			14	# Of Tkts.

Rpt. Source Codes | Repair Category | Disposition Code | Cause Code | # Def. Prs. Ckt.

Field Code	AA	Hours	Field Code	AA	Hours	LTT
2R			45R		.75	C L
45R			RVL		.25	N PL
5R						B G
6R						Trans Code

Mtce. Contract | TIP | TDC | BW TTN | IPC

ONI ☐Y ☐N INI ☐Y ☐N | Delay Code | Delay Min. | Insp.

Trouble Address

Cause Of Trouble

Work Done INCOMPLETE TEST LINE

Remarks/S&E

Spec. Svc. Stat.		S/O Stat.
400		SWO
650		DPN
1000		RAML
1300		NFE
1700		REA
2000		LST-A
2300		LST-B
2600		LST-I
3000		LST-S
3200		COC
Steady		OCB-Y
C-Notch		OCB-N
Imp.		Time
Total		Hrs.

8571-C (5-90)

Outside Plant Field Ticket

Customer Nan | Tel. #

Address

Due Date 10-11-93 | CKT/SO #

Access Information | RSN # | Reach #

PTY	Cable	Pair	BP	Color	Term Or Pole Address
	F1 16	716	216		5173 Berkshire
1735	F2 65	7			E Berkshire
	F3				
	F4				

Cust. Rpt. | Repeat | O.O.S. | Emp. Rpt. | Routine

Trbl. Rept. STATIC | Type Test OK | Cls. Ser. IFR | R. Z.

Emp. I.D. 285 | Ticket # 1 | W. C 225 | A A.

	Mo.	Dy.	Hr.	Min.
Com. Time ▸	10	11	5	00
Dispatch Time		11	8	00
Service Restored				
Repair Completed		11	9	30
Total Hours			1	# Of Tkts.

Rpt. Source Codes | Repair Category | Disposition Code | Cause Code | # Def. Prs. Ckt.

Field Code	AA	Hours	Field Code	AA	Hours	LTT
2R			45R		.50	C L
45R						N PL
5R						B G
6R						Trans Code

Mtce. Contract | TIP | TDC | BW TTN | IPC

ONI ☐Y ☐N BW ☐Y ☐N | Delay Code | Delay Min. | Insp.

Trouble Address

Cause Of Trouble

Work Done CHG BFI TO 16 K 693. Pulled for OE Chan

Remarks/S&E

Spec. Svc. Stat.		S/O Stat.
400		SWO
650		DPN
1000		RAML
1300		NFE
1700		REA
2000		LST-A
2300		LST-B
2600		LST-I
3000		LST-S
3200		COC
Steady		OCB-Y
C-Notch		OCB-N
Imp.		Time
Total		Hrs.

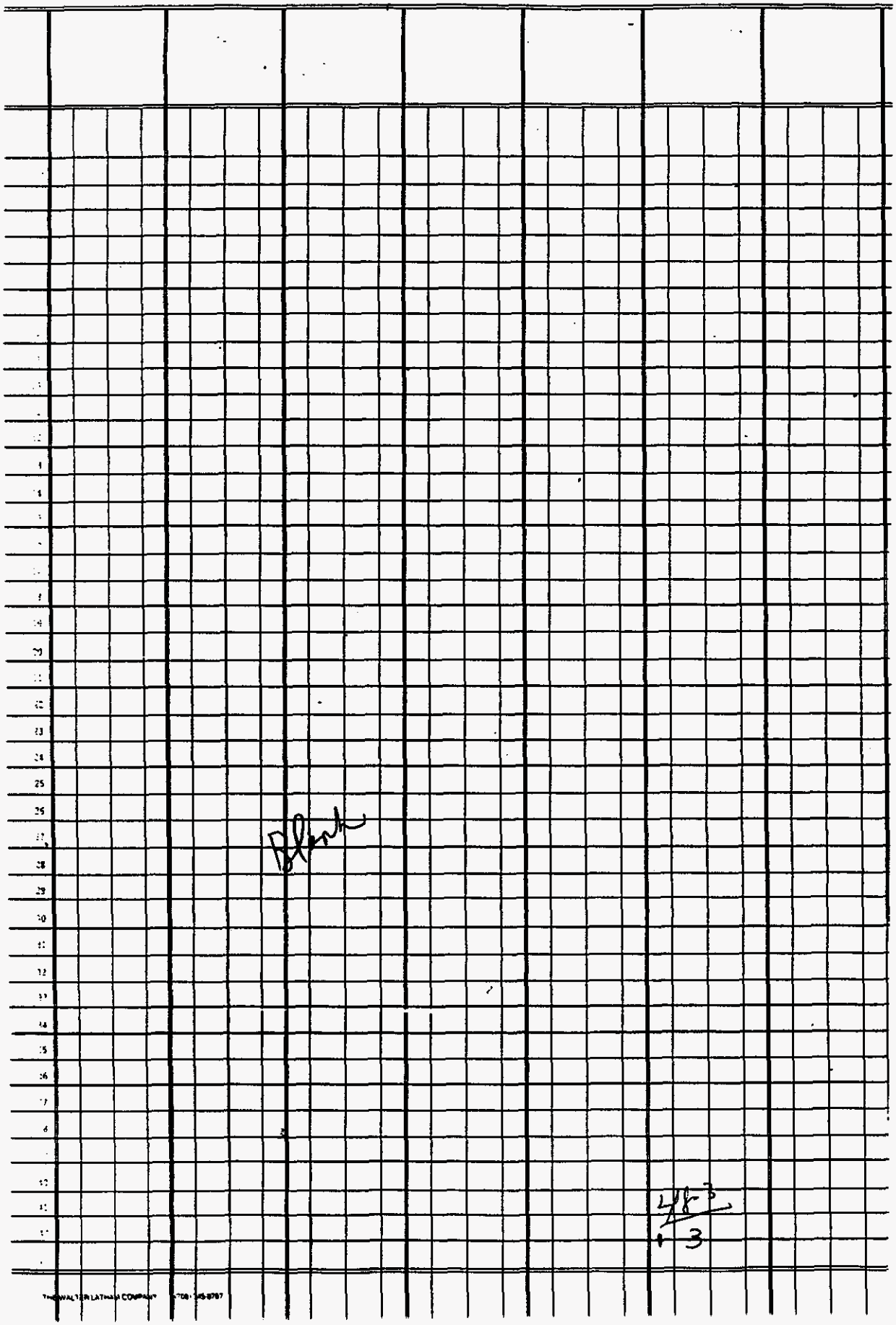
FLORIDA
KEVIN YATES
#285

BSP
Sample WAL

B 10/9/93
[illegible] 10/11/93

48.3
12

THE WALTER LATHAM COMPANY



275

CRAFT WORK SUMMARY EC: 285 YATES.K SUPV GRP: P

PAGE 14 - MORE

10/11/93

PBC

RCMD DCMS MC 962 DAA SUPV GRP P EMP CODE PRTR X869 REQ BY RLM
PAGE ARG DJI NARR FULL CLOCK

STATUS	TTN	DAA	DEC	TN	STAT	TIME	ELAPSED	DISPOSITION
ON	0322558	686	285		DPO	0650A		
			285		DEC	0915A	2:25	

NARR: OFFICE EQUIPMENT CHANGE REQUIRED
closed TN: COMM: 10-11-93 0500P REACH:
ACCESS: A B
CS: SC: RTE:
LAST CLRD: 05-08-93
TROUBLE: TRAN OOSY HEAVY STTC ALPHS CHACN
VER: 0 SUMMARY: TEST OK CTTN:
SCRN RSLT: NARR: OEC PENDING
FAC CABLE WNP
F1 16 0716 0216 S 173 BERKSHIRE
F2
FZ 173B 0657 0007 I BERKSHIRE K
OE: 01002-241-71 WKG TTR
ON 0338740 687 285 DPO 0918A
285 CCA 1030A 1:12

PAGE 15 - MORE

285 FST 1033A 1:15 0190
NARR: 299 500/SO CP/PL BPXJ/CNT NTW/RN BDRN JK
closed TN: 407 COMM: 10-11-93 1200P REACH:
ACCESS: A B 1200P AC: W EST: 010
SN: RK3F03: T: N SC: 1FR IBI:
AHN: RO: N RTE:
ACC RMK 697-8170
S&E: /I1 1FR/NLC Y1/ADL /NMC /I1 TTR/I1 ESX/I1 RW2/I1 CREX1

FAC	CABLE	PAIR	BP	COLOR	TERMINAL ADDRESS
F1	PGS3	751	301		R cI!
F2	LCD	23	23		I cI!

/F1 /PGS SLC96.9122/PGSC I/CUR E FS/PXJ /R1 A BP 301
IOE 91013-13-51 A R
ON 0028368 686 285 DPO 1034A
285 CCA 1125A 0:51
285 FST 1125A 0:51 0360
NARR: 0 300/DEF P/E/REP DEF NTW
PAGE 16 - MORE

Conf

Pg 1

276

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RCMD DCWS      MC 962  DAA       SUPV GRP P  EMP CODE       PRTR X559 REQ BY RLM
 PAGE        4RG DJI NARR FULL CLOCK

 closed        TN:                          COMM: 10-11-93 0600P  REACH: 0000000
 (                                          ACCESS: A        B
                                            CS:        SC:        RTE:
                                                                  LAST CLRD: 04-04-9
 TROUBLE: NDT OOSY    ALPHNS 710A-10P/NASAP
 VER: 41  SUMMARY: OPEN OUT: BALANCED                                      CTTN:
 SCRN RSLT:      NARR: BAL OPEN OUT // MAY BE CPE TBL
 FAC       CABLE   MAC IWP
  F1          17 0864 0014                        4911 OKEECHOBEE BLVD
  F2

 OE:  01017-001-40          WKG TTR
   ON    0273361    686  285                      DPO  1125A
                         285                      AJR  1127A  0:02
 closed        TN:                          COMM: 10-11-93 0200P  REACH:
                                            ACCESS: A        B
 ;                                          CS:        SC:        RTE:
                                                                  LAST CLRD: 01-01-7

 PAGE 17 - MORE

 TROUBLE: CBC OOSN    BSY FROM #40T487Ø733
 VER: 11  SUMMARY: CROSS TO WORKING PAIR                                   CTTN:
 SCRN RSLT:      NARR: <OOS> X'D BATT B/S 60V
 FAC       CABLE   CCS IWP                          RESTRICTED SERV
  F1          32 2219 0669                       F 235 GUAVA AV
  F2
  FZ        2360 1690 0002                       R 8604 PAPAYA RD
 OE:  01021-031-42          WKG TTR
   ON    0013619    686  285                      DPO  1127A
                         285                      CCA  1210P  0:43
                         285                      FST  1214P  0:47        0430
 NARR: :27 100/TELCO/REPL MISSING BLDG PKJ
 closed        TN:                          COMM: 10-11-93 0600P  REACH:
                                            ACCESS: A        B       RFRD TO ANN
                                            CS:        SC:        RTE:
                                            *NMC *                LAST CLRD: 01-22-9
 TROUBLE: NDT OOSY    PRMSD RECONN 10/8 STL NWKG MEDICAL EMERG NSASP AC
 VER: SU  SUMMARY: INTERCEPT                                               CTTN:
 PAGE 18 - MORE
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Conf

Pg 2

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PAGE       ARG DJI NARR FULL CLOCK

SCRN RSLT:      NARR: (OVR) OPEN OUT 99%
FAC       CABLE
 F1          22 1899 0499                        SD DORCHESTER BLDG C
 F2
 FZ        DORC 0043 0018                        CAMBRIDGE G1 1 BLDG
OE:  01019-151-21          WKG
  ON   0026105   833  285                         DPD  1215P
                      285                         CCA  0216P  2:03
                      285                         FST  0216P  2:03        0190
NARR: :41 500/SO CP/PL 2 BPXJ/CRT 2 NTW
closed                                  COMM: 10-11-93 1200P  REACH:
'                                       ACCESS: A       B 1200P AC: W   EST: 01
                                        SN: RW65620       T: N SC:       IBI:
                                        AHN:          RO: Y  RTE:
ACC RMK BOB WENTZEL/ZDIS /RMK 792-1234
S&E: TN:2MTN              TG A 832-6170. 6281/I2 HTG/I1 TTB/TN          I 1FE
TN          AC /NLC 00/I1 CREX4/TN         /BI UNR/RMKR (A)/I1 TTB/TN 832-62
FAC       CABLE PAIR  BP  COLOR               TERMINAL ADDRESS

PAGE 19 - MORE

 F1          26  270 270                       1515-1.1 S FLAGLER DR       cI!
 F2       1515F  399 399                       1515-11.1 S FLAGLER DR      cI!
/RMK /BCT                               /EXJ /F1 /PXJ /BCT BP 270 TEA 1515-1.1 S
IOE  004-005-011 AGLER DR/F2 /CDW #/4078326281/IF1/CA 26/PR 199/BP 199/TEA 15
 ON   0487323   832  285                         DPD  0219P
                      285                         CCA  0365P  1:36
                      285                         FST  0355P  1:36        1210
NARR: :96 210/CUST ACT/DEF CPE/RTN AONI/M W/SUPERV
closed       TN:                        COMM: 10-11-93 0600P  REACH: 0000000000
'                                       ACCESS: A       B
                                        CS: RES   SC: 1FR     RTE:
                                                              LAST CLRD: 01-05-91
TROUBLE: NDT OOSY   %NACN/ALPHS/GBI/NDS ASAP HAS ILL BABY/TAKES CARE
VER: 99  SUMMARY: ANALYSIS OF FULL RESULTS NEEDED       SUB(1)    CTTN:
SCRN RSLT:      NARR: (OVR) NOT HELD IN OFC-DISP OUT PER SCC-
FAC       CABLE  CCS IWP                          RESTRICTED SERV
 F1          13 0230 0280                       R 901 SOUTHERN BLVD
 F2
PAGE 20 - MORE
```

```
RCMD DCWS      MC 962  DAA      SUPV GRP P  EMP CODE      PRTR X659 REQ BY RLM
PAGE       ARG DJI NARR FULL CLOCK

 FZ        1306 0126 0000 BL-W+V-S                SOP 2194
OE:  001-224-001          WKG TTR
  ON   0345374   832  285                         DPD  0355P
                      285                         CCA  0530P  1:35
                      285                         FST  0533P  1:38        1210
NARR: :27 210/CUST ACT/REP DEF IW/WEATHER DLY
closed       TN:                        COMM: 10-12-93 1200P  REACH:
'                                       ACCESS: A       B       MRS.VILLAR
                                        CS: RES   SC: 1FR     RTE:
                                                              LAST CLRD: 10-06-92
TROUBLE: NDT OOSY   CBC-BSY ACN:9649430 3-ELDERLY PEOPLE SICK IN RES
VER: 71  SUMMARY: ROH                                  SUB(2)    CTTN:
SCRN RSLT:      NARR: <OOS> SHT BRING TRPS
FAC       CABLE  CCS IWP
```

278

fig 3

CABLE COS TWP
F1 13 0344 0019 F 1046 VAN DE VENTER ST
F2

OE: 002-206-003 WKG TTR

PAGE 21 - MORE

ON 0039373 685 285 DPO 0534P
285 NAS 0618P 0:44
NARR: NALC/R#DA/NA TO NI/0618
TTN: 0039373 TN: 407 COMM: 10-12-93 1200P REACH:
ACCESS: A B 8A-5PRENEE
CS: BUS SC: 1FB RTE: 407
LAST CLRD: 06-24-93
TROUBLE: MISC OOSN ACN: 6832244 ALARM IS INDICATING A LINE TRBL
VER: 0C SUMMARY: CPE OR HIGH RESISTANCE OPEN CTTN:
SCRN RSLT: NARR: NALC/R#DA/NA TO NI/0618
FAC CABLE WMP
F1 17 0284 0034 4190.2 OKEECHOBEE BLVD
F2

OE: 01020-260-20 WKG TTR
OFF 685 285 0619P

FROM BellSouth WPB ASM 407 586 6581 12-11-93 03:28PM P001 #14

Conf

184

279

B8P
Sauce Dam to WALS

B 10/6/93
KW 12/14/93

48-3
2-2

THE WALTER LATHAM COMPANY (708) 345-8787

280

PBC

T. C. Taylor
Operations Manager-IMC

Southern Bell

Room 14JJ1 Southern Bell Tower
301 W. Bay Street
Jacksonville, Florida 32202
(904) 350-3586

JANUARY 29, 1992
FILE CODE: 710.0400

MEMORANDUM

TO: Operations Managers, Network Operations - Florida

FROM: T. C. Taylor, Operations Manager - South Operations
I&M/IMC Implementation Support

SUBJECT: Plant Time Reporting Correction Procedures

BellSouth Practice 620-700-001SV "Time Reporting Requirements For Technicians" provides the necessary procedures to be followed to ensure compliance with the BellSouth Cost Allocation Manual (CAM), as well as Federal and State regulatory agencies.

At times, due to supervisory review of MIR time Sheets and associated documentation, it may be necessary to correct errors found.

The attached document "Time Reporting Correction Procedures" has been developed to assist field personnal in determining the appropriate corrective action.

Please distribute this document within your organization to all affected personnel. If additional information is desired, the following Implementation Staff managers may be contacted:

South Florida	Steve Shaw 305/644-4994
S/E Florida	Denise Maggert 305/492-3332
North Florida	Lorretta Zezulak 904/350-4118

T. C. Taylor

Attachment

cc: General Managers - Florida
Doug Harkness
David Puckett

Copy (1)

281

48-3

SOUTH OPERATIONS
NETWORK OPERATIONS I&M/IMC IMPLEMENTATION SUPPORT
February 1992

TIME REPORTING CORRECTION PROCEDURES

1. GENERAL

1.1 On February 6, 1987, the Federal Communications Commission (FCC) released its Joint Cost Order (JCO) in FCC Docket No. 86-111, commonly referred to Part X. The order established the requirements that a regulated carrier MUST meet if it intends to use its resources (assets and employees) to provide deregulated products and services.

1.2 The FCC and State Commissions require the company to provide an audit trail of ALL TIME charged for EVERY WORK ASSIGNMENT performed by the technician. To comply with regulatory requirements and Part X accounting, an auditable record of employee time reported must be maintained.

1.3 Management personnel must properly review time reporting documents. In addition, sufficient documentation must be maintained to substantiate that an employee's labor hours and associated costs have been charged to the correct account code.

1.4 Each field code reported must be substantiated by the close out narrative. Work activities must be detailed to the point that a post inspection can be made from the information on the DCWS or 6571 Work Ticket.

1.5 MTR Time Labor Report RF-152-I should be completed as outlined in BSP 620-700-001SV.

2. POSITIVE TIME REPORTING (PTR)

2.1 BellSouth Telecommunications, Inc. uses positive time reporting to classify costs to the appropriate Part 32 accounts, apportioned between regulated, and deregulated activities to pay PTR employees.

2.2 Technicians are plant occupational employees and are considered PTR, or positive time reporting employees. Technicians cost are a significant part of plant construction and maintenance expenditures. Since technicians perform both regulated and deregulated activities, accurate time reporting is essential for proper assignment of costs.

2.3 All plant occupational employees, whether performing a particular job function 100% of the time, or on a regulated/deregulated split, must prepare a time-labor report every day. Once entered into the Mechanized Time Reporting System (MTR), these reports are subject to a series of edits which validate the information. **ANY ERRORS FOUND IN THE REPORTED DATA ARE IDENTIFIED AND AN ERROR REPORT IS TRANSMITTED FOR CORRECTION AND RESUBMITTAL.**

2.4 **THE SUPERVISOR IS RESPONSIBLE FOR REVIEWING OUTPUT REPORTS TO ENSURE REASONABLENESS OF TIME REPORTED.** Any errors detected as a result of reviewing documents must be corrected, and noted on the original forms

3. **SUPPORT DOCUMENTATION**

3.1 Technicians are required to provide narrative descriptions in such detail as to support the use of every account code charged on the MTR Form RF-152-I.

3.2 Support documentation for technicians dispatched out of LMOS-MAPPER is considered to be the DCWS (Full, Clock, Narr). All tasks not dispatched out of MAPPER require a completed 6571 work ticket. This ticket must be completed as outlined in BSP 620-700-001SV paragraph 6.1.

3.3 Support documentation for those technicians working on Designed Specials, Routine, Projects, Helping, Employee Reports etc., a completed 6571 work ticket is required as outlined in 3.2 above.

4. **REVIEW PROCESS**

4.1 Supervisors are required to review MTR documents (6571 Work Tickets, DCWS's, RF152-I, Form 9360) to ensure the accuracy of the time reported. Requirements for review are outline in BSP 620-700-001SV.

4.2 Verification , review and approval of MTR Form 9360-AL is mandatory. Evidence of this review must be apparent by means of (but not limited to) highlights, notes, or initials.

4.3 When a discrepancy or error is detected the reviewing manager is responsible for ensuring the appropriate corrective action is taken.

5. **CORRECTING DOCUMENTS**

5.1 When it is determined by review of the support documentation that the account code charged by the technician in MTR is incorrect the correction must be made on the time report in ~~"RED INK"~~ or a corrected time report must be prepared with "CORRECTED REPORT" written across the top of the RF-152-I. These changes must be made by the technician to maintain accurate time reporting, and ensure coverage of error regardless of its origin.

Note: Revisions are being made to Form RF-152-I to provide for a box to check if the information contained is a correction of a previous report.

5.2 The corrected information must be called or forwarded to the MTR input center.

5.3 MTR Form 9360-AL will reflect the changes made to correct the account code errors if received and input into the MTR system no later than the Monday following the close of the plant payroll period.

5.4 If the correction to the time report is made after the Monday following the close of the plant payroll period Form 9360-AL will not reflect the corrections and will have to be noted by the appropriate supervisor in the field.

5.5 In those instance when the support documentation is not complete, or fails to support the account codes charged by the technician, the support documentation must be corrected.

5.6 Corrections to the DCWS can be made by creating a DATH/WATH entry into the LMOS system. The DATH must be printed, initialed by the technician and supervisor, then attached to the DCWS.

THE TECHNICIAN MUST BE CONSULTED TO OBTAIN THE CORRECT NARRATIVE INFORMATION BASED ON THE WORK PERFORMED TO SUPPORT THE ACCOUNT CODES CHARGED. IF THE NARRATIVE CANNOT SUPPORT THE CODES CHARGED THE MTR REPORT SHOULD BE CORRECTED AS INDICATED IN 5.1 ABOVE.

5.7 Corrections to 6571 work tickets should be made by the original technician after it is determined that the information on the ticket does not support the account codes charged in the MTR System.

IF THE TECHNICIAN ADVISES MANAGEMENT THAT THE NARRATIVE IS CORRECT, THE MTR TIME REPORT SHOULD BE CORRECTED AS OUTLINED IN 5.1 ABOVE.

5.8 The attached form (attachment A) should be used to initiate any changes to Disposition/Cause Codes or narrative entries when the technician determines a need to correct or modify these items prior to management review.

BST
Positive Time Rept
Correction Procedures

B 12/9/93
[illegible] 2/14/93

483/4

EXAMPLE

FLORIDA
4100
June 1994

UNIVERSE SIZE = 2077
SAMPLE SIZE = 30
OF WKS IN MONTH 5

RC	NAME	SSN	WK	WK BEGINS	INTERVIEWS S	M	T	W	T	F	S
NS220404	HEADRICK,ROBERT P		1	june 1							
NS220601	STURGES,BRUCE C		1	june 1							
NS220602	MATTSSON,RICHARD D		1	june 1							
NS250804	ALEXANDER,J R		1	june 1							
NS320206	WALKER,KATHY D		1	june 1							

Cindy

RAND 0-1

RAND 0-100

(1)

* = To be interviewed

286

Example

FLORIDA
4100
June 1994

UNIVERSE SIZE = 2077
SAMPLE SIZE = 30
OF WKS IN MONTH 5

RC	NAME	SSN	WK	WK BEGINS	INTERVIEWS S	M	T	W	T	F	S
NS210308	EICHHOLZ,RICHARD D		2	june 8		*	*			*	
NS310202	CARANO,CLAUDIO F		2	june 8		*	*			*	
NS310508	FLOURNOY,C		2	june 8							
NS330304	SMITH,RONNIE D		2	june 8							
NS330A0A	GUTHRIE,DOUGLAS L		2	june 8							
NS420705	BANKS,CALVIN L		2	june 8			*	*	*		
NS42070D	ESCARDA,JOSE M		2	june 8							

* = To be interviewed

(2)

287

Example

FLORIDA
4100
June 1994

UNIVERSE SIZE = 2077
SAMPLE SIZE = 30
OF WKS IN MONTH 5

RC	NAME	SSN	WK	WK BEGINS	INTERVIEWS S	M	T	W	T	F	S
NS210309	SCOTT JR,EARL R		3	june 15							
NS230301	BARBO,M S		3	june 15							
NS320204	SAN MARTIN,ROGELI(		3	june 15							
NS320602	TANTON,MARY P		3	june 15							
NS320606	EDDIE,ROBERT B		3	june 15		•	*	*			
NS320609	FERRANTE,SANTE		3	june 15							
NS410201	MUMFORD,RONNIE A		3	june 15			•	*	*		
NS410604	PICHE,DENNIS G		3	june 15			•		*	*	
NS42070D	ARMAS,EFREN S		3	june 15							

(3)

882

EXAMPLE

FLORIDA
4100
June 1994

UNIVERSE SIZE = 2077
SAMPLE SIZE = 30
OF WKS IN MONTH 5

RC	NAME	SSN	WK	WK BEGINS	INTERVIEWS S	M	T	W	T	F	S
NS41060C	PEARSON,DAVID C		4	june 22							
NS41060T	WHITAKER,T T		4	june 22							
NS420704	BAUMAN,ROBERT J		4	june 22							

(4)

EXAMPLE

FLORIDA
4100
June 1994

UNIVERSE SIZE = 2077
SAMPLE SIZE = 30
OF WKS IN MONTH 5

RC	NAME	SSN	WK	WK BEGINS	INTERVIEWS S	M	T	W	T	F	S
NS220603	RILES JR,G W		5	june 29							
NS250305	STORMANT,TED W		5	june 29							
NS330A02	AMMER,DOUGLAS W		5	june 29			*		*	*	
NS410610	TAMARGO,CARLOS		5	june 29							
NS430102	MORALES,ALEXANDER		5	june 29							
NS430105	CANCHON,MIGUEL		5	june 29							

(S)

290

Example of Sample List

B88

B 10/9/93

NW 12/14/93

48-3

THE WALTER LATHAM COMPANY (708) 246-8787

COMPANY: BST
TITLE: DATA ANALYSIS
PERIOD: TYE 12/31/93
DATE: DEC 9, 1993
AUDITOR: RKY

KW 12/14/93

WP NO. 49

V. DATA ANALYSIS

Per D&T, the data derived from the logs are input into Wassp data base processor. INPUT program provides for input and storage of data by work goup.

INOUT prograa develops time distribution ratios and other data anleysis for each work group. Wassp distributes the increaents of hours reported to each FRC and calculated % of time assigned to each FRC.

According to my conversations with Rick King, Steve Vanderberg, and Steve Shaw, the profile for each month is a total of 3 months samples(not average). The profile is applied two months later. For exaaple, October profile consists of Aug, Sept and Oct data. This profile is applied to Decaaber.

wp no 49-1 is the profile for the month of October, 1993.

No further work done on Data Analysis.

— Conf —

PBC

FLORIDA

(Reg 1)

OCT 1993 - 3 MONTH AGGREGATE

I&M POTS (4100)

NO. OF EMPLOYEES = 2067

NO. IN SAMPLE = 90

	FIELD CODE	TYPE	HOURS	%	PRECISION
2	22M	REG	126.00	3.59%	1.19%
3	22R	REG	109.25	3.11%	
4	45M	REG	641.25	18.28%	2.63%
5	45R	REG	367.00	10.46%	
6	248C	REG	54.00	1.54%	0.59%
7	248M	REG	192.25	5.48%	1.40%
8	248R	REG	121.00	3.45%	
9	548C	REG	158.75	4.52%	1.69%
10	548M	REG	275.50	7.85%	1.66%
11	548R	REG	182.50	5.20%	
12	12M	REG	60.25	1.72%	1.06%
13	12R	REG	13.00	0.37%	
14	52M	REG	11.50	0.33%	0.33%
15	52R	REG	1.25	0.04%	
16	68E	REG	55.75	1.59%	0.75%
17	68M	REG	167.75	4.78%	2.69%
18	68R	REG	95.50	2.72%	
21	68Y	REG	7.50	0.21%	0.42%
29	257C	REG	5.75	0.16%	0.20%
30	257M	REG	1.50	0.04%	0.06%
31	257R	REG	8.00	0.23%	0.18%
32	377M	REG	1.50	0.04%	0.06%
33	377R	REG	2.50	0.07%	0.09%
34	F257M	REG	4.00	0.11%	0.13%
35	F257R	REG	3.25	0.09%	0.12%
39	F257C	REG	7.00	0.20%	0.20%
50	97BI	DREG	180.75	5.15%	1.05%
51	97BW	DREG	15.75	0.45%	0.30%
52	97BP	DREG	380.25	10.84%	1.86%
53	97BR	DREG	24.00	0.68%	0.34%
54	98EI	DREG	6.75	0.19%	0.18%
55	98EW	DREG	2.75	0.08%	0.16%
56	98ER	DREG	12.50	0.36%	0.29%
80	78M	REG	2.25	0.06%	0.13%
90	5532	COMM	79.25	2.26%	0.58%
91	5533	COMM	29.00	0.83%	1.66%
93	5535	COMM	14.25	0.41%	0.47%
94	5536	COMM	94.25	2.69%	0.72%
95	553A	COMM	147.00	4.19%	0.85%

47-1

47-1

— Cont —

FLORIDA

OCT 1993 - 3 MONTH AGGREGATE

I&M POTS (4100)

NO. OF EMPLOYEES = 2067

NO. IN SAMPLE = 90

FIELD CODE	TYPE	HOURS	%	PRECISION
TOTAL	REG	1786.25	50.91%	3.01%
TOTAL	DREG	622.75	17.75%	1.91%
TOTAL	COMM	363.75	10.37%	1.97%
TOTAL	TRVL	736.00	20.98%	1.86%

TOTAL SAMPLE HOURS 3508.75

ESTIMATED TOTAL HOURS *********

ESTIMATED MONTHLY SAMPLE REQ'D 30

FLORIDA

OCT 1993 - 3 MONTH AGGREGATE

I&M SPECIAL SERVICES (4110)

NO. OF EMPLOYEES = 396

NO. IN SAMPLE = 90

	FIELD CODE	TYPE	HOURS	%	PRECISION
2	22M	REG	80.00	2.73%	1.62%
3	22R	REG	40.00	1.36%	
4	45M	REG	327.75	11.17%	2.43%
5	45R	REG	122.50	4.18%	
6	248C	REG	24.50	0.84%	0.63%
7	248M	REG	28.00	0.95%	0.56%
8	248R	REG	17.50	0.60%	
9	548C	REG	13.50	0.46%	0.40%
10	548M	REG	18.75	0.64%	0.40%
11	548R	REG	12.00	0.41%	
12	12M	REG	195.00	6.65%	2.40%
13	12R	REG	60.25	2.05%	
14	52M	REG	49.50	1.69%	0.97%
15	52R	REG	9.00	0.31%	
16	68E	REG	225.25	7.68%	2.02%
17	68M	REG	233.25	7.95%	2.41%
18	68R	REG	107.50	3.66%	
21	68Y	REG	11.00	0.37%	0.36%
29	257C	REG	22.25	0.76%	0.61%
30	257M	REG	25.50	0.87%	0.92%
31	257R	REG	19.00	0.65%	0.65%
34	F257M	REG	15.50	0.53%	0.47%
35	F257R	REG	13.75	0.47%	0.47%
39	F257C	REG	19.00	0.65%	0.65%
40	378C	REG	83.50	2.85%	1.44%
41	378M	REG	38.75	1.32%	1.01%
42	358NC	DREG	0.50	0.02%	0.03%
44	558C	REG	73.00	2.49%	0.92%
45	558M	REG	123.50	4.21%	1.46%
46	418M	REG	72.00	2.45%	1.74%
47	378X	REG	4.25	0.14%	0.15%
48	558X	REG	16.75	0.57%	0.38%
52	97BP	DREG	7.25	0.25%	0.31%
54	98EI	DREG	125.25	4.27%	1.53%
55	98EW	DREG	18.50	0.63%	0.50%
56	98ER	DREG	50.25	1.71%	0.71%
90	5532	COMM	133.50	4.55%	2.69%
92	5534	COMM	27.75	0.95%	1.65%
93	5535	COMM	5.00	0.17%	0.30%
94	5536	COMM	65.00	2.22%	0.81%
95	553A	COMM	90.00	3.07%	1.08%
98	510C	COMM	82.00	2.79%	3.42%
115	F758C	REG	1.50	0.05%	0.10%
193	540M	REG	30.00	1.02%	2.03%

(3)

FLORIDA

OCT 1993 - 3 MONTH AGGREGATE

I&M SPECIAL SERVICES (4110)

NO. OF EMPLOYEES = 396

NO. IN SAMPLE = 90

FIELD CODE	TYPE	HOURS	%	PRECISION
TOTAL	REG	1764.75	60.15%	4.57%
TOTAL	DREG	201.75	6.88%	1.91%
TOTAL	COMM	403.25	13.74%	4.41%
TOTAL	TRVL	564.25	19.23%	1.97%

TOTAL SAMPLE HOURS 2934.00

ESTIMATED TOTAL HOURS 167824.87

ESTIMATED MONTHLY SAMPLE REQ'D 43

FLORIDA

OCT 1993 - 3 MONTH AGGREGATE

I&M PUBLIC COMMUNICATIONS (4180)

NO. OF EMPLOYEES = 107

NO. IN SAMPLE = 197

	FIELD CODE	TYPE	HOURS	%	PRECISION
2	22M	REG	53.75	0.77%	0.25%
3	22R	REG	40.50	0.58%	
4	45M	REG	167.25	2.39%	0.59%
5	45R	REG	116.00	1.66%	
6	248C	REG	30.00	0.43%	0.22%
7	248M	REG	60.00	0.86%	0.30%
8	248R	REG	46.00	0.66%	
9	548C	REG	14.25	0.20%	0.10%
10	548M	REG	87.25	1.25%	0.45%
11	548R	REG	78.50	1.12%	
12	12M	REG	5.25	0.07%	0.09%
13	12R	REG	2.75	0.04%	
14	52M	REG	5.75	0.08%	0.09%
15	52R	REG	3.75	0.05%	
16	68E	REG	1.50	0.02%	0.04%
22	89E	REG	3.75	0.05%	0.06%
23	89M	REG	0.75	0.01%	0.02%
24	89Y	REG	1.25	0.02%	0.03%
25	189E	REG	84.50	1.21%	0.51%
26	189M	REG	91.50	1.31%	0.38%
27	189Y	REG	12.00	0.17%	0.09%
31	257R	REG	6.50	0.09%	0.07%
32	377M	REG	7.00	0.10%	0.18%
34	F257M	REG	3.25	0.05%	0.06%
35	F257R	REG	2.25	0.03%	0.04%
39	F257C	REG	5.50	0.08%	0.09%
54	98EI	DREG	1.25	0.02%	0.03%
56	98ER	DREG	2.50	0.04%	0.04%
57	968NC	DREG	57.50	0.82%	0.96%
58	968NM	DREG	31.50	0.45%	0.44%
59	968NX	DREG	2.00	0.03%	0.05%
71	88M	REG	49.25	0.70%	0.64%
72	88Y	REG	1.25	0.02%	0.02%
73	188E	REG	241.50	3.45%	0.98%
74	188M	REG	2136.25	30.49%	2.14%
75	188Y	REG	168.75	2.41%	1.07%
76	288E	REG	38.00	0.54%	0.36%
77	288M	REG	129.00	1.84%	0.79%
78	288Y	REG	2.00	0.03%	0.04%
82	988E	REG	1.00	0.01%	0.02%
83	988M	REG	11.00	0.16%	0.10%
84	988Y	REG	1.00	0.01%	0.02%

85	989E	REG	2.00	0.03%	0.04%
86	989M	REG	3.00	0.04%	0.05%
87	989Y	REG	1.00	0.01%	0.03%
88	2600	REG	436.25	6.23%	1.98%
			FLORIDA		

OCT 1993 - 3 MONTH AGGREGATE

I&M PUBLIC COMMUNICATIONS (4180)

NO. OF EMPLOYEES = 107

NO. IN SAMPLE = 197

	FIELD CODE	TYPE	HOURS	%	PRECISION
90	5532	COMM	226.50	3.23%	0.95%
91	5533	COMM	2.00	0.03%	0.04%
93	5535	COMM	14.50	0.21%	0.25%
94	5536	COMM	85.00	1.21%	0.33%
95	553A	COMM	312.25	4.46%	0.74%
98	510C	COMM	184.75	2.64%	0.90%
	TOTAL	REG	3864.50	55.15%	2.09%
	TOTAL	DREG	94.75	1.35%	1.08%
	TOTAL	COMM	825.00	11.77%	1.53%
	TOTAL	TRVL	2223.25	31.73%	1.46%

TOTAL SAMPLE HOURS 7007.50

ESTIMATED TOTAL HOURS 49479.37

ESTIMATED MONTHLY SAMPLE REQ'D 37

FLORIDA

OCT 1993 - 3 MONTH AGGREGATE

I&M CORPORATE COMMUNICATIONS (4120)

NO. OF EMPLOYEES = 66

NO. IN SAMPLE = 209

	FIELD CODE	TYPE	HOURS	%	PRECISION
2	22M	REG	9.25	0.13%	0.15%
3	22R	REG	7.25	0.10%	
4	45M	REG	25.25	0.34%	0.24%
5	45R	REG	14.50	0.20%	
7	248M	REG	2.00	0.03%	0.05%
8	248R	REG	2.00	0.03%	
12	12M	REG	50.00	0.68%	0.32%
13	12R	REG	27.50	0.37%	
14	52M	REG	55.75	0.75%	0.49%
15	52R	REG	29.75	0.40%	
16	68E	REG	71.00	0.96%	0.51%
17	68M	REG	58.75	0.79%	0.89%
18	68R	REG	6.75	0.09%	
21	68Y	REG	6.50	0.09%	0.15%
30	257M	REG	1.50	0.02%	0.04%
36	758M	REG	0.25	0.00%	0.01%
40	378C	REG	135.00	1.83%	0.96%
41	378M	REG	34.50	0.47%	0.28%
44	558C	REG	82.25	1.11%	0.76%
45	558M	REG	35.00	0.47%	0.24%
48	558X	REG	3.25	0.04%	0.06%
60	728C	REG	111.00	1.50%	0.93%
61	658M	REG	1007.25	13.63%	2.20%
62	658C	REG	404.75	5.48%	1.88%
63	628C	REG	90.25	1.22%	1.01%
64	730C	REG	1035.75	14.01%	2.70%
65	630M	REG	2443.75	33.06%	3.48%
66	728X	REG	9.50	0.13%	0.09%
67	658X	REG	70.00	0.95%	0.65%
68	628X	REG	5.00	0.07%	0.10%
69	730X	REG	124.00	1.68%	0.57%
90	5532	COMM	87.00	1.18%	0.34%
91	5533	COMM	1.50	0.02%	0.04%
92	5534	COMM	46.00	0.62%	0.62%
93	5535	COMM	93.50	1.27%	0.93%
94	5536	COMM	22.25	0.30%	0.21%
95	553A	COMM	17.50	0.24%	0.14%
96	5539	COMM	6.50	0.09%	0.15%
98	510C	COMM	121.25	1.64%	0.77%
166	158M	REG	20.75	0.28%	0.49%

(7)

FLORIDA

OCT 1993 - 3 MONTH AGGREGATE

I&M CORPORATE COMMUNICATIONS (4120)

NO. OF EMPLOYEES = 66

NO. IN SAMPLE = 209

FIELD CODE	TYPE	HOURS	%	PRECISION
TOTAL	REG	5891.25	79.71%	1.57%
TOTAL	DREG	0.00	0.00%	0.00%
TOTAL	COMM	395.50	5.35%	1.39%
TOTAL	TRVL	1104.25	14.94%	0.93%

TOTAL SAMPLE HOURS 7391.00

ESTIMATED TOTAL HOURS 30342.01

ESTIMATED MONTHLY SAMPLE REQ'D 66

FLORIDA

OCT 1993 - 3 MONTH AGGREGATE

CABLE/FACILITIES MAINTENANCE (4250)

NO. OF EMPLOYEES = 132

NO. IN SAMPLE = 371

	FIELD CODE	TYPE	HOURS	%	PRECISION
2	22M	REG	577.00	8.16%	1.70%
3	22R	REG	542.75	7.67%	
4	45M	REG	3173.75	44.86%	4.15%
5	45R	REG	2996.50	42.36%	
6	248C	REG	6.00	0.08%	0.15%
7	248M	REG	33.00	0.47%	0.33%
8	248R	REG	30.25	0.43%	
9	548C	REG	0.75	0.01%	0.02%
10	548M	REG	163.00	2.30%	0.74%
11	548R	REG	154.00	2.18%	
12	12M	REG	41.75	0.59%	0.33%
13	12R	REG	9.00	0.13%	
14	52M	REG	29.50	0.42%	0.35%
15	52R	REG	10.50	0.15%	
16	68E	REG	36.00	0.51%	0.31%
17	68M	REG	1.00	0.01%	0.03%
18	68R	REG	1.00	0.01%	
19	5M	REG	469.50	6.64%	2.57%
20	5R	REG	289.50	4.09%	
21	68Y	REG	2.00	0.03%	0.05%
29	257C	REG	24.75	0.35%	0.40%
30	257M	REG	70.50	1.00%	0.57%
31	257R	REG	56.75	0.80%	0.60%
32	377M	REG	3.00	0.04%	0.08%
34	F257M	REG	310.00	4.38%	1.71%
35	F257R	REG	63.75	0.90%	0.44%
39	F257C	REG	63.50	0.90%	0.76%
40	378C	REG	107.25	1.52%	0.70%
41	378M	REG	191.25	2.70%	1.24%
44	558C	REG	7.00	0.10%	0.18%
47	378X	REG	2.25	0.03%	0.04%
50	97BI	DREG	2.50	0.04%	0.06%
54	98EI	DREG	4.75	0.07%	0.12%
90	5532	COMM	161.25	2.28%	0.52%
91	5533	COMM	8.00	0.11%	0.14%
92	5534	COMM	23.50	0.33%	0.44%
93	5535	COMM	23.25	0.33%	0.30%
94	5536	COMM	82.25	1.16%	0.38%

95	553A	COMM	15.00	0.21%	0.16%
98	510C	COMM	34.75	0.49%	0.47%
115	F758C	REG	2.50	0.04%	0.06%
116	F758M	REG	3.50	0.05%	0.07%
181	357M	REG	113.75	1.61%	0.86%
208	758C	REG	3.50	0.05%	0.09%
216	D257M	REG	3.00	0.04%	0.07%

FLORIDA

OCT 1993 - 3 MONTH AGGREGATE

CABLE/FACILITIES MAINTENANCE (4250)

NO. OF EMPLOYEES = 132

NO. IN SAMPLE = 371

FIELD CODE	TYPE	HOURS	%	PRECISION
TOTAL	REG	5559.50	78.59%	1.40%
TOTAL	DREG	7.25	0.10%	0.13%
TOTAL	COMM	348.00	4.92%	1.02%
TOTAL	TRVL	1159.25	16.39%	0.89%

TOTAL SAMPLE HOURS 7074.01

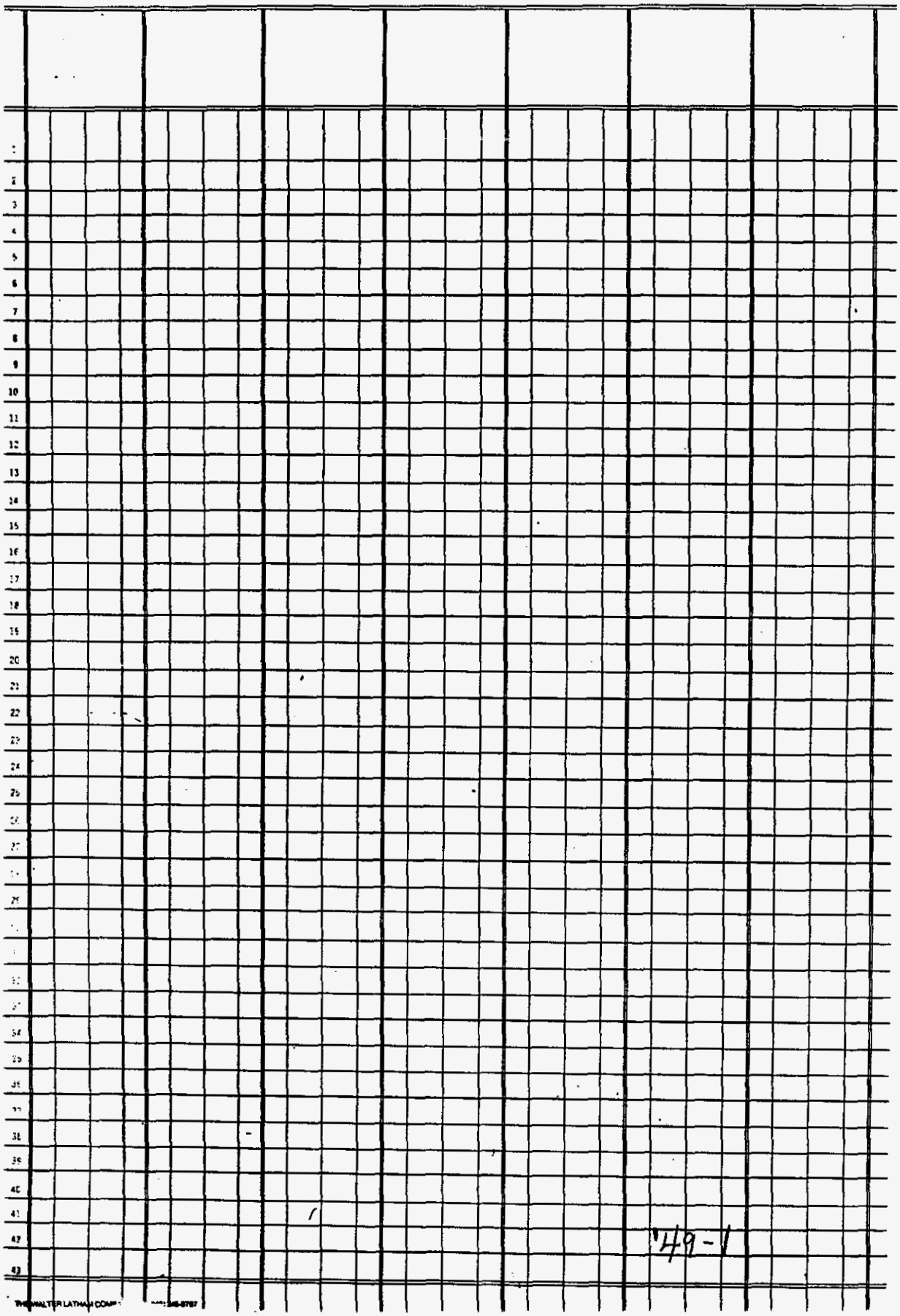
ESTIMATED TOTAL HOURS 32719.66

ESTIMATED MONTHLY SAMPLE REQ'D 132

B&D

Profile used for Oct 93

12/6/93



49-1

BST
WASSP Rept
Cost Savings

B 12/13/93

KW 12/14/93

AUDIT DISCLOSURE

SUBJECT: COSTS SAVINGS ASSOCIATED WITH THE IMPLEMENTATION OF WORK ACTIVITY STATISTICAL SAMPLING PROCESS (WASSP)

STATEMENT OF FACTS:

50-1 Acccording to the answer to FPSC Staff's 36th Interrogatories, Item 712, "The estimated annual Florida total cost savings (net of annual cost of implemetnation) is $,675,000. The Florida intrastate annual net cost savings is estimated at $3,454,000."

50-1 p 2 According to a Deloitte & Touche schedule (prepared for the March 5, 1993 report to BST) the Estimated Annual Gross Cost Savings for the entire company is $24,618,000. This is based on certain estimates. They are: Estimated Hours Saved Per day, the estimated number of employees not reporting under WASSP, and Average Technician Hourly Cost. See Schedule following this Disclosure. 50-1/1 50-1/2

PSC staff inquired about how BST came up with 15 minutes savings per day. In our interview with Rick King, Steve Vanderberg, they stated the 15 minutes was arrived at through observations and conversations. There were no formal studies performed nor formal documentation of their observations and conversations.

OPINION:

One part of the assumptions to calculate the Cost Savings is not based on a formal documented study.

RECOMMENDATION:

In order to determine the Cost Savings to apply to this rate case, a study should be performed to determine on a more formal bases how many minutes are saved per day by using WASSP. Should the Commission decide that the WASSP process should be instituted, this documentation could be done on a sample basis w/PTR rather than continue w/ parallel testing.

— Conf —

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324

Rq 9

PBC

Southern Bell Tel. & Tel. Co.
FPSC Docket No. 920260-TL
FPSC Staff's 36th Interrogatories
September 17, 1993
Item No. 712
Page 1 of 1

REQUEST: What are the annual Florida cost savings associated with the implementation of the Work Activity Statistical Sampling Process (WASSP) on a total company and intrastate basis?

RESPONSE: The estimated annual Florida total cost savings (net of annual cost of implementation) is $4,675,000. The Florida intrastate annual net cost savings is estimated at $3,454,000.

SO-1 p. 2

INFORMATION PROVIDED BY: H. A. Paisant
Operations Manager
675 W. Peachtree Street
Atlanta, Georgia 30375

SO-1

325

p 1

SCHEDULE A

BELLSOUTH TELECOMMUNICATIONS, INC.

WORK ACTIVITY STATISTICAL SAMPLING PROCESS
SCHEDULE OF ESTIMATED ANNUAL NET COST SAVINGS

	(000's)
ESTIMATED ANNUAL GROSS COST SAVINGS (Schedule B)	$24,618
ESTIMATED ANNUAL COST OF IMPLEMENTATION (Schedule C)	(1,782)
ESTIMATED ANNUAL NET COST SAVINGS	$22,836

Capital + w/process

22,836
x .89
Expense 20,324
x 23%
FL 4,675
TOE less depr per '93 budget { x .9434
x .7833
3,454

J0-1

P 2 326

Southern Bell Tel. & Tel. Co.
FPSC Docket No. 920260-TL
FPSC Staff's 36th Interrogatories
September 17, 1993
Item No. 713
Page 1 of 1

REQUEST: On an annual revenue requirements total company and intrastate basis, what does the WASSP study performed by Deloitte and Touche indicate for Florida?

RESPONSE: The annual reduced revenue requirements impact of the net savings is estimated to be $4,821,000 for Florida combined, and $3,562,000 for Florida intrastate. In addition to the net savings, there may be a small shift of costs between regulated and nonregulated operations, but the impact of this shift should be immaterial.

INFORMATION PROVIDED BY: H. A. Paisant
Operations Manager
675 W. Peachtree Street
Atlanta, Georgia 30375

50-1

pg 327

Southern Bell Tel. & Tel. Co.
FPSC Docket No. 920260-TL
FPSC Staff's 36th Interrogatories
September 17, 1993
Item No. 713
Page 1 of 1

REQUEST: On an annual revenue requirements total company and intrastate basis, what does the WASSP study performed by Deloitte and Touche indicate for Florida?

RESPONSE:

		FL Total
FL Intrastate	3,454,000	4,675,510
(38.515%) Tax	1,332,321	1,803,321
Net of Tax	2,121,619	2,871,619
Revenue Req.	÷ 5956623	÷ .5956623
	3,561,782	4,820,772
Rounded	3,562,000	4,821,000

INFORMATION PROVIDED BY:

H. A. Paisant
Operations Manager
675 W. Peachtree Street
Atlanta, Georgia 30375

501

DT 328

BST
WASSP- Cost Sharing

B 12/13/93
WW 12/14/93

50-1

SCHEDULE B

BELLSOUTH TELECOMMUNICATIONS, INC.

WORK ACTIVITY STATISTICAL SAMPLING PROCESS
SCHEDULE OF ESTIMATED ANNUAL GROSS COST SAVINGS

Job Function Code	(1) Number of Technicians	* Estimated Hours Saved Per Day	(1) Estimated % of Employees Not Reporting Under WASSP	(1) Estimated Hours Saved Per Year	(1) Average Technician Hourly Cost	($000) Estimated Annual Gross Cost Savings
4150 I&M POTS	7,422	0.25	90%	400,788	$39.59	$15,867
4130 I&M Corporate	292	0.25	75%	13,140	39.59	520
4180 I&M Public	440	0.25	75%	19,800	39.59	784
4190 I&M Special Services	1,144	0.25	85%	58,344	39.59	2,310
42XX I&M Cable Repair	2,584	0.25	80%	124,032	41.42	5,137
Total Estimated Annual Gross Cost Savings						$24,618

(50-1 p2)

Source: D & T report dated March 1993

* 50-1 / 2

(1) = Unaudited by P.S.C.

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SCHEDULE C

BELLSOUTH TELECOMMUNICATIONS, INC.

WORK ACTIVITY STATISTICAL SAMPLING PROCESS
SCHEDULE OF ESTIMATED ANNUAL COST OF IMPLEMENTATION

		(000's)
Estimated Cost of Payroll at Full Implementation		$1,133
Estimated Data Processing Cost		100
Equipment Cost:		
PCs	100	
Fax Machines	20	
Total Estimated Equipment Cost	120	
Estimated Annual Depreciation of Equipment		24
Estimated Telecommunications Cost		25
Estimated Travel and Training Cost		500
Total Estimated Annual Cost of Implementation		$1,782

Source:
O+T report dated March 1993

unaudited
by PSC

BST
WASSP - Cost Summary

B 12/13/93
[illegible] 12/14/93

50-1

EXHIBIT D

March 5, 1993

BellSouth Corporation
1155 Peachtree Street, N.E.
Atlanta, Georgia 30367

Dear Sirs:

We have performed the procedures requested by you, as described below, to the accompanying Schedule of Estimated Annual Net Cost Savings and associated supporting schedules of Estimated Annual Gross Cost Savings and Estimated Annual Cost of Implementation of the BellSouth Telecommunications, Inc. Work Activity Statistical Sampling Process. This report is solely for your information and is not to be referred to or distributed to anyone who is not a member of BellSouth management or the Federal Communications Commission for any purpose. Our procedures performed and our findings are as follows.

A. Schedule A - Schedule of Estimated Annual Net Cost Savings

1. We compared the "Estimated Annual Gross Cost Savings" amount to Schedule B and found them to be in agreement.

2. We compared the "Estimated Annual Cost of Implementation" amount to Schedule C and found them to be in agreement.

3. We determined that Schedule A was mathematically accurate.

B. Schedule B - Schedule of Estimated Annual Gross Cost Savings

1. We compared the "Number of Technicians" to the BSCMS report "BellSouth Region Forces as of March 1, 1993" and found them to be in agreement.

2. We compared the "Estimated Hours Saved Per Day" to a BellSouth prepared analysis and found them to be in agreement. BellSouth management assumes that technicians will save fifteen minutes daily completing Logs compared to the existing Mechanized Time Reporting ("MTR") form.

3. We compared the "Estimated % of Employees Not Reporting Under WASSP" to a BellSouth prepared analysis and found them to be in agreement.

Source: D.T report dated March 1993

333

4. We recalculated the "Estimated Hours Saved Per Year" by multiplying the "Number of Technicians" by the "Estimated Hours Saved Per Day" by the "Estimated % of Employees Not Reporting Under WASSP" by 20 workdays per month by 12 months per year and found the amounts to be in agreement. Management has made the assumption that technicians will work an average of 20 workdays per month during the year.

5. We compared the "Average Technician Hourly Cost" to the management report named "Analysis of Direct Labor and Related Costs-Craft Forces" for the period ending December 1992 and found such amounts to be in agreement. The Average Technician Pay Rate includes benefits.

6. We recalculated the "Estimated Annual Gross Cost Savings" by multiplying the "Estimated Hours Saved Per Year" by the "Average Technician Hourly Cost" and found such amounts to be in agreement.

7. We compared the "Total Estimated Annual Gross Cost Savings" to the sum the estimated annual gross cost savings for each job function code and found them to be in agreement.

C. Schedule C - Schedule of Estimated Annual Cost of Implementation

1. We recalculated the "Estimated Cost of Payroll at Full Implementation" by multiplying the number of employees which WASSP management has represented it is approved to hire by an estimated average salary per employee provided to us by BellSouth and found the amounts to be in agreement.

2. We agreed the "Estimated Data Processing Cost," "Estimated Equipment Cost," and "Estimated Telecommunications Cost" to BellSouth prepared analyses and found them to be in agreement.

3. We recalculated the "Annual Depreciation of Equipment" assuming a 5-year life and straight-line depreciation.

4. We recalculated the "Estimated Travel and Training Cost" by multiplying BellSouth estimates of ten training personnel by $2,000 in cost per week by 25 weeks per year.

5. We determined that Schedule C was mathematically accurate.

Because the procedures we performed were not sufficient to constitute an audit in accordance with generally accepted auditing standards, we do not express an opinion on the accompanying Schedules referred to above. In performing these procedures, however, no matters came to our attention that caused us to believe that such schedules should be adjusted. Had we performed additional procedures, matters might have come to our attention that would have been reported to you. This report relates only to the items specified above, and does not extend to BellSouth Corporation's financial statements taken as a whole for any date or period.

Yours truly,

Source: D+T report dated March 1993

BST

WASSP - Cont Sewing

B 12/13/93

JW 12/14/93

SO-1
2

335

PBC

FLORIDA

Profile - One month for example use 3 month total Profile for actual

OCT 1993

I&M POTS (4100)

NO. OF EMPLOYEES = 2077

NO. IN SAMPLE = 30

	FIELD CODE	TYPE	HOURS	%	PRECISION
2	22M	REG	66.25	5.39%	2.53%
3	22R	REG	57.50	4.68%	
4	45M	REG	230.00	18.71%	4.61%
5	45R	REG	141.75	11.53%	
6	248C	REG	17.25	1.40%	0.96%
7	248M	REG	73.75	6.00%	2.49%
8	248R	REG	56.25	4.58%	
9	548C	REG	47.50	3.86%	2.21%
10	548M	REG	81.00	6.59%	2.14%
11	548R	REG	62.00	5.04%	
12	12M	REG	21.75	1.77%	1.58%
13	12R	REG	3.50	0.28%	
14	52M	REG	1.50	0.12%	0.17%
16	68E	REG	19.50	1.59%	0.90%
17	68M	REG	78.75	6.41%	6.50%
18	68R	REG	63.25	5.15%	
29	257C	REG	0.50	0.04%	0.08%
30	257M	REG	1.50	0.12%	0.18%
31	257R	REG	1.00	0.08%	0.16%
33	377R	REG	0.25	0.02%	0.04%
34	F257M	REG	0.50	0.04%	0.08%
35	F257R	REG	0.75	0.06%	0.12%
39	F257C	REG	2.50	0.20%	0.28%
50	97BI	DREG	56.00	4.56%	1.86%
51	97BW	DREG	3.75	0.31%	0.34%
52	97BP	DREG	148.50	12.08%	2.66%
53	97BR	DREG	14.00	1.14%	0.52%
56	98ER	DREG	4.00	0.33%	0.37%
80	78M	REG	2.25	0.18%	0.38%
90	5532	COMM	33.75	2.75%	0.97%
94	5536	COMM	33.75	2.75%	1.13%
95	553A	COMM	47.75	3.89%	1.32%
	TOTAL	REG	646.50	52.60%	5.49%
	TOTAL	DREG	226.25	18.41%	3.21%
	TOTAL	COMM	115.25	9.38%	2.27%
	TOTAL	TRVL	241.00	19.61%	2.70%

TOTAL SAMPLE HOURS 1229.00

ESTIMATED TOTAL HOURS 340351.18

ESTIMATED MONTHLY SAMPLE REQ'D 52

29

48-3/6

— Conf —

(1)

=1003

OCT4100 FLORIDA

		1003	1004	1005	1006	1007	1008	1009
2	22M	0.	0.	0.	0.25	0.	0.	0.
3	22R	0.	0.	2.75	0.	1.25	2.00	1.00
4	45M	0.	0.	0.	0.25	0.	0.	0.
5	45R	0.	0.	0.	0.	1.75	1.50	0.75
6	248C	0.	0.	0.	2.00	1.00	0.	0.
8	248R	0.	0.	0.50	1.00	1.00	3.00	2.25
9	548C	0.	0.	0.	0.	1.00	0.	0.
10	548M	0.	0.	0.	1.00	0.	0.	0.
11	548R	0.	0.	0.50	0.	0.	0.	0.
50	97BI	0.	0.	0.	0.	0.25	0.	0.
51	97BW	0.	0.	0.	1.50	0.	0.	0.
52	97BP	0.	0.	4.50	2.25	0.	0.50	2.75
95	553A	0.	0.	0.	0.	0.	1.25	0.
99	TRVL	0.	0.	1.25	1.00	2.50	2.50	2.50

		1003	1004	1005	1006	1007	1008	1009
4	45M	0.	3.00	1.00	1.50	2.75	0.	0.
5	45R	0.	0.	0.	0.	0.	0.	3.00
6	248C	0.	0.	0.	0.	2.50	0.	0.
9	548C	0.	2.00	3.00	3.50	1.50	0.	0.
10	548M	0.	1.00	0.	1.00	0.	0.	0.
11	548R	0.	0.	1.75	0.	0.	0.	0.
33	377R	0.	0.	0.	0.	0.	0.	0.25
50	97BI	0.	0.	0.	0.	0.25	0.	0.
52	97BP	0.	0.	1.75	1.50	0.	0.	2.25
94	5536	0.	0.	0.	0.75	1.00	0.	0.
95	553A	0.	3.00	0.	0.	0.	0.	0.50
99	TRVL	0.	1.00	0.50	0.75	0.50	0.	2.00

1 OCT4100 FLORIDA

3			1003	1004	1005	1006	1007	1008	1009
4									
5	3	22R	0.	1.00	0.75	0.75	0.50	1.00	0.
	4	45M	0.	0.	0.50	1.25	0.50	0.	0.
6	5	45R	0.	0.	0.	0.50	0.	0.	0.
7	7	248M	0.	0.	0.	2.50	1.50	0.50	0.
8	8	248R	0.	2.50	1.00	0.	0.	0.	0.
9	9	548C	0.	0.	0.75	0.	0.	0.	0.
10	10	548M	0.	0.	0.	0.	0.	2.25	0.
11	11	548R	0.	0.75	2.00	0.	0.	0.	0.
12	50	97BI	0.	0.	1.25	0.25	0.	0.	0.
13	52	97BP	0.	0.50	1.50	0.75	4.25	0.75	0.
14	90	5532	0.	1.00	0.	0.	0.	2.00	0.
15	99	TRVL	0.	2.25	1.25	2.00	1.25	1.50	0.

16

	1003	0000	0000	0000	0000	0000	0000	

OCT4100 FLORIDA

		1003	1004	1005	1006	1007	1008	1009
2	22M	0.	1.25	3.00	0.	0.	0.	0.
3	22R	0.	0.	0.	0.	1.00	0.	0.50
4	45M	0.	0.	0.	0.75	0.	0.	0.
5	45R	0.	0.	0.	0.	0.75	3.25	0.50
6	248C	0.	0.	0.	0.	0.	0.	1.75
8	248R	0.	0.	0.	0.	0.	0.	1.75
16	68E	0.	0.	0.	0.	1.00	0.	0.
17	68M	0.	0.	0.	0.	0.	1.50	1.50
18	68R	0.	0.50	0.	0.	0.	0.	0.
50	97BI	0.	0.	0.50	0.	0.	0.	0.50
51	97BW	0.	0.	0.	0.	0.	1.00	0.
52	97BP	0.	2.00	0.75	3.50	1.00	0.	0.
53	97BR	0.	1.75	0.	0.	0.	0.	0.
90	5532	0.	0.	0.50	1.50	0.50	0.50	0.
94	5536	0.	1.00	0.50	1.00	1.25	0.	0.75
95	553A	0.	0.	1.00	1.00	2.50	0.75	0.
99	TRVL	0.	1.50	0.75	1.25	0.75	1.50	0.75

		1003	1004	1005	1006	1007	1008	1009
18	68R	0.	0.	0.	0.	0.	0.	1.25
52	97BP	0.	0.	0.	0.	0.	0.	0.50
80	78M	0.	0.	0.	0.	0.	0.	2.25
94	5536	0.	0.	0.	0.	0.	0.	3.50
95	553A	0.	0.	0.	0.	0.	0.	0.50
99	TRVL	0.	0.	0.	0.	0.	0.	1.00

OCT4100 FLORIDA

		1003	1004	1005	1006	1007	1008	1009
3	22R	0.	0.	0.	0.	0.	0.	0.50
4	45M	0.	0.	0.	0.	0.	0.	1.00
5	45R	0.	0.	0.	0.	0.	0.	1.75
7	248M	0.	0.	0.	0.	0.	0.	0.50
11	548R	0.	0.	0.	0.	0.	0.	1.25
18	68R	0.	7.50	8.50	8.50	9.50	7.50	0.
50	97BI	0.	0.	0.	0.	0.	0.	0.50
94	5536	0.	0.	0.	0.	0.	0.	0.75
99	TRVL	0.	0.50	0.50	0.50	0.50	0.50	1.75

		1003	1004	1005	1006	1007	1008	1009
2	22M	0.	2.00	0.	0.	0.	0.	0.
4	45M	0.	0.	4.50	5.50	1.50	1.00	4.00
5	45R	0.	0.	0.	0.	0.	0.	2.50
11	548R	0.	0.	0.	0.	0.	4.00	0.
12	12M	0.	1.75	0.	0.	4.25	0.	0.
16	68E	0.	0.	0.75	1.00	0.	0.	1.50
17	68M	0.	0.	0.	0.	0.50	0.	0.
18	68R	0.	1.00	0.	0.	0.	0.	0.
50	97BI	0.	0.	1.00	0.	0.	0.	0.25
52	97BP	0.	1.00	0.	0.	0.	0.	0.
53	97BR	0.	0.	0.	0.	1.00	0.	0.
90	5532	0.	0.	2.00	0.	0.	0.	0.
94	5536	0.	0.	0.	0.25	1.25	0.	0.
95	553A	0.	1.25	0.	0.	0.	3.50	0.
99	TRVL	0.	2.50	0.75	2.25	2.00	1.50	1.25

1 OCT4100 FLORIDA

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		1003	1004	1005	1006	1007	1008	1009
3	22R	0.	0.	1.75	0.	1.50	1.25	1.00
4	45M	0.	0.	0.	0.	0.	1.75	0.
5	45R	0.	3.50	4.00	2.50	4.00	0.	0.75
8	248R	0.	0.	0.	0.	1.25	2.00	0.50
9	548C	0.	0.	0.	0.	1.50	0.	0.
11	548R	0.	2.25	0.50	1.75	0.	0.	0.75
13	12R	0.	0.	0.	0.	0.	1.25	0.
18	68R	0.	0.	0.	1.50	0.	0.	0.
50	97BI	0.	0.	0.	0.	1.25	0.	0.
52	97BP	0.	1.00	1.50	2.75	0.50	2.50	2.75
94	5536	0.	0.25	0.50	0.	0.	0.	0.50
95	553A	0.	0.	0.	0.	0.	0.	0.75
99	TRVL	0.	1.50	1.25	1.50	1.50	1.75	1.00

OCT4100 FLORIDA

		1010	1011	1012	1013	1014	1015	1016
4	45M	0.	0.50	1.00	0.50	1.00	0.	0.
5	45R	0.	2.00	0.	0.	0.	0.	0.
6	248C	0.	0.	0.	0.	4.00	0.	0.
16	68E	0.	0.	1.00	0.50	2.00	0.	0.
17	68M	0.	0.25	0.	0.	0.	0.	0.
18	68R	0.	0.	0.	0.50	0.	0.	0.
30	257M	0.	0.	0.	0.50	0.	0.	0.
50	97BI	0.	0.25	1.00	1.25	0.	1.00	0.
52	97BP	0.	1.75	1.00	0.	0.	1.50	0.
90	5532	0.	0.50	1.00	0.50	0.75	0.50	0.
94	5536	0.	0.	0.	0.75	0.	0.	0.
95	553A	0.	0.	0.50	0.75	0.	2.00	0.
99	TRVL	0.	2.75	2.50	2.75	0.25	3.00	0.

		1010	1011	1012	1013	1014	1015	1016
4	45M	0.	0.	0.50	1.00	1.00	0.	0.75
5	45R	0.	4.50	1.75	0.	0.	2.25	0.
9	548C	0.	0.	0.	2.00	2.25	0.	0.
10	548M	0.	1.00	1.25	0.50	0.	0.	0.
11	548R	0.	0.75	1.50	1.50	0.	1.00	1.50
29	257C	0.	0.	0.	0.50	0.	0.	0.
50	97BI	0.	0.	0.	0.	1.75	0.	0.
52	97BP	0.	0.	1.25	0.	0.	1.50	2.25
53	97BR	0.	0.	0.	0.	0.	0.	0.75
90	5532	0.	0.	0.	1.00	0.	1.50	0.
94	5536	0.	0.	0.	0.	0.	0.75	0.
95	553A	0.	0.	0.	0.	1.50	0.	0.
99	TRVL	0.	1.75	1.75	1.50	1.50	1.00	2.75

OCT4100 FLORIDA

		1010	1011	1012	1013	1014	1015	1016
3	22R	0.	1.00	1.00	0.	0.	0.	0.
5	45R	0.	2.00	3.50	6.00	0.	0.	0.
18	68R	0.	0.	0.25	0.	0.	0.	0.
52	97BP	0.	2.50	2.25	0.	5.25	1.50	0.
90	5532	0.	0.	0.	0.	1.50	1.50	0.
95	553A	0.	0.	0.	0.75	0.	0.	0.
99	TRVL	0.	2.50	1.00	1.25	1.25	1.00	0.

		1010	1011	1012	1013	1014	1015	1016
4	45M	0.	0.25	0.	0.50	0.	0.50	0.
5	45R	3.75	0.	1.75	0.50	2.25	2.25	0.50
8	248R	0.50	0.	0.	0.	0.	0.	0.
10	548M	0.	0.25	0.	0.50	0.	0.	0.
11	548R	0.	2.50	0.	0.50	0.	0.	1.25
17	68M	0.	0.	0.	0.	0.	1.75	0.
18	68R	0.25	0.	0.	1.25	0.	0.	0.
50	97BI	0.	0.25	0.50	0.25	0.	0.	0.
52	97BP	0.75	0.75	2.00	0.25	0.	0.50	2.00
53	97BR	0.	0.	0.	0.	1.00	0.	0.
90	5532	0.	1.50	0.	0.	1.00	0.	0.
94	5536	0.	0.	0.	0.	1.00	0.	0.
95	553A	0.	0.	0.75	1.00	0.	0.	0.75
99	TRVL	2.75	2.50	3.00	3.25	2.75	3.00	3.50

OCT4100 FLORIDA

		1010	1011	1012	1013	1014	1015	1016
3	22R	0.	0.	0.	0.	0.	0.	1.50
4	45M	0.	0.	0.	0.50	1.00	0.75	0.
5	45R	0.	1.00	1.75	0.	0.50	2.50	0.
8	248R	0.	2.00	0.50	1.50	2.50	0.	2.50
9	548C	0.	0.	0.	1.50	0.	0.	0.
11	548R	0.	1.25	0.	0.	0.	1.00	0.
12	12M	0.	0.	0.50	0.	0.	0.	0.
14	52M	0.	0.	0.75	0.	0.	0.	0.
50	97BI	0.	0.	0.	1.50	0.	0.	0.
52	97BP	0.	1.25	2.25	1.75	1.50	1.50	0.50
53	97BR	0.	0.	0.	0.	0.	0.	1.50
90	5532	0.	0.50	0.25	0.	0.	0.	0.
94	5536	0.	0.	0.	0.	1.25	0.	0.
95	553A	0.	0.75	0.75	0.	0.	0.75	0.75
99	TRVL	0.	1.25	1.25	1.25	1.25	1.50	1.25

		1010	1011	1012	1013	1014	1015	1016
4	45M	0.	0.75	2.25	0.	1.00	4.75	0.
5	45R	0.	1.50	0.	2.75	0.	0.	1.00
6	248C	0.	0.	2.00	0.	0.	0.	0.
7	248M	0.	0.50	0.	0.	0.	0.	0.
8	248R	0.	0.	0.75	1.00	3.00	0.	0.
9	548C	0.	0.	0.	0.	0.	1.50	0.
11	548R	0.	0.	0.	0.	0.	0.	3.25
14	52M	0.	0.75	0.	0.	0.	0.	0.
16	68E	0.	0.75	0.50	0.	0.	0.	0.
18	68R	0.	0.50	0.	2.00	0.	0.	0.
50	97BI	0.	0.50	1.50	0.	0.	1.00	0.
52	97BP	0.	1.00	0.	0.50	4.00	0.	1.00
53	97BR	0.	0.	0.	0.	0.	0.	1.00
90	5532	0.	0.25	0.50	0.	0.	0.	0.
94	5536	0.	1.00	0.75	0.	0.	0.75	0.50
95	553A	0.	0.	0.	1.00	0.	0.	0.
99	TRVL	0.	2.00	1.75	2.75	1.50	1.50	1.25

1 OCT4100 FLORIDA

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3

		1010	1011	1012	1013	1014	1015	1016
4 3	22R	0.	0.	0.50	0.	0.	0.	0.
5 4	45M	0.	2.00	1.50	0.	0.	0.	0.
6 5	45R	2.75	0.	0.	0.	0.	0.	0.
7 7	248M	0.	0.	2.50	0.	0.	0.	0.
8 10	548M	0.	1.50	0.	0.	0.	0.	0.
9 11	548R	1.00	0.	0.	0.	0.	0.	0.
10 12	12M	0.	0.	0.	7.00	0.	0.	0.
11 50	97BI	0.	1.00	0.	0.	0.	0.	0.
12 52	97BP	0.75	0.	1.50	0.75	0.	0.	0.
13 90	5532	0.	2.00	0.	0.	0.	0.	0.
14 94	5536	0.50	0.50	0.	0.	0.	0.	0.
15 99	TRVL	3.00	1.00	2.50	2.25	0.	0.	0.

16

		1010	1011	1012	1013	1014	1015	1016
3	22R	0.	0.75	0.	1.00	0.75	0.	0.
4	45M	0.	0.	0.	1.50	0.25	0.	1.50
5	45R	0.	3.50	1.25	0.	0.	0.	0.
7	248M	0.	0.50	0.	0.	0.	0.	0.
8	248R	0.	1.75	0.	0.	0.	0.	0.
10	548M	0.	0.	0.	0.	0.	0.	2.00
12	12M	0.	0.	0.25	0.50	0.25	1.50	0.50
13	12R	0.	0.	0.	0.50	0.	1.00	0.
18	68R	0.	0.	0.	0.	1.75	1.50	0.
50	97BI	0.	0.75	0.	0.	2.25	0.75	0.
52	97BP	0.	0.	3.00	2.75	1.25	0.	0.
53	97BR	0.	0.	0.	0.	0.	0.	0.25
90	5532	0.	0.	0.	0.	0.	1.00	0.
94	5536	0.	0.	2.25	0.	0.25	0.75	1.25
95	553A	0.	0.	0.	0.75	0.	1.00	0.
99	TRVL	0.	0.75	1.25	1.00	1.25	1.00	2.50

OCT4100 FLORIDA

		1017	1018	1019	1020	1021	1022	1023
4	45M	0.	0.	0.25	0.	1.50	0.50	0.
5	45R	0.	0.	0.	0.	0.	0.	1.25
7	248M	0.	0.	1.25	0.	0.	0.	0.
8	248R	0.	0.	1.25	0.	0.	1.25	0.
9	548C	0.	0.	0.	0.	3.50	0.	0.
11	548R	0.	0.	0.	0.	0.	0.	2.50
12	12M	0.	0.	0.	0.	0.50	0.	0.
17	68M	0.	0.	0.50	0.	0.	0.25	0.
50	97BI	0.	0.75	0.	0.	0.	0.	0.
52	97BP	0.	3.00	0.50	0.	0.	3.75	1.25
90	5532	0.	0.	0.	0.	0.75	0.	0.
94	5536	0.	0.75	0.	0.	0.	0.	0.
95	553A	0.	0.75	1.00	0.	0.	0.	0.
99	TRVL	0.	2.75	3.25	0.	1.75	2.25	3.00

		1017	1018	1019	1020	1021	1022	1023
4	45M	0.	1.00	1.25	2.00	1.00	1.00	0.
5	45R	0.	0.	2.75	0.	0.	1.00	0.
8	248R	0.	4.50	0.	0.75	0.	0.	0.
9	548C	0.	0.75	2.50	0.	4.00	1.00	0.
10	548M	0.	0.75	0.	0.	0.	0.	0.
16	68E	0.	0.	0.	2.50	0.	0.	0.
18	68R	0.	0.	0.	0.50	2.00	0.	0.
39	F257C	0.	0.	0.	0.	0.50	0.75	0.
50	97BI	0.	0.	0.50	0.25	0.75	1.50	0.
52	97BP	0.	0.	0.	0.	0.	1.25	0.
95	553A	0.	0.50	0.	0.	0.	0.	0.
99	TRVL	0.	1.00	1.00	2.25	0.75	1.50	0.

1 OCT4100 FLORIDA

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3 1017 0000 0000 0000 0000 0000 0000

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		1017	1018	1019	1020	1021	1022	1023
4	45M	0.	0.50	0.	0.25	0.50	0.	0.
5	45R	0.	0.	2.25	0.	0.	0.75	0.
9	548C	0.	0.	0.	0.	0.	0.25	0.
10	548M	0.	0.	0.	0.25	0.	0.	0.
11	548R	0.	1.75	1.50	0.	0.	2.00	0.
16	68E	0.	1.00	0.	0.50	0.	0.	0.
34	F257M	0.	0.	0.	0.50	0.	0.	0.
50	97BI	0.	0.25	0.	0.75	0.	0.25	0.
51	97BW	0.	0.	1.25	0.	0.	0.	0.
52	97BP	0.	2.00	0.50	0.	3.25	2.50	0.
53	97BR	0.	0.	0.75	0.50	0.	0.	0.
90	5532	0.	0.	0.75	0.50	0.	0.	0.
94	5536	0.	0.50	0.	0.	0.50	0.	0.
95	553A	0.	0.	0.25	1.75	0.75	0.	0.
99	TRVL	0.	2.00	1.75	3.00	3.00	2.25	0.

OCT4100 FLORIDA

		1017	1018	1019	1020	1021	1022	1023
3	22R	0.	0.75	0.	0.	0.	0.	0.
4	45M	0.	0.50	1.50	0.	0.	1.75	0.50
5	45R	0.	0.75	0.50	1.75	2.50	0.50	0.75
8	248R	0.	0.	0.	0.	2.25	0.	0.
9	548C	0.	0.	1.00	1.00	0.	0.	0.
10	548M	0.	1.00	0.	0.	0.	0.	0.
11	548R	0.	0.	0.	1.00	1.50	0.	1.25
16	68E	0.	0.50	0.	0.	0.	2.25	0.
17	68M	0.	0.50	0.	0.	0.	0.	0.
18	68R	0.	0.	0.50	0.25	0.	0.	0.50
35	F257R	0.	0.	0.	0.	0.	0.	0.75
39	F257C	0.	0.25	0.	0.	0.	1.00	0.
50	97BI	0.	0.25	0.	0.75	0.	0.	0.25
52	97BP	0.	0.	2.25	1.00	0.50	1.00	1.75
53	97BR	0.	0.	0.25	0.	0.50	0.	0.
56	98ER	0.	0.75	0.	0.	0.	0.	0.
90	5532	0.	0.	0.	0.50	0.	0.	0.
94	5536	0.	0.	0.	0.	0.	0.	0.25
95	553A	0.	1.25	0.50	1.00	0.75	1.50	0.50
99	TRVL	0.	2.00	2.50	2.25	1.50	1.50	2.50

		1017	1018	1019	1020	1021	1022	1023
4	45M	0.	2.00	2.25	0.50	0.50	0.	0.
9	548C	0.	1.50	0.	0.	1.00	0.	0.
12	12M	0.	0.	0.	0.50	0.	0.	0.
18	68R	0.	0.	0.	2.00	0.	0.	0.
50	97BI	0.	2.00	2.00	1.50	1.50	0.	0.
52	97BP	0.	0.	0.	1.00	0.	0.	0.
53	97BR	0.	0.	0.	0.50	0.	0.	0.
95	553A	0.	1.50	1.00	0.	0.	0.	0.
99	TRVL	0.	2.00	2.75	2.00	1.00	0.	0.

/ OCT4100 FLORIDA

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		1017	1018	1019	1020	1021	1022	1023
3	22R	0.	1.25	0.	0.50	0.	0.	1.75
4	45M	0.	1.50	1.00	1.50	2.50	1.00	0.50
5	45R	0.	0.	0.50	0.	0.	0.50	0.75
9	548C	0.	1.50	3.00	0.	0.	0.50	0.
10	548M	0.	0.50	0.	0.	0.	0.	0.
11	548R	0.	0.	0.	1.00	3.00	1.50	0.
16	68E	0.	0.	0.50	0.50	0.25	0.	0.
17	68M	0.	0.	0.	1.00	0.	0.50	2.25
50	97BI	0.	0.	1.75	0.	1.25	0.50	1.25
52	97BP	0.	0.50	1.50	2.25	0.75	1.00	0.
53	97BR	0.	0.	0.	0.50	0.	0.	0.
90	5532	0.	2.25	0.	0.	0.	0.50	0.
94	5536	0.	0.	0.	0.	0.	1.00	0.
95	553A	0.	0.	0.	0.	0.	0.	0.50
99	TRVL	0.	1.50	0.75	1.75	1.25	2.00	1.50

1 =1024

2 OCT4100 FLORIDA

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4			1024	1025	1026	1027	1028	1029	1030
5	3	22R	0.	1.75	1.75	0.	0.	1.25	0.
6	4	45M	0.	0.75	0.50	0.	0.50	0.	0.
7	5	45R	0.	1.75	0.	0.	1.00	0.	0.
8	6	248C	0.	0.	0.	0.	1.00	0.	0.
9	7	248M	0.	0.25	0.75	1.25	2.50	0.	0.
10	8	248R	0.	0.	0.	0.	1.00	1.00	0.
11	9	548C	0.	1.00	1.50	1.00	0.	0.	0.
12	11	548R	0.	0.	0.	0.	0.	2.50	0.
13	17	68M	0.	0.	1.75	0.	0.	0.	0.
14	18	68R	0.	0.	0.50	0.	0.	0.	0.
15	30	257M	0.	0.	0.	1.00	0.	0.	0.
16	50	97BI	0.	1.00	1.25	0.	0.50	0.	0.
17	52	97BP	0.	1.00	0.50	3.00	0.50	1.25	0.
18	53	97BR	1.50	0.	0.	0.	0.	0.75	0.
19	90	5532	0.	0.	0.	0.	0.50	0.	0.
20	94	5536	0.	0.	0.	0.	0.	0.25	0.
21	99	TRVL	0.	0.50	0.50	1.75	1.50	1.00	0.

22

	1024	0000	0000	0000	0000	0000	0000

15

OCT4100 FLORIDA

		1024	1025	1026	1027	1028	1029	1030
2	22M	0.	2.25	0.	0.	0.	0.	0.
3	22R	0.	1.25	0.	1.25	0.	2.00	0.25
5	45R	0.	0.	0.50	0.	0.	0.	0.50
8	248R	0.	1.25	0.	0.	2.75	1.75	2.25
9	548C	0.	0.	0.	2.00	0.	0.	0.
16	68E	0.	0.50	0.	0.	0.	0.	0.
17	68M	0.	0.	0.75	0.	0.	1.25	0.
18	68R	0.	0.	0.	0.	0.75	0.	0.
50	97BI	0.	2.75	1.50	1.50	0.75	3.00	0.
52	97BP	0.	0.	1.25	2.75	1.00	0.	1.00
53	97BR	0.	0.	1.00	0.	0.	0.	0.
90	5532	0.	0.	0.50	1.00	0.	0.	0.
94	5536	0.	0.	0.	0.	0.	0.	2.25
95	553A	0.	0.	1.25	0.	0.75	0.	0.
99	TRVL	0.	1.00	2.25	1.75	3.00	1.00	1.75

		1024	1025	1026	1027	1028	1029	1030
3	22R	0.	0.	1.50	4.50	0.	0.	0.
5	45R	0.	5.50	5.00	2.50	6.50	7.00	0.
90	5532	0.	1.50	0.	0.	0.	0.	0.
99	TRVL	0.	1.00	1.50	1.00	1.50	1.00	0.

OCT4100 FLORIDA

48-3

		1024	1025	1026	1027	1028	1029	1030
4	45M	0.	0.75	0.	0.	0.	0.	0.
5	45R	0.	3.50	1.50	1.00	0.	0.	0.
6	248C	0.	0.	0.	2.00	0.	0.	0.
7	248M	0.	0.	0.25	0.	0.	0.	0.
8	248R	0.	0.75	1.50	0.	0.50	0.	0.
10	548M	0.	0.	0.25	0.25	0.	0.	0.
11	548R	0.	0.	0.	2.75	6.25	0.	0.
16	68E	0.	0.50	0.	0.75	0.	0.	0.
17	68M	0.	0.50	0.	0.	0.	0.	0.
18	68R	0.	0.	0.75	0.	0.	0.	0.
31	257R	0.	0.	1.00	0.	0.	0.	0.
50	97BI	0.	2.25	0.75	0.	0.	0.	0.
52	97BP	0.	0.25	0.75	0.75	2.00	0.	0.
53	97BR	0.	0.	0.	0.50	0.	0.	0.
56	98ER	0.	0.	1.50	0.	0.	0.	0.
90	5532	0.	0.	0.	0.50	0.	0.	0.
99	TRVL	0.	1.50	1.75	1.50	1.00	0.	0.

		1024	1025	1026	1027	1028	1029	1030
3	22R	1.75	2.25	1.25	4.00	2.25	1.25	0.
4	45M	0.	1.50	0.	0.	0.	0.	1.00
5	45R	0.	0.	0.75	0.	2.50	1.50	1.75

17
HR 308

6	248C	0.	0.	0.	0.	0.	0.	1.00
7	248M	0.75	0.25	0.25	0.75	0.75	0.	0.
8	248R	0.	0.	0.75	0.	0.	0.	0.
10	548M	0.50	0.25	1.00	0.	0.50	1.50	0.
11	548R	1.00	0.	0.	0.	0.	0.	0.
12	12M	0.	0.75	0.	0.	0.	0.	0.
13	12R	0.	0.75	0.	0.	0.	0.	0.
16	68E	0.	0.	0.	0.	0.	0.	0.75
17	68M	0.	0.75	0.	0.	0.	0.	0.
18	68R	0.75	0.	0.	0.	0.	1.00	0.
50	97BI	0.	0.	0.	0.	0.	0.	1.25
52	97BP	0.50	1.25	0.	1.50	0.75	1.75	0.
56	98ER	0.	0.	1.75	0.	0.	0.	0.
90	5532	0.	0.	0.	0.	0.75	0.	0.
94	5536	0.75	0.	0.50	0.50	0.	0.50	0.50
95	553A	0.	0.	1.50	1.00	0.	0.	0.
99	TRVL	2.00	2.25	2.25	2.25	2.50	2.50	1.75

OCT4100 FLORIDA

```
1 =1
2
3
4
5
6

  ENTER SSN
  ENTER -1 TO DO ALL SSN'S IN THIS FILE
  ENTER 1 TO LIST SSN'S IN THIS FILE
  ENTER 0 (OR 'ENTER') TO TERMINATE PROGRAM RUN
```

BSR
One month Profile

R 12/9/93
KW 12/14/93

48-3
6

311