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REAL ESTATE MODEL OF ACTIVITY PERFORMANCE (REMAP) USER'S MANUAL--ETC(U)
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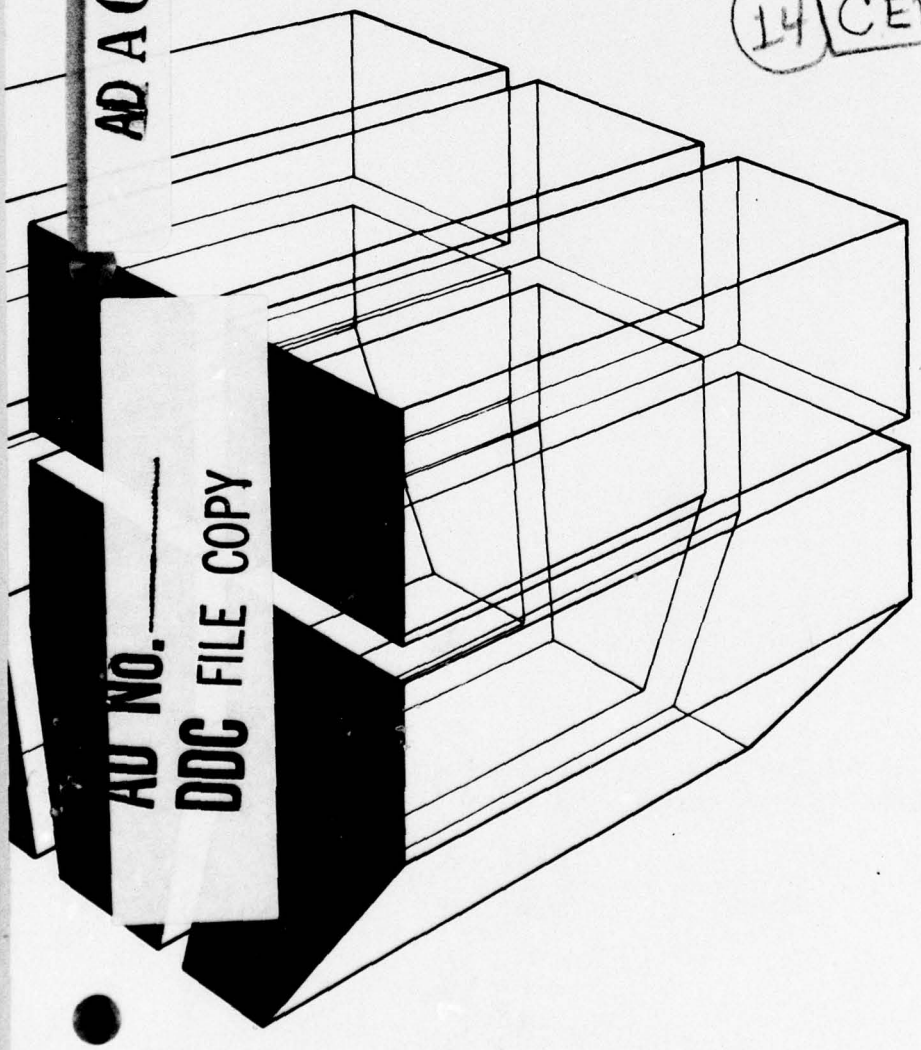

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The U.S. Army Construction Engineering Research Laboratory has developed a management model for analyzing alternative organizational locations of performance centers as Division, District, Field, or Project Offices for the Office of the Chief of Engineers, Directorate of Real Estate. This report describes the evaluation procedures and provides instructions for using the computer programs and performing the manual calculations required in the model, called the Real Estate Model of Activity Performance (REMAP).

Block 20 continued.

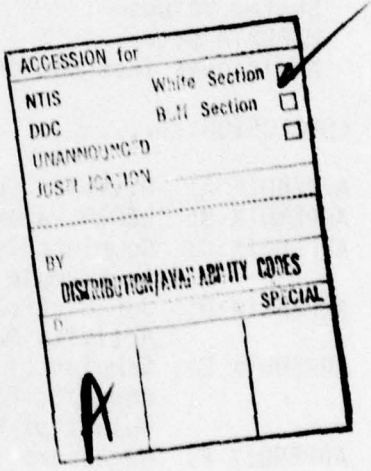
The procedures involve computer and manual techniques for conducting comparative analyses of real estate activity assignments which are dependent on the locations--actual or proposed--of real estate activities and offices throughout CONUS. The analyses compare relative differences in dollar and manpower requirements for the performance and administration of real estate activities by various performance centers. REMAP uses computer-aided techniques to generate the annual workload of each performance center based on a selective assignment of activity locations to that center and to create visual displays of those assignments in the form of maps.

FOREWORD

This study was performed for the Office of the Chief of Engineers (OCE), Directorate of Real Estate, under the O&MA Program, Work Unit Title, "Real Estate Organization Study." The OCE Technical Monitor was Mr. E. W. Merli, (DAEN-REP). Additional guidance was provided by Mr. L. L. Pitchford, Jr., Chief, DAEN-REP.

The work was performed by the Facility Systems Division (FS), U.S. Army Construction Engineering Research Laboratory (CERL). The research was conducted under the supervision of Mr. C. P. Altheide, Principal Investigator. Mr. E. A. Lotz is Chief of FS.

COL J. E. Hays is Commander and Director of CERL, and Dr. L. R. Shaffer is Technical Director.



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1 INTRODUCTION

Background

In August 1973, the Deputy Chief of Engineers directed that a study be made to identify and evaluate field organizational alternatives for the period from 1975 to 1980. The study was to select field organization options which would provide solutions to problems associated with workload imbalances, user relationships, geographical distribution of work, funding and manpower implications, relationships between Federal regional centers and state and local interests, and time and distance factors as they affect management.

In February 1975, the Corps' Directorate of Real Estate (DAEN-RE) requested that an in-house study be made of the geographical boundaries of Corps field offices having real estate responsibilities. The study was to determine the best and most efficient way in which to handle the DAEN-RE mission for the Corps. The problem, as stated, is that overlapping geographical areas of responsibility, workload imbalances, inconsistent manpower utilization, and excessive travel time and expense are detrimentally affecting the overall performance of the DAEN-RE mission. The guidelines for the study indicated that primary concern should be for the efficiency and economy of the DAEN-RE mission, and that real estate service to the Air Force and to the Civil Works and Military Construction Directorates would benefit if this primary objective were attained.

In the spring of 1975, the U.S. Army Construction Engineering Research Laboratory (CERL) proposed that the revised real estate boundaries for the field offices be analyzed using computer techniques.

Purpose

The purpose of this study was to develop a model of CONUS real estate activities to provide DAEN-RE with a management tool for evaluating various organizational alternatives. Procedures were to permit evaluation of specific "what-if" situations on a special case basis and to evaluate alternative assignments of real estate activities on an overall basis. The Real Estate Model of Activity Performance (REMAP) was developed in response to these objectives, and specific applications are described in the CERL Technical Report, *Real Estate*

Organization Analysis Using the Real Estate Model of Activity Performance (REMAP) Evaluation Procedures.[1]

The purpose of this report is to describe the (REMAP) evaluation procedures and provide the user with instructions for operating the computer programs and performing the manual calculations required in REMAP.

General Introduction to REMAP

REMAP analyzes alternative organizational locations of performance centers such as Division, District, field, or project offices. The procedures involve computer and manual techniques for conducting comparative analyses of real estate activity assignments which are dependent on the locations--actual or proposed--of real estate activities and offices throughout CONUS. The analyses compare relative differences in dollar and manpower requirements for the performance of real estate activities by various performance centers. REMAP uses computer-aided techniques to generate the annual workload of each performance center based on a selective assignment of activity locations to that center and to create visual displays of those assignments in the form of maps.

The computer programs in REMAP are written in FORTRAN extended for CDC 6000 series computers and are currently installed on a CDC 6700 computer at the Naval Ship Research and Development Center (NSRDC) in Bethesda, MD. Programs may be accessed in either interactive or batch mode. The job control language is SCOPE 3.4.2; source code is available on computer cards or magnetic tape. Inquiries about the availability of the program listings, source code, and system documentation should be addressed to U.S. Army, Office of the Chief of Engineers, Directorate of Real Estate (DAEN-RE), Washington, DC 20314.

Organization of Report

Chapter 2 describes the REMAP methodology. Chapter 3 describes the operating procedures which the user must follow in applying the model. Chapter 4 explains the input data for the nine real estate activities which can be analyzed using REMAP.

---

[1] C. P. Altheide, *Real Estate Organization Analysis Using the Real Estate Model of Activity Performance (REMAP) Evaluation Procedures,* Technical Report P-90 (U.S. Army Construction Engineering Research Laboratory, 1978).

Mode of Technology Transfer

The REMAP evaluation procedures were developed for use by DAEN-RE as an in-house management tool. The computer program listings, source codes, and system documentation have been turned over to DAEN-RE along with this user's manual. Input data for the computer programs must be extracted from the Real Estate Master files maintained by the Engineer Data Processing Center (EDPC) and from quarterly reports submitted on ENG Forms 4564 and 1685. Division- and District-level evaluations of activity performance using the REMAP evaluation procedures requires access to these input data; i.e., to appropriate subsets of the data resident on the Real Estate Master Files. Requests for evaluations of alternative organizational locations of performance centers should be made through DAEN-REP. The *REMAP Evaluation Procedures* report is also available through DAEN-REP upon request. The REMAP evaluation procedures do not impact current Army or Engineer regulations.

2 REMAP METHODOLOGY

The REMAP evaluation procedures involve computerized and manual techniques. The basic steps in the procedure involve accessing an automated data processing (ADP) data base for a real estate activity, retrieving workloads and places of activity performance for a given time frame from this data base, and identifying the latitude and longitude of each CONUS real estate activity and of each actual and/or potential office location. Based on the user's criteria, activity locations are assigned to selected office locations. The expected costs and manpower required for that office to perform the activity workload at the assigned locations are then calculated using the computerized routines in REMAP. Performance dollars and manpower for a given assignment are compared with the existing assignment to ascertain potential performance savings. In addition, if the number of office locations is changed, total requirements for administrative dollars and manpower will also change. Administrative differences are manually calculated by the user, based on the choice of office locations. Adding the performance savings and administrative savings, if any, gives the total activity savings for the given assignment. Distinct real estate activities must be analyzed individually for each assignment. Activity savings, however, can be added to give total savings on a Corps-wide basis. The total savings of alternate assignments may then be compared.

The DAEN-RE activities which can be analyzed are Project Planning, Acquisition (Pre- and Post-Condemnation), Inleasing, Outgranting, Disposals, Utilization and Compliance Inspections, and Relocation Assistance. Activities can be reassigned to actual or proposed performance centers in a number of ways; by reassigning all activities to the closest existing real estate performance center; by reassigning all activities to the closest performance center in a new list of centers (i.e., cities have been removed from and/or added to the list of existing offices); and by reassigning all activities at one or more performance centers to the closest remaining offices, with these other offices also maintaining their existing workloads. Partial reassignments of selected activities (e.g., all the activities performed by one organizational element) can also be analyzed with respect to each of the above assignments.

Techniques for retrieving the appropriate data for each activity are discussed in Chapter 4. Basically, the DAEN-RE activity master files at EDPC must be accessed and the data for the desired fiscal year extracted. A data file of latitudes and longitudes for those activity locations represented in the master file must be created and merged with the newly created subset of the master file. A computer program, MAPDATA, performs this merger, generates a list of unmatched activity locations, conveniently sorts the file, and then stores the coded names of the three offices (from a user-defined list) closest to the activity location and the respective distances. The user must

identify the latitude and longitude of the unmatched activity locations, update this information to the file, and rerun MAPDATA. Storage of the three closest offices allows subsequent analyses involving the deletion of some cities from the original list to be performed without rerunning MAPDATA.

A second computer program, MAP, uses the output of MAPDATA to calculate and print workload totals for each city in the list of selected performance centers. The original list consists of those cities with existing DAEN-RE District offices. Division totals for groups of cities are also calculated based on the user's coding system for such groups. A visual aid in the form of a map of the activity locations is displayed to permit determination of regions in CONUS where the activity level is high. Figure 1 illustrates a map of the Inleasing activity for FY75. Each character printed represents a location in CONUS where at least one lease was acquired or renewed in FY75. The alphabetic character is the FY75 code for the DAEN-RE Division office which had jurisdiction over the negotiation of that lease. The codes are included in Appendix A. Figure 2 illustrates a map of these same Inleasing activity locations reassigned to the closest DAEN-RE District office. Again the code for the corresponding Division office is printed.

The computerized procedures in REMAP have been simplified for easy interactive usage. After the data files are created, the user need only choose variations in parameters to perform an activity analysis. An interactive program called PROFILE has been developed to provide this simplicity. From the interactive COMMAND mode, the user attaches PROFILE and selects parameters which represent the desired activity to be analyzed, the type of assignment considered, the fiscal year of data, and some YES/NO responses to various alternatives, such as whether or not to rerun MAPDATA, print the entire output directly, keep the existing list of cities, or create a new list. The user also must name the files which are created while PROFILE is operating. When PROFILE has completed its execution, the desired maps and totals of expected costs and manpower requirements are either printed directly, partially retrieved, or batched to a different printer at the discretion of the user. The user then repeats this process to analyze an alternative assignment for the same activity or the same assignment for a different real estate activity. Chapter 3 presents examples.

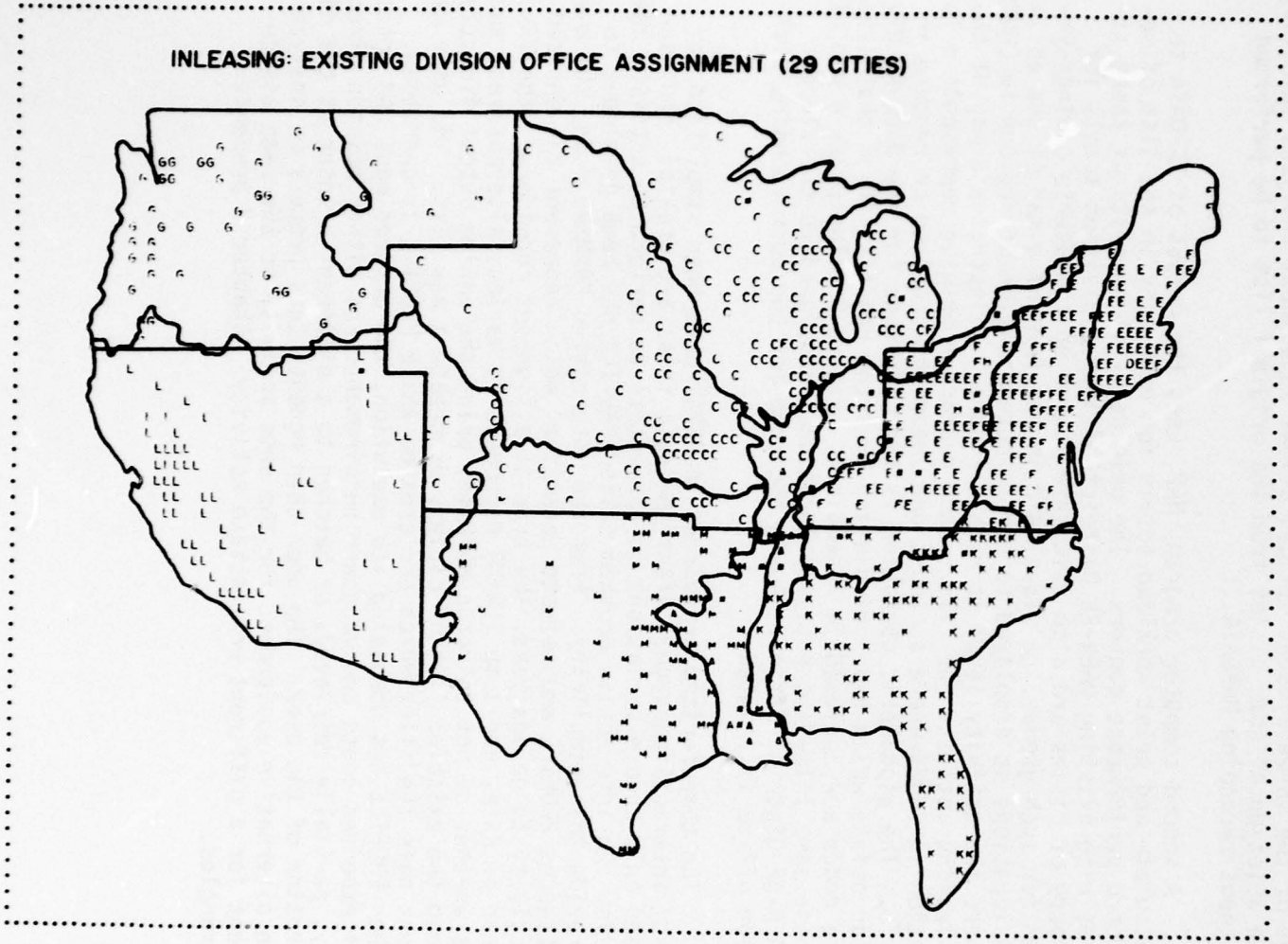


Figure 1. Map of Inleasing activity locations in FY75.

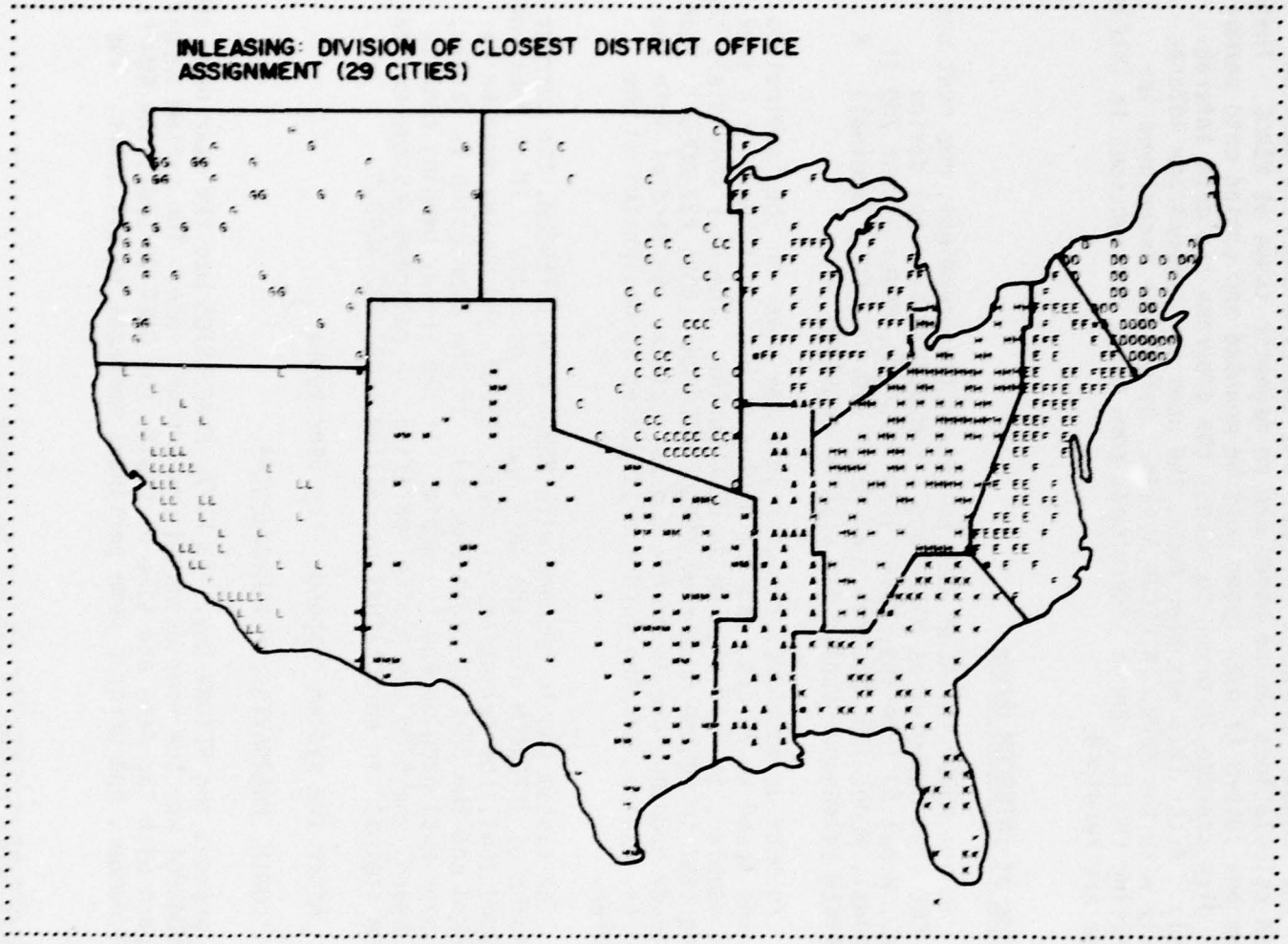


Figure 2. Map of FY75 Inleasing activity locations reassigned to the closest DAEN-RE performance center.

3 OPERATING PROCEDURES

The computer programs in REMAP and the FY75 and FY76 data on which calculations can be based are on magnetic tapes at NSRDC. These tapes and future FY data types must be mounted and copied onto permanent disk storage in order to access the programs and data interactively. After this has been done, the user may communicate interactively with the NSRDC INTERCOM System. Before the techniques for operating PROFILE can be understood, some basic instructions in INTERCOM usage are required.

Basics of INTERCOM Usage

To use NSRDC INTERCOM with an interactive terminal, one must use the CDC 6700 computer at NSRDC and a compatible terminal device (e.g., Model 33 Teletype, Model 1030 Teleterm, Model Silent 700 TI Terminal, Model 1280 Memorex, and Model 710 CDC [CRT] Terminal). A separate telephone coupler may also be required.

To hook up to NSRDC, the user sets the power on the terminal to ON, the speed to 30 cps, and the duplex to HALF. If there is a separate coupler, it must also be in HALF duplex. The user then dials the commercial telephone number of NSRDC INTERCOM, (202) 227-3000.* When a steady beeping tone is heard, the user places the handset into the coupler, making sure the cord end is placed as designated on the coupler.

The system should respond with NSRDC 6700 INTERCOM, the current revision of INTERCOM plus the date and time of entry. If it does not respond thus, the selections of power, speed, and duplex must be rechecked and the ON-LINE light checked. If the connection is faulty, the user must hang up and try again. If the steady beeping tone is not heard, the 6700 may not be operating. A recorded message on "machine status" can be obtained by calling (202) 227-3043.*

After the system responds, the user types

LOGIN, PUAJDAVIDS,** 1189043801**

and presses the RETURN key. In FY77, PUAJDAVIDS was the user name and 1189043801 was the user password and account code. The system should respond with the date and time of LOGIN, the USER-ID code, the EQUIP/PORT number, and perhaps some pertinent messages to all users. The

*This phone number is subject to change.
**LOGIN procedures, codes, and phone numbers are subject to change. The user name, password, and account codes are created by NSRDC upon the establishment of an account.

system will be in the COMMAND mode and will indicate its readiness to accept commands via the remote terminal by displaying

COMMAND-

The user may then proceed to send commands to the system. Each time a desired command is typed, the RETURN key (or SEND key) must be pressed to send that command to the system. Throughout this report, pushing the RETURN key will be designated by -R-.

To exit from interactive usage, the user must be in the COMMAND mode and should send the command

LOGOUT -R-

The user should not hang up the phone until the system has responded with the time of logout and an estimated cost of usage.

The teletype terminals have special symbols and keyboard function keys. These are the RETURN, BREAK, CONTROL, and ESCAPE keys, which are described below.

1. RETURN Key (-R-). The RETURN key signals the end of a command or a line of input. If the teletypewriter line has a maximum of 72 characters, a full INTERCOM line of 80 characters can be input by depressing the line feed key and continuing the data on another teletypewriter line. When complete, the line can be transmitted by pressing the RETURN key.

2. BREAK Key. The BREAK key is used to recover from a temporary disconnection in the line. When a communication is disconnected, the BREAK light comes on. Pressing the BREAK key turns off the light. If the light remains off, the connection has been reestablished and normal operation can be resumed. If not, the user has been disconnected and must LOGIN again. If the time delay is long, local files may be lost. Permanent files would be retained, however.

3. CONTROL plus H Keys. Simultaneous pressing of the CONTROL and H keys physically backspaces the pointer and deletes the last character position from memory. The printed character is not physically erased but will not be transmitted. A new character can be typed in its place. CONTROL plus H can be repeated consecutively by holding down the CONTROL key and repeatedly pressing the H key.

4. CONTROL plus X Keys. Simultaneous pressing of the CONTROL and X keys terminates a line and prevents transmission of that line to INTERCOM. This keyboard function essentially deletes an entire line from memory. For convenience in visualizing the new line of printing, the RETURN or line feed key can be pressed.

5. ESCAPE Key. The ESCAPE key is pressed whenever the user wants to stop INTERCOM from communicating--for example, when a new roll of thermal paper must be installed during output transmission. Pressing the ESCAPE key interrupts the printing and puts INTERCOM in a holding position. Pressing the RETURN key allows printing to resume.

6. ESCAPE, %A. After pressing the ESCAPE key, typing %A and then -R- will abort the existing INTERCOM situation and return the user to the COMMAND mode.

Commands

The user will send several commands to INTERCOM. The first and most important is the ATTACH command. It is used to attach permanent files to INTERCOM, and may be typed as follows:

```
COMMAND- ATTACH,F,PROFILE,ID=PUAJ   -R-
```

In essence, this command states that the permanent file named PROFILE, cataloged under user identification PUAJ, should be attached to INTERCOM and be given the local file name F.

The second command, called the BEGIN command, tells INTERCOM to begin the execution of the PROFILE program. It is written as follows:

```
COMMAND- BEGIN(EX,F,----------)   -R-
```

Since the local file name of PROFILE is F, this simply instructs INTERCOM to BEGIN EXecution of F. The information to follow F inside the parentheses is a list of user-selected parameters which are explained in the next section.

The next command is the BATCH command statement. If the user has chosen not to print the entire output of PROFILE on the local terminal, the BATCH command is required to print the output elsewhere. The user should send the following statement to INTERCOM:

```
COMMAND- BATCH,OUTPUT,PRINT,__,NAME   -R-
```

This statement tells INTERCOM to batch the local file called OUTPUT to print at another terminal coded by __ and name the output with a four-character code, so that the user may identify it later. The two-digit code to BATCH print at CERL is YX; to BATCH print at EDPC the code is __. The user can create a list of codes for possible BATCH printing locations. To BATCH print to the user's remote output terminal the code is the User ID ØU, which was given to the user by INTERCOM after LOGIN.

To partially retrieve the output, the PAGE command should be used. The statement

COMMAND- PAGE,OUTPUT -R-

will allow the user to retrieve certain parts of the output file. After the user sends the PAGE command, the system responds with READY.. and waits for the user to respond. If the user sends a +, INTERCOM will print the first 10 lines in the file. If the user types a number, say 123, then the 10 lines starting with the 123rd line are printed. Lines may also be retrieved by means of a character string between slashes. If a 72-character terminal is being used but the file being paged is longer, including a tab set will shift the printout over a designated number of columns. For example,

COMMAND- PAGE,OUTPUT -R-

READY..+=/COMPLETE TOTAL/,TAB=50 -R-

will retrieve the first line with "Complete Total" in it and print that line plus nine more, starting in column 50.

This example statement will be the usual partial retrieval statement for viewing the total expected costs and manpower requirements for one activity assignment.

A complete library of search statements for the PAGE command can be obtained, if desired, by sending

READY..A -R- but generally other search statements would not

be used.

To abort PAGE, an "E" for END is sent.

Two additional commands may be sent by the user. The command statement

COMMAND- FILES -R-

will display the names of all the local and remote output files, if any. The statement

COMMAND- ETL,500 -R-

will Extend the Time Limit for the execution of PROFILE. An extension may be necessary when analyzing the Inleasing, Outgranting, Disposals, Compliance, and Utilization activities if the data files are extremely large. If the built-in time limit is exceeded in PROFILE, the program will abort, inform the user TIME LIMIT EXCEEDED, and return the user to the COMMAND mode. The user should then send an ETL command and repeat the BEGIN statement.

BEGIN Parameters

As indicated on page 16, the BEGIN command requires a sequence of parameters following F, the local file name of PROFILE. The full command is as follows:

BEGIN (EX,F,A=_,T=_,YR=_,L=_,OC=_,NC=_,R=_,NF=_,DN=_,W=_)

The parameter A represents the Activity to be analyzed. An alpha-character code must be inserted after the equals sign. One of the following activity codes must be entered.

A --- Acquisition (Pre-Condemnation)
B --- Acquisition (Post-Condemnation)
C --- Compliance Inspection
D --- Disposal
I --- Inleasing
O --- Outgranting
P --- Project Planning
R --- Relocation Assistance
U --- Utilization Inspection

For example, A=D would request analysis of the Disposal activity.

The parameter T represents the Type of assignment selected. One of the following must be entered.

T=1, which generates maps and totals for both the existing assignments and closest assignments of the activity locations to a user-defined list of cities.

T=2, which generates a map and the totals for a partial reassignment of selected cities' activities to the closest of other cities on a given list, with those other cities also maintaining their existing workloads. This type can be used to evaluate the transfer of workload from one or more performance centers to a specific city, just by selecting the given list of cities, so that the desired city is also the closest city.

T=3, which generates a map and the totals for an assignment of activity workloads to a given list of cities based on state boundaries.

YR represents the fiscal year of data being analyzed. The last digit of the year is required. YR=5 and YR=6 are currently the only possible choices, since only FY75 and FY76 data are available.

L, OC, and NC are parameters which specify Lists of cities with which the user will work. OC stands for Old list of Cities, NC for

New list of Cities. The old list of cities currently consists of the existing Division and District office locations. The name of the permanent file is EXDDF. Permanent file names are limited to 30 alphanumeric characters, with the first one being alphabetic. EXDDF is a default file name for OC and will not be changed unless the user selects a different permanent file name. Since analyzing any reassignment requires comparison of distances with the existing situation, the old cities list will remain EXDDF until DAEN-RE changes its current organizational structure. Figure 3 is a copy of the EXDDF permanent file.

There are three choices for L, which is used to specify the status of NC:

L=C, which means that the user wants to Create a list of cities to which activities will be assigned. A unique permanent file name must be selected by NC.

L=N, which means that the user already has a list of cities to which activities will be assigned and that list will Not be changed. This list will already have a permanent file name to be used for NC.

L=AD, which means that the user wants to ADd to the previously created list of cities. Again, a permanent file name will already be available to use for NC.

The parameter L has the default value of N. Thus, the user does not have to specify L in the BEGIN statement if L is equal to N. NC has a default value of EXDD2, which is a duplicate copy of EXDDF. If NC is the same as OC, then it need not be specified. If the user changes the list of cities (L≠N), then NC must be different from OC and hence must be specified.

R is a Yes or No parameter which indicates whether the user desires to Run the MAPDATA program within PROFILE. It is related to the NF parameter, which represents the Name of the permanent File created by MAPDATA, the program which merges the latitude/longitude file with the activity file to create an input file for the MAP program. This input file needs a unique permanent file name. Whenever MAPDATA is run, NF must be given that permanent file name. If MAPDATA is not to be run, there is already an existing permanent file name which must then be assigned to NF. MAPDATA will usually be run the first time an activity is analyzed, but rerun only if the list of new cities is dramatically changed. Consequently, R has a default value of N. NOTE: MAPDATA must be run (R=Y), whenever L≠N.

An additional permanent file of Division and District Names is generated by MAPDATA and must be identified by the user. DN is the parameter which represents this file name. It must be uniquely

```
A0          3221 9053 LMVD
A1          35 8 90 3 MEMPHIS
A2          2958 90 4 NEW ORLEANS
A3          3837 9012 ST. LOUIS
A4          3221 9053 VICKSBURG
C0          4117 96 1 MRD
C1          39 6 9435 KANSAS CITY
C2          4117 96 1 OMAHA
D0          4223 7114 NED
D1          4223 7114 BOSTON
E0          4043 74 0 NAD
E1          3917 7637 BALTIMORE
E3          4043 74 0 NEW YORK
E4          3651 7617 NORFOLK
E5          3957 7510 PHILADELPHIA
F0          4153 8738 NCD
F2          4153 8738 CHICAGO
G0          453212237 NPD
G2          453212237 PORTLAND
G3          473612220 SEATTLE
G4          46 411820 WALLA WALLA
H0          39 6 8431 ORD
H1          3825 8227 HUNTINGTON
H2          3815 8546 LOUISVILLE
H3          3610 8647 NASHVILLE
H4          4026 80 1 PITTSBURGH
K0          3345 8423 SAD
K3          3020 8139 JACKSONVILLE
K5          3041 88 3 MOBILE
K6          32 5 81 6 SAVANNAH
L0          374712225 SPD
L1          34 411815 LOS ANGELES
L2          383512129 SACRAMENTO
M0          3247 9649 SWD
M1          35 510639 ALBUQUERQUE
M2          3245 9718 FT. WORTH
M3          2918 9448 GALVESTON
M4          3445 9217 LITTLE ROCK
M5          3610 9555 TULSA
```

Figure 3. EXDDF permanent file.

specified whenever MAPDATA is run (R=Y). DN is associated with NF, since they are created under similar conditions. It would be convenient for the user to choose a name which shows this association. For example, if R=Y and NF=XYZ, DN could be XYZDN.

The final BEGIN parameter is W. It is a Yes or No parameter signifying whether the user wants the entire output of PROFILE Written directly on the interactive terminal (W=Y) or the user intends to partially retrieve and/or batch print the output elsewhere (W=N). The default value of this parameter is N, since it is anticipated that outputs will usually be printed elsewhere while subsequent analyses are being generated on the interactive terminal.

Those parameters in the BEGIN statement which have default values do not have to be specified if the user accepts the default value; that is, to state BEGIN (EX, F, --------, L=N, --------) is redundant, since the default value of L is N.

Appendix B contains a table of the BEGIN parameters' definitions, their acceptable values, and default values for quick reference.

The following examples of BEGIN statements should assist the user in establishing appropriate parameter values.

Example 1: The user wants to analyze the Inleasing activity by comparing the existing office assignment versus assignment to the closest existing offices using FY76 data. The user desires to retrieve the complete totals for each assignment and then have the maps and totals printed elsewhere. The BEGIN statement should be

BEGIN (EX,F,A=I,T=1,YR=6,R=Y,NF=INLEX,DN=INLEXDN) -R-

Explanation: For the Inleasing activity, A=1. To compare an existing situation versus assignment to the closest existing offices is a type-1 assignment, so T=1. FY76 data implies YR=6. Since the list of cities is the existing Division and District office locations, OC=EXDDF by default. The cities to which workloads will be assigned are the same, so the user accepts NC=EXDD2 and L=N by default. This is the first analysis of the Inleasing activity and MAPDATA must be run. Hence, R=Y, and the names of NF and DN are specified as INLEX (INLeasing EXisting situation) and INLEXDN. Note that the value of W is N (the default value) and was not specified.

Example 2: The user wants to analyze the Inleasing activity based on reassignment of the Inleasing workloads of three specific offices to their next closest office. All other offices would also maintain their existing workload. Output is to be partially retrieved interactively. The BEGIN statement should be

BEGIN (EX,F,A=I,T=2,YR=6,NF=INLEX,DN=INLEXDN) -R-

Explanation: This is a type-2 assignment (T=2) for the Inleasing activity (A=I). Again FY76 implies YR=6. As in Example 1, OC=EXDDF and NC-EXDD2 so OC and NC need not be specified. Since MAPDATA need not be run, the default value of R is accepted (R=N), and the output (INLEX) of the previously run MAPDATA must be used for NF. DN is unchanged. W=N by default. The three offices would be specified after the PROFILE program inquires about such.

Example 3: The user wants to analyze the Inleasing activity by comparing a reassignment of the Inleasing workloads to the closest of the 10 existing Division offices with a reassignment to a list having two additional cities (or 12 office locations). Output is to be partially retrieved and then batch-printed elsewhere. There are two assignments to consider--one with 10 cities, and one with 12. The BEGIN statements are

BEGIN (EX,F,A=I,T=1,YR=6,L=C,NC=DIV12,R=Y,NF=INL12,DN=INL12DN) -R-

and

BEGIN (EX,F,A=I,T=1,YR=6,NC=DIV12,NF=INL12,DN=INL12DN) -R-

Explanation: The choices of A, T, and YR should be clear. In the first case the user needs to create (within PROFILE) a list of the 12 cities; hence, L=C, and the name DIV12 is given to NC. OC is still EXDDF. MAPDATA will have to be run so that Inleasing activity locations can be assigned to the three closest cities in this list of 12 offices. New names must be given to NF and DN. In the second case the user may delete the two extra cities in the list of 12 within the PROFILE program to analyze the closest assignment to the 10 Division offices. It is therefore not necessary to change NC (L=N by default) nor to run MAPDATA again (R=N by default). NF and DN are still INL12 and INL12DN. Deletion of cities from the NC list is explained in the next section.

The user could have analyzed these two assignments in reverse order. However, NC would then have been a list of 10 cities (created within PROFILE) instead of 12. The first BEGIN statement would have been the same except for code names for NC, NF, and DN--perhaps DIV10, INL10, and INL10DN--but the second BEGIN statement would need L=AD in order to add the two additional cities. This would necessitate running MAPDATA a second time, resulting in higher computer charges.

PROFILE

As mentioned in Chapter 2, PROFILE is an interactive program developed to simplify the computerized procedures in REMAP. Attaching the PROFILE program and sending a BEGIN statement with appropriate parameters is all that is required to begin execution of PROFILE.

Based on certain values of the L parameter, PROFILE asks the user a question and gives specific directions for the user's response.

When L is not its default value of N, the user wants either to create a new list of cities to which activity workloads will be assigned or to add locations to a previously created list of city locations. This list will be, or has been, named by the parameter NC, depending on whether L=C or L=AD. In the first case, PROFILE requests a permanent file to be named by NC; in the second case, PROFILE attaches the existing NC. In either case, the system will respond with the question:

```
DO YOU WANT TO CREATE THE OFFICE LIST OR JUST ADD SOME TO THE
OLD ONE?

TYPE C FOR CREATE:  TYPE A FOR ADD:
```

If L=C, then the user must type "C" again. The system will respond:

```
PLEASE ENTER EACH SET OF INFORMATION IN ONE LINE IN THE
FOLLOWING FORMAT

XY     ADAMLDDLM LOCATION

START FROM 1ST COLUMN, TYPE
X:DIV SYMBOL;USE ANY ALPHABETIC CHARACTER FROM A TO N EXCEPT
I OR J;Y:DISTRICT NO.;ANY NUMBER FROM Ø-9,Ø MUST BE USED FOR
DIVISION OFFICE;
...DO NOT CREATE A DISTRICT CODE UNLESS A DIVISION CODE IS
ALSO CREATED OR ALREADY EXISTS...
THEN 4 BLANKS,AND
AD: 2 DIGITS FOR DEGREE OF LATITUDE;
AM: 2 DIGITS FOR MINUTE OF LATITUDE;
LDD:3 DIGITS FOR DEGREE OF LONGITUDE;
LM: 2 DIGITS FOR MINUTE OF LONGITUDE;
TYPE 1 BLANK, AND THEN
LOCATION:1Ø CHARACTERS FOR BRIEF NAME OF LOCATION
```

FOR EXAMPLE:

```
AØ     4ØØ7 8815 CERL
A1     4ØØ7 8815 CHAMPAIGN
BØ     379Ø 77ØØ OCE
B1     379Ø 77ØØ WASH D.C.

...FOR ANY DUPLICATE XY IN THE LIST, ONLY THE FIRST OCCURRENCE
WILL BE RECOGNIZED, OTHER(S) WILL BE IGNORED.  AFTER ENTERING
ALL DATA, PLEASE TYPE ++ IN THE FIRST TWO COLUMNS ON THE NEXT
LINE...
```

The system will wait for the user to create the list of cities, line by line, until the "++" is sent; the permanent file for NC will then be cataloged. The user should be aware that the cities in the new list are potential Division and District offices. Division offices are identified with a District number of zero. District office codes must relate to a Division code or they will be ignored; i.e., C3 will be ignored as a District code if there is not a Division code of CØ.

If L=AD, the user must send an "A". In this case the system will respond by printing the current list NC and then the same instructions as illustrated for L=C. For example, if NC=EXDD2, the user's response of

```
C3     394410459     DENVER

++
```

would add Denver as a District office under MRD's (CØ) jurisdiction. NC is recataloged with a higher cycle, so that now EXDD2 would have Denver on it. Any activity analysis which uses this augmented list will assign workloads to the closest of 30 performance centers. The user should recall from p 19 that whenever a new list of cities is created (L=C) or additions to an old list are made (L=AD), then MAP-DATA must be run (R=Y).

No other parameter in the BEGIN statement requires interactive responses. R and W are yes/no parameters and PROFILE will do what the user selects. OC, NC, NF, and DN are names of permanent files. Within PROFILE, the ATTACH command is used to attach the appropriate permanent files. However, if the files cannot be found, the system will inform the user

```
FILE NOT CATALOGED

PF ABORT
```

and the PROFILE program will abort. The system then returns the user to the COMMAND mode and the user must check for incorrect file names within the BEGIN statement. For example, if MAPDATA has already been run and the user accepts R=N, but inputs an incorrect name for NF, the system will abort because it cannot find that name. Other reasons for causing a PF abort (besides typing errors) would be if the data are not available for the desired YR or the time limit is exceeded (see ETL command). If there are any problems with lost or missing files, the user may call the NSRDC User Service number 202-227-1907* for assistance.

*This phone number is subject to change.

In the MAP program within PROFILE, expected dollar and manpower requirements are calculated based on the activity workloads assigned to an office and the number of trips required to perform that activity. System values for each fiscal year must be determined in advance and stored along with the activity data. Techniques for determining these system values are explained in Chapter 4.

However, the user may change one or more of these values during various analyses interactively within PROFILE if desired. In fact, the system will always ask the user

```
WANT TO CHANGE ANY VALUE(S) OF COST/UNIT,MAN YR/UNIT,NO. OF
TRIPS,FIXED COST/OFFICE,FIXED MAN YR/OFFICE,AVG WAGE/DAY?
IF YES TYPE Y;OTHERWISE TYPE N:
```

If the user types "N", PROFILE will go on to its next question. If the user types "Y", the system will inquire about each one of the six values separately and print the current value, asking, for example,

```
WANT TO CHANGE VALUE OF COST/UNIT? =      622.280 BY DEFAULT
IF NOT,TYPE N,O.W.TYPE Y:
```

"O.W." stands for "otherwise."

Then it waits for the user to send either a "Y" or an "N". Whenever the response is "Y", the system asks the user to type in the new value. Figure 4 is a sample of the interactive response for the Acquisition (Post-Condemnation) activity, where the number of trips is changed to 5 from its default value of 3.

The next question asked in PROFILE concerns the deletion of cities from NC. The system asks

```
WANT TO DELETE ANY DISTRICT?  TYPE Y OR N:
```

If the response is "Y", the system states

```
PLEASE ENTER THE DIVISION SYMBOL(S) AND DISTRICT NO.(S) WHICH
ARE TO BE DELETED WITH ONE BLANK IN BETWEEN AND ENTER THEM ALL
IN ONE LINE...USE ANY CHARACTER FROM A TO N EXCEPT I OR J FOR
DIVISION SYMBOL;...ANY NUMBER FROM 1 TO 9 FOR DISTRICT NO. ...
```

If the user were to type "D1 L2" and press RETURN, no activity workload would be assigned to District offices D1 or L2 in a type 1 (T=1) assignment. In a type 2 assignment, only their existing workloads would be reassigned to the next closest performance center.

This step concludes the inquiring portion of PROFILE. PROFILE will then continue to execute until it is finished. The system will

```
COMMAND- BEGIN(EX,F,A=B,T=1,OF=BNSM,DN-BNSMDN)
WANT TO CHANGE ANY VALUE(S) OF COST/UNIT,MAN YR/UNIT,NO. OF TRIP,FIXED C
OST/OFFICE,FIXED MAN YR/OFFICE,AVG WAGE/DAY?
IF YES TYPE Y;OTHERWISE TYPE N:
 PF CYCLE NO. = ØØ1
 PF CYCLE NO. = ØØ2
   CM LWA+1 = 21222B, LOADER USED 33300BY
WANT TO CHANGE VALUE OF COST/UNIT? =   622.28Ø BY DEFAULT
IF NOT, TYPE 'N',O.W. TYPE 'Y':N
WANT TO CHANGE VALUE OF MAN YR/UNIT?=     .Ø29 BY DEFAULT
IF NOT,TYPE 'N',O.W.TYPE 'Y':N
WANT TO CHANGE VALUE OF NO. OF TRIP? =   3.ØØØ BY DEFAULT
IF NOT,TYPE 'N',O.W.TYPE 'Y':Y
TYPE NO. OF TRIP:5
WANT TO CHANGE VALUE OF FIX COST/DIST OFFICE?= 2Ø851.62Ø BY DEFAULT
IF NOT,TYPE'N',O.W.TYPE 'Y':N
WANT TO CHANGE VALUE OF FIX MAN YR/DIST OFFICE? =    .33Ø BY DEFAULT
IF NOT, TYPE 'N',O.W.TYPE 'Y':N
WANT TO CHANGE VALUE OF AVG WAGE/DAY?=  61.47Ø BY DEFAULT
IF NOT,TYPE 'N',O.W.TYPE 'Y':N
```

Figure 4. Sample interactive response for Acquisition (Post-Condemnation) activity: change number of trips from default value of 3 to 5.

indicate to the user where it is in its execution stage. If MAPDATA is being run, the system will indicate when it is done by stating

END MAPDATA

and the quantity of system seconds used. If any permanent files have been created and cataloged, the system will print pertinent information about them. PROFILE will indicate when it has finished the MAP program by stating

END AMAPT

and the execution time in system seconds. The first "A" and the "T" in AMAPT are the activity parameter A and the type parameter T, the values of which would be printed here; i.e., if Inleasing were being analyzed with a type 2 assignment, this statement would be

END IMAP2

and the corresponding execution time.

PROFILE will then return the user to the COMMAND mode, provided W=N. If W=Y, the entire output will be printed directly on the user's local terminal. From the COMMAND mode, the user may either partially retrieve information from OUTPUT by using the PAGE command or batch print the entire output elsewhere, as explained on p 17.

Output

Output of the PROFILE program includes maps of activity locations throughout CONUS and the totals of expected costs and manpower requirements to perform the activity workload at those locations when assigned to various performance centers.

For a type-1 assignment, two pairs of maps are displayed for each activity. The first pair shows the existing assignment for the given fiscal year of data. Activity locations are identified by the alpha-character code for the Division to which the performance center belongs and then by the numeric-character code for the District office (or performance center) which performed the activity there. The codes are taken from EXDDF, the list of old cities. For display purposes, the latitudes and longitudes for each location were rounded off to the nearest half-degree and stored in an appropriate rectangular array prior to being printed. In this existing assignment, it is quite possible that two distinct character codes had to be stored in the same place, in which case the symbol # is printed.

The second pair of maps for a type-1 assignment shows the assignment of all activity locations to the closest performance center on

the list of cities in NC, with reassignment to the next closest city in the event the user deleted some cities from NC. As before, an alpha-character code is printed for the Division having jurisdiction over the performance center to which the activity location was assigned and then a numeric-character code is printed for the respective performance center. Figures 1 and 2 in Chapter 2 are examples of the first maps in each pair for the existing and closest assignment of the Inleasing activity locations.

Similarly, two maps are displayed for a type-2 assignment in which activity locations currently assigned to some performance centers are reassigned to the next closest city still on NC. Those cities not deleted from NC would also maintain their existing workload. If no cities are deleted from NC, the type-2 assignment maps are identical to the existing situation.

Following the maps is a complete breakdown of the activity workload units for the selected Division and District performance centers. A record of the type of activity workload unit is printed, along with the expected costs and man-years required to perform those units, the fixed costs and fixed man-years required to have the capability of performing any units for that activity, and subtotals and totals for each District, each Division, and the Corps. The existing assignment totals are printed first, followed by the closest assignment totals. The last line of an assignment total is the

COMPLETE TOTAL THIS ASSIGNMENT

and is typically the line retrieved by using the PAGE command prior to batch printing the maps and District totals to some alternate terminal.

An example printout of the totals for a type-1 assignment is shown in Figure 5 for the Inleasing activity where OC=EXDDF and NC=EXDD2.

The user should now be sufficiently acquainted with the computerized techniques in REMAP to perform some trial analyses. The three examples in the BEGIN Parameters section of this chapter are suitably realistic cases. It is recommended that the user attempt to execute at least example 1 before reading further. It is also recommended that the user perform type-1 analyses for all the real estate activities for each fiscal year of data considered. The complete interactive responses to the examples are presented in Appendix C.

Performance Analysis

Once PROFILE has completed its execution and the complete totals for the chosen assignment have been retrieved, the analysis of the

THE FOLLOWING DISTRICT WORKLOADS WERE CALCULATED USING
ASSIGNMENT OF THE EXISTING DISTRICT OFFICE

DIVISION	INLEASING TYPE	WORKLOAD (UNITS)	COST($)	EFF. MAN/YR
A: LMVD				
	R	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A1 AT MEMPHIS		1	10889.00	.41
	N	4	956.00	.56
ACT TOTAL		4	956.00	.56
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A2 AT NEW ORLEAN		4	11606.00	.83
	N	4	956.00	.56
	R	1	239.00	.14
ACT TOTAL		5	1195.00	.70
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A3 AT ST. LOUIS		5	11845.00	.97
	N	13	3107.00	1.82
	R	2	478.00	.28
ACT TOTAL		15	3585.00	2.10
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A4 AT VICKSBURG		15	14235.00	2.37

Figure 5. Example printout for Type-1 assignment for Inleasing activity (OC=EXDDF and NC=EXDD2).

	N	21	5019.00	2.94
	P	4	956.00	.56
ACT TOTAL		25	5975.00	3.50
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		25	48575.00	4.59

C: MPD

	N	85	20315.00	11.90
	P	35	8365.00	4.90
ACT TOTAL		120	28680.00	16.80
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C1 AT KANSAS CIT		120	39330.00	17.07
	N	564	134796.00	78.96
	P	271	64769.00	37.94
ACT TOTAL		835	199565.00	116.90
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C2 AT OMAHA		835	210215.00	117.17
	N	649	155111.00	90.86
	P	306	73134.00	42.84
ACT TOTAL		955	228245.00	133.70
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		955	249545.00	134.25

D: NED

ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT D1 AT BOSTON		0	10650.00	.27

Figure 5 (con't)

ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		0	10650.00	.27

E: AAB

	M	351	83849.00	49.14
	P	17	4063.00	2.38
ACT TOTAL		368	87952.00	51.52
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E1 AT BALTIMORE		368	98602.00	51.79
	M	449	107311.00	62.86
	P	20	4780.00	2.80
ACT TOTAL		469	112091.00	65.66
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E3 AT NEW YORK		469	122741.00	65.93
	M	45	10755.00	6.30
ACT TOTAL		45	10755.00	6.30
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E4 AT NORFOLK		45	21405.00	6.57
	M	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E5 AT PHILADELPH		1	10889.00	.41
	M	846	202194.00	118.44
	P	37	8843.00	5.18
ACT TOTAL		883	211037.00	123.62
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		883	253637.00	124.71

F: MCD

	M	5	1195.00	.70
	P	8	1912.00	1.12
ACT TOTAL		13	3107.00	1.82
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT F2 AT CHICAGO		13	13757.00	2.09
	M	5	1195.00	.70
	P	8	1912.00	1.12
ACT TOTAL		13	3107.00	1.82
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		13	13757.00	2.09

Figure 5 (con't)

G: NPD '

	N	2	478.00	.28
ACT TOTAL		2	478.00	.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G2 AT PORTLAND		2	11128.00	.55
	N	191	45669.00	26.74
	R	19	4541.00	2.66
ACT TOTAL		210	50190.00	29.40
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G3 AT SEATTLE		210	60840.00	29.67
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G4 AT WALLA WALL		1	10889.00	.41
	N	194	46366.00	27.16
	R	19	4541.00	2.66
ACT TOTAL		213	50907.00	29.82
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		213	82857.00	30.64

H: NPD

ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H1 AT HUNTINGTON		0	10650.00	.27
	N	4	956.00	.56
ACT TOTAL		4	956.00	.56
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H2 AT LOUISVILLE		4	11606.00	.83
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H3 AT NASHVILLE		1	10889.00	.41
	N	2	478.00	.28
ACT TOTAL		2	478.00	.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H4 AT PITTSBURGH		2	11128.00	.55

Figure 5 (con't)

	N	7	1673.00	.98
ACT TOTAL		7	1673.00	.98
ACT FIXED			42600.00	1.00
TOTAL FOR THE DIVISION		7	44273.00	2.07
F1 SAD				
	D	6	1434.00	.84
ACT TOTAL		6	1434.00	.84
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K3 AT JACKSONVIL		6	12084.00	1.11
	N	274	85446.00	39.36
	D	291	69549.00	40.76
ACT TOTAL		565	135035.00	79.19
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K5 AT MOBILE		565	145685.00	79.37
	N	139	33221.00	19.46
	D	17	4863.00	2.38
ACT TOTAL		156	37284.00	21.84
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K6 AT SAVANNAH		156	47934.00	22.11
	N	413	98787.00	57.82
	D	314	75046.00	43.96
ACT TOTAL		727	173753.00	101.78
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		727	205703.00	102.60
L1 SPD				
	N	271	64769.00	37.94
	D	26	6214.00	3.64
ACT TOTAL		297	70983.00	41.58
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L1 AT LOS ANGELE		297	81633.00	41.85
	N	135	32265.00	18.90
	D	10	2390.00	1.40
ACT TOTAL		145	34655.00	20.30
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L2 AT SACRAMENTO		145	45305.00	20.57
	N	406	97034.00	56.84
	P	34	8804.00	5.04
ACT TOTAL		440	105838.00	61.88
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		440	126838.00	62.43

Figure 5 (con't)

M: SWD					
	N		18	4302.00	2.42
	R		12	2868.00	1.68
ACT TOTAL			30	7170.00	4.20
ACT FIXED				10650.00	.27
TOTAL FOR DISTRICT M1 AT ALBUQUERQU			30	17820.00	4.47
	N		118	28202.00	16.52
	R		73	17447.00	10.22
ACT TOTAL			191	45649.00	26.74
ACT FIXED				10650.00	.27
TOTAL FOR DISTRICT M2 AT FT. WORTH			191	56299.00	27.01
	N		52	12428.00	7.28
ACT TOTAL			52	12428.00	7.28
ACT FIXED				10650.00	.27
TOTAL FOR DISTRICT M3 AT GALVESTON			52	23078.00	7.55
	N		16	3924.00	2.24
	R		13	3107.00	1.82
ACT TOTAL			29	6931.00	4.06
ACT FIXED				10650.00	.27
TOTAL FOR DISTRICT M4 AT LITTLE ROC			29	17581.00	4.33
	N		40	9560.00	5.60
	R		2	478.00	.28
ACT TOTAL			42	10038.00	5.88
ACT FIXED				10650.00	.27
TOTAL FOR DISTRICT M5 AT TULSA			42	20688.00	6.15
	N		244	58316.00	34.16
	R		100	23900.00	14.00
ACT TOTAL			344	82216.00	48.16
ACT FIXED				53250.00	1.37
TOTAL FOR THE DIVISION			344	135466.00	49.52
COMPLETE TOTAL THIS ASSIGNMENT			3689	1171481.00	913.18

Figure 5 (con't)

THE FOLLOWING DISTRICT WORKLOADS WERE CALCULATED USING
ASSIGNMENT TO THE CLOSEST DISTRICT OFFICE

DIVISION	INCREASING TYPE	WORKLOAD (UNITS)	COST($)	EFF. MAN/YR
A: LMVD				
	N	124	25849.07	17.27
	R	59	14317.22	8.26
ACT TOTAL		183	39366.29	25.53
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A: AT VICKSBURG		183	50016.29	25.81
	N	124	25849.07	17.27
	R	59	14317.22	8.26
ACT TOTAL		183	39366.29	25.53
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		183	50016.29	25.81
C: MRD				
	N	296	74985.18	41.52
	R	142	36072.40	19.92
ACT TOTAL		438	111057.58	61.44
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C: AT OMAHA		438	121707.58	61.72
	N	296	74985.18	41.52
	R	142	36072.40	19.92
ACT TOTAL		438	111057.58	61.44
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		438	121707.58	61.72
D: NED				
	N	209	36722.68	29.02
	R	14	2591.79	1.95
ACT TOTAL		223	39314.46	30.96
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT D: AT BOSTON		223	49964.46	31.23

Figure 5 (con't)

	M	209	36722.68	29.82
	R	14	2591.79	1.95
		223	39314.46	30.94
ACT TOTAL			10650.00	.27
ACT FIXED		223	49964.46	31.73
TOTAL FOR THE DIVISION				

F1 NAD				
	M	488	131945.37	68.61
	R	17	4507.93	2.39
		505	136453.30	71.00
ACT TOTAL			10650.00	.27
ACT FIXED		505	147103.30	71.27
TOTAL FOR DISTRICT F4 AT NEW YORK				

	M	488	131945.37	68.61
	R	17	4507.93	2.39
		505	136453.30	71.00
ACT TOTAL			10650.00	.27
ACT FIXED		505	147103.30	71.27
TOTAL FOR THE DIVISION				

F1 NCD				
	M	310	31651.75	42.68
	R	140	14989.85	19.28
		450	46641.60	61.96
ACT TOTAL			10650.00	.27
ACT FIXED		450	57291.60	62.23
TOTAL FOR DISTRICT F4 AT CHICAGO				

	M	310	31651.75	42.68
	R	140	14989.85	19.28
		450	46641.60	61.96
ACT TOTAL			10650.00	.27
ACT FIXED		450	57291.60	62.23
TOTAL FOR THE DIVISION				

G1 NPD				
	M	211	50512.12	29.58
	R	21	4991.16	2.94
		232	55503.27	32.52
ACT TOTAL			10650.00	.27
ACT FIXED		232	66153.27	32.79
TOTAL FOR DISTRICT G1 AT PORTLAND				

Figure 5 (con't)

	N	211	58512.12	29.58
	R	41	4991.16	2.94
ACT TOTAL		232	55503.27	32.52
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		232	66153.27	32.79

MI OHO

	N	218	28128.47	30.08
	R	36	2037.61	4.92
ACT TOTAL		254	30166.08	35.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT MA AT CINCINNATI		254	40816.08	35.27

	N	218	28128.47	30.08
	R	36	2037.61	4.92
ACT TOTAL		254	30166.08	35.00
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		254	40816.08	35.27

MI SAD

	N	349	77981.29	48.74
	R	281	67113.46	39.31
ACT TOTAL		630	145094.74	88.05
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M7 AT ATLANTA		630	155744.74	88.32

	N	349	77981.29	48.74
	R	281	67113.46	39.31
ACT TOTAL		630	145094.74	88.05
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		630	155744.74	88.32

LI SPD

	N	282	89268.00	39.84
	R	36	12286.93	5.10
ACT TOTAL		318	101554.93	44.95
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT LH AT SAN FRANCI		318	112204.93	45.22

Figure 5 (con't)

	N	282	89268.00	39.84
	P	34	12286.93	5.10
ACT TOTAL		316	101554.93	44.95
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		316	112204.93	45.22
PI SWD				
	N	298	102093.47	42.35
	P	78	21789.34	10.99
ACT TOTAL		376	123883.01	53.34
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT HQ AT DALLAS		376	134533.01	53.61
	N	298	102093.47	42.35
	P	78	21789.34	10.99
ACT TOTAL		376	123883.01	53.34
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		376	134533.01	53.61
COMPLETE TOTAL THIS ASSIGNMENT		3609	935535.28	507.48
COMPLETE TOTAL THIS ASSIGNMENT		3609	935535.28	507.48

Figure 5 (con't)

activity performance for that assignment should be compared with the performance of the existing assignment. Differences should be identified as potential gains or losses, to be added when collectively analyzing that assignment on a Corps-wide basis.

Any performance savings are relative to the existing situation for which the total costs and manpower requirements are expected totals, not necessarily actual totals. Table 1 gives the expected performance dollars using FY75 data for each real estate activity and the relative total savings of the two closest office assignments as determined in the *Real Estate Organization Analysis Using the Real Estate Model of Activity Performance (REMAP) Evaluation Procedures.*[2]

As mentioned in Chapter 2, if the selected list of office locations to which activities are to be assigned (NC) has fewer cities than there are existing real estate performance centers (EXDDF), administrative savings may also be possible. The user must calculate these additional savings by determining the effective salaries of administrators and their personal staffs which would be saved due to a reduced number of performance centers.

On the other hand, if the user chooses to analyze an assignment of activities to more performance centers than currently in existence, the cost of administrative salaries incurred at those additional centers would offset any performance savings.

Total savings for an assignment of activity locations to a selected list of cities can thus be determined by summing the expected performance and administrative savings.

As an illustration, suppose the user wants to compare the reassignment of workloads of two performance centers, X1 and X2, which are geographically close. For each activity, a type-1 (T=1) assignment should be analyzed in PROFILE. The PROFILE output would be the maps and totals for the existing situation and the closest assignment. Next, two type-2 (T=2) assignments should be performed for each activity, one with X1 deleted from NC, the other with X2 deleted. Since the centers are close, each would probably be assigned some of the other's workload. Performance totals for all the activities can be compared to determine which reassignment yields the most performance benefits. However, before making a decision, the user should manually calculate any administrative savings which would be realized by each potential reassignment. It is quite possible that administrative

[2]C. P. Altheide, *Real Estate Organization Analysis Using the Real Estate Model of Activity Performance (REMAP) Evaluation Procedures*, Technical Report P-90 (U.S. Army Construction Engineering Research Laboratory, 1978).

Table 1

Performance Savings for Closest Office Assignment, FY75

Activities \ Assignment	Existing District Office	Cost ($000) Closest District Office	Closest Division Office
Project Planning	1679	1516	1360
Acquisition (Pre)	12020	11755	10146
Acquisition (Post)	1172	1158	853
Inleasing	894	749	696
Outgranting	1139	1104	965
Disposals	503	445	384
Utilization	651	602	588
Compliance	540	367	516
Relocation Assistance	967	946	652
Performance Totals	19566	18643	16161
Performance Savings		923	3405
Administrative Savings		0*	**
Total Savings		923	**

*No administrative savings, since the number of performance centers is unchanged.
**Needs to be determined by the user, since the number of performance centers has been reduced to ten.

savings may outweigh the performance savings and result in the decision-maker's revising an original impression.

Summary

In general the user will be evaluating performance using different organizational structures for the Directorate of Real Estate. For each real estate activity--Project Planning, Acquisition (Pre- and Post-Condemnation), Inleasing, Outgranting, Disposals, Compliance Inspections, Utilization Inspections, and Relocation Assistance--evaluations of the performance of expected workloads by various organizational elements (Division, District, field, and project offices) called performance centers are conducted. The procedures to analyze various assignments of activity workloads to these performance centers can be summarized as follows:

1. Establish the list of existing real estate performance centers (OC).

2. Establish new lists of proposed performance centers (NC).

3. Determine criteria for assigning activity workloads to those centers (T=1 or 2).

4. Use the PROFILE program in REMAP to determine the expected activity workloads, performance costs, and manpower requirements for the selected assignments (BEGIN).

5. Determine potential administrative savings for the selected assignments (manually).

6. Compare total savings in performance and administration for each activity and for all activities together for all assignments.

7. Choose the reassignment of activity workloads which will result in the organizational structure which improves the economy and efficiency of the DAEN-RE mission.

4 DATA REQUIRED

The previous chapter discussed the REMAP operating procedures assuming that the data were ready for the user to input into REMAP. This chapter explains the input data for each of nine real estate activities using FY75 data. The system values are also derived using FY75 data. The techniques for establishing activity location files with the appropriate formats are also discussed.

Within the PROFILE program, two major computer programs are executed--MAPDATA and MAP. The output of MAPDATA is used as input to MAP. This is done automatically within PROFILE; all the user need do is specify names for the MAPDATA output (NF and DN).

System Values

The system values which are currently defaulted in PROFILE are also used as input to the MAP program. For each activity, these values include the cost per unit, the man-years per unit, number of trips, fixed cost per office, fixed man-year per office, and average salary per day. During PROFILE, one or more of these values can be changed for a single run, but they are not permanently changed within PROFILE. For subsequent runs, the default values are used unless the user changes them each time. Since changing the values for each run could become tedious, a way to permanently change these values was developed. This method is particularly helpful in implementing the values for a new fiscal year; a permanent file of each year's values should be created.

The system values for activity A are stored in a permanent file, named AYR, where A and YR are BEGIN parameters for the activity and fiscal year, e.g., system values for project planning for FY75 are currently stored in the permanent file P5. These values are

Cost per unit	= $657
Man-years per unit	= 0.030
Number of trips per unit	= 10
Fixed cost per office	= $31,161
Fixed man-years per office	= 1.104
Average salary per day	= $61.47

These values are stored in the file on one data line. The procedures for permanently changing any of these values are best explained by illustrating how to create the permanent file P6. After logging in, the user types

```
COMMAND- ATTACH, P5, ID=PUAJ

COMMAND- EDITOR
```

```
. . E, P5, S

. . L, 100

. . 100=   657.0   0.030   10   31161.   1.104   61.47

. . 100=   658.0   0.031   11   31162.   1.105   61.48
```

(All numbers and decimal points must be in the appropriate columns.)

```
. . Save, THIS

. . CATALOG, THIS, P6, ID=PUAJ

. . B, B

COMMAND-LOGOUT
```

If permanent changes are desired for P5, the local file THIS could be cataloged as P5; the computer would then assign a higher cycle number to it, which would cause the new P5 to be automatically attached in PROFILE instead of the original.

The six system values for the other real estate activities are stored similarly in separate permanent files. Changes to those values can be made similarly.

The number-of-trips system value was originally determined by discussions with selected personnel at DAEN-RE. The user may choose any number which is appropriate. The average salary per day was calculated by dividing the average annual salary paid out by all District offices to all personnel as of the end of FY75 (as reported on the ENG Forms 1685) by the number of working days per year.

The other four system values were determined by using information reported by the Districts on ENG Form 4564 as well as ENG Form 1685. Two linear regressions were performed for each activity to determine the fixed cost per office, the cost per unit, the fixed man-years per office, and the number of man-years per unit required for a typical performance center to accomplish the activity. A linear regression involves finding the straight line approximation which best fits a collection of data points. The fixed cost and fixed man-years per office derived by linear regression represent the costs and manpower required to open a performance center and provide the capability to perform an activity. The cost per unit and man-years per unit are performance rates for accomplishing a given workload. The system values for each activity for FY75 data are illustrated in Table 2. Figure 6 is the graph of the linear approximation to the FY75 cost data points for Project Planning. Instructions for performing a linear regression are explained in most elementary statistics texts. Many hand-held calculators have this capability already programmed for use.

Table 2

System Values (FY75 Data)

Item Activity	Cost/Unit	Man-Yr/Unit	No. of Trip	Fixed Cost/ Office	Fixed Man-Yr/Office	Av. Wage/Day
Acquisition	1430.110	.058	3.000	136688.190	3.630	61.47
Compliance	10.0	0.0003	0.20	6369.	.26	61.47
Disposal	161.000	.007	1.000	6394.000	.754	61.47
Inleasing	239.0	0.14	1	10650.	.273	61.47
Outgranting	182.0	0.010	0.25	9056.	.05	61.47
Project Planning	657.0	0.030	10.	31161.	1.104	61.47
Relocation Assistance	310.000	.022	2.000	19960.000	1.41	61.47
Utilization	58.000	.022	0.100	3612.000	.240	61.47

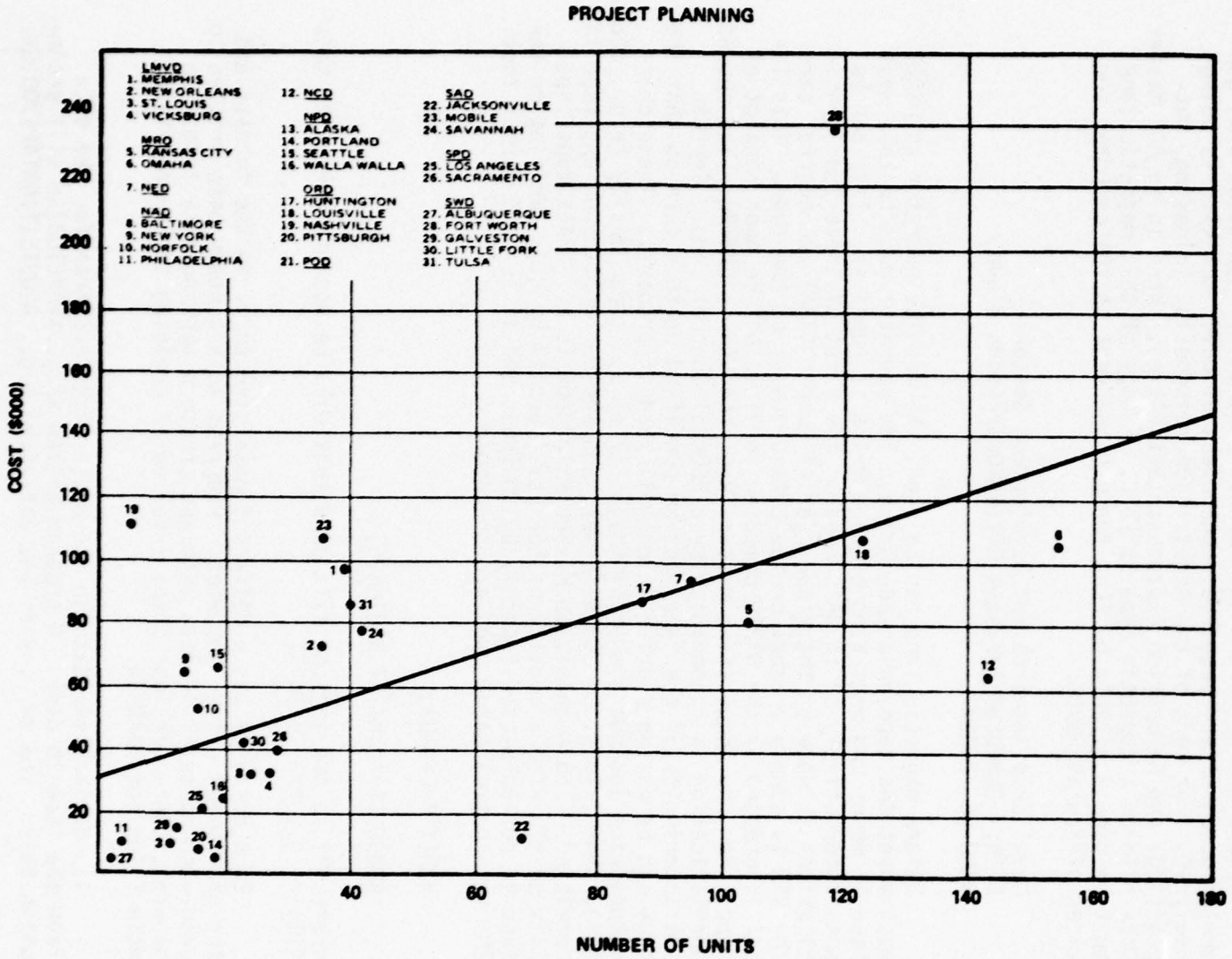


Figure 6. Linear approximation of the FY75 cost data points for Project Planning.

MAPDATA Data

Before the user runs the MAPDATA program for new data, some general procedures are required, regardless of which activity is being analyzed. For each of the Acquisition, Disposals, Inleasing, Outgranting, and Relocation Assistance activities, there is an ADP Master Data File on a magnetic tape at EDPC. A copy of this magnetic tape must be made available by EDPC for use and sent to the computer services office at NSRDC:

Naval Ship Research and Development Center
ATTN: Computer Services Office/Operations Group
WASH DC 20007

Before magnetic tape can be used, the machine operator at NSRDC must mount the tape on a tape drive. The operator must be told what tape to mount and what kind of tape drive it requires. This can be done interactively or in BATCH mode. The first of these two identifications is done by the Visual Serial Number (VSN) job control card. The VSN is simply a label on the outside cover of the tape. This label is created by the NSRDC computer services office upon receipt of tape. For the Acquisition Master Tape, the VSN is CKØ1Ø3. The second identification is accompanied by a REQUEST control card. Certain characteristics of the tape must be specified on this card so that the tape can be put on a drive which will read it properly. These characteristics include number of tracks (7 or 9), tape density (e.g., 556 bpi), short, long, or SCOPE format, and whether writing on the tape is permitted. The Acquisition Master File tape is a 7-track tape (specify by MT) with a density of 556 bpi (specify by HI). Writing on the tape is not permitted (specify by NORING), and it is an S format tape. The two control cards used are therefore

```
VSN(***=CK0103)

REQUEST(***,MT,HI,NORING,S)
```

where *** is the logical file name that will be used to work with this file; e.g., *** is TAPE1.

Each activity has a different data structure, so the formats and the procedures differ somewhat. Programs have already been written to read each master file data tape and create a working disk file. In general, there are four steps involved in creating the appropriate data files for MAPDATA.

1. Unblock the data in the Master Tape and transfer the data from the tape to disk. A program called xx....xTAPETODISK will accomplish this. The xx....x is the activity; e.g., ACQUISITIONTAPETODISK.

2. Retrieve the relevant data from the disk and write it in a

format acceptable to MAPDATA. A program called CREATExx.....xMASTER will do this; e.g., CREATEACQUISITIONMASTER.

3. Sort the retrieved data either by project identification or the name of the activity location (nearest city, base, etc.). A program called SORTxx....xMASTER does this; e.g., SORTACQUISITIONMASTER.

4. Shorten the data file obtained in 3 by a program called CRUNCHA, where A represents the first letter in Inleasing, Utilization, or Compliance (Outgranting also uses CRUNCHC). This program totals the workload of the same type of unit for all records with the same activity location name; e.g., if there are 15 new leases in Chicago in the Inleasing data file, . . CRUNCHI will produce one record with a 15 in it, rather than the original 15 separate records. Whenever the master file is very large, this step can save considerable computing time for MAPDATA and processing time for MAP, but it is not a necessity.

Only five ADP activity master tapes at EDPC are used. Pre- and Post-Condemnation Acquisition master files are created from the Acquisition master tape, Compliance is created from the Outgranting master tape, and Utilization is created from the Inleasing master tape. A separate data base which does not require these four steps has been developed for the Project Planning activity.

Once the sorted master file (shortened or not) is established, it must be cataloged under the name AMSYR, where A and YR are again the Activity and fiscal YeaR parameters for the BEGIN command; e.g., IMS5 is the sorted Inleasing master file for FY75.

The job control cards for running the programs used in each of these steps for each of the eight activities (except Project Planning) are included in Appendix D.

Eventually EDPC will create the sorted master files (shortened or not) and these steps will not be required of the user.

The second major input file for MAPDATA is a latitude/longitude file for each activity. This is a list of all the activity location names (cities, installations, nearest city to a project, etc.) along with the appropriate latitude and longitude of that location. This file is used to associate a latitude/longitude with each record in the activity master file.

To create this file, a program called ACITY retrieves all the location names which appear in the master tape for activity A. This temporary file may be sorted alphabetically by a program called SORTxx....xLATLONG. For some of the activities, the temporary file is already sorted. Duplication of names can be eliminated by using the program ACDELIM. A printout of this reduced file is then used as a

working file for the user to determine the latitude and longitude of each location by means of the National Atlas, maps, or asking the Districts (estimates to nearest half degree are sufficient). This information must then be keypunched to create the Activity, Latitude and Longitude, Sorted file, cataloged as ALLS (A is the BEGIN parameter). These files have already been created and cataloged for each activity (except Project Planning) through the end of FY75. The user should not have to recreate them, only augment or update them.

MAPDATA merges ALLS and AMSYR and prints out a list of activity names from AMSYR which were not matched with any location on ALLS. Since the latitude/longitude files have already been created, running MAPDATA will produce the unmatched activity locations. Hence, all the user has to do to update the file is to determine locations for those unmatched ones and enter the data onto the data file. Since Utilization and Inleasing records are both retrieved from the Inleasing Master tapes, there is a common latitude/longitude file. The same is true for Compliance and Outgranting. Pre- and Post-Condemnation Acquisition activity locations also are in a common file. Project Planning does not need a latitude/longitude file, because the latitudes and longitudes were coded directly into the Project Planning master file. MAPDATA still should be run for Project Planning, but in this case the merger of PLLS and PMSYR is by-passed. Consequently, there would be no unmatched records. Samples of the ALLS and AMS5 files and the data formats for each, as well as the output of MAPDATA, called ANSM, are given in Appendix E.

There are two techniques for entering data onto the ALLS files. Cards for new records can be keypunched and BATCH input to NSRDC as an intermediary file, which could then be merged with the old file, resorted, and recataloged as ALLS with a higher cycle number. Figure 7 is a sample portion of the ILLS file. Figure 8 illustrates a sample set of punched cards to be input. Figure 9 shows the job control cards to merge the new cards with the old file. Figure 10 is the resulting ILLS file with a higher cycle number.

WARNING: The ALLS and AMSYR files must be sorted before running MAPDATA. Whenever changes are made to either file which cause them to become unsorted, SORTxx....xLATLONG and SORTxx....xMASTER must be run to resort the files.

The other technique uses an interactive mode known as the EDITOR. This is an expensive technique and should be used only when relatively few changes are to be made.

Two examples using the EDITOR are illustrated in Figures 11 and 12; one for updating ILLS as with cards, the other by creating two additional lines of data at the end of the existing file. Figure 13 illustrates the sorting technique for both examples. Figure 14 is the resulting ILLS.

```
ABBEVILLE          222958 9208
ABERDEEN           373508 7925
ABERDEEN           464528 9829
ABERDEEN           53465912350
ABILENE            483228 9943
ACEY               53
ADAMS CO           08394010455
ADA                403446 9641
ADDISON            174156 8759
ADRIAN             264154 8402
AFFTON             293833 9020
AFTON              403641 9458
AGANA GUAM         GQ
AGUADILLA ST PRRQ
AGUADILLA          RQ
AIKEN              453334 8143
AJO                04322211252
AKRON              394105 8131
ALAMANCE COUNTY373610 7929
```

Figure 7. Sample portion of ILLS file.

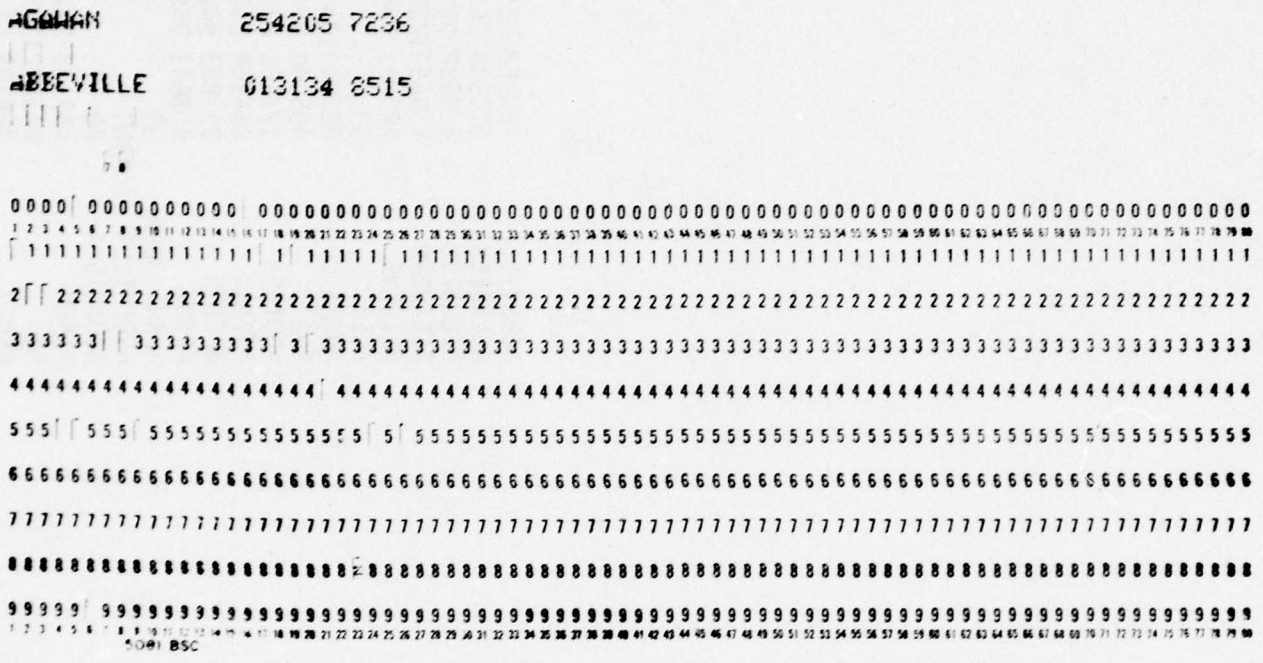


Figure 8. Sample set of punched cards to be input.

```
CATALOG,TEMP1,UNSORTNEWILLS,ID=PUAJ.
COMBINE,TEMP2,TEMP1,2.
REWIND,TEMP2.
COPYCR,INPUT,TEMP2.
COPYCR,T1,TEMP2.
ATTACH,T1,ILLS,ID=PUAJ.
REQUEST,TEMP1,*PF.
CHARGE,PUAJ,1189043801,RS,I.
PAJ,CM45000,T20,P3.
```

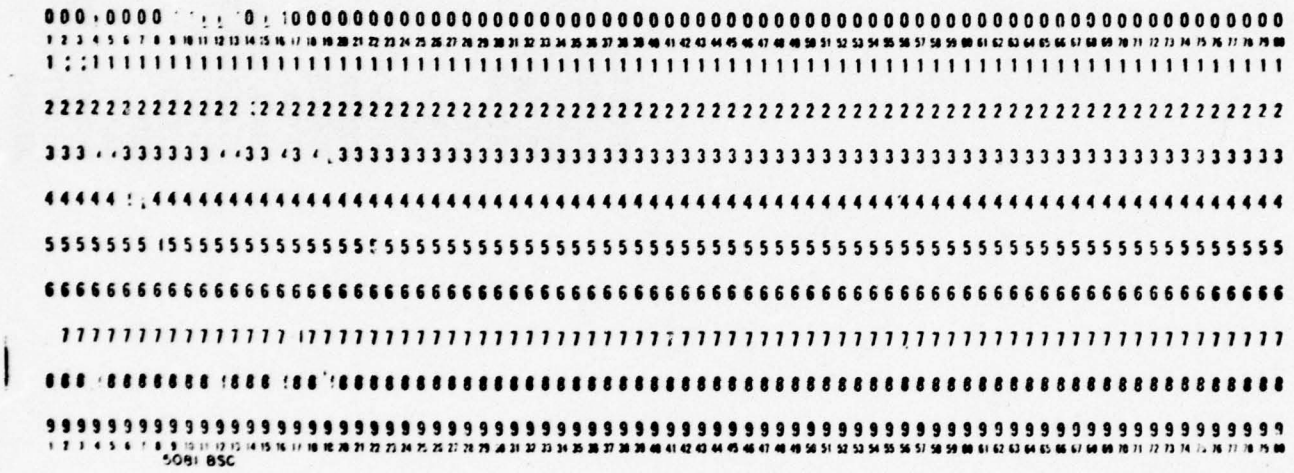


Figure 9. Job control cards to merge new cards with the old file.

```
ABBEVILLE          222958 9208
ABERDEEN           373508 7925
ABERDEEN           464528 9829
ABERDEEN           53465912350
ABILENE            483228 9943
ACEY               53
ADAMS CO           08394010455
ADA                403446 9641
ADDISON            174156 8759
ADRIAN             264154 8402
AFFTON             293833 9020
AFTON              403641 9458
AGANA GUAM         GQ
AGUADILLA ST PRRQ
AGUADILLA          RQ
AIKEN              453334 8143
AJO                04322211252
AKRON              394105 8131
ALAMANCE COUNTY373610 7929
ABBEVILLE          013134 8515
AGAWAN             254205 7236
```

Figure 10. Resulting ILLS file.

```
COMMAND-EDITOR
..creat
     100=abbeville          013134 8515
     110=agawan             254205 7236
     120=:
..l,a


     100=ABBEVILLE          013134 8515
     110=AGAWAN             254205 7236
..s,t3,n
..b
COMMAND- request,temp,*pf.
COMMAND- attach,t1,ills,id=puaj
 PF CYCLE NO. = 002
COMMAND- copycr,t1,temp2.
COMMAND- copycr,t3,temp2.
COMMAND- rewind,temp2.
COMMAND- combind,temp2,temp.
 NO SUCH PROGRAM CALL NAME  -  COMBIND
COMMAND- combine,temp2,temp.
 WRONG NUMBER OF PARAMETERS
COMMAND- combine,temp2,temp,2.
COMMAND- catalog,temp,unsornewlls,id-puaj
 INITIAL CATALOG
 RP = 030 DAYS
 CT ID=      PUAJ PFN= UNSORNEWLLS
 CT CY= 001  00000001 PRUS  $0000.00 /DAY
COMMAND- page,temp
Ready..
1


ABBEVILLE          222958 9208
ABERDEEN           373508 7925
ABERDEEN           464528 9829
ABERDEEN           53465912350
ABILENE            483228 9943
ACEY               53
ADAMS CO           08394010455
ADA                403446 9641
ADDISON            174156 8759
ADRIAN             264154 8402
AFFTON             293833 9020
Line      1
+

AFTON              403641 9458
AGANA GUAM         GQ
AGUADILLA ST PRRQ
AGUADILLA          RQ
AIKEN              453334 8143
AJO                04322211252
AKRON              394105 8131
ALAMANCE COUNTY373610 7929
ABBEVILLE          013134 8515
AGAWAN             254205 7236
(eor    )
Line     12
```

Figure 11. Example of using EDITOR.

```
LOGIN       UPDATED 05/27/77  TODAY IS 06/14/77
  6600 INTERACTIVE ACCESS, PRINT SYSBULL(BATCH)

COMMAND- attach,w1,ills,id=puaj
 PF CYCLE NO. = 002
COMMAND- editor
..e,w1,s
..l,all


   100=ABBEVILLE       222958 9208
   110=ABERDEEN        373508 7925
   120=ABERDEEN        464528 9829
   130=ABERDEEN        53465912350
   140=ABILENE         483228 9943
   150=ACEY            53
   160=ADAMS CO        08394010455
   170=ADA             403446 9641
   180=ADDISON         174156 8759
   190=ADRIAN          264154 8402
   200=AFFTON          293833 9020
   210=AFTON           403641 9458
   220=AGANA GUAM      GQ
   230=AGUADILLA ST PRRQ
   240=AGUADILLA       RQ
   250=AIKEN           453334 8143
   260=AJO             04322211252
   270=AKRON           394105 8131
   280=ALAMANCE COUNTY373610 7929
..a,290
   290=abbeville       013134 8515
   300=agawan          254205 7236
   310==
..s,w2,n
..catalog,w2,unsornewlls,id=puaj
 INITIAL CATALOG
 RP = 030 DAYS
 CT ID=      PUAJ PFN=UNSORNEWLLS
 CT CY= 001  00000001 PRUS  $0000.00 /DAY
```

Figure 12. Second example of using EDITOR.

```
100=PWSCM,CM100000,T75,P4.
110=CHARGE,PUAJ.1189043801,RS.I.
120=FTN,OPT=2.
130=ATTACH,TAPE1,UNSORNEWLLS,ID=PUAJ.
140=REQUEST(TAPE5,*PF)
150=LIBRARY(COBOL)
160=RFL,100000.
170=LGO.
180=REDUCE.
190=CATALOG,TAPE5,ILLS,ID=PUAJ.
200=       PROGRAM SORT(TAPE1,TAPE5,OUTPUT,TAPE7=OUTPUT)
210=       CALL SMSORT(26)
220=       CALL SMFILE("SORT","CODED",1,"REWIND")
240=       CALL SMFILE("OUTPUT","CODED",5,"REWIND")
250=       CALL SMKEY(1,1,17,0,"DISPLAY","DISPLAY","A")
260=       CALL SMEND
270=5      WRITE(7,100)
280=100    FORMAT(* NORMAL COMPLETION*)
290=       STOP
300=       END
```

Figure 13. Example of sorting techniques using EDITOR.

```
COMMAND- page,w3
Ready..
1


ABBEVILLE          013134 8515
ABBEVILLE          222958 9208
ABERDEEN           373508 7925
ABERDEEN           464528 9829
ABERDEEN           534659 12350
ABILENE            483228 9943
ACEY               53
ADAMS CO           08394010455
ADA                403446 9641
ADDISON            174156 8759
ADRIAN             264154 8402
Line      1
+


AFFTON             293833 9020
AFTON              403641 9458
AGANA GUAM         GQ
AGAWAN             254205 7236
AGUADILLA ST PRRQ
AGUADILLA          RQ
AIKEN              453334 8143
AJO                04322211252
AKRON              394105 8131
ALAMANCE COUNTY373610 7929
{eor    }
Line     12
```

Figure 14. Resulting ILLS file after sorting.

If the user desires to have a printed copy of any of the data files or programs, they can be batch printed interactively or sent to be printed elsewhere.

To batch lengthy printouts to any other terminal, as mentioned in Chapter 3, p 17, the following commands are sent after LOGIN:

```
COMMAND- ATTACH,FILE,ID=PUAJ

COMMAND- COPYSBF,FILE,DUMMY

COMMAND- REWIND,DUMMY

COMMAND- BATCH,DUMMY,PRINT,__,NAME.
```

(NAME is a four-character identification code and __ is a two-character USER-ID code for a receiving terminal)

```
COMMAND- LOGOUT
```

To batch print at the user's terminal for shorter printouts, after the ATTACH command, the user types

```
COMMAND- CONNECT,OUTPUT

COMMAND- COPYSBF,FILE,OUTPUT
```

The terminal will automatically print out FILE; the user can then logout. Figure 15 is an example of an interactive printout of the PMS5 file. Notice that only 72 characters were printed in one line and the rest of the latitude/longitude numbers were printed on the next line. The entire PMS5 file would have been printed if the ESCAPE key and "%A" had not been typed in the middle of the printout. The computer reprinted the entire line during which it was interrupted, and then indicated USER ABORT and asked for the next COMMAND.

Additional Instructions

While working with the CDC 6700 computer at NSRDC, the user may have many programs and data files available in permanent disk storage. These files have been cataloged as permanent files. Usually there is a retention period of 30 days assigned to a newly cataloged file, which means that if the file is not attached for 30 consecutive days, it will be taken off the disk and archived on magnetic tape at NSRDC. The file is not lost, but it cannot be attached automatically with a COMMAND statement. The user would have to call NSRDC User Services 202-227-1907,* explain the necessity of the file, and request that it

*This phone number is subject to change.

```
NSRDC 66ØØ INTERCOM U4.5
DATE Ø6/14/77
TIME 17.11.5Ø.
LOGIN,PUAJDAVIDS,1189Ø438Ø1

Ø6/14/77   LOGGED IN AT  17.12.11.
           WITH USER-ID ØU
           EQUIP/PORT Ø2/Ø27

LOGIN      UPDATED Ø5/27/77  TODAY IS Ø6/14/77
   66ØØ INTERACTIVE ACCESS, PRINT SYSBULI  (BATCH)

COMMAND- ATTACH,PMS5,ID=PUAJ
 PFN IS PMS5
 PF CYCLE NO. = ØØ1
COMMAND- CONNECT,OUTPUT
COMMAND- COPYSBF,PMS5,OUTPUT

M5237222Ø   R 175CLAYTON        CLAYTON LAKE          OK3
435 9521
M5237222Ø   S 175CLAYTON        CLAYTON LAKE          OK3
435 9521
M5237222Ø   O 375CLAYTON        CLAYTON LAKE          OK3
435 9521
M5237       R 175COLGATE        PARKER RESERVOIR      OK
M5237       R 175DURANT         ALBANY LAKE           OK3
36Ø 9623
M5237       R 175DURANT         CENTRAL OKLAHOMA      OK3
360 9623
M5237424    R 175PONCA CITY     K%A                   OK3
M5237424    R 175PONCA CITY     KAW LAKE              OK3

USER ABORT
COMMAND- LOGOUT
```

Figure 15. Example interactive printout of the PMS5 file.

be taken out of the archives and placed back on the disk. The user will have to identify the file by its permanent file name and the date of its last attachment. An extra charge will be assessed for this service.

The user can obtain a list of all the permanent files currently on the disk by running an AUDIT of the files. After LOGIN, the user types

```
COMMAND- CONNECT,OUTPUT

COMMAND- AUDIT,ID=PUAJ,AC=1189043801,AI=I
```

The complete audit file will then be printed on the user's terminal. If it is preferable to have it printed elsewhere, the user would not connect OUTPUT, but would run the AUDIT command and batch print the output elsewhere by typing

```
COMMAND- BATCH,OUTPUT,PRINT,__,NAME.
```

From the printout, the user may identify which files have not been attached for some time and proceed to attach them. However, since the quantity of files is large, a short program has been written to accomplish the attaching of all the files. It is called ATTACHPF and can be used as follows after LOGIN,

```
COMMAND- AUDIT,ID=PUAJ,AC=1189043801,AI=I

COMMAND- REWIND,OUTPUT

COMMAND- ATTACH,AGO,ATTACHPF,ID=PUAJ

COMMAND- AGO.

COMMAND- REWIND, TAPE5

COMMAND- BATCH, TAPE5, INPUT, HERE
```

The ATTACHPF program will attach everything in disk storage under the user ID=PUAJ, including the NC, OF, NF, and DN files which were cataloged during REMAP analyses. Since storage charges can mount up, the user should judiciously remove from storage files which are no longer needed. Files can be removed by means of the PURGE command, but care must be exercised to insure that THE MAIN PROGRAMS USED IN REMAP ARE NEVER PURGED. A list of these necessary program names can be found in Appendix F. Suppose the user no longer needed a file named OLDFILE and wanted to PURGE this file; after LOGIN, the user would type

```
COMMAND- ATTACH,OLDFILE,ID=PUAJ
```

```
COMMAND- PURGE,OLDFILE,ID=PUAJ
```

When OLDFILE was attached, it was a permanent file. It would show up in the local files as *OLDFILE; after purging, the asterisk is removed and OLDFILE becomes a local file. Thus, if the user accidentally purges the wrong file, it still exists as a local file and can be recataloged as permanent by typing

```
COMMAND- REQUEST,TEMP,*PF

COMMAND- COPYCR,OLDFILE,TEMP

COMMAND- REWIND,TEMP

COMMAND- CATALOG,TEMP,OLDFILE,ID=PUAJ
```

However, if the user logs out or is disconnected while OLDFILE is a local file, it will be permanently erased and lost.

5 CONCLUSIONS

This report has described operating procedures and input preparation for a model developed to evaluate alternate assignments of real estate activity locations to existing and/or new locations of Division, District, field, and project offices. The model, entitled Real Estate Model of Activity Performance (REMAP), can provide users with expected activity workloads, performance costs, and manpower requirements for selected assignments of nine real estate activities. The REMAP evaluation procedures can be used by DAEN-RE in its analysis and management of field organization options.

APPENDIX A:

DIVISION CODES

AØ	Lower Mississippi Valley Division (LMVD)
CØ	Missouri River Division (MRD)
DØ	New England Division (NED)
EØ	North Atlantic Division (NAD)
FØ	North Central Division (NCD)
GØ	North Pacific Division (NPD)
HØ	Ohio River Division (ORD)
KØ	South Atlantic Division (SAD)
LØ	South Pacific Division (SPD)
MØ	Southwestern Division (SWD)

APPENDIX B:

BEGIN PARAMETERS

Name	Symbol	Values	Definition	Restrictions
Activity	A	A - Acquisition (Pre) B - Acquisition (Post) C - Compliance D - Disposals I - Inleasing O - Outgranting P - Project Planning R - Relocation Assistance U - Utilization		No default value. One of these values must be specified.
Type	T	1 - Existing and Closest Assignments 2 - Partial Reassignment 3 - Assignment based on State Boundaries		One of the values must be specified. T = 3 can be used only with Activities A, B, I and P.
Year	YR	Ø-9	Last digit in the fiscal year	A value must be specified. Data exist for FY75, 76.
List	L	C - Create a list of centers. N - No change to an existing list. AD - Add to an existing list.		Default value is N. If L=C, then user must define a unique name for NC.
Run	R	Y-Yes N-No	Will MAPDATA be run?	Default value is N. If L≠N, then R=Y. If R=Y, then user must define unique names for NF and DN.

Name	Symbol	Values	Definition	Restrictions
Write	W	Y-Yes N-No	Will OUTPUT be written directly on the user's terminal?	Default value is N.
Old Centers	OC	These are permanent file names, and are alpha-numeric words of seven characters.		First character is alphabetic. Default name for OC is EXDDF. Default value for NC is EXDD2, which is a duplicate copy of EXDDF. NF and DN must be specified.
New Centers	NC			
Name of File	NF			
Division Names	DN			

APPENDIX C:

COMPLETE INTERACTIVE RESPONSES TO
EXAMPLE PROBLEMS

Example 1

```
NSRDC 66ØØ INTERCOM V4.5
DATE  Ø6/27/77
TIME  16.28.34.
loginpuaj,1189Ø438Ø1
FORMAT ERROR
READY..login,puajdavids,1189Ø438Ø1

Ø6/27/77   LOGGED IN AT 16.29.17.
           WITH USER-ID ØU
           EQUIP/PORT Ø2/Ø24

LOGIN      UPDATED Ø5/27/77  TODAY IS Ø6/27/77
  66ØØ INTERACTIVE ACCESS, PRINT SYSBULL(BATCH)

COMMAND- attach,f,profile,id=puaj
 PF CYCLE NO. = ØØ2
COMMAND- etl,5ØØ
COMMAND-begin(ex,f,a=i,t=l,yr=6,r=y,nf=inlex,dn=inlexdn)
 PF CYCLE NO. = ØØl
 PF CYCLE NO. = ØØ2
 PF CYCLE NO. = ØØ3
 PF CYCLE NO. = ØØ4
 PF CYCLE NO. = ØØ1
 PF CYCLE NO. = ØØ2
WANT TO CHANGE ANY VALUE(S) OF COST/UNIT,MAN YR/UNIT,
NO. OF TRIP,FIXED COST/OFFICE,FIXED MAN YR/OFFICE,AVG WAGE/DAY?
IF YES TYPE Y;OTHERWISE TYPE N:
   CM LWA+1 = 21251B, LOADER USED  33ØØBn
WANT TO DELETE ANY DISTRICT? TYPE Y OR N:n
THANK YOU.

     STOP
       .Ø76 CP SECONDS EXECUTION TIME
   CM LWA+1 = 26246B, LOADER USED  4Ø3ØØB
     STOP
    131.953 CP SECONDS EXECUTION TIME
NEWCYCLE CATALOG
RP = Ø3Ø DAYS
CT ID=     PUAJ PFN=INDEX
CT CY= ØØ2  ØØØØØ281 PRUS  $ØØØØ.7Ø /DAY
NEWCYCLE CATALOG
RP = Ø3Ø DAYS
CT ID=     PUAJ PFN=INLEXDN
```

```
CT CY= ØØ2 ØØØØØØØ4 PRUS  $ØØØØ.Ø1 /DAY
PF CYCLE NO. = ØØ2
  CM LWA+1 = 37151B, LOADER USED  512ØØB
     END  IMAP1
    32.185 CP SECONDS EXECUTION TIME
COMMAND- rewind,output
COMMAND- batch,output,print,yx,chun
  FILE ICHUN28 SENT,  DC=PR
```

THIS IS A TYPE 1 MAPDATA PROGRAM FOR INLEASING ACTIVITY.

THE FOLLOWING OFFICES ARE USED FOR ASSIGNMENT:

A0	LMVD
A1	MEMPHIS
A2	NEW ORLEANS
A3	ST. LOUIS
A4	VICKSBURG
C0	MRD
C1	KANSAS CITY
D0	NED
D1	BOSTON
E0	NAD
E1	BALTIMORE
E3	NEW YORK
E4	NORFOLK
E5	PHILADELPH
F0	NCD
F2	CHICAGO
G0	NPD
G2	PORTLAND
G3	SEATTLE
G4	WALLA WALL
H0	ORD
H1	HUNTINGTON
H2	LOUISVILLE
H3	NASHVILLE
H4	PITTSBURGH
K0	SAD
K3	JACKSONVIL
K5	MOBILE
K6	SAVANNAH
L0	SPD
L1	LOS ANGELE
L2	SACRAMENTO
M0	SWO
M1	ALBUQUERQU
M2	FT. WORTH
M3	GALVESTON
M4	LITTLE ROC
M5	TULSA

THE FOLLOWING MASTER FILE RECORDS HAVE NOT BEEN ASSIGNED DUE TO ONE OF THE FOLLOWING REASONS
1.NO MATCH WAS FOUND FOR THIS RECORD IN THE LAT/LONG FILE
2.THE DIV/DIST CODE FOR THIS RECORD WAS NOT FOUND IN THE DIVDISTOFFICEDATA FILE

AGANA GUAM	GQ	ZZ	R
ALAMOGORDO	4R	M1	R
ALDENVILLE	42	E1	N
ALEXANDRIA	4R	M2	R
ANGLETON TX	4R	M3	N
ANNE ARUNDEL	24	E1	N
ANSAS CITY	20	C1	N
ARNOLD	29	C1	N
ASHFORD	09	E3	N
ATCHISON	29	C1	N
BALBOA	PQ	ZZ	R
BARRINGTON	33	E3	N
BERLIN	50	E3	N
BOLIVAR	54	E1	N
BRANDON	47	K5	N
CANFIELD	39	E1	N
CANOGA PARK	06	L1	N
CARLE PLACE	36	E3	N
CHAPLIN	09	E3	N
CHAS HEIGHTS	45	K6	N
CLARKSVILLE	1R	C2	N
CODY	21	M2	N
COLCHESTER	50	E3	N
COLONIE	36	E3	N
CORINTHAI CORN	2R	M3	R
DODGE CITY	29	C1	N
DORCHESTER	25	E3	N
DOUGLASSVILLE	42	E1	N
EAGAN	27	C2	N

EAGAN	27	C2	R
EASTHAM	25	E3	N
EDWARDSVILLE	42	E1	N
EGAN	27	C2	N
ENON	39	E1	N
ETROIT	26	C2	N
FAIRBANKS ALS	02	G1	N
FALLINGWATERS	54	E1	N
FALLON	06	L2	N
FORESTPORT	36	E3	N
FT LAUDERHILL	12	K5	N
GAMBOA	P0	K5	R
GLENDALE	54	E1	N
GRAND BAHAMA ISHF		K3	R
GR COVE SPRINGS	12	K5	N
HARWOOD MINES	42	E1	N
HEMPLE	29	C1	N
HONOLULU/HAW	15	Z7	R
HONOLULU	15	Z7	N
HONOLULU	15	Z7	R
HOPKINSVILLE	42	E1	N
ILADELPHIA PENN	42	E5	N
JACK	01	K5	R
JAMAICA	36	E3	N
JONESBORO	47	K5	N
JUNEAU ALS	02	G1	N
KAWAILOA/HONO	15	Z7	N
KEARSARGE	26	C2	N
KNOXVILLE	27	K5	R
KODIAK ALS	02	G1	N
LAGRANGE	13	K6	R
LAKEHEAD	06	L2	N
LAKE KATRINE	36	E3	N

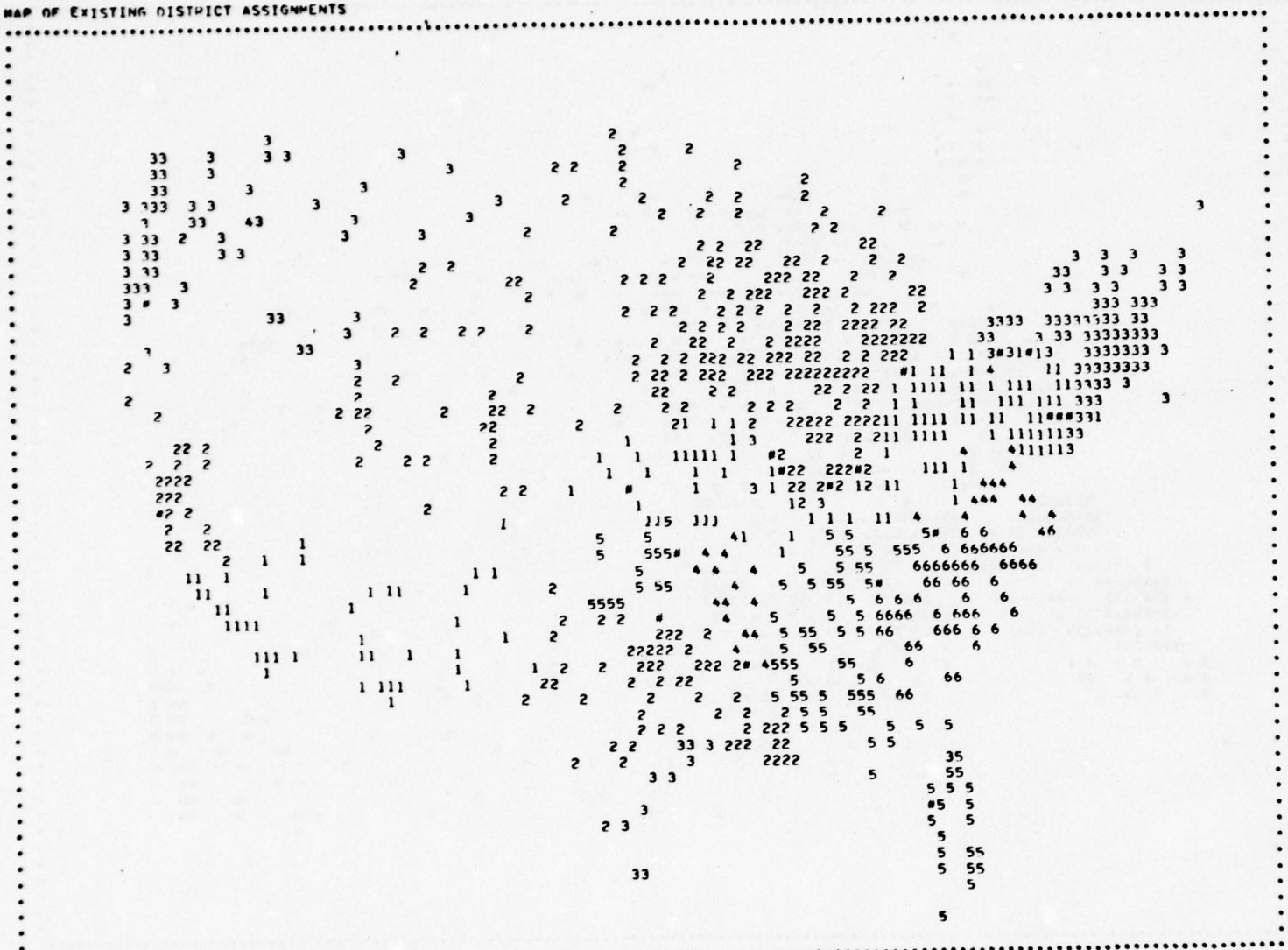
LA VISTA	31	C2	N
LEMONT FURNACE	42	E1	N
LOUISVILLE	47	K5	R
LOWELL	37	K6	N
MABSCOTT	54	E1	N
MADISON TWNSHP	34	E3	N
MAPLETON	3A	C2	N
MARSHFIELD	25	E3	N
MARYVILLE	37	K5	R
MASON CITY	18	C2	N
MECHANICUAL	36	E3	N
MESTEAD	12	K5	R
MIRALESTE	06	L1	N
MOLINE ACRES	29	C1	N
MONROE	42	E1	N
NASHVILLE	12	K5	R
NASHVILLE	4A	K5	N
NEW HOPE	51	E1	N
N CAR	37	K6	N
OFALLON	29	C1	N
OKLAHOMA CITY	32	M1	R
ONESBORO	05	M4	N
ON	01	K5	R
PANAMA CITY	PN	ZZ	N
PARLIN	34	E3	N
PENACOOK	33	E3	N
PISCATAWAY	34	E3	N
PLAINVILLE	09	E3	N
PORT RICHEY	12	K5	N
POWELL	47	K5	R
REISTERSTOWN	24	E1	N
RIDGEWAY	42	E1	N
RODMAN	PO	ZZ	N

ROWLAND HEIGHTS	06	L1	N
SALTLAKECITY	49	L2	N
SANDY	49	L2	N
SARGENT BLUFF	19	C2	R
SCOTLAND	09	E3	N
SCOTTSVILLE	36	E3	N
SEWARD ALASKA	02	G1	N
SEWARD AL S	02	G1	N
SHABBONA	17	C2	N
SHORT CREEK	39	E1	R
SIERRA	32	M1	R
SOMERS POINT	34	E3	N
SOMERS PT	34	E3	N
SPANISH FORK	49	L2	N
STAFFORD	36	E3	N
STOW	39	E1	N
SWOYERSVILLE	42	E1	N
TARZANA	04	L1	N
TEMPLE TERRACE	12	K5	N
TIERRA DEL MAR	41	G3	N
TIGRETT	47	K5	N
TOPEKA	29	C1	N
TRAVERSE	26	C2	N
TUJUNGA	04	L1	N
ULSA OKLA	40	M5	N
WAHIAWA/HONO	15	ZZ	N
WAHIAWA/HONO	15	ZZ	R
WALWORTH	36	E3	R
WATERFORD	09	E3	N
WATSON	26	C2	R
WESLACO TX	48	M3	N
WESTHMPTN BEACH	36	E3	N
WESTPORT	25	E3	N

```
WEST GORHAM     23          E3 N

WEST WILLINGTON09           E3 N

          NOE   04          L1 N

 SAN JOSE       06          L2 N



END OF LAT/LONG FILE
RECORDS READ    3607
RECORDS WITH LAT/LONG OUT OF RANGE     382
RECORDS WHICH WERE NOT MATCHED    1788



END OF MASTER FILE ENCOUNTERED
MASTER FILE RECORDS READ.  1763
MASTER FILE RECORDS WHICH WERE NOT MATCHED     132



NUMBER  OF RECORDS WRITTEN IS    1631



THIS IS A TYPE 1 MAP PROGRAM FOR INCREASING ACTIVITY

THE FOLLOWING VALUES ARE USED IN THE PARAMETERS:

COST/UNIT=       239.000
MAN YR/UNIT=        .140
NO. OF TRIP=       1.000
FIXED COST/OFFICE=    10650.000
FIXED MAN YR/OFFICE=          .273
AVG WAGE/DAY=       61.470



3262 RECORDS READ FROM THE MASTER FILE
```

MAP OF EXISTING DIVISION ASSIGNMENTS

MAP OF EXISTING DISTRICT ASSIGNMENTS



MAP OF DIVISION ASSIGNMENTS USING CLOSEST OPEN DISTRICT OFFICE

MAP OF DISTRICT ASSIGNMENTS USING CLOSEST OPEN DISTRICT OFFICE

THE FOLLOWING DISTRICT WORKLOADS WERE CALCULATED USING
ASSIGNMENT OF THE EXISTING DISTRICT OFFICE

DIVISION	INCREASING TYPE	WORKLOAD (UNITS)	COST($)	EFF. MAN/YR
A: LMVD				
	R	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A1 AT MEMPHIS		1	10889.00	.41
	N	4	956.00	.56
ACT TOTAL		4	956.00	.56
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A2 AT NEW ORLEAN		4	11606.00	.83
	N	4	956.00	.56
	R	1	239.00	.14
ACT TOTAL		5	1195.00	.70
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A3 AT ST. LOUIS		5	11845.00	.97
	N	13	3107.00	1.82
	R	2	478.00	.28
ACT TOTAL		15	3585.00	2.10
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A4 AT VICKSBURG		15	14235.00	2.37
	N	21	5019.00	2.94
	R	4	956.00	.56
ACT TOTAL		25	5975.00	3.50
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		25	48575.00	4.59
C1: MRD				
	N	85	20315.00	11.90
	R	35	8365.00	4.90
ACT TOTAL		120	28680.00	16.80
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C1 AT KANSAS CIT		120	39330.00	17.07

	N	564	134796.00	78.96
	R	271	64769.00	37.94
ACT TOTAL		835	199565.00	116.90
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C2 AT OMAHA		835	210215.00	117.17
	N	649	155111.00	90.84
	R	306	73134.00	42.84
ACT TOTAL		955	228245.00	133.70
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		955	249545.00	134.25

D1 NED

ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT D1 AT BOSTON		0	10650.00	.27
ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		0	10650.00	.27

E1 NAO

	N	351	83889.00	49.14
	R	17	4063.00	2.38
ACT TOTAL		368	87952.00	51.52
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E1 AT BALTIMORE		368	98602.00	51.79
	N	449	107311.00	62.86
	R	20	4780.00	2.80
ACT TOTAL		469	112091.00	65.66
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E3 AT NEW YORK		469	122741.00	65.93
	N	45	10755.00	6.30
ACT TOTAL		45	10755.00	6.30
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E4 AT NORFOLK		45	21405.00	6.57

	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E5 AT PHILADELPH		1	10889.00	.41
	N	846	702194.00	118.44
	R	37	8843.00	5.18
ACT TOTAL		883	211037.00	123.62
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		883	253637.00	124.71

F1 NCD

	N	5	1195.00	.70
	R	8	1912.00	1.12
ACT TOTAL		13	3107.00	1.82
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT F2 AT CHICAGO		13	13757.00	2.09
	N	5	1195.00	.70
	R	8	1912.00	1.12
ACT TOTAL		13	3107.00	1.82
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		13	13757.00	2.09

G1 NPD

	N	2	478.00	.28
ACT TOTAL		2	478.00	.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G2 AT PORTLAND		2	11128.00	.55
	N	191	45849.00	26.74
	R	19	4541.00	2.66
ACT TOTAL		210	50190.00	29.40
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G3 AT SEATTLE		210	60840.00	29.67
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G4 AT WALLA WALL		1	10889.00	.41

	N	194	44366.00	27.16
	N	19	4541.00	2.64
ACT TOTAL		213	50907.00	29.82
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		213	82857.00	30.64
M1 OHO				
ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M1 AT HUNTINGTON		0	10650.00	.27
	N	4	956.00	.56
ACT TOTAL		4	956.00	.56
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M2 AT LOUISVILLE		4	11606.00	.83
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M3 AT NASHVILLE		1	10889.00	.41
	N	2	478.00	.28
ACT TOTAL		2	478.00	.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M4 AT PITTSBURGH		2	11128.00	.55
	N	7	1673.00	.98
ACT TOTAL		7	1673.00	.98
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		7	44273.00	2.07
M2 SAD				
	R	6	1434.00	.84
ACT TOTAL		6	1434.00	.84
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M1 AT JACKSONVIL		6	12084.00	1.11

	N	274	45646.00	38.36
	R	291	48549.00	40.74
ACT TOTAL		565	135035.00	79.10
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K5 AT MOBILE		565	145685.00	79.37
	N	139	33221.00	19.46
	R	17	4063.00	2.38
ACT TOTAL		156	37284.00	21.84
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K6 AT SAVANNAH		156	47934.00	22.11
	N	413	98707.00	57.82
	R	314	75046.00	43.96
ACT TOTAL		727	173753.00	101.78
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		727	205703.00	102.60
L1 SMD				
	N	271	64769.00	37.94
	R	26	6214.00	3.64
ACT TOTAL		297	70983.00	41.58
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L1 AT LOS ANGELE		297	81633.00	41.85
	N	135	32265.00	18.90
	R	10	2390.00	1.40
ACT TOTAL		145	34655.00	20.30
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L2 AT SACHAMENTO		145	45305.00	20.57
	N	406	97034.00	56.84
	R	36	8604.00	5.04
ACT TOTAL		442	105638.00	61.88
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		442	126938.00	62.43
M1 SMD				
	N	18	4302.00	2.52
	R	12	2868.00	1.68
ACT TOTAL		30	7170.00	4.20
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M1 AT ALBUQUERQU		30	17820.00	4.47

	N	118	24202.00	16.52
	P	73	17447.00	10.22
ACT TOTAL		191	45649.00	26.74
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M2 AT FT. WORTH		191	56299.00	27.01
	N	52	12428.00	7.28
ACT TOTAL		52	12428.00	7.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M3 AT GALVESTON		52	23078.00	7.55
	N	16	3824.00	2.24
	P	13	3107.00	1.82
ACT TOTAL		29	6931.00	4.06
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M4 AT LITTLE ROC		29	17581.00	4.33
	N	40	9560.00	5.60
	P	2	478.00	.28
ACT TOTAL		42	10038.00	5.88
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M5 AT TULSA		42	20688.00	6.15
	N	244	58316.00	34.16
	P	100	23900.00	14.00
ACT TOTAL		344	82216.00	48.16
ACT FIXED			53250.00	1.37
TOTAL FOR THE DIVISION		344	135466.00	49.52
COMPLETE TOTAL THIS ASSIGNMENT		3609	1171481.00	513.18

THE FOLLOWING DISTRICT WORKLOADS WERE CALCULATED USING ASSIGNMENT TO THE CLOSEST DISTRICT OFFICE

DIVISION	LEASING TYPE	WORKLOAD (UNITS)	COST($)	EFF. MAN/YR
A1 LMVD				
	N	14	1278.86	1.92
	R	8	907.25	1.10
ACT TOTAL		22	2186.11	3.02
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A1 AT MEMPHIS		22	12836.11	3.29
	N	34	1808.18	4.65
	R	10	1130.06	1.38
ACT TOTAL		44	2938.24	6.03
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A2 AT NEW ORLEAN		44	13588.24	6.30
	N	41	5274.10	5.66
	R	23	2747.17	3.17
ACT TOTAL		64	8021.27	8.83
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A3 AT ST. LOUIS		64	18671.27	9.11
	N	36	6851.40	5.01
	R	9	1777.66	1.25
ACT TOTAL		45	8629.06	6.26
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A4 AT VICKSHUNG		45	19279.06	6.53
	N	125	15212.54	17.24
	R	50	6562.14	6.90
ACT TOTAL		175	21774.68	24.14
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		175	64374.68	25.23
C1 WCD				
	N	52	12486.89	7.28
	R	24	5732.03	3.36
ACT TOTAL		76	18136.92	10.64
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C1 AT KANSAS CIT		76	28786.92	10.91

	N	186	44159.15	26.03
	M	82	19443.29	11.46
ACT TOTAL		268	63352.44	37.51
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C2 AT OMAHA		268	74302.44	37.79
	N	236	56566.04	33.31
	R	106	25225.32	14.84
ACT TOTAL		344	81791.36	48.15
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		344	103091.36	48.70
D: NED				
	N	209	36910.59	29.02
	R	14	2602.74	1.95
ACT TOTAL		223	39513.33	30.96
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT D1 AT BOSTON		223	50163.33	31.23
	N	209	36910.59	29.02
	R	14	2602.74	1.95
ACT TOTAL		223	39513.33	30.96
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		223	50163.33	31.23
E: MAD				
	N	152	36212.62	21.28
	R	5	1195.00	.78
ACT TOTAL		157	37407.62	21.98
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E1 AT BALTIMORE		157	48057.62	22.25
	N	183	43495.30	25.62
	R	5	1162.31	.78
ACT TOTAL		188	44657.61	26.32
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E3 AT NEW YORK		188	55307.61	26.59
	N	60	11187.95	8.32
	R	3	541.99	.42

ACT TOTAL		63	11729.94	8.74
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT F- AT NORFOLK		63	22379.94	9.01
	N	92	18036.28	12.77
	R	3	683.05	.42
ACT TOTAL		95	18719.33	13.19
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E5 AT PHILADELPH		95	29369.33	13.47
	N	487	104932.15	68.00
	R	16	3582.35	2.24
ACT TOTAL		503	112514.50	70.23
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		503	155114.50	71.33

F2 ACD

	N	282	25115.52	38.73
	R	117	10535.29	16.08
ACT TOTAL		399	35650.81	54.81
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT F2 AT CHICAGO		399	46300.81	55.08
	N	282	25115.52	38.73
	R	117	10535.29	16.08
ACT TOTAL		399	35650.81	54.81
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		399	46300.81	55.08

G1 NPD

	N	71	11726.70	9.85
	R	6	982.35	.83
ACT TOTAL		77	12709.05	10.68
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G2 AT PORTLAND		77	23359.05	10.96
	N	83	19837.00	11.62
	R	5	1195.00	.70
ACT TOTAL		88	21032.00	12.32
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G3 AT SEATTLE		88	31682.00	12.59

	N	53	7895.67	7.34
	R	13	2178.10	1.80
ACT TOTAL		66	10073.77	9.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT 64 AT WALLA WALL		66	20723.77	9.41
	N	207	39459.37	28.81
	R	24	4355.45	3.33
ACT TOTAL		231	43814.82	32.14
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		231	75764.82	32.96

--M1 ORD

	N	70	8935.52	9.64
	R	4	709.72	.55
ACT TOTAL		74	9645.24	10.20
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M1 AT HUNTINGTON		74	20295.24	10.47
	N	67	3101.31	9.15
	R	18	152.72	2.44
ACT TOTAL		85	3254.03	11.59
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M2 AT LOUISVILLE		85	13904.04	11.87
	N	74	9790.70	10.21
	R	34	3118.34	4.67
ACT TOTAL		108	12909.04	14.88
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M3 AT NASHVILLE		108	23559.04	15.15
	N	117	17130.40	16.17
	R	20	1650.86	2.74
ACT TOTAL		137	18781.46	18.91
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M4 AT PITTSBURGH		137	29431.46	19.18

	N	328	38958.13	45.18
	W	76	5631.63	10.41
ACT TOTAL		404	44589.77	55.58
ACT FIXED			42610.00	1.09
TOTAL FOR THE DIVISION		404	87199.77	56.67

K1 SAD

	N	150	16775.44	20.66
	P	207	24717.59	28.54
ACT TOTAL		357	41493.03	49.20
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K3 AT JACKSONVIL		357	52143.03	49.47
	N	34	8113.29	4.76
	R	43	10277.00	6.02
ACT TOTAL		77	18390.29	10.78
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K5 AT MOBILE		77	29040.29	11.05
	N	64	15296.00	8.96
	R	9	2151.00	1.26
ACT TOTAL		73	17447.00	10.22
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K6 AT SAVANNAH		73	28097.00	10.49

	N	248	40184.73	34.38
	W	259	37145.59	35.42
ACT TOTAL		507	77330.32	70.20
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		507	109280.32	71.02

L1 SPD

	N	112	26713.44	15.68
	R	20	4779.87	2.80
ACT TOTAL		132	31493.30	18.48
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L1 AT LOS ANGELE		132	42143.30	18.75
	N	119	28190.91	16.66
	R	8	1786.95	1.12
ACT TOTAL		127	29977.86	17.77
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L2 AT SACHAMENTO		127	40627.86	18.05

	N	231	54904.34	32.34
	R	28	6566.82	3.92
ACT TOTAL		259	61471.16	36.25
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		259	82771.16	36.80

M: SWD

	N	226	43947.13	31.59
	R	52	10373.80	7.26
ACT TOTAL		278	54320.93	38.84
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M1 AT ALBUQUERQU		278	64970.93	39.12

	N	62	14685.23	8.68
	R	46	10994.00	6.44
ACT TOTAL		108	25679.22	15.12
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M2 AT FT. WORTH		108	36329.22	15.39

	N	65	15166.00	9.09
	R	14	3158.70	1.96
ACT TOTAL		79	18324.70	11.05
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M3 AT GALVESTON		79	28974.70	11.32

	N	25	5383.96	3.50
	R	14	3296.30	1.96
ACT TOTAL		39	8680.26	5.46
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M4 AT LITTLE ROC		39	19330.26	5.73

	N	52	12181.81	7.28
	R	8	1746.62	1.12
ACT TOTAL		60	13928.43	8.40
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT MS AT TULSA		60	24578.43	8.67
	N	430	91364.12	60.14
	R	134	29569.41	18.73
ACT TOTAL		564	120933.54	78.87
ACT FIXED			53250.00	1.37
TOTAL FOR THE DIVISION		564	174183.54	80.23
COMPLETE TOTAL THIS ASSIGNMENT		3609	948234.29	509.26
COMPLETE TOTAL THIS ASSIGNMENT		3609	948234.29	509.26

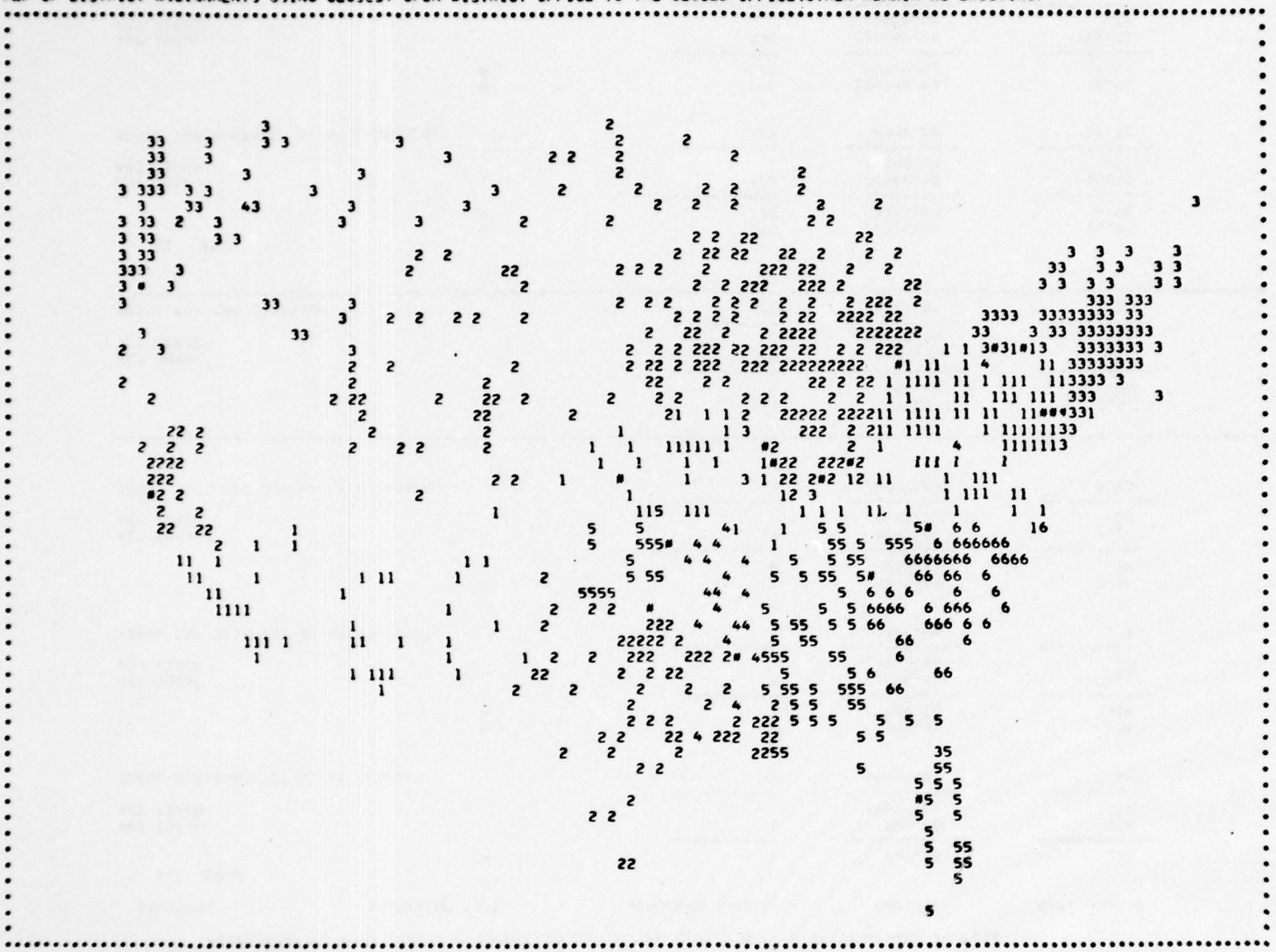
Example 2

```
COMMAND- attach,f,profile,id=puaj
 PP CYCLE NO. = ØØ1
COMMAND- begin(ex,f,a=i,t=2,yr=6,nf=inlex,dn=inlexdn)

WANT TO CHANGE ANY VALUE(S) OF COST/UNIT,MAN YR/UNIT,
NO. OF TRIP,FIXED COST/OFFICE,FIXED MAN YR/OFFICE, AVG WAGE/DAY?
IF YES TYPE Y;OTHERWISE TYPE N:
 PF CYCLE NO. = ØØ1
 PF CYCLE NO. = ØØ2
   CM LWA+1 = 21251B, LOADER USED 333ØØBn
WANT TO DELETE ANY DISTRICT? TYPE Y OR N:y
PLEASE ENTER THE DIVISION NAME(S) AND DISTRICT NO.(S) WHICH ARE
TO BE DELETED WITH ONE BLANK IN BETWEEN AND ENTER THEM ALL IN
ONE LINE
m3 a2 e4
THANK YOU.

     STOP
       .140 CP SECONDS EXECUTION TIME
 PF CYCLE NO. = ØØ2
 PF CYCLE NO. = ØØ2
 PF CYCLE NO. = ØØ2
   CM LWA+1 = 31571B, LOADER USED 436ØØB
     END IMAP2
     26.452 CP SECONDS EXECUTION TIME
```

```
THIS IS A TYPE 2 MAP PROGRAM FOR INLEASING ACTIVITY

THE FOLLOWING VALUES ARE USED IN THE PARAMETERS:

COST/UNIT=       239.000
MAN YR/UNIT=        .140
NO. OF TRIP=       1.000
FIXED COST/OFFICE=    10650.000
FIXED MAN YR/OFFICE=          .273
AVG WAGE/DAY=        64.790



      1631 RECORDS READ FROM THE MASTER FILE

THE FOLLOWING DISTRICTS WERE CLOSED
M3 A2 E4
```

MAP OF DIVISION ASSIGNMENTS USING CLOSEST OPEN DISTRICT OFFICE TO THE CLOSED OFFICE(OTHER REMAIN AS EXISTING)

MAP OF DISTRICT ASSIGNMENTS USING CLOSEST OPEN DISTRICT OFFICE TO THE CLOSED OFFICE(OTHER REMAIN AS EXISTING)



THE FOLLOWING DISTRICT WORKLOADS WERE CALCULATED USING
ASSIGNMENT TO THE CLOSEST DISTRICT OFFICE OF THE CLOSED OFFICE(OTHER REMAIN AS EXISTING

DIVISION	INLEASING TYPE	WORKLOAD (UNITS)	COST($)	EFF. MAN/YR
A: LMVD				
	R	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A1 AT MEMPHIS		1	10889.00	.41
	N	4	956.00	.56
	R	1	239.00	.14
ACT TOTAL		5	1195.00	.70
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A3 AT ST. LOUIS		5	11845.00	.97
	N	17	4219.05	2.38
	R	2	478.00	.28
ACT TOTAL		19	4697.05	2.66
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A4 AT VICKSBURG		19	15347.05	2.93
	N	21	5175.05	2.94
	R	4	956.00	.56
ACT TOTAL		25	6131.05	3.50
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		25	38081.05	4.32
C: MRD				
	N	85	20315.00	11.90
	R	35	8365.00	4.90
ACT TOTAL		120	28680.00	16.80
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C1 AT KANSAS CIT		120	39330.00	17.07
	N	564	134796.00	78.96
	R	271	64769.00	37.94
ACT TOTAL		835	199565.00	116.90
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C2 AT OMAHA		835	210215.00	117.17

	N	649	155111.00	90.86
	R	306	73134.00	42.84
ACT TOTAL		955	228245.00	133.70
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		955	249545.00	134.25
D1 WED				
ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT D1 AT BOSTON		0	10650.00	.27
ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		0	10650.00	.27
E1 MAD				
	N	387	93025.17	54.19
	R	17	4063.00	2.38
ACT TOTAL		404	97088.17	56.57
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E1 AT BALTIMORE		404	107738.17	56.84
	N	449	107311.00	62.86
	R	20	4780.00	2.80
ACT TOTAL		469	112091.00	65.66
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E3 AT NEW YORK		469	122741.00	65.93
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E5 AT PHILADELPH		1	10889.00	.41
	N	837	200575.17	117.19
	R	37	8843.00	5.18
ACT TOTAL		874	209418.17	122.37
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		874	241368.17	123.19

AD-A057 146 CONSTRUCTION ENGINEERING RESEARCH LAB (ARMY) CHchampai--ETC F/G 5/1
REAL ESTATE MODEL OF ACTIVITY PERFORMANCE (REMAP) USER'S MANUAL--ETC(U)
JUL 78 C P ALTHEIDE

UNCLASSIFIED CERL-TR-P-89 NL

2 OF 3
AD
A057 146

F1 MCD				
	N	5	1195.00	.70
	R	8	1912.00	1.12
ACT TOTAL		13	3107.00	1.82
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT F2 AT CHICAGO		13	13757.00	2.09
	N	5	1195.00	.70
	R	8	1912.00	1.12
ACT TOTAL		13	3107.00	1.82
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		13	13757.00	2.09
G1 NPD				
	N	2	478.00	.28
ACT TOTAL		2	478.00	.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G2 AT PORTLAND		2	11128.00	.55
	N	191	45649.00	26.74
	R	19	4541.00	2.66
ACT TOTAL		210	50190.00	29.40
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G3 AT SEATTLE		210	60840.00	29.67
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G4 AT WALLA WALL		1	10889.00	.41
	N	194	46366.00	27.16
	R	19	4541.00	2.66
ACT TOTAL		213	50907.00	29.82
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		213	82857.00	30.64
H1 ORD				
	N	9	1696.14	1.25

.1 TOTAL		9	1696.14	1.25
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT #1 AT HUNTINGTON		9	12346.14	1.53
	N	4	956.00	.56
ACT TOTAL		4	956.00	.56
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT #2 AT LOUISVILLE		4	11606.00	.83
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT #3 AT NASHVILLE		1	10889.00	.41
	N	2	478.00	.28
ACT TOTAL		2	478.00	.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT #4 AT PITTSBURGH		2	11128.00	.55
	N	16	3369.14	2.23
ACT TOTAL		16	3369.14	2.23
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		16	45969.14	3.33
#1 SAD				
	R	6	1434.00	.84
ACT TOTAL		6	1434.00	.84
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT #3 AT JACKSONVIL		6	12084.00	1.11
	N	276	66056.36	38.64
	R	291	69549.00	40.74
ACT TOTAL		567	135605.36	79.38
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT #5 AT MOBILE		567	146255.36	79.65
	N	139	33221.00	19.46
	R	17	4063.00	2.38
ACT TOTAL		156	37284.00	21.84
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT #6 AT SAVANNAH		156	47934.00	22.11

	N	415	99277.36	58.10
	R	314	75046.00	43.96
ACT TOTAL		729	174323.36	102.06
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		729	206273.36	102.88
L1 SPD				
	N	271	44769.00	37.94
	R	26	6214.00	3.64
ACT TOTAL		297	70983.00	41.58
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L1 AT LOS ANGELE		297	81633.00	41.85
	N	135	32265.00	18.90
	R	10	2390.00	1.40
ACT TOTAL		145	34655.00	20.30
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L2 AT SACRAMENTO		145	45305.00	20.57
	N	406	97034.00	56.84
	R	36	8604.00	5.04
ACT TOTAL		442	105638.00	61.88
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		442	126938.00	62.43
M1 SWD				
	N	18	4307.00	2.52
	R	12	2868.00	1.68
ACT TOTAL		30	7170.00	4.20
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M1 AT ALBUQUERQU		30	17820.00	4.47
	N	167	43749.60	23.43
	R	73	17447.00	10.22
ACT TOTAL		240	61196.60	33.65
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M2 AT FT. WORTH		240	71846.60	33.92
	N	17	3952.80	2.38
	R	13	3107.00	1.82

ACT TOTAL		30	7059.80	4.20
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M4 AT LITTLE ROC		30	17709.81	4.47
	N	40	9560.00	5.60
	R	2	478.00	.28
ACT TOTAL		42	10038.00	5.88
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M5 AT TULSA		42	20688.00	6.15
	N	242	61564.40	33.93
	R	100	23900.00	14.00
ACT TOTAL		342	85464.40	47.93
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		342	128064.40	49.02
COMPLETE TOTAL THIS ASSIGNMENT		3609	1143503.12	512.41
COMPLETE TOTAL THIS ASSIGNMENT		3609	1143503.12	512.41

Example 3a

```
COMMAND- begin(ex,f,a=i,t=1,yr=6,l=c,nc=div12,r=y,nf=in112,dn=in112dn)
DO YOU WANT TO CREATE THE OFFICE DIST OR JUST ADD SOME TO THE OLD ONE?
TYPE C FOR CREATE;TYPE A FOR ADD:

 PF CYCLE NO. = ØØ1
 PF CYCLE NO. = ØØ2
   CM LWA+1 = 2ØØØ3B, LOADER USED  32ØØØBc
PLEASE ENTER EACH SET OF INFORMATION IN ONE LINE IN THE FOLLOWING FORMAT

XY    ADAMLUDLM LOCATION

START FROM 1ST COLUMN,TYPE
X:DIV SYMBOL;USE ANY ALPHABETIC CHARACTER FROM A TO N EXCEPT I OR J;
Y: DISTRICT NO.;ANY NUMBER FROM Ø-9, Ø MUST BE USED FOR DIVISION OFFICE;
...DO NOT CREATE A DISTRICT CODE UNLESS A DIVISION CODE IS ALSO
  CREATED OR ALREADY EXISTS...
THEN 4 BLANKS,AND
AD: 2 DIGITS FOR DEGREE OR LATITUDE;

MD:  2 DIGITS FOR MINUTE OF LATITUDE;
LDD: 3 DIGITS FOR DEGREE OF LONGITUDE;
DM:  2 DIGITS FOR MINUTE OF LONGITUDE;
TYPE 1 BLANK,AND THEN
LOCATION:1Ø CHARACTERS FOR BRIEF NAME OF LOCATION

FOR EXAMPLE:

AØ    123456789 CERL
A1    123456789 CHAMPAIGN
BØ    379Ø 77ØØ OCE
B
B1    379Ø 77ØØ WASH D.C.

...FOR ANY DUPLICATE XY IN THE LIST, ONLY THE FIRST OCCURRENCE
 WILL BE RECOGNIZED, OTHER(S) WILL BE IGNORED. AFTER ENTERING
ALL DATA, PLEASE TYPE ++ IN THE FIRST TWO COLUMNS ON THE NEXT LINE...
aØ    3221 9Ø53 lmvd
a1    3221 9Ø53 vicksburg
cØ    4117 96Ø1 mrd
c2    4117 96Ø1 omaha
bØ    3837 9Ø12 st. louis
b3    3837 9Ø12 st. louis
eØ    4043 74ØØ nad
e4    4Ø43 74ØØ new york
fØ    4153 8738 ned
f5    4153 8738 chicago
gØ    453212237 npd
g1    453212237 portland
h6    39Ø6 8431 cincinnati
dØ    4223 7114 ned
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d6    4223 7114 boston
kØ    3345 8423 sad
control y
k7    3345 8423 atlanta
lØ    374712225 spd
l8    374712225 san franci
mØ    3247 9649 swd
m9    3247 9649 dallas
nØ    394410459 denver
n7    394410459 denver
++
THANK YOU
WANT TO CHANGE ANY VALUE(S) OF COST/UNIT,MAN YR/UNIT,
NO. OF TRIP,FIXED COST/OFFICE,FIXED MAN YR/OFFICE,AVG WAGE/DAY?
IF YES TYPE Y;OTHERWISE TYPE N:
     STOP
       .348 CP SECONDS EXECUTION TIME
INITIAL CATALOG
RP = Ø3Ø DAYS
CT ID=      PUAJ PFN=DIV12
CT CY= ØØ1  ØØØØØØØ3 PRUS $ØØØØ.Ø1 /DAY
PF CYCLE NO. = ØØ2
PF CYCLE NO. = ØØ3
PF CYCLE NO. = ØØ4
PF CYCLE NO. = ØØ1
PF CYCLE NO. = ØØ2
   CM LWA+1 = 212510, LOADER USED   33300Bn
WANT TO DELETE ANY DISTRICT? TYPE Y OR N:n
THANK YOU.

     STOP
       .Ø82 CP SECONDS EXECUTION TIME
    CM LWA+1 = 30207B, LOADER USED  42200B

     STOP
    104.341 CP SECONDS EXECUTION TIME
INITIAL CATALOG
RP = Ø3Ø DAYS
CT ID=      PUAJ PFN-INL12
CT CY= ØØ1   ØØØØØ281 PRUS   $ØØØØ.7Ø /DAY
INITIAL CATALOG
RP = Ø3Ø DAYS
CT ID=      PUAJ PFN=INL12DN
CT CY= ØØ1   ØØØØØØØ4 PRUS   $ØØØØ.Ø1 /DAY
PF CYCLE NO. = ØØ2
   CM LWA+1 = 37151B, LOADER USED  51200B
      END IMAP1
     32.616 CP SECONDS EXECUTION TIME
```

THIS IS A TYPE 2 MAPDATA PROGRAM FOR INLEASING ACTIVITY

THE FOLLOWING OFFICES ARE USED FOR THE EXISTING ASSIGNMENT:

A0 LMVD
A1 MEMPHIS
A2 NEW ORLEAN
A3 ST. LOUIS
A4 VICKSBURG
C0 MRD
C1 KANSAS CIT
C2 OMAHA
D0 NED
D1 BOSTON
E0 NAD
E1 BALTIMORE
E3 NEW YORK
E4 NORFOLK
E5 PHILADELPH
F0 NCD
F2 CHICAGO
G0 NPD
G2 PORTLAND
G3 SEATTLE
G4 WALLA WALL
H0 ORD
H1 HUNTINGTON
H2 LOUISVILLE
H3 NASHVILLE
H4 PITTSBURGH
K0 SAD
K3 JACKSONVIL
K5 MOBILE
K6 SAVANNAH
L0 SPD
L1 LOS ANGELE
L2 SACRAMENTO
M0 SWD
M1 ALBUQUERQU
M2 FT. WORTH
M3 GALVESTON
M4 LITTLE ROC
M5 TULSA

THE FOLLOWING OFFICES ARE USED FOR NEW ASSIGNMENT:

A0 LMVD
A1 VICKSBURG
C0 MRD
C2 OMAHA
B0 ST. LOUIS
B3 ST. LOUIS
E0 NAD
E4 NEW YORK
F0 NCD
F5 CHICAGO
G0 NPD
G1 PORTLAND
H0 ORD
H6 CINCINNATI
D0 NED
D6 BOSTON
K0 SAD
K7 ATLANTA
L0 SPD
L8 SAN FRANCI
M0 SWD
M9 DALLAS
N0 DENVER
N7 DENVER

THE FOLLOWING MASTER FILE RECORDS HAVE NOT BEEN ASSIGNED DUE TO ONE OF THE FOLLOWING REASONS
1.NO MATCH WAS FOUND FOR THIS RECORD IN THE LAT/LONG FILE
2.THE DIV/DIST CODE FOR THIS RECORD WAS NOT FOUND IN THE DIVDISTOFFICEDATA FILE

AGANA GUAM	00	Z2	R
ALAMOGORDO	4P	N1	R
ALDENVILLE	47	E1	N
ALEXANDRIA	4R	N2	R
ANGLETON TX	4R	N3	N
ANNE ARUNDEL	24	E1	N
ANSAS CITY	20	C1	N
ARNOLD	29	C1	N
ASHFORD	00	E1	N
ATCHISON	29	C1	N
BALBOA	P0	Z2	R
BARRINGTON	33	E1	N
BERLIN	50	E1	N
BOLIVAR	54	E1	N
BRANDON	47	K5	N
CANFIELD	30	E1	N
CANOGA PARK	0A	L1	N
CAPLE PLACE	3A	E1	N
CHAPLIN	00	E1	N
CHAS HEIGHTS	4A	KA	N
CLARKSVILLE	1A	C2	N
CODY	21	H2	N
COLCHESTER	50	E1	N
COLONIE	3A	E1	N
CORINTHALCORN	2A	H1	R
DODGE CITY	29	C1	N
DORCHESTER	2A	E1	N
DOUGLASSVILLE	47	E1	N
EAGAN	27	C2	N

EAGAN	27	C2 R
EASTHAM	25	E3 N
EDWARDSVILLE	42	E1 N
EGAN	27	C2 N
ENON	39	E1 N
ETROIT	26	C2 N
FAIRBANKS ALS	02	G1 N
FALLINGWATERS	54	E1 N
FALLON	04	L2 N
FORESTPORT	36	E3 N
FT LAUDERHILL	12	K5 N
GAMBOA	PQ	K5 R
GLENDALE	54	E1 N
GRAND HAHAMA ISHF		K3 R
GR COVE SPRINGS	12	K5 N
HARWOOD MINES	42	E1 N
HEMPLE	29	C1 N
HONOLULU/HAW	15	Z2 R
HONOLULU	15	Z2 N
HONOLULU	15	Z2 R
HOPKINSVILLE	42	E1 N
ILADELPHIA PENN	42	E5 N
JACK	01	K5 R
JAMAICA	36	E3 N
JONESBORO	47	K5 N
JUNEAU ALS	02	G1 N
KAWAILOA/HONO	15	Z2 N
KEARSARGE	26	C2 N
KNOXVILLE	27	K5 R
KODIAK ALS	02	G1 N
LAGRANGE	13	K4 R
LAKEHEAD	04	L2 N
LAKE KATRINE	36	E3 N

LA VISTA	31	C2	N
LEMONT FURNACE	42	E1	N
LOUISVILLE	47	K5	R
LOWELL	37	K6	N
MARSCOTT	56	E1	N
MADISON TWNSHP	34	E3	N
MAPLETON	3R	C2	N
MARSHFIELD	25	E3	N
MARYVILLE	37	K5	R
MASON CITY	1R	C2	N
MECHANICUAL	36	E3	N
MESTEAD	12	K5	R
MIRALESTE	06	L1	N
MOLINE ACRES	29	C1	N
MONROE	42	E1	N
NASHVILLE	12	K5	R
NASHVILLE	48	K5	N
NEW HOPE	51	E1	N
N CAR	37	K6	N
OFALLON	29	C1	N
OKLAHOMA CITY	32	M1	R
ONESBORO	05	M4	N
ON	01	K5	R
PANAMA CITY	PN	Z7	N
PARLIN	34	E3	N
PENACOOK	33	E3	N
PISCATAWAY	34	E3	N
PLAINVILLE	09	E3	N
PORT RICHEY	12	K5	N
POWELL	47	K5	R
REISTERSTOWN	24	E1	N
RIDGEWAY	42	E1	N
RODMAN	PO	Z7	N

ROWLAND HEIGHTS	06	L1	N
SALTLAKECITY	49	L2	N
SANDY	49	L2	N
SARGENT BLUFF	19	C2	R
SCOTLAND	09	E3	N
SCOTTSVILLE	36	E3	N
SEWARD ALASKA	02	G1	N
SEWARD ALS	02	G1	N
SHARRONA	17	C2	N
SHORT CREEK	39	E1	R
SIERRA	32	M1	R
SOMERS POINT	34	E3	N
SOMERS PT	34	E3	N
SPANISH FORK	49	L2	N
STAFFORD	36	E3	N
STOW	39	E1	N
SWOYERSVILLE	42	E1	N
TARZANA	06	L1	N
TEMPLE TERRACE	12	K5	N
TIERRA DEL MAR	41	G3	N
TIGRETT	47	K5	N
TOPEKA	29	C1	N
TRAVERSE	26	C2	N
TUJUNGA	06	L1	N
ULSA OKLA	40	M5	N
WAHIAWA/HONO	15	ZZ	N
WAHIAWA/HONO	15	ZZ	R
WALWORTH	36	E3	R
WATERFORD	09	E3	N
WATSON	26	C2	R
WESLACO TX	48	M3	N
WESTHMPTN BEACH	36	E3	N
WESTPORT	25	E3	N

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WEST GORHAM     23          E3 N

WEST WILLINGTON09           E3 N

          NDE   04          L1 N

 SAN JOSE       06          L2 N



END OF LAT/LONG FILE
RECORDS READ    3607
RECORDS WITH LAT/LONG OUT OF RANGE     382
RECORDS WHICH WERE NOT MATCHED    1788



END OF MASTER FILE ENCOUNTERED
MASTER FILE RECORDS READ.  1763
MASTER FILE RECORDS WHICH WERE NOT MATCHED     132



NUMBER  OF RECORDS WRITTEN IS    1631



THIS IS A TYPE 1 MAP PROGRAM FOR INLEASING ACTIVITY

THE FOLLOWING VALUES ARE USED IN THE PARAMETERS:

COST/UNIT=       239.000
MAN YR/UNIT=        .140
NO. OF TRIP=       1.000
FIXED COST/OFFICE=    10650.000
FIXED MAN YR/OFFICE=          .273
AVG WAGE/DAY=       64.790


     3262 RECORDS READ FROM THE MASTER FILE
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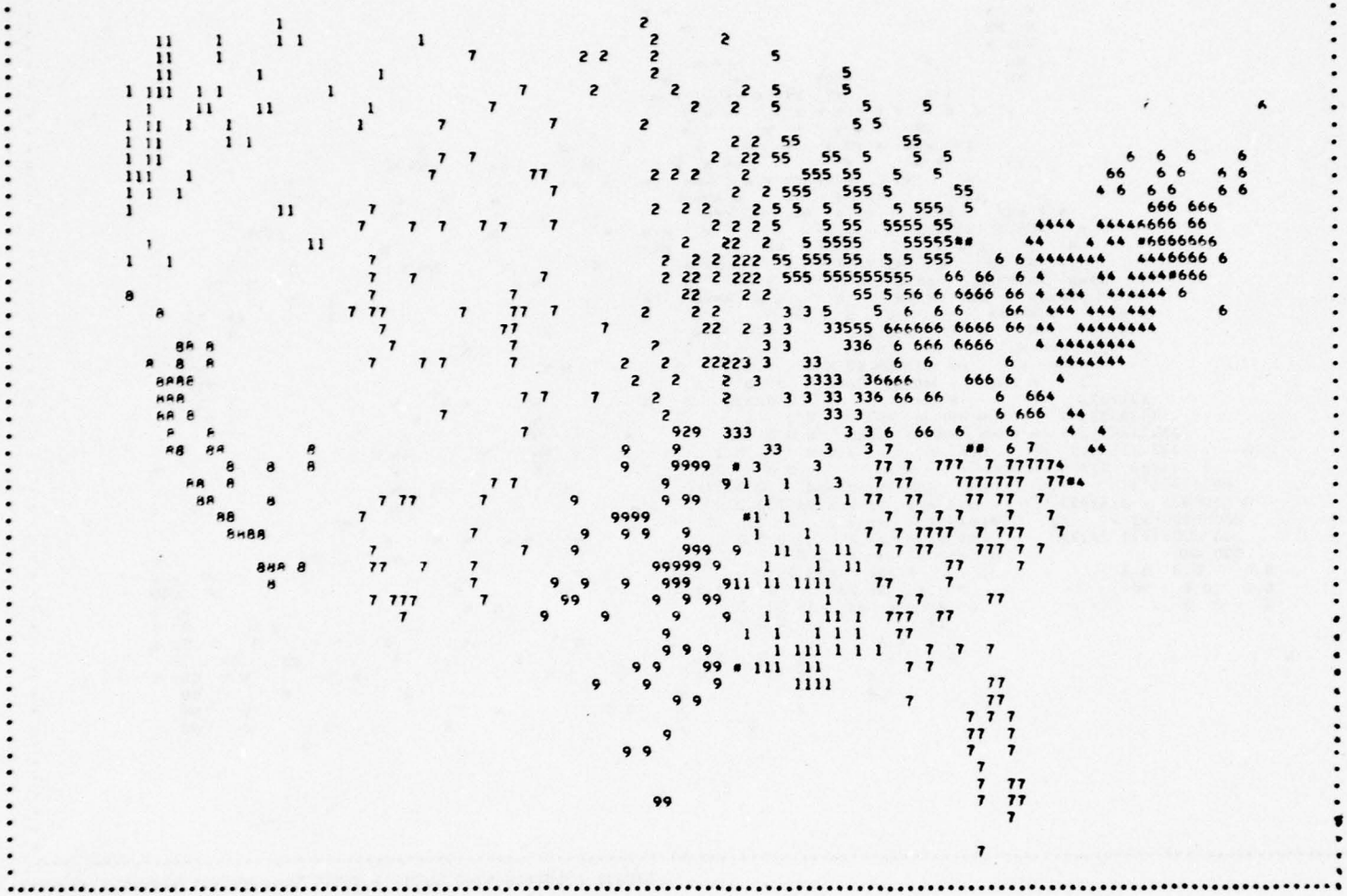
MAP OF EXISTING DIVISION ASSIGNMENTS

MAP OF EXISTING DISTRICT ASSIGNMENTS

MAP OF DIVISION ASSIGNMENTS USING CLOSEST OPEN DISTRICT OFFICE

MAP OF DISTRICT ASSIGNMENTS USING CLOSEST OPEN DISTRICT OFFICE



THE FOLLOWING DISTRICT WORKLOADS WERE CALCULATED USING ASSIGNMENT OF THE EXISTING DISTRICT OFFICE

DIVISION	INLEASING TYPE	WORKLOAD (UNITS)	COST($)	EFF. MAN/YR
A1 LMVD				
	P	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A1 AT MEMPHIS		1	10889.00	.41
	N	4	956.00	.56
ACT TOTAL		4	956.00	.56
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A2 AT NEW ORLEAN		4	11606.00	.83
	N	4	956.00	.56
	P	1	239.00	.14
ACT TOTAL		5	1195.00	.70
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A3 AT ST. LOUIS		5	11845.00	.97
	N	13	3107.00	1.82
	P	2	478.00	.28
ACT TOTAL		15	3585.00	2.10
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A4 AT VICKSBURG		15	14235.00	2.37
	N	21	5019.00	2.94
	P	4	956.00	.56
ACT TOTAL		25	5975.00	3.50
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		25	48575.00	4.59
C1 MHO				
	N	85	20315.00	11.90
	P	35	8365.00	4.90
ACT TOTAL		120	28680.00	16.80
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C1 AT KANSAS CIT		120	39330.00	17.07

	N	564	134796.00	78.96
	R	271	64769.00	37.94
ACT TOTAL		835	199565.00	116.90
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C2 AT OMAHA		835	210215.00	117.17
	N	449	155111.00	90.86
	R	306	73134.00	42.84
ACT TOTAL		955	228245.00	133.70
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		955	249545.00	134.25
D: NED				
ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT D1 AT BOSTON		0	10650.00	.27
ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		0	10650.00	.27
E: NAD				
	N	351	83889.00	49.14
	R	17	4063.00	2.38
ACT TOTAL		368	87952.00	51.52
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E1 AT BALTIMORE		368	98602.00	51.79
	N	449	107311.00	62.86
	R	20	4780.00	2.80
ACT TOTAL		469	112091.00	65.66
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E3 AT NEW YORK		469	122741.00	65.93
	N	45	10755.00	6.30
ACT TOTAL		45	10755.00	6.30
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E4 AT NORFOLK		45	21405.00	6.57

	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT 65 AT PHILADELPH		1	10889.00	.41
	N	846	202194.00	118.44
	R	37	8443.00	5.18
ACT TOTAL		883	211037.00	123.62
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		883	253637.00	124.71

F: MED

	N	5	1195.00	.70
	R	8	1912.00	1.12
ACT TOTAL		13	3107.00	1.82
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT 72 AT CHICAGO		13	13757.00	2.09
	N	5	1195.00	.70
	R	8	1912.00	1.12
ACT TOTAL		13	3107.00	1.82
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		13	13757.00	2.09

G: NPD

	N	2	478.00	.28
ACT TOTAL		2	478.00	.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT 62 AT PORTLAND		2	11128.00	.55
	N	191	45649.00	26.74
	R	19	4541.00	2.66
ACT TOTAL		210	50190.00	29.40
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT 63 AT SEATTLE		210	60840.00	29.67
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT 64 AT WALLA WALL		1	10889.00	.41

	N	194	46366.00	27.16
	R	19	4541.00	2.66
ACT TOTAL		213	50907.00	29.82
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		213	82857.00	30.64
H: OHO				
ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H1 AT HUNTINGTON		0	10650.00	.27
	N	4	956.00	.56
ACT TOTAL		4	956.00	.56
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H2 AT LOUISVILLE		4	11606.00	.83
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H3 AT NASHVILLE		1	10889.00	.41
	N	2	478.00	.28
ACT TOTAL		2	478.00	.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H4 AT PITTSBURGH		2	11128.00	.55
	N	7	1673.00	.98
ACT TOTAL		7	1673.00	.98
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		7	44273.00	2.07
K: SAD				
	R	6	1434.00	.84
ACT TOTAL		6	1434.00	.84
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K3 AT JACKSONVIL		6	12084.00	1.11

	N	274	65486.00	38.36
	R	291	69549.00	40.74
ACT TOTAL		565	135035.00	79.10
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K9 AT MOBILE		565	145685.00	79.37
	N	139	33221.00	19.46
	R	17	4063.00	2.38
ACT TOTAL		156	37284.00	21.84
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K4 AT SAVANNAH		156	47934.00	22.11
	N	413	98787.00	57.82
	R	314	75046.00	43.96
ACT TOTAL		727	173753.00	101.78
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		727	205703.00	102.60

L: SPD

	N	271	64769.00	37.94
	R	26	6214.00	3.64
ACT TOTAL		297	70983.00	41.58
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L1 AT LOS ANGELE		297	81633.00	41.85
	N	135	32265.00	18.90
	R	10	2390.00	1.40
ACT TOTAL		145	34655.00	20.30
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L2 AT SACRAMENTO		145	45305.00	20.57
	N	406	97034.00	56.84
	R	36	8604.00	5.04
ACT TOTAL		442	105638.00	61.88
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		442	126938.00	62.43

M1 SUB				
	N	18	4382.00	2.52
	R	12	2848.00	1.68
ACT TOTAL		30	7170.00	4.20
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M1 AT ALBUQUERQU		30	17820.00	4.47
	N	118	28202.00	16.52
	R	73	17447.00	10.22
ACT TOTAL		191	45649.00	26.74
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M2 AT FT. WORTH		191	56299.00	27.01
	N	52	12428.00	7.28
ACT TOTAL		52	12428.00	7.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M3 AT GALVESTON		52	23078.00	7.55
	N	16	3824.00	2.24
	R	13	3107.00	1.82
ACT TOTAL		29	6931.00	4.06
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M4 AT LITTLE ROC		29	17581.00	4.33
	N	40	9560.00	5.60
	R	2	478.00	.28
ACT TOTAL		42	10038.00	5.88
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M5 AT TULSA		42	20688.00	6.15
	N	244	58316.00	34.16
	R	100	23900.00	14.00
ACT TOTAL		344	82216.00	48.16
ACT FIXED			53250.00	1.37
TOTAL FOR THE DIVISION		344	135466.00	49.52
COMPLETE TOTAL THIS ASSIGNMENT		3609	1171401.00	413.18

THE FOLLOWING DISTRICT WORKLOADS WERE CALCULATED USING
ASSIGNMENT TO THE CLOSEST DISTRICT OFFICE

DIVISION	LEASING TYPE	WORKLOAD (UNITS)	COST($)	EFF. MAN/YR
A: LMVD				
	N	122	24611.58	16.99
	R	53	12438.09	7.41
ACT TOTAL		175	37049.67	24.40
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A1 AT VICKSBURG		175	47699.67	24.67
	N	122	24611.58	16.99
	R	53	12438.09	7.41
ACT TOTAL		175	37049.67	24.40
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		175	47699.67	24.67
B: ST. LOUIS				
	N	74	11192.41	10.24
	R	37	5372.45	5.12
ACT TOTAL		111	16564.86	15.36
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT B3 AT ST. LOUIS		111	27214.86	15.63
	N	74	11192.41	10.24
	R	37	5372.45	5.12
ACT TOTAL		111	16564.86	15.36
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		111	27214.86	15.63
C: MPD				
	N	225	56948.48	31.57
	R	99	25393.43	13.98
ACT TOTAL		324	82341.92	45.46
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C2 AT OMAHA		324	92991.92	45.73

	N	225	56948.48	31.57
	R	99	25393.43	13.90
ACT TOTAL		324	82341.92	45.46
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		324	92991.92	45.73

D: NED

	N	209	36727.68	29.02
	R	14	2591.79	1.95
ACT TOTAL		223	39314.46	30.96
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT D4 AT BOSTON		223	49964.46	31.23

	N	209	36722.68	29.02
	R	14	2591.79	1.95
ACT TOTAL		223	39314.46	30.96
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		223	49964.46	31.23

E: NAD

	N	488	131945.37	68.61
	R	17	4507.93	2.39
ACT TOTAL		505	136453.30	71.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E4 AT NEW YORK		505	147103.30	71.27

	N	488	131945.37	68.61
	R	17	4507.93	2.39
ACT TOTAL		505	136453.30	71.00
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		505	147103.30	71.27

F: NCD

	N	281	24647.74	38.60
	R	118	10300.90	16.21
ACT TOTAL		399	34948.65	54.82
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT F5 AT CHICAGO		399	45598.65	55.09

	N	201	24647.74	30.60
	R	118	10380.99	16.21
ACT TOTAL		399	34948.65	54.82
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		399	45598.65	55.09

G: MPD

	N	201	48630.76	28.18
	R	19	4540.85	2.66
ACT TOTAL		220	53171.61	30.84
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT G1 AT PORTLAND		220	63821.61	31.11

	N	201	48630.76	28.18
	R	19	4540.85	2.66
ACT TOTAL		220	53171.61	30.84
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		220	63821.61	31.11

H: OPD

	N	196	25314.38	27.05
	R	31	1613.41	4.23
ACT TOTAL		227	26927.79	31.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H6 AT CINCINNATI		227	37577.79	31.55

	N	196	25314.38	27.05
	R	31	1613.41	4.23
ACT TOTAL		227	26927.79	31.28
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		227	37577.79	31.55

K: SAD

	N	349	77981.29	48.74
	R	281	67113.46	39.31
ACT TOTAL		630	145094.74	88.05
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K7 AT ATLANTA		630	155744.74	88.32

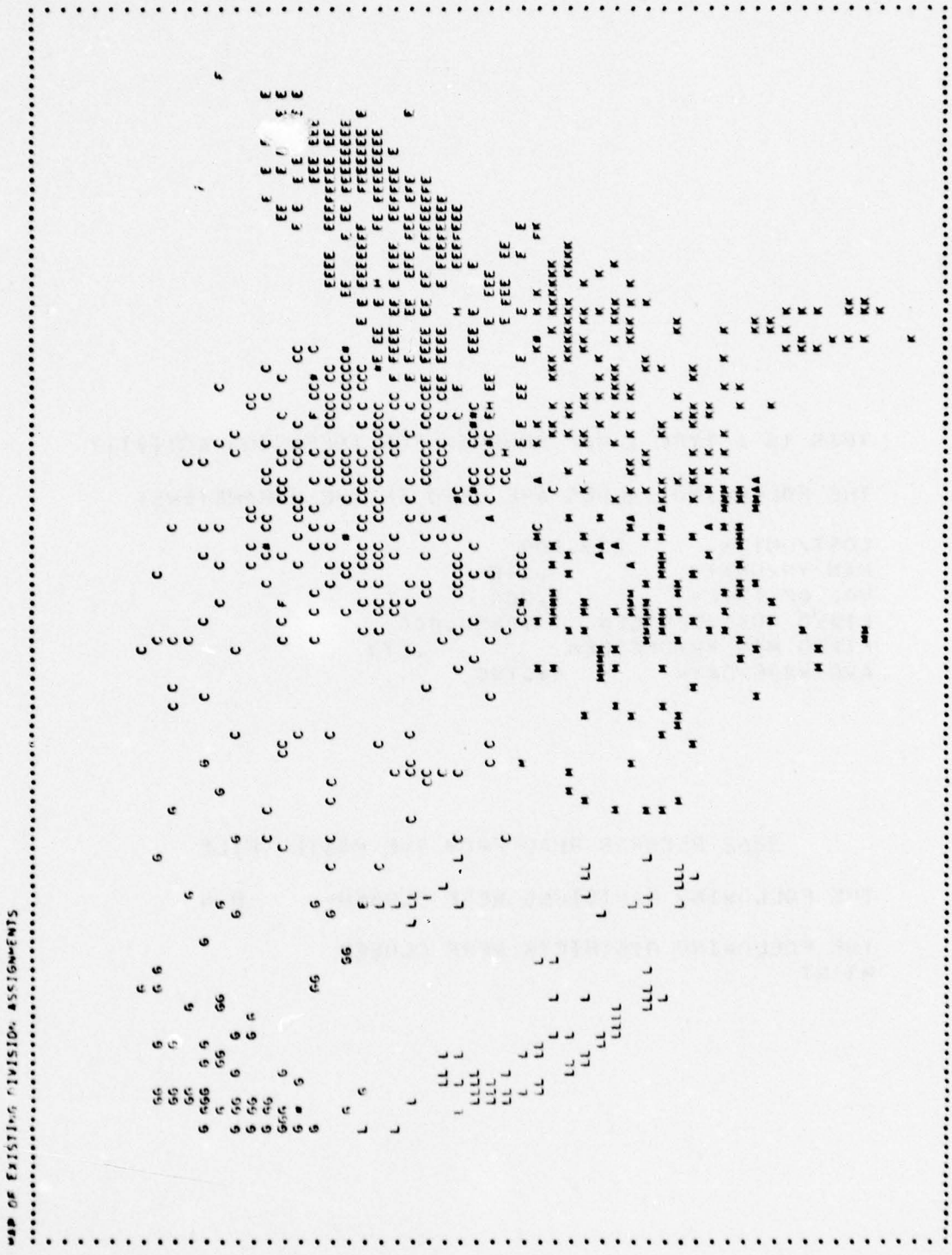
	N	349	77881.29	68.76
	R	281	67113.46	39.31
ACT TOTAL		630	144994.74	88.05
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		630	155744.74	88.32
L: SFO	N	214	64812.57	30.19
	R	28	9512.80	3.97
ACT TOTAL		242	74325.37	34.16
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT LA AT SAN FRANCI		242	84975.37	34.43
	N	214	64812.57	30.19
	R	28	9512.80	3.97
ACT TOTAL		242	74325.37	34.16
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		242	84975.37	34.43
M: SWD	N	173	47834.79	24.32
	R	67	16683.84	9.48
ACT TOTAL		240	64518.64	33.72
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT MG AT DALLAS		240	75168.64	34.00
	N	173	47834.79	24.32
	R	67	16683.84	9.48
ACT TOTAL		240	64518.64	33.72
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		240	75168.64	34.00
M: DENVER	N	253	65018.48	35.59
	R	60	9628.21	8.34
ACT TOTAL		313	75446.68	43.92
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M7 AT DENVER		313	86096.68	44.19

	N	253	65818.40	35.59
	P	60	9628.21	8.34
ACT TOTAL		313	75446.60	43.92
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		313	86096.60	44.19
COMPLETE TOTAL THIS ASSIGNMENT		3609	913957.54	507.24
COMPLETE TOTAL THIS ASSIGNMENT		3609	913957.54	507.24

Example 3b

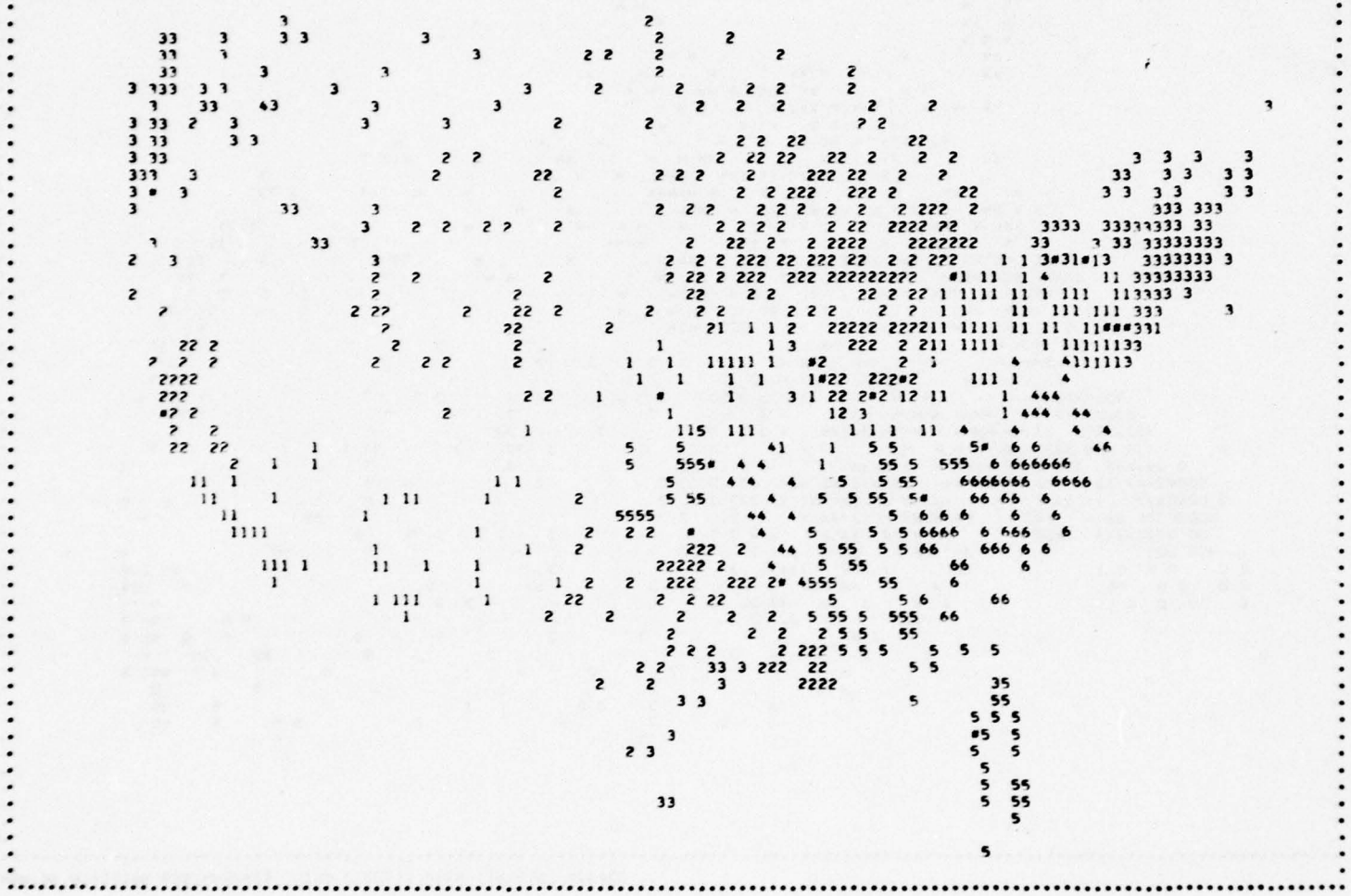
```
NSRDC 6600 INTERCOM  U4.5
DATE  06/29/77
TIME  12.23.07.



LOGIN,PURJDAVIDS,1189043801


06/29/77  LOGGED IN AT 12.30.13.
          WITH USER-ID 0U
          EQUIP/PORT 02/035

LOGIN      UPDATED 06/28/77  TODAY IS 06/29/77
  DEVICE SET PASSWORD,  NETED,  MARS VI

COMMAND- ATTACH,F,PROFILE,ID-PUAJ
 PF CYCLE NO. = 001
COMMAND- BEGIN(EX,F,A-I,T=1,YR=6,NC=DIV12,NF=INL12,DN-INL12DN)
WANT TO CHANGE ANY VALUE(S) OF COST/UNIT,MAN YR/UNIT,
NO. OF TRIP,FIXED COST/OFFICE,FIXED MAN YR/OFFICE,AVG WAGE/DAY?
IF YES TYPE Y;OTHERWISE TYPE N:
 PF CYCLE NO. = 001
 PF CYCLE NO. = 002
   CM LWA+1 = 212511, LOADER USED 33300BN
WANT TO DELETE ANY DISTRICT? TYPE Y OR N:Y
PLEASE ENTER THE DIVISION NAME(S) AND DISTRICT NO.(S) WHICH ARE TO BE
DELETED WITH ONE BLANK IN BETWEEN AND ENTER THEM ALL IN ONE LINE
R3 N7
THANK YOU.

     STOP
       .269 CP SECONDS EXECUTION TIME
 PF CYCLE NO. = 001
 PF CYCLE NO. = 002
 PF CYCLE NO. = 002
   CM LWA+1 = 37151B, LOADER USED 51200B
      END  IMAP1
     31.303 CP SECONDS EXECUTION TIME
COMMAND- REWIND,OUTPUT
COMMAND- BATCH,OUTPUT,PRINT,YX,CHUN
 FILE ICHUN0A SENT,  DC=PP
COMMAND- LOGOUT
CPA      36.269 SEC
SS       37.200 SEC
EST. SYSTEM COST $   6.68
EST. CONNECT COST $  0.17
CONNECT TIME    0 HRS.   4 MIN.
 06/29/77 LOGGED OUT AT 12.34.09.
```

```
THIS IS A TYPE 1 MAP PROGRAM FOR INLEASING ACTIVITY

THE FOLLOWING VALUES ARE USED IN THE PARAMETERS:

COST/UNIT=       239.000
MAN YR/UNIT=        .140
NO. OF TRIP=       1.000
FIXED COST/OFFICE=    10650.000
FIXED MAN YR/OFFICE=          .273
AVG WAGE/DAY=       64.790



      3262 RECORDS READ FROM THE MASTER FILE

THE FOLLOWING DIVISIONS WERE CLOSED-     B N

THE FOLLOWING DISTRICTS WERE CLOSED
B3 N7
```

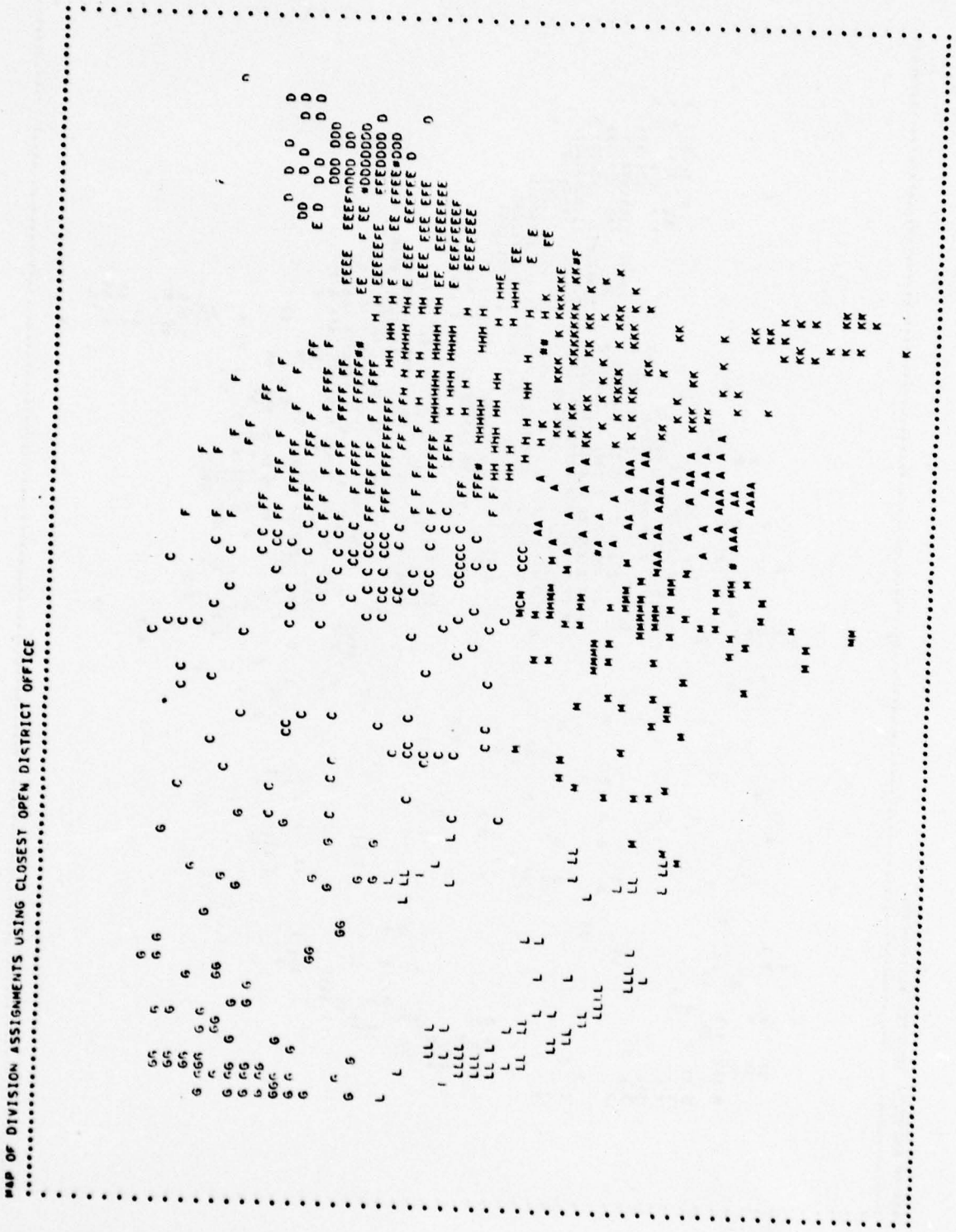


MAP OF EXISTING DIVISION ASSIGNMENTS

MAP OF EXISTING DISTRICT ASSIGNMENTS



MAP OF DIVISION ASSIGNMENTS USING CLOSEST OPEN DISTRICT OFFICE



MAP OF DISTRICT ASSIGNMENTS USING CLOSEST OPEN DISTRICT OFFICE

THE FOLLOWING DISTRICT WORKLOADS WERE CALCULATED USING
ASSIGNMENT OF THE EXISTING DISTRICT OFFICE

DIVISION	INLEASING TYPE	WORKLOAD (UNITS)	COST($)	EFF. MAN/YR
A: LMVD				
	R	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A1 AT MEMPHIS		1	10889.00	.41
	N	4	956.00	.56
ACT TOTAL		4	956.00	.56
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A2 AT NEW ORLEAN		4	11606.00	.83
	N	4	956.00	.56
	R	1	239.00	.14
ACT TOTAL		5	1195.00	.70
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A3 AT ST. LOUIS		5	11845.00	.97
	N	13	3107.00	1.82
	R	2	478.00	.28
ACT TOTAL		15	3585.00	2.10
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A4 AT VICKSBURG		15	14235.00	2.37

	N	21	5019.00	2.94
	R	4	956.00	.56
ACT TOTAL		25	5975.00	3.50
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		25	48575.00	4.59

C: MRD

	N	85	28315.00	11.90
	R	35	8365.00	4.90
ACT TOTAL		120	28680.00	16.80
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C1 AT KANSAS CIT		120	39330.00	17.07
	N	564	134796.00	78.96
	R	271	64769.00	37.94
ACT TOTAL		835	199565.00	116.90
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C2 AT OMAHA		835	210215.00	117.17
	N	649	155111.00	90.86
	R	306	73134.00	42.84
ACT TOTAL		955	228245.00	133.70
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		955	249545.00	134.25

D: NED

ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT D1 AT BOSTON		0	10650.00	.27

ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		0	10650.00	.27
F1 NAD				
	N	351	83889.00	49.14
	R	17	4063.00	2.38
ACT TOTAL		368	87952.00	51.52
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E1 AT BALTIMORE		368	98602.00	51.79
	N	440	107311.00	62.86
	R	20	4780.00	2.80
ACT TOTAL		460	112091.00	65.66
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E3 AT NEW YORK		460	122741.00	65.93
	N	45	10755.00	6.30
ACT TOTAL		45	10755.00	6.30
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E4 AT NORFOLK		45	21405.00	6.57
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT E5 AT PHILADELPH		1	10889.00	.41
	N	846	202194.00	118.44
	R	37	8843.00	5.18
ACT TOTAL		883	211037.00	123.62
ACT FIXED			42600.00	1.09
TOTAL FOR THE DIVISION		883	253637.00	124.71
F1 NCD				
	N	5	1195.00	.70
	R	8	1912.00	1.12
ACT TOTAL		13	3107.00	1.82
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT F2 AT CHICAGO		13	13757.00	2.09
	N	5	1195.00	.70
	R	8	1912.00	1.12
ACT TOTAL		13	3107.00	1.82
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		13	13757.00	2.09

61 NPD '				
	N	2	478.00	.28
ACT TOTAL		2	478.00	.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT 62 AT PORTLAND		2	11128.00	.55
	N	191	45669.00	26.74
	R	19	4541.00	2.66
ACT TOTAL		210	50190.00	29.40
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT 63 AT SEATTLE		210	60840.00	29.67
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT 64 AT WALLA WALL		1	10889.00	.41
	N	194	46366.00	27.16
	R	19	4541.00	2.66
ACT TOTAL		213	50907.00	29.82
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		213	82857.00	30.64
H1 NPD				
ACT TOTAL		0	0.00	0.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H1 AT HUNTINGTON		0	10650.00	.27
	N	4	956.00	.56
ACT TOTAL		4	956.00	.56
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT HP AT LOUISVILLE		4	11606.00	.83
	N	1	239.00	.14
ACT TOTAL		1	239.00	.14
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H3 AT NASHVILLE		1	10889.00	.41
	N	2	478.00	.28
ACT TOTAL		2	478.00	.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT H4 AT PITTSBURGH		2	11128.00	.55

	N	7	1873.00	.98
ACT TOTAL		7	1873.00	.98
ACT FIXED			42600.00	1.69
TOTAL FOR THE DIVISION		7	44273.00	2.67
K3 SAD				
	R	6	1434.00	.86
ACT TOTAL		6	1434.00	.86
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K3 AT JACKSONVIL		6	12084.00	1.11
	N	274	65456.00	38.36
	R	291	69549.00	40.74
ACT TOTAL		565	135035.00	79.10
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K5 AT MOBILE		565	145685.00	79.37
	N	139	33221.00	19.46
	R	17	4063.00	2.38
ACT TOTAL		156	37284.00	21.84
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT K6 AT SAVANNAH		156	47934.00	22.11
	N	413	98707.00	57.82
	R	314	75046.00	43.96
ACT TOTAL		727	173753.00	101.78
ACT FIXED			31950.00	.82
TOTAL FOR THE DIVISION		727	205703.00	102.60
L1 SPD				
	N	271	64769.00	37.94
	R	26	6214.00	3.64
ACT TOTAL		297	70983.00	41.58
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L1 AT LOS ANGELE		297	81633.00	41.85
	N	135	32265.00	18.90
	R	10	2390.00	1.40
ACT TOTAL		145	34655.00	20.30
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT L2 AT SACRAMENTO		145	45305.00	20.57
	N	406	97034.00	56.84
	R	34	8084.00	5.26
ACT TOTAL		440	105638.00	61.88
ACT FIXED			21300.00	.55
TOTAL FOR THE DIVISION		440	126938.00	62.43

M1 SWD					
	N	18	4302.00	2.92
	R	12	2868.00	1.68
ACT TOTAL		30	7170.00	4.70
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M1 AT ALBUQUERQU		30	17820.00	4.47
	N	118	28202.00	16.52
	R	73	17447.00	10.22
ACT TOTAL		191	45649.00	26.74
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M2 AT FT. WORTH		191	56299.00	27.01
	N	52	12428.00	7.28
ACT TOTAL		52	12428.00	7.28
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M3 AT GALVESTON		52	23078.00	7.55
	N	16	3824.00	2.24
	R	13	3107.00	1.82
ACT TOTAL		29	6931.00	4.06
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M4 AT LITTLE ROC		29	17581.00	4.33
	N	40	9560.00	5.60
	P	2	478.00	.28
ACT TOTAL		42	10038.00	5.88
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT M5 AT TULSA		42	20688.00	6.15
	N	244	58316.00	34.16
	R	100	23900.00	14.00
ACT TOTAL		344	82216.00	48.16
ACT FIXED			53250.00	1.37
TOTAL FOR THE DIVISION		344	135466.00	49.52
COMPLETE TOTAL THIS ASSIGNMENT		3609	1171401.00	913.18

THE FOLLOWING DISTRICT WORKLOADS WERE CALCULATED USING
ASSIGNMENT TO THE CLOSEST DISTRICT OFFICE

DIVISION	INLEASING TYPE	WORKLOAD (UNITS)	COST($)	EFF. MAN/YR
A: LMVD				
	N	124	25049.07	17.27
	R	59	14317.22	8.26
ACT TOTAL		183	39366.29	25.53
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT A1 AT VICKSHURG		183	50016.29	25.81
	N	124	25049.07	17.27
	R	59	14317.22	8.26
ACT TOTAL		183	39366.29	25.53
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		183	50016.29	25.81
C: MRD				
	N	294	74985.18	41.52
	R	142	36072.40	19.92
ACT TOTAL		436	111057.58	61.44
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT C2 AT OMAHA		436	121707.58	61.72
	N	296	74985.18	41.52
	R	142	36072.40	19.92
ACT TOTAL		436	111057.58	61.44
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		436	121707.58	61.72
D: NED				
	N	209	36727.68	29.02
	R	14	2591.79	1.95
ACT TOTAL		223	39314.46	30.96
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT D4 AT HOSTON		223	49964.46	31.23

	N	209	36722.68	29.82
	R	14	2591.79	1.99
ACT TOTAL		223	39314.46	30.94
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		223	49964.46	31.23

F1 NAD

	N	488	131945.37	68.61
	R	17	4507.93	2.39
ACT TOTAL		505	136453.30	71.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT F4 AT NEW YORK		505	147103.30	71.27

	N	488	131945.37	68.61
	R	17	4507.93	2.39
ACT TOTAL		505	136453.30	71.00
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		505	147103.30	71.27

F1 NCD

	N	310	31651.75	42.68
	R	140	14989.85	19.28
ACT TOTAL		450	46641.60	61.96
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT F5 AT CHICAGO		450	57291.60	62.23

	N	310	31651.75	42.68
	R	140	14989.85	19.28
ACT TOTAL		450	46641.60	61.96
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		450	57291.60	62.23

01 NPD

	N	211	50512.12	29.58
	R	21	4991.16	2.94
ACT TOTAL		232	55503.27	32.52
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT 01 AT PORTLAND		232	66153.27	32.79

	N	211	50512.12	29.58
	R	21	4991.16	2.94
ACT TOTAL		232	55503.27	32.52
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		232	66153.27	32.79

MI OHO

	N	218	28128.47	30.08
	R	36	2037.61	4.92
ACT TOTAL		254	30166.08	35.00
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT MA AT CINCINNATI		254	40816.08	35.27

	N	218	28128.47	30.08
	R	36	2037.61	4.92
ACT TOTAL		254	30166.08	35.00
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		254	40816.08	35.27

MI SAO

	N	349	77981.29	48.74
	R	281	67113.46	39.31
ACT TOTAL		630	145094.74	88.05
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT MI AT ATLANTA		630	155744.74	88.32

	N	349	77981.29	48.74
	R	281	67113.46	39.31
ACT TOTAL		630	145094.74	88.05
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		630	155744.74	88.32

LI SFO

	N	282	89268.00	39.84
	R	36	12286.93	5.10
ACT TOTAL		318	101554.93	44.95
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT LM AT SAN FRANCI		318	112204.93	45.22

	N	282	89268.00	39.84
	P	36	12286.93	5.10
ACT TOTAL		318	101554.93	44.95
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		318	112204.93	45.22

MI SWD

	N	298	102093.87	42.35
	P	78	21789.14	10.99
ACT TOTAL		376	123883.01	53.34
ACT FIXED			10650.00	.27
TOTAL FOR DISTRICT MV AT DALLAS		376	134533.01	53.61

	N	298	102093.87	42.35
	P	78	21789.14	10.99
ACT TOTAL		376	123883.01	53.34
ACT FIXED			10650.00	.27
TOTAL FOR THE DIVISION		376	134533.01	53.61

COMPLETE TOTAL THIS ASSIGNMENT	3600	935535.20	807.48
COMPLETE TOTAL THIS ASSIGNMENT	3600	935535.20	807.48

APPENDIX D:

JOB CONTROL CARDS FOR CREATING
ACTIVITY MASTER FILES

```
CREATE ACQUISITIONMASTER

PAJ,CM6ØØØØ,T5ØØ,P3,MT1.
CHARGE,PUAJ,1189Ø438Ø1,RS,I.
FTN.
VSN(TAPE1=CKØ1Ø3)
REQUEST(TAPE1,MT,HI,NORING,S)
REQUEST,TAPE2,*PF.
LGO.
CATALOG,TAPE2,ACQMASTER,ID=PUAJ.
EOR
      PROGRAM TAPEIN(TAPE1,TAPE2,OUTPUT,TAPE3=OUTPUT)
      INTEGER X(9),YR,DIVDIST,DEPT,TEMP,NR,NM,NP
      NR=NM=NP=Ø
   5  BUFFERIN(1,Ø) (X(1),X(9))
      IF (UNIT(1))1Ø,2Ø,3Ø
  1Ø  YR=SHIFT(X(3),12).AND.MASK(12)
      NR=NR+1
      IF(YR.NE.2L76 GOTO 5
      TEMP=X(1).AND.77777777777777B
      NM=NM+1
      DEPT=SHIFT(X(1).AND.MASK(6),-12)
      DIVDIST=SHIFT(X(1),6).AND.MASK(12)
      X(1)=DIVDIST.OR.DEPT.OR.TEMP
      WRITE(2,1ØØ) (X(I),I=1,8)
 1ØØ  FORMAT(8A1Ø)
      GOTO 5
  3Ø  NP=NP+1
      GOTO 5
  2Ø  WRITE(3,1Ø2)NR,NM,NP
 1Ø2  FORMAT(* TOTAL RECORDS READ=*,I1Ø,/,I1Ø,
     1* RECORDS ARE SUCCESSFULLY WRITTEN IN THE MASTER FILE OF FY '76*
     2,/,I1Ø,* RECORDS ARE FAIL DUE TO PARITY ERROR*)
       STOP
       END
<BOTTOM OF FILE>
E> W RC
RC WRITTEN.
E> QUIT
COMMAND- REWIND,RC
COMMAND- PURGE,W2,CREATEACQUISITIONMASTER,ID=PUAS
 PR ID=     PUWS PFN=CREATEACQUISITIONMASTER
 PR CY= ØØ1  ØØØØØØØ3 PRUS  $ØØØØ.Ø1 /DAY
```

```
COMMAND- CATALOG,RC,CREATEACQUISITIONMASTER,ID=PWWS
 INITIAL CATALOG
RP = 030 DAYS
 CT ID=     PUWS PFN=CREATEACQUISITIONMASTER
 CT CY= 001  00000003 PRUS   $0000.01 /DAY
COMMAND- RETURN,W2
COMMAND- FILES
  LOCAL FILES--


SORTACQUISITIONMASTER:

PAJ,CM100000,T100,P3.
CHARGE,PUAJ,1189043801,RS,I.
FTN.
ATTACH,TAPE1,ACQMASTER,ID=PUAJ
REQUEST(TAPE5,*PF)
LIBRARY(COBOL)
RFL,100000.
LGO.
REDUCE.
CATALOG,TAPE5, AMS6,ID=PUAJ
*EOR
      PROGRAM SORT(TAPE1,TAPE5,OUTPUT,TAPE7=OUTPUT)
      CALL SMSORT(80)
      CALL SMFILE("SORT","CODED",1,"REWIND")
      CALL SMFILE("OUTPUT","CODED",5,"REWIND")
      CALL SMKEY(1,1,8,0,"DISPLAY","DISPLAY","A")
      CALL SMEND
      WRITE(7,100)
  100 FORMAT(*1NORMAL COMPLETION*)
      STOP
      END


SORTACQUISITIONLATLONG:

PAJ,CM100000,T100,P3.
CHARGE,PUAJ,1189043801,RS,I.
FTN.
ATTACH,TAPE1,ALLS,ID=PUAJ.
REQUEST(TAPE5,*PF)
LIBRARY(COBOL)
RFL,100000.
LGO.
REDUCE.
CATALOG,TAPE5,ALLS,ID=PUAJ
*EOR
```

```
      PROGRAM SORT(TAPE1,TAPE5,OUTPUT,TAPE7=OUTPUT)
      CALL SMSORT(22)
      CALL SMFILE("SORT","CODED",1,"REWIND")
      CALL SMFILE("OUTPUT",CODED",5,"REWIND")
      CALL SMKEY(1,1,8,0,"DISPLAY", "DISPLAY","A")
      CALL SMEND
100   FORMAT(*1NORMAL COMPLETION*)
      WRITE(7,100)
      STOP
      END
```

```
DISPOSALTAPETODISK

PWSCM,CM50000,T300,MT1,P4.                          POLIN X333                    000010
CHARGE,PUAJ,1189043801.                                                           000110
FTN.                                                                              000210
VSN(TAPE1=CK1266/CK1267)                                                          000310
COMMENT, TWO TAPE REELS IN THIS FILE                                              000410
REQUEST,TAPE1,MT,HI,NORING,S. TWO TAPE REELS IN                                   000510
COMMENT. THIS FILE. TWO TAPE REELS IN THIS FILE                                   000610
REQUEST,TAPE4,*PF.                                                                000710
REQUEST,TAPE2,*PF                                                                 000810
LGO.                                                                              000910
CATALOG,TAPE2,DISPOSALDISKFILE,ID=PUAJ,AC=1189043801.                             001010
      PROGRAM CITY(TAPE1,TAPE2=4097/216,OUTPUT,TAPE3=OUTPUT)                      001310
       INTEGER X(22),COUNT1,COUNT2                                                001410
       WRITE(3,305)                                                               001510
  305 FORMAT(*1*,T50,*DISPOSALS RECORD FORMATION PROGRAM*)                        001610
       COUNT1=0                                                                   001710
       COUNT2=0                                                                   001810
    5 BUFFERIN (1,0) (X(1),X(22))                                                 001910
       IF (UNIT(1)) 10,20,30                                                      002110
10    CONTINUE                                                                    002120
      WRITE(2,306) (X(I),I=1,22)                                                  002210
306   FORMAT(21A10,A6)                                                            002310
      COUNT1=COUNT1+1                                                             002410
       GOTO 5                                                                     002610
 20   WRITE(3,300) COUNT1,COUNT2                                                  002710
      GOTO 21                                                                     002810
      CONTINUE                                                                    002910
      COUNT2=COUNT2+1                                                             003010
      GOTO 5                                                                      003110
   21 WRITE(3,304) COUNT1,COUNT2                                                  003210
      STOP                                                                        003510
 300  FORMAT(1X,*EOF ENCOUNTERED*,/,1X,I6,* RECORDS READ SUCCESSFULLY*,           003610
     1/,1x,I6,* TOTAL RECORDS (INCLUDING ERRORS*)                                 003710
  304 FORMAT(1X,*PROG TERMINATED*,/,1X,I6,* RECORDS READ SUCCESSFULLY*,           004010
     1/,1X,I6,* PARITY ERRORS*)                                                   004110
      END                                                                         004210
```

```
CREATEDISPOSALMASTER

PWSCM,CM75000,T600,MT1,P2.                          POLIN X333                    000010
CHARGE,PUAJ,1189043801.                                                           000020
FTN,OPT=2.                                                                        000030
ATTACH,TAPE1,DISPOSALDISKFILE,ID=PUAJ,AC=1189043801.                              000040
REQUEST,TAPE2,*PF.                                                                000060
LGO.                                                                              000070
CATALOG,TAPE2,DISPOSALMASTER,ID=PUAJ,AC=1189043801.                               000080
      PROGRAM CITY(TAPE1=216/4097,TAPE2,OUTPUT,TAPE3=OUTPUT)                      000110
      INTEGER IDATE(3),COUNT,COUNT1,STATES(52),IM(3),ID(3),IY(3),COUNTW           000120
      COUNT=COUNT1=NOUNITS=NO76=0                                                 000130
      STATES(1)=10HALABAMA                                                        000140
      STATES(2)=10HALASKA                                                         000150
      STATES(3)=10HARIZONA                                                        000160
      STATES(4)=10HARKANSAS                                                       000170
      STATES(5)=10HCALIFORNIA                                                     000180
      STATES(6)=10HCOLORADO                                                       000190
      STATES(7)=10HCONNECTICU                                                     000200
      STATES(8)=10HDELAWARE                                                       000210
      STATES(9)=10HDIST OF CO                                                     000220
      STATES(10)=10HFLORIDA                                                       000230
      STATES(11)=10HGEORGIA                                                       000240
      STATES(12)=10HHAWAII                                                        000250
      STATES(13)=10HIDAHO                                                         000260
      STATES(14)=10HILLINOIS                                                      000270
      STATES(15)=10HINDIANA                                                       000280
      STATES(16)=10HIOWA                                                          000290
      STATES(17)=10HKANSAS                                                        000300
      STATES(18)=10HKENTUCKY                                                      000310
      STATES(19)=10HLOUISIANA                                                     000320
      STATES(20)=10HMAINE                                                         000330
      STATES(21)=10HMARYLAND                                                      000340
      STATES(22)=10HMASS.                                                         000350
```

```
STATES(23)=10HMICHIGAN                                          000360
STATES(24)=10HMINNESOTA                                         000370
STATES(25)=10HMISSISSIPP                                        000380
STATES(26)=10HMISSOURI                                          000390
STATES(27)=10HMONTANA                                           000400
STATES(28)=10HNEBRASK                                           000410
STATES(29)=10HNEVADA                                            000420
STATES(30)=10HNEW HAMP.                                         000430
STATES(31)=10HNEW JERSEY                                        000440
STATES(32)=10HNEW MEXICO                                        000450
STATES(33)=10HNEW YORK                                          000460
STATES(34)=10HN. CAROLIN                                        000470
```

```
SORTDISPOSALMASTER

PWSCM,CM75000,T75,P4.                                                    000010
CHARGE,PUAJ,1189043801,RS,I.                                             000020
FTN.                                                                     000030
ATTACH,TAPE1,DISPOSALMASTER,ID=PUAJ.                                     000040
REQUEST(TAPE2,*PF)                                                       000050
LIBRARY(COBOL)                                                           000060
RFL,75000.                                                               000070
LGO.                                                                     000080
REDUCE.                                                                  000090
CATALOG,TAPE2,DISPOSALMASTERSORTED,ID=PUAJ.                              000100
      PROGRAM ONEFILE(TAPE1,TAPE2,OUTPUT,TAPE6=OUTPUT)                   000120
      CALL SMSORT (37)                                                   000130
      CALL SMFILE("SORT","CODED",1,"REWIND")                             000140
      CALL SMFILE("OUTPUT","CODED",2,"REWIND")                           000150
      CALL SMKEY(1,1,25,0,"DISPLAY","DISPLAY","A")                       000160
      CALL SMEND                                                         000170
5     WRITE(6,100)                                                       000180
100   FORMAT(*INFORMAL COMPLETION*)                                      000190
      STOP                                                               000200
      END                                                                000210
```

```
SORTDISPOSALLATLONG

PWSCM,CM75000,T75,P4.                                                    000100
CHARGE,PUWS,1189056946,RS,I.                                             000110
FTN.                                                                     000120
ATTACH,TAPE1,DLATLONGCARDS,ID=PUWS.                                      000130
REQUEST(TAPE2,*PF)                                                       000170
REQUEST(TAPE3,*PF)                                                       000175
LIBRARY (COBOL)                                                          000180
RFL,75000.                                                               000190
LGO.                                                                     000200
REDUCE.                                                                  000210
CATALOG,TAPE2,DLATLONGCARDSSORTED,ID=PUWS.                               000240
      PROGRAM ONEFILE(TAPE1,TAPE2,TAPE3,OUTPUT,TAPE6=OUTPUT)             000255
C READ FROM TAPE 1, REFORMAT TO TAPE 3, AND SORT TO TAPE2                000260
1     CONTINUE                                                           000265
      READ(I,88) ICITY1,ICITY2,ISTATE,LD,LM,LLD,LLM                      000270
      IF (EOF(1)), 20,2                                                  000272
2     WRITE(3,98)ICITY1,ICITY2,ISTATE,LD,LM,LLD,LLM                      000275
99    FORMAT(A10,A5,4X,A10,10X,2I2,I3,I2)                                000280
98    FORMAT (A10,A5,A10,2I2,I3,I2)                                      000285
      GOTO 1                                                             000290
20    CONTINUE                                                           000295
      REWIND 3                                                           000300
      CALL SMSORT (34)                                                   000310
      CALL SMFILE("SORT","CODED",3,"REWIND")                             000320
      CALL SMFILE("OUTPUT","CODED",2,"REWIND")                           000330
      CALL SMKEY(1,1,25,0,"DISPLAY","DISPLAY","A")                       000340
      CALL SMEND                                                         000350
5     WRITE(6,100)                                                       000415
100   FORMAT(*1NORMAL COMPLETION*)                                       000417
      STOP                                                               000420
      END                                                                000430
```

```
CREATEINLEASEMASTER

PWSCM,CM75000,T100,P4,MT1.                                                    000010
CHARGE,PUAJ,1189043801.                                                       000020
FTN,OPT=2.                                                                    000030
REQUEST(TAPE2,*PF)                                                            000040
REQUEST(TAPE4,*PF)                                                            000055
VSN(TAPE1=CK1265)                                                             000060
REQUEST,TAPE1,MT,HI,NORING,S.                                                 000070
LGO.                                                                          000080
CATALOG,TAPE2,INLEASEMASTER,ID=PUAJ,AC-1189043801.                            000090
CATALOG,TAPE4,INOMATCH,ID=PUAJ,AC=1189043801.                                 000100
      PROGRAM INGO (TAPE2,TAPE3,INPUT,OUTPUT,TAPE1,TAPE5=INPUT,               000120
     *TAPE6=OUTPUT,TAPE4)                                                     000130
      INTEGER X(20),PARITY,ICOUNT,IOCONUS,BADCODE,ACODES(37),                 000140
     *ICODES(37)                                                              000150
      DATA ICODES /4LOXJO,4LOXKO,4LOXLO,4LOXPO,4LOXRO,4LOXTO,                 000160
     *4LO7YO,                                                                 000170
     *4LOXUO,4LOXWO,4LOXW1,4LOXZO,4LOXOO,4LO700,4LO701,4L2SKO,                 000180
     *4LOYAO,                                                                 000190
     *4LOYBO,4LOYCO,4LOYDO,4LOYEO,4LOYFO,4LOYJO,4L2SNO,4LOY7O,                 000200
     *4LOYLO,4LOYL3,4LOYMO,4LOYM1,4LOYM2,4LOYNO,4LOYQO,4LOYRO,                 000210
     *4LOYTO,                                                                 000220
     *4LOYUO,4LOYVO,4LOYZO,4LOY10/                                            000230
      DATA ACODES /2HA1,2HA2,2HA3,2HA4,2HC1,2HC2,2HD1,                        000240
     *2HE1,                                                                   000250
     *2HE3,2HZZ,2HE4,2HE5,2HF2,2HZZ,                                          000260
     *2HG1,2HG2,2HG3,2HG4,2HH1,2HH2,2HH3,2HH4,2HZZ,2HZZ,2HK3,2HZZ,            000270
     *2HK5,2HZZ,2HZZ,2HK6,2HL1,2HL2,                                          000280
     *2HM1,2HM2,2HM3,2HM4,2HM5/                                               000290
      WRITE(3,108)                                                            000298
108   FORMAT(*1RECORDS OUTSIDE THE CONTINENTAL U.S.*)                         000299
      ICOUNT=IOCONUS=BADCODE=PARITY=0                                         000300
      WRITE(4,109)                                                            000301
109   FORMAT(*1RECORDS WITH UNMATCHED CODES*)                                 000302
      IJK=INRTC=IN=IR=IT=IB=IZ=0                                              000310
```

```
9     CONTINUE                                                    000320
      BUFFERIN (1,0) (X(1),X(20))                                 000330
       IF (UNIT(1)) 10,20,30                                      000340
10    CONTINUE                                                    000350
      IJK=IJK+1                                                   000360
      IF(IJK.GT.100) GOTO 20                                      000370
      IYR=SHIFT(X(13),42).AND.MASK(12)                            000380
      IF(IYR.NE.2L76) GOTO 9                                      000390
      INRT=SHIFT(X(13).36).AND.MASK(6)                            000400

SORTINLEASEMASTER

PWSCM,CM100000,T75,P4.                                            000100
CHARGE,PUAJ,1189043801,RS,I.                                      000110
FTN,OPT=2.                                                        000120
ATTACH,TAPE1,IMS6,ID=PUAJ.                                        000130
REQUEST(TAPE5, *PF)                                               000160
LIBRARY(COBOL)                                                    000180
RFL,100000.                                                       000190
LGO.                                                              000200
REDUCE.                                                           000210
CATALOG,TAPE5,IMS6,ID=PUAJ.                                       000230
      PROGRAM SORT(TAPE1,TAPE5,OUTPUT,TAPE7=OUTPUT)               000255
      CALL SMSORT(43)                                             000310
      CALL SMFILE("SORT","CODED",1,"REWIND")                      000320
      CALL SMFILE("OUTPUT","CODED",5,"REWIND")                    000330
      CALL SMKEY(1,1,17,0,"DISPLAY","DISPLAY","A")                000335
      CALL SMKEY(29,1,1,0,"DISPLAY","DISPLAY","A")                000340
      CALL SMEND                                                  000350
5     WRITE(7,100)                                                000415
100   FORMAT(*INORMAL COMPLETION*)                                000417
      STOP                                                        000420
      END                                                         000430
```

```
CRUNCH I

PAJ, CM 60000, T20, P4.
CHARGE, PUAJ, 1189043801, RS.1.
REQUEST, TAPE1, *PF.
ATTACH, TAPE5, IMS TR, (or INLEASEMASTERSORTED) ID=PUAJ.
FIN.
LGO
CATALOG, TAPE1, IMS YR, ID=PUAJ
      PROGRAM CRUNCH(TAPE1,TAPE5,OUTPUT,TAPE9=OUTPUT)                    000100
      INTEGER M1,M2,I1,I2,COUNT,IDD,INR,MDD,MNR,IUNIT                    000110
      READ(5,202)M1,M2,MDD,MNR                                           000120
      I1=M1                                                              000130
      I2=M2                                                              000140
      IDD=MDD                                                            000171
      INR=MNR                                                            000172
      IUNIT=1                                                            000173
      COUNT=1                                                            000174
5     READ(5,202)M1,M2,MDD,MNR                                           000180
      IF(EOF (5).NE.0)GOTO 80                                            000190
      COUNT=COUNT+1                                                      000200
      IF(MNR.NE.INR)GOTO 10                                              000205
      IF(M1-I1) 10,20,10                                                 000210
20    IF(M2-I2)  10,60,10                                                000220
60    IUNIT=IUNIT+1                                                      000260
      GOTO 5                                                             000270
10    WRITE(1,240)I1,I2,IDD,INR,IUNIT                                    000280
      I1=M1                                                              000290
      I2=M2                                                              000300
      INR=MNR                                                            000320
      IDD=MDD                                                            000340
      IUNIT=1                                                            000360
      GOTO 5                                                             000370
202   FORMAT(R9,R8,9X,A2,A1)                                             000380
240   FORMAT(R9,R8,9X,A2,A1,I5)                                          000390
```

```
80    WRITE(9,250)COUNT                                                    000400
250   FORMAT(*EXECUTION COMPLETE;TOTAL RECORD READ=*I10)                    000410
      STOP                                                                 000420
      END                                                                  000430
```

```
UTILIZATIONTAPETODISK

PWSCM,CM60000,T500,P3,MT1.                                                    000010
CHARGE,PUWS,1189056946.                                                       000020
FTN,OPT=2,R=2.                                                                000030
VSN(TAPE1=CK1265)                                                             000040
REQUEST,TAPE1,MT,HI,NORING,S.                                                 000050
REQUEST(TAPE2,*PF)                                                            000060
LGO.                                                                          000070
CATALOG,TAPE2,UTILIZATIONFILE,ID=PUWS,AC=1189056946.                          000080
      PROGRAM INTR(TAPE1=/200,TAPE2=/200,OUTPUT,TAPE3=OUTPUT)                 000100
      INTEGER COUNT1,COUNT2,X(20),COUNTR                                      000110
      WRITE(3,305)                                                            000120
305   FORMAT(*1*,T50,*TRANSFER OF UTILIZATION TAPE*)                          000130
      COUNT1=COUNT2=COUNTR=0                                                  000140
    5 BUFFERIN (1.0) (X(1),X(20))                                             000160
      IF (UNIT(1)) 10,20,30                                                   000170
10    CONTINUE                                                                000180
      COUNTR=COUNTR+1                                                         000185
C     IF (COUNTR.GE.250) GOTO 21                                              000186
      IEFF=SHIFT(X(12),-24).AND.777777777777B                                 000187
      ITERM=SHIFT(X(12),12).AND.777777770000B                                 000188
      ITEMP=SHIFT(X(13),12).AND.7777B                                         000189
      ITERM=ITERM.OR.ITEMP                                                    000190
      IF(IFFF.GT.6R760630) GOTO 5                                             000191
      IF(ITERM.EQ.6RINDEF ) GOTO 11                                           000192
      IF(ITERM.LT.IEFF) GOTO 11                                               000193
      IF(ITERM.LT.6R750701) GOTO 5                                            000194
11    CONTINUE                                                                000195
      WRITE(2,100) (X(I),I=1,20)                                              000200
100   FORMAT(20A10)                                                           000210
      COUNT1=COUNT1+1                                                         000220
C     IF (COUNT1.GE.250) GOTO 21                                              000230
      GOTO 5                                                                  000240
```

```
 20   WRITE(3,300) COUNTR,COUNT2,COUNT1                                          000250
      STOP                                                                       000260
 30   WRITE(3,301) COUNT2,COUNT1                                                 000270
      COUNT2=COUNT2+1                                                            000280
      GOTO 5                                                                     000290
   21 WRITE(3,304) COUNTR, COUNT2,COUNT1                                         000300
      STOP                                                                       000310
300   FORMAT(1X,*EOF ENCOUNTERED*,/,1X,I6,* RECORDS READ SUCCESSFULLY*,          000320
     1/,1X,I6,* PARITY ERRORS*/                                                  000330
     2//,1X,I6,* RECORDS WRITTEN *)                                              000335
301   FORMAT (1X,*PARITY ERROR NUMBER*,I6,/,1X,I6,                               000340
```

```
SORTUTILIZATIONFILE

PWSCM,CM100000,T75,P4.                                                    000100
CHARGE,PUWS,1189056946,RS,I.                                              000110
FTN,OPT=2.                                                                000120
ATTACH,TAPE1,UTILIZATIONFILE,ID=PUWS.                                     000130
REQUEST(TAPE5,*PF)                                                        000160
LIBRARY(COBOL)                                                            000180
RFL,100000.                                                               000190
LGO.                                                                      000200
REDUCE.                                                                   000210
CATALOG,TAPE5,UTILIZATIONFILESORTED,ID=PUWS.                              000230
      PROGRAM SORT(TAPE1=/200,TAPE5=/200,OUTPUT,TAPE7=OUTPUT)             000255
      CALL SMSORT(200)                                                    000310
      CALL SMFILE("SORT","CODED",1,"REWIND")                              000320
      CALL SMFILE("OUTPUT","CODED",5,"REWIND")                            000330
      CALL SMKFY(14,1,16,0,"DISPLAY","DISPLAY","A")                       000340
      CALL SMKFY(2,1,1,0,"DISPLAY","DISPLAY","A")                         000342
      CALL SMKEY(4,1,10,0,"DISPLAY","DISPLAY","A")                        000344
      CALL SMEND                                                          000350
5     WRITE(7,100)                                                        000415
100   FORMAT(*1NORMAL COMPLETION*)                                        000417
      STOP                                                                000420
      END                                                                 000430
```

```
CREATEUTILIZATIONMASTER

PWSCM,CM75000,T100,P4,MT1.                                                    000100
CHARGE,PUWS,1189056946.                                                       000110
FTN,OPT=2.                                                                    000120
REQUEST(TAPE2,*PF)                                                            000130
ATTACH,TAPE1,UTILIZATIONFILESORTED,ID=PUWS.                                   000140
LGO.                                                                          000150
CATALOG,TAPE2,UTILIZATIONMASTER76,ID=PUWS,AC-1189056946.                      000160
      PROGRAM INGO(TAPE2,TAPE3,INPUT,OUTPUT,TAPE1=/200,TAPE5=INPUT,           000180
     *TAPE6=OUTPUT,TAPE4)                                                     000190
      INTEGER X(20),PARITY,ICOUNT,IOCONUS,BADCODE,ACODES(38),                 000200
     *ICODES(38)                                                              000210
      DATA ICODES /4LOXJO,4LOXKO,4LOXLO,4LOXPO,4LOXRO,4LOXTO,                 000220
     *4LO7YO,                                                                 000230
     *4LOXUO,4LOXWO,4LOXW1,4LOXZO,4LOXOO,4LO700,4LO701,4L2SKO,                000240
     *4LOYAO,                                                                 000250
     *4LOYRO,4LOYCO,4LOYDO,4LOYEO,4LOYFO,4LOYJO,4L2SNO,4LOY7O,                 000260
     *4LOYLO,4LOYL3,4LOYMO,4LOYM1,4LOYM2,4LOYNO,4LOYQO,4LOYRO,                000270
     *4LOYTO,                                                                 000280
     *4LOYUO,4LOYVO,4LOYZO,4LOY1O,4LOX6O/                                     000290
      DATA ACODES /2HA1,2HA2,2HA3,2HA4,2HC1,2HC2,2HD1,                        000300
     *2HF1,                                                                   000310
     *2HF3,2HZZ,2HE4,2HE5,2HF2,2HZZ                                           000320
     *2HG1,2HG2,2HG3,2HG4,2HH1,2HH2,2HH3,2HH4,2HZZ,2HZZ,2HK3,2HZZ,            000330
     *2HK5,2HZZ,2HZZ,2HK6,2HL1,2HL2,                                          000340
     *2HM1,2HM2,2HM3,2HM4,2HM5,2HF2/                                          000350
      IJK=0                                                                   000360
      LASTCON=LASTCO2=LASTIDD=0                                               000370
      COUNTW=BADCODE=COUNTR=0                                                 000380
9     CONTINUE                                                                000390
      READ(1,100) IDD,ICON,ICON2,ISC,ICITY1,ICITY2                            000400
100   FORMAT(5X,A4,4X,2R8,3X,A2,24X,A8,A7)                                    000410
```

```
      IF(EOF(1)) 20,10                                                  000420
10    CONTINUE                                                          000430
      COUNTR=COUNTR+1                                                   000440
      IDD=IDD.AND.7777777700 0000000000B                                000450
      IJK=IJK+1                                                         000460
C     IF(IJK.GT.100) GOTO 20                                            000470
      IF(ICON-LASTCON) 16,11,16                                         000480
11    IF(ICON2-LASTCO2) 16,12,16                                        000490
12    IF(IDD-LASTIDD) 16,9,16                                           000500
16    CONTINUE                                                          000510
      DO 99 I=1,38                                                      000520
      IF(ICODES(I).EQ.IDD) GOTO 13                                      000530
      CONTINUE                                                          000540
```

```
SORTUTILIZATIONMASTER

PWSCM,CM100000,T75,P3.                                                    000100
CHARGE,PUWS,1189056946,RS,I.                                              000110
FTN,OPT=2.                                                                000120
ATTACH,TAPE1,UTILIZATIONMASTER76,ID=PUWS.                                 000130
REQUEST(TAPE5,*PF)                                                        000160
LIBRARY(COBOL)                                                            000180
RFL,100000.                                                               000190
LGO.                                                                      000200
REDUCE.                                                                   000210
CATALOG,TAPE5,UTILIZATIONMASTER76SORTED,ID=PUWS.                          000230
      PROGRAM SORT(TAPE1,TAPE3,TAPE5,TAPE6,OUTPUT,TAPE7=OUTPUT)           000255
      CALL SMSORT(28)                                                     000310
      CALL SMFILE("SORT","CODED",1,"REWIND")                              000320
      CALL SMFILE("OUTPUT","CODED",5,"REWIND")                            000330
      CALL SMKEY(1,1,17,0,"DISPLAY","DISPLAY","A")                        000340
      CALL SMEND                                                          000350
5     WRITE(7,100)                                                        000415
100   FORMAT(*1NORMAL COMPLETION*)                                        000417
      STOP                                                                000420
      END                                                                 000430
```

```
CRUNCHU

PAJ,CM60000,T20,P4.
CHARGE,PUAJ,1189043801,RS,1.
FTN.
REQUEST,TAPE1,*PF.
ATTACH,TAPE5,UTILIZATIONMASTERSORTED,ID=PUAJ.
LGO.
CATALOG,TAPE1,UMS YR,ID=PUAJ
      PROGRAM CRUNCH(TAPE1,TAPE5,OUTPUT,TAPE9=OUTPUT)                    000100
      INTEGER M1,M2,I1,I2,COUNT,IDD,MDD,IUNIT                            000110
      READ(5,202)M1,M2,MDD                                               000120
      I1=M1                                                              000130
      I2=M2                                                              000140
      IDD=MDD                                                            000171
      IUNIT=1                                                            000173
      COUNT=1                                                            000174
5     READ(5,202)M1,M2,MDD                                               000180
      IF(EOF(5).NF.0) GOTO 80                                            000190
      COUNT=COUNT+1                                                      000200
      IF(M1-I1) 10,20,10                                                 000210
20    IF(M2-I2) 10,60,10                                                 000220
60    IUNIT=IUNIT+1                                                      000260
      GOTO 5                                                             000270
10    WRITE(1,240)I1,I2,IDD,IUNIT                                        000280
      I1=M1                                                              000290
      I2=M2                                                              000300
      IDD=MDD                                                            000340
      IUNIT=1                                                            000360
      GOTO 5                                                             000370
202   FORMAT(R9,R8,9X,A2)                                                000380
240   FORMAT(R9,R8,9X,A2,I5)                                             000390
80    WRITE(9,250)COUNT                                                  000400
250   FORMAT(*EXECUTION COMPLETE;TOTAL RECORD READ=*,I10)                000410
      STOP                                                               000420
      END                                                                000430
```

```
COMPLIANCETAPETODISK

PWSCM,CM60000,T700,MT1.                          POLIN X333                    000010
CHARGE,PUWS,1189056946.                                                        000020
FTN.OPT=2,R-2.                                                                 000030
VSN(TAPE1=CK1268)                                                              000040
REQUEST,TAPE1,MT.HI,NORING,S.                                                  000050
REQUEST,TAPE5,*PF.                                                             000060
LGO.                                                                           000070
CATALOG,TAPE5,COMPLIANCEFILE,ID=PUWS.                                          000075
      PROGRAM CITY(TAPE1,OUTPUT,TAPE3=OUTPUT,TAPE5)                            000090
       INTEGER Z(64,2),COUNTR,COUNTW,PARITY                                    000100
       WRITE(3,305)                                                            000110
 305  FORMAT(*1*,T50,* COMPLIANCE TAPE TO DISK*)                                000120
       COUNTR=0                                                                000130
       COUNTW=0                                                                000140
   5  BUFFERIN (1,0) (Z(1,1),Z(64,2)                                           000150
       IF (UNIT(1))  10,20,30                                                  000160
10    CONTINUE                                                                 000165
      COUNTR=COUNTR+1                                                          000166
      WRITE(5,1) ((Z(I,J),I=1,13),(Z(I,J),I=13,26).                            000170
     *(Z(I,J),I=26,39),(7(I,J),I=39,52),(Z(I,J),I=52,64),                      000180
     *J=1,2)                                                                   000190
    1 FORMAT(12A10,A8/,R2,12A10,A6/,R4,12A10,A4/,                              000200
     *R6,12A10,A2/,R8,12A10/,12A10,A8/                                         000210
     *R2,12A10,A6/,R4,12A10,A4/,R6,12A10,A2/R8,12A10)                          000220
      COUNTW=COUNTW+1                                                          000225
      GOTO 5                                                                   000260
20    WRITE(3,300) COUNTR,PARITY,COUNTW                                        000270
      GOTO 31                                                                  000280
30    CONTINUE                                                                 000285
      PARITY=PARTIY+1                                                          000287
      WRITE(3,301) COUNTR,PARITY                                               000290
      GOTO 5                                                                   000300
```

```
31    CONTINUE                                                                  000310
      STOP                                                                      000320
300   FORMAT(1X,*EOF ENCOUNTERED*,/,1X,I6,* RECORDS READ SUCCESSFULLY*,         000470
     1/,1X,I6,* PARITY ERRORS*/                                                 000480
     2/,1X,I6,* RECORDS WRITTEN*)                                               000485
301   FORMAT(1X,*PARITY ERROR RECORD*,I6,/,1X,I6.                               000490
     1* PARITY ERRORS SO FAR*)                                                  000500
      END                                                                       000560
```

```
CREATECOMPLIANCEMASTER

PWSCM,CM75000,T700,P4.                                                    000010
CHARGE,PUAJ,1189043801.                                                   000020
FTN,OPT=2.                                                                000030
REQUEST(TAPE2,*PF)                                                        000040
ATTACH,TAPE1,COMPLIANCEFILE,ID=PUAJ.                                      000060
LGO.                                                                      000070
CATALOG,TAPE2,COMPLIANCEMASTER,ID=PUAJ,AC=1189043801.                     000080
      PROGRAM INGO(TAPE2,TAPE3,INPUT,OUTPUT,TAPE1,TAPE5=INPUT,            000110
     *TAPE6=OUTPUT)                                                       000120
      INTEGER PARITY,ICOUNT,IOCONUS,BADCODE,ACODES(38),                   000130
     *ICODES(38)                                                          000140
      DATA ICODES /4L0XJ0,4L0XK0,4L0XL0,4L0XP0,4L0XR0,4L0XT0,             000150
     *4L07Y0,                                                             000160
     *4L0XU0,4L0XW0,4L0XW1,4L0XZ0,4L0X00,4L0700,4L0701,4L2SK0,             000170
     *4L0YA0,                                                             000180
     *4L0YR0,4L0YC0,4L0YD0,4L0YE0,4L0YF0,4L0YJ0,4L2SN0,4L0Y70,             000190
     *4L0YL0,4L0YL3,4L0YM0,4L0YM1,4L0YM2,4L0YN0,4L0Y00,4L0YR0,             000200
     *4L0YT0,                                                             000210
     *4L0YU0,4L0YV0,4L0YZ0,4L0Y10,4L0X60/                                 000220
      DATAACODES /2HA1,2HA2,2HA3,2HA4,2HC1,2HC2,2HD1,                     000230
     *2HF1,                                                               000240
     *2HF3,2HZZ,2HE4,2HE5,2HF2,2HZZ                                       000250
     *,2HG1,2HG2,2HG3,2HG4,2HH1,2HH2,2HH3,2HH4,2HZZ,2HZZ,2HK3,2HZZ,       000260
     *2HK5,2HZZ,2HZZ,2HK6,2HL1,2HL2,                                      000270
     *2HM1,2HM2,2HM3,2HM4,2HM5,2HF2/                                      000280
      ICOUNT=BADCODE=PARITY=0                                             000290
      IJK=0                                                               000320
9     CONTINUE                                                            000330
      READ(1,100) IDD1,IFY,ISC,IEFF,ITERM,ISTATE,INSTAL1,INSTAL2,INSTAL3  000340
     1,INSTAL4,IDD2                                                       000350
100   FORMAT(1X,R4,31X,R2,6X,R2,1X,R6,R6,16X,R6,2X,3A10,A3,3X,R2)         000360
      IF(EOF(1)) 20,10                                                    000370
```

```
10    CONTINUE                                                          000380
      IJK=IJK+1                                                         000390
      IDD1=SHIFT(IDD1,36)                                               000395
C     IF(IJK.GT.250) GOTO 20                                            000400
      IF(IEFF.GT.6R750630) GOTO 9                                       000410
      IF(ITERM.EQ.6RINDEF ) GOTO 3                                      000420
      IF(IEFF.LT.ITERM.AND.ITERM.LT.6R740701) GOTO 9                    000430
3     CONTINUE                                                          000440
      DO 12 I=1,38                                                      000450
      IF (ICODES(I).EQ.IDD1) GOTO 13                                    000460
12    CONTINUE                                                          000470
```

```
PWSCM,CM75000,T700,P4.                                                    000010
CHARGE,PUAJ,1189043801.                                                   000020
FTN,OPT=2.                                                                000030
REQUEST(TAPE2,*PF)                                                        000040
ATTACH,TAPE1,OUTGRANTFILE IF OUTGRANTFILE HAS BEEN CREATED HERE, WE MAY USE IT
*76,ID=PUAJ                                                               000060
LGO.                                                                      000070
CATALOG,TAPE2,COMPLIANCEMASTER76,ID=PUAJ,AC=1189043801.                   000080
      PROGRAM INGO(TAPE2,TAPE3,INPUT,OUTPUT,TAPE1,TAPE5=INPUT,            000110
     *TAPE6=OUTPUT)                                                       000120
      INTEGER PARITY, ICOUNT, IOCONUS,BADCODE,ACODES(38),                 000130
     *ICODES(38)                                                          000140
      DATA ICODES /4L0XJ0,4L0XK0,4L0XL0,4L0XP0,4L0XR0,4L0XT0,             000150
     *4L07Y0,                                                             000160
     *4L0XU0,4L0XW0,4L0XW1,4L0XZ0,4L0X00,4L0700,4L0701,4L2SK0,             000170
     *4L0YA0,                                                             000180
     *4L0YB0,4L0YC0,4L0YD0,4L0YE0,4L0YF0,4L0YJ0,4L2SN0,4L0Y70,             000190
     *4L0YL0,4L0YL3,4L0YM0,4L0YM1,4L0YM2,4L0YN0,4L0YQ0,4L0YR0,             000200
     *4L0YT0,                                                             000210
     *4L0YU0,4L0YV0,4L0YZ0,4L0Y10,4L0X60/                                 000220
      DATA ACODES /2HA1,2HA2,2HA3,2HA4,2HC1,2HC2,2HD1,                    000230
     *2HF1,                                                               000240
     *2HF3,2HZZ,2HE4,2HE5,2HF2,2HZZ                                       000250
     *,2HG1,2HG2,2HG3,2HG4,2HH1,2HH2,2HH3,2HH4,2HZZ,2HZZ,2HK3,2HZZ,       000260
     *2HK5,2HZZ,2HZZ,2HK6,2HL1,2HL2,                                      000270
     *2HM1,2HM2,2HM3,2HM4,2HM5,2HF2/                                      000280
      ICOUNT=BADCODE=PARITY=0                                             000290
      IJK=0                                                               000320
9     CONTINUE                                                            000330
      READ(1,100) IDD1,IFY,ISC,IEFF,ITERM,ISTATE,INSTAL1,INSTAL2,INSTAL3  000340
     1,INSTAL4,IDD2                                                       000350
100   FORMAT(1X,R4,31X,R2,6X,R2,1X,R6,R6,16X,R6,2X,3A10,A3,3X,R2)         000360
      IF(EOF(1)) 20,10                                                    000370
10    CONTINUE                                                            000380
```

```
      IJK=IJK+1                                                          000390
      IDD1=SHIFT(IDD1,36)                                                000395
C     IF(IJK.GT.250) GOTO 20                                             000400
      GOTO 9                                                             000410
      IF (ITERM.EQ.6RINDEF ) GOTO 3                                      000420
      IF(IFFF.LT.ITERM.AND.ITEM.LT.6R750701) GOTO 9                      000430
3     CONTINUE                                                           000460
      DO 12 I=1,38                                                       000490
      IF (ICODES(I).EQ.IDD1) GOTO 13                                     000500
```

```
SORTCOMPLIANCEMASTER

PWSCM,CM100000,T100,P4.                                                    000100
CHARGE,PUAJ,1189043801,RS,I,                                               000110
FTN.                                                                       000120
ATTACH,TAPE1,COMPLIANCEMASTER76,ID=PUAJ.                                   000130
REQUEST(TAPE2,*PF)                                                         000170
LIBRARY(COBOL)                                                             000180
RFL,100000                                                                 000190
LGO.                                                                       000200
REDUCE.                                                                    000210
CATALOG,TAPE2,CMS6,ID=PUACJ.                                               000240
      PROGRAM ONEFILE(TAPE1,TAPE2,OUTPUT,TAPE6=OUTPUT)                     000255
      CALL SMSORT(43)                                                      000310
      CALL SMFILE("SORT","CODED",1."REWIND")                               000320
      CALL SMFILE("OUTPUT","CODED",2,"REWIND")                             000330
      CALL SMKFY(1,1,43,0,"DISPLAY",DISPLAY","A")                          000340
      CALL SMEND                                                           000350
5     WRITE(6,100)                                                         000415
100   FORMAT(*1NORMAL COMPLETION*)                                         000417
      STOP                                                                 000420
      END                                                                  000430
```

```
OUTGRANTTAPETODISK

PWSCM,CM60000,T700,MT1.                          POLIN X333                    000010
CHARGE,PUAJ,1189043801                                                         000020
FTN,OPT=2.                                                                     000030
VSN(TAPE1=CK1268)                                                              000040
REQUEST,TAPE1,MT,HI,NORING,S.                                                  000050
REQUEST,TAPE5,*PF.                                                             000060
LGO.                                                                           000070
CATALOG,TAPE5,OUTGRANTFILE76,ID=PUAJ.                                          000075
      PROGRAM CITY(TAPE1,OUTPUT,TAPE3=OUTPUT,TAPE5)                            000090
       INTEGER Z(64,2),COUNT1,COUNT2                                           000100
       WRITE(3,305)                                                            000110
  305 FORMAT(*1*,T50,*OUTGRANT TAPE TO DISK*)                                  000120
       COUNT1=0                                                                000130
       COUNT2=0                                                                000140
    5 BUFFERIN (1,0) (Z(1,1),Z(64,2))                                          000150
       IF (UNIT(1)), 10,20,30                                                  000160
10    WRITE(5,1) ((Z(I,J),I=1,13),(Z(I,J),I=13,26),                            000170
     *(Z(I,J),I=26,39),(Z(I,J),I=39,52),(Z(I,J),I=52,64),                      000180
     *J=1,2)                                                                   000190
    1 FORMAT(12A10,A8/,R2,12A10,A6/,R4,12A10,A4/,                              000200
     *R6,12A10,A2/,R8,12A10/,12A10,A8/                                         000210
     *R2,12A10,A6/,R4,12A10,A4/,R6,12A10,A2/R8,12A10)                          000220
       COUNT1=COUNT1+1                                                         000230
       COUNT2=COUNT2+1                                                         000240
       GOTO 5                                                                  000260
20     WRITE(3,300) COUNT1,COUNT2                                              000270
       GOTO 31                                                                 000280
30     WRITE(3,301) COUNT1,COUNT2                                              000290
       GOTO 5                                                                  000300
31     CONTINUE                                                                000310
       STOP                                                                    000460
```

```
300   FORMAT(1X,*EOF ENCOUNTERED*,/,1X,I6,* RECORDS READ SUCCESSFULLY*,      000470
     1/,1X,I6,* TOTAL RECORDS (INCLUDING ERRORS*)                           000480
301   FORMAT(1X,*PARITY ERROR RECORD*,I6,/,1X,I6,                            000490
     1* RECORDS HAVE BEEN READ SUCCESSFULLY*)                               000500
  304 FORMAT(1X,*PROG TERMINATED*,/,1X,I6,* RECORDS READ SUCCESSFULLY*,      000510
     1/,1X,I6,* TOTAL RECORDS (INCLUDING ERRORS*)                           000520
      END                                                                   000560
```

```
CREATEOUTGRANTMASTER

PWSCM,CM75000,T300,P4.                                                    000010
CHARGE,PUAJ,1189043801.                                                   000020
FTN,OPT=2.                                                                000030
REQUEST(TAPE2,*PF)                                                        000040
ATTACH,TAPE1,OUTGRANTFILE76,ID=PUAJ.                                      000060
LGO.                                                                      000070
CATALOG,TAPE2,OUTGRANTMASTER76,ID=PUAJ,AC=1189043801.                     000080
      PROGRAM INGO(TAPE2,TAPE3,INPUT,OUTPUT,TAPE1,TAPE5=INPUT,            000110
     *TAPE6=OUTPUT)                                                       000120
      INTEGER PARITY, ICOUNT,IOCONUS,BADCODE,ACODES(38),                  000130
     *ICODES(38)                                                          000140
      DATA ICODES /4LOXJO,4LOXKO,4LOXLO,4LOXPO,4LOXRO,4LOXTO,             000150
     *4LO7YO,                                                             000160
     *4LOXUO,4LOXWO,4LOXW1,4LOXZO,4LOXOO,4LO700,4LO701,4L2SKO,            000170
     *4LOYAO,                                                             000180
     *4LOYBO,4LOYCO,4LOYDO,4LOYEO,4LOYFO,4LOYJO,4L2SNO,4LOY7O,            000190
     *4LOYLO,4LOYL3,4LOYMO,4LOYM1,4LOYM2,4LOYNO,4LOYOO,4LOYRO,            000200
     *4LOYTO,                                                             000210
     *4LOYUO,4LOYVO,4LOYZO,4LOY1O,4LOX6O/                                 000220
      DATA ACODES /2HA1,2HA2,2HA3,2HA4,2HC1,2HC2,2HD1,                    000230
     *2HE1,                                                               000240
     *2HE3,2HZZ,2HE4,2HE5,2HF2,2HZZ                                       000250
     *,2HG1,2HG2,2HG3,2HG4,2HH1,2HH2,2HH3,2HH4,2HZZ,2HZZ,2HK3,2HZZ,       000260
     *2HK5,2HZZ,2HZZ,2HK6,2HL1,2HL2,                                      000270
     *2HM1,2HM2,2HM3,2HM4,2HM5,2HF2/                                      000280
      ICOUNT=BADCODE=PARITY=0                                             000290
      IJK=0                                                               000320
9     CONTINUE                                                            000330
      READ(1,100) IDD1,IFY,ISC,IEFF,ITERM,ISTATE,INSTAL1,INSTAL2,INSTAL3  000340
     1,INSTAL4,IDD2                                                       000350
100   FORMAT(1X,R4,31X,R2,6X,R2,1X,R6,R6,16X,R6,2X,3A10,A3,3X,R2)         000360
      IF(EOF(1)) 20,10                                                    000370
```

```
10    CONTINUE
      IJK=IJK+1
      IDD1=SHIFT(IDD1,36)
C     IF(IJK.GT.250) GOTO 20
      IF(IFY.EQ.2R76) GOTO 3
      GOTO 9
3     CONTINUE
      DO 12 I=1,38
      IF (ICODES(I).EQ.IDD1) GOTO 13
12    CONTINUE
```

```
SORTOUTGRANTMASTER

PWSCM,CM100000,T50,P4.                                                    000100
CHARGE,PUAJ,1189043801,RS,I.                                              000110
FTN.                                                                      000120
ATTACH,TAPE1,OUTGRANTMASTER76,ID=PUAJ.                                    000130
REQUEST(TAPE2,*PF)                                                        000170
LIBRARY(COBOL)                                                            000180
RFL,100000.                                                               000190
LGO.                                                                      000200
REDUCE.                                                                   000210
CATALOG,TAPE2,OMS6,ID=PUAJ.                                               000240
      PROGRAM ONEFILE(TAPE1,TAPE2,OUTPUT,TAPE6=OUTPUT)                    000255
      CALL SMSORT(43)                                                     000310
      CALL SMFILE("SORT","CODED",1,"REWIND")                              000320
      CALL SMFILE("OUTPUT","CODED",2,"REWIND")                            000330
      CALL SMKEY(1,1,43,0,"DISPLAY","DISPLAY","A")                        000340
      CALL SMEND                                                          000350
5     WRITE(6,100)                                                        000415
100   FORMAT(*1NORMAL COMPLETION*)                                        000417
      STOP                                                                000420
      END                                                                 000430
```

```
PAJ, CMB0000, T20, P4.
CHARGE, PUAJ, 1189043801, RS, I.
REQUEST, TAPE1, *PF.
ATTACH, TAPE5, OUTGRANTMASTERSORTER, ID=PUAJ.
FTN.
LGO.
CATALOG, TAPE1, OMSYR, ID=PUAJ.
      PROGRAM CRUNCH(TAPE1,TAPE5,OUTPUT,TAPE9=OUTPUT)                                  000100
      INTEGER M1,M2,M3,M4,M5,I1,I2,I3,I4,I5,COUNT,IDD,MDD,MNS,INS,IUNIT                000110
      READ(5,202)M1,M2,M3,M4,M5,MDD,MNS                                                000120
      I1=M1                                                                            000130
      I2=M2                                                                            000140
      I3=M3                                                                            000150
      I4=M4                                                                            000160
      I5=M5                                                                            000170
      IDD=MDD                                                                          000171
      INS=MNS                                                                          000172
      IUNIT=1                                                                          000173
      COUNT=1                                                                          000174
5     READ(5,202)M1,M2,M3,M4,M5,MDD,MNS                                                000180
      IF(EOF(5).NF.0) GOTO 80                                                          000190
      COUNT=COUNT+1                                                                    000200
      IF(M1-I1) 10,20,10                                                               000210
20    IF(M2-I2)  10,30,10                                                              000220
30    IF(M3-I3)  10,40,10                                                              000230
40    IF(M4-I4)  10,50,10                                                              000240
50    IF(I5-I5)  10,60,10                                                              000250
60    IUNIT=IUNIT+1                                                                    000260
      GOTO 5                                                                           000270
10    WRITE(1,240) I1,I2,I3,I4,I5,IDD,INS,IUNIT                                        000280
      I1=M1                                                                            000290
      I2=M2                                                                            000300
      I3=M3                                                                            000310
      I4=M4                                                                            000320
```

```
      I5=M5                                                                  000330
      IDD=MDD                                                                000340
      INS=MNS                                                                000350
      IUNIT=1                                                                000360
      GOTO 5                                                                 000370
202   FORMAT(4R9,R3,A2,R2)                                                   000380
240   FORMAT(4R9,R3,A2,R2,I5)
80    WRITE(9,250)COUNT
250   FORMAT(*EXECUTION COMPLETE;TOTAL RECORD READ=*.I10)
      STOP
      END
```

```
SORTCOMPLIANCELATLONG
SAME AS SORTOUTGRANTLATLONG

PWSCM,CM100000,T50,P4.                                                    000100
CHARGE,PUWS,1189056946,RS,I.                                              000110
FTN.                                                                      000120
ATTACH,TAPE1,OLATLONG,ID=PUWS.                                            000130
REQUEST(TAPE2,*PF)                                                        000170
LIBRARY(COBOL)                                                            000180
RFL,100000.                                                               000190
LGO.                                                                      000200
REDUCE.                                                                   000210
CATALOG,TAPE2,OLATLONGCARDSSORTED,ID=PUWS.                                000240
      PROGRAM ONEFILE(TAPE1,TAPE2,OUTPUT,TAPE6=OUTPUT)                    000255
      CALL SMSORT(48)                                                     000310
      CALL SMFILE("SORT","CODED",1,"REWIND")                              000320
      CALL SMFILE("OUTPUT","CODED",2,"REWIND")                            000330
      CALL SMKFY(1,1,39,0,"DISPLAY","DISPLAY","A")                        000340
      CALL SMEND                                                          000350
5     WRITE(6,100)                                                        000415
100   FORMAT(*1NORMAL COMPLETION*)                                        000417
      STOP                                                                000420
      END                                                                 000430
```

```
CRUNCHC

PAJ, CM60000,T20, P4.
CHARGE, PUAJ, 1189043801, RS, I.
FTN.
ATTACH, TAPE5, CMSYR, ID=PUAJ.
REQUEST, TAPE1, *PF.
LGO.
CATALOG, TAPE1, CMSYR, ID=PUAJ
      PROGRAM,CRUNCH(TAPE1,TAPE5,OUTPUT,TAPE9=OUTPUT)                                  000100
      INTEGER M1,M2,M3,M4,M5,I1,I2,I3,I4,I5,COUNT,IDD,MDD,MNS,INS,IUNIT                000110
      READ(5,202)M1,M2,M3,M4,M5,MDD,MNS                                                000120
      I1=M1                                                                            000130
      I2=M2                                                                            000140
      I3=M3                                                                            000150
      I4=M4                                                                            000160
      I5=M5                                                                            000170
      IDD=MDD                                                                          000171
      INS=MNS                                                                          000172
      IUNIT=1                                                                          000173
      COUNT=1                                                                          000174
5     READ(5,202)M1,M2,M3,M4,M5,MDD,MNS                                                000180
      IF(EOF(5).NE.0) GOTO 80                                                          000190
      COUNT=COUNT+1                                                                    000200
      IF(M1-I1) 10,20,10                                                               000210
20    IF(M2-I2) 10,30,10                                                               000220
30    IF(M3-I3) 10,40,10                                                               000230
40    IF(M4-I4) 10,50,10                                                               000240
50    IF(I5-I5) 10,60,10                                                               000250
60    IUNIT=IUNIT+1                                                                    000260
      GOTO 5                                                                           000270
10    WRITE(1,240)I1,I2,I3,I4,I5,IDD,INS,IUNIT                                         000280
      I1=M1                                                                            000290
      I2=M2                                                                            000300
      I3=M3                                                                            000310
```

```
      I4=M4                                                                  000320
      I5=M5                                                                  000330
      IDD=MDD                                                                000340
      INS=MNS                                                                000350
      IUNIT=1                                                                000360
      GOTO 5                                                                 000370
202   FORMAT(4R9,R3,A2,R2)                                                   000380
240   FORMAT(4P9,R3,A2,R2,I5)                                                000390
80    WRITE(9,250)COUNT                                                      000400
250   FORMAT(*EXECUTION COMPLETE;TOTAL RECORD READ=*,I10)                    000410
      STOP                                                                   000420
      END                                                                    000430
```

```
CREATERELOCATIONMASTER

PWSCM,CM60000,T200,MT1,P4.                          POLIN X333                                  000010
CHARGE,PUAJ,1189043801.                                                                         000020
FTN,OPT=2.                                                                                      000030
VSN(TAPE1=CK1269)                                                                               000040
REQUEST,TAPE1,MT,HI,NORING,S.                                                                   000050
REQUEST,TAPE2,*PF.                                                                              000060
LGO.                                                                                            000070
CATALOG,TAPE2,RELOCATIONMASTER,ID=PUAJ,AC=1189043801.                                           000080
      PROGRAM CITY(TAPE1,TAPE2,OUTPUT,TAPE6=OUTPUT)                                             000100
       INTEGER Z(80,4),COUNTR,PARITY,ICODES(33),ACODES(33),                                     000110
     1COUNTW,BADCODE                                                                            000120
C COUNTR=NUMBER OF RECORDS READ                                                                 000130
C COUNTW=NUMBER OF RECORDS WRITTEN                                                              000140
      DATA ICODES /3LOXJ,3LOXK,3LOXL,3LOXP,3LOXR,3LOXT,                                         000150
     *3LO7Y,                                                                                    000160
     *3LOXU,3LOXW,3LOXZ,3LOX0,3LO70,3L2SK,                                                      000170
     *3LOYA,                                                                                    000180
     *3LOYB,3LOYC,3LOYD,3LOYE,3LOYF,3LOYJ,3L2SN,3LOY7,                                          000190
     *3LOYL,3LOYM,3LOYN,3LOYQ,3LOYR,                                                            000200
     *3LOYT,                                                                                    000210
     *3LOYU,3LOYV,3LOYZ,3LOY1,3LOX6/                                                            000220
      DATA ACODES /2HA1,2HA2,2HA3,2HA4,2HC1,2HC2,2HD1,                                          000230
     *2HE1,                                                                                     000240
     *2HE3,2HE4,2HE5,2HF2,2HZZ                                                                  000250
     *,2HG2,2HG3,2HG4,2HH1,2HH2,2HH3,2HH4,2HZZ,2HZZ,2HK3,                                       000260
     *2HK5,2HK6,2HL1,2HL2,                                                                      000270
     *2HM1,2HM2,2HM3,2HM4,2HM5,2HF2/                                                            000280
      COUNTW=BADCODE=PARITY=0                                                                   000290
       COUNTR=0                                                                                 000300
    5 BUFFERIN (1,0) (Z(1,1),Z(80,4))                                                           000320
       IF (UNIT(1))  10,20,30                                                                   000330
10     CONTINUE                                                                                 000340
```

```
      COUNTR=COUNTR+1                                                    000342
C     IF(COUNTR.GT.250) GOTO 20                                          000344
      DO 999 II=1,4                                                      000350
      IDD=Z(1,II).AND.MASK(18)                                           000360
      DO 888 JJ=1,33                                                     000370
      IF(ICODES(JJ).EQ.IDD)  GOTO 889                                    000380
888   CONTINUE                                                           000390
C NO MATCH WRITE OUT THE CODE AND GET ANOTHER RECORD                     000400
      WRITE(6,100) IDD                                                   000410
100   FORMAT(1X,* NO MATCH FOR THIS CODE *,A10)                          000420
      GOTO 999                                                           000430
      CONTINUE                                                           000440
```

```
[illegible]RELOCATIONMASTER

[illegible],CM75000,T50,P4.                                                    000100
CHARGE,PUWS,1189056946,RS,I.                                                   000110
FTN.                                                                           000120
ATTACH,TAPE1,RELOCATIONMASTER,ID=PUWS.                                         000130
REQUEST(TAPE2,*PF)                                                             000170
LIBRARY(COBOL)                                                                 000180
RFL,75000.                                                                     000190
LGO.                                                                           000200
REDUCE.                                                                        000210
CATALOG,TAPE2,RELOCATIONMASTERSORTED,ID=PUWS.                                  000240
      PROGRAM ONEFILE(TAPE1,TAPE2,OUTPUT,TAPE6=OUTPUT)                         000255
      CALL SMSORT(61)                                                          000310
      CALL SMFILE("SORT","CODED",1,"REWIND")                                   000320
      CALL SMFILE("OUTPUT","CODED",2,"REWIND")                                 000330
      CALL SMKEY(1,1,56,0"DISPLAY","DISPLAY","A")                              000340
      CALL SMEND                                                               000350
5     WRITE(6,100)                                                             000415
100   FORMAT(*1NORMAL COMPLETION*)                                             000417
      STOP                                                                     000420
      END                                                                      000430
```

```
SORTRELOCATIONLATLONG

PWSCM,CM75000,T50,P4.                                                    000100
CHARGE,PUWS,1189056946 RS,I.                                             000110
FTN.                                                                     000120
ATTACH,TAPE1,RLATLONGCARDS,ID=PUWS.                                      000130
REQUEST(TAPE2,*PF)                                                       000170
LIBRARY(COBOL)                                                           000180
RFL,75000.                                                               000190
LGO.                                                                     000200
REDUCE.                                                                  000210
CATALOG,TAPE2,RLATLONGCARDSSORTED,ID=PUWS.                               000240
      PROGRAM ONEFILE(TAPE1,TAPE2,OUTPUT,TAPE6=OUTPUT)                   000255
      CALL SMSORT(68)                                                    000310
      CALL SMFILE("SORT","CODED",1,"REWIND")                             000320
      CALL SMFILE("OUTPUT","CODED",2,"REWIND")                           000330
      CALL SMKEY(1,T,56,0,"DISPLAY","DISPLAY","A")                       000340
      CALL SMEND                                                         000350
5     WRITE(6,100)                                                       000415
100   FORMAT(*1NORMAL COMPLETION*)                                       000417
      STOP                                                               000420
      END                                                                000430
```

APPENDIX E:

SAMPLES OF AMS5 AND ALLS FILES AND DATA FORMATS FOR EACH; OUTPUT OF MAPDATA, CALLED ANSM.

AMS5/BMS5

```
A1204487    3008636017500000600011550003180 7    LOWER ST FRAN BAS FLDWY
A1204487    3008636027 0000040000068000017 40    LOWER ST FRAN BAS FLDWY
A1204638    1402726017500003300006330039245 0    ST FRAN BIG CREEK ITEM-1
A1204646    1007746017500001700007560025980 0    ST FRAN CEN DONNICK FLDY
A1204651    2912696017500000200000140001027 5    ST FRAN DTCH 9-10 ITEM 2
A1204655    0504746017500011900006030039690 0    ST FRAN BAS DITCH 27
A1204655    0504746027500001300000970006590 0    ST FRAN BAS DITCH 27
A1204659    2912691017500001000000490003990 0    ST FRAN BAS BIG BAY IT 1
A1204668    2912696017500003700002420005125 0    ST FRAN BAS LOCUST CREEK
A1204675    1908666037500000300000280000902 8    ST FRAN TYRONZA R ITEM 2
A1226525    0208736017500000500000560003085 0    MISS RIV LEVEE BARNES RG
A1226527    2111676017500000000000000000005 0    MISS RIV LEVEE BIRDS PT
A1226527    2111676027500000500000400000025 0    MISS RIV LEVEE BIRDS PT
A1226639    3004746027500000200002020003282 5    ST FRAN DTCH 1 IT-2-3
A1226639    3004746017500003000011010014860 0    ST FRAN DTCH 1 IT-2-3
A1226672    0502736047500000200000120000310 0    ST FRAN BAS MINGO DITCH
A1226685    2310736027500000200000710000890 0    ST FRAN WAPOAPELLO IT 4
A1226685    2310736017500000300000300000711 5    ST FRAN WAPPAPELLO IT 4
A1243539    0208741017500000100000410000800 0    MISS RV-TRIB W TENN MIT
```

Data Format for Acquisition Master File (AMSYR or BMSYR)

Name of Field	Columns From	TC	No. Cols.	Type of Data*	Justify**	Remark
Division	1	1	1	A	L	
District	2	2	1	N	L	
Department	3	3	1	N	L	
State Code	4	5	2	N	L	Use State Code already in file.
Installation or Project No.	6	8	3	N	L	
Directive No.	9	13	5	N	L	
Directive Date/Date of Approval of REDM (Day,Month,Year)	14	19	6	N	R	
DOD Category	20	20	1	N	L	o
Method of Acquisition	21	22	2	N	R	
Fiscal Yr. in which Acq. Occur	23	24	2	N	R	
No. of Tracts Acquired	25	30	6	N	R	
No. of Acres Acquired	31	37	7	N	R	o
Amount of Accepted Option	38	45	8	N	R	o
Federal Agency from which Acquired	46	49	4	N	R	o
Installation Name	50	73	24	A/N	L	o
State Abbreviation	74	79	6	A	L	o

o Data not needed in Program MAPDATA or MAP

* A=ALPHA, N=NUMERIC

** L=LEFT, R=RIGHT

ALLS/BLLS

A1204487	3604 9021
A1204638	3604 9021
A1204646	3604 9021
A1204651	3604 9021
A1204655	3604 9021
A1204659	3604 9021
A1204668	3604 9021
A1204675	3604 9021
A1204677	3604 9021
A1218523	3700 8900
A1226525	3631 9016
A1226527	3631 9016
A1226639	3631 9016
A1226672	3630 9000
A1226685	3700 9025
A1243539	3610 8926
A2219600	2944 9036
A2244210	3323 9542
A2244210	3323 9542

Data Format for Acquisition Latitude, Longitude File (ALLS/BLLS)

Name of Field	Columns From	TC	No. Cols.	Type of Data*	Justify**	Remark
Division	1	1	1	A	L	
District	2	2	1	N	L	
Department	3	3	1	N	L	
State Code	4	5	2	N	R	Use State Code already in file
Installation or Project No.	6	8	3	N	R	
Latitude Degree	14	15	2	N	R	
Latitude Minute	16	17	2	N	R	
Longitude Degree	18	20	3	N	R	
Longitude Minute	21	22	2	N	R	

*A=ALPHA, N=NUMERIC
**L=LEFT, R=RIGHT

ANSM/BNSM

A1204487	3008636017500000600011550003180 7	36	4	9021	AKH	A1	M4	A3	.06532	.09446	.09647	.01664	.03584	.04455	.01664
A1204487	3008636027 0000040000068000017 40	36	4	9021	AKH	A1	M4	A3	.06532	.09446	.09647	.01664	.03584	.04455	.01664
A1204638	1402726017500003300006330039245 0	36	4	9021	AKH	A1	M4	A3	.06532	.09446	.09647	.01664	.03584	.04455	.01664
A1204646	1007746017500001700007560025980 0	36	4	9021	AKH	A1	M4	A3	.06532	.09446	.09647	.01664	.03584	.04455	.01664
A1204651	2912696017500000290000140001027 5	36	4	9021	AKH	A1	M4	A3	.06532	.09446	.09647	.01664	.03584	.04455	.01664
A1204655	0504746017500011900006030039690 0	36	4	9021	AKH	A1	M4	A3	.06532	.09446	.09647	.01664	.03584	.04455	.01664
A1204655	0504746027500001300000970006590 0	36	4	9021	AKH	A1	M4	A3	.06532	.09446	.09647	.01664	.03584	.04455	.01664
A1204659	2912691017500001000000490003990 0	36	4	9021	AKH	A1	M4	A3	.06532	.09446	.09647	.01664	.03584	.04455	.01664
A1204668	2912696017500003700002420005125 0	36	4	9021	AKH	A1	M4	A3	.06532	.09446	.09647	.01664	.03584	.04455	.01664
A1204675	1906666037500000300000280000902 8	36	4	9021	AKH	A1	M4	A3	.06532	.09446	.09647	.01664	.03584	.04455	.01664
A1226525	0208736017500000500000560003085 0	3631		9016	AHK	A1	A3	M4	.07326	.09118	.09684	.02434	.03666	.04206	.02434
A1226527	2111676017500000000000000000005 0	3631		9016	AHK	A1	A3	M4	.07326	.09118	.09684	.02434	.03666	.04206	.02434
A1226527	2111676027500000050000040000002 5 0	3631		9016	AHK	A1	A3	M4	.07326	.09118	.09684	.02434	.03666	.04206	.02434
A1226639	3004746027500000200002020003282 5	3631		9016	AHK	A1	A3	M4	.07326	.09118	.09684	.02434	.03666	.04206	.02434
A1226639	3004746017500003000011010014860 0	3631		9016	AHK	A1	A3	M4	.07326	.09118	.09684	.02434	.03666	.04206	.02434
A1226672	0502736047500000200000120000310 0	3630		90 0	AHK	A1	A3	M4	.07354	.08817	.09342	.02386	.03705	.04452	.02386
A1226685	2310736027500000020000071000089 0 0	37	0	9025	AHF	A3	A1	M4	.08143	.08896	.09311	.02837	.03299	.04732	.03299
A1226685	2310736017500000300000300000711 5	37	0	9025	AHF	A3	A1	M4	.08143	.08896	.09311	.02837	.03299	.04732	.03299
A1243539	0208741017500000100000410000800 0	3610		8926	AKH	A1	H3	A3	.06982	.08363	.08506	.02004	.03734	.04406	.02004

DMS5

ABERDEEN	MARYLAND	21E1	0	1
ADDISON	ILLINOIS	14C2	1	0
AIKEN	S. CAROLINA	41K6	0	1
ALAMEDA	CALIFORNIA	5L2	0	1
ALAMOGORDO	NEW MEXICO	2M1	0	1
ALBUQUERQUE	NEW MEXICO	32M1	0	6
ALEXANDRIA	LOUISIANA	19M2	0	2
ALMA	NEBRASKA	28C1	0	1
ALTUS	OKLAHOMA	37M5	0	1

Data Format for Disposal Master Fie (DMSYR)

Name of Field	Columns From	TC	No. Cols.	Type of Data*	Justi-fy**	Remark
Location	1	15	15	A/N	L	
State	16	25	10	A	L	
State Code	26	27	2	N	R	
Division	28	28	1	A	L	
District	29	29	1	N	L	
GSA Unit	30	33	4	N	R	
OCE Unit	34	37	4	N	R	

*A=ALPHA, N=NUMERIC
**L=LEFT, R=RIGHT

DISPOSAL-DLLS

ABBEVILLE	LOUISIANA	2958 92 8
ABERDEEN	MARYLAND	3931 7610
ABERDEEN	MISSISSIPP	3349 8833
ABERDEEN	WASHINGTON	465912350
ABILENE	TEXAS	3228 9943
ADAK ISLAND	ALASKA	514517645
ADAMS	WISCONSIN	4357 8949
ADA	OKLAHOMA	3446 9641
ADDICKS	TEXAS	2947 9539
ADDISON	ILLINOIS	4156 8759
ADMIRALTY IS	ALASKA	573013430
ADRIAN	MICHIGAN	4154 84 2
ADVANCE	MISSOURI	37 6 8955
AGNEW	NEBRASKA	4110 9649
AIKEN	S. CAROLINA	3334 8143
AINSWORTH	NEBRASKA	4233 9952
AJO	ARIZONA	322211252
AKRON	ALABAMA	3253 8745
AKRON	OHIO	41 5 8131
ALAMEDA	CALIFORNIA	374612215

Data Format for Disposal Latitude, Longitude File (DLLS)

Name of Field	Columns From	TC	No. Cols.	Type of Data*	Justify**	Remark
Location	1	15	15	A/N	L	
State	16	25	10	A	L	
Latitude Degree	26	27	2	N	R	
Latitude Minute	28	29	2	N	R	
Longitude Degree	30	32	3	N	R	
Longitude Minute	33	34	2	N	R	

*A=ALPHA, N=NUMERIC
**L=LEFT, R=RIGHT

DNSM

ABERDEEN	MARYLAND	3931 7610E1	0	121	EDR	E1	E5	E3	.03570	.08203	.11296	.00731	.01541	.03570	.00731
ADDISON	ILLINOIS	4156 8759C2	1	014	FHO	F2	A3	H2	.00463	.06752	.10541	.00463	.06497	.07077	.10541
ALAMEDA	CALIFORNIA	374612215L2	0	1 5	LGO	L2	L1	G2	.00232	.13564	.35705	.01771	.08581	.13564	.01771
ALAMOGORDO	NEW MEXICO	325410557M1	0	132	MCA	M1	M2	M5	.13390	.20105	.22149	.03943	.12686	.15502	.03943
ALBUQUERQUE	NEW MEXICO	35 510639M1	0	632	MCL	M1	M2	M5	.14787	.18140	.22606	.00000	.14135	.15336	.00000
ALEXANDRIA	LOUISIANA	3118 9227M2	0	219	AMK	A4	A2	M3	.02959	.06959	.12613	.02959	.04269	.04972	.07609
ALMA	NEBRASK	4323 8429C1	0	128	FHF	F2	H4	H1	.04818	.07476	.14350	.04818	.07755	.09073	.15202
ALTUS	OKLAHOMA	3438 9920M5	0	137	MCA	M2	M5	M4	.04876	.12469	.12924	.04418	.05548	.10117	.05548
AMARILLO	TEXAS	351310150M2	1	044	MCA	M1	M2	M5	.08408	.13247	.16643	.06877	.07846	.08548	.07846
ANNISTON	ALABAMA	3339 8550K5	0	53 1	KAH	H3	K5	A1	.02113	.07731	.09690	.04598	.06126	.06601	.06126

IMS5

ABERDEEN	37	K6N	1
ABILENE	48	M2N	1
ABILENE	48	M2R	1
ADA	40	M5N	1
AFTON	40	M5N	1
AGAWAN	25	E3N	1
AKRON	39	E1N	1
AKRON	39	E1R	3
ALAMANCE COUNTY	37	K6N	1
ALAMEDA	06	L2N	2
ALAMOSA	08	C2N	1
ALAMOSA	08	C2R	1
ALBANY	13	K6N	1
ALBANY	36	E3N	8
ALBANY	41	G3N	1
ALBUQUERQUE	35	M1N	5
ALEXANDRIA	51	E1N	18
ALICEVILLE	01	K5N	1
ALICE	48	M3N	2

Data Format for Inleasing Master File (IMSYR)

Name of Field	Columns From	TC	No. Cols.	Type of Data*	Justi-fy**	Remark
Location	1	15	15	A/N	L	
State Code	16	17	2	N	R	
BLANKS	18	26	9	A		BLANKS shall be filled in the field
Division	27	27	1	A	L	
District	28	28	1	N	R	
TYPE	29	29	1	A	L	R or N shall be indicated
Number of unit	30	34	5	N	R	

*A=ALPHA, N=NUMERIC
**L=LEFT, R=RIGHT

UMS5

ABBEVILLE	01	K5	4
ABBEVILLE	22	A2	2
ABERDEEN	37	K6	1
ABERDEEN	46	C2	2
ABERDEEN	53	G3	2
ABILENE	48	M2	4
ACEY	53	G3	1
ADAMS CO	08	C2	1
ADA	40	M5	2
ADDISON	17	C2	1
AFFTON	29	C1	1
AFTON	40	M5	1
AGAWAN	25	E3	1
AGUADILLA ST PR	RQ	ZZ	1
AGUADILLA	RQ	ZZ	42
AIKEN	45	K6	2
AJO	04	L1	1
AKRON	39	E1	8
ALAMANCE COUNTY	37	K6	1

Data Format for Utilization Master File (UMSYR)

Name of Field	Columns From	TC	No. Cols.	Type of Data*	Justify**	Remark
Location	1	15	15	A/N	L	
State Code	16	17	2	N	R	
Blanks	18	26	9	A	L	Blanks shall be filled in the field
Division	27	27	1	A	L	
District	28	28	1	N	R	
Number of unit	29	33	5	N	R	

*A=ALPHA, N=NUMERIC
**L=LEFT, R=RIGHT

ILLS/ULLS

ABBEVILLE	222958 9208
ABERDEEN	373508 7925
ABERDEEN	464528 9829
ABERDEEN	53465912350
ABILENE	483228 9943
ACEY	53
ADAMS CO	0839401045[illegible]
ADA	403446 9641
ADDISON	174156 8759
ADRIAN	264154 8402
AFFTON	293833 9020
AFTON	403641 9458
AGANA GUAM	GQ
AGUADILLA ST PR	RQ
AGUADILLA	RQ
AIKEN	453334 8143
AJO	04322211252
AKRON	394105 8131
ALAMANCE COUNTY	373610 7929

Data Format for Inleasing/Utilization Latitude, Longitude File (ILLS/ULLS)

Name of Field	Columns From	TO	No. Cols.	Type of Data*	Justify**	Remark
Location	1	15	15	A/N	L	
State Code	16	17	2	N	R	See codes of states already in file
Latitude Degree	18	19	2	N	R	
Latitude Minute	20	21	2	N	R	
Longitude Degree	22	24	3	N	R	
Longitude Minute	25	26	2	N	R	

*A=ALPHA, N=NUMERIC
**L=LEFT, R=RIGHT

INSM

ABERDEEN	3735 8 7925K6N	1	KHE E4 K6 H1	.07545	.09912	.12265	.05343	.05858	.07128	.05858
ABILENE	483228 9943M2N	1	MAC M2 M5 M3	.04298	.13014	.16227	.03587	.08466	.09206	.03587
ABILENE	483228 9943M2R	1	MAC M2 M5 M3	.04298	.13014	.16227	.03587	.08466	.09206	.03587
ADA	403446 9641M5N	1	MAC M5 M2 M4	.03467	.09429	.11410	.02675	.03632	.06309	.02675
AFTON	403641 9458M5N	1	MCA M5 C1 M4	.07305	.08154	.09573	.01610	.04251	.05083	.01610
AKRON	3941 5 8131E1N	1	HFE H4 H1 E1	.05293	.08117	.09934	.02285	.04820	.07248	.07248
AKRON	3941 5 8131E1R	3	HFE H4 H1 E1	.05293	.08117	.09934	.02285	.04820	.07248	.07248
ALAMANCE COUNTY	373610 7929K6N	1	KHE E4 H1 E1	.08179	.08635	.10916	.04645	.05691	.06727	.07499

UNSM

ABBEVILLE	222958 92 8A2	2	AMK A2 M3 A4	.04559	.08535	.13245	.03125	.04209	.04559	.03125
ABERDEEN	3735 8 7925K6	1	KHE E4 K6 H1	.07545	.09912	.12265	.05343	.05858	.07128	.05858
ABERDEEN	464528 9829C2	2	CFH C2 C1 F2	.07943	.15040	.21138	.07943	.12196	.15040	.07943
ABERDEEN	5346591235OG3	2	GLC G3 G2 G4	.02926	.16160	.36023	.02076	.02926	.06794	.02076
ABILENE	483228 9943M2	4	MAC M2 M5 M3	.04298	.13014	.16227	.03487	.08466	.09206	.03587
ADAMS CO	08394010455C2	1	CMF M1 C2 M5	.12142	.16550	.23128	.08352	.12142	.13807	.12142
ADA	403446 9641M5	2	MAC M5 M2 M4	.03467	.09429	.11410	.02675	.03632	.06309	.02675
ADDISON	174156 8759C2	1	FHC F2 A3 H2	.00463	.06752	.10541	.00463	.06497	.07077	.10541
AFFTON	293833 9020C1	1	FHC A3 C1 A1	.06840	.07966	.08977	.00216	.05857	.05976	.05857
AFTON	403641 9458M5	1	MCA M5 C1 M4	.07305	.08154	.09573	.01610	.04251	.05083	.01610
AIKEN	453334 8143K6	2	KHA K6 K3 H1	.03887	.10428	.13586	.02742	.05644	.08528	.02742
AJO	043222112521.1	1	LMG L1 M1 L2	.16582	.23594	.26472	.08400	.10191	.16348	.08400
AKRON	3941 5 8131E1	8	HFE H4 H1 E1	.05293	.08117	.09934	.02285	.04820	.07248	.07248
ALAMANCE COUNTY	373610 7929K6	1	KHE E4 H1 E1	.08179	.08635	.10916	.04645	.05691	.06726	.07499

AD-A057 146 CONSTRUCTION ENGINEERING RESEARCH LAB (ARMY) CHAMPAI--ETC F/G 5/1
REAL ESTATE MODEL OF ACTIVITY PERFORMANCE (REMAP) USER'S MANUAL--ETC(U)
JUL 78 C P ALTHEIDE

UNCLASSIFIED CERL-TR-P-89 NL

3 OF 3
AD
A057 146

PROJECT PLANNING MASTER FILE--PMS5

M5237220	R 175CLAYTON	CLAYTON LAKE	OK3435 9521
M5237220	S 175CLAYTON	CLAYTON LAKE	OK3435 9521
M5237220	O 375CLAYTON	CLAYTON LAKE	OK3435 9521
M5237	R 175COLGATE	PARKER RESERVOIR	OK
M5237	R 175DURANT	ALBANY LAKE	OK3360 9623
M5237	R 175DURANT	CENTRAL OKLAHOMA	OK3360 9623
M5237424	R 175PONCA CITY	KAW LAKE	OK3642 9705
M5237429	O 175SALLISAW	KERR LAKE	OK3528 9447
M5237	R 175TULSA	MINGO AND JOE CREEK	OK3610 9554
M5137	R 175TULSA	CORPS LEASE	OK3610 9554
M5244	R 175WICHITA FALLS	LAKE WICHITA	TX3354 9830
M5244	S 175WICHITA FALLS	LAKE WICHITA AND HOLIDAY CREEK	TX3354 9830
M5237750	R 175WAURICA	WAURIKA LAKE	OK3410 9760
M5237750	S 275WAURICA	WAURIKA LAKE	OK3410 9760
M5237	R 175WISTER	WISTER RESERVOIR	OK3458 9443
M5237	S 175WISTER	WISTER RESERVOIR	OK3458 9443
M5537050	R 175ALTUS	ALTUS AFB	OK3438 9920
M5537050	S 175ALTUS	ALTUS AFB	OK3438 9920
M5237577	S 175HARDESTY	OPTIMA LAKE	OK363710112

Data Format for Project Planning Master File (PMSYR)

Name of Field	Columns From	Columns TC	No. Cols.	Type of Data*	Justify**	Remark
Division	1	1	1	A	L	
District	2	2	1	N	L	
Department	3	3	1	N	L	
State Code	4	5	2	N	R	Use state code already in file
Project No.	6	8	3	N	R	
Type	12	12	1	A	L	
Quantity	13	14	2	N	R	
Fiscal Year	15	16	2	N	R	
Location	17	35	19	A/N	L	
Project Title	36	69	34	A/N	L	
State Abbreviation	70	71	2	A	L	
Latitude Degree	72	73	2	N	R	
Latitude Minute	74	75	2	N	R	
Longitude Degree	76	78	3	N	R	
Longitude Minute	79	80	2	N	R	

*A=ALPHA, N=NUMERIC
**L=LEFT, R=RIGHT

PNSM

M5237220	R	175	3435	9521	MAC	M5	M2	M4	.03795	.07581	.11730	.02879	.04273	.04412	.02879
M5237220	S	175	3435	9521	MAC	M5	M2	M4	.03795	.07581	.11730	.02879	.04273	.04412	.02879
M5237220	0	375	3435	9521	MAC	M5	M2	M4	.03795	.07581	.11730	.02879	.04273	.04412	.02879
M5237	R	175	3360	9623	MAC	M2	M5	M4	.02215	.08534	.12722	.02558	.03840	.06049	.03840
M5237	R	175	3360	9623	MAC	M2	M5	M4	.02215	.08435	.12722	.02558	.03840	.06049	.03840
M5237424	R	175	3642	97 5	MCA	M5	C1	M2	.06847	.08129	.11705	.01884	.05422	.06901	.01884
M5237429	0	175	3528	9447	MAC	M5	M4	M2	.05528	.07841	.10291	.02016	.03782	.05975	.02016
M5237	R	175	3610	9554	MCA	M5	C1	M4	.06050	.08932	.09833	.00023	.05433	.05705	.00023
M5137	R	175	3610	9554	MCA	M5	C1	M4	.06050	.08932	.09833	.00023	.05433	.05705	.00023
M5244	R	175	3354	9830	MAC	M2	M5	M4	.03134	.11454	.13334	.02663	.05411	.09081	.05411
M5244	S	175	3354	9630	MAC	M2	M5	M4	.03134	.11454	.13334	.02663	.05411	.09081	.05411
M5237750	R	175	3410	9760	MAC	M2	M5	M4	.02966	.10857	.12718	.02674	.04584	.08288	.04584
M5237750	S	275	3410	9760	MAC	M2	M5	M4	.02966	.10857	.12718	.02674	.04584	.08288	.04584
M5237	R	175	3458	9443	MAC	M5	M4	M2	.04876	.07201	.11168	.02700	.03505	.05383	.02700
M5237	S	175	3458	9443	MAC	M5	M4	M2	.04876	.07201	.11168	.02700	.03505	.05383	.02700
M5537050	R	175	3438	9920	MCA	M2	M5	M4	.04876	.12469	.12924	.04418	.05548	.10117	.05548
M5537050	S	175	3438	9920	MCA	M2	M5	M4	.04876	.12469	.12924	.04418	.05548	.10117	.05548
M5237577	S	175	363710112		MCA	M5	M1	M2	.09180	.10758	.16592	.07463	.08160	.08766	.07463
M5244	R	275	3340	9533	MAC	M2	M5	M4	.02408	.07206	.13309	.03015	.04395	.05080	.04395

OMS5

ABERDEEN PROVING GROUND	MLD	E124	5
ABIQUIU DAM AND RESERVOIR	N MEX	M135	1
ADA CITY OF	OKLA	M540	1
ADDICKS DAM	TEX	M348	6
AF PLANT =3	OKLA	M540	1
AIR FORCE PLANT 13	KAN	C120	2
AIR FORCE PLANT 38	N-Y	E336	1
AIR FORCE PLANT 42	CAL	L106	1
AIR FORCE PLANT 44	ARZ	L104	1
AIR FORCE PLANT 4	TEX	M248	1
AIR FORCE PLANT 6	GEO	K613	1
ALABAMA ARMY AMMUNITION PLANT	ALA	K501	5
ALIAMANU MIL RES	HAW	Z715	1
ALIGATOR CATFISH	MISS	A428	1
ALLATOONA RES	GEO	K513	17
ALMOND LAKE	N-Y	E136	1
ALTUS AFB	OKLA	M540	1
ALUM CREEK LAKE	OHIO	H139	1
AMARILLO NATL GUARD FACILITY	TEX	M248	2
AMES LAKE SKUNK RIVER IOWA	IOWA	E219	1

CMS5

ABERDEEN PROVING GROUND	MLD	E124	121
ABERDEEN PROVING GROUND	VIR	E151	1
ABIQUIU DAM AND RESERVOIR	N MEX	M135	10
ADAIR AF STATION	ORE	G341	5
ADA CITY OF	OKLA	M540	1
ADDICKS DAM	TEX	M348	71
ADDISON FLOOD CONTROL	N-Y	E136	1
AERO CHART-INFO CTR	KAN	C120	1
AERO CHART-INFO CTR	MO	C129	4
AFES STATION MONTGOMERY	ALA	K5 1	1
AFRC WICHITA	KAN	C120	2
AF PLANT NO 14	CAL	L1 6	9
AF PLANT =3	OKLA	M540	4
AIKEN AIR FORCE STATION	S CAR	K645	2
AIR FORCE PLANT 13	KAN	C120	7
AIR FORCE PLANT 19	CAL	L1 6	2
AIR FORCE PLANT 27	OHIO	E139	2
AIR FORCE PLANT 28	MASS	E325	1
AIR FORCE PLANT 29	MASS	E325	2
AIR FORCE PLANT 36	OHIO	E139	5
AIR FORCE PLANT 38	N-Y	E336	4
AIR FORCE PLANT 42	CAL	L1 6	20
AIR FORCE PLANT 44	ARZ	L1 4	5
AIR FORCE PLANT 47	OHIO	E139	3
AIR FORCE PLANT 4	TEX	M248	17
AIR FORCE PLANT 59	N-Y	E336	2
AIR FORCE PLANT 65	MO	C129	10
AIR FORCE PLANT 6	GEO	K613	2
AIR FORCE PLANT 83	N MEX	M135	2
AIR FORCE PLANT 84	MO	C129	7
AJO AIR FORCE STATION	ARZ	L1 4	1
ALABAMA ARMY AMMUNITION PLANT	ALA	K5 1	19
ALAMO RESERVOIR	ARZ	L1 4	3
ALBANY COUNTY AIRPORT	N J	E334	1
ALBENI FALLS DAM	IDA	G316	12
ALCOA ANG STATION	TENN	K547	1
ALIGATOR CATFISH	MISS	A428	1
ALLATOONA RES	GEO	K513	196
ALLEGHENY RIV LD 2	PENN	H442	1
ALLEGHENY RIV L-D 4	PENN	H442	3

Data Format for Outgrant/Compliance Master File (OMSYR/CMSYR)

Name of Field	Columns From	Columns TC	No. Cols.	Type of Data*	Justify**	Remark
Installation/Location	1	33	33	A/N	L	
State Abbreviation	34	39	6	A	L	
Division	40	40	1	A	L	
District	41	41	1	N	L	
State Code	42	43	2	N	R	
Units	44	48	5	N	R	

*A=ALPHA, N=NUMERIC
**L=LEFT, R=RIGHT

OUTGRANT/COMPLIANCE--OLLS/CLLS

ABERDEEN PROVING GROUND	MLD	3930	7615
ABERDEEN PROVING GROUND	VIR	3930	7615
ABIQUIU DAM AND RESERVOIR	N MEX	361610627	
ADA CITY OF	OKLA	3440	9638
ADDICKS DAM	TEX	2947	9536
ADDISON FLOOD CONTROL	N-Y	4205	7715
AERO CHART-INFO CTR	KAN	3837	9012
AERO CHART-INFO CTR	MO	3837	9012
AFES STATION MONTGOMERY	ALA	3223	8619
AFRC WICHITA	KAN	3342	9720
AIDEN AIR FORCE STATION	S CAR	3500	8140
AJO AIR FORCE STATION	ARZ	322211252	
ALABAMA ARMY AMMUNITION PLANT	ALA	3316	8621
ALAMO RESERVOIR	ARZ	341211329	
ALBANY COUNTY AIRPORT	N J	4239	7345
ALCOA ANG STATION	TENN	3548	8359
ALLATOONA RES	GEO	3410	8444
ALLEGHENY RIV LD 2	PENN	4151	7857
ALLEGHENY RIV L-D 4	PENN	4151	7857

Data Format for Outgrant/Compliance Latitude, Longitude File (OLLS/CLLS)

Name of Field	Columns From	TC	No. Cols.	Type of Data*	Justify**	Remark
Installation or Location	1	33	33	A/N	L	
State Abbreviation	34	39	6	A	L	
Latitude Degree	40	41	2	N	R	
Latitude Minute	42	43	2	N	R	
Longitude Degree	44	46	3	N	R	
Longitude Minute	47	48	2	N	R	

*A=ALPHA, N=NUMERIC
**L=LEFT, R=RIGHT

ONSM

ABERDEEN PROVING GROUND	MLD	3930 7615E124	5	EDH	E1	E5	E3	.03678	.08308	.11183	.00623	.01653	.03678	.00623
ARIQUIU DAM AND RESERVOIR	N MEX	361610627M135	1	MCL	M1	M2	M5	.15118	.16661	.22377	.02085	.14512	.14826	.02085
ADA CITY OF	OKLA	3440 9638M540	1	MAC	M5	M2	M4	.03298	.09291	.11579	.02809	.03482	.06242	.02809
ADDICKS DAM	TEX	2947 9536M348	6	MAK	M3	M2	A4	.05541	.08353	.18013	.01479	.05765	.08353	.01479
ALABAMA ARMY AMMUNITION PLANT	ALA	3316 8621K501	5	KAH	H3	K5	A1	.02984	.06839	.10503	.05099	.05163	.06256	.05163
ALATOONA RES	GEO	3410 8444K513	17	KHA	H3	K6	H2	.00886	.08616	.09517	.04554	.06435	.07274	.07799
ALMOND LAKE	N-Y	4220 7749E136	1	FDH	H4	E5	E1	.05729	.08489	.10502	.04392	.05425	.05554	.05554
ALTUS AFB	OKLA	3438 9920M540	1	MCA	M2	M5	M4	.04876	.12469	.12924	.04418	.05548	.10117	.05548
ALUM CREEK LAKE	OHIO	4010 83 0H139	1	HFK	H1	H4	H2	.02761	.06795	.11364	.03143	.03998	.05018	.03143
AMARILLO NATL GUARD FACILITY	TEX	351310150M248	2	MCA	M1	M2	M5	.08408	.13247	.16643	.06877	.07846	.08548	.07846
AMES LAKE SKUNK RIVER IOWA	IOWA	4130 9150F219	1	CFH	A3	C2	F2	.05490	.05514	.10597	.05485	.05490	.05514	.05514
ARKABUTLA RES	MISS	3446 90 8A428	91	AKM	A1	M4	A4	.04357	.08481	.10293	.00651	.03083	.04357	.04357
ARK R HENSLEY BAR CUT-OFF	ARK	34 2 9110M405	1	AMK	M4	A1	A4	.02967	.08515	.09838	.02037	.02502	.02967	.02037
ARMY TOPOGRAPHIC STATION	MLD	3858 7710E124	1	EDH	E1	E5	F4	.05228	.09857	.09965	.00927	.03195	.03889	.00927

CNSM

ABERDEEN PROVING GROUND	MLD	3930	7615E124	121	EDH	E1	E5	E3	.03678	.08308	.11183	.00623	.01653	.03678	.00623
ABERDEEN PROVING GROUND	VIR	3930	7615E151	1	EDH	E1	E5	E3	.03673	.08308	.11183	.00623	.01653	.03678	.00623
ABIQUIU DAM AND RESERVOIR	N MEX	3616	10627M135	10	MCL	M1	M2	M5	.15116	.16661	.22377	.02065	.14512	.14026	.02065
ADA CITY OF	OKLA	3440	9636M540	1	MAC	M5	M2	M4	.03258	.09291	.11579	.02009	.03402	.06242	.02009
ADDICKS DAM	TEX	2947	9536M346	71	MAK	M3	M2	A4	.05541	.08353	.16013	.01479	.05765	.06353	.01479
ADDISON FLOOD CONTROL	N-Y	42 5	77152136	1	EDH	E5	H4	E3	.04677	.07791	.10943	.04625	.04633	.04677	.04,56
AERO CHART-INFO CTR	KAN	3837	9012C120	1	FHC	A3	C1	A1	.06647	.07769	.09065	.00000	.06016	.06063	.06016
AERO CHART-INFO CTR	MO	3837	9012C129	4	FHC	A3	C1	A1	.06647	.07769	.09065	.00000	.06016	.06063	.06016
AFES STATION MONTGOMERY	ALA	3223	8619K5 1	1	KAH	K5	H3	A4	.03659	.06732	.11990	.02931	.06637	.06732	.03931
AFRC WICHITA	KAN	3342	9720C120	2	MAC	M2	M5	M4	.01769	.09726	.13360	.01659	.04756	.07514	.10164
AJO AIR FORCE STATION	ARZ	3222	11252L1 4	1	LMC	L1	M1	L2	.16562	.23594	.26472	.06400	.10191	.16346	.06400
ALABAMA ARMY AMMUNITION PLANT	ALA	3316	8621K5 1	19	KAH	K3	K5	A1	.02964	.06839	.10503	.05093	.05163	.06256	.05163
ALAMO RESERVOIR	ARZ	3412	11329L1 4	3	LCM	L1	M1	L2	.14072	.23223	.24357	.06050	.09930	.13506	.06050
ALBANY COUNTY AIRPORT	N J	4239	7345E33A	1	DEH	D1	E3	E5	.03271	.03390	.15486	.03271	.03390	.05065	.03390
ALCOA ANC STATION	TENN	3548	8355K547	1	KHA	H3	H2	H1	.03624	.05807	.11647	.04006	.04945	.05041	.10721
ALLATOONA RES	GEO	3410	8444K513	196	KHA	H3	K6	H2	.00865	.06616	.09517	.04554	.06435	.07274	.07799
ALLEGHENY RIV LD 2	PENN	4151	7857H442	1	EHD	H4	E1	E5	06786	08809	10030	02842	05444	05991	02842
ALLEGHENY RIV L-D 4	PENN	4151	7857H442	3	EHD	H4	E1	E5	06786	08809	10030	02842	05444	05991	

RMS5

ALUM CREEK LAKE	DELAWARE COUNTY	OHIO	39H11
ANDREWS AFB	PRINCE GEORGES COUNTY	MARYLA	24E11
APPLE GATE LAKE	JACKSON CO	OREG	41G21
BEAR CREEK LAKE	KNOX CO	COLO	08C21
BEECH FORK LAKE	WAYNE COUNTY	W-VA	54H11
BIG STONE LAKE-WHETSO	DESSA	MINN	27F21
BIG THICKET NATL PK	JEFFERSON COUNTY	TEX	48M21
BIRCH LAKE	OSAGE COUNTY	OKLA	40M51
BLOOMINGTON LAKE	MINERAL COUNTY	W-VA	54E11
BLUE MARSH LAKE	BERKES COUNTY	PA	42E51

Data Format for Relocation Master File (RMSYR)

Name of Field	Columns From	TC	No. Cols.	Type of Data*	Justify**	Remark
Project Title/ Installation	1	20	20	A/N	L	
County/Location	21	50	30	A/N	L	
State Abbreviation	51	56	6	A	L	
State Code	57	58	2	N	L	
Division	59	59	1	A	L	
District	60	60	1	N	L	
Number of Unit	61	61	1	N	L	

*A=ALPHA, N=NUMERIC
**L=LEFT, R=RIGHT

RLLS

ALICEVILLE L-D	PICKENS CO	ALA	3308 8809
ALUM CREEK LAKE	DELAWARE COUNTY	OHIO	4010 8300
ANDREWS AFB	PRINCE GEORGES COUNTY	MARYLA	3844 7656
APPLE GATE LAKE	JACKSON CO	OREG	421612310
BEECH FORK LAKE	WAYNE COUNTY	W-VA	3813 8227
BELTON LAKE	BELL + CORYELL COUNTIES	TX	3107 9729
BELTZVILLE LAKE	CARBON AND MONROE COUNTIES	PENN	4045 7530
BERWICK RATS FLDWALL	ST MARYS PARISH	LA	2941 9112
BIG BEND DAM	BUFFALO AND LYMAN COUNTIES	S-DAK	4407 9923
BIG HILL LAKE	MONTGOMERY CO	KAN	3720 9541
BIG STONE LAKE-WHET	SODESSA	MINN	4518 9627
BIG THICKET NATL PK	JEFFERSON COUNTY	TEX	2940 9415
BIRCH LAKE	OSAGE COUNTY	OKLA	3634 9610
BLOOMINGTON LAKE	MINERAL COUNTY	W-VA	3939 7904
BLUE MARSH LAKE	BERKES COUNTY	PA	4020 7556
BLUE SPRINGS LAKE	JACKSON COUNTY	MO	3901 9342
BONNEVILLE L-D	MULNOMAH COUNTY	ALASKA	453912156
BONNEVILLE L-D	MULTNOMAH COUNTY	ORE	453912156
BONNEVILLE L-D	SKAMANIA COUNTY	WASH	453912156

Data Format for Relocation Latitude, Longitude File (RLLS)

Name of Field	Columns From	TC	No. Cols.	Type of Data*	Justi-fy**	Remark
Installation	1	20	20	A/N	L	
Location	21	50	30	A/N	L	
State Abbreviation	51	56	6	A	L	
Latitude Degree	60	61	2	N	R	
Latitude Minute	62	63	2	N	R	
Longitude Degree	64	66	3	N	R	
Longitude Minute	67	68	2	N	R	

*A=ALPHA, N=NUMERIC
**L=LEFT, R=RIGHT

RNSM

ANDREWS AFB	PRINCE GEORGES COUNTY	MARYLA	3844	765624E11	EDH E1 E5 E4	.05242	.09881	.10315	.01052	.03193	.03407
.01052											
APPLE GATE LAKE	JACKSON CO	OREG	42161231041	G21	GLC G2 L2 G4	.05743	.07889	.35231	.05743	.06806	.08974
.05743											
BEECH FORK LAKE	WAYNE COUNTY	W-VA	3813	822754H11	HKF H1 H2 H4	.03211	.08260	.09426	.00349	.04547	.05075
.00349											
BIG STONE LAKE-WHETSODESSA		MINN	4518	962727F21	CFH C2 C1 F2	.07032	.12630	.18814	.07032	.11086	.12630
.12630											
BIG THICKET NATL PK	JEFFERSON COUNTY	TEX	2940	941548M21	MAK M3 A2 A4	.06652	.06876	.16281	.01053	.06356	.06876
.07048											
BIRCH LAKE	OSAGE COUNTY	OKLA	3634	961040M51	MCA M5 C1 M4	.06669	.08235	.10578	.00782	.04931	.06354
.00782											
BIRCH LAKE	OSAGE COUNTY	OKLA	3634	961040M51	MCA M5 C1 M4	.06669	.08235	.10578	.00782	.04931	.06354
.00782											
BIRCH LAKE	OSAGE COUNTY	OKLA	3634	961040M51	MCA M5 C1 M4	.06669	.08235	.10578	.00782	.04931	.06354
.00782											

APPENDIX F:

NECESSARY PROGRAM NAMES

FILE NAME X	Parameter File X1	Lat/Long File XLLS	Master File for '75 XMS5	Master File for '76 XMS6	MAPDATA Program Type 1 CY1,CY2 XMD1	MAPDATA Program Type 2 CY1,CY2 XMD2	MAPDATA Program Type 3 CY1,CY2 XMD3	MAP Program Type 1 CY1,CY2 XMAP1	MAP Program Type 2 CY1,CY2 XMAP2	MAP Program Type 3 CY,CY2 XMAP3	Other Files EXDDF,TEMDO
A	x	x	x	x	x	x	x	x	x	x	CRUCHI,(CRUNCHU, CRUCHC)
B					x	x	x	x	x	x	REP1, (REP2)
C	x	x	x	x	x	x	(x)	x	x	(x)	PROFILE
D	x	x	x	x	x	x	(x)	x	x	(x)	CREATADD,VALUEDEL
											REMAP1, (REMAP2)
I	x	x	x	x	x	x	x	x	x	x	(REALESTATE3)
O	x	x	x	x	x	x	(x)	x	x	(x)	(ATTACHPF)
P	x		x	x	x	x	x	x	x	(x)	
R	x	x	x	x	x	x	(x)	x	x	(x)	
U	x		x	x	x	x	(x)	x	x	(x)	

x Permanent file cataloged under PUAJ and PUWS.
(x) Permanent file cataloged under PUWS but could be cataloged under PUAJ

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Altheide, Carl P.
Real estate model of activity performance (REMAP) : user's manual. -- Champaign, Ill. : Construction Engineering Research Laboratory ; Springfield, Va. : available from National Technical Information Service , 1978.
206p. ; 27 cm. (Technical report - Construction Engineering Research Laboratory ; P-89)

1. Real estate management. 2. REMAP. I. Title. II. Series: U.S. Construction Engineering Research Laboratory - Technical report ; P-89.

END