

AD-A048 554

ARMY CONCEPTS ANALYSIS AGENCY BETHESDA MD
COMPUTER ASSISTED MATCH PROGRAM (CAMP), (U)
AUG 76 G L MARTIN, E R MONTAGNE

UNCLASSIFIED

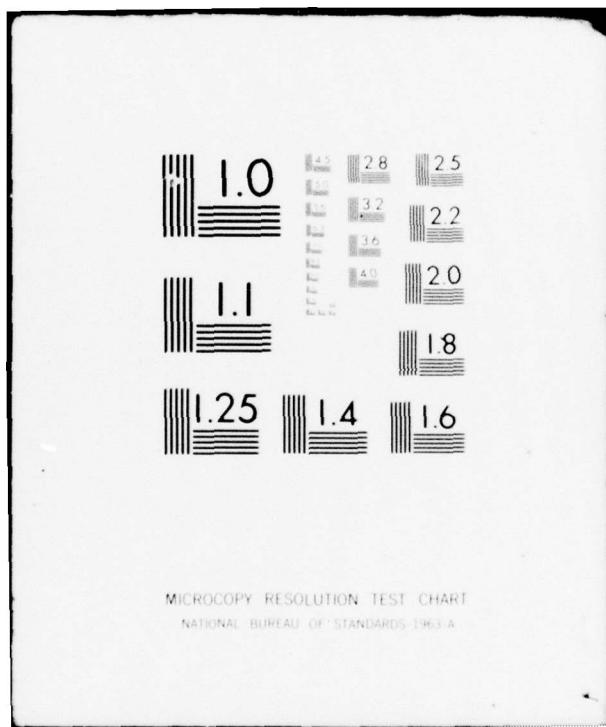
CAA-D-76-5

F/6 15/7

NL

| OF 4
AD-A048554

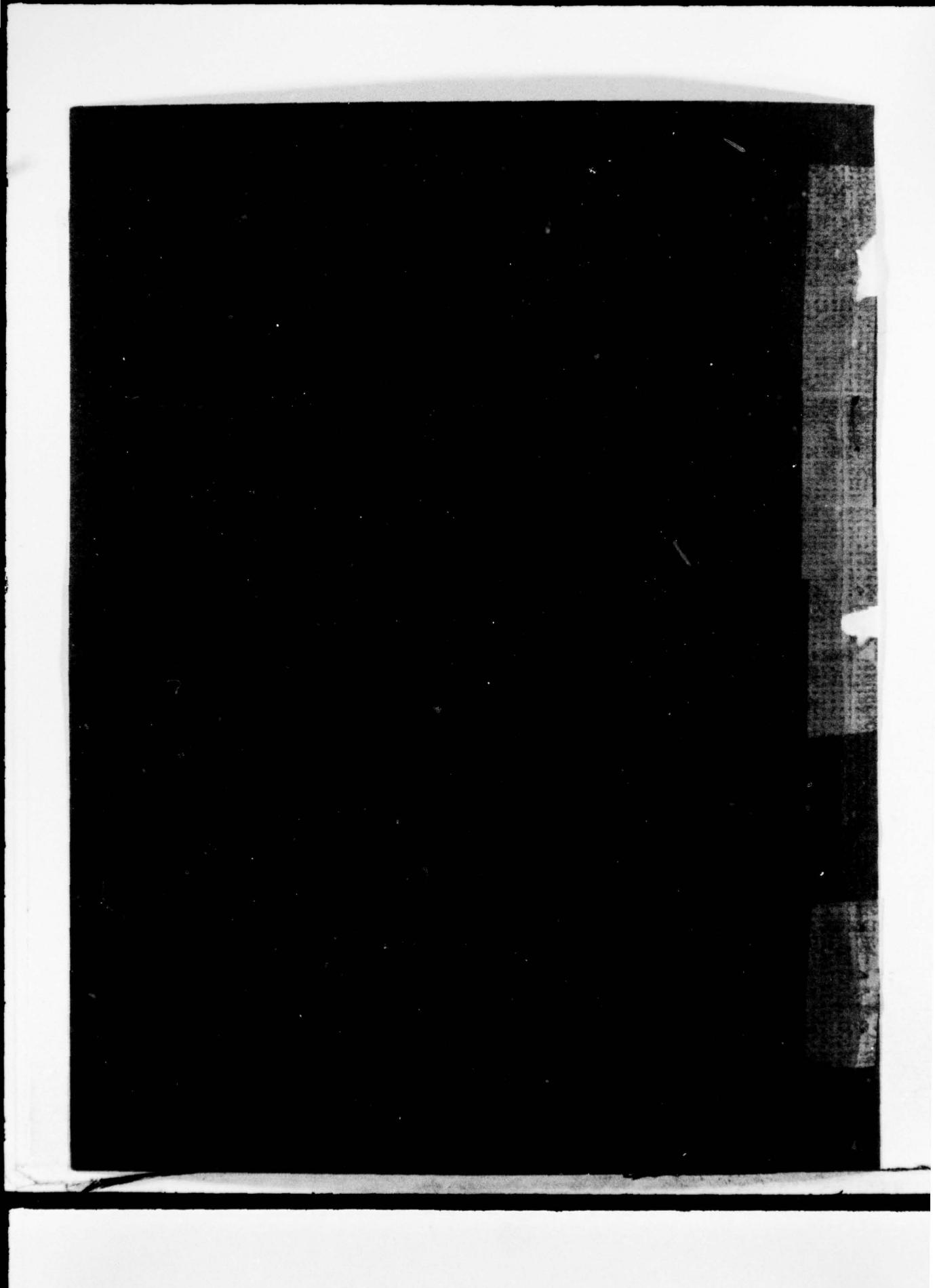




AD-A048554

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

DD
PAGE
JAN 2
R
HOL
E



0

DOCUMENTATION

CAA-D-76-5

COMPUTER ASSISTED MATCH PROGRAM
(CAMP)

AD-A

AUGUST 1976

PREPARED BY

JOINT AND STRATEGIC FORCES DIRECTORATE

US ARMY CONCEPTS ANALYSIS AGENCY

8120 Woodmont Avenue
Bethesda, Maryland 20014

ADMISSION NO.	
WTS	White Section <input checked="" type="checkbox"/>
DSG	Buff Section <input type="checkbox"/>
UNACKNOWLEDGED <input type="checkbox"/>	
NOTIFICATION <i>Per DDC Form 50 or on file</i>	
DISTRIBUTION/AVAILABILITY CODES	
Dist. AVAIL. and/or SPECIAL	
A	

D D C
RECORDED
JAN 23 1978
RECORDED
D

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

~~UNCLASSIFIED~~ SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER CAA-D-76-5	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Computer Assisted Match Program (CAMP)		5. TYPE OF REPORT & PERIOD COVERED Model Documentation
7. AUTHOR(s) Mr Gary L Martin MAJ Ernest R Montagne Jr		6. PERFORMING ORG. REPORT NUMBER CAA-D-76-5
9. PERFORMING ORGANIZATION NAME AND ADDRESS US Army Concepts Analysis Agency Joint and Strategic Forces Directorate 8120 Woodmont Avenue, Bethesda, MD 20014		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Concepts Analysis Agency Joint and Strategic Forces Directorate 8120 Woodmont Avenue, Bethesda, MD 20014		12. REPORT DATE 13 August 1976
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) NA		13. NUMBER OF PAGES 314
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE NA
16. DISTRIBUTION STATEMENT (of this Report) <div style="border: 1px solid black; padding: 5px; text-align: center;">DISTRIBUTION STATEMENT A Approved for public release; Distribution Unlimited</div>		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Force structure, Force match, Movement requirements, Strategic mobility		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) CAMP is a data processing system designed to be used as a tool in force structuring and analysis and strategic mobility analysis. CAMP contains two major functions: Force match algorithm (FMA) and Movement Requirements Generator. CAMP interfaces DA force planning files (Force Accounting System), the FASTALS theater roundout model, and various logistical data files to produce movement requirements in the Mobility Requirements for Staff Analysis system (MORSA) and/or SMOBSMOD format.		

~~UNCLASSIFIED~~

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

UNCLASSIFIED

REF ID: A6510000000000000000

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

TABLE OF CONTENTS

	Page
Disclaimer	ii
Report Documentation Page, DD Form 1473	iii
Table of Contents	vii
List of Figures	ix
List of Tables	ix

CHAPTER

I	System Introduction	I-1
	Purpose	
	Background	
	General System Description	
	Operation and Maintenance	
	Security	
	Limitations and Constraints	
II	Functional Description - Force Match Algorithm (FMA) .	II-1
	Introduction	
	System Processing Flow	
	Interfaces with other models	
	User Constraints	
III	Functional Description - Movement Requirements Generator (MRG).	III-1
	Introduction	
	System Processing Flow	
	Interfaces with other models	
	User Constraints	
IV	Data Dictionary	IV-1
V	Job Preparation	V-1
	FMA Job Preparation	
	MRG Job Preparation	

VI Job Utilization VI-1

Force Match Algorithm
Movement Requirements Generator

VII Program Listings VII-1

	Listing Page Number
BUILD	1
SORTUDS	4
FSORT	12
RSORT	30
MATCH	34
ATL	45
ALT	49
LAYIN	51
BINCOPY	58
SORTARLOC	64
MORSAROLL	69
TUCHARROLL	79
POMCUSROLL	89
GEO	99
LOG	106
UPMDF1	113
NUR	115
MERGEMORSA	125
PCKAGE	126
INLAY	133
PRTPCK	138
BUILDMRG	140

VIII Sample Output VIII-1

APPENDICES

A. Study Contributors	A-3
B. References	B-3
C. Glossary	C-3

LIST OF FIGURES

Figure	Page
I-1 CAMP Input-Processing-Output Chart	I-2
II-1 FMA Input-Processing-Output Chart	II-4
III-1 MRG Input-Processing-Output Chart	III-3

LIST OF TABLES

II-1 FMA Programs	II-3
III-1 MRG Programs	III-2
V-1 FAS File Record	V-2
V-2 CAMP SUM File Record	V-3
V-3 R SORT Card Type 1	V-5
V-4 R SORT Card Type 2 (Lockout UIN)	V-5
V-5 Hand Played UIC Data	V-5
V-6 Lockout ADC01 Data	V-6
V-7 Alternate Theater ADC01 Data	V-6
V-8 MCODE 1 (POMCUS) ROBCO Data	V-7
V-9 MCODE 0 (In-country) Data	V-7
V-10 Lockout COMPO Data	V-7
V-11 Subperiod RDD Data	V-9
V-12 Notional Unit Data	V-9
V-13 Notional Unit PECOD Data	V-10
V-14 Above-the-Line RDD Data	V-10
V-15 ARLOC File Record Description	V-10
V-16 TUCHA ABF1 Record Description	V-11
V-17 TUCHA F2 Record Description	V-11
V-18 POMCUS F1 Record Description	V-12
V-19 POMCUS F2 Record Description	V-12
V-20 POMCUS F3 Record Description	V-12
V-21 M ORSA File Record Description	V-14
V-22 MORSAROLL Input Data	V-15
V-23 GEO Data	V-16
V-24 Node Table	V-16
V-25 LOG Data	V-17
V-26 UPMDF1 Data	V-17
V-27 NUR Data	V-18
V-28 PCKAGE Data	V-20
V-29 INLAY Data	V-21
VI-1 SORTUDS Report	VI-2
VI-2 FSORT Reports	VI-3
VI-3 RSORT Report	VI-4

VI-4	MATCH Report	VI-5
VI-5	Data Elements Displayed by TUCHAROLL	VI-7
VI-6	SMOBSMOD Cargo Categories	VI-10
VI-7	MDF1 Data Elements	VI-10
VI-8	Supply Status Summary	VI-11
VI-9	MRG Data Items Overlaid on FAS File	VI-13

COMPUTER ASSISTED MATCH PROGRAM (CAMP)

CHAPTER I SYSTEM INTRODUCTION

1. Purpose. The purpose of this documentation is to describe the Computer Assisted Match program (CAMP) Model in sufficient detail to allow use of CAMP by interested personnel.

2. Background

a. Various strategic mobility models require the input of force movement requirements in varying levels of detail.

b. Several studies conducted at the Concepts Analysis Agency (CAA) require production of input for the Strategic Mobility Simulation Model (SMOBSMOD), used at CAA, or the Mobility Requirements for Staff Analysis (MORSA) system, used at Joint Chiefs of Staff level. Automated production of such input is dictated by the volume of data required (typically, to 20,000 cards for MORSA). The CAMP was developed to meet this requirement.

3. General System Description. The CAMP is a data processing system developed at CAA. The system consists of two major functions as shown in Figure I-1: Force Match Algorithm (FMA) and Movement Requirements Generator (MRG). Each function includes a series of programs, primarily written in FORTRAN, but with some COBOL programs as well. The objectives of CAMP are to compare an actual Army force structure with time phased unit requirements for a given scenario, identify overages and shortfalls on the force, create notional units for shortfalls, and produce movement requirements (e.g., origin destination, required delivery date, and deployment weight) as determined from the time phased unit requirements for input to various strategic mobility models. The CAMP provides the interface between the Force Accounting System (FAS) used in force structuring and analysis by the DA staff, the Force Analysis Simulation of Theater Administration and Logistics Support (FASTALS) Model used at CAA, and the SMOBSMOD and MORSA mobility models. Significant features of CAMP are its abilities to generate notional FAS records for required units not on the FAS file; to develop unit movement requirements for the notional units and for actual units which are required by the scenario; and to calculate nonunit movement requirements (resupply, replacements, and fillers) to support the force. The user may specify up to seven theaters, each with different force lists, and nonunit factors. In general, CAMP programs function sequentially. Should an error in input

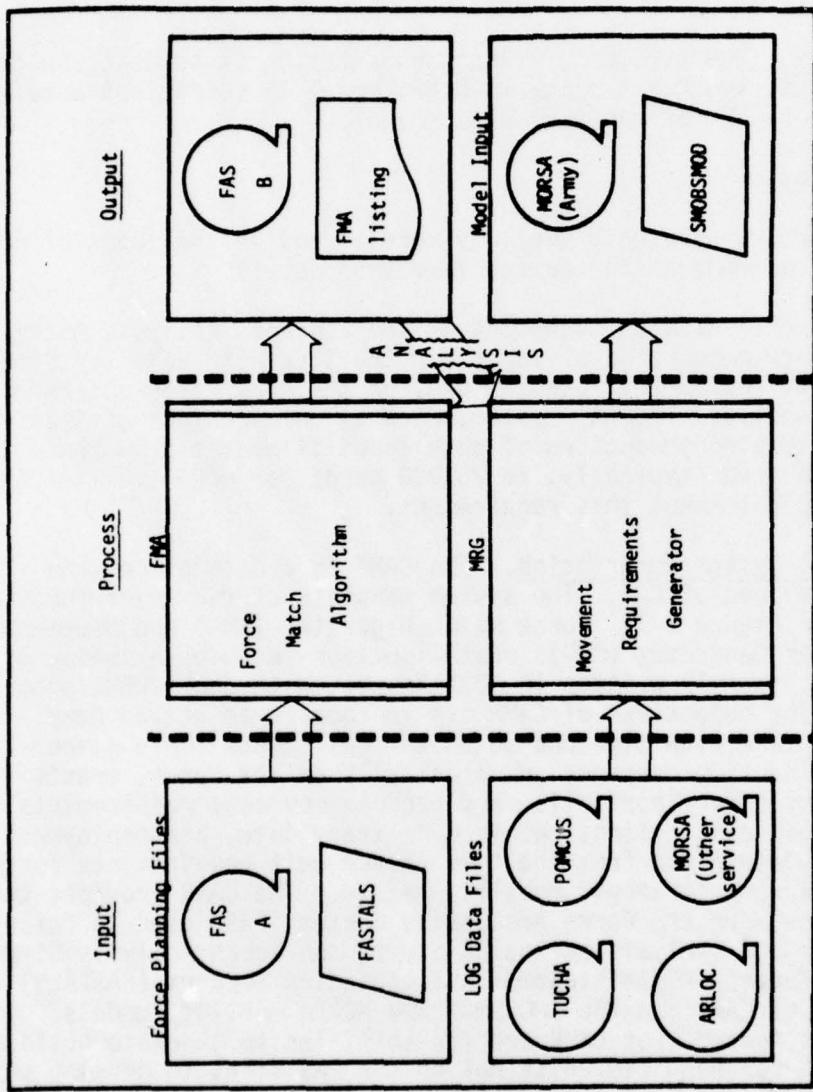


FIGURE I-1, CAMP Input-Processing-Output Chart

to one program lead to a processing error, execution is terminated and a diagnostic error message is printed to assist the user in correcting the error. The CAMP has been interfaced with the Unit Data System (UDS) to provide a generalized report generator capability.

4. Operation and Maintenance. The CAMP operates on the UNIVAC 1108 computer. The maximum program size is 58K words but most programs are between 20K and 40K words. Processing time is directly dependent on the size of the force being processed. Typically, a force may include on the order of 10,000 units, in which case exercise of the FMA will require approximately 1 hour of wall-clock time, and MRG will require approximately 2 hours. The CAMP is maintained by the CAA Methodology and Resources Directorate (MRD) that provides program-related user assistance. The proponent of CAMP is the Joint and Strategic Forces Directorate (JF), that provides functionally oriented user assistance.

5. Security. The CAMP programs are unclassified, but files and data are generally classified SECRET.

6. Limitations and Constraints

a. Data Base. Many of the files accessed by CAMP are not produced at CAA. The user often has little control over the quality of the data in these files. Close coordination with the data source is required to obtain valid data.

b. Formats. The input force must be in FAS file format. The output is produced only in SMOBSMOD and MORSA formats. Requirements for other formats should be coordinated with MRD.

COMPUTER ASSISTED MATCH PROGRAM (CAMP)

CHAPTER II FUNCTIONAL DESCRIPTION - FORCE MATCH ALGORITHM (FMA)

1. Introduction

a. The Force Match Algorithm (FMA) is a force structuring and analysis tool. The FMA compares an actual or planning force in FAS file format with a time phased requirements list produced by FASTALS. Selected units on the force may be locked out (excluded from consideration in the match) based on user input. For example, units located in a specific theater might be locked out in a match of requirements for another theater. The remaining units are match candidates and are matched against type unit requirements identified by FASTALS. Each match candidate is either matched or designated as excess to the stated requirements. Each requirement that cannot be matched with a unit on the force results in generation of a notional unit. Each matched unit and each notional unit are assigned a required delivery date (RDD) based on the FASTALS time phasing. Assignment of RDD within a FASTALS time period is user adjustable.

b. Output of the FMA is used by the force planner to allocate resources between active and reserve components. The rationale for allocation is that units required early should be active, while those required later may be reserve. Close scrutiny of overages and shortfalls is required to determine if substitutions can be made. It is from this manual analysis that CAMP draws the computer assisted portion of its name. The match cannot be fully automated because the force planner should have the final decision in structuring a force. However, CAMP output assists the planner in force analysis. In general, analysis by the planner will result in retention of many units designated as excess. Further, budgetary or other constraints may well result in the inability of the planner to activate the notional unit shortfalls. Only the application of sound judgment by the planner will result in designation of the appropriate force.

c. The FMA input consists of two basic files: the Force file and the Requirements file. The Force file is a planning force and may be considered as the starting point in the force structuring process. Typically, the Force file is provided in FAS format by the Office, Deputy Chief of Staff for Operations and Plans (ODCSOPS). The second input file is the Requirements file. This file is generated by FASTALS, the theater roundout model, in response to a specific scenario or situation.

2. System Processing Flow. The FMA consists of a series of nine programs that are identified in Table II-1.

a. Preprocessors

(1) Program BUILD accepts a FAS tape and creates a keyed access UDS file. The UDS allows detailed analysis of the force prior to match. In particular, the user can verify the number and location of various type units, examine the POMCUS packages, and update the file to correct errors or add new data. Capabilities of UDS are described in Reference 1.

(2) Program SORTUDS reads the UDS file. Records are sorted and written to a Force file (FF) on mass storage.

b. Main Programs. Input-processing-output charts for the main programs are shown in Figure II-1.

(1) Program FSORT reads the Force file to select Match Candidates. The user has considerable influence over the selection process. Certain fields of the FAS records can be updated based on user input. Subsequent to update, FSORT divides the force into five groups.

(a) Locked Out. These units are designated by the user based on the value of the ADC01 field. Locked Out units are excluded from consideration in the match process and are written to the Lock Out file (LOU). Generally, these will be units with specific missions in theaters not of interest in the current run. They are considered nondeployable.

(b) Alternate Theater. These units are also designated by the user based on the ADC01 field. Alternate Theater units are required to be deployed to theaters other than the primary theater. Requirements for these units are not generated by FASTALS. The units are excluded from match consideration but will ultimately be assigned RDD and destination in the specified theater; these units are written to the Alternate Theater file (ALT).

(c) Above-the Line. These are major combat forces (divisions and separate brigade sized units). Both the RDD and theater of these units are determined by the user. The Above-the-Line units are matched manually and are excluded from automated matching. These units are written to the Above-the-Line file (ATL).

(d) Hand Played Units. The user may specify a number of units (by UIC, ROBCO, or ADC01) to receive specific RDD. Hand Played Units will be excluded from match processing but will be

TABLE II-1. Force Match Algorithm Programs

Program	Language	Size (words)	Time (minutes)	Input files	Output files	Function
BUILD	COBOL	16 K	2	FAS tape	UDS file	Create keyed access UDS file
SORTUDS	COBOL	28 K	15	UDS file	FORCE	Load and sort FAS file
FSORT	FORTRAN	36 K	11	FORCE	LOU, HPU, ALT, CAN, ATL	Select and sort candidates
RSORT	FORTRAN	33 K	10	CAMPSUM	REQ	Load and sort requirements
MATCH	FORTRAN	35 K	30	REQ, CAN	MREQ	Match
ATL	FORTRAN	8 K	1	ATL	MATL	Set RDD on ATL units
ALT	FORTRAN	8 K	1	ALT	MALT	Set RDD on ALT units
LAYIN	FORTRAN	36 K	30	MREQ, HPU, LO, MALT, MATL	FOUT	Write match data on FAS
BINCOPY	COBOL	35 K	15	FOUT	FAS tape	Sort file and write FAS tape

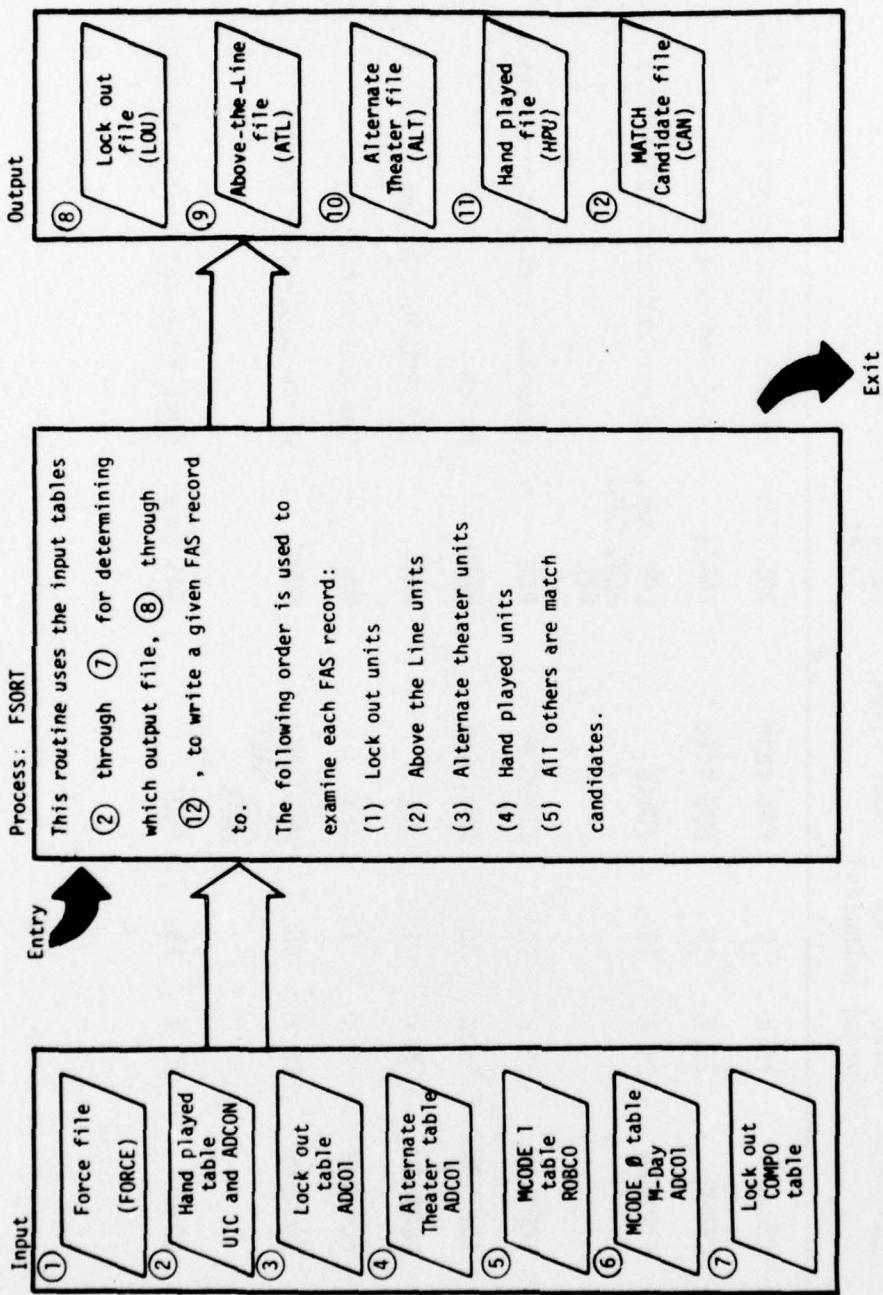


FIGURE II-1, FMA input-Processing-Output Chart (continued on next page)

Page 1 of 6

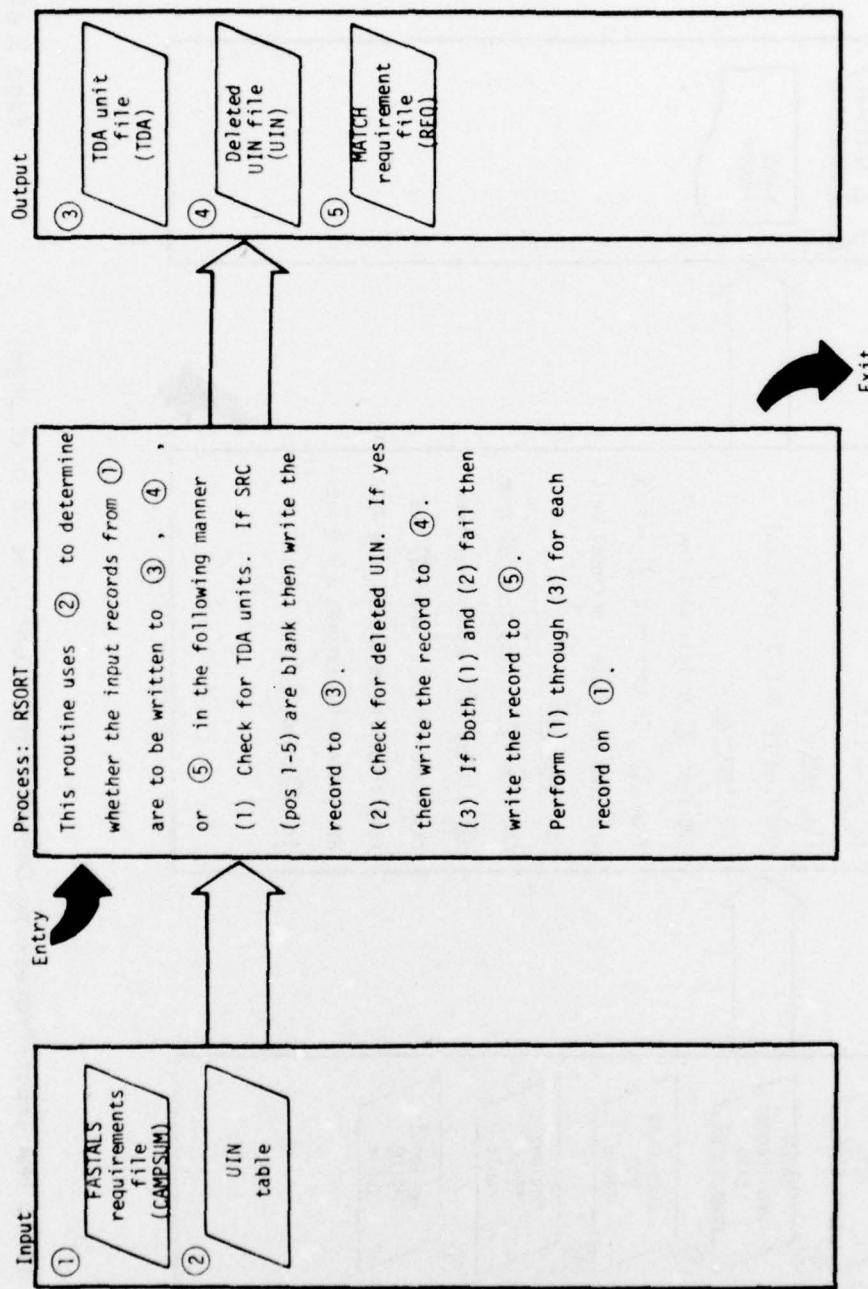


FIGURE II-1, FMA Input-Processing-Output Chart (continued on next page)

Page 2 of 6

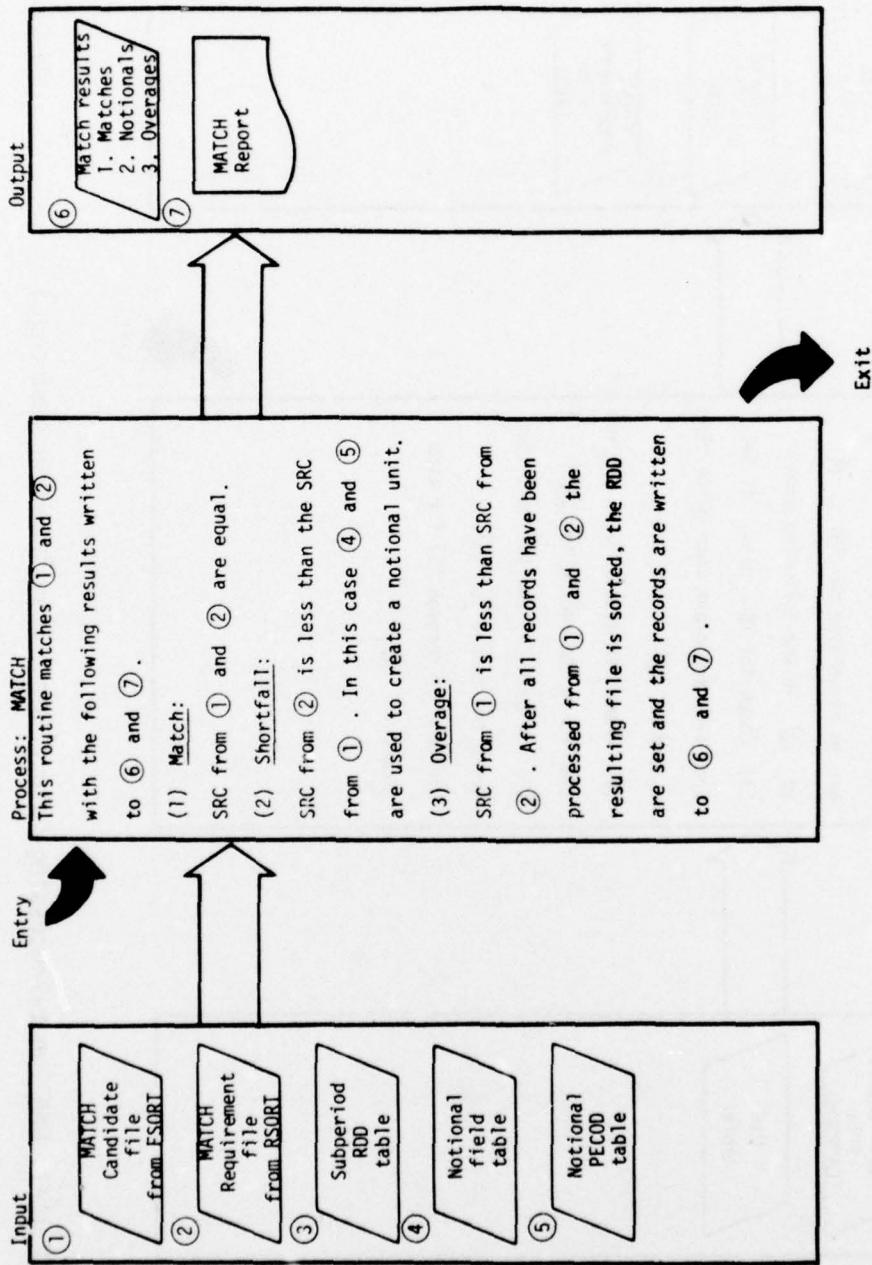


FIGURE II-1, FMA Input-Processing-Output Chart (continued on next page)

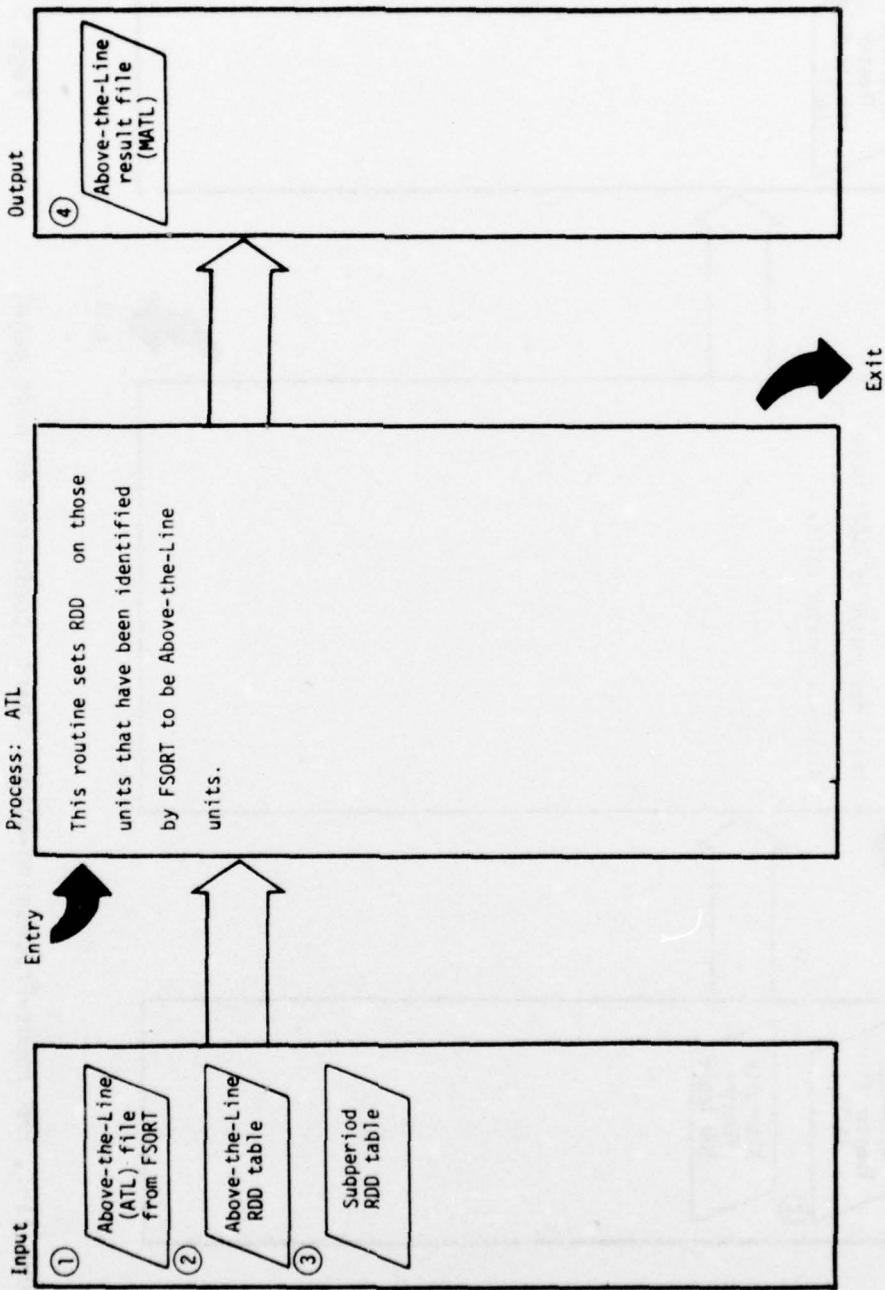


FIGURE II-1, FMA Input-Processing-Output Chart (continued on next page)

Page 4 of 6

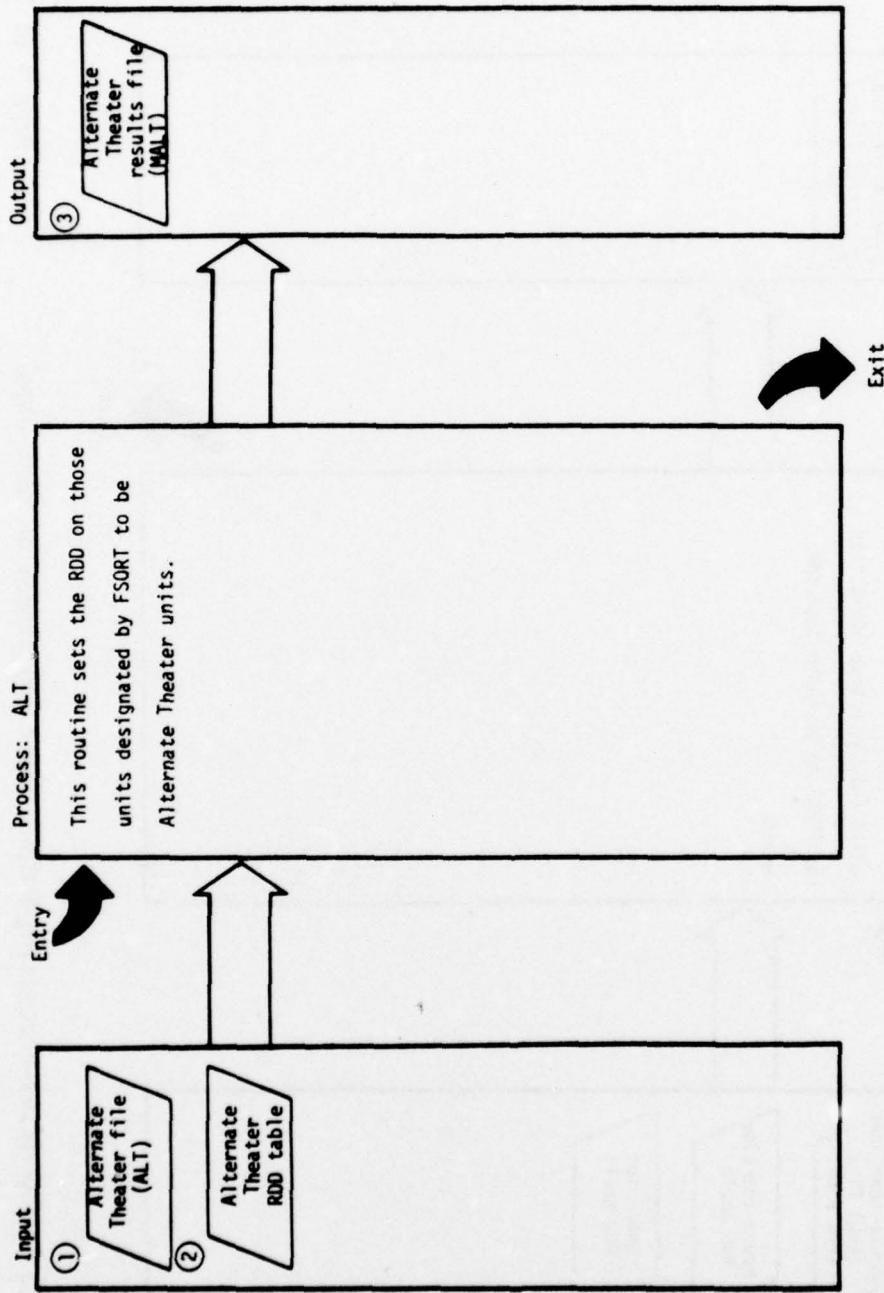


FIGURE II-1, FMA Input-Processing-Output Chart (continued on next page)

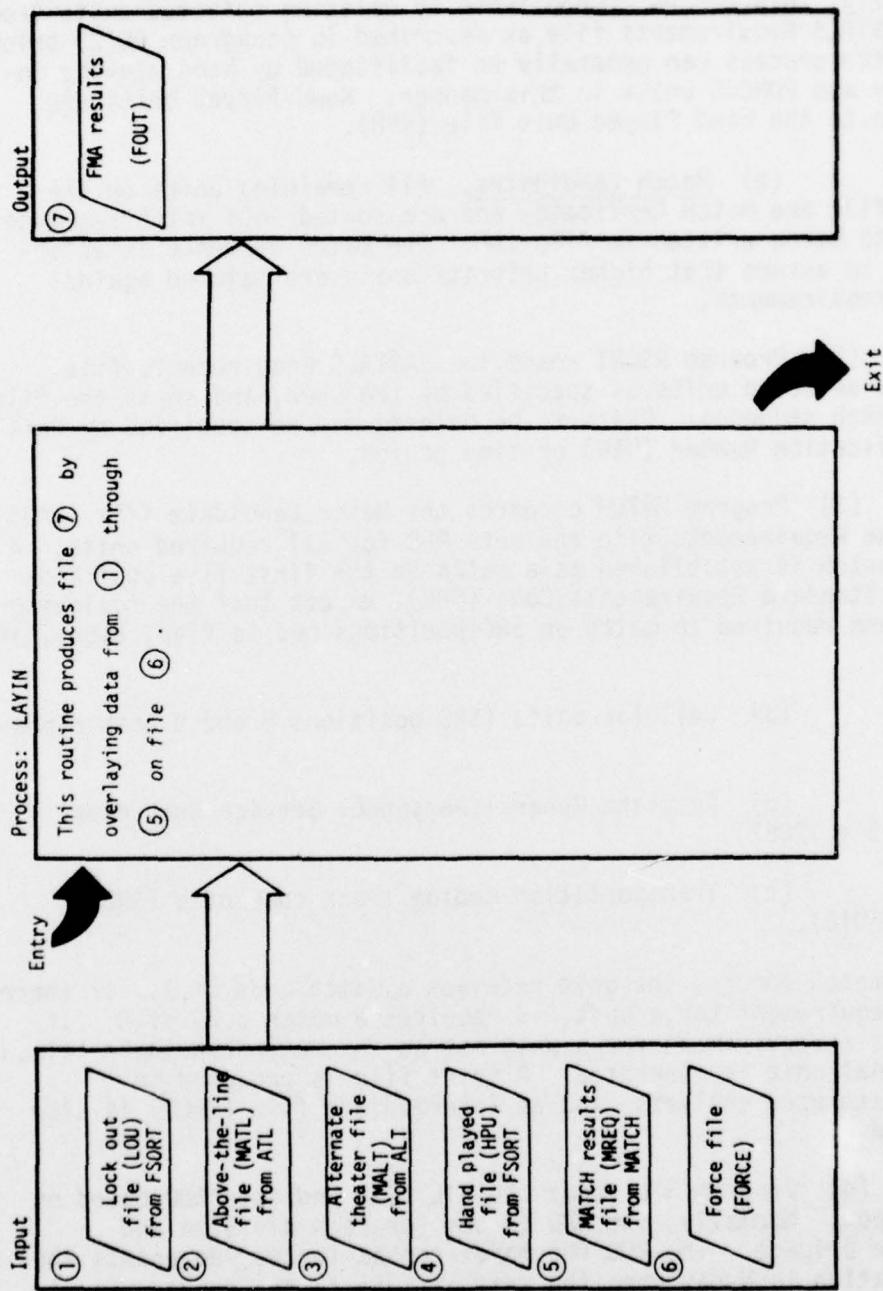


FIGURE II-1, FMA Input-Processing-Output Chart (concluded)

designated as required in the primary theater, so the user must assure that duplicate requirements are not generated by FASTALS. Generally, this can be accomplished by deleting selected units from the FASTALS Requirements file as described in paragraph 2b(2) below. The match process can generally be facilitated by hand playing in-country and POMCUS units in this manner. Hand Played Units are written to the Hand Played Unit file (HPU).

(e) Match Candidates. All remaining units on the Force file are Match Candidates and are sorted into match sequence prior to being written to file CAN. The match sequence is established to assure that higher priority units are matched against early requirements.

(2) Program RSORT reads the FASTALS Requirements file, deletes selected units as specified by the user, and sorts the file into match sequence. Units to be deleted may be specified by Unit Identification Number (UIN) or time period.

(3) Program MATCH compares the Match Candidate file (CAN) with the Requirements file and sets RDD for all required units. A valid match is established as a match on the first five positions of the Standard Requirements Code (SRC), except that the following units are required to match on SRC positions one to five, eight, and nine.

(a) Cellular units (SRC positions 8 and 9 both alphabetic).

(b) Adjutant General Personnel Service Companies (SRC 1-5 = 12067).

(c) Transportation medium truck companies (SRC 1-5 = 55018).

When a match occurs, the unit receives a match code of 1. If there is no requirement for a unit, it receives a match code of 0. If there is a requirement for a unit not on the Match Candidate file, a notional unit is generated. A print file is produced to facilitate user analysis, and an intermediate file (MREQ) is also produced.

(4) Program ATL reads the ATL file and sets RDD based on user input. Normally, one RDD is set for each division and separate brigade. The RDD for major combat forces represents the day relative to M-day when the unit arrives in the theater (port discharge date). This date is usually established based on input to a warfighting model. The time period is also set. Output file is file MATL.

(5) Program ALT sets RDD for units on file ALT based on user input. Output is file MALT.

(6) Program LAYIN merges the files LOU, MALT, MATL, HPU, and MREQ with the Force file to record the match results. A revised Force file is developed with match results overlaid on selected fields:

(a) AUTH 1-3 = FASTALS UIN for matched or notional unit
= 000, overage
= blank, otherwise

(b) AUTH 4-7 = FASTALS rules for matched or notional unit
= zero, otherwise

(c) AUTH 8 = Match code, assigned as follows:

Required unit: 1
Not required: 0
Other, as specified for specific run
(FAS ADC01)

(d) AUTH 9-10 = FASTALS time period for Required unit
= 99, overage
= blank, Lock Out or Alternate Theater

(e) AUTH 11-13 = RDD for Required unit or Alternate Theater
= 999, overage
= blank, Lock Out

(f) AUTH 14 = FASTALS Logical Region of Employment (LRE) for Required units
= zero for overage
= blank, otherwise

(g) AUTH 15 = Theater code as assigned by Match.

c. Postprocessors

(1) Program BINCOPY reads and sorts the revised Force file (FOUT) to produce the final output tape in FAS format. If the primary tape is to be forwarded to the DA staff for analysis, the user should make a copy for retention at CAA.

(2) Program BUILD may again be used to interface CAMP with the Unit Data System (UDS) by creating a keyed access UDS file from the FAS tape. The UDS capabilities are described in Reference 1.

3. Interfaces with other Models. Much of CAMP utility results from its capability to interface with other models and systems. The FMA interfaces with three major models to provide match results. Requirements data are extracted from FASTALS; forces are extracted from FAS; output is fed back to FAS and into UDS for analysis.

a. FASTALS Interface. The FASTALS generates time phased support requirements for a given tactical scenario. A special program called CAMPSUM, written and maintained by the CAA Methodology and Resources Directorate, produces CAMP input from FASTALS output. Actually, there are three versions of CAMPSUM, each of which handles composite units (called '66' units because the SRC ends in '66') differently. Composite units are composed of a mix of teams and detachments and are tailored to meet specific requirements. There is no predetermined number or type of teams that make up a specific composite unit. However, FASTALS plays "type" composite units. The principal version of CAMPSUM is called 66 ROLLUP because the teams and detachments are rolled up to the level of the '66' SRC. In general, composite units on the FAS file do not have a '66' SRC but instead display the SRC of the header team. To facilitate matching, a new version of CAMPSUM (66 ROLLUP--MODIFIED) was developed to roll up composite units using total strengths but using the SRC of the header team. A third version (66 ROLLOUT) displays requirements for each team and detachment without using the composite unit designation. This version must be used if movement requirements are to be generated. CAMPSUM also accesses the table(s) of organization and equipment/troop program sequence number (TOE/PSN) file to append detail strength data and the TPSN to the FASTALS output.

b. FAS Interface. The FAS interface is the weakest link of CAMP. Concepts Analysis Agency does not control the FAS data base. The interface is in the form of manual transfer of tapes between ODCSOPS and CAA. Errors in FAS data create significant problems for CAMP. Three alternatives are open to the user to correct FAS data errors. A new tape can be requested from ODCSOPS, the existing tape can be loaded into UDS and updated by the user, or program SORTUDS can be revised to make the required data changes. The best alternative to choose depends on the time available and the nature of the changes.

c. UDS Interface. The UDS provides two major capabilities: the data base update capability discussed above and a generalized

report generator capability. The interface is provided by program BUILD. The UDS reports are of great value to the CAMP user in analyzing match results.

4. User Constraints

a. Data Base. A significant detractor of FMA utility is the lack of control over the FAS data base. Close coordination with ODCSOPS can eliminate many potential errors and correct errors that have already occurred.

b. SRC Substitutions. The SRC used in FASTALS do not correspond exactly with those used by FAS. Apparent mismatches result in generation of unnecessary notional units when in fact a similar unit is on the force but has a different SRC.

c. Composite Units. Actual composite units on the FAS file are tailored to meet specific requirements. The composition of such units may differ greatly from the type composition used by FASTALS. Thus, a given SRC may represent one type unit in FAS and another type unit in FASTALS. The best way to resolve this is by rolling out composite units to the team level. Efforts are underway to achieve this capability on the FAS file.

COMPUTER ASSISTED MATCH PROGRAM (CAMP)

CHAPTER III FUNCTIONAL DESCRIPTION - MOVEMENT REQUIREMENTS GENERATOR (MRG)

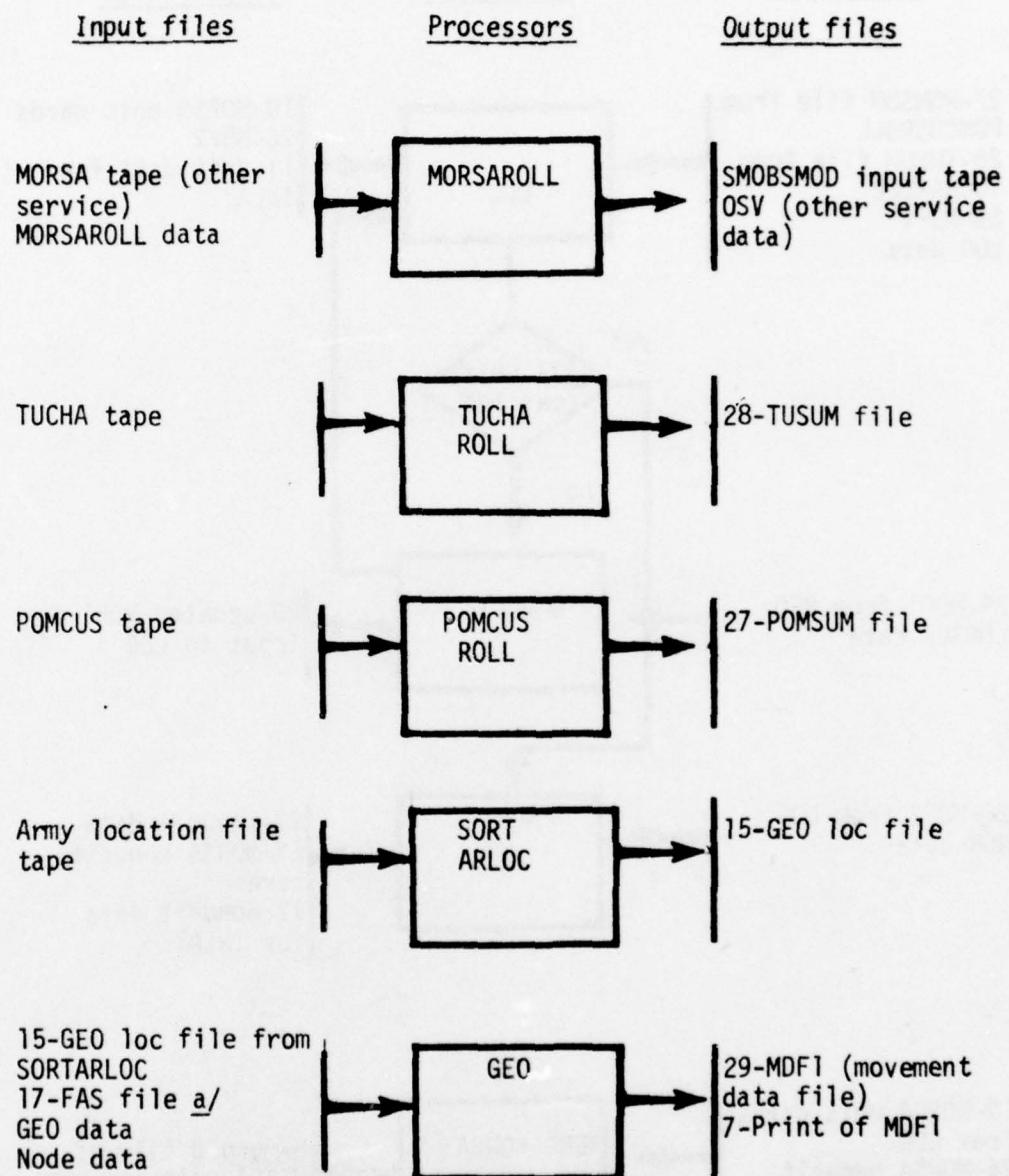
1. Introduction. The Movement Requirements Generator (MRG) interfaces FMA output with selected strategic mobility models. The MRG automates the production of input data for Strategic Mobility Simulation Model (SMOBSMOD) and the Mobility Requirements for Staff Analysis (MORSA) system. The MRG determines unit movement requirements for a force to be deployed. The force is entered in FAS format. The force may be entered directly from FMA; however, the more general occurrence is that FMA output is analyzed and reviewed by the DA staff prior to being entered in MRG. Actual unit locations are used as origins, and location codes required by the models are obtained automatically through an MRG interface with the Army Location file. Deployment weights for various categories of unit equipment are obtained automatically from the TUCHA file. A special file is used for those units that have equipment pre-positioned in the theater. Accompanying supply weights are entered by the user. Nonunit movement requirements (fillers, replacement, and resupply) are calculated by MRG based on factors entered by the user. These factors include consumption rates, prepositioned quantities, and theater stockage objectives. After all movement requirements have been determined, the data are reformatted to meet input specifications for SMOBSMOD and MORSA. An automated interface allows the data (both unit and nonunit) to be entered into UDS, thus facilitating review and analysis.

2. System Processing Flow. The MRG consists of 13 programs as listed in Table III-1. Processing logic is shown in Figure III-1 and is discussed below.

a. Programs SORTARLOC, MORSAROLL, TUCHAROLL, and POMCUSROLL are preliminary processes that build the data base actually used in subsequent MRG processes. Each of these programs reads a tape produced outside of CAA and creates a mass storage file with data required for subsequent processing. The formats for the tapes and output files are described in subsequent chapters. Use of these preliminary processes allows the user to analyze the input data thoroughly prior to making production runs. The computer resources required for production runs are thus considerably reduced because the output files are generally smaller than the input files and operate on time-saving mass storage files in lieu of tape files. In MORSAROLL, the user can specify how other service movement requirements are to be rolled up for SMOBSMOD. Origins and destinations may be rolled to specific SMOBSMOD nodes, and RDD and availability dates may be rolled into groups.

TABLE III-1, Movements Requirements Generator Programs

Program	Language	Size (words)	Time (minutes)	Function
SORTARLOC	COBOL	18 K	5	Produces Location file
MORSAROLL	COBOL	36 K	6	Rolls up other service movement data for SMOBSMOD
TUCHAROLL	COBOL	42 K	6	Produces TUCHA summary file
POMCUSROLL	COBOL	42 K	2	Produces POMCUS summary file
GEO	FORTRAN	58 K	16	Sets origin and destination codes
LOG	FORTRAN	34 K	28	Sets unit deployment weights. Produces MORSA cards
UPMDF1	FORTRAN	20 K	20	Allows SRC substitution
NUR	FORTRAN	38 K	11	Calculates nonunit movement requirements. Produces MORSA cards
PCKAGE	FORTRAN	36 K	14	Rolls movement requirements into SMOBSMOD packages
PRTPCK	FORTRAN	6 K	2	Prints report
MORSAMERGE	FORTRAN	6 K	12	Merges unit and nonunit MORSA cards
INLAY	FORTRAN	37 K	25	Lays movement data on FAS records
BUILDMRG	COBOL	16 K	2	Produces keyed access UDS file



a/Normally produced by FMA program LAYIN. May be produced by SORTUDS if no match processing is required.

FIGURE III-1, MRG Input-Processing-Output Chart (continued on next page)

page 1 of 3

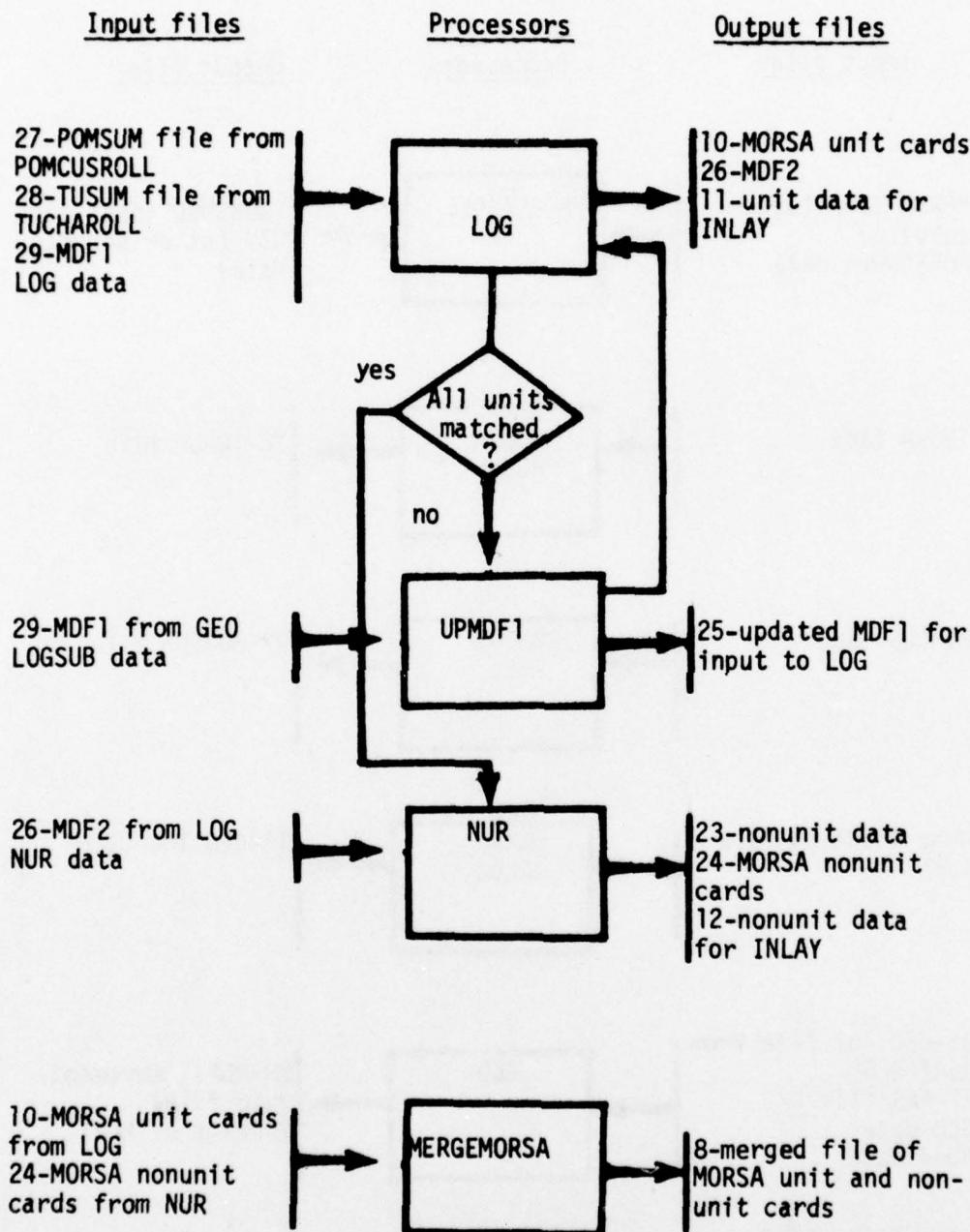
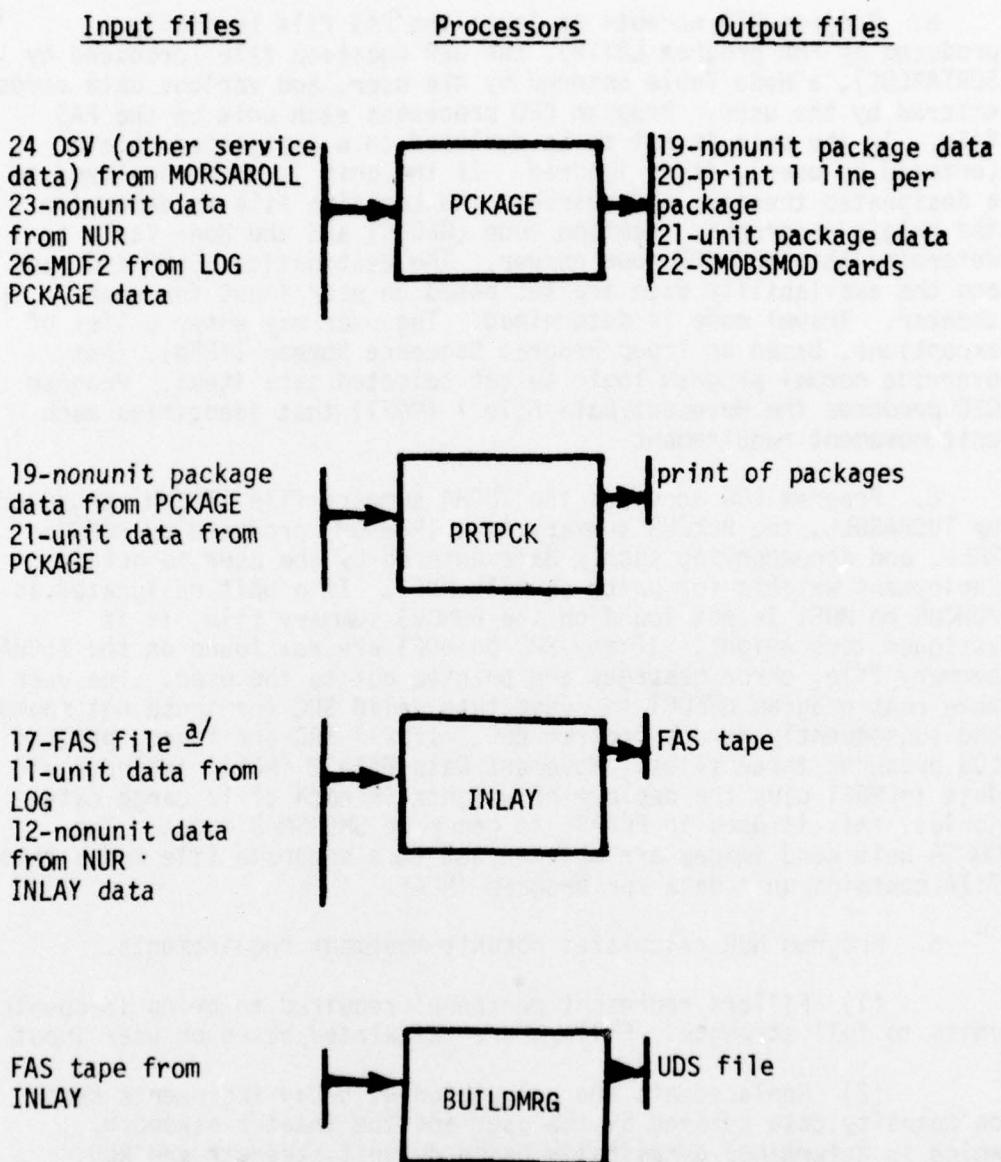


FIGURE III-1, MRG Input-Processing-Output Chart (continued on next page)

page 2 of 3



^{a/}Normally produced by FMA program LAYIN. May be produced by SORTUDS if no match processing is required.

FIGURE III-1, MRG Input-Processing-Output Chart (concluded)

page 3 of 3

b. Program GEO accepts as input the FAS file (normally produced by FMA program LAYIN), the GEO Location file (produced by SORTARLOC), a Node Table entered by the user, and various data cards entered by the user. Program GEO processes each unit on the FAS file. If the unit is not to be deployed to a designated theater (entered by user), it is ignored. If the unit is to be deployed to a designated theater, GEO searches the Location file to determine the origin geographic location code (GELOC) and the Node Table to determine the SMOBSMOD node number. The destination GELOC and node and the availability date are set based on user input for each theater. Travel mode is determined. The user may enter a list of exceptions, based on Troop Program Sequence Number (TPSN), that override normal program logic to set selected data items. Program GEO produces the Movement Data File 1 (MDF1) that identifies each unit movement requirement.

c. Program LOG accesses the TUCHA summary file (TUSUM) produced by TUCHAROLL, the POMCUS summary file (POMSUM) produced by POMCUS-ROLL, and accompanying supply data entered by the user to obtain deployment weights for units on file MDF1. If a unit designated as POMCUS on MDF1 is not found on the POMCUS summary file, it is assigned zero weight. If any SRC on MDF1 are not found on the TUCHA summary file, error messages are printed out to the user. The user then runs program UPMDF1 to substitute valid SRC for those not found, and subsequently reruns program LOG. If all SRC are found, program LOG produces three files. Movement Data File 2 (MDF2) includes all data in MDF1 plus the deployment weights in each of 17 cargo categories; this is used in PACKAGE to generate SMOBSMOD input. The MORSA unit card images are written out to a separate file and a third file contains unit data for program INLAY.

d. Program NUR calculates nonunit movement requirements.

(1) Fillers represent personnel required to bring in-country units to full strength. Fillers are calculated based on user input.

(2) Replacements are calculated at 5-day increments based on casualty data entered by the user and the theater strength, which is determined dynamically based on unit strength and RDD information in MDF2 file.

(3) Resupply requirements are calculated for POL, ammunition, and dry bulk. For each theater, the user enters prepositioned quantities, consumption data, and theater stockage policies (day resupply starts, RDAY; stockage objective; and day objective is to be achieved, BLDUP). Program NUR simulates arrival of units and the arrival and consumption of supplies to determine resupply requirements. For all days prior to RDAY, the model generates

resupply requirements to maintain a safety level (entered by the user). For each 5-day interval between RDAY and BLDUP, the model interpolates between the on-hand level at RDAY and the stockage objective at BLDUP to determine requirements. However, if RDAY level is greater (in terms of days of supply) than the stockage objective, resupply requirements are not generated until the level falls below the objective. For each 5-day increment after BLDUP, the model generates resupply requirements to maintain the stockage objective. Nonunit requirements are written to a MORSA card file and a file containing data for program INLAY.

e. Program MERGEMORSA produces a single set of MORSA card images on tape by merging the MORSA files produced by LOG and NUR.

f. Programs PCKAGE and PRTPCK produce SMOBSMOD input cards and print out the results for user review. Both a detailed and a summary report are produced. Movement requirements are rolled into packages. All requirements with the same RDD, availability date, origin node, destination node, and travel mode are rolled into one package. The user may obtain a higher degree of rollup by specifying input parameters that cause several RDD and several availability days to be packaged together such that the package will have the earliest RDD and latest availability day of the group.

g. Program INLAY creates a FAS file tape overlaid with movement data. New FAS records are created for nonunit requirements; the user enters the FICOD, COMPO and EDATE, and the UIC (first position N) is set sequentially by INLAY. Units on the FAS file that are not deployed are not overlaid with movement data.

h. Program BUILDMRG reads the FAS tape created by INLAY and produces a keyed access UDS file.

3. Interfaces with Other Models. The MRG is designed specifically to interface the FAS with SMOBSMOD and MORSA. Interfaces with additional mobility models could be programmed if required by the user and if all required data items are available in CAMP files. Requirements for additional interfaces should be coordinated with the CAA Methodology and Resources Directorate. The MRG also interfaces with FAS and UDS.

a. The MRG/SMOBSMOD interface provided by program PCKAGE results in production of SMOBSMOD input card images in a mass storage file. The SMOBSMOD input requirements are described in Chapter VI and overall SMOBSMOD capabilities are described in Reference 2.

b. The MRG/MORSA interface results in production of MORSA

input card images on tape. Concepts Analysis Agency does not currently have the capability to process MORSA data, but is required by various study directives to produce the data for processing at the Joint Chiefs of Staff (JCS) level. Input to MORSA is described in Chapter VI and is produced by programs LOG and NUR and merged by program MERGEMORSA. The MORSA system is operated and maintained at the Command and Control Technical Center (CCTC), Logistics Data System Division, and is somewhat volatile. The user is cautioned to coordinate with CCTC prior to running MRG to ascertain if any MORSA input requirements have changed. The MORSA system is described in Reference 3.

c. The MRG/UDS interface provided by program INLAY results in a significant report generation capability. The UDS file as created by MRG is described in Chapter VI. Overall UDS capabilities are described in Reference 1.

d. An MRG/FAS interface can be provided by program SORTUDS to allow use of an actual force (with or without notional units) as a basis for determination of movement requirements without prior FMA processing. In this case, the force must contain unit RDD in the ADC03 field.

4. User Constraints

a. Data Base. Inconsistencies occur relatively frequently in the various files accessed by MRG. The user should review the data contained in all computer tapes obtained outside of CAA. Errors and inconsistencies should be coordinated with the source of the data.

b. MORSA Output. Concepts Analysis Agency does not have the capability to process MORSA data. The MORSA system is operated by CCTC on the JCS Worldwide Military Command and Control System (WWMCCS) computer, and CAA is required to provide movement data in MORSA format. However, correction of errors is difficult and often requires that CAA rerun the job.

COMPUTER ASSISTED MATCH PROGRAM (CAMP)
CHAPTER IV
DATA DICTIONARY

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
A0	Weight of non-air transportable (NAT) vehicles.	Input from TUCHA file for each SRC. Input from POMCUS file for each POMCUS UIC (tenths of short tons).	TUCHAROLL POMCUSROLL LOG	Rolled up for output to MORS. Output to SMOBSMOD cargo category 2.
A1	Weight of oversize vehicles.	Input from TUCHA file for each SRC. Input from POMCUS file for each POMCUS UIC (tenths of short tons).	TUCHAROLL POMCUSROLL LOG	Rolled up for output to MORS. Output to SMOBSMOD cargo category 5.
A2C	Weight of oversize containerizable vehicles.	Input from TUCHA file for each SRC. Input from POMCUS file for each POMCUS UIC (tenths of short tons).	TUCHAROLL POMCUSROLL LOG	Rolled up for output to MORS. Output to SMOBSMOD cargo category 10.
A2D	Weight of oversize noncontainerizable vehicles.	Input from TUCHA file for each SRC. Input from POMCUS file for each POMCUS UIC (tenths of short tons).	TUCHAROLL POMCUSROLL LOG	Rolled up for output to MORS. Output to SMOBSMOD cargo category 11.
A3C	Weight of containerizable bulk vehicles.	Input from TUCHA file for each SRC. Input from POMCUS file for each POMCUS UIC (tenths of short tons).	TUCHAROLL POMCUSROLL LOG	Rolled up for output to MORS. Output to SMOBSMOD cargo category 14.

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
ACAMO	Weight of accompanying ammunition.	LOG	NUR	Output to MORSA (short tons) and SMOBSMOD (category 17) (thousand short tons).
ACTCO	Action code. See data element EDATE.			Identifies the type change being made on a given EDATE. E.g., ACTCO = J implies deactivation of a unit.
ADCON				
ADC01	See data element Theater Code.			
ADC02	See data element Time Period.			
ADC03	See data element RDD.			
AMMO	Ammunition weight.		NUR for resupply.	Output to MORSA and SMOBSMOD (category 17).
AREA	Area abbreviation. A three-position code which identifies a specific geographic area. See data elements LOCCO and MBLOC.		GEO	DA Cir 525-10-4, -3. CONUS areas are identified by Army area and state. Example: 1VA implies First Army, Virginia. Overseas areas are generally identified by an abbreviation of the country name. Example: FRA for France.

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
ARLOC	Army location code. A unique five position code which identifies a geographic location at which Army activities may be situated or which may have potential military significance.	Input from Army location file.	SORTARLOC	
ASGMT	Assignment. Identifies major command to which a unit is assigned.	Input from FAS file.		Manually set for notional units.
IV-5	Weight of accompanying supply (excluding ammunition).	NUR		Output to MORSA and SMOBSMOD.
AUTHR				
1-3	AUTHR	See data element UIN.		
4-7	AUTHR	See data element Rules.		
8	AUTHR	See data element Match Code.		
9-10	AUTHR	See data element Time Period.		
11-13	AUTHR	See data element RDD.		

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
AUTHR 14	See data element LRE.			
AUTHR 15	See data element Theater Code.			
AVAIL	Availability date. Day relative to the starting day of a scenario on which a given unit is available for deployment.	GEO		Output to MORSA and SMOBSMOD.
B0	Square feet of NAT non-self deployable aircraft (NSDA).			Rolled up for output to MORSA. Output to SMOBSMOD category 3.
B1	Square feet of outsize NSDA.			Rolled up for output to MORSA. Output to SMOBSMOD category 4.
B2C	Square feet of containerizable oversize NSDA.			Rolled up for output to MORSA. Output to SMOBSMOD category 8.
Branch	Branch of service for TOE units.		N/A	Example: EN for engineers.

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
BULK	Cargo having dimensions not larger than 104 x 84 x 96 inches.	LOG		Output to MORSA.
CARRS	Combat arms regimental system. Historical designation assigned to combat arms units.	Input from FAS file.	N/A	
COMPO	Component code. Identifies unit status.	Input from FAS file.	FSORT	1 = Active 2 = National Guard 3 = Reserve 4 = Notional.
DAMPL	DA master priority list. Priority grouping of units for allocation of personnel and/or equipment.	Input from FAS file.	FSORT	Match sequence is keyed on DAMPL.
DSCMP	Display/compute indicator.	Input from FAS file.	SORTUDS	DO implies display only (a titular record). DC implies display and compute (i.e. count this unit's strength).
Destination	The location to which a unit is being deployed.	GEO. Based on Theater Code.	NUR	Output to MORSA and SMOBSMOD.

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
Dry Re-supply	Quantity of resupply in all classes except III (POL) and V(ammo) (thousands of tons).			SMOBSMOD cargo category 16.
EDATE	Effective date of a transaction. See data element ACTCO.	Input from FAS file.		Manually set for notional units.
FCTCD	Foreign Country Code Description. The full name of foreign countries.	Input from Army location file.	N/A	DA Cir 525-10-4.
FIC0D	Force identification code. Differentiates between various planning forces.	Input from FAS file.		Example: J = JSOP force T = Total Force.
FPLAN	Force Planning Code. Classification code for strategic and force planning.	Input from FAS file.	N/A	First position: A = Division forces B = Special mission C = General support.
GELOC	Specified geographic location code. A JCS established equivalent to the ARLLOC covering locations for all military activities.	Input from Army location file.	GEO	Output to MORSAs.

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
J1	Quantity of non-vehicular oversize cargo.	Input from TUCHA file for each SRC. Input from POMCUS file for each POMCUS UIC (tenths of short tons).	LOG	Rolled up for output to MORSA (short tons). Output to SMOBSSMOD category 7 (thousand short tons).
J2C	Quantity of non-vehicular oversize containerizable cargo.	Input from TUCHA file for each SRC. Input from POMCUS file for each POMCUS UIC (tenths of short tons).	LOG	Rolled up for output to MORSA (short tons). Output to SMOBSSMOD category 13 (thousand short tons).
J2D	Quantity of non-vehicular oversize noncontainerizable cargo.	Input from TUCHA file for each SRC. Input from POMCUS file for each POMCUS UIC (tenths of short tons).	LOG	Rolled up for output to MORSA (short tons). Output to SMOBSSMOD category 12 (thousand short tons).
J3C	Quantity of non-vehicular bulk containerizable cargo.	Input from TUCHA file for each SRC. Input from POMCUS file for each POMCUS UIC (tenths of short tons).	LOG	Rolled up for output to MORSA (short tons). Output to SMOBSSMOD category 15 (thousand short tons).
J7C	Quantity of accompanying dry bulk supply.	Input from TUCHA file.	N/A	
JCS	JCS type unit code. JCS designated equivalent of SRC.	Input from FAS and TUCHA files.	N/A	Output to MORSA.

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
Level	First three characters of the FAS unit description. Denotes the organizational level of the unit.	Input from FAS and FASTALS files.	N/A	Example: TM = team BN = battalion Note: Not to be confused with level at position 10 of SRC.
LFLC	Geographic coordinates. Latitude and longitude.	Input from Army location file.	N/A	
LOC00	See data element AREA. The area code for the unit home station.	Input from FAS file.	GEO	
LOCNA	Location name abbreviated. Nine characters maximum.	Input from Army location file.	GEO	
LOCNM	Location name; 17 characters maximum.	Input from Army location file.	GEO	
LRE	Logical Region of Employment.	Input from FASTALS.		1 = combat zone 2 = corps forward 3 = corps rear 4 - commz forward 5 = commz rear 6 = offshore Output to FAS.
Match Code	Indicator for match results.	MATCH	LAYIN	1 = required 0 = excess X = locked out.

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
MBLOC	See data element AREA. Area code for unit mobilization station.	Input from FAS file.	GEO	
MBSTA	See data element LOCNA. Abbreviated location name of unit mobilization station.	Input from FAS file.	GEO	
NAT	Non-air transportable. Cargo having dimensions larger than 1453 x 144 x 156 inches or 1453 x 216 x 114 inches.	LOG		Output to MORSAs.
NSDA	Non-self-deployable aircraft.	LOG		Output to MORSAs.
Origin	Location at which a unit or package originates deployment.	GEO	Usually home station for active units, mobilization station for nonactive units.	Output to MORSAs as the GELOC. Output to SMOBSMOD as a node number.
OUTSZ	Outsize. Cargo having dimensions larger than 810 x 117 x 105 inches but not excluding the limits of air transportability.	LOG		Requires C5A aircraft. Output to MORSAs.

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
OVRSZ	Oversize. Cargo having LOG dimensions larger than 104 x 84 x 96 inches but no larger than 810 x 117 x 105 inches.			Requires C-141 aircraft. Output to MORSA.
PAX	Passengers.	Input from TUCHA.	NUR LOG	Output to MORSA and SMOBSMOD.
PECOD	Program element code. Budget code which groups similar forces.	Input from FAS file.		Manually set for notional units.
PHASE	Authority for a FAS record entry.	Input from FAS file.		Manually set for notional units.
RD	Record description. Code to identify the type cargo. See data element RT.	NUR LOG See		Output to MORSA. A = AMMO F = fillers G = resupply dry or replacements N = NSDA 8 = POL.
RDD	Required delivery date. Day relative to initial day of a scenario when unit or package is required to arrive in the destination theater (port discharge date).	MATCH ATL ALT	NUR	Output to MORSA and SMOBSMOD.

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
ROBCO	Ostensibly, a code to identify reserve component units or part of a force grouping. Now used extensively to designate POMCUS packages.	Input from FAS file.	FSORT LOG	Output to MORSA.
RT	Record type code to identify the type cargo. See data element RD.	NUR LOG		Output to MORSA U = unit P = POL S = other.
Rules	Zero/one variables to indicate reason for a unit requirement. Manual play, theater structure, existence and/or workload.	Input from FASTALS.		Output to FAS.
SRC	Standard Requirements Code. Identifies type unit (TOE).	Input from FAS, FASTALS and TUCHA.	FSORT RSORT MATCH LOG	Pos 1-2 branch identity 2-5 type organization 6 series 7 year 8-9 variation 10 level 11-12 paragraph.
STACO	Station code. Army location code for unit home station. See ARLOC.	Input from FAS file.		Manually set for notional units.

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
STAGR	Structured aggregate strength. Full TOE strength.	Input from FAS. Input from FASTALS for use in generation of notional units.	LOG NUR MATCH	Output to FAS.
STENL	Structured enlisted strength.	Input from FAS. Input from FASTALS for use in generation of notional units.	MATCH	Output to FAS.
STNM	See data element LOCNA. Location name (abbreviated) of unit's home station.	Input from FAS.	GEO	
STOFF	Structured officer strength.	Input from FAS. Input from FASTALS for generation of notional units.	MATCH	Output to FAS.
STWOF	Structured warrant officer strength.	Input from FAS. Input from FASTALS for generation of notional units.	MATCH	Output to FAS.
Theater Code	One character code designating the theater to which a unit is deploying.	LAYIN	GEO NUR	

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>												
Time Period	Time increment established in FASTALS.		RSORT MATCH	Output to FAS. RRD are based on Time Period as determined for a specific scenario.												
TLAC	Type location or activity code.		SORTARLOC	Example: AIN = Army installation. See App B, DA Cir 525-10-4.												
TMODE	Preferred mode of travel.	LOG NUR		Output to MORSA and SMOBSMOD. <table> <tr><td>Air</td><td>A</td><td>1</td></tr> <tr><td>Sea</td><td>S</td><td>2</td></tr> <tr><td>Optional</td><td>P</td><td>0</td></tr> <tr><td>Mixed</td><td>-</td><td>3</td></tr> </table>	Air	A	1	Sea	S	2	Optional	P	0	Mixed	-	3
Air	A	1														
Sea	S	2														
Optional	P	0														
Mixed	-	3														
TPSN	Troop program sequence number. Code which groups units by type and size.			Output to FAS. See AR 18-19 for explanation.												
TYPCC	Type code.		FSORT	1 = TOE unit 2 = TDA augmentation 3 - TDA unit.												
UGRID	Universal transmercator grid coordinates (military grid coordinates).		N/A													

<u>Data element</u>	<u>Description</u>	<u>Set</u>	<u>Used</u>	<u>Remarks</u>
UIC	Unit identification code. Code which uniquely identifies each unit.	Input from FAS. Input from POMCUS, generated by MATCH for notional units.	LOG	Output to FAS.
UIN	Unit identity number. Associates SRC with LRE within FASTALS.	Input from FASTALS	RSORT	Output to FAS.
ULCCC	See Level.			
UNMBR	Unit number. The numerical portion of the unit designation.	Input from FAS generated by MATCH for notional units.		Output to FAS.
UNTDS	Unit description.	Input from FAS and FASTALS.		Output to MORSA.

COMPUTER ASSISTED MATCH PROGRAM (CAMP)

CHAPTER V JOB PREPARATION

1. FMA Job Preparation

a. General. To run an FMA job, the user must obtain two basic input files, FAS and CAMPSUM, and prepare eleven manual input tables. The files and tables are described below.

b. Input Files

(1) FAS file. The FAS file is fully described in Reference 4. The file contains one or more records for each unit in the force. Multiple records occur when a unit changes status (e.g. receives an updated SRC), in which case the effective date of the change is shown on the applicable record. Each record is 307 characters. Fields applicable to CAMP have been described in Chapter IV and are shown in Table V-1. The ADCON and AUTHR fields are generally overlaid with other data. The ADCON field is used by the DA staff to pass selected data to CAA for match purposes. The ADCO1 field contains the Theater Code which must be used in match processing as it identifies the theater to which a unit is eligible to deploy. The ADCO2 and ADCO3 fields may be used by the DA staff to identify a specific Time Period and RDD: in general, however, these values will not be specified by DA but are set during match processing. Match results are forwarded to DA in the AUTHR field.

(2) CAMPSUM. The FASTALS Requirements file is provided in CAMPSUM format as described in Table V-2. The file contains one record for each type unit requirement, except that each above-the-line unit is represented by its Headquarters Company. The FASTALS system is described in Reference 5.

c. Preliminary Processing. The FAS file is loaded into UDS using program BUILD. The user should analyze the force and make any required updates with UDS; then a UDS extract is performed to obtain the desired force for matching purposes. Program SORTUDS is then used to create the mass storage FAS file used by FMA. Once this file is obtained, any number of matches can be made against it.

d. Input Tables. FMA programs require the input tables described below. Normally, a different set of tables is developed by the user for each match.

TABLE V-1, FAS File Record

<u>Position</u>	<u>Data element</u>
2	FICOD
3	COMPO
4-9	UIC
10-15	EDATE
16	ACTCO
27-28	ASGMT
29-43	AUTHR
44-45	Branch
46-47	CARSS
58-62	DAMPL
71-72	DSCMP
80-82	FPLAN
83-87	JCSTY
88-90	LOC CO
96-98	MBLOC
101-109	MBSTA
119-124	ADCON
127	PHASE
130-132	ROBCO
134-145	SRC
147-151	STACO
154-162	STNNM
180-184	TPSN
186	TYPCO
194-197	UNMBR
198-203	PECOD
204-224	UNTDS
278-282	STOFF
283-287	STWOF
288-292	STENL
293-297	STAGR

TABLE V-2, CAMPSUM File Record

<u>Position</u>	<u>Type</u>	<u>Description</u>
1-3	N	FASTALS UIN
6-14	AN	SRC position 1-9
15-16	N	SRC paragraph
17	N	Personnel level
18	N	Equipment level
20-21	A	Branch
23-54	A	Unit description
56-58	N	FASTALS strength
60-61	N	FASTALS Time Period
64-67	N	FASTALS Rules Manual play Theater structure variable Existence rule Workload
69	N	FASTALS Logical Region of Employment
71	N	Combination rule <u>a/</u>
73	N	Rounding rule <u>a/</u>
75-79	N	TPSN
81-85	N	Officer strength <u>b/</u>
87-91	N	Warrant Officer strength <u>b/</u>
99-103	N	Enlisted strength <u>b/</u>
105-109	N	Total strength <u>b/</u>

a/ Not used in CAMP

b/ Used as structured strength for notional units

(1) RSORT input. Two card types are input to RSORT to cause various records to be deleted from the CAMPUSUM file. Normally these records will correspond to units which are played by hand in FSORT. Card type 1 is described in Table V-3. Exactly one of this card type is required. All records with Time Period less than the input value (First Time Period) will be deleted from the CAMPUSUM file. For example, if First Time Period equals two, then all units with Time Period = 1 (usually corresponding to in-country units) will be deleted. Card type 2 is described in Table V-4. One card type 2 is entered for each UIN to be deleted. All records with a specified UIN and Time Period later than or equal to the specified UIN will be deleted.

(2) FSORT input. Six input tables are required for FSORT.

(a) The Hand Played UIC data as described in Table V-5 are used to change selected data fields on a FAS record. One card is entered for each unit to be changed. If RDD is not specified, the specified fields will be changed, and the unit will be processed according to the changed data; the unit will not be processed to the Hand Played Unit file (HPU). If a new RDD is specified, the unit will be hand played by FMA.

(b) The Lock Out ADCO1 data described in Table V-6 are used to specify theaters not to be considered in this match. One card is entered for each theater to be locked out. Units with specified Theater Code are not match candidates in FMA and are not deployed in MRG.

(c) The Alternate Theater ADCO1 data described in Table V-7 are used to designate alternate theaters. One card is entered for each Theater Code representing an alternate theater. Units with a specified Theater Code are not considered for matching in FMA but are deployed in MRG. This table is also input to Program ALT.

(d) MCODE 1 (POMCUS) ROBCO data. One card is entered for each POMCUS ROBCO as described in Table V-8. POMCUS units are hand played.

(e) The MCODE 0 (in-country) data require two card types as described in Table V-9. In-country units are hand played.

(f) The Lock Out COMPO data described in Table V-10 are used to delete entire sets of units from the force.

TABLE V-3, RSORT Card Type 1

<u>Position</u>	<u>Format</u>	<u>Data entry</u>
1-3	I3	First Time Period

TABLE V-4, RSORT Card Type 2
(Lock Out UIN)

<u>Position</u>	<u>Format</u>	<u>Data entry</u>
1-3	I3	FASTALS UIN
5-6	I2	Time Period

TABLE V-5, Hand Played UIC Data

<u>Position</u>	<u>Type</u>	<u>Data entry</u>
1-6	A	UIC--Unit Identification Code of Force record to be changed or hand played.
8-10	A	New ROBCO (blank if no change). Appears in final output.
12	A	New Theater Code (blank if no change). Appears in AUTHR field of final product.
14-15	N	Hand Played Time Period (if blank, program will calculate correct time period to correspond to RDD).
17-19	N	Hand Played RDD. If this field is entered the unit will be hand played; if this field is blank, the unit will be processed normally in accordance with other changes.

TABLE V-6, Lock Out ADC01 Data

<u>Position</u>	<u>Type</u>	<u>Data entry</u>
1	A	ADC01--Theater Code. Locked out in FMA and not deployed in MRG.

TABLE V-7, Alternate Theater ADC01 Data

<u>Position</u>	<u>Type</u>	<u>Data entry</u>
1	A	ADC01--code to select alternate theater support units (TPSN less than 20000)
3-5 <u>a/</u>	N	Earliest RDD to assign to units with this ADC01
7-9 <u>a/</u>	N	Last RDD to assign to units with this ADC01
11-13 <u>a/</u>	N	Increment between previous values to assign RDD
15-17 <u>a/</u>	A	AUTHR 15--Theater Code to be used by MRG

a/these fields are used by ALT but not by FSORT

TABLE V-8, MCODE 1 (POMCUS) ROBCO Data

<u>Position</u>	<u>Type</u>	<u>Data entry</u>
1-3	A	ROBCO field values to be considered POMCUS unit--the asterisk character (*) may be used to indicate a don't care condition for any position of the field. Only COMPO 1 units are considered.
5-7	N	RDD to be assigned above-the-line units with this ROBCO. May be blank in which case RDD will be assigned by TPSN as in Table V-14.
9-11	N	RDD to be assigned to support units with this ROBCO.

TABLE V-9, MCODE 0 (In-country) Data

<u>Position</u>	<u>Type</u>	<u>Data entry</u>
1-3 a/	N	M-day for primary theater. RDD for in-country units.
1	A	ADC01 value to be considered in-country in the primary theater. One card for each ADC01 value.

a/first card only

TABLE V-10, Lock Out Compo Data

<u>Position</u>	<u>Type</u>	<u>Data entry</u>
1	N	COMPO value to be locked out. Records with these COMPO values are deleted from the force file.

(3) MATCH input. Three input tables are required by MATCH.

(a) The Subperiod RDD data described in Table V-11 are used to designate RDD to be assigned within each Time Period. Higher priority units within a given Time Period are assigned the earlier RDD within that Time Period. This table is also used by ATL to assign a Time Period to each above-the-line unit.

(b) Tables V-12 and V-13 are used to create FAS records for notional units. Normally the values to be entered are specified by the DA staff.

(4) ATL input. ATL requires the input described in Table V-14. One card is entered for each TPSN. RDD are normally determined by the DA staff.

2. MRG Job Preparation

a. General. To run an MRG job, the user must obtain the five basic input files (ARLOC, TUCHA, POMCUS, MORSA and FAS) and provide card image input to six programs. The ARLOC file is obtained quarterly from US Army Management Systems Support Agency. The file is documented in References 6 and 7. The TUCHA file used is the Army input to the JCS TUCHA file used in the Joint Operations Planning System (JOPS). The JCS TUCHA file is documented in Reference 8. This file is obtained from the United States Army Command and Control Support Agency (USACCSA) quarterly. The POMCUS file is a nonstandard file provided to CAA on request by ODCSLOG. The MORSA file is obtained on request from CCTC through JCS-J4. See Reference 3 for documentation. Note that this file contains the MORSA data record, not the MORSA transaction card image which is produced by CAMP. The FAS file is produced by FMA Program LAYIN. The files and input data are described in subsequent paragraphs.

b. Preprocessors. MRG requires four preprocessor programs identified in Chapter III to process the input tapes. These programs are required only when the tapes to be processed are updated. The user is encouraged to coordinate with Joint and Strategic Forces Directorate to determine the status of the preprocessor output files. If the files are current, the preprocessor runs can be eliminated.

(1) ARLOCSORT. This preprocessor produces the GEO file from the ARLOC file. The layout of the ARLOC file is shown in Table V-15. Manual inputs are not required.

TABLE V-11, Subperiod RDD Data

<u>Position</u>	<u>Data entry</u>
1-4	RDD 1st subperiod
5-8	RDD 2nd subperiod
9-12	RDD 3rd subperiod
13-16	RDD 4th subperiod
17-20	RDD 5th subperiod
21-24	RDD 6th subperiod
25-28	last day of time period

One card per time period-10 cards required

TABLE V-12, Notional Unit Fields

<u>Card</u>	<u>Position</u>	<u>Type</u>	<u>Data entry</u>
1	1	A	FICOD
2	1-6	N	EDATE
3	1	A	ACTCO
4	1-2	A	ASGMT
5	1	N	AUTH 8
6	1-2	N	CARSS
7	1-2	A	DSCMP
8	1-3	A	FPLAN
9	1-3	AN	LOCDO
10	1-3	AN	MBLOC
11	1-6	A	MBSTA pos 1-6
12	1-3	A	MBSTA pos 7-9
13	1	A	PHASE
14	1-5	AN	STACO
15	1-6	A	STNNM pos 1-6
16	1-3	A	STNNM pos 7-9
17	1	N	TYPCO
18	1	N	COMPO
19	1-2	AN	UIC pos 1-2
20	1-2	AN	UIC pos 1-2 host nation support unit (not currently used)

TABLE V-13, Notional Unit PECOD Data

<u>Position</u>	<u>Type</u>	<u>Data entry</u>
1-2	N	SRC pos 1-2
5-10	AN	PECOD value to be assigned

TABLE V-14, Above-the-Line RDD Data

<u>Position</u>	<u>Type</u>	<u>Data entry</u>
1-5	N	TPSN
8	N	Theater Code to be assigned
11-13	N	RDD to be assigned

TABLE V-15, ARLOC File Record Description

<u>Data name</u>	<u>Description</u>	<u>Start pos</u>	<u>No char</u>	<u>Type</u>
AREA	Geographic area	1	3	A/N
ARLOC	Army location code	9	5	A/N
GELOC	JCS geographic location code	18	4	A
LOCNA	Abbreviated location name	27	9	A/N
LOCNM	Location name	40	17	A/N
TLAC	Type installation	65	3	A
FCTCD	State or foreign country	78	18	A/N
UGRID	Universal transverse mercator grid coordinates	98	11	A/N
LFLLC	Latitude/longitude	112	15	A/N
STAT	Status of record	129	1	A

(2) TUCHAROLL. This preprocessor produces the TUSUM file. The TUCHA file is input to this program. Of the four record types in TUCHA, only the ABF1 and the F2 record types are used. The layout of these records is given in Tables V-16 and V-17. Manual input is not required.

(3) POMCUSROLL. This preprocessor is used to produce the POMSUM file. The POMCUS file which is input to this program, is in a modified TUCHA transaction format. The layout of these records is given in Tables V-18 through V-20. The F3 detail record is not

TABLE V-16, TUCHA ABF1 Record Description

<u>Position</u>	<u>Type</u>	<u>Description</u>
1-5	A/N	Unit type code
9	N	Record type = 1
13-15	A	Unit level code
16	N	Deployment indicator code
17	A	Service code
18	A	Record security classification
19-33	A/N	Short type name
34	A/N	Invalid record indicator (T for TYPEA record)
35	A/N	Unit type status (C for cancelled)
36	A	F1 security classification
37-90	A/N	Type name
91-96	A/N	Originators UIC
97-102	N	Date of record creation
103-108	N	Date of last change
109-113	N	Authorized wartime personnel
114-118	N	Nonorganic passengers
119-121	N	Number or cargo categories
122-124	N	Count of F2 records
125	A/N	New F1 indicator
126-137	A/N	SRC
138	A	blank

TABLE V-17, TUCHA F2 Record Description

<u>Position</u>	<u>Type</u>	<u>Description</u>
1-5	A/N	Unit type code
6-7	A/N	Cargo category code
8	A	Containerization code
9	N	Record type = 2
13	A	F2 security classification
14	A/N	New F2 indicator
15	A	Heavy lift code
18-23	N	Square feet of cargo
24-35	N	Short tons of cargo (in tenths)
36-41	N	Measurement tons of cargo
42-47	N	Barrels of POL (in hundreds of barrels)
48-50	N	Number of F3 records required
51-53	N	Count of F3 records

TABLE V-18, POMCUS F1 Record

<u>Position</u>	<u>Type</u>	<u>Description</u>
7	N	Record type = 1
9-13	A/N	Unit type code
19-23	N	Nonorganic passengers
24-26	N	Number of F2 records
71-76	A/N	UIC of POMCUS unit
90-101	A/N	SRC
102-120	A/N	Not used

TABLE V-19, POMCUS F2 Record

<u>Position</u>	<u>Type</u>	<u>Description</u>
7	N	Record type = 2
9-13	A/N	Unit type code
14	A	POMCUS code A = TAT, B = Other exclusion, C = Prepo
34-35	A/N	Cargo category code
36	A	Containerization code
37-42	N	Square feet of cargo
45-50	N	Short tons of cargo (in tenths)
52-57	N	Measurement tons of cargo
59	A	Heavy lift code
60	N	Number of F3 records
71-76	N	UIC of POMCUS unit
90-101	A/N	SRC

TABLE V-20, POMCUS F3 Record

<u>Position</u>	<u>Type</u>	<u>Description</u>
7	N	Record type = 3
9-13	A/N	Unit type code
14	A	POMCUS code
19-20	A/N	Cargo category code
21	A	Containerization code
22-24	N	F3 identification number
25-38	A/N	Cargo description
39-42	N	Length
43-45	N	Width
46-48	N	Height
49-52	N	Square feet
53-55	N	Number of pieces

currently used but is documented here because other references are not available. Manual inputs are not required by POMSUM, however manual editing of the output may be required to ensure that the UIC identified on the Force file are present on the POMSUM file.

(4) MORSAROLL. The MORSAROLL preprocessor extracts other service movement requirements from the MORSA file. The layout of the MORSA file is shown in Table V-21. Manual input card formats are shown in Table V-22.

c. MRG Processors. Input to MRG programs is described in Tables V-23 through V-28. The Node Table is input to program GEO to assign SMOBSMOD nodes and default GELOC to each AREA used as an origin or destination. One entry as described in Table V-24 is required for each AREA. The SMOBSMOD node number will always be selected from this table. The default GELOC will be selected only if the actual LOCNA is not found on the GEO file.

d. Postprocessors. Program INLAY requires one card input as described in Table V-29, Program Build requires no manual input.

TABLE V-21, MORSA File Record Description

<u>Data name</u>	<u>Description a/</u>	<u>Start pos</u>	<u>No char</u>	<u>Type</u>
PLAN-ID	Identification code for plan	1	1	N
SERV	Service	2	1	A/N
SEQ	Sequence number of this record	3	4	N
RT	Record type	12	1	A/N
RD	Record description	13	1	A/N
REC-NAME	Record (unit or package description)	14	12	A/N
LEVEL		26	3	A/N
TMODE		30	1	A
AVAIL		32	3	N
RDD		35	3	N
NAME-0	Origin name	44	14	A/N
CODE-2-0	MORSA origin node	61	2	A/N
GEO-0	Origin GELOC	68	4	A
CODE-2-D	MORSA destination node	117	2	A/N
GEO-D	Destination GELOC	124	4	A
PAX		128	5	N
ACAMO		133	5	N
ASPLY		138	5	N
BULK		143	5	N
OVER-POL	(1) ST oversize cargo or, (2) thousand barrels POL (if RT=P)	148	5	N
OUTSZ		153	5	N
NAT		158	5	N
TOTAL-WT	Total cargo weight (less POL)	163	5	N
TPSN		168	5	N
SRC		173	11	A/N
FRN	Force requirements number	184	4	A/N
JCSTY		188	5	A/N
UIC		193	6	A/N
NSDA		217	5	N
Filler	N/A	222	57	A/N

a/ Where description is not given see Data Dictionary, this document.

TABLE V-22, MORSAROLL data

Card type 1 (one card for each origin code on MORSA file)

<u>Col</u>	<u>Data name</u>	<u>Type</u>	<u>Description</u>
1-2	CODE-2-0	A	MORSA origin node
4-6	ONODE	N	SMOBSMOD origin node

Card type 2 (one card for each destination code on MORSA file)

<u>Col</u>	<u>Data name</u>	<u>Type</u>	<u>Description</u>
1-2	CODE-2-D	A	MORSA destination node
4-6	DNODE	N	SMOBSMOD destination node

Card type 3 (one card only)

<u>Col</u>	<u>Data name</u>	<u>Type</u>	<u>Description</u>
1-2	DELTA-RDD	N	Enter number of days rollup desired for other services on RDD. For example, an entry of 10 will result in the following:

Actual RDD RDD assigned by
MORSAROLL

0-9	5
10-19	15
20-29	25
etc	

2-4	DELTA-AVAIL	N	Enter number of days rollup desired for other services on AVAIL. For example, an entry of 05 will result in the following:
-----	-------------	---	--

Actual AVAIL AVAIL assigned by
MORSAROLL

0-4	2
5-9	7
10-14	12
etc	

TABLE V-23, GEO Data

<u>Card type</u>	<u>Number required</u>	<u>Position</u>	<u>Type</u>	<u>Description</u>
1	1	1	N	Number of destination theaters (number of type 2 cards to follow--maximum 7)
2	1 per theater	1	N	Theater Code to select input force records
		3-5	N	Day available at origin for all except reserve above-the-line units.
		7-10	A	Destination GELOC
		12-14	N	Destination node number
		16-18	N	Day available at origin for reserve component above-the- line units
3	1	1-2	N	Number of exception cards (type 4) to follow (maximum of 20)
4	1 per exception	1-5	N	TPSN
		7-10	A	Destination GELOC
		12-14	N	Destination node number
		16-18	N	Day available
		20-22	N	Required Delivery Date
		24	A	TMODE (P-optional, A-air, S-sea, Z-not moved)
		26	N	Destination theater
		28-31	A	Origin GELOC
		33-35	N	Origin node number

TABLE V-24, Node Table

<u>Position</u>	<u>Type</u>	<u>Description</u>
1-3	AN	AREA (position 1 blank if numeric)
4-12	AN	LOCNA
13-16	A	GELOC
17-21	AN	ARLOC
22-24	N	SMOBSMOD node number

TABLE V-25, LOG Data

<u>Card type</u>	<u>Number required</u>	<u>Position</u>	<u>Type</u>	<u>Description</u>
1	1	1	N	Number of destination theaters
		3	N	Number of theater sets
		5-11	N	Theater code for each destination theater (maximum 7-- blank if less than 7)
		13-19	N	Theater set for each destination theater
2	1	27	N	Plan identification for each theater set
		1-4	A	APOE GELOC-not used
		6-9	A	SPOE GELOC-not used
		11-16	N	Accompanying supply (dry and packaged POL) for non-POMCUS units lbs/man--decimal point required
		18-23	N	Accompanying ammunition for non-POMCUS units lbs/man--decimal point required
		25-30	N	Accompanying supply (dry) for POMCUS units lbs/man--decimal point required
		32-37	N	Accompanying ammunition for POMCUS units lbs/man--decimal point required
3	1	1-2	N	Number of SRC substitution cards (type 4) to follow (may be zero)
4	1 per substitution	1-11	AN	SRC less ALO (position 10) that appears in Force but not on TUCHA
		13-23	AN	TUCHA SRC that was substituted for Force SRC

TABLE V-26, UPMDF1 Data

<u>Card</u>	<u>Position</u>	<u>Type</u>	<u>Description</u>
1	1-2	N	Number of SRC substitution cards to follow
2	1-11	AN	SRC less ALO (position 10) that appears in Force but not on TUCHA
	13-23	AN	TUCHA SRC to be substituted for Force SRC

TABLE V-27, NUR Data (continued on next page)

<u>Card</u>	<u>Position</u>	<u>Type</u>	<u>Description</u>
1	1	N	Number of destination theaters
	3	N	Number of theater sets
	5-11	N	Theater Code for each destination theater
	13-19	N	Theater set for each destination theater
	21-27	N	Plan identification for each theater set
2	1	N	Theater set number
	3-5	N	D-Day--day on which personnel casualties start
	7-0	N	RDAY--day on which theater resupply build up begins
	11-13	N	BLDUP--day on which build up objective is to be met
	15-17	N	C-Day--all units with RDD less than or equal to C-Day are considered in-country
	19-21	N	A-Day--all resupply packages with RDD greater than or equal to A-Day will be assigned TMODE=S (sea)
	23-25	N	Last day of resupply period 1
	27-29	N	Last day of resupply period 2
	31-33	N	Last day of resupply period 3
	35-37	N	Last day of resupply period 4
	39-41	N	Last day of resupply period 5
	43-45	N	Last day of resupply period 6
	47-49	N	Last day of resupply period 7
	50-51	N	Last day of resupply period 8 (last day of consumption)
	55-57	N	Level of supply (days) required at BLDUP--dry
	59-61	N	Days of ammo required at BLDUP
	63-65	N	Days of POL required at BLDUP
	67-69	N	Minimum level (days) of supply (dry) prior to RDAY
	71-73	N	Minimum days of ammo prior to RDAY day of resupply
	75-78	N	Minimum days of POL prior to RDAY day of resupply

TABLE V-27, NUR Data (continued on next page)

<u>Card</u>	<u>Position</u>	<u>Type</u>	<u>Description</u>
3	1	N	Theater set number
	3-11	N a/	Short tons of dry PWRS
	13-21	N a/	Short tons of ammo PWRS
	23-31	N a/	Bbls of POL PWRS
	33-36	N a/	Fraction of in-country strength needed for filler
	38-40	N	RDD for 1st filler increment
	42-44	N	RDD for 2nd filler increment
	46-48	N	RDD for 3rd filler increment
	50-53	N a/	Fraction of total fillers in 1st increment
	55-58	N a/	Fraction of total fillers in 2nd increment
	60-63	N a/	Fraction of total fillers in 3rd increment
	65-68	A	Destination GEO code
	70-72	N	Destination node number
	1	N	Theater set number
4	3-7	N a/	Replacements/1000/day 1st period
	9-13	N a/	Replacements/1000/day 2nd period
	15-19	N a/	Replacements/1000/day 3rd period
	21-25	N a/	Replacements/1000/day 4th period
	27-31	N a/	Replacements/1000/day 5th period
	33-37	N a/	Replacements/1000/day 6th period
	39-43	N a/	Replacements/1000/day 7th period
	45-49	N a/	Replacements/1000/day 8th period
5	1	N	Theater set number
	3-8	N a/	Dry accompanying supply for non-POMCUS units lbs/man
	10-15	N a/	Accompanying ammo for non-POMCUS units lbs/man
	17-22	N a/	Accompanying POL for non-POMCUS units lbs/man
	24-29	N a/	Dry accompany supply for POMCUS units lbs/man
	31-36	N a/	Accompanying ammo for POMCUS units lbs/man
	38-43	N a/	Accompanying POL for POMCUS units lbs/man

a/Decimal point required

TABLE V-27, NUR Data (concluded)

<u>Card</u>	<u>Position</u>	<u>Type</u>	<u>Description</u>
6	1	N	Theater set number
	2	N	Resupply type (1-dry, 2-ammo, 3-POL)
	4-9	N <u>a/</u>	1bs/man/day 1st period
	11-16	N <u>a/</u>	1bs/man/day 2nd period
	17-22	N <u>a/</u>	1bs/man/day 3rd period
	24-29	N <u>a/</u>	1bs/man/day 4th period
	31-36	N <u>a/</u>	1bs/man/day 5th period
	38-43	N <u>a/</u>	1bs/man/day 6th period
	45-51	N <u>a/</u>	1bs/man/day 7th period
	53-58	N <u>a/</u>	1bs/man/day 8th period
7 b/	1-4	A	Origin GELOC
	6-8	N	Origin node number
	10-13	N <u>a/</u>	Fraction of dry from this origin
	15-18	N <u>a/</u>	Fraction of ammo from this origin

a/Decimal point required

b/20 type 7 cards are required-use blank if necessary-last two specify replacement and POL origins

TABLE V-28, PDKAGE Data

<u>Card</u>	<u>Position</u>	<u>Type</u>	<u>Description</u>
1	1-2	N	Packaging interval on RDD
	4-5	N	Packaging interval on availability
	1	N	Theater number
	3-5	N	RDD to begin requiring all units to theater by mixed mode
	7	N	Theater number
	9-11	N	RDD to start all mixed mode
	13	N	Theater number
	15-17	N	RDD to start all mixed mode
	19	N	Theater number
	21-23	N	RDD to start all mixed mode
2	25	N	Theater number
	27-29	N	RDD
	31	N	Theater number
	33-35	N	RDD
	37	N	Theater number
	39-41	N	RDD

TABLE V-29, INLAY Data

<u>Position</u>	<u>Data entry</u>
1	FICOD for NUR records
3-8	EDATE for NUR records

COMPUTER ASSISTED MATCH PROGRAM
(CAMP)

CHAPTER VI
JOB UTILIZATION

1. Force Match Algorithm. This section describes the output from FMA. The ultimate output is the FAS tape overlaid with match results. However, intermediate reports are produced that should be examined. Examples are shown in Chapter VIII. To analyze the final output appropriately, it is necessary to load the FAS tape into the UDS system using Program BUILD. Detailed and summary reports can then be obtained and analyzed.

a. Program SORTUDS. This program provides a listing of the force in COMPO/UIC sequence. Data elements displayed are identified in Table VI-1.

b. Program FSORT provides a copy of the manual entry data and a listing of each of the five files produced. Each listing has the same format as described in Table VI-2. The Match Candidate file is sorted in match sequence; all other files are in the original COMPO/UIC sequence.

c. Program RSORT displays the manual entry data, a count of the units, and two reports: the UIN report (deleted units) and the REQ report (requirements) in match sequence. The reports are described in Table VI-3.

d. Program ATL prints the manual entry tables, the input data file (ATL) and the output data file (MATL). The output file is exactly the same as the input file (Table VI-2) except that the ADCO2 and ADCO3 fields have been overlaid with Time Period and RDD, respectively.

e. Program ALT prints the manual entry table and the output file (MALT) that is exactly the same as the input file (Table VI-2) except that the ADCON field has been overlaid with Destination Theater and RDD.

f. Program MATCH produces a report (Table VI-4) that readily identifies matches, overages, and shortfalls. The first two data items displayed are the REQ-SRC (FASTALS requirement SRC) and FORCE-SRC (FAS file SRC). Entries in both columns indicate a match. An entry in FORCE-SRC and a blank REQ-SRC indicates an overage. An

TABLE VI-1, SORTUDS Report

<u>Column</u>	<u>Data element</u>
1-6	UIC
9-13	TPSN
16	COMPO
19-21	FPLAN
24-26	ROBCO
29-40	SRC
43-47	JCS Type Unit Code
50-51	Level
55-56	CARRS
29-62	Unit number
65-66	Branch
69-86	Unit description
99-107	Home station
109-111	LOCCO
113-114	DSCMP
117	ADC01
119-120	ADC02
122-124	ADC03

TABLE VI-2, FSORT Reports

<u>Column</u>	<u>Data element</u>
1-7	SRC (positions 1-5, 8,9)
8	COMPO
9	MCODE
11-15	DAMPL
16-21	UIC
22-26	SRC (positions 6,7, 10-12)
27-28	Branch
29-31	Level
32-49	Unit description
50-54	TPSN
55-57	ROBCO
58-66	Home station
67-69	LOCCO
70-74	STAGR
75-80	ADCON
81-86	Sequence number
87-91	FSORT Key <u>a/</u>

a/FSORT Key has the following meaning:

Lock Out file: Reason for lock out

ATL file: YES or NO to indicate ADC03 set based on manual
input to FSORT

Other files: blank

TABLE VI-3, RSORT Report

<u>Column</u>	<u>Data element</u>
1-5	SRC (truncated)
7-8	SRC (positions 8,9)
11	Time period
13-14	SRC (positions 6,7)
16	SRC (position 10)
18	SRC (position 12)
20	SRC (position 11)
22-24	Level
26-46	Unit description
47-50	Rules
52	Logical Region of Employment
54	Combining rule
56	Rounding rule
58-62	TPSN a/
64-68	STOFF a/
70-74	STWOF a/
76-80	STENL a/
82-86	STAGR a/
88-90	FASTALS strength
92-93	Branch
95-97	UIN

a/Used only in the generation of notional units.

TABLE VI-4, MATCH Report

<u>Column</u>	<u>Data element</u>
1-8	REQ-SRC
11-18	FORCE-SRC
23-24	Branch
28-30	Level
33-50	Unit description
54	COMPO
58-63	UIC
65-69	TPSN
71-73	UIN
76	Time Period
79-82	Requirement sequence number
84	MCODE
88-90	ROBCO
93-101	Home station
104-106	LOCCO
109-113	FASTALS strength
115-119	FAS strength ^a /
121-125	Force sequence number

^a/For notional units, this is the structured aggregated strength from the TOE file.

entry in REQ-SRC and a blank in FORCE-SRC indicates a shortfall for which a notional unit has been generated. This report is prepared in SRC sequence to facilitate analysis. The Match Report is the key report of the match process as it identifies the required force structure (except for hand played units) and the status of the actual force in relation to the requirements.

g. Programs LAYIN and BINCOPY do not produce any significant printed output. However, the FAS tape produced by BINCOPY can be loaded into a keyed access UDS file using program BUILD. UDS provides an enhanced capability for analysis of the match results. Further, the file produced by LAYIN (FOUT) is used as input to MRG.

2. Movement Requirements Generator. In this section the output from MRG is described. The ultimate output, will be movement requirements in SMOBSMOD and/or MORSA format. However, intermediate output is available at several points in the processing to assist the user in analysis. Examples of output are shown in Chapter VIII.

a. Preprocessors. As stated in Chapter III, MRG includes four preliminary processors. Each one produces an intermediate file which is used in subsequent processing and a printed report that should be perused by the user. The use of these four reports is described in the following paragraphs.

(1) TUCHAROLL. The output from TUCHAROLL is a summary of movement characteristics of each type unit. The report is printed in SRC sequence and includes two lines per type unit. The data elements are described in Table VI-5. Under each cargo category, the first line displays weights in tenths of short tons, and the second line displays square feet of cargo if appropriate. Occasionally, the user may discover errors in the TUCHA file. The correct data can usually be ascertained through coordination with ODCSLOG, and the intermediate mass storage file produced by TUCHAROLL, in the same format as the printed report, can be corrected using the edit processor. The output from TUCHAROLL is also useful in determining appropriate SRC substitutions. If the force being processed contains SRC not on the TUCHA file, substitutions must be made subsequent to running program LOG.

(2) POMCUSROLL. The output from POMCUSROLL is similar to that from TUCHAROLL except that the report is sorted in UIC sequence and four lines are printed for each unit. The first two lines indicate quantities to be moved and correspond to the first two lines in the TUCHAROLL report. The next two lines indicate quantities prepositioned. The POMCUS report should be checked against the force to ascertain if all POMCUS units are represented. If not, substitutions can be made using the edit processor, or a new POMCUS file can be obtained from ODCSLOG.

TABLE VI-5, Data Elements Displayed by TUCHAROLL

<u>Data element</u>		<u>Description</u>
SRC		Standard requirements code, line number
ULC/UTC	line 1: line 2:	Unit level code/unit type code Unit description
PAX	line 1: line 2:	Number passengers Unit strength
A0		Vehicles, non-air transportable (NAT)
B0		Non-self-deployable aircraft (NSDA) NAT
B1		NSDA outsize
A1		Vehicles, outsize
J1		Nonvehicular outsize cargo
B2C		NSDA oversize, containerizable
A2C		Vehicles, oversize, containerizable
A2D		Vehicles, oversize, noncontainerizable
J2D		Nonvehicular cargo, oversize, noncontainerizable
J2C		Nonvehicular cargo, oversize, containerizable
A3C		Vehicles, Bulk, containerizable
J3C		Nonvehicular cargo, bulk, containerizable
J7C		Accompanying dry bulk supplies
AMMO		Accompanying ammunition
UE/B	line 1: line 2:	Total weight of unit equipment Total square feet of NSDA
AS/A	line 1: line 2:	Total accompanying supply weight ^a / Total square feet of vehicles

^a/Not used in MRG

(3) MORSAROLL. The reports are produced by MORSAROLL. The first is a listing of the SMOBSOD input data (A and B cards only, the C card is produced but not listed) for other service movements. The A, B, and C cards are described in Reference 2. The report is listed in package number sequence as derived by sorting the other service movement data on RDD, availability date, travel mode, origin node, and destination node. The format is exactly the same as that for SMOBSMOD input. The A card shows package number, RDD, and availability date. One B card is produced for each cargo category included in the package. Current categories are listed at Table VI-6. Each B card displays availability date, destination node, origin node, travel mode, number of passengers (thousands) cargo quantity thousands of barrels of POL or thousands of short tons for other cargo) and the cargo type. The second report is a detailed listing of the units making up each package. The data elements on this report are self-explanatory except for OV/POL. Normally all cargo quantities are input from MORSA in short tons, and the OV/POL field displays quantity of oversize cargo. However, if the cargo is POL (record type 'P') then the OV/POL field displays barrels in thousands. This program also provides a listing of all records for which the origin or destination could not be found in the node tables. A code (1 for origin, 9 for destination) indicates which type node was not located. Also displayed are the MORSA node identification, total weight, bulk, number of passengers, RDD, and availability date. Although the program does not error terminate when a node is not found, the user should update the node tables and assign a SMOBSMOD node to each MORSA node.

(4) ARLOCSORT. Two reports are provided by ARLOCSORT. The first report displays the entire Army Location file in Army Location code (ARLOC) sequence and in abbreviated location name (LOCNA) sequence. The data elements displayed have been listed in Table V-15. The second report is sorted by AREA and displays only AREA, LOCNA, GELOC and ARLOC. These are the same data elements contained in the GEO Location file and subsequently used by Program GEO.

b. Main processors. Each of the MRG programs provides output to assist the user in analysis of results.

(1) GEO. All manual entry data are formatted and displayed to the user. The user should carefully check the program output to verify the accuracy of manual entry data. Also displayed is the number of records in the GEO file and Node table. The GEO file is the same file output by ARLOCSORT, so the number of records should agree. The Node table is created from card input, so the number of

records can easily be checked. The last direct output from GEO identifies the number of locations on the Force file that could not be found on the GEO file and the average number of accesses to the GEO file per unit. Locations not found on the GEO file are assigned a notional GELOC from the Node table based on LOCCO or MBLOC. If the LOCCO and MBLOC values are not found in the Node table, the program will terminate abnormally after identifying all such values. The user should then update the Node table. GEO also produces a Movement Data file 1 (MDF1) which can be listed or edited separately by the user. This file displays the data elements shown in Table VI-7.

(2) LOG. This program may terminate abnormally if there are discrepancies in the input data. The user must correct the discrepancies and rerun the program in the event of abnormal termination of the program. The next paragraphs describe the output under abnormal and normal conditions.

(a) Abnormal termination. If any SRC appearing on the MDF1 file are not found on the TUSUM file, these SRC will be listed. The user must then determine appropriate substitute SRC whose movement characteristics will be used in lieu of the SRC that could not be found. Programs UPMDF1 and LOG are then rerun with the list of substitute SRC as input.

(b) Normal termination. All manual entry data are formatted and displayed to the user who should carefully check this output to verify the accuracy of the manual entry data. The number of units in each theater set is displayed. A list of units, that are identified as POMCUS units on the Force file but that are not located on the POMCUS file, is then printed. Such mismatches do not cause program termination because these units will be assigned zero deployment weight. However, the user should peruse the list to determine if an error exists on one of the files. Program LOG also produces a file of MORSA cards for each unit. This file can be printed or edited as desired by the user.

(3) UPMDF1. This program does not produce any user output.

(4) NUR. Manual entry data are formatted and displayed for user perusal. This output should be carefully checked to assure correctness. NUR prints a supply status summary in 5-day increments for each theater. Data elements are listed in Table VI-8. NUR also identifies units on MDF1 for which no corresponding Theater Code was input to the program. No resupply or replacement quantities are generated for these units. If the user wants these quantities determined, appropriate manual entry data must be provided to NUR. NUR also produces a file of MORSA cards for the nonunit movement requirements. This file can be listed or edited by the user as desired.

TABLE VI-6, SMOBSMOD Cargo Categories

<u>Category</u>	<u>Cargo type</u>
1	PAX
2	VEH-NAT
3	NSDA-NAT
4	NSDA-OUT
5	VEH-OUT
6	POL
7	NV-OUT
8	NSDA-OVER-C
9	NSDA-OVER-NC
10	VEH-OVER-C
11	VEH-OVER-NC
12	NV-OVER-NC
13	NV-OVER-C
14	VEH-BULK-C
15	NV-BULK-C
16	DRY RESUPPLY
17	AMMO

TABLE VI-7, MDF1 Data Elements

<u>Data element</u>	<u>Description</u>
SRC	Standard requirement code
UIC	Unit identification number
TPSN	Troop program sequence number
ORIGIN	Origin GELOC
Destination	Destination GELOC
Origin-node	SMOBSMOD node number
Destination-node	SMOBSMOD node number
RDD	Required delivery date
AVAIL	Availability date
MODE	MORSA travel mode
Theater code	See Data Dictionary (this document)
MCODE	See Data Dictionary (this document)
Unit description	Description of the type unit

TABLE VI-8, Supply Status Summary

<u>Data element</u>	<u>Description</u>
DAY	Effective day of summary
THR	Theater code
UNITS	Number of units deployed to the theater (cumulative)
STRENGTH	Authorized theater strength used to determine number of casualties
REPLACEMENTS	Number of replacements required
TYPE	'1' = Dry bulk cargo '2' = Ammunition '3' = POL
DAYS OH	Number of days of supply on hand in theater stocks (by type)
DAYS DESRD	Number of days of supply required to be in theater stocks (by type)
TONS OH	Number of short tons on hand
TONS REQRD	Shortfall in theater stocks (POL units and thousands of barrels)

(5) MERGEMORSA. A user output is not produced by this program.

(6) PCKAGE and PRTPCK. The printed output is self-explanatory. Two files are also produced that can be listed or edited by the user. One file contains SMOBSMOD input (A, B, and C cards) as defined in paragraph 2a(3) of this chapter. The second file contains a detail listing of units (identified by UIC and TPSN) within each Army package.

c. Post processors. MRG includes two programs designed to interface with UDS. Use of these programs is optional with the user but is strongly recommended because of the versatile report generation capability of UDS. The UDS reports provide a valuable aid to the user in analysis of MRG results. Two programs are required to produce a UDS file. Program INLAY overlays movement data on selected fields of the FAS file, creates additional FAS records for nonunit movements, and produces a modified FAS tape. Program BUILDMRG accepts the modified FAS tape and produces a UDS file with the new data. Table VI-9 identifies the MRG data items overlaid on the FAS file and the UDS data names associated with the overlaid data. A special version of the UDS report generator (39FACT.MAINABS) should be used to extract reports from this file. See Reference 1 for an explanation of UDS.

TABLE VI-9, MRG Data Items Overlaid on FAS File

MRG data	Size	FAS position	UDS name
Availability Date	3	34-36	AVAL1
Record Type	1	37	RTCCC
Record Description	1	38	RDCCC
Sequence Number	4	48-53	CCNUM
Origin Geographic Location Code	4	54-57	ORGEO
Destination Geographic Location Code	4	58-61	DEGEO
Travel Mode	1	62	TMODE
Required Delivery Date	3	110-112	REQDA
Destination node <u>a/</u>	3	113-115	DNODE
Origin node <u>a/</u>	3	116-118	ONODE
Package Number <u>a/</u>	4	163-167	PKGNR
Unit level <u>b/</u>	3	204-206	} UNTDS
Unit description <u>b/</u>	12	207-224	
Bulk (short tons)	6	228-232	BULK1
Oversize (short tons)	6	233-237	OVRSZ
Outsize (short tons)	6	238-242	OUTSZ
NAT (short tons)	6	243-247	NATAA
NSDA (square feet)	6	248-252	NSDA1
Total weight (short tons)	6	253-257	DEPST
Accompanying ammunition (short tons)	6	258-262	ACAMO
POL (000 barrels)	6	263-267	POLBB
Passengers	6	268-272	PAXAA
Accompanying dry cargo (short tons)	6	273-277	ASPLY

a/Data items obtained from SMOBSMOD input. All other data items obtained from MORSA input.

b/Overlaid for nonunit records only.

APPENDIX A
STUDY CONTRIBUTORS

PRECEDING PAGE BLANK-NOT FILMED

COMPUTER ASSISTED MATCH PROCESS (CAMP)

APPENDIX A
STUDY CONTRIBUTORS

1. Study Director

Mr Gary L. Martin, Joint and Strategic Forces Directorate

2. Study Team

Ms Patricia Fleming, Methodology and Resources Directorate

Mr Ivan Keller, Force Concepts and Design Directorate

MAJ Ernest R. Montagne, Jr, Joint and Strategic Forces Directorate

Mr Rene Plourde, Methodology and Resources Directorate

Ms Avonale Stephenson, Project Planning and Control Office

3. Support Personnel

Ms Betty Spence

Ms Armin Maryin

Ms Vivian Layman

APPENDIX B
REFERENCES

PRECEDING PAGE BLANK-NOT FILMED

COMPUTER ASSISTED MATCH PROGRAM (CAMP)

APPENDIX B
REFERENCES

1. US Army Concepts Analysis Agency, "Capabilities and Use of the CAA Unit Data System (UDS)," Draft Documentation, Bethesda, MD, 23 Jul 74.
2. _____, "Strategic Mobility Simulation Model (SMOBSMOD) User's Manual," Draft Documentation, Bethesda, MD, 30 May 74.
3. Defense Communications Agency, "Movement Requirements for Staff Planning and Special Studies Applications (MORSA)," User's Manual, Logistic Data Branch (ATTN: C318), Command and Control Technical Center. To be published.
4. Dept of Army, "Force Accounting System (FAS)," User's Guide, Washington, DC, Oct 72.
5. Research Analysis Corporation, "The FOREWON Force-Planning System," App C of "User's Guide for Force Analysis Simulation of Theater Administrative and Logistic Support (FASTALS)," RAC-R-86, May 71.
6. Dept of Army, "Army Location Codes, States Within the United States," DA Circular 525-10-3, Washington, DC, 30 Aug 74.
7. _____, "Army Location Codes, Foreign Locations," DA Circular 525-10-4, Washington, DC, 30 Aug 74.
8. Defense Communications Agency, "Type Unit Data File (TUCHA)," in Users Manual of Computer System Manual, CSM UM 157-74, Jul 74.
9. Dept of Army, "Troop Program Sequence Number," AR 18-19, Washington, DC, 16 Aug 72.

COMPUTER ASSISTED MATCH PROGRAM (CAMP)

APPENDIX C
GLOSSARY

PRECEDING PAGE BLANK-NOT FILMED

COMPUTER ASSISTED MATCH PROGRAM (CAMP)

APPENDIX C
Glossary

<u>Term</u>	<u>Definition</u>
ALT	A computer program. A file output by program FSORT for input to program ALT
ammo	ammunition
ATL	Above-the-line. Refers to major combat forces (divisions and separate brigades). All units with TPSN first position 0 or 1 are above-the-line.
	A computer program.
	A computer file output by program FSORT for input to program ATL
BINCOPY	A computer program
BUILD	A computer program
BLDUP	day stockage objective is to be achieved
BUILDMRG	A computer program
CAA	Concepts Analysis Agency
CAMP	Computer Assisted Match Program
CAMPSUM	A program RSORT input computer file
CAN	A program Match data input file. A program FSORT output file. The match candidate file
CCTC	Command and Control Technical Center
COBOL	common business oriented language
DA	department of the Army
DC	display and compute
DO	display only

<u>Term</u>	<u>Definition</u>
FAS	Force Accounting System
FASTALS	Force Analysis Simulation of Theater Administration and Logistic Support
FMA	force match algorithm
FORTRAN	Formula Translation (a scientific programming language for computers)
FSORT	A computer program
GEO	A computer program that produces the Movement Data File 1
HPU	Hand played units. A computer file output by program FSORT for input to program LAYIN
INLAY	A computer program
JCS	Joint Chiefs of Staff
K	thousand
LAYIN	A computer program
LOG	A computer program
LOU	Locked out units. Units not considered for matching. A computer file output by program FSORT for input to program LAYIN
MALT	A program LAYIN computer input file. Also a program ALT output file
MATCH	A computer program
MATL	A file output by program ATL for input to program LAYIN
MERGEMORSA	A computer program
MORSA	Mobility Requirements for Staff Analysis
MORSAROLL	A computer program that provides preliminary processing for data base building

<u>Term</u>	<u>Definition</u>
MRD	Methodology and Resources Directorate, CAA
MREQ	A computer file output by program MATCH for input to program LAYIN (includes matches, overages, and notional units)
NUR	A computer program
ODCSOPS	Office, Deputy Chief of Staff for Operations and Plans
PCKAGE	A computer program
POL	petroleum, oils and lubricants
POMCUS	prepositioning of materiel configured to unit sets. A computer file input to MRG
POMCUSROLL	A computer program that provides preliminary processing for data base building
POMSUM	A summary file produced by POMCUSROLL
POS	position
PRTPCK	A computer program
PWRS	prepositioned war reserve stock
RDAY	day theater resupply build up begins
RDD	required delivery date
REQ	A computer file output by program RSORT for input to program MATCH
ROLLUP- MODIFIED	A new version of CAMPUSUM
RSORT	A computer program
SORTARLOC	A computer program
SORTUDS	A computer program that provides preliminary processing for data base building
TOE	table(s) of organization and equipment

<u>Term</u>	<u>Definition</u>
TOE/TPSN	table(s) of organization and equipment/Troop Program Sequence Number. A computer file
TPSN	Troop Program Sequence Number (see reference 9)
TUCHA	Type unit data, a computer file input to MRG
TUCHAROLL	A computer program that provides preliminary processing for data base building
TUSUM	A summary file produced by TUCHAROLL
UDS	Unit Data System. Also, a computer file
UPMDF1	A computer program
WWMCCS	worldwide military command and control system
66 ROLLOUT	A third version of CAMPSUM (used if movement requirements are to be generated)
66 ROLLUP	The principal version of Program CAMPSUM

BEST AVAILABLE COPY

COMPUTER ASSISTED MATCH PROGRAM (CAMP)

CHAPTER VII
PROGRAM LISTINGS

BEST AVAILABLE COPY

24MONTAGNE•BUILD
 ELT07 RLIB70 08/16-07:40:07-(3.)
 000001 000 010010 IDENTIFICATION DIVISION.
 000002 000 010020 PROGRAM-ID. "BUILD".
 000003 000 010030 AUTHOR. J MEYEROWITZ.
 000004 000 010040 DATE WRITTEN 02 MAY 1973.
 000005 000 010050 REMARKS. READ A FAS FILE FROM TAPE
 307 CHARACTERS BLOCKED 24 PER RECORD.
 000006 000 010060 WRITE A UDF FILE TO MASS STORAGE USING ISFM
 360 CHARACTERS PER RECORD.
 000007 000 010070
 000008 000 010080 ENVIRONMENT DIVISION.
 000009 000 020100 CONFIGURATION SECTION.
 000010 000 020120 SOURCE=COMPUTER. UNIVAC=1108.
 000011 000 020140 OBJECT=COMPUTER. UNIVAC=1108.
 000012 000 020160 INPUT-OUTPUT SECTION.
 000013 000 020180 FILE=CONTROL.
 000014 000 020200 SELECT MASTER=FILE ASSIGN TO MASS-STORAGE FORCE
 ACCESS MODE IS RANDOM SYMBOLIC KEY IS REAL=KEY
 000015 000 020220 ORGANIZATION IS INDEXED FILE=DESCRIPTION IS FILE=.
 000016 000 020240 SELECT FAS=FILE ASSIGN TO UNISERV FAS=FILE.
 000017 000 020260 SELECT PRINT=FILE ASSIGN TO PRINTER.
 000018 000 020280
 000019 000 020300
 000020 000 030010 DATA DIVISION.
 000021 000 030020 FILE SECTION.
 000022 000 030030 FD MASTER=FILE
 LABEL RECORDS ARE STANDARD
 DATA RECORD IS MASTER=REC.
 000023 000 030040
 000024 000 030050
 000025 000 030060 01 MASTER=REC
 PICTURE IS X(110752).
 000026 000 031010 FD FAS=FILE
 000027 000 031020 LABEL RECORD IS OMITTED
 000028 000 031030 RECORD CONTAINS 7368 CHARACTERS
 000029 000 031035 RECORDING MODE IS 1
 000030 000 031040 DATA RECORD IS TAPE=BLOCK.
 000031 000 031050 01 TAPE=BLOCK
 PICTURE IS X(17368).
 000032 000 032010 FD PRINT=FILE
 000033 000 032020 RECORD CONTAINS 132 CHARACTERS
 000034 000 032030 LABEL RECORD IS OMITTED
 000035 000 032040 DATA RECORD IS PRINT=LINE.
 000036 000 032050 01 PRINT=LINE
 PICTURE IS 99 COMP SYNC RIGHT
 000037 000 040010 WORKING-STORAGE SECTION.
 000038 000 040020 77 NEXX
 000039 000 040030 77 N
 000040 000 040100 01 WORK=BLOCK.
 000041 000 040110 02 WORK=REC OCCURS 24 TIMES.
 000042 000 040120 03 PART=1.
 000043 000 040130 04 FILLER PICTURE IS X.
 000044 000 040140 04 WORKID.
 000045 000 040143 05 FICID PICTURE IS X.
 000046 000 040144 05 COMPO PICTURE IS X.
 000047 000 040145 05 UJCCC PICTURE IS X(6).
 000048 000 040146 05 EDATE PICTURE IS X(6).
 000049 000 040150 04 FILLER PICTURE IS X(11).
 000050 000 040160 03 PART=2.
 000051 000 041622 04 FILLER PICTURE X(12).
 000052 000 04 THEATER=CODE PIC X.
 000053 001 04 FILLER PIC X(31).
 000054 001 04 DSCMP PIC XX.
 000055 001 04 FILLER PIC XXX.

```

000056    000   04164      04  ESONN    PIC X*.
000057    000   04106      04  FILLER   PIC X(108).
000058    000   000          04  TRCON    PIC X*.
000059    003   000          04  FILLER   PIC X(1122).
000060    000   050010 01  DATAREC*   PICTURE IS X(26).
000061    000   050020 02  SEG-1    PICTURE IS X.
000062    000   050030 02  FILLER   PICTURE IS X.
000063    000   050040 02  SEG-2    PICTURE IS X(333).
000064    000   060010 01  PRT-AREA*  PICTURE IS X(18) OCCURS 7 TIMES.
000065    000   060020 02  PRT-ITEM  PICTURE IS X(18) OCCURS 7 TIMES.
000066    000   080010 01  ER-LINE*  PICTURE IS X(12), VALUE IS *INVALID KEY*.
000067    000   080020 02  FILLER   PICTURE IS X(14).
000068    000   080030 02  ER-KEY   PICTURE IS X(14).
000069    000   150010 01  REAL-KEY*  PICTURE IS X(14).
000070    000   150020 02  REC-KEY  PICTURE IS X(14).
000071    000   150030 02  FILLER   PICTURE IS X(4).
000072    000   180010 01  FILE-DESCRIP*  PICTURE IS H(10) VALUE IS 1200.
000073    000   180020 02  NUMBER-OF-RECORDS  PICTURE IS H(10) VALUE IS 36U.
000074    000   180030 02  RECORD-LENGTH  PICTURE IS H(10) VALUE IS 36U.
000075    000   180040 02  RECORD-LENGTH-MAX  PICTURE IS H(10) VALUE IS U.
000076    000   180050 02  RECORD-KEY-LENGTH  PICTURE IS H(10) VALUE IS 18.
000077    000   180060 02  OVERFLOW-AREA  PICTURE IS H(10) VALUE IS 10.
000078    000   180070 02  1=0-F  PICTURE IS H(10) VALUE IS 1000.
000079    000   180080 02  DATA-NAME-8*  PICTURE IS X(14).
000080    000   180090 03  DATA-NAME-9  PICTURE IS X(3).
000081    000   180100 03  DATA-NAME-10 PICTURE IS X(3).
000082    000   190010 01  INFORM*.
000083    000   190020 02  NUMBER-OF-BLOCKS PICTURE IS H(10).
000084    000   190030 02  NUMBER-OF-INDX-BLOCKS PICTURE IS H(10).
000085    000   190040 02  NUMBER-OF-OVERFL-BLOCKS PICTURE IS H(10).
000086    000   190050 02  NUMBER-OF-RECORDS  PICTURE IS H(10).
000087    000   190060 02  NUMBER-OF-RECORDS-IN=10F PICTURE IS H(10).
000088    000   190070 02  NUMBER-OF-RECORDS-DELRD PICTURE IS H(10).
000089    000   190080 02  NUMBER-OF-RECORDS-READ PICTURE IS H(10).
000090    000   190090 02  NUMBER-OF-RECORDS-READ-FROM-IF PICTURE IS H(10).
000091    000   190100 02  NUMBER-OF-RECORDS-WRITTEN PICTURE IS H(10).
000092    000   195010 01  INFORM-FL-DATA*.
000093    000   195020 02  NUMBER-OF-BLOCKS PICTURE IS 9(6).
000094    000   195030 02  NUMBER-OF-INDX-BLOCKS PICTURE IS 9(6).
000095    000   195040 02  NUMBER-OF-OVERFL-BLOCKS PICTURE IS 9(6).
000096    000   195050 02  NUMBER-OF-RECORDS  PICTURE IS 9(6).
000097    000   195060 02  NUMBER-OF-RECORDS-IN=10F PICTURE IS 9(6).
000098    000   195070 02  NUMBER-OF-RECORDS-DELRD PICTURE IS 9(6).
000099    000   195080 02  NUMBER-OF-RECORDS-READ PICTURE IS 9(6).
000100    000   195090 02  NUMBER-OF-RECORDS-READ-FROM-IF PICTURE IS 9(6).
000101    000   195100 02  NUMBER-OF-RECORDS-WRITTEN PICTURE IS 9(6).
000102    000   200000  PROCEDURE DIVISION.
000103    000   200010  START-TEST.
000104    000   200020  OPEN INPUT FASTFILE WITH NO REWIND.
000105    000   200030  OPEN OUTPUT PRINT-FILE.
000106    000   200040  OPEN OUTPUT MASTER-FILE.
000107    000   210000  TAPE-READ.
000108    000   210010  MOVE ZERO TO NDEX.
000109    000   210020  READ FASTFILE AT END GO TO FINI.
000110    000   210030  MOVE TAPE-BLOCK TO WORK-BLOCK.
000111    000   220000  GET-ITEM.
000112    000   220010  ADD 1 TO NDEX.

```

```

000112    000    220020    IF INDEX = 25 GO TO TAPE-READ.
          000    220021    IF WORKID (INDEX) = SPACES GO TO GET-ITEM.
000113    000    220025    IF WORKID (INDEX) = *W*W*W*W*W*W*W*W*W*W*W*W*W*W*W*W*W*
                           MOVE THEATER-CODE(INDEX) TO TRCON(INDEX).
                           MOVE PART-1 (INDEX) TO SEQ-1.
000114    000    220030    MOVE PART-2 (INDEX) TO SEQ-2.
000115    000    220040    MOVE WORKID (INDEX) TO REAL-KEY.
000116    000    220055    ADD 1 TO N.
000117    000    220060    IF N = 6 PERFORM LINE-LIST THRU X-LIST.
                           WRITE MASTER-REC FROM DATA-REC INVALID KEY GO TO ERR=0.
000118    000    220065    MOVE REAL-KEY TO PRT-ITEM (N).
000119    000    220070    MOVE REAL-KEY TO PRT-ITEM (N).
000120    000    220074    GO TO GET-ITEM.
000121    000    220080    GO TO GET-ITEM.
000122    000    220085    MOVE 1 TO N.
000123    000    220090    MOVE 1 TO N.
000124    000    220094    MOVE 1 TO N.
000125    000    220098    MOVE 1 TO N.
000126    000    225010    LINE-LIST.
000127    000    225020    MOVE 1 TO N.
000128    000    225030    WRITE PRINT-LINE FROM PRT-AREA.
                           MOVE SPACES TO PRT-AREA.
000129    000    225040    MOVE SPACES TO PRT-AREA.
                           X-LIST.
000130    000    225060    EXIT.
000131    000    226010    ERR=0.
000132    000    226020    MOVE REAL-KEY TO ER-KEY.
000133    000    226025    WRITE PRINT-LINE FROM ER-LINE.
000134    000    226030    GO TO FINI.
000135    000    230000    FINI.
000136    000    230010    CLOSE FAS-FILE.
000137    000    230020    CLOSE MASTER-FILE USING INFORM.
000138    000    230030    MOVE CORRESPONDING INFORM TO INFORM-FL-DATA.
000139    000    230035    WRITE PRINT-LINE FROM PRT-AREA.
000140    000    230040    WRITE PRINT-LINE FROM INFORM-FL-DATA AFTER 2 LINES.
000141    000    230050    CLOSE PRINT-FILE.
000142    000    230060    STOP RUN.
                           END ELT.

```

BHUG FMA/MRG PRE-PROCESSOR PROGRAM SORTUDS ••UNCLASSIFIED•• •L,0

#ELT,L 32MARTIN.SORTUDS2FAS
 ELT007 RL1B70 08/16-07:40:09-(1.)
 000001 000 IENTIFICATION DIVISION.
 000002 001 PROGRAM-ID.
 000003 000 ENVIRONMENT DIVISION.
 000004 000 CONFIGURATION SECTION.
 000005 000 SOURCE-COMPUTER.
 000006 000 OBJECT-COMPUTER.
 000007 000 INPUT-OUTPUT SECTION.
 000008 000 FILE-CONTROL.
 000009 000 SELECT PRNTFL ASSIGN TO PRINTER.
 000010 000 SELECT CARDFL ASSIGN TO CARD-READER.
 000011 000 SELECT UDSSL ASSIGN TO UNISERVU SERC-TAPE.
 000012 000 SELECT FASFL ASSIGN TO UNISERVU UIC-TAPE.
 000013 000 SELECT SRTRFL ASSIGN TO MASS-STORAGE XA.
 000014 000 DATA DIVISION.
 000015 000 FILE SECTION.
 000016 000 FD PRNTFL
 000017 000 LABEL RECORD OMITTED
 000018 000 DATA RECORD PRNTLINE.
 000019 000 PRNTLINE.
 000020 000 01
 000021 000 02 NUMB
 000022 000 02 FILLER
 000023 000 02 MESSAGE
 000024 000 FD CARDFL
 000025 000 LABEL RECORD OMITTED
 000026 000 DATA RECORD CARU.
 000027 000 01 CARD.
 000028 000 02 TPSN
 000029 000 02 FILLER
 000030 000 02 FILLER
 000031 000 FD UDSSL
 000032 000 BLOCK CONTAINS 24 RECORDS
 000033 000 RECORD CONTAINS 360 CHARACTERS
 000034 000 LABEL RECORD STANDARD
 000035 000 DATA RECORD IS UDS.
 000036 000 UDS.
 000037 000 03 RECDL
 000038 000 03 FICOU
 000039 000 03 COMPU
 000040 000 03 UICC.
 000041 000 04 VIC12
 000042 000 04 VIC36
 000043 000 03 EDATE
 000044 000 03 ACTCO
 000045 000 03 AMSCO
 000046 000 03 ASGMT
 000047 000 03 AUTHR
 000048 000 03 BRANCH
 000049 000 03 CARS
 000050 000 03 CNUM
 000051 000 03 CHGRNR
 000052 000 03 CIVCN
 000053 000 03 DAMPL
 000054 000 03 DEPLO
 000055 000 03 UNPID

AD-A048 554

ARMY CONCEPTS ANALYSIS AGENCY BETHESDA MD
COMPUTER ASSISTED MATCH PROGRAM (CAMP), (U)
AUG 76 G L MARTIN, E R MONTAGNE

F/6 15/7

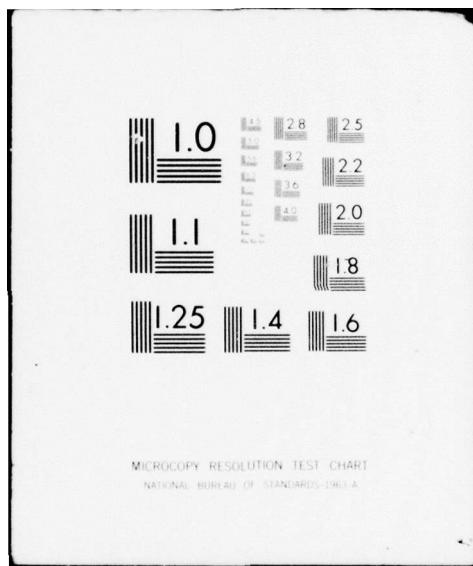
UNCLASSIFIED

CAA-D-76-5

NL

2 OF 4
AD-A048 554





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963 A

FMA/MRG PRE-PROCESSOR PROGRAM SORTUDS **UNCLASSIFIED**

PAGE 4

DATE 081676

MELT 32MARTIN.SORTUDS2FAS
ELT007 RLIB70 08/16-07:40:09-(1.)
000001 000 IDENTIFICATION DIVISION.
000002 001 PROGRAM-ID.
000003 000 ENVIRONMENT DIVISION.
000004 000 CONFIGURATION SECTION.
000005 000 SOURCE=COMPUTER.
000006 000 OBJECT=COMPUTER.
000007 000 INPUT-OUTPUT SECTION.
000008 000 FILE-CONTROL.
000009 000 SELECT PRNTFL ASSIGN TO PRINTER.
000010 000 SELECT CARDFL ASSIGN TO CARD-READER.
000011 000 SELECT UDSSL ASSIGN TO UNISERVO SRC-TAPE.
000012 000 SELECT FASFL ASSIGN TO UNISERVO UIC-TAPE.
000013 000 SELECT SRSTFL ASSIGN TO MASS-STORAGE XA.
000014 000 DATA DIVISION.
000015 000 FILE SECTION.
000016 000 FD PRNTFL
000017 000 LABEL RECORD OMITTED
000018 000 DATA RECORD PRNTLINE.
000019 000 01 PRNTLINE.
000020 000 02 NUMB PIC 9(5).
000021 000 02 FILLER PIC X(2).
000022 000 02 MESSAGE PIC X(125).
000023 000 FD CARDFL
000024 000 LABEL RECORD OMITTED
000025 000 DATA RECORD CARU.
000026 000 01 CARD.
000027 000 02 TPSN PIC 9(5).
000028 000 02 FILLER PIC X(1).
000029 000 02 AVCON PIC 9(6).
000030 000 02 FILLER PIC X(68).
000031 000 FD UDSSL
000032 000 BLOCK CONTAINS 24 RECORDS
000033 000 RECORD CONTAINS 360 CHARACTERS
000034 000 LABEL RECORD STANDARD
000035 000 DATA RECORD IS UD\$.
000036 000 01 UD\$.
000037 000 03 RECDL PIC X.*
000038 000 03 FICOD PIC X.*
000039 000 03 COMPU PIC X.*
000040 000 03 UICCC.
000041 000 04 UIC12 PIC X(12).
000042 000 04 UIC36 PIC X(4).
000043 000 03 EDATE PIC X(6).
000044 000 03 ACTCO PIC A.
000045 000 03 AMSCO PIC X(11).

FMA/MRG PRE-PROCESSOR PROGRAM SORTUDS ••UNCLASSIFIED••

DATE 081676

PAGE 5

000056	000	03	MOPRD	PIC X(3).
000057	000	03	DSCMP	PIC X(2).
000058	000	03	ELSEQ	PIC X(2).
000059	000	03	EQCON	PIC X.
000060	000	03	ESCON	PIC X.
000061	000	03	ELAGG	PIC X.
000062	000	03	FNCAT	PIC X.
000063	000	03	FURCO	PIC X.
000064	000	03	FPLAN*	
000065	000	04	FPLAN1	PIC X.
000066	000	04	FPLAN2	PIC X.
000067	000	04	FPLAN3	PIC X(2).
000068	000	03	JCSTY	PIC X(3).
000069	000	03	LOCCT	PIC X(3).
000070	000	03	MACTO	PIC X(3).
000071	000	03	NBCMD	PIC X(2).
000072	000	03	NBLOC	PIC X(3).
000073	000	03	FILLR	PIC X(2).
000074	000	03	MBSTA	PIC X(9).
000075	000	03	MILCN	PIC X(2).
000076	000	03	NOTID	PIC X.
000077	000	03	NTREF	PIC X(2).
000078	000	03	QUESTS	PIC X.
000079	000	03	OPAGY	PIC 9(3).
000080	000	03	ADCON*	
000081	000	04	ADCO1	PIC 9.
000082	000	04	ADCO2	PIC 99.
000083	000	04	ADCO3	PIC 999.
000084	000	03	OPDAT	PIC X.
000085	000	03	CATCO	PIC X.
000086	000	03	PHASE	PIC X.
000087	000	03	PRCON	PIC X.
000088	000	03	REPCO	PIC X.
000089	000	03	ROBCO.	
000090	000	04	ROBCD1	PIC X.
000091	000	04	ROBCD2	PIC X.
000092	000	04	ROBCD3	PIC X.
000093	000	03	SPLIT	PIC A.
000094	000	03	SRCTO	PIC X(3).
000095	000	03	STACO	PIC X(5).
000096	000	03	STATS	PIC X(2).
000097	000	03	STNNM	PIC X(9).
000098	000	03	TDATE	PIC 9(5).
000099	000	03	TDNUM	PIC X(11).
000100	000	03	TMCCC	PIC A.
000101	000	03	TPSNA	PIC 9(5).
000102	000	03	TRCON	PIC X.
000103	000	03	TYPCO	PIC 9.
000104	000	03	UNCAP	PIC X.
000105	000	03	UNCON	PIC X.
000106	000	03	UNCLC	PIC X(5).
000107	000	03	UNMBR	PIC X(4).
000108	000	03	PECD	PIC X(6).
000109	000	03	ULCCC	PIC A(3).
000110	000	03	UNTDS	PIC X(16).
000111	000	03	VCHNR	PIC X(3).
000112	000	03	AUSTR	PIC X(25).

FMA/MRG PRE-PROCESSOR PROGRAM SORTUDS ••UNCLASSIFIED••

DATE 081676

PAGE 5

000113	000	03	OPSTR	PIC X(125)*
000114	000	03	S1STR	PIC X(125)*
000115	000	03	DPMNT	PIC X(4)*
000116	000	03	ENDRC	PIC X*
000117	000	03	FILLER	PIC X(52)*
000118	000	FU	FASEL	
000119	000		RECORD CONTAINS 7368 CHARACTERS	
000120	000		LABEL RECORD OMITTED	
000121	000		RECORDING MODE IS 1	
000122	000		DATA RECORD IS FAS-BLK.	
000123	000	01	FAS-BLK.	
000124	000	02	FAS=REC OCCURS 24 TIMES.	
000125	000	03	FAS=DATA	PIC X(1307)*
000126	000	SD	SRTEL	
000127	000		DATA RECORD IS SRT.	
000128	000	01	SRT.	
000129	000	03	RECDL	PIC X*
000130	000	03	F1C0U	PIC X*
000131	000	03	COMPO	PIC X*
000132	000	03	UICCC.	
000133	000	04	UIC12	PIC X(2)*
000134	000	04	UIC36	PIC X(4)*
000135	000	03	EDATE	PIC 9(6)*
000136	000	03	ACTCO	PIC A*
000137	000	03	AMSCO	PIC X(1U)*
000138	000	03	ASGMT	PIC X(2)*
000139	000	03	AUTHR.	
000140	000	04	UIN	PIC X(3)*
000141	000	04	TP	PIC 9(2)*
000142	000	04	RDD	PIC 9(3)*
000143	000	04	ESC	PIC X*
000144	000	04	EQC	PIC X*
000145	000	04	THR	PIC 9*
000146	000	04	FLG	PIC X(4)*
000147	000	03	BRNCH	PIC A(2)*
000148	000	03	CARSS	PIC X(2)*
000149	000	03	CCNUM	PIC X(6)*
000150	000	03	CHGNR	PIC X(2)*
000151	000	03	CIVCN	PIC X(2)*
000152	000	03	DAMPL	PIC X(5)*
000153	000	03	DEPL0	PIC X(3)*
000154	000	03	UNP10	PIC X(2)*
000155	000	03	MBPRD	PIC X(3)*
000156	000	03	DSCMP	PIC X(2)*
000157	000	03	ELSEQ	PIC X(2)*
000158	000	03	EQCON	PIC X*
000159	000	03	ESCON	PIC X*
000160	000	03	ELAGG	PIC X*
000161	000	03	FNCAT	PIC X*
000162	000	03	FORCO	PIC X*
000163	000	03	FPLAN	
000164	000	04	FPLAN1	PIC X*
000165	000	04	FPLAN2	PIC X*
000166	000	04	FPLAN3	PIC X*
000167	000	03	JCTSY	PIC X(5)*
000168	000	03	LOC00	PIC X(3)*
000169	000	03	MACT0	PIC X(3)*

000170	000	02	MBCMD	PIC X(2)*
000171	000	03	MBLOC	PIC X(3)*
000172	000	03	FILLR	PIC X(2)*
000173	000	03	MBSTA	PIC X(9)*
000174	000	03	MILCN	PIC X(2)*
000175	000	03	NOTID	PIC X*
000176	000	03	NTREF	PIC X(2)*
000177	000	03	OESTS	PIC X*
000178	000	03	OPAGY	PIC 9(-)*
000179	000	03	ADCON	
000180	000	04	ADCO1	PIC 9*
000181	000	04	ADCO2	PIC 99.
000182	000	04	ADCO3	PIC 999.
000183	000	04	OPDAT	PIC X*
000184	000	03	CATCO	PIC X*
000185	000	03	PHASE	PIC X*
000186	000	03	PRCON	PIC X*
000187	000	03	REPCO	PIC X*
000188	000	03	ROBCO*	
000189	000	04	ROBC01	PIC X*
000190	000	04	ROBC02	PIC X*
000191	000	04	ROBC03	PIC X*
000192	000	03	SPLIT	PIC A*
000193	000	03	SRCTO	PIC X(13)*
000194	000	03	STACO	PIC X(5)*
000195	000	03	STATS	PIC X(2)*
000196	000	03	STNNM	PIC X(9)*
000197	000	03	TDATE	PIC 9(5)*
000198	000	03	TDNUM	PIC X(11)*
000199	000	03	TMCC	PIC A*
000200	000	03	TPSNA	PIC 9(5)*
000201	000	03	TRCON	PIC X*
000202	000	03	TYPCO	PIC 9*
000203	000	03	UNCAP	PIC X*
000204	000	03	UNCON	PIC X*
000205	000	03	UNCLC	PIC X(5)*
000206	000	03	UNMBR	PIC X(4)*
000207	000	03	PECOD	PIC X(6)*
000208	000	03	ULCCC	PIC A(3)*
000209	000	03	UNTDS	PIC X(18)*
000210	000	03	VCHNR	PIC X(3)*
000211	000	03	AUSTR	PIC X(25)*
000212	000	03	OPSTR	PIC X(25)*
000213	000	03	SETSTR	PIC X(25)*
000214	000	03	DPMNT	PIC X(4)*
000215	000	03	ENDRC	PIC X*
000216	000	77	WORKING-STORAGE SECTION.	
000217	000	77	BRC	PIC 9(5).
000218	000	01	WORK-SRC*	
000219	000	02	WSRC1-5	
000220	000	03	WSRC1-3	PIC X(3)*
000221	000	03	WSRC4-5	PIC X(2)*
000222	000	02	WSRC6-12	
000223	000	03	WSRC6-9	PIC X(4)*
000224	000	03	WSRCAL0	PIC X(1)*
000225	000	03	WSRC11-12	PIC X(2)*
000226	000	01	FAS.	

000227	000	03	REDEL	PIC X*
000228	000	03	FICOD	PIC X*
000229	000	03	COMP0	PIC X*
000230	000	03	UICCC*	
000231	000	04	UIC12	PIC X(2)*
000232	000	04	UIC36	PIC X(4)*
000233	000	03	EDATE	PIC 9(6)*
000234	000	03	ACTCO	PIC A*
000235	000	03	AMSCO	PIC X(10)*
000236	000	03	ASGMNT	PIC X(2)*
000237	000	03	AUTHR*	
000238	000	04	UIN	PIC X(3)*
000239	000	04	FLG	PIC X(4)*
000240	000	04	MATCH	PIC X*
000241	000	04	TP	PIC 9(2)*
000242	000	04	RDD	PIC 9(3)*
000243	000	04	LRE	PIC X*
000244	000	04	THR	PIC 9*
000245	000	03	BRANCH	PIC A(2)*
000246	000	03	CASS	PIC X(2)*
000247	000	03	CNUM	PIC X(6)*
000248	000	03	CHNR	PIC X(2)*
000249	000	03	CIVCN	PIC X(2)*
000250	000	03	DAMPL	PIC X(5)*
000251	000	03	DEPL0	PIC X(3)*
000252	000	03	UNP10	PIC X(2)*
000253	000	03	MBPRD	PIC X(3)*
000254	000	03	DSCMP	PIC X(2)*
000255	000	03	ELSEQ	PIC X(2)*
000256	000	03	EQCON	PIC X*
000257	000	03	ESCON	PIC X*
000258	000	03	ELAGG	PIC X*
000259	000	03	FNCAT	PIC X*
000260	000	03	FORCO	PIC X*
000261	000	03	FPLAN*	
000262	000	04	FPLAN1	PIC X*
000263	000	04	FPLAN2	PIC X*
000264	000	04	FPLAN3	PIC X*
000265	000	03	JCSFY	PIC X(5)*
000266	000	03	LOCDO	PIC X(3)*
000267	000	03	MACTO	PIC X(3)*
000268	000	03	MBCMD	PIC X(2)*
000269	000	03	MBLOC	PIC X(3)*
000270	000	03	FILLR	PIC X(2)*
000271	000	03	MBSTA	PIC X(9)*
000272	000	03	MILCN	PIC X(2)*
000273	000	03	NOTID	PIC X*
000274	000	03	NTRFF	PIC X(2)*
000275	000	03	TESTS	PIC X*
000276	000	03	OPAGY	PIC 9(3)*
000277	000	03	ADCON*	
000278	000	04	ADCO1	PIC 9*
000279	000	04	ADCO2	PIC 9*
000280	000	04	ADCU3	PIC 99*
000281	000	03	OPDAT	PIC X*
000282	000	03	CATCO	PIC X*
000283	000	03	PHASE	PIC X*

```

000284    000      03  PRCON          PIC X*  

000285    000      03  REPCO          PIC X*  

000286    000      03  ROBC0,        PIC X*  

000287    000      04  ROBC01        PIC X*  

000288    000      04  ROBC02        PIC X*  

000289    000      04  ROBC03        PIC X*  

000290    000      03  SPLIT          PIC A*  

000291    000      03  SRCTO          PIC X(13)*  

000294    000      03  STACO          PIC X(5)*  

000293    000      03  STATS          PIC X(2)*  

000294    000      03  STNNM          PIC X(9)*  

000295    000      03  TDATE          PIC X(5)*  

000296    000      03  TDNUM          PIC X(11)*  

000297    000      03  TMCCC          PIC A*  

000298    000      03  TPSNA          PIC X(5)*  

000299    000      03  TRCON          PIC X*  

000300    000      03  TYPCO          PIC 9*  

000301    000      03  UNCAP          PIC X*  

000302    000      03  UNCON          PIC X*  

000303    000      03  UNCLC          PIC X(5)*  

000304    000      03  UNMBR          PIC X(4)*  

000305    000      03  PECD0          PIC X(6)*  

000306    000      03  ULCCC          PIC A(3)*  

000307    000      03  UNTDS          PIC X(18)*  

000308    000      03  VCHNR          PIC X(3)*  

000309    000      03  AUSTR          PIC X(25)*  

000310    000      03  OPSTR          PIC X(25)*  

000311    000      03  STSTR          PIC X(25)*  

000312    000      03  DPMNT          PIC X(4)*  

000313    000      03  ENDRC          PIC X*  

000314    000      01  PRNTWK         03  UICCC.  

000315    000      04  UJCJ2          PIC X(2)*  

000316    000      04  UJC36          PIC X(4)*  

000317    000      03  FILLER          PIC XX VALUE SPACES.  

000318    000      03  TPSNA          PIC X(5)*  

000319    000      03  FILLER          PIC XX VALUE SPACES.  

000320    000      03  FILLER          PIC XX VALUE SPACES.  

000321    000      03  COMPO          PIC X*  

000322    000      03  FILLER          PIC XX VALUE SPACES.  

000323    000      03  FPLAN          PIC X*  

000324    000      04  FPLAN1         PIC X*  

000325    000      04  FPLAN2         PIC X*  

000326    000      04  FPLAN3         PIC X*  

000327    000      03  FILLER          PIC XX VALUE SPACES.  

000328    000      03  ROBC0*        PIC X(12)*  

000329    000      04  ROBC01        PIC X*  

000330    000      04  ROBC02        PIC X*  

000331    000      04  ROBC03        PIC X*  

000332    000      03  FILLER          PIC XX VALUE SPACES.  

000333    000      03  SRCTO          PIC X(12)*  

000334    000      03  FILLER          PIC XX VALUE SPACES.  

000335    000      03  JCSTY          PIC X(5)*  

000336    000      03  FILLER          PIC XX VALUE SPACES.  

000337    000      03  ULCCC          PIC X(3)*  

000338    000      03  FILLER          PIC XX VALUE SPACES.  

000339    000      03  CARSS          PIC X(2)*  

000340    000      03  FILLER          PIC XX VALUE SPACES.

```

```

000341      000      03  UNMBR    PIC X(4)•
000342      000      03  FILLER  PIC XX VALUE SPACES.
000343      000      03  BRNCH   PIC X(2)•
000344      000      03  FILLER   PIC XX VALUE SPACES.
000345      000      03  UNTDS   PIC X(15)•
000346      000      03  FILLER   PIC X VALUE SPACE.
000347      000      03  MBSTA   PIC X(9)•
000348      000      03  FILLER   PIC X VALUE SPACE.
000349      000      03  MBLOC   PIC X(3)•
000350      000      03  FILLER   PIC X VALUE SPACE.
000351      000      03  STNNM   PIC X(9)•
000352      000      03  FILLER   PIC X VALUE SPACE.
000353      000      03  LOCCO   PIC X(3)•
000354      000      03  FILLER   PIC X VALUE SPACE.
000355      000      03  DSMP    PIC X(2)•
000356      000      03  FILLER   PIC XX VALUE SPACES.
000357      000      03  ADCON*  PIC X(9)•
000358      000      04  ADC01   PIC 9•
000359      000      04  FILLER  PIC X VALUE SPACES.
000360      000      04  ADC02   PIC 99•
000361      000      04  FILLER  PIC X VALUE SPACES.
000362      000      04  ADC03   PIC 999.
PROCEDURE DIVISION.
000363      000      OPEN INPUT UDSFL CARDFL OUTPUT FASFL PRNTFL.
000364      000      READ CARDFL AT END MOVE 99999 TU TPSN IN CARD.
000365      000      MOVE ZERO TO BRC.
000366      000      SORT IT.
000367      000      SORT RDTFL ON ASCENDING KEY COMPO UICCC
000368      000      INPUT PROCEDURE IS SORT-IN THRU UDS-EOF
000369      001      OUTPUT PROCEDURE IS SORT-OUT.
000370      000      GO TO CLOSEOUT.
000371      000      SORT-IN.
000372      000      READ UDSFL AT END GO TO UDS-EOF.
000373      000      MOVE CORRESPONDING UDS TO FAS.
000374      000      RELEASE SRT FROM FAS.
000375      000      GO TO SORT-IN.
000376      000      UDS=EOF.
000377      000      EXIT.
000378      000      SORT-OUT.
000379      000      RETURN SRDTFL INTO FAS AT END GO TO LAST-BLK.
000380      000      IF TPSN IN CARU EQUALS TPSNA IN FAS
000381      000      MOVE ADCON IN CARU TO ADCON IN FAS.
000382      000      MOVE CORRESPONDING FAS TO PRNTWORK.
000383      000      WRITE PRNTLINE FROM PRNTWORK.
000384      000      ENTER FORTRAN FCOPY SUBROUTINE REFERENCING FAS.
000385      000      ADD 1 BRC.
000386      000      MOVE FAS TO FAS-REC (BRC).
000387      000      IF BRC EQUALS 24 WRITE FAS-BLK MOVE ZERO TO BRC.
000388      000      GO TO SORT-OUT.
LAST-BLK.
000389      000      IF BRC EQUALS ZERO GO TO EOF-FAS.
000390      000      ADD 1 TO BRC.
000391      000      MOVE ALL '9' TO FAS-DATA (BRC).
000392      000      IF BRC LESS THAN 24 GO TU LAST-BLK.
000393      000      WRITE FAS-BLK.
EOF-FAS.

```

```

      000398    000    ENTER FORTRAN ECOPY SUBROUTINE REFERENCING FAS.
      000399    000    CLOSEOUT.
      000400    000    CLOSE UDSFL FASFL PRNTFL CARUFL.
      000401    000    STOP RUN.

```

END ETC.

```

BETYL 32MARTIN.FCOPY
ELTOO/ RL1B70 06/16-07:40:13-(0, )
000001 000 SUBROUTINE FCOPY(FAS)
000002 000 DIMENSION FAS(152)
000003 000 DATA IL/0/
000004 000 C WRITE(2)FAS
000005 000 IL=IL+1
000006 000 1F1L/500*500•EQ.1L)PRINT 1,1L
000007 000
000008 000 1 FORMAT(1I10)
000009 000 RETURN
000010 000 C PUT EOF ON BINARY FILE
000011 000 ENTRY ECOPY(FAS)
000012 000 C PRINT 99,1L
000013 000 FORMAT(1I10)
000014 000 99 ENDFILE 2
000015 000 ENDFILE 2
000016 000 RETURN
000017 000
000018 000 C
000019 000 C READ BINARY FILE
000020 000 C ENTRY FREAD(FAS)
000021 000 READ(2,END=999) FAS
000022 000 RETURN
000023 000 FAS(1)=6H9999999
000024 000 999 FAS(2)=6H9999999
000025 000 FAS(1)=6H9999999
000026 000 FAS(2)=6H9999999
000027 000 REWIND 2
000028 000 RETURN
000029 000

```

18053 MAGEE, ERNEST

SCIENCE 100

```

BELL,L  FSFS•CKALT
ELT007 RL1870 08/16•07:40:15•13.)
000001 003      SUBROUTINE CKALT (ADCO1,SIZE,ALTTAB,ALTFLG)
000002    000      IMPLICIT INTEGER (A=2)
000003    000      INTEGER ALTTAB(100)
000004    000      LOGICAL ALTFLG
000005    002      C   WRITE(6,1) ADC01•SIZE,(ALTTAB(K),K=1,SIZE)
000006    002      1 FORMAT (* SUB CKALT ADC01=,A1,,SIZE=,I4, IX, 5A6)
000007    000      C   ALTFLG = •FALSE•
000008    000      C
000009    000      C   DO WHILE (NOT END OF TABLE ALTTAB)
000010    000      C
000011    000      C   000012 000      C
000012    000      C   000013 000      C   1000 IF (I .GT. SIZE) RETURN
000013    000      C
000014    000      C
000015    000      C   IF (ADCO1 •NE• ALTTAB(I)) GOTO 1100
000016    000      C   THEN
000017    000      C   ALTFLG = •TRUE•
000018    000      C   RETURN
000019    000      C   ELSE
000020    000      C   1100   I = I + 1
000021    000      C   END•IF
000022    000      C   GOTO 1000
000023    000      C   END•DO
000024    000      C   END
END ELT.

```

```

BELL,L  FSFS•CKHPU
ELT007 RL1870 08/16•07:40:16•13.)
000001 000      C K H P U - ROUTINE
000002 000
000003 000
000004 000
000005 000
000006 000
000007 000
000008 000
000009 000
000010 000
000011 000
000012 000
000013 000
000014 000
000015 000
000016 000
000017 000
000018 000
000019 000
000020 000
000021 000
000022 000
000023 000
000024 000

RENE K. PLOURDE
USACAA/MRD JUN 1976

THIS ROUTINE CHECKS THE CURRENT FASREC VIA THE INFORMATION CONTAINED IN
MPINFO AGAINST THE INFORMATION CONTAINED IN THE HAND•PLAYED•UNIT TABLE + PUTA+
TO DETERMINE IF THE FASREC IS TO BE HAND•PLAYED.
A GIVEN FASREC IS HAND•PLAYED IF ITS VIC (MPINFO(I)) EQUALS A HAND•PLAYED
VIC FROM THE HAND•PLAYED TABLE (PUTAB(I)), WHERE 0 < I < LIMIT +1.
GIVEN THAT THE FASREC IS A HAND•PLAYED•UNIT, (VIC'S MATCH) THEN ROBO0, ADC01,
ADC02, AND ADC03 ARE SET EQUAL TO THE CORRESPONDING FIELD FROM MPUTAB IF THE
FIELD IN HPUTAB IS NON-BLANK. ALSO IF ADC03 FIELD IS CHANGED THEN RDDFLG IS
SET TO •TRUE• TO INDICATE THAT THE RDU IS BEING HAND•PLAYED FOR THIS UNIT
SUBROUTINE CKHPU (VIC,ROBO0,ADC01,ADC02,ADC03,LIMIT,
               HPUTAB,RDDFLG)
IMPLICIT INTEGER (A = Z)
INTEGER HPUTAB(100,6),
        DATA BLANK/6H/
LOGICAL RDDFLG
WRITE(6,1) VIC,ROBO0,ADC01,ADC02,ADC03,LIMIT

```

```

000025    000      1  FORMAT(  SUB CHPU   VIC="A6",  RUBCO="A3",  ADC01="A1",
000026    000      .  ADC02="A2",  ADC03="A3",  LIMIT="A4",
000027    000      C  HPUTAB(1,1) = VIC,  HPUTAB(1,2) = ROBC0,  HPUTAB(1,3) = ADC01,
000028    000      C  HPUTAB(1,4) = ADC02,  HPUTAB(1,5) = ADC03,  HPUTAB(1,6) = FLAG,
000029    000      C
000030    000      C  FIRST SET RDDFLG TO FALSE THEN CHECK TO SEE IF HPUTAB IS EMPTY
000031    000      C
000032    000      C
000033    000      C  RDDFLG = FALSE*
000034    000      C  IF (LIMIT .EQ. 0)  RETURN
000035    000      C  I = 1
000036    000      C
000037    000      C  DOWHILE (I < LIMIT)
000038    000      C
000039    000      C  1000 IF (I .GT. LIMIT)  RETURN
000040    000      C
000041    000      C  COMPARE VIC'S  (FASREC VIC (HPINFO(1)) AND HAND-PLAYED (HPUTAB(1,1))
000042    000      C
000043    001      C  VICFLG = CKVIC (VIC,HPUTAB(1,1))
000044    001      C  IF (VIC .EQ. HPUTAB(1,1))  GOTO 1100
000045    000      C  THEN
000046    000      C  VIC'S DID NOT MATCH THEREFORE INCREMENT POINTER AND CHECK NEXT ONE
000047    000      C
000048    000      C  I = I + 1
000049    000      C  GOTO 1900
000050    000      C
000051    000      C  ELSE
000052    000      C  VIC'S MATCH THEREFORE CHECK ROBCO AND ADC01 FIELDS FROM HPUTAB
000053    000      C  AND CHANGE HPINFO FIELDS WHEN HPUTAB FIELDS ARE NON-BLANK
000054    000      C  CHECK HAND-PLAYED ROBCO FIELD FOR NON-BLANK
000055    000      C  IF (HPUTAB(1,2) .EQ. BLANK)  GOTO 1200
000056    000      C
000057    000      C  THEN
000058    000      C  CHANGE FASREC ROBCO TO HAND-PLAYED ROBCO
000059    000      C  ROBC0 = HPUTAB(1,2)
000060    000      C
000061    000      C  ELSE
000062    000      C  HAND-PLAYED ROBCO IS BLANK THUS FASREC ROBCO IS NOT CHG'D
000063    000      C
000064    000      C  END-IF
000065    000      C  CHECK HAND-PLAYED ADC01 FIELD FOR NON-BLANK
000066    000      C  IF (HPUTAB(1,3) .EQ. BLANK)  GOTO 1300
000067    000      C
000068    000      C  THEN
000069    000      C  CHANGE FASREC ADC01 TO HAND-PLAYED ADC01
000070    000      C  ADC01 = HPUTAB(1,3)
000071    000      C
000072    000      C
000073    000      C  ELSE
000074    000      C  HAND-PLAYED ADC02 IS BLANK THUS FASREC ADC02 IS NOT CHANGED
000075    000      C
000076    000      C
000077    000      C
000078    000      C  END-IF
000079    000      C  CHECK HAND-PLAYED ADC03 FIELD FOR NON-BLANK
000080    000      C  IF (HPUTAB(1,4) .EQ. BLANK)  GOTO 1400
000081    000      C
000082    000      C  THEN
000083    000      C  CHANGE FASREC ADC03 TO HAND-PLAYED ADC03 AND SET RUDFLG

```

```

0000082      000      AUC03 = HPUTAB(1,5)
0000083      000      RUDFLG = .TRUE.
0000084      000      C
0000085      000      C      ELSE      HAND-PLAYED AUC03 IS BLANK THUS NO=CHG TO FASMREC
0000086      000      C
0000087      000      C      END-IF
0000088      000      C      SET POINTER TO ONE GREATER THAN LIMIT SO THAT WE EXIT FROM DOWHILE
0000089      000      1500      HPUTAB(1,6) = 1
0000090      000      C      1 = LIMIT + 1
0000091      000      C      END-IF
0000092      000      1400  CONTINUE
0000093      000      GOTO 1000
0000094      000      C      END-DO
0000095      000      C      END

```

END ETC

```

000037    000      LOFLAG = .FALSE.
000038    000      C
000039    000      C *** CHECK CONDITION 1 (ADCOI FROM LOTAB) ***
000040    000      C
000041    000      C     I = 1
000042    000      C
000043    000      C DOWHILE (NOT EOF FOR LOTAB)
000044    000      C
000045    000      C     1000 IF (I .GT. SIZEL) GOTO 2000
000046    000      C
000047    000      C     IF (ADCOI .NE. LOTAB(I)) GOTO 1100
000048    000      C     THEN
000049    000      C     LOFLAG = .TRUE.
000050    001      WHY = 6HADCOI
000051    000      RETURN
000052    000      C
000053    000      C     1100 ELSE
000054    000      C     END=IF
000055    000      C     1 = 1 + 1
000056    000      C     END=DO
000057    000      C
000058    000      C *** CHECK CONDITION 2 (TDA UNITS) ***
000059    000      C
000060    002      C     2000 IF (SRC15 .NE. 0) GOTO 2100
000061    000      C     THEN
000062    000      C     LOFLAG = .TRUE.
000063    001      WHY = 6HTNSRC
000064    000      RETURN
000065    000      C
000066    000      C     2100 ELSE IF (TYPCC .NE. TWO) GOTO 2200
000067    000      C     THEN
000068    000      C     LOFLAG = .TRUE.
000069    001      WHY = 6HTYPCU2
000070    000      RETURN
000071    000      C
000072    000      C     2200 ELSE IF (TYPCC .NE. THREE) GOTO 2300
000073    000      C     THEN
000074    000      C     LOFLAG = .TRUE.
000075    001      WHY = 6HTYPC03
000076    000      C
000077    000      C
000078    000      C
000079    000      C
000080    000      C     2300 END=IF
000081    000      C     CONTINUE
000082    000      C     2400 END=IF
000083    000      C     CONTINUE
000084    000      C     2500 CONTINUE
000085    000      C
000086    000      C *** CHECK CONDITION 3 (SPLIT UNITS) ***
000087    000      C
000088    000      C     2000 DECODE (61,UICI) UICLST, UICTH
000089    000      C     1 FORMAT (A1,4X,R1)
000090    000      C
000091    000      C     IF (UICLST .NE. W) GOTO 3100
000092    000      C     THEN
000093    000      C     IF (UICTH .LE. ZERO) GOTO 3100

```

```

000094    000   C      THEN    LOFLAG = TRUE.
000095    000   C      WHY = ONSPLIT
000096    001   C      RETURN
000097    000   C      END=IF
000098    000   C      END=IF
000099    000   C      3100 CONTINUE
000100    000   C      *** CHECK CONDITION 4 (DISPLAY ONLY UNITS ***)
000101    000   C      4000 IF (DSCMP •EQ. DC) GOTO 4100
000102    000   C      LOFLAG = TRUE.
000103    000   C      WHY = 6HDU
000104    000   C      RETURN
000105    000   C      THEN
000106    000   C      *** CHECK CONDITION 4 (HAND-PLAYED COMPO'S) ***
000107    001   C      4100 CONTINUE
000108    001   C      END=IF
000109    000   C      END=IF
000110    000   C      4100 CONTINUE
000111    000   C      *** CHECK CONDITION 5 (HAND-PLAYED COMPO'S) ***
000112    000   C      5000 I = 1
000113    000   C      5100 IF (I •GT. SIZEC) GOTO 6000
000114    000   C      5000 I = 1
000115    000   C      DOWHILE (NOT EOF FOR HPCTAB TABLE)
000116    000   C      5200 IF (COMPO •NE. HPCTAB(I)) GOTO 5200
000117    000   C      5100 IF (I •GT. SIZEC) GOTO 6000
000118    000   C      5200 IF (COMPO •NE. HPCTAB(I)) GOTO 5200
000119    000   C      THEN
000120    000   C      LOFLAG = TRUE.
000121    000   C      WHY = 6HCMPD
000122    000   C      RETURN
000123    001   C      ELSE
000124    000   C      5200 I = I + 1
000125    000   C      END=IF
000126    000   C      5200 END=DO
000127    000   C      5300 CONTINUE
000128    000   C      6000 CONTINUE
000129    000   C      GOTO 5100
000130    000   C      6000 CONTINUE
000131    000   C      END=DO
000132    000   C      6000 CONTINUE
000133    000   C      RETURN
000134    000   C      END
000135    000   C      THIS ROUTINE CHECKS SRC POSITIONS & AND 9 TO DETERMINE WHETHER OR NOT TO
000136    000   C      CHANGE THEM TO 99 OR LEAVE UNCHANGED.
END ELT.

```

@ELT,L F5FS•CKSRC
 ELT007 RL1870 08/16•07:40:19-(1.) C K S K C - ROUTINE
 000001 000 C
 000002 000 C
 000003 000 C
 000004 000 C
 000005 000 C
 000006 000 C
 000007 000 C

RENE• R. PLOURDE
 USACAA/MRD JUNE 1976

```

000008    000    C
000009    000    C
000010    000    C      SUBROUTINE CKSRC (SRC15, SRC89)
000011    000    C
000012    000    C      IMPLICIT INTEGER (A - Z)
000013    000    C
000014    000    C      DATA A/1H/A, 2/1H/Z, N99/ZH99/
000015    000    C
000016    000    C      DECODE (2,1, SRC89) SRC8, SRC9
000017    000    C      1 FORMAT(2A1)
000018    000    C
000019    000    C      WRITE (6,2) SRC15, SRC89
000020    000    C      2 FORMAT(1, SUB CKSRC  SRC15=,,A5,, SRC89=,,A2,
000021    000    C
000022    000    C
000023    001    C      IF (SRC15 .EQ. 55U18) GOTO 2000
000024    001    C      IF (SRC15 .EQ. 12U67) GOTO 2000
000025    000    C
000026    000    C      IF (SRC8 .GE. A .AND. SRC9 .LE. Z) GOTO 1000
000027    000    C      THEN
000028    000    C      IF (SRC15 .EQ. N99) GOTO 2000
000029    000    C
000030    000    C      ELSE
000031    000    C      1000   IF (SRC9 .GE. A .AND. SRC9 .LE. Z) GOTO 2000
000032    000    C      THEN
000033    000    C      SRC89 = N99
000034    000    C
000035    000    C      ELSE
000036    000    C      NO=CHANGE
000037    000    C      END-IF
000038    000    C      2000  CONTINUE
000039    000    C      RETURN
000040    000    C
END ELT.

```

```

BELT.L F5FS.CMPCODE
ELT007 RL1B7D 08:16:07:40:19-(5,1) CM CODE - ROUTINE
000001 001    C
000002 001    C
000003 001    C
000004 001    C
000005 001    C
000006 001    C      THIS ROUTINE COMPUTES THE MCODE, (1, 2, OR 3) BY USING THE TABLES MCUTAB
000007 001    C      AND MCITAB, WHICH ARE PROVIDED FOR BY THE USER.
000008 001    C
000009 001    C
000010 004    C      SUBROUTINE CMCODE (TYPE, ADC01, ROBC0, MCUD0, MCUD0, SIZE0, SIZE1,
000011 005    C      SIZE2, MCUTAB, MCITAB, RDDFLG)
000012 001    C
000013 001    C      IMPLICIT INTEGER (A-Z)
000014 001    C      WRITE (6,99) TYPE, ADC01, ROBC0, ADC03, MCUD0, SIZE1, SIZE2
000015 001    C      99 FORMAT(IX,'TYPE' ,I1,'ADC01' ,I1,'ROBC0' ,I1,'MCUD0' ,I3,'SIZE0' ,I3,
000016 001    C      * A3,'MCUD0' ,I1,'SIZE1' ,I1,'SIZE2' ,I1)
000017 001    C      INTEGER TYPE, MCUTAB(100), MCITAB(100,3)

```

```

000018    001      LOGICAL R0DFLG
000019    001      DATA ASTER/1H0/
000020    004      DATA ZERO/1H0/, ONE/1H1/, TWO/1H2/, THREE/1H3/
000021    004      DATA FOUR/1H4/, FIVE/1H5/
000022    001      C
000023    001      MDAY = MCUTAB(1)
000024    001      C
000025    004      MCODE = "1
000026    004      IF (COMPO.EQ.ONE.OR.COMPO.EQ.TWU.OR.COMPO.EQ.THREE) GOTO 100
000027    004      C
000028    004      C
000029    004      C
000030    004      C
000031    004      C
000032    004      C
000033    004      C
000034    004      IF (COMPO.NE.TWO • AND• COMPU.NE.THREE) GOTO 200
000035    004      C
000036    004      C
000037    004      C
000038    004      C
000039    004      C
000040    001      C
000041    001      C
000042    001      C
000043    001      C
000044    001      C
000045    001      C
000046    001      C
000047    001      C
000048    001      C
000049    001      C
000050    001      C
000051    001      C
000052    003      C
000053    001      C
000054    001      C
000055    001      C
000056    001      C
000057    001      C
000058    001      C
000059    001      C
000060    001      C
000061    001      C
000062    004      C
000063    001      C
000064    001      C
000065    001      C
000066    001      C
000067    001      C
000068    001      C
000069    001      C
000070    001      C
000071    001      C
000072    001      C
000073    001      C
000074    001      C

```

WE HAVE A NOTIONAL UNIT SET MCODE TO FIVE
MCODE = FIVE
RETURN

END-IF
100 CONTINUE

IF (COMPO.NE.TWO • AND• COMPU.NE.THREE) GOTO 200

THEN WE HAVE EITHER A NATIONAL OR RESERVE UNIT SET MCODE TO FOUR
MCODE = FOUR

END-IF
200 CONTINUE

IF (ADCU1 • NE. MCUTAB(1)) GOTO 1500

C DOWHILE (NOT EOF FOR MCUTAB TABLE)

1000 IF (I • GT• SIZE) GOTO 2000

IF (ADCU3=MDAY
R0DFLG = • TRUE.
RETURN

END-IF
1 = 1 + 1

WE HAVE A MATCH FOR MCODE=U TABLE
MCODE = ZERO
IF (NOT.R0DFLG) ADCU3=MDAY
R0DFLG = • TRUE.
RETURN

END-IF
2000 CONTINUE
IF (MCODE • EQ• FOUR) RETURN
I = 1
DECODE (3•1•ROBC0) R1• R2• R3
1 FORMAT (3A1)

C DOWHILE (NOT EOF FOR MCUTAB TABLE)

3000 IF (I • GT• SIZE) GOTO 4000
DECODE (3•1•MCUTAB(1,1)) T1• T2• T3
IF (T1•NE•ASTER • AND• R1•NE•T1) GOTO 3100
C THEN IF (T2•NE•ASTER • AND• R2•NE•T2) GOTO 3100
C THEN

```

000075    001      IF (T3•NE•ASTER •AND• R3•NE•T3) GOTO 3100
000076    001      C
000077    001      MCODE = ONE
000078    001      IF (NOT•RUOFLG) ADC03=MCITAR(1,2+TYPE)
000079    002      RUOFLG = •TRUE•
000080    001      RETURN
000081    001      C
000082    001      C
000083    001      END=IF
000084    001      C
000085    001      ELSE
000086    001      END=IF
000087    001      I = I + 1
000088    001      GOTO 3000
000089    001      END=DO
000090    001      C
000091    001      CONTINUE
000092    001      MCODE = THREE
000093    001      RETURN
000094    001      END

```

END 511

```

BELT.L      F5F5•FCKUIC
ELT007 RL1B70 08/16-07:40:12,
000001      000      FUNCTION CKUIC (FASUIC,TABUIC)
000002      000      C
000003      000      IMPLICIT INTEGER (A = Z)
000004      000      DATA AST/IH/
000005      000      C
000006      000      C DECODE (6,1,FASUIC) F1, F2, F3, F4, F5, F6
000007      000      C DECODE (6,1,TABUIC) T1, T2, T3, T4, T5, T6
000008      000      1 FORMAT (0A1)
000009      000      C
000010      000      C WRITE (6,3) FASUIC, TABUIC
000011      000      C FORMAT (I8 , 'FUNCTION FCKUIC FASUIC=',
000012      002      C TABUIC=',
000013      000      C THEN
000014      002      C IF IT2•NE•AST•AND•F2•NE•T2)GOTO 2
000015      000      C THEN
000016      002      C IF (IT3•NE•AST•AND•F3•NE•T3)GOTO 2
000017      000      C THEN
000018      002      C IF IT4•NE•AST•AND•F4•NE•T4)GOTO 2
000019      000      C THEN
000020      002      C IF IT5•NE•AST•AND•F5•NE•T5)GOTO 2
000021      000      C THEN
000022      002      C IF IT6•NE•AST•AND•F6•NE•T6)GOTO
000023      000      C THEN
000024      000      C CKUIC = 1
000025      000      C RETURN
000026      000      C END-IF
000027      000      C
000028      000      C EN-IF
000029      000      C

```

FMA PROGRAM FSORT

UNCLASSIFIED

DATE 081676 PAGE 20

```

000031    000    C      ELSE
000032    000    2      CKUJC = 0
000033    000    C      RETURN
000034    000    C      END-IF
000035    000    END
END ELT.

```

```

6ELT.L   FSFS*MAIN
ELT007  RL1B70 0616-07:40:22-(29.)
          F S O R T - R O U T I N E

000001    025    C
000002    025    C
000003    025    C
000004    025    C
000005    025    C
000006    025    C
000007    025    C
000008    025    C
000009    025    C
000010    025    C
000011    025    C
000012    025    C
000013    025    C
000014    025    C
000015    025    C
000016    025    C
000017    025    C
000018    025    C
000019    025    C
000020    025    C
000021    025    C
000022    025    C
000023    025    C
000024    025    C
000025    026    C
000026    025    C
000027    025    C
000028    025    C
000029    025    C
000030    025    C
000031    025    C
000032    025    C
000033    025    C
000034    025    C
000035    025    C
000036    025    C
000037    025    C
000038    025    C
000039    025    C
000040    025    C
000041    025    C
000042    025    C
000043    025    C
000044    025    C
000045    025    C

RENE K. PLOURDE
USACAA JUNE 1976

THIS ROUTINE PROCESS THE FAS FILE. (FILE 2) A RECORD AT A TIME. EACH RECORD
FROM FAS FILE IS WRITTEN TO ONE AND ONLY ONE OF THE OUTPUT FILES (CANDIDATE,
HAND-PLAYES, LOCKOUT, ALT-Theater, OR ABOVE-THE-LINE) WITH THE INPUT TABLES,
(HAND-PLAYES-UNITS (INPUTTAB), ALT-Theater (ALTTAB), LOCKOUT (LOTAB)), MCODE=1
(MCITAB), MCODE=0 (MCUTAB), AND HAND-PLAYED=COMP(IMPCTAB) USED TO DETERMINE
WHICH ONE OF THE OUTPUT FILES TO WRITE THE FAS RECORD TO.

IMPLICIT INTEGER (A = 2)
LOGICAL ER0DE, L0FLG, RD0FLG, ALTFLG
000015    025    C
000016    025    C
000017    025    C
000018    025    C
000019    025    C
000020    025    C
000021    025    C
000022    025    C
000023    025    C
000024    025    C
000025    026    C
000026    025    C
000027    025    C
000028    025    C
000029    025    C
000030    025    C
000031    025    C
000032    025    C
000033    025    C
000034    025    C
000035    025    C
000036    025    C
000037    025    C
000038    025    C
000039    025    C
000040    025    C
000041    025    C
000042    025    C
000043    025    C
000044    025    C
000045    025    C

*** FILE DEFINITION ***
DATA FAS/2/, CFILE/3/, LFILE/20/, ATLFILE/21/, ALTFIL/22/,*
        * HFILE/23/
        * DATAFILE/13/, FILATE/42/, FILALT/33/, FILEHP/34/
        * DATAFILE/13/, FILELO/31/, FILATE/42/, FILALT/33/, FILEHP/34/
        * DATA KEY/1,1*42.0.1.2.0.0.2.99999.228*0* BLANK/1H /
        * DATA YES/3HYES/, NO/2HNO/, LEN/100/, N999/3H999/
        * THE ARRAY USES KEY(1) THRU KEY(6) TO DEFINE THE SORT KEY. WHERE
        * KEY(1) = 1 KEY BEGINS IN WORD 1 OF THE RECORD
        * KEY(2) = 1 KEY BEGINS IN BIT 1 OF THE WORD SPECIFIED BY KEY(1)
        * KEY(3) = 126 TOTAL NUMBER OF BITS USED TO DEFINE THE KEY
        * KEY(4) = 0 TYPE OF SORT: ALPHANUMERIC
        * KEY(5) = 0 TYPE OF ORDER: ASCENDING
        * KEY(6) = 1 OF THE TOTAL NUMBER OF KEYS THIS IS THE FIRST ONE
        * KEY(7) = 99999 INDICATES THAT THERE ARE NO MORE KEYS FOR THIS RECORD

        * PLIST(4), PLIST(19), SIZES(6)
        * DEFINE INPUT TABLES AND THEIR MEANING
        * INTEGER HPUTTAB(100,6), LUTTAB(100), ALTTAB(100), MCITAB(100,3),
        *          HPCTAB(100), MCUTAB(100)
        * HPUTAB(1,1) = UIC, HPUTAB(1,2) = RUBCO, HPUTAB(1,3) = ADCO,
        *          HPUTAB(1,4) = RUBCO, HPUTAB(1,5) = ADCO, HPUTAB(1,6) = ADCO

```

```

000046    025      C   HPUTTAB(1,4) = ADCU1, HPUTTAB(1,5) = ADCU3
000047    025      C   LOTAB(1) = ADCU1, ALTTAB(1) = ADCU1, HPCTAB(1) = CUMPU
000048    025      C   MCITAB(1,1) = ROBCO, MCITAB(1,2) = RDD=ALL, MCITAB(1,3) = RDD=BTL
000049    025      C   MCOTAB(1) = M=DAY, MCOTAB(1) = AUOO1 WHERE 1>
000050    025      C
000051    025      C   *** OUTPUT STRUCTURE ***
000052    025      C
000053    025      C   ALL FIVE OUTPUT FILES (CANDIDATE, HAND=PLAYED, LOCKOUT, ALT=THEATER, AND
000054    025      C   ABOVE=THE=LINE) ARE BINARY FILES AND USE THE SAME RECORD STRUCTURE, WHERE
000055    025      C   THE RECORD IS STRUCTURED AS FOLLOWS: (UICLIST IS THE 1ST CHAR OF THE UIC)
000056    025      C
000057    025      C   SRCIS, SRCB9, COMPO, MCODE, UICLIST, UAMPL, SEQ, ROBCO, ADCU1, ADCU2,
000058    025      C   ADCU3, STNNM, LOCCO, BRNCH, UNTD$, TPSN
000059    025      C
000060    025      C   FOR CONVENIENCE WHEN ENCODING THE TWO LIST PLIST1 AND PLIST2 ARE USED
000061    025      C
000062    025      C   EQUIVALENCE (PLIST1(1),SRCIS), (PLIST1(2),SRCB9),
000063    025      C   *          (PLIST1(3),COMPO), (PLIST1(4),MCODE)
000064    025      C
000065    025      C   EQUIVALENCE (PLIST2(1),SRCIS), (PLIST2(2),SRCA),
000066    025      C   *          (PLIST2(3),SRCB9), (PLIST2(4),SRCCL),
000067    025      C   *          (PLIST2(5),BRNCH), (PLIST2(6),UNTD$),
000068    025      C   *          (PLIST2(7),UNTD$), (PLIST2(8),UNTD$),
000069    025      C   *          (PLIST2(9),UNTD$), (PLIST2(10),TPSN),
000070    025      C   *          (PLIST2(11),ROBCO), (PLIST2(12),STNM$),
000071    025      C   *          (PLIST2(13),STNM$), (PLIST2(14),LUCCO),
000072    025      C   *          (PLIST2(15),SAGR), (PLIST2(16),ADCO),
000073    025      C   *          (PLIST2(17),ADCO2), (PLIST2(18),ADCO3),
000074    025      C   *          (PLIST2(19),SEQ)
000075    025      C
000076    025      C   TLKOUT = 0
000077    025      C   TATL = 0
000078    025      C   TALT = 0
000079    025      C   THPU = 0
000080    025      C   TCAND = 0
000081    025      C   SEQ = 0
000082    025      C
000083    025      C   INITIALIZE SYSTEM SORT ROUTINE BY CALLING SOPEN3
000084    025      C
000085    025      C   CALL SOPEN3 ($100,$3000,16,4,KEY)
000086    025      C
000087    025      C   SET=UP=INPUT TABLES BY CALLING SUBROUTINE SUTAB
000088    025      C
000089    025      C   100 CALL SUTAB (IMPUTAB,LOTAB,ALTTAB,MCITAB,MCOTAB,HPCTAB,SIZES,
000090    025      C   .
000091    025      C
000092    025      C   IF (ERCODE) STOP
000093    025      C
000094    025      C
000095    025      C   DOWHILE (NOT EOF FOR FAS FILE)
000096    025      C
000097    025      C   1000 CONTINUE
000098    025      C
000099    025      C   GET NEXT FASREC, DECODE IT, AND INCREMENT SEQ BY ONE
000100    025      C
000101    025      C   READ (FAS,END=2000) FASREC
000102    025      C   DECODE (100,1,FASREC) COMPO, UIC, BRNCH, DAMPL, DSCHMP, LOCCO,

```

UNCLASSIFIED//~~DE~~

DATE 081676

PAGE 22

```

000103      ADC01, ADC02, ADC03, RUBCO, SRCIS, SRC05, SRC6,
000104      SRC89, SRCA, SRCB, SRCC, STNM1, STNM2, TPSN, TPCO, UNT01, UNT02,
000105      UNT03, UNT04, SAQR
000106      IF (SEQ •LE. 20) WRITE(16,7) ADC01, ADC02, ADC03
000107      FORMATT( ADC01 = *A1*, ADC02 = *A2*, ADC03 = *A3)
000108      CHECK FOR HAND-PLAYED-UNITS THEN CHECK FOR LOCKOUT-UNITS
000109      CALL CKHPU (UIC,RUBCO,ADC01,ADC02,ADC03,SIZES(1),
000110      HPUTAB,RRDFFLG)
000111      CALL CKLQ (ADC01,SRCS1,TYPCO,UIC,USCMP,COMPO,ADCOZ,ADCO3,
000112      SIZES(2),SIZES(16),LOTAB,HPCTAB,LOFLAG,WHYL)
000113      CALL CKLQ (ADC01,SRCS1,TYPCO,UIC,USCMP,COMPO,ADCOZ,ADCO3,
000114      SIZES(2),SIZES(16),LOTAB,HPCTAB,LOFLAG,WHYL)
000115      IF (NOT•LOFLAG) GOTO 1010
000116      THIS UNIT IS A LOCKOUT UNIT THEREFORE WRITE IT TO THE L
000117      SEQ = TLKOUT
000118      SEQ = TLKOUT + 1
000119      CALL CKALT (ADC01,SIZES(3),ALTAB,ALTFLG)
000120      ENCODE (LEN,2+RECORD) PLIST1, UIC, DAMPL, UIC, PLIST2
000121      ENCODE (LEN,2+RECORD) PLIST1, UIC, DAMPL, UIC, PLIST2
000122      MCODE = BLANK
000123      WRITE (LOFILE) RECORD
000124      WRITE (FILE0,4) PLIST1, UIC, DAMPL, UIC, PLIST2, WHYLO
000125      GOTO 1990
000126      ELSE
000127      CHECK FOR ABOVE-THE-LINE (ATL) UNIT (TPSN < 20000) =
000128      CALL CKALT (ADC01,SIZES(3),ALTAB,ALTFLG)
000129      IF (TPSN •GE. 20000) GOTO 1020
000130      THEN
000131      THE UNIT IS ABOVE-THE-LINE. THEREFORE CALCULATE
000132      FOR THIS UNIT AND THEN WRITE THE RECORD TO ATL
000133      CALL CMODE (U,ADCO1,RUBCO,ADCO3,MCODE,COMPO,
000134      SIZES(4),SIZES(15),MCUTAB,MCITAB,RRDFFLG)
000135      TATL = TATL + 1
000136      FLGALT = NO
000137      IF (ALTFLG) FLGALT = YES
000138      SEQ = TATL
000139      HPFLAG = NO
000140      IF (RRDFFLG) HPFLAG = YES
000141      WRITE (FILE1,4) PLIST1, UIC, DAMPL, UIC, PLIST2
000142      HPFLAG, FLGALT
000143      GOTO 1980
000144      ELSE
000145      CHECK FOR ALTERNATE-THEATER (ALT)
000146      IF (*NOT•ALTFLG) GOTU 1030
000147      THEN
000148      THIS UNIT IS PART OF THE ALT-THEATER TH
000149      WRITE IT TO THE ALTFIL FILE
000150      TATL = TATL + 1
000151      SEQ = TATL
000152      IF (*NOT•RRDFFLG) ADC03 = N999
000153      ENCODE ( LEN,2+RECORD) PLIST1, UIC, UAM
000154      UIC, PLIST2
000155      WRITE (ALTFL1) RECORD
000156      MCODE = BLANK
000157      WRITE (FILEALT,4) PLIST1, UIC, DAMPL, U
000158      PLIST2
000159      GOTO 1960

```

••UNCLASSIFIED••

```

000161 025 C ELSE IS THIS A HAND-PLAYED-UNIT (BELOW-THE-LINE)
000161 025 C THAT IS RUDFLG = TRUE.
000162 025 C CALL CMCODE (I,ADCOL,ROBCO,
000163 025 1030 ADC03,MCODE,COMPU,
000164 025 *
000165 025 *
000166 025 *
000167 025 IF (NOT RUDFLG) GOTO 1040
000168 025 C THEN THIS UNIT IS A HAND-PLAYED-BELOW-THE-LINE-
000169 025 C UNIT WRITE IT TO HPFILE
000170 025 C THPU = THPU + 1
000171 025 SEQ = THPU
000172 025 ENCODE (LEN,2,RECORD) PLIST1,VIC,
000173 025 DAMPL, VIC, PLIST2
000174 025 *
000175 025 WRITE (HPFILE) RECORD
000176 025 WRITE (FILEMP4) PLIST1,VIC,DAMPL,
000177 025 VIC,PLIST2
000178 025 GOTO 1960
000179 025 C ELSE PROCESS ONE EACH CANDIDATE RECORD (BTL)
000180 025 C FIRST CHECK SRC POSITIONS B AND 9
000181 025 C SAVE89 = SRC89
000182 027 1040 CALL CKSRC (SRC15,SRC89)
000183 027 SEQ = U
000184 025 DECODE15,VIC1 VIC1
000185 025 CALL MODVIC(COMP0,VIC1)
000186 025 ENCODE (LEN,2,RECORD) PLIST1,VIC1,
000187 025 DAMPL, VIC, PLIST2, SAVE89
000188 027 *
000189 025 CALL SRKEL (RECORD,16)
000190 025 TCAND = TCAND + 1
000191 025 END-IF
000192 025 CONTINUE
000193 025 END-IF
000194 025 CONTINUE
000195 025 END-IF
000196 025 1960 CONTINUE
000197 025 C END-IF
000198 025 1990 CONTINUE
000199 025 GOTO 1000
000200 025 END-DO
000201 025 C TIME TO SORT THE CANDIDATE RECORDS
000202 025 C NOW GET THE RESULTS OF THE SYSTEM SORT AND WRITE THEM TO THE CANDIDATE FILE
000203 025 C
000204 025 2000 CONTINUE
000205 025 C DOWHILE (THERE ARE MORE CANDIDATE RECORDS)
000210 025 CALL SSORT
000211 025 C
000212 025 3000 CONTINUE
000213 025 CSEQ = 0
000214 025 3100 CONTINUE
000215 025 C
000216 025 CALL SRKEL (RECORD,DUMMY,34000)

```

SOUNCLASSIFIED

PAGE

PAGE 24

END ELT.

```

6ELT,L F5FS•MODUIC
ELT007 RL1B70 08/16-07:40:24-(0,0)
000001 000 C
000002 000 C M O D U I C
000003 000 C
000004 000 C
000005 000 C
000006 000 C
000007 000 C
000008 000 C
000009 000 C IMPLICIT INTEGER (A = Z)
000010 000 C
000011 000 DATA K/1H2/, X/1HX/, W/1HW/
000012 000 DATA ONE/1H1/, TWO/1H2/, THREE/1H3/
000013 000 C
000014 000 IF (COMPO •NE• ONE) GOTO 50
000015 000 C THEN
000016 000 IF (UICI •NE• W) GOTO 10
000017 000 C THEN
000018 000 UICI = ONE
000019 000 GOTO 40
000020 000 C
000021 000 10 ELSE IF (UICI •NE• X) GOTO 20
000022 000 C THEN
000023 000 UICI = TWO
000024 000 GOTO 30
000025 000 C
000026 000 20 ELSE UICI = THREE
000027 000 C END=IF
000028 000 30 CONTINUE
000029 000 C END=IF
000030 000 40 CONTINUE
000031 000 GOTO 120
000032 000 C ELSE
000033 000 50 IF (COMPO•NE•TWO •AND• COMPO•NE•THREE) GOTO 100
000034 000 C THEN
000035 000 IF (UICI •NE• W) GOTO 60
000036 000 C THEN
000037 000 UICI = ONE
000038 000 GOTO 90
000039 000 C
000040 000 60 ELSE IF (UICI •NE• K) GOTO 70
000041 000 C THEN
000042 000 UICI = TWO
000043 000 GOTO 80
000044 000 C
000045 000 70 ELSE UICI = THREE
000046 000 C END=IF
000047 000 80 CONTINUE
000048 000 C END=IF
000049 000 90 CONTINUE
000050 000 GOTO 110
000051 000 C ELSE

```

```

000053    000    100      VICI = ONE
000053    000    C        END=IF
000054    000    110      CONTINUE
000054    000    C        END=IF
000055    000    120      CONTINUE
000056    000    C
000057    000    C        RETURN
000058    000    C        END
000059    000    C

```

END ELT.

```

BELT,L  FSFS+SUTAB
ELT007 RL1870 08/16-07:40:25-(0.)
          S U T A B - R O U T I N E
000001    000    C
000002    000    C
000003    000    C
000004    000    C
000005    000    C
000006    000    C
000007    000    C
000008    000    C
000009    000    C
000010    000    C
000011    000    C
000012    000    C
000013    000    C
000014    000    C
000015    000    C
000016    000    C
000017    000    C
000018    000    C
000019    000    C
000020    000    C
000021    000    C
000022    000    C
000023    000    C
000024    000    C
000025    000    C
000026    000    C
000027    000    C
000028    000    C
000029    000    C
000030    000    C
000031    000    C
000032    000    C
000033    000    C
000034    000    C
000035    000    C
000036    000    C
000037    000    C
000038    000    C
000039    000    C
000040    000    C
000041    000    C
000042    000    C

RENE' R. PLOURDE
USACAA JUNE 1976

THIS ROUTINE SETS UP THE FOLLOWING SIX TABLES* HAND=PLAYED=UNITS (INPUTTAB);
LOCKOUT=UNITS (LOTAB); ALTERNATE=THEATER (ALTAB); MCODE=1 (MCITAB);
MCODE=0 (MCUTAB); AND HAND=PLAYED=CUMPOS (HPCTAB).

SUBROUTINE SUTAB (INPUTTAB,LOTAB,ALTAB,MCOTAB,MCITAB,HPCTAB,
SIZE,ERCODE)
*
IMPLICIT INTEGER (A-Z)
INTEGER INPUTTAB(100,6), LOTAB(100), ALTAB(100), MCITAB(100,3),
MCOTAB(100), HPCTAB(100), SIZE(6)
*
LOGICAL ERCODE
DATA LIMIT1/100/, LIMIT2/100/, LIMIT3/100/,
LIMIT4/100/, LIMIT5/100/, LIMIT6/100/
DATA HUNIT/14/, LUNIT/15/, ALTH/16/,
MCUNE/17/, MCZERO/18/, MPCOMP/19/
*
ERCODE = .FALSE.

SET-UP HAND=PLAYED=UNITS TABLE INPUTTAB
N = 0
WHITE (6,101)
LUI FORMAT (1H,***   HAND=PLAYED=UNIT=TABLE ***//1H ,
*     SEQ   VIC   KBC0   ADC02   ADC03//)
*
DOWHILE (NOT EOF AND NO ERRS)
GET NEXT HAND=PLAYED=UNIT
1000 CONTINUE
N = N + 1
READ (HUNIT,1,END=2000) (INPUTTAB(N,J),J=1,5)
WRITE (6,11) N, (INPUTTAB(N,J),J=1,5)
GOTO 1000

```

```

**UNCLASSIFIED**
000043    000    1 FORMAT (A6,1X,A3,1X,A1,1X,A2,1X,A3)
000044    000    1I FORMAT (1H ,14,3X,A6,3X,A3,7X,A1,0X,A2,0X,A3)
000045    000    C PROCESS ERR FOR TABLE HPUTAB
000046    000    C
000047    000    C
000048    000    C
000049    000    C   5I FORMAT (1H0,1000  FORMAT ERR 1000)
000050    000    C
000051    000    2000 CONTINUE
000052    000    C   SIZE(1) = N - 1
000053    000    IF (SIZE(1) *LE* LIMIT1) GOTO 2050
000054    000    ERCODE = *TRUE*
000055    000    WRITE (6,61)
000056    000    6I FORMAT (1H0,1000  TO MANY INPUT RECORDS 1000)
000057    000    2050 CONTINUE
000058    000    C   WRITE (6,102)
000059    000    102 FORMAT (1H1,1000  LOCKOUT TABLE 1000 //1H 1000 SEQ ADC01*1)
000060    000    N = 0
000061    000    C SET-UP LOCKOUT TABLE (LQTAB)
000062    000    C
000063    000    C   DOWHILE (NOT EOF AND NO ERRKS)
000064    000    C
000065    000    C
000066    000    2100 CONTINUE
000067    000    N = N + 1
000068    000    C
000069    000    C   READ (LQUNIT,2,END=3000) LQTAB(N)
000070    000    WRITE (6,12) N, LQTAB(N)
000071    000    GOTO 2100
000072    000    C
000073    000    2 FORMAT (A1)
000074    000    12 FORMAT (1H ,14,5X,A1)
000075    000    C
000076    000    C PROCESS ERR FOR TABLE LQTAB
000077    000    C
000078    000    C
000079    000    C   3000 CONTINUE
000080    000    C   SIZE(2) = N - 1
000081    000    IF (SIZE(2) *LE* LIMIT2) GOTO 3050
000082    000    ERCODE = *TRUE*
000083    000    WRITE (6,61)
000084    000    3050 CONTINUE
000085    000    C   WRITE (6,103)
000086    000    103 FORMAT (1H1,1000  ALTERNATE-THEATER TABLE 1000 //1H 1000
000087    000    *  SEQ ADC01*1)
000088    000    N = 0
000089    000    C SET-UP ALTERNATE-THEATER TABLE (ALTITAB)
000090    000    C
000091    000    C   DOWHILE (NOT EOF AND NO ERRKS)
000092    000    C
000093    000    C   3100 CONTINUE
000094    000    C
000095    000    N = N + 1
000096    000    C
000097    000    C   READ (ALTTH,3,END=4000) ALTITAB(N)
000098    000    WRITE (6,13) N, ALTITAB(N)
000099    000    GOTO 3100

```

```

000100    000      3 FORMAT (A1)
000101    000      13 FORMAT (1H ,14.5X,A1)
000102    000      C
000103    000      C  PROCESS ERR FOR ALTERNATE-THEATER INPUT TABLE (ALT TAB)
000104    000      C
000105    000      C
000106    000      C
000107    000      4000 CONTINUE
000108    000      SIZE(3) = N = 1
000109    000      IF (SIZE(3) *LE* LIMIT3) GOTO 4050
000110    000      ERCODE = *TRUE*
000111    000      WRITE (6,61)
000112    000      4050 CONTINUE
000113    000      WRITE (6,104)
000114    000      104 FORMAT (1H,1000) MCODE = 1 TABLE *•••//1H *
000115    000      * * SEQ RUDC0 RUD/ATL RDU/BTL */
000116    000      N = 0
000117    000      C
000118    000      C SET-UP MCODE = 1 TABLE (MCITAB;
000119    000      C
000120    000      C DOWHILE (NOT EOF AND NO ERRS OCCUR)
000121    000      C
000122    000      4100 CONTINUE
000123    000      N = N + 1
000124    000      C
000125    000      READ (MCUNE,4,END=5000) (MCITAB(N,J),J=1,3)
000126    000      WRITE (6,14) N, (MCITAB(N,J),J=1,3)
000127    000      GOTO 4100
000128    000      C
000129    000      4 FORMAT (A3,2X,A3,2X,A3)
000130    000      14 FORMAT (1H ,14.3X,A3,7X,A3,7X,A3)
000131    000      C
000132    000      C  PROCESS ERR FOR MCODE = 1 TABLE (MCITAB)
000133    000      C
000134    000      C
000135    000      5000 CONTINUE
000136    000      SIZE(4) = N - 1
000137    000      IF (SIZE(4) *LE* LIMIT4) GOTO 5050
000138    000      ERCODE = *TRUE*
000139    000      WRITE (6,61)
000140    000      5050 CONTINUE
000141    000      WRITE (6,105)
000142    000      105 FORMAT (1H,1000) MCODE = 0 TABLE *•••//1H *
000143    000      * * SEQ COMPU */
000144    000      N = 0
000145    000      C
000146    000      C SET-UP MCODE = 0 TABLE (MCOTAB)
000147    000      C
000148    000      5100 CONTINUE
000149    000      N = N + 1
000150    000      C
000151    000      READ (MCZERO,5,END=6000) MCOTAB(N)
000152    000      WRITE (6,15) N, MCOTAB(N)
000153    000      GOTO 5100
000154    000      C
000155    000      C      5 FORMAT (A6)
000156    000      15 FORMAT (1H ,14.5X,A6)

```

```

000157    000      C   PROCESS ERR FOR MCODE = 0 TABLE IMCOTAB)
000158    000      C
000159    000      C
000160    000      C
000161    000      C     BUUD CONTINUE
000162    000      C     SIZE(5) = N - 1
000163    000      C     IF (SIZE(5) *LE* LIMIT5) GOTO 0050
000164    000      C     ERCODE = *TRUE.
000165    000      C     WRITE (6,61)
000166    000      C     BUUD CONTINUE
000167    000      C     WRITE (6,106)
000168    000      C     106 FORMAT (1H1,*000 HAND-PLAYED-COMPOS-TABLE *000//1H*
000169    000      C     * * SEQ COMPO*)
000170    000      C     N = 0
000171    000      C     SET-UP HAND-PLAYED-COMPOS TABLE IMPCTAB)
000172    000      C
000173    000      C     DOWHILE (NOT EOF AND NO ERRORS EXIST)
000174    000      C
000175    000      C     GIUD CONTINUE
000176    000      C     N = N + 1
000177    000      C
000178    000      C     READ IMPCUMP,6,END=7000) IMPCTAB(N)
000179    000      C     WRITE (6,16) N, IMPCTAB(N)
000180    000      C     GOTO GIUD
000181    000      C
000182    000      C     6 FORMAT (A6)
000183    000      C     16 FORMAT (1H .14.3X.A6)
000184    000      C     PROCESS ERR FOR HAND-PLAYED-COMPO TABLE IMPCTAB)
000185    000      C
000186    000      C
000187    000      C
000188    000      C
000189    000      C     7UUD CONTINUE
000190    000      C     SIZE(6) = N - 1
000191    000      C     IF (SIZE(6) *LE* LIMIT6) GOTO 0050
000192    000      C     ERCODE = *TRUE.
000193    000      C     WRITE (6,61)
000194    000      C     BUUD CONTINUE
000195    000      C     CALL CLOSE (MPUNIT,1)
000196    000      C     CALL CLOSE (ALTH,1)
000197    000      C     CALL CLOSE (MCONE,1)
000198    000      C     CALL CLOSE (MCZERO,1)
000199    000      C     CALL CLOSE (MPCOMP,1)
000200    000      C
000201    000      C     TIME TO RETURN
000202    000      C
000203    000      C     RETURN
000204    000      C     END
END ELT.
```

```

BELT,L F5RS•CKSRC
ELT007 RL1B70 08/16-07:40:27-(2.)
      CKSRC - ROUTINE
      00001   000   C
      00002   000   C
      00003   000   C
      00004   000   C
      00005   000   C
      00006   000   C   THIS ROUTINE CHECKS SRC POSITIONS & AND 9 TO DETERMINE WHETHER OR NOT TO
      00007   000   C   CHANGE THEM TO 99 OR LEAVE UNCHANGED.
      00008   000   C
      00009   000   C
      00010   000   C   SUBROUTINE CKSRC (SRC15,SRC89)
      00011   000   C
      00012   000   C   IMPLICIT INTEGER (A = Z)
      00013   000   C
      00014   000   C   DATA A/1H/A, Z/1H/Z, N94/ZH99/
      00015   000   C
      00016   000   C   DECODE (Z,I,SRC89) SRC8, SRC9
      00017   000   I FORMAT(2A1)
      00018   000   C   WRITE (6,2) SRC15, SRC89
      00019   001   C   FORMAT(1 SUB CKSRC SRC15=,AS,, SRC89=,A2)
      00020   000   2
      00021   000   C
      00022   000   C
      00023   002   IF (SRC15 • EQ. 55016) GOTO 2000
      00024   002   IF (SRC15 • EQ. 12067) GOTO 2000
      00025   000   C
      00026   000   C   IF (SRC8•GE.A • AND. SRC8•LE.Z) GOTO 1000
      00027   000   C   THEN SRC89 = N99
      00028   000   C
      00029   000   C   ELSE GOTO 2000
      00030   000   C
      00031   000   C   ELSE IF (SRC9•GE.A • AND. SRC9•LE.Z) GOTO 2000
      00032   000   C   THEN SRC89 = N99
      00033   000   C
      00034   000   C   ELSE NO=CHANGE
      00035   000   C   END=IF
      00036   000   C
      00037   000   C   END=IF
      00038   000   2000 CONTINUE
      00039   000   RETURN
      00040   000   END
END ELT.

BELT,L F5RS•R50RT
ELT007 RL1B70 08/16-07:40:27-(2.)
      R50RT - ROUTINE
      00001   000   C
      00002   000   C
      00003   000   C
      00004   000   C
      00005   000   C
      00006   000   C   THIS ROUTINE EXAMINES THE FASTAL REQUIREMENT FILE AND USES THE HAND-PLAYED-
      00007   000   C   WIN FILE, (PROVIDED FOR BY THE USER) TO BUILD A REQUIREMENT FILE.
      00008   000   C

```

```

000009    000      IMPLICIT INTEGER (A-Z)
000010    000      INTEGER RECORD(13), LIST(23), KEY(24), UNTAB(100,3)
000011    000      LOGICAL UINFLG
000012    000      EQUIVALENCE (LIST(1),SRC15), (LIST(2),SRC89), (LIST(3),TMPD),
000013    000      *          (LIST(4),SRC67), (LIST(5),SRC4), (LIST(6),SRCB),
000014    000      *          (LIST(7),SRCC), (LIST(8),UNTDL), (LIST(9),UNTDL2),
000015    000      *          (LIST(10),UNTDL3), (LIST(11),UNTDL4), (LIST(12),RULE),
000016    000      *          (LIST(13),LRE), (LIST(14),COMB), (LIST(15),ROUND),
000017    000      *          (LIST(16),TPSN), (LIST(17),SUFF), (LIST(18),SWUF),
000018    000      *          (LIST(19),SENL), (LIST(20),SAGR), (LIST(21),UINI),
000019    000      *          (LIST(22),BRNCH), (LIST(23),STR)
000020    000      DATA LEN/100/, KEY/1,1054,0,0,1,9999,234*0/
000021    000      DATA FPUIN/1/, FILREG/2/, FILTUY/3/FASTAL/4/,
000022    000      *          FUINHP/11/, REQFIL/12/, TUAFIL/13/, HPOINT/15/
000023    000      C OPEN SORT ROUTINE
000024    000      C
000025    000      C
000026    000      CALL SOPEN3 ($1000,$4000,13,2,KEY)
000027    000      C
000028    000      C READ FIRST TIME PERIOD TO ACCEPT REQUIREMENTS
000029    000      1000 READ (HPOINT,4) FIRSTP
000030    000      WRITE (6,13) FIRSTP
000031    000      C
000032    000      C INPUT HAND PLAYED UIN'S
000033    000      C
000034    000      C
000035    000      C
000036    000      C
000037    000      C
000038    000      C
000039    000      1050 READ (HPOINT,4,END=1100) UNTAB(SIZE,1), UNTAB(SIZE,2)
000040    000      WRITE (6,5) SIZE, UNTAB(SIZE,1), UNTAB(SIZE,2)
000041    000      SIZE = SIZE + 1
000042    000      GOTO 1050
000043    000      C
000044    000      C
000045    000      1100 CONTINUE
000046    000      SIZE = SIZE - 1
000047    000      SEQ = 1
000048    000      C
000049    000      C
000050    000      C
000051    000      2000 READ (FASTAL,1,END=3000) UIN, SRC15, SRC67, SRC89, SRC4, SRCB,
000052    000      *          SRCC, BRNCH, UNTDL, UNTDL2, UNTDL4, STR, TMPD, RULE,
000053    000      *          LRE, COMB, ROUND, TPSN, SUFF, SWUF, SENL, SAGR
000054    000      *          IF (SEQ.LE.100) WRITE(6,3) LIST
000055    000      SEQ = SEQ + 1
000056    000      C
000057    000      C CHECK FOR TUA UINTS (SRC15 IS BLANK)
000058    000      C
000059    000      C
000060    000      C
000061    000      C
000062    000      C
000063    000      C
000064    000      C
000065    000      C

```

```

000066    000    C  DOWHILE (NOT END-OF-TABLE  VINTAB)
000067    000    C
000068    000    C  2100    IF (UINFLG •OR• J •GT• SIZE)  GOTO 2199
000069    000    C
000070    000    C  IF (UIN •NE• VINTAB(1••1))  GOTO 2150
000071    000    C  IF (THPD•LT• VINTAB(1••2))  GOTO 2150
000072    000    C
000073    000    C  THEN  UINFLG = *TRUE*
000074    000    C  VINTAB(I••J) = VINTAB(1••3) + 1
000075    000    C  GOTO 2160
000076    000    C
000077    000    C  2150    ELSE  I = I + 1
000078    000    C  END-IF
000079    000    C  CONTINUE
000080    000    C  GOTO 2100
000081    000    C  END-DO
000082    000    C  2199    IF (*NOT•UINFLG)  GOTO 2200
000083    000    C  THEN
000084    000    C  THIS RECORD IS A HAND-PLAYED•UIN UNIT
000085    000    C  IF (SEQ•LE•101) WRITE(6,8)
000086    000    C  ENCODE (LEN•2•RECORD) LIST
000087    000    C  WRITE (THPUIN) LIST
000088    000    C  WRITE (FUINHP•3) LIST
000089    000    C  THPUIN = THPUIN + 1
000090    000    C  GOTO 2250
000091    000    C  ELSE
000092    000    C  WE HAVE A REQ RECD
000093    001    C  SAVE89 = SRC89
000094    001    C  CALL CKSRC (SRC15•SRC89)
000095    000    C  IF (SEQ•LE•101) WRITE(6,9)
000096    001    C  ENCODE (LEN•2•RECORD) LIST  SAVE89
000097    000    C  CALL SRREL (RECORD•13)
000098    000    C  TREQ = TREQ + 1
000099    000    C  END-IF
000100    000    C  CONTINUE
000101    000    C  GOTO 2400
000102    000    C  ELSE
000103    000    C  WE HAVE A TDA UNIT
000104    000    C  2300    CONTINUE
000105    000    C  IF (SEQ•LE•101) WRITE(6,10)
000106    000    C  ENCODE (32•2•RECORD) LIST
000107    000    C  WRITE (FILTD1) LIST
000108    000    C  WRITE (TDAFILE•3) LIST
000109    000    C  TTDA = TTDA + 1
000110    000    C  END-IF
000111    000    C  2400  CONTINUE
000112    000    C  GOTO 2000
000113    000    C  END-DO
000114    000    C
000115    000    C  3000  CONTINUE
000116    000    C
000117    000    C  TIME TO SORT REQUIREMENT'S FILE
000118    000    C
000119    000    C  CALL SSORT
000120    000    C  4000  CONTINUE
000121    000    C  SEQ = 0
000122    000    C

```

```

000123    000    4100  CONTINUE
000124    000    SEQ = SEQ + 1
000125    000    CALL SRRET (RECORD,MAX,$5000)
000126    001    DECODE (LEN,2,RECORD) LIST, SAVE69
000127    001    WRITE (REQFIL,3) LIST, SEQ, SAVE69
000128    000    GOTO 4100
000129    000    C CHECK UNITAB TO SEE IF ANY HAND-PLAYED UIN'S WERE NOT USED
000130    000    C
000131    000    C
000132    000    6000 CONTINUE
000133    000    1 = 1
000134    000    WRITE (6,12)
000135    000    C
000136    000    C DOWHILE (NOT END OF UNITAB TABLE)
000137    000    C
000138    000    $100 IF (J .GT. SIZE) GOTO 6000
000139    000    C
000140    000    WRITE (6,11) J, (UINTAB(J),J),J=1,3)
000141    000    $200 I = 1 + 1
000142    000    GOTO 5100
000143    000    C END=DO
000144    000    C
000145    000    6000 CONTINUE
000146    000    C
000147    000    C COMPUTE TOTAL AND PRINT
000148    000    C
000149    000    TOTAL = THPUIN + TTD4 + TREQ
000150    000    WRITE (6,7) THPUIN, TTD4, TREQ, TOTAL
000151    000    1 FORMAT(13*2,15,2A2,3A1,2X,A2,1X,A3,3A6,12X,13,1X,12*2X,A4,
000152    000    * 3IX,A1),1X,15,4(1X,A5))
000153    001    2 FORMAT(15,A2,12,A2,3A1,A3,3A6,A4,JAI,15,4A5,13,A2,13,A3)
000154    000    3 FORMAT(1X,15,1X,A2,1X,12,1X,A2,3(1X,A1),1X,A3,3(1X,A6),1X,A4,
000155    002    * 3IX,A1),1X,15,4(1X,A5),1X,13,1X,A2,1X,13,16,A3)
000156    000    4 FORMAT(13,1X,12)
000157    000    5 FORMAT(1H,*14*3X,13*3X,12)
000158    000    6 FORMAT(1H,*8*   HAND-PLAYED-UIN=TABLE ***'//', SEQ, UIN, TP'//)
000159    000    7 FORMAT(1H,*8*   TOTAL S ***'//'
000160    000    *   HAND-PLAYED-UIN   =,1B/
000161    000    *   TDA-UNIT      =,1B/
000162    000    *   REQUIREMENTS =,1B/
000163    000    *   TOTAL        =,1B/
000164    000    8 FORMAT(*   HAND-PLAYED-UIN ***')
000165    000    9 FORMAT(*   REG=RECORD ***')
000166    000    10 FORMAT(*   TDA-UNIT ***')
000167    000    11 FORMAT(1H,*4*3X,J3,3X,J2,3X,16)
000168    000    12 FORMAT(1H,*SEQ*,3X,UIC*,3X,TP*,3X,COUNT*)
000169    000    13 FORMAT(1H,*FIRST TIME PERIOD =,13'//')
000170    000    STOP
000171    000    END
END ELT.
```

```

6ELTL F5FM•PRINT
ELTOUT RL1B70 08/16-07:40:29-(10.)
000001 006 C PRINT - ROUTINE
000002 006 C
000003 006 C
000004 006 C SUBROUTINE PRT (LINE,TYPE)
000005 006 C
000006 006 C IMPLICIT INTEGER (A = 2)
COMMON /FASTAL/ KBRNCH,KSRC15,RSKC67,KSKC89,RSRCB,RSRC,RSRC,
KTPSN,RUNTD1,RUNTD2,RUNTD3,RUNTD4,RSOFF,RSWF,
RSENL,RSAGR,WIN,MULE,TMPDIL,REJNUMBR,OLDSRC,NAUIC,
RSTR,REWSEQ,KSTNM1,KSTNM2,RUIC,RLOCCO,RCOMPO,SFK89
COMMON /MCAND/ MSKC15,MSKC67,MSRC67,MSRCB,MSRC,COMPO,
MC,UCI,CST,DAMPL,UIIC,MUNTDL,MUNDL2,MUNTU3,MUNTU4,
MCSEQ,NTPSN,MBRNCH,MSAGR,LOCCO,MSTNM1,MSTNM2,ROBCO,SMFB9
DATA RESULT/19/
000014 006 C
000015 006 C
000016 006 C *** CHECK TO SEE IF THE HEADER NEEDS TO BE PRINTED ***
000017 006 C
000018 006 C IF (LINE .LT. 54) GOTO 500
000019 006 C THEN PRINT THE HEADER
000020 006 C WRITE (RESULT,1)
000021 006 C LINE = 1
000022 006 C GOTO 600
000023 006 C ELSE
000024 006 C INCREMENT LINE COUNTER
000025 006 C 500 LINE = LINE + 1
000026 006 C
000027 006 C END-IF
000028 006 C
000029 006 C 600 CONTINUE
000030 006 C
000031 006 C *** CHECK FOR SHORT-FALL (TYPE = 1) ***
000032 006 C
000033 006 C IF (TYPE .NE. 1) GOTO 1000
000034 006 C THEN PRINT ONE EACH SHORT-FALL LINE
000035 006 C WRITE (RESULT,2) RSRC15,SFK89,RBRNCH,RUNTD1,RUNTD2,
000036 009 RUNTD3,RUNTD4,RCPMU,RUIC,RPSN,WIN,TMPD,REUSE,
000037 007 C RSTNM1,RSTNM2,RLOCCO,RSTR,RSAGR
000038 007 C
000039 006 C RETURN
000040 006 C
000041 006 C
000042 006 C *** CHECK FOR A MATCH (TYPE = 2) ***
000043 006 C
000044 006 C 1000 IF (TYPE .NE. 2) GOTO 2000
000045 006 C THEN PRINT ONE EACH MATCH LINE
000046 006 C WRITE (RESULT,3) RSRC15,SFK89,MSKC15,SMFB9,MBRNCH,
000047 010 MUNDL1,MUNDL2,MUNTU3,MUNTU4,COMPU,UIIC,
000048 006 C
000049 006 C
000050 006 C
000051 006 C
000052 006 C END-IF
000053 006 C
000054 006 C *** CHECK FOR AN OVERAGE (TYPE = 3) ***
000055 006 C

```

**UNCLASSIFIED//
S

```

000056 006 2000 IF (TYPE .NE. 3) GOTO 3000
000057 006 C THEN
000058 006 C PRINT ONE EACH OVERAGE LINE
000059 009 C WRITE (RESULT,4) M$RC15,SFM89,IMBRNCH,MUNTDL,MUNTD2,
000060 006 C MUNTU3,MUNTDL4,CUMPO,UIC,MTPSN,MC,
000061 006 C R$BCO,M$TNM1,M$TNM2,LUCCO,MSAGR,MCSEQ
000062 006 C RETURN
000063 006 C END-IF
000064 006 C
000065 006 C *** ERROR TYPE *NE. 1, 2, OR 3 ***
000066 006 3000 WRITE (6,9) TYPE
000067 006 99 FORMAT (* *** ERROR TYPE = 12)
000068 006 1 FORMAT (1H1,REQ=SRC FORCE=SRC BRNCH LEVEL UNTDS*14X,
000069 006 * COMPO UIC TPSN UIN TP RSEQ HC ROBCO STNNH,5X,
000070 006 * 'LUCCO KSTR FSTK FSEQ'//)
000071 006 2 FORMAT (1X,J5,1X,A2,14X,A2,3X,A3,2X,3X,A1,3X,A6,1X,J5,
000072 006 * 1X,13,1X,16,10X,A6,A3,2X,A3,2X,J5,1X,A5)
000073 006 3 FORMAT (1X,J5,1X,A2,2X,J5,1X,A2,4X,A2,3X,A3,2X,3A6,3X,A1,
000074 007 * 3X,A6,1X,J5,1X,13,1X,12,1X,15,1X,A1,3X,A3,2X,A6,A3,
000075 006 *
000076 006 4 FORMAT (1X,J5,1X,A2,4X,A2,3X,A3,2X,3A6,3X,A1,3X,A6,1X,15)
000077 006 *
000078 006 END
END ELT.
```

```

@ELT,L F5FM*SHORT
ELT007 RL1B70 08/16-07:40:30-(23,1)
000001 019 C S H O R T - R O U T I N E
000002 019 C
000003 019 C
000004 019 C SUBROUTINE SHORT (NEWSRC)
000005 019 C
000006 019 IMPLICIT INTEGER (A - Z)
000007 019 COMMON /TABLES/ NOTAB(120), PTAB12,23), RDDTAB(7,10),
000008 019 * STP(6,10), KTRUDU(10)
000009 019 * COMMON /REQREC/ RECORD(125)
000010 019 COMMON /FASTAL/ RBRNCH,K$RC15,R$RC67,K$RC89,K$RCRA,R$RCB,K$RC,
000011 019 * RTPSN,RUNTD1,RUNTD2,RUNTD3,RUNTD4,RSOFF,RSWRF,
000012 019 * RSENL,RSAGR,WIN,RULE,IMPD,LRE,UNMBR,OLD$KC,NUVIC,
000013 019 * RSTR,REGSEG,RS$TNM1,R$TNM2,IRUC,RL$OCO,R$COMPO,SFR89
000014 019 COMMON /MCANDS/ M$RC15,M$RC67,M$RC89,M$RCRA,M$RCB,M$RC,CUMPO,
000015 019 * MC,UCI$C,DA$PL,UIC,M$TNM1,M$TNM2,M$TNM3,M$TNM4,
000016 019 * MC$EQ,MTPSN,MBRNCH,MSAGR,LUCCO,M$TNM1,M$TNM2,ROBCO,SM$BY
000017 019 C
000018 019 INTEGER TINDEX(L1) R$HOT(147)
000019 019 DATA TINDEX/1,4,5,6,9,14,15,16,17,18,20,21,30,31,32,34,2/
000020 019 DATA ONE/1H1/, FIVE/1H5/, B/1H8/, BLANKH /, ASTER/6H***/,
000021 021 DATA MCDE9/1H9/, D$AMP9/5H9Y999/, ZERO/1H0/, R$HOT/47/,$H$OODU,
000022 019 C
000023 019 C *** TRANSFER NOTIONAL TABLE INPUT
000024 019 C
000025 019 C
000026 019 C
000027 019 C DO WHILE (1 .LE. 18)
```

```

000028    019    C
000029    019    1000  IF (1 •GT• 16)  GOTO 1100
000030    019    C
000031    019    C      K = TINDEX(1)
000032    019    RSHORT(K) = NOTAB(1)
000033    019    I = I + 1
000034    019    GOT0 1000
000035    019    C      END=DU
000036    019    C
000037    019    C      *** TRANSFER FASTALIS INFO
000038    019    C
000039    019    1100  CONTINUE
000040    019    RSHORT(17) = UIN
000041    019    RSHORT(8) = RULE
000042    019    RSHORT(10) = TMPD
000043    019    RSHORT(11) = SFR89
000044    019    RSHORT(12) = LRE
000045    019    RSHORT(13) = RBRNCH
000046    019    RSHORT(22) = BLANK
000047    019    RSHORT(23) = RSRC15
000048    019    RSHORT(24) = RSRC67
000049    019    RSHORT(25) = RSRC89
000050    022    RSHORT(26) = ONE
000051    022    IF (RSRCA •EQ• FIVE)  RSHORT(20) = B
000052    022    RSHORT(27) = RSRCC
000053    022    RSHORT(28) = RSRCC
000054    019    RSHORT(29) = MCODE9
000055    019    RSHORT(33) = RTPSN
000056    019    RSHORT(37) = RUNTU1
000057    019    RSHORT(38) = RUNTU2
000058    019    RSHORT(39) = RUNTU3
000059    019    RSHORT(40) = RUNTU4
000060    019    RSHORT(41) = RSOFF
000061    019    RSHORT(42) = RSWOF
000062    019    RSHORT(43) = RSENL
000063    019    RSHORT(44) = RSAGK
000064    019    RLOCCK = NOTAB(9)
000065    019    RSTNM1 = NOTAB(15)
000066    019    RSTNM2 = NOTAB(16)
000067    019    RCMP0 = NOTAB(16)
000068    019    C      *** COMPUTE UNMBR ***
000069    019    C
000070    019    C      IF (NEWSRC •NE• OLDSRC)  GOTO 1200
000071    019    C      THEN  UNMBR = 1
000072    019    C      UNMBR = UNMBR + 1
000073    019    GOTO 1300
000074    019    C      ELSE
000075    019    C      UNMBR = 1
000076    019    1200  UNMBR = 1
000077    019    C      OLDSRC = NEWSRC
000078    019    C      END=IF
000079    019    1300  CONTINUE
000080    019    C      RSHORT(35) = UNMBR
000081    019    C      *** LOCATE PECOD FROM PTAB AND TRANSFER IT ***
000082    019    C
000083    019    C      I = 1
000084    019    C

```

```

000085      019      PECOD = ASTER
000086      019      SRC12 = R$RC15 / 1000
000087      019      C
000088      019      C  DOWHILE (I •LT• 24)
000089      019      C
000090      019      2000  IF (I •GT• 23)  GOTO 2200
000091      019      C
000092      019      IF (SRC12 •NE• PTAB(1,1))  GOTO 2100
000093      019      C  THEN
000094      019      SRC12 MATCHES PTAB;5 SRC12
000095      019      PECOD = PTAB(2,1)
000096      019      GOTO 2200
000097      019      C  ELSE
000098      019      2100  I = 1 + 1
000099      019      C  END=IF
000100      019      GOTO 2000
000101      019      C  END=DO
000102      019      C
000103      019      2200  CONTINUE
000104      019      R$HORT(36) = PECOD
000105      019      C  *** SET-UP AUTHORITY FIELDS ***
000106      019      C
000107      019      3000  CONTINUE
000108      019      C
000109      019      C  *** COMPUTE UIC36 ***
000110      019      C
000111      019      UIC36 = NAUJC
000112      019      NXUJC = NXUJC +
000113      019      ENCODE(6,2,R$HORT(3)) NOTAB(19), UIC36
000114      019      RUIC = R$HORT(3)
000115      019      2  FORMAT (A2,J4)
000116      019      C
000117      019      C  *** ENCODE INFO INTO RECORD ***
000118      019      C
000119      019      ENCODE (150,1,RECORD) R$HORT
000120      019      1  FORMAT (ZAI,2A6,A1,A2,J3,A4,A1,J2,A3,A1,3A2,3A3,A6,A3,A1,A3,
000121      020      .   J5,2A2,4A1,A5,A6,A3,J5,A1,J4,A6,A3,3A6,"A5,A1,A1,A5)
000122      019      C
000123      019      C  *** INCREMENT TIME-PERIOD COUNTER ***
000124      019      C
000125      019      KNTROD(TMPD) = KNTROD(TMPD) + 1
000126      019      C
000127      019      RETURN
000128      019      END
END ELBT.
```

```

@ELT,L F5FM•MAIN
ELTOUT RL1870 08/16•07:40:32•(18.)
000001      014      C
000002      014      C  MAIN - ROUTINE
000003      014      C
000004      014      C
000005      014      C
000006      014      C

```

RENE: R. PLOURDE
USACAA/MRD JUNE 1976

```

000007 014 IMPLICIT INTEGER (A=2)
000008 014 COMMON /TABLES/ PTAB(2,23), RDTTAB(7,10),
000009 014 * STP(6,10), KNTROD(10)
000010 014 COMMON /REGREC/ RECORD(25)
000011 014 COMMON /FASTAL/ RBRANCH,RSRC15,RSRC67,RSRC89,RSRCB,RSRC,
000012 014 * RTPSN,RUNTL1,RUNTL2,RUNTL3,RUNTL4,RSOLF,RSWLT,
000013 014 * KSEN1,RSAGR,UNL,RULE,TMPD,LRE,UNMBR,OLDSRC,NXVIC,
000014 014 * RSTR,REQSEQ,RSTNM1,RSTNM2,RUIC,RLOCCO,RCOMP,RSFKA9
000015 014 COMMON /MCAND/ MSRC15,MSRC67,MSRC89,MSRCA,MSRCC,COMPO,
000016 014 * MC,UCIIST,DAMPL,UIC,MUNTUL,MUNTDL,MUNTUD,MUNTU4,
000017 014 * MCSEQ,HTPSN,MBRNCH,MSAGR,LUCCO,MSTNM1,MSTNM2,ROBCO,SMFB9
000018 014 * INTEGER KEY(241), LIST(45), BUFF(24)
000019 014 DATA LINE/100/
000020 014 DATA KEY/5,7,12,0,0,1,12,31,6,0,0,2,25,1,36,0,0,3,
000021 014 * 1,13,36,0,0,4,9999,216*0/
000022 014 DATA NXVIC/1/, AUTH13/3H000/, AUTH47/4H000/, AUTH8/1H0/,
000023 014 * AUTH9A/2H99/, AUTHBD/3H999/, AUTHE/1H0/, BLANK/1H /
000024 014 DATA PFILE/1/, MDFILE/12/, NOFILE/13/
000025 014 DATA FMFILE/1/, FRFILE/2/, UVFILE/3/, MRFILE/8/
000026 014 1 FORMAT (IX,A5,A2,3A1,A5,A6,A2,4A3,3A6,5, A3,A9,2A3,A5,
000027 014 * A1,A2,A3,16,A6)
000028 014 2 FORMAT (IX,15,1X,A2,1X,12,1X,A2,3(1X,A1),1X,A3,3(1X,A6),1X,A4,
000029 014 * 3(1X,A1),1X,J5,4(1X,A5),1X,13,1X,A2,1X,13,16,A3)
000030 014 5 FORMAT(5,A6,A3,A4,A1,A2,A3,A1)
000031 014 C CALL SOPEN3 ($100,$5000,25,25,KEY)
000032 014 C
000033 014 C
000034 014 C 100 READ (PFILE,11) PTAB
000035 014 C 11 FORMAT (12,2X,A6)
000036 014 C
000037 014 C 12 READ (RFILE,12) RDTAB
000038 014 C 12 FORMAT (17,4)
000039 014 C
000040 014 C READ (NOFILE,13) NOTAB
000041 014 C 13 FORMAT (A6)
000042 014 C
000043 014 C
000044 014 C FLAG = 1
000045 014 C
000046 014 C DOWHILE (INUT EOF)
000047 014 C 1000 IF (FLAG.NE.1 * AND* FLAG.NE.2) GOTO 1020
000048 014 C
000049 014 C THEN GET NEXT MATCH=CANDIDATE=RECORD
000050 014 C READ (FMFILE,1,END=2001) MSRC15,MSRC89,COMPOMC,UCIST,
000051 014 C DAMPL,UIC,MSRC67,MSRCA,MSRCB,MSRCC,
000052 014 C MBRNCH,MUNTUL,MUNTDL,MUNTUD,MUNTU4,
000053 014 C MTPSN,ROBCU,MSTNM1,MSTNM2,OCCO,
000054 014 C
000055 014 C MSAGR,MACOL,MACDOL,MACDOL2,MACDOL3,MCSEQ,SMFB9
000056 014 C NB9 = FLU10,12,MSRC091
000057 014 C MKEY = MSRC15 * 5UUU + N9
000058 014 C END=IF
000059 014 C
000060 014 C 1020 IF (FLAG.NE.1 * AND* FLAG.NE.3) GOTO 1040
000061 014 C
000062 014 C THEN GET NEXT REQUIREMENT=RECORD
000063 014 C READ (FRFILE,2,END=30001) RSRC15,RSRC89,TMPD,RSRC67,RSRC,

```

```

000064    014      *
000065    014      *
000066    014      *
000067    014      *
000068    014      C   END=IF
000069    014      C
000070    014      C   *** CHECK FOR SHORT-FALL (RKEY ) MKEY) ***
000071    014      C
000072    014      C
000073    014      C   IF (RKEY • GE. MKEY) GOTO 1060
000074    014      C
000075    014      C   WE HAVE A SHORT-FALL CREATE A NATIONAL UNIT
000076    014      C   FLAG = 3
000077    014      C   TSHORT = TSHORT + 1
000078    014      CALL SHORT (RKEY)
000079    014      CALL SRREL (RECORD,25)
000080    014      CALL PRT (LINE,1)
000081    014      GOTO 1200
000082    014      C
000083    014      C   *** CHECK FOR OVERAGE (RKEY • GT. MKEY)
000084    014      C   IF (RKEY • EQ. MKEY) GOTO 108U
000085    014      C
000086    014      C
000087    014      C
000088    014      C   WE HAVE AN OVERAGE
000089    014      C   FLAG = 2
000090    014      C   TOVER = TOVER + 1
000091    014      CALL OVER
000092    014      CALL SRREL (RECORD,25)
000093    014      CALL PRT (LINE,3)
000094    014      C
000095    014      C   ELSE
000096    014      C
000097    014      C
000098    014      C
000099    014      C
000100    014      C   WE HAVE A GOOD MATCH
000101    014      C   FLAG = 1
000102    014      TMATCH = TMATCH + 1
000103    014      CALL MATCH
000104    014      CALL SRREL (RECORD,25)
000105    014      CALL PRT (LINE,2)
000106    014      GOTO 1160
000107    014      C
000108    014      C
000109    014      C
000110    014      C
000111    014      C   ELSE
000112    014      C   WE HAVE A GOOD MATCH
000113    014      C   FLAG = 1
000114    014      TMATCH = TMATCH + 1
000115    014      CALL MATCH
000116    014      CALL SRREL (RECORD,25)
000117    014      CALL PRT (LINE,2)
000118    014      GOTO 1140
000119    014      C
000120    014      C

```

```

000121    014      CALL PRT (LINE,1)
000122    014      C
000123    014      1140      EN=IF
000124    014      C      CONTINUE
000125    014      1160      END=IF
000126    014      C      CONTINUE
000127    014      1180      EN=IF
000128    014      C      CONTINUE
000129    014      1200      END=IF
000130    014      GOTO 1000
000131    014      C      CONTINUE
000132    014      C
000133    014      C      *** PROCESS THE REMAINING REQUIREMENT RECORDS AS SHORT=FALL ***
000134    014      C
000135    014      2000 IF (FLAG • EQ. 1) GOTO 2100
000136    014      C      THEN
000137    014      TSHORT = TSHORT + 1
000138    014      CALL SHORT (RKEY)
000139    014      CALL SRREL (RECORD,25)
000140    014      CALL PRT (LINE,1)
000141    014      C      END=IF
000142    014      2100      CONTINUE
000143    014      C
000144    014      C      DOWHILE (NOT EOF FOR REQ=FILE)
000145    014      2200      READ (FRFILE,2,END=4000) RSRC15,RSRC89,IMPD,RSRC67,RSRCB,
000146    014      *      RSRC2,RSRCA,RUNDI,RUNTD2,RUNTD3,RUNTD4,RULE,
000147    014      *      LRE,CUMB,ROUND1,RTPSN,TSUFF,RSWUF,RSNL,
000148    014      *      RSAGR,UN,BRNC,RSTK,REQSEQ,SR89
000149    014      *      RKEY = RSRC15 • 100 + RSRC89
000150    014      C      END=IF
000151    014      TSHORT = TSHORT + 1
000152    014      CALL SHORT (RKEY)
000153    014      CALL SRREL (RECORD,25)
000154    014      CALL PRT (LINE,1)
000155    014      GOTO 2200
000156    014      C      END=DO
000157    014      C
000158    014      C      *** PROCESS REMAINING MATCH=CANDIDATE RECORDS AS OVERAGE ***
000159    014      C
000160    014      23000 IF (FLAG • EQ. 1) GOTO 3100
000161    014      C      THEN
000162    014      30000 TOVER = TOVER + 1
000163    014      CALL OVER
000164    014      CALL SRREL (RECORD,25)
000165    014      CALL PRT (LINE,3)
000166    014      C      END=IF
000167    014      3100      CONTINUE
000168    014      C
000169    014      C      DOWHILE (NOT EOF FOR MATCH=CAND=FILE)
000170    014      C
000171    014      3200      READ (FMFILE,1,END=4000) MSRC15,MSRC89,CMP0,MC,VCIST,
000172    014      *      DAMPL,VIC,MSRC67,MSRCB,MSRCC,
000173    014      *      MBRNC,H,MUNT1,MUNT2,MUNT3,MUNT4,
000174    014      *      MTPSN,ROBCU,MSTNM1,MSTNM2,LOC0,
000175    014      *      MSAGK,MAUC01,MADC02,MADC03,MSSEQ,MSFMB9
000176    014      TOVER = TOVER + 1
000177    014      CALL OVER

```

```

000176    014      CALL SRREL (RECORD,25)
000179    014      CALL PRT (LINE,3)
000180    014      GOT0 3200
000181    014      C END-DO
000182    014      C
000183    014      C *** TIME TO SORT THE MATCH-RESULTS ***
000184    014      C
000185    014      4000 CALL SSORT
000186    014      C
000187    014      C *** COMPUTE RDV ***
000188    014      C
000189    014      5000 TP = 1
000190    014      WRITE(6,77) TMATCH,TSHURT,TOVER
000191    014      ?? FORMAT( TMATCH='16.', TSHURT='16.', TOVER='16.')
000192    014      C
000193    014      C DOWHILE (TP .LT. 10)
000194    014      C
000195    014      5100 IF (TP .GT. 10) GOT0 5300
000196    014      C
000197    014      IF (KNTRDD(TP) .EQ. 0) GOT0 5200
000198    014      C
000199    014      THEN SP = 1
000200    014      WRITE (6,66) TP,KNTRDD(TP)
000201    014      66 FORMAT (I,TP=,12,KNTRDD(TP)=,10)
000202    014      AV = KNTRDU(TP) / 6
000203    014      K = KNTRDD(TP) - AV * 6
000204    014      C
000205    014      C DOWHILE (SP .LT. 7)
000206    014      C
000207    014      5120 IF (SP .GT. 6) GOT0 5200
000208    014      C
000209    014      C
000210    014      C
000211    014      C
000212    014      C
000213    014      C
000214    014      5140 IF (SP .GT. R) GOT0 514U
000215    014      C
000216    014      5160 THEN L = AV + 1
000217    014      C
000218    014      C
000219    014      C
000220    014      C
000221    014      5180 IF (M .GT. L) GOT0 5199
000222    014      CALL SKRET (RECORD,DUMMY,$99999)
000223    018      DECODE (115U,3,RECORD) LIST
000224    014      TR = TR + 1
000225    015      IF (LIST(45) .NE. '0') GOT0 5182
000226    016      TNOT = TNOT + 1
000227    015      GOT0 5168
000228    015      5162 IF (LIST(45) .NE. '1') GOT0 5184
000229    015      TMTCN = TMTCN + 1
000230    015      GOT0 5168
000231    015      5164 IF (LIST(45) .NE. '2') GOT0 5186
000232    015      TSDV = TSDV + 1
000233    015      GOT0 5168
000234    015      5166 WRITE (6,69) LIST(45)

```

```

000235    015      S188      CONTINUE
000236    017      09       FORMAT ( *   LIST(45) = ",A6,*   ***)
000237    014
000238    014      08       FORMAT (J3)
000239    014      08       FORMAT (J3)
000240    014      08       FORMAT (J3)
000241    014      08       FORMAT (J3)
000242    014      08       FORMAT (J3)
000243    014      08       FORMAT (20A6)
000244    014      08       WRITE(MRFILE) BUFF
000245    014      08       FORMAT (2A1,2A6,A1,A2,A3,A4,A1,A2,A3,A4,A3,A3,
000246    014      08       *      J5,2A2,A1,A5,A6,A3,J5,A1,A4,A6,A3,JA6,4A5,A1)
000247    014      08       FORMAT (2A1,2A6,A1,A2,A3,A4,A1,A2,A3,A4,A5,A1,
000248    014      08       *      2A2,4A1,2A6,A3,15,A1,14,A6,A3,JA6,4A5,A1)
000249    014      08       IF (LIST(45) .NE. '2') M = M + 1
000250    014      08       GOTO S180
000251    014      C       END=DO
000252    014      C       CONTINUE
000253    014      0199     CONTINUE
000254    014      0199     WRITE(6,39) TP,SP,M,L,AV,TR
000255    014      0199     FORMAT('TP',I3,'SP',I2,'M',I6,'L',I6,'AV',I6)
000256    014      0199     *      R,I6,TR,I6
000257    014      0199     SP = SP + 1
000258    014      0199     GOTO S120
000259    014      C       END=DO
000260    014      C       END=IF
000261    014      5200     CONTINUE
000262    014      07       FORMAT ('TP',I2,'TR',I6)
000263    014      07       TP = TP + 1
000264    014      0199     GOTO S100
000265    014      C       END=DO
000266    014      C       END=DO
000267    014      9999     CONTINUE
000268    014      9999     IF (TR .EQ. TMATCH+TSHORT+TOVER) GOTO S300
000269    014      9999     WRITE(6,99)
000270    014      9999     FORMAT ('*1   *** ERROR OCCURRED WHILE COMPUTING RDD ***')
000271    014      5300     CONTINUE
000272    014      55       WRITE(6,55) TR, TSOV, TNUT, TMTCN
000273    014      55       FORMAT(' TOTAL NUMBER OF RECORDS RETURNED FROM SORT = ',I6)
000274    014      55       ENDFILE OFILE
000275    014      55       ENDFILE MRFILE
000276    014      55       STATUS = CSF(2,'WBKPT 19 ')
000277    014      55       STOP
000278    014      55       END
END ELT.
```

```

@ELT,L F5FM=MATCH
ELTOUT RL1B70 08/16-07:40:34-(1.)
000001 000  C  S U B M A T C H
000002 000  C
000003 000  C
000004 000  C  SUBROUTINE MATCH
000005 000  C  IMPLICIT INTEGER (A - Z)
000006 000  C

```

```

000007 000 * COMMON /TABLES/ NOTAB(2U), PTAB(2,23), RDUTAB(7,10),
000008 000 * STP(6,10), KNTROD(10)
000009 000 * COMMON /REQREC/ RECOR(125)
000010 000 * COMMON /FASTAL/
000011 000 * RBRNC,RSRC15,RSRC67,RSRC89,MSRCA,RSRCB,RSRC,
000012 000 * RTPSN,RUNTD1,RUNTD2,RUNTD3,RUNTD4,RSOFF,RSWF,
000013 001 * RSENL,RSAGR,UIN,RULE,IMPDLRE,UNMBR,OLDSRK,NAVIC,
000014 000 * COMMON /MCAND/ MSRC15,MSRC67,MSRC89,MSRCA,MSRCB,MSRC,COMPO,
000015 000 * MC,UCIST,DAMPL,UIC,MUNTD1,MUNTD2,MUNTD3,MUNTD4,
000016 001 * MCSEQ,HTPSN,MBRNCH,MSAGH,LOCCO,MSTNM1,MSTNM2,ROBCQ,SMF89
000017 000 * INTEGER RMATCH(47)
000018 000 * DATA RMATCH/4406H ,1H1,201H /
000019 000 * DATA ONE/1H1/
000020 000 C *** SET-UP THE AUTHORITY FIELDS IN RMATCH ***
000021 000 C
000022 000 C
000023 000 RMATCH(2) = COMPU
000024 000 RMATCH(3) = UIC
000025 000 RMATCH(7) = UIN
000026 000 RMATCH(8) = RULE
000027 000 RMATCH(9) = ONE
000028 000 RMATCH(10) = TMPD
000029 001 RMATCH(11) = SMF89
000030 000 RMATCH(12) = LRE
000031 000 RMATCH(22) = ROBCO
000032 000 RMATCH(29) = MC
000033 000 RMATCH(46) = UCIST
000034 000 RMATCH(47) = DAMPL
000035 000 C *** ENCODE INFO INTO RECORD ***
000036 000 C
000037 000 C
000038 000 ENCODE (1150,1,RECORD) RMATCH
000039 000 C *** INCREMENT TIME-PERIOD COUNTER ***
000040 000 C
000041 000 C KNTROD(TMPD) = KNTROD(TMPD) + 1
000042 000 C
000043 000 C
000044 000 RETURN
000045 000 1 FORMAT (2A1,2A6,A1,A2,J3,A4,A1,J2,A3,A6,A3,A1,A3,
000046 000 * A5,2A2,A1,A5,A6,A3,A5,A1,A4,A6,A3,A6,A5,A1,A1,A5)
000047 000 END
END ELT.

@ELT+L F5FM•OVER
000001 000 C
000002 000 C O V E R A G E
000003 000 C
000004 000 C SUBROUTINE OVER
000005 000 C IMPLICIT INTEGER (A-Z)
000006 000 C
000007 000 C COMMON /TABLES/ NOTAB(2U), PTAB(2,23), RDUTAB(7,10),
000008 000 * STP(6,10), KNTROD(10)
000009 000 C

```

UNCLASSIFIED//~~REF ID~~

PAGE

DATE 081676 PAGE 44

```

000010      000      COMMON /REQREC/ RECORD(125)
000011      000      COMMON /FASTAL/
000012      000      RPSN, RNTD1, RNTU2, RNTD3, RNTU4, RSOF, RSWF,
000013      000      RSEN1, RSEN2, RSEN3, RSEN4, RSEN5, RSEN6, RSEN7, RSEN8,
000014      001      RSTR, RESEQ, RSTNM1, RSTNM2, RUIC, RLCCO, RCOMP, SFH8,
000015      000      COMMON /MCANDS/ MSCRIS, MSCR67, MSCR89, MSCR90, MSCR91, MSCR92, MSCR93, MSCR94,
000016      000      MC, UICIST, UAMPL, UIC, MUNTL1, MUNTD2, MUNTO3, MUNTD4,
000017      001      MCSEQ, MTPSN, MBRNCH, MSAGK, LOCCO, MSTNM1, MSTNM2, RUBCO, SFH8
000018      000      C
000019      000      INTEGER OVLIST(47)
000020      000      DATA MCODEB/1H8/
000021      000      C
000022      000      DATA OVLIST/9*6H000000, 2*6H999999, 33*6H000000, 1H2.2*1H /
000023      000      OVLIST(22) = ROBCO
000024      000      OVLIST(10) = 9
000025      070      OVLIST(29) = MCODE8
000026      000      OVLIST(46) = UICIST
000027      000      OVLIST(47) = DAMPL
000028      000      OVLIST(2) = COMP0
000029      000      OVLIST(9) = UIC
000030      000      KNTRD(9) = KNTRDU(9) + 1
000031      000      C
000032      000      ENCODE (150,1,RECORD) OVLIST
000033      000      C
000034      000      DLT TO FORMAT 1 FROM SUBMATCH ALIAS MATCH
000035      002      1 FORMAT (2A1,2A6,A1,A2,A3,A4,A1,JZ,A3,A1,JZ,A3,A6,A3,A1,A4,A5,A3,A5,A1,A1,A5)
000036      000      *
000037      000      RETURN
000038      000      END
000039      000

```

E-mail programs

• 111 •

SYSTEM PROGRAM MATCH

```

SLET,L FSATL,FIND
ELT007 RLIB70 08/16-07:40:37(10.)
000001 000 C
000002 000 C SUBROUTINE FIND (KEY,I,SIZE)
000003 000 IMPLICIT INTEGER (A = Z)
000004 000 COMMON /TTAB/ TABLE(5,100)
000005 000 C MAX = SIZE
000006 000 C MIN = 1
000007 000 C I = 0
000008 000 C
000009 000 C DOWHILE (I .EQ. 0 .AND. MIN .LE. MAX)
000010 000 C
000011 000 C I000 IF (I .NE. 0 .OR. MIN .GT. MAX) RETURN
000012 000 C
000013 000 C
000014 000 C MID = (MAX + MIN)/2
000015 000 C IF (KEY .NE. TABLE(I,MID)) GOTO 1100
000016 000 C WE HAVE FOUND THE KEY
000017 000 C I = MID
000018 000 C TABLE(5,I) = 1
000019 000 C GOTO 1200
000020 000 C
000021 000 C 1100 IF (KEY .LT. TABLE(I,MID)) GOTO 1120
000022 000 C
000023 000 C THEN POSSIBLE MATCH IS IN UPPER HALF OF TABLE
000024 000 C MIN = MID + 1
000025 000 C GOTO 1140
000026 000 C
000027 000 C ELSE POSSIBLE MATCH IS IN LOWER HALF OF TABLE
000028 000 C 1120 MAX = MID - 1
000029 000 C END-IF
000030 000 C CONTINUE
000031 000 C
000032 000 C 1200 CONTINUE
000033 000 C GOTO 1000
000034 000 C END-DO
000035 000 C
000036 000 C END
END ELT.

```

```

SLET,L FSATL,GETTP
ELT007 RLIB70 08/16-07:40:37(10.)
000001 000 C
000002 000 C SUBROUTINE GETTP (RDD,TP)
000003 000 C
000004 000 IMPLICIT INTEGER (A = Z)
000005 000 COMMON /RTAB/ RDUTAB(7,10)
000006 000 C I = 1
000007 000 C
000008 000 C DOWHILE (I .LE. 10)
000009 000 C
000010 000 C 1000 IF (I .GT. 10) GOTO 2000
000011 000 C
000012 000 C

```

```

000013    000      IF (RDV * GT* RDTAB(7,1)) GOTO 1100
000014    000      C
000015    000      C      THEN WE HAVE FOUND THE CORRECT TIME-PERIOD (TP)
000016    000      C      TP = 1
000017    000      C      RETURN
000018    000      C
000019    000      1100    ELSE I = 1 + 1
000020    000      C      END-IF
000021    000      C      GOTO 1000
000022    000      C      END-DO
000023    000      C
000024    000      2000    CONTINUE
000025    000      000      WRITE (6,1) RDD
000026    000      1      FORMAT (1,0) *** RDD = '113.' WAS NOT FOUN IN RDTAB *** */
000027    000      TP = 0
000028    000      RETURN
000029    000      END

END ELT.

```

BELT.L FSATL.MAIN

ELT007 RL1870 08/16-07:40:39-(3.)

```

000001    000      C      A B O V E - T H E - L I N E
000002    000      C
000003    000      C
000004    000      C
000005    000      C
000006    000      C
000007    000      IMPLICIT INTEGER (A = Z)
000008    000      COMMON /TTAB/ TABT(5,100)
000009    000      COMMON /RTAB/ RDTAB(7,10)
000010    000      INTEGER LIST(27)
000011    000      EQUIVALENCE (LIST(1),SRC15), (LIST(2),SRC89), (LIST(3),CUMPO),
000012    000      (LIST(4),MC), (LIST(5),UIC15), (LIST(6),DAMP1),
000013    000      (LIST(7), UIC), (LIST(8),SKC67), (LIST(9), SRC1),
000014    000      (LIST(10), SRCB), (LIST(11), SRCC), (LIST(12), BNCH),
000015    000      (LIST(13),UNT1), (LIST(14),UNT2), (LIST(15),UNT3),
000016    000      (LIST(16),UNT4), (LIST(17),TPSN), (LIST(18),RRCO),
000017    000      (LIST(19),STNM1), (LIST(20),STNM2), (LIST(21),LUCC),
000018    000      (LIST(22), SAGR), (LIST(23),ADCOL), (LIST(24),ADCO2),
000019    000      (LIST(25),ADC03), (LIST(26), SEQ), (LIST(27),HPFLQ)
000020    000      DATA RDTAB//11/, TPSNF//12/, ATLFIL//13/, FILAIL//14/
000021    000      DATA YES/3HYES/, NO/2HNO/
000022    000      DATA ZERO/1H0/, ONE/1H1/, BLANK/6H   /, ASTER/1H*/ /
000023    000      C
000024    000      C
000025    000      C      *** GET RDD TABLE FROM RDTAB FILE ***
000026    000      C
000027    000      C      I = 1
000028    000      C      DO WHILE (I .LE. 10)
000029    000      C
000030    000      C
000031    000      1100    IF (I * GT* 10) GOTO 1999
000032    000      C      READ (RDTAB,1) (RDTAB(j,1),j=1,7)
000033    000      C

```

```

000034    000      WRITE (6,2) 1, (RDDTAB(J,1),J=1,7)
000035    000      1 = 1 +
000036    000      GOTO 1000
000037    000      C END-DO
000038    000      C
000039    000      1499  CONTINUE
000040    000      1 = 1
000041    000      C
000042    000      C   *** LOAD TPSN TABLE FROM TPSNF FILE TO TABT TABLE ***
000043    000      C
000044    000      C DOWHILE (NOT EOF FOR TPSNF)
000045    000      C
000046    000      2000  READ (TPSNF,3,END=2999) (TABT(J,1),J=1,3)
000047    000      CALL GETTP (TABT(3,1),TABT(4,1))
000048    000      WRITE (6,4) 1, (TABT(J,1),J=1,4)
000049    000      1 = 1 +
000050    000      GOTO 2000
000051    000      C END-DO
000052    000      C
000053    000      2999  CONTINUE
000054    000      C
000055    000      C   *** PROCESS ATL RECORDS ***
000056    000      C
000057    000      C DOWHILE (NOT EOF FOR ATLFILE)
000058    000      C
000059    000      C
000060    001      3000  READ (ATLFILE,5,END=3999) LIST, FLAGTL
000061    000      CALL FIND (TPSN,INDEX,TSIZE)
000062    000      IF (INDEX .EQ. UI) GOTO 3300
000063    000      C
000064    000      C
000065    002      *** ADC01 = 1 ***
000066    000      ADC01 = TABT(2,INDEX)
000067    000      LOFLAG = BLANK
000068    000      IF (TABT(2,INDEX) .NE. ONE) GOTO 3100
000069    000      C
000070    003      THEN
000071    000      C
000072    000      *** HPFLAG ***
000073    000      IF (HPFLAG.EQ.YES .AND. ADC03.NE.BLANK) GOTO 3020
000074    000      C
000075    000      C
000076    000      C
000077    003      3020
000078    003      C
000079    000      C
000080    000      3040
000081    000      C
000082    000      C
000083    000      3100
000084    003      C
000085    000      C
000086    000      C
000087    003      C
000088    000      C
000089    003      3120
000090    000      C

```

IF (HPFLAG.EQ.YES .AND. ADC03.NE.BLANK) GOTO 3020

ADC02 = 0

IF (HPFLAG.EQ.YES .AND. ADC03.NE.BLANK) GOTO 3120

THEN

ADC03 = TABT(3,INDEX)

CALL GETTP (ADC03,ADC02)

END-IF

CONTINUE

GOTO 3200

ADC02 = 0

IF (HPFLAG.EQ.YES .AND. ADC03.NE.BLANK) GOTO 3120

THEN

ADC03 = TABT(3,INDEX)

GO TO 3200

END-IF

DECOD (3,7,ADC03) ADC03

CALL GETTP (ADC03,ADC02)

END-IF

DECOD (3,7,ADC03) ADC03

```

000091    000      3200      CONTINUE
000092    000      GOTO 3400
000093    000      C      ELSE
000094    000      3300      LOFLAG = ASTER
000095    000      C      END-IF
000096    000      3400      CONTINUE
000097    000      LIST(27) = LOFLAG
000098    003      WRITE (FILATE,8) LIST, FLAGTL
000099    000      GOTO 3000
000100    000      C      END-DO
000101    000      C      3999  CONTINUE
000102    000      1 = 1
000103    000      C
000104    000      C      DOWHILE ( 1 .LE. TSIZE )
000105    000      C
000106    000      C
000107    000      4000  IF ( I .GT. TSIZE ) GOTO 4999
000108    000      C
000109    000      IF ( TABT(J) .NE. 0 ) GOTO 4100
000110    000      C
000111    000      C      THEN
000112    000      C      PRINT THAT THIS TPSN WAS NOT USED
000113    000      C      WRITE (6,6) J, (TABT(J),J=1,5)
000114    000      C      END-IF
000115    000      4100  CONTINUE
000116    000      1 = 1 + 1
000117    000      GOTO 4000
000118    000      C      END-DO
000119    000      4999  CONTINUE
000120    000      C
000121    000      WRITE (6,101)
000122    000      I01  FORMAT ( * * * ABOVE-THE-LINE FINI * * * )
000123    000      STATUS = CSF ( 2, *BRKPT 11 *)
000124    000      STATUS = CSF ( 2, *BRKPT 12 *)
000125    000      STATUS = CSF ( 2, *BRKPT 13 *)
000126    000      STATUS = CSF ( 2, *BRKPT 14 *)
000127    000      STOP
000128    000      1  FORMAT (714)
000129    000      2  FORMAT (IX,13,716)
000130    000      4  FORMAT (IX,13,2X,J5,3X,A1,3X,J3,2X,J2)
000131    000      3  FORMAT (J5,2X,A1,2X,J3)
000132    000      5  FORMAT (IX,J5,A2,3A1,A5,A6,AZ,A3,A6,2A3,A5,
000133    003      *          A1,J2,A3,16,A6,A3)
000134    000      6  FORMAT (1H0,13,1X,*   TPSN=* ,J5,*  WAS NOT USED * * * ,2X,A1,
000135    000      *          J3*2X,J2,2X,I2)
000136    003      7  FORMAT (J3)
000137    003      8  FORMAT (IX,J5,A2,3A1,A6,AZ,A3,A6,2A3,A5,
000138    003      *          A1,J2,J3,16,A6,A3)
000139    000      END
END ELT.
```

••UNCLASSIFIED••

```

BELL L FSALT*MAIN
ELT007 RL1870 08/16/07:40:(1,1)
000001 000 C ALTERNATE - THEATER
000002 000 C
000003 000 C
000004 000 C
000005 000 C
000006 000 C
000007 000 C IMPLICIT INTEGER (A = 2)
000008 000 C INTEGER ALTAB(6,100), RDU(100), LIST(26)
000009 000 C DATA ALTTF(11), ALTFIL(12), FILALT(13)
000010 000 C
000011 000 C EQUIVALENCE (LIST(1),SRC15), (LIST(2),SRC89), (LIST(3),COMPO),
000012 000 C (LIST(4),MC), (LIST(5),UCLIST), (LIST(6),DAMPL),
000013 000 C (LIST(7), UIC), (LIST(8),SRC67), (LIST(9), SRC4),
000014 000 C (LIST(10), SRCB), (LIST(11), SRCC), (LIST(12),BRNC),
000015 000 C (LIST(13),UNTDL), (LIST(14),UNTDL), (LIST(15),UNTDL),
000016 000 C (LIST(16),UNTDL), (LIST(17),TPSN), (LIST(18),RUBCO),
000017 000 C (LIST(19),STNM1), (LIST(20),STNM2), (LIST(21),LUCCO),
000018 000 C (LIST(22), SAGR), (LIST(23),ADCO1), (LIST(24),ADCO1),
000019 000 C (LIST(25),ADCU3), (LIST(26), SEQ)
000020 000 C
000021 000 C WRITE (6,21)
000022 000 C 21 FORMAT (*1ADCO1 LOWER=LIMIT UPPER=LIMIT INCRE NEW=ADCO1//)
000023 000 C 11 FORMAT (3X,A1,BX,J3,I0X,J3,7X,J3,7X,A1)
000024 000 C 1 = 1
000025 000 C
000026 000 C DOWHILE (NOT EOF FOR ALTTF)
000027 000 C
000028 000 C 1000 READ (ALTTF,1,END=1999) (ALTAB(J,1),J=1,5)
000029 000 C 1 FORMAT (A1,2X,J3,2X,J3,2X,A1)
000030 000 C WRITE (6,1) (ALTAB(J,1),J=1,5)
000031 000 C RDU(1) = ALTAB(2,1) - ALTAB(4,1)
000032 000 C I = I + 1
000033 000 C GOTO 1000
000034 000 C END-DO
000035 000 C
000036 000 C 1999 CONTINUE
000037 000 C TSIZE = 1 = 1
000038 000 C DOWHILE (NOT EOF FOR ALTFIL)
000039 000 C
000040 000 C
000041 000 C 2000 READ (ALTFIL,8,END=2999) LIST
000042 000 C 8 FORMAT (I4,5,A2,J1,A5,A6,A2,3A1,A2,A3,A4,A5,A6,A7,A8)
000043 001 C * 1 = 1
000044 000 C J = 0
000045 000 C
000046 000 C DOWHILE ((1 .LE. TSIZE .AND. J .EQ. 0))
000047 000 C
000048 000 C 2100 IF ((1.GT.TSIZE .OR. J.NE.0)) GOTO 2199
000049 000 C
000050 000 C
000051 000 C IF ((ADCO1 .NE. ALTAB(1,1)) GOTO 2120
000052 000 C THEN ADC1'S MATCH
000053 000 C J = 1
000054 000 C RDU(J) = RDU(J) + ALTAB(4,J)
000055 000 C

```

••UNCLASSIFIED••

```

000056    000      IF (RDD(I,J) .GT. ALTAB(I,J)) RUD(I,J) = ALTAB(I,J)
000057    000      ADC01 = ALTAB(5,J)
000058    000      IF (ADC03 .EQ. 999) ADC03 = RDD(J)
000059    000          ADC02 = 0
000060    000          ALTAB(6,J) = 1
000061    000          GOTO 2140
000062    000      ELSE
000063    000          2120      I = I + 1
000064    000          ENDIF
000065    000          CONTINUE
000066    000          GOTO 2100
000067    000      END=DO
000068    000      C
000069    000      2199  CONTINUE
000070    000      C
000071    000      IF (J .NE. 0) GOTO 2200
000072    000      C
000073    000      THEN
000074    000          ADC01 WAS NOT FOUND
000075    000          WRITE (16,2) ADC01
000076    000          2 FORMAT (1H0,000 ADC01 = '0.000' WAS NOT FOUND IN THE TABLE •••)
000077    000          LUFLAG = 1
000078    000          GOTO 2220
000079    000          ELSE
000080    000          2200  WRITE (FILALT,B) LIST
000081    000          ENDIF
000082    000          2220  CONTINUE
000083    000          GOTO 2000
000084    000          END=DO
000085    000          2999  CONTINUE
000086    000          WRITE (6,101)
000087    000          101  FORMAT (1••• ALTERNATE-THEATER FINI •••)
000088    000          C
000089    000          STATUS = CSF (2,0BRKPT 1,1 '1
000090    000          STATUS = CSF (2,0BRKPT 1,2 '1
000091    000          STATUS = CSF (2,0BRKPT 1,3 '1
000092    000          STOP
000093    000          END
END ELT.
```

ENDG FMA PROGRAM LAYIN

••UNCLASSIFIED•• 0.L.U

```

*ELT.L FSLAY.MAIN
ELT007 RL1B70 06/07:40:42-(0.)
000001 000 C
000002 000 C
000003 000 C
000004 000 C
000005 000 C
000006 000 C
000007 000 C
IMPLICIT INTEGER (A = 2)
COMMON /RTAB/ RDTAB(7,10)
INTEGER KEY(241), NOTREC(52), FASREC(52)
INTEGER ALTTAB(5), ATLTAB(8), LOTAB(6), HPTAB(6), MRTAB(45)
INTEGER NINDEX(44), MRREC(24)
000014 000 C
000013 000 C
000014 000 C
000015 000 C
000016 000 C
000017 000 C
000018 000 C
000019 000 C
000020 000 C
000021 000 C
000022 000 C
000023 000 C
000024 000 C
000025 000 C
000026 000 C
000027 000 C
000028 000 C
000029 000 C
000030 000 C
000031 000 C
000032 000 C
000033 000 C
000034 000 C
000035 000 C
000036 000 C
000037 000 C
000038 000 C
000039 000 C
000040 000 C
000041 000 C
000042 000 C
000043 000 C
000044 000 C
000045 000 C
000046 000 C
000047 000 C
000048 000 C
000049 000 C
000050 000 C
000051 000 C
000052 000 C
000053 000 C
000054 000 C
000055 000 C
1 FORMAT (1X,2A1,2A6,A1,A6,A4,A2,A3,A4,A1,A2,A3,A3,A2,A6,A2,
          A5,A3,A2,A3,2A2,5A1,A3,A5,2A3,A2,A3,A2,A6,A3,A2,
          A1,A2,A1,A3,A1,A2,A3,A3,A1,A5,2A2,A4,A1,A5,A2,
          A6,A3,A5,A6,A5,A1,A5,A4,A6,A3,A3,A6,A3,15A5,
          A4,A1)
3 FORMAT (2A1,2A6,A1,A2,A3,A4,A1,A2,A3,A1,A2,A3,A6,A3,
          A1,A3,A5,2A2,4A1,A5,A6,A3,A5,A1,A4,A6,A3,3A6,
          4A5,A1)
2 FORMAT (16X,A6,33X,A3,17X,A1,A2,A3,A6,X,A6)
C
CALL SOPEN3 ($100,$2000,24,2,KEY)
100 CONTINUE
*** GET RDD TABLE FROM RUDFIL FILE ***

```

```

000056    000      1 = 1
000057    000      C  DOWHILE (1 .LE. 10)
000058    000      C  DOWHILE (1 .LE. 10)
000059    000      C  DOWHILE (1 .LE. 10)
000060    000      C  ISU  IF (1 .GT. 10)  GOTO 199
000061    000      C
000062    000      C  READ (RDUTAB(1,1),J=1,7)
000063    000      C  WRITE (6,7)  1, (RDUTAB(1,1),J=1,7)
000064    000      C  I = I + 1
000065    000      C  GOTO 150
000066    000      C  END=DO
000067    000      C  END=DO
000068    000      199  CONTINUE
000069    000      6   FORMAT (714)
000070    000      7   FORMAT (1X,13,716)
000071    000      C  DOWHILE (NOT EOF FOR MRFILE)
000072    000      C  DOWHILE (NOT EOF FOR MRFILE)
000073    000      C  1000  READ (MRFILE,END=1999)  MRREC
000074    000      C  CALL SRREL (MRREC,24)
000075    000      C  GOTO 1000
000076    000      C  END=DO
000077    000      C  DOWHILE (NOT EOF FOR MRFILE)
000078    000      C  1999  CONTINUE
000079    000      C  1999  CONTINUE
000080    000      C  CALL SSORT
000081    000      C  CALL SSORT
000082    000      C  CALL SSORT
000083    000      C  2000  CONTINUE
000084    000      C  2000  CONTINUE
000085    000      C  2000  CONTINUE
000086    000      C  READ (ATLTFIL,2,END=2100)  ATLTAU
000087    000      C  2100  READ (ATLTFIL,8,END=2200)  ATLTAB
000088    000      C  2200  READ (L0FILE,2,END=2300)  LOTAB
000089    000      C  2300  READ (MPFILE,8,END=2400)  MPTAB
000090    000      C  2400  CALL SRRET (MRREC,DUMMY,$2500)
000091    000      C  DECODE (150,3,MRREC)  MRTAB
000092    000      C  2500  CONTINUE
000093    000      C  *** MERGE THE SIX INPUT FILES TO PRODUCE THE OUTPUT FILE ***
000094    000      C  2400  CALL SRRET (MRREC,DUMMY,$2500)
000095    000      C  DECODE (150,3,MRREC)  MRTAB
000096    000      C  2500  CONTINUE
000097    000      C  2500  CONTINUE
000098    000      C  *** MERGE THE SIX INPUT FILES TO PRODUCE THE OUTPUT FILE ***
000099    000      C
000100    000      C  3100  IF (NEXT .NE. FAS)  GOTO 3100
000101    000      C  THEN  GET NEXT FAS RECORD
000102    000      C  LUIC = FASVIC
000103    000      C  READ (FASFIL,END=3600)  FASREC
000104    000      C  DECODE (312,1,FASREC)  FASTAB
000105    000      C  END=IF
000106    000      C  3100  CONTINUE
000107    000      C  IF (NEXT.EQ.NOT .AND. MUIC.EQ.-1)  GOTO 3999

```

```

000111      000      COUNT = COUNT + 1
000114      000      C
000115      000      C    *** COMPARE ALT=TH (UIC) WITH FAS (UIC) ***
000116      000      C
000117      000      IF (ALTUIC *NE* FASUIC) GOTO 3200
000118      000      THEN
000119      000      PROCESS ONE EACH ALT=TH WITH THE CURRENT FAS=REC
000120      000      TATL = TATL + 1
000121      000      ROBO = ALTTAB(2)
000122      000      AUTHB = FASTAB(45)
000123      000      AUTH9A = BLANK
000124      000      AUTHBD = ALTTAB(5)
000125      000      ENCODE (2,102,AUTHB) BLANK * ALTTAB(3)
000126      000      AUTH13 = BLANK
000127      000      AUTH47 = BLANK
000128      000      NEXT = FAS
000129      000      IF (MOD(COUNT,50) *EQ* 0) CALL PRTFAS (COUNT,1,FASTAB)
000130      000      ENCODE (312,1,FASTAB)
000131      000      WRITE (FILE1) FASTAB
000132      000      READ (ALTFIL,2,END=3199) ALTTAB
000133      000      END-IF
000134      000      GOTO 3990
000135      000      3199 ALTUIC = -1
000136      000      GOTO 3990
000137      000      C    *** COMPARE ABOVE-THE-LINE (UIC) WITH FAS (UIC) ***
000138      000      THEN
000139      000      3200 IF (ALTUIC *NE* FASUIC) GOTO 3400
000140      000      THEN
000141      000      C
000142      000      CHECK FOR ALT=OVERAGE
000143      000      IF (ATLFLG *NE* 1) GOTO 3300
000144      000      THEN
000145      000      C
000146      000      TREAT THIS RECORD AS AN OVERAGE
000147      000      TATLOV = TATLOV + 1
000148      000      AUTH13 = ZERO
000149      000      AUTH47 = ZERO
000150      000      AUTHB = ZERO
000151      000      AUTH9A = NINES
000152      000      AUTHBD = NINES
000153      000      AUTHE = ZERO
000154      000      IF (MOD(COUNT,50) *EQ* 0) CALL PRTFAS (COUNT,2,FASTAB)
000155      000      ELSE
000156      000      GOTO 3350
000157      000      THEN
000158      000      PROCESS ONE EACH ATL WITH CURRENT FAS REC
000159      000      TATL = TATL + 1
000160      000      ROBO = ALTTAB(3)
000161      000      AUTH13 = BLANK
000162      000      AUTH47 = ONE
000163      000      AUTH9A = ALTAB(5)
000164      000      AUTHBD = ALTAB(6)
000165      000      LRE = ONE
000166      000      IF (LFLGALT *NE* YES) GOTO 3345
000167      000      AUTHB = FASTAB(45)
000168      000      AUTH9A = BLANK
000169      000      LRE = BLANK
CONTINUE

```

```

000170    000      IF (MOD(COUNT,50) *EQ* 0) CALL PRTFAS (COUNT,3,FASTAB)
000171    000      ENDF-IF
000172    000      NEXT = FAS
000173    000      3350      ENCODE (312,1,FASREC) FASTAB
000174    000      WRITE (FILEF) FASREC
000175    000      READ (ATLFIL,8,END=3499) ATLTAB
000176    000      C      ENDF-IF
000177    000      C      END-IF
000178    000      GOT0 3980
000179    000      3399      ATLUIC = -1
000180    000      GOT0 3980
000181    000      C      *** COMPARE LOCKOUT (UIC) WITH FAS (UIC) ***
000182    000      C      BY PASS THIS RECORD
000183    000      C      TYPAS = TBYPAS + 1
000184    000      3400      IF (LOUIC *NE* FASUIC) GOT0 3500
000185    000      C      THEN
000186    000      C      CHECK LOCKOUT TYPE
000187    000      C      IF (LOTYPE *NE* COMPU) GOT0 3420
000188    000      C      THEN
000189    000      C      ELSE
000190    000      3440      PROCESS ONE EACH LUCKOUT REC WITH CURRENT FAS REC
000191    000      C      TLKOUT = TLKOUT + 1
000192    000      C      ROBCO = LOTAB(2)
000193    000      C      AUTHB = X
000194    000      C      AUTH13 = BLANK
000195    000      3420      AUTH47 = BLANK
000196    000      C      AUTH9A = BLANK
000197    000      C      AUTHBD = BLANK
000198    000      C      AUTH13 = BLANK
000199    000      C      AUTH47 = BLANK
000200    000      C      AUTH9A = BLANK
000201    000      C      AUTHBD = BLANK
000202    000      C      AUTHE = BLANK
000203    000      C      IF (MOD(COUNT,50) *EQ* 0) CALL PRTFAS (COUNT,4,FASTAB)
000204    000      3499      ENCODE (312,1,FASREC) FASTAB
000205    000      WRITE (FILEF) FASREC
000206    000      C      END-IF
000207    000      3440      CONTINUE
000208    000      C      END-IF
000209    000      NEXT = FAS
000210    000      READ (LUFIL,2,END=3499) LOTAB
000211    000      GOT0 3970
000212    000      3499      LOUIC = "1"
000213    000      C      *** COMPARE HAND-PLAYED (UIC) WITH FAS (UIC) ***
000214    000      C      BY PASS THIS RECORD
000215    000      C      TYPAS = TBYPAS + 1
000216    000      C      ROBCO = LOTAB(3)
000217    000      3500      PROCESS ONE EACH HAND-PLAYED UNIT WITH CURRENT FAS REC
000218    000      C      THP = THP + 1
000219    000      C      AUTHB = ONE
000220    000      C      AUTHBD = HPTAB(6)
000221    000      C      DECODE (3,4,HPTAB(5)) RUD
000222    000      4 FORMAT (13)
000223    000      5 FORMAT (J2)
000224    000      C      END-IF
000225    000      C      END-IF

```

```

000227    000      CALL GETTP (RUD,TIMEPO)
000228    000      ENCODE (2,5,AUTH4A) TIMEPO
000229    000      ENCODE (2,102,AUTH4) BLANK, ONE
000230    000      AUTH13 = BLANK
000231    000      AUTH47 = BLANK
000232    000      IF (MOD(COUNT,50) *EQ* 0) CALL PRTFAS (COUNT,6,FASTAB)
000233    000      ENCODE (312,1,FASREC) FASTAB
000234    000      WRITE (FILEF) FASREC
000235    000      NEXT = FAS
000236    000      READ (HPFILE,8,END=3699) MPTAB
000237    000      C      END=IF
000238    000      GOT0 3960
000239    000      3599  MPLIC = -1
000240    000      GOT0 3960
000241    000      C      *** CHECK FOR NOTIATIONAL FROM MRFILE ***
000242    000      C      PROCESSED ONE EACH NOTIATIONAL UNIT
000243    000      3600  IF (MPLIC *EQ* FASUIC) GOT0 3650
000244    000      C      THEN
000245    000      C      PROCESS ONE EACH NOTIATIONAL UNIT
000246    000      C      IF (MRFLAG *NE* '0') GOT0 3995
000247    000      C      TSHORT = TSHORT + 1
000248    000      C      NEXT = NOT
000249    000      C      MRTAB(29) = BLANK
000250    000      C      IF (MOD(COUNT,50) *EQ* 0) CALL PRTFAS (COUNT,7,NUTTAB)
000251    000      C      i = 1
000252    000      C      DOWNHILE (I *LE* 44)
000253    000      C
000254    000      C
000255    000      C
000256    000      3620  IF (I *GT* 44) GOT0 3640
000257    000      C      K = NINDEX(1)
000258    000      C      NOTTAB(K) = MRTAB(1)
000259    000      C      I = I + 1
000260    000      C      GOTU 3620
000261    000      C      END=DO
000262    000      C
000263    000      3640  ENCODE (2,102,NOTTAB(14)) NOTTAB(14), ONE
000264    000      C      NOTTAB(82) = BLANK
000265    000      C      ENCODE (312,1,NOTREC) NOTTAB
000266    000      C      WRITE (FILEF) NOTREC
000267    000      C      GOTU 3700
000268    000      C      ELSE THIS UNIT IS EITHER A MATCH-REC UNIT OR AN OVERAGE
000269    000      C      3650  IF (MRFLAG *NE* '1') GOTU 3660
000270    000      C      THEN PROCESS ONE EACH MATCH-REC WITH CURRENT FAS=REC
000271    000      C      TMATCH = TMATCH + 1
000272    000      C      ROBC0 = MRTAB(22)
000273    000      C      AUTH13 = MRTAB(17)
000274    000      C      AUTH47 = MRTAB(8)
000275    000      C      AUTHB = MRTAB(19)
000276    000      C      AUTH9A = MRTAB(10)
000277    000      C      AUTHBD = MRTAB(11)
000278    000      C      AUTHBE = MRTAB(12,AUTHE) MRTAB(12), ONE
000279    000      C      IF (MOD(COUNT,50) *EQ* 0) CALL PRTFAS (COUNT,8,FASTAB)
000280    000      C      GOTU 3680
000281    000      C
000282    000      C
000283    000      C      ELSE

```

```

PROCESS ONE EACH OVERAGE WITH CURRENT FAS REC

000284      000      C      3000
000285      000      C      3000
000286      000      C      3000
000287      000      C      3000
000288      000      C      3000
000289      000      C      3000
000290      000      C      3000
000291      000      C      3000
000292      000      C      3000
000293      000      C      3000
000294      000      C      3000
000295      000      C      3000
000296      000      C      3000
000297      000      C      3000
000298      000      C      3000
000299      000      C      3700  CONTINUE
000300      000      C      CALL SRKET (MRREC,CDUMMY,$3799)
000301      000      C      DECODE (1150,3,MRREC) MRTAB
000302      000      C      GOTO 395U
000303      000      C      37999  MULIC = -1
000304      000      C
000305      000      C
000306      000      C      395U  CONTINUE
000307      000      C
000308      000      C
000309      000      C      396U  CONTINUE
000310      000      C
000311      000      C
000312      000      C      397D  CONTINUE
000313      000      C
000314      000      C
000315      000      C      398D  CONTINUE
000316      000      C
000317      000      C      399U  CONTINUE
000318      000      C      GOTO 3000
000319      000      C
000320      000      C      END-DO
000321      000      C
000322      000      C      3995  WRITE (6,99) LUIC, FASUIC
000323      000      C      99  FORMAT (10,0,0) LUIC*,A6,* ,FASUIC = ' ,A6,' , WAS NOT FOUND
000324      000      C      CALL PRIFAS(-1,9,FASTAB)
000325      000      C
000326      000      C      TOTAL = TALIT+TATLOV+TAIL+TBYPAS+TLKOUT+TSHORT+TMATCH+TOK
000327      000      C      WRITE (6,101) TALIT,TATLOV,TAI1,TBYPAS,TLKOUT,TSHORT,TOK
000328      000      C      TMATCH,TOVER,TOTAL
000329      000      C      101  FORMAT (10,0,0) TALIT= ,16,0, TATLOV= ,16,0, TAII= ,16,0, TBYPAS= ,16,
000330      000      C      * , TLKOUT= ,16,/ , THP= ,16,0, TSHORT= ,16,0, TMATCH= ,16,
000331      000      C      * , TOVER= ,16,0, TOTAL = ,16,/ , * , LAYIN FINI ****)
000332      000      C      102  FORMAT (2A1)
000333      000      C      8   FORMAT (9X,A1,6X,A6,33X,A3,17X,A1,A2,A3,6X,A6,A3)
000334      000      C
000335      000      C
000336      000      C
000337      000      C
000338      000      C
000339      000      C
000340      000      C

```

UNCLASSIFIED//
FMA PROGRAM LAYIN

DATE 08/06/06 PAGE 57

```
000341    000      STATUS = CSF (2,16BRKPT 16+)
000342    000      STOP
000343    000      END
```

END EDITION

```

      FSLAY.PRTFAS
ELTOUT RLIB70 08/16-07:40:43-(40)
      P   R   T   F   A   S
000001 001 C
000002 001 C
000003 001 C
000004 004 C
000005 001 C
000006 001 C
000007 004 C
000008 001 C
000009 001 C
000010 001 C
000011 001 C
000012 001 C
000013 001 C
000014 001 C
000015 001 C
000016 001 C
000017 001 C
000018 001 C
000019 003 C
000020 001 C
000021 002 C
000022 002 C
000023 001 C
000024 001 C
000025 001 C
000026 002 C
000027 001 C
000028 001 C
      SUBROUTINE PRTFAS ( I,J,FASTAB )
      IMPLICIT INTEGER (A - Z)
      INTEGER FASTAB(99)
      INTEGER REASON(19)
      DATA REASON/'ALT-TM','ATL-OV','ATL ','LO-BYP',
     *          'LOCKOUT','MPUNIT','NOTION','MATCH','OVERAG'/
      •
      •
      •
      WRITE (18,1) REASON(I), (FASTAB(K),K=1,34)
      WRITE (18,2)
      WRITE (18,3)
      WRITE (18,4)
      WRITE (18,5)
      WRITE (18,6)
      WRITE (18,7)
      RETURN
      1 FORMAT (11H0,A6,1X,Z1A6,1X),A1,1X,A6,1X,A4,1X,A2,1
      •
      •
      •
      A3,1X,A4,1X,A1,1X,A2,1X,A6,1X,A2,1X),A
      A3,1X,A2,1X,A3,1X,Z1A2,1X),S(A1,1X,A3,1X,A5,1X,A
      2 FORMAT (11H ,3XA2,1X,A3,1X,XA3,1X,A2,1X,A6,1X,A3,1X,A
      •
      •
      A1,1X,A3,1X,A1,1X,A2,1X,A3,1X,S(A1,1X,A3,1X,A5,1X,A
      2(A2,1X),4(A1,1X),A5,1X,A2,1X,A6,1X,A3,1X,A5,1X,A6,1X
      •
      •
      A1,1X,A5)
      3 FORMAT (11H ,3XA4(A1,1X),A5,1X,A4,1X,A6,1X,A3,1X,A4,1X,A
      4 FORMAT (11H ,16B2X,15(AS1X),A4,1X,A1)
END

```

ENCL 2

XIV. THE INFLUENCE OF THE ENVIRONMENT

卷之三

SISTEMA PROGRAM LAYIN

• 0313155413N108

DATE 08/16/76 PAGE 57

RELEASER: 24MONTAGNEBINCOPY-SUM
 ELTOUT LIB70 08/16-07:40:45-(10.)
 IDENTIFICATION DIVISION.
 PROGRAM-ID. BINCOPY-A.
 AUTHOR. E MONTAGNE.
 DATE WRITTEN. 17 JULY 1975.
 REMARKS. THIS PROGRAM IS PART OF A SERIES OF NEW CAMP
 PROGRAMS. IT CALLS A FORTRAN SUBROUTINE TO READ AN
 UNFORMATTED BINARY FILE (BIFAS) INTO A COBOL FILE CALLED FASBIN307.
 BIFAS IS CREATED BY KELLER TO CONTAIN RESULTS OF A MATCH OF
 CONWAY'S OUTPUT AGAINST THE FASTALS OUTPUT.
 FASBIN307 IS THE FAS FILE (307 CHARACTERS PER RECORD, 24 RECORDS
 PER BLOCK) WHICH IS THEN SORTED AND OUTPUT TO TAPE (FAS-OUT FILE).
 SELECTED FIELDS ARE LISTED TO
 ASSURE CORRECTNESS PRIOR TO DELIVERY OF THE TAPE.
 REVISED 24 JULY TO REPLACE BLANKS WITH ZERO
 IN SELECTED FIELDS (AUTHR ESCON EGCON).
 REVISED 15 AUG FOR TOTAL FORCE.

ENVIRONMENT DIVISION.
 CONFIGURATION SECTION.
 SOURCE-COMPUTER. UNIVAC-1106.
 OBJECT-COMPUTER. UNIVAC-1106.
 INPUT-OUTPUT SECTION.

FILE-CONTROL.
 SELECT PRINT-FILE ASSIGN TO PRINTER.
 SELECT SORT-ING ASSIGN TO MASS-STORAGE XA.
 SELECT FAS-OUT ASSIGN TO UNISERVO TAPE-FILE.
 SELECT ALT-PRINT-FILE ASSIGN TO PRINTER 24FAS-PRINT.

DATA DIVISION.
 FILE SECTION.
 SD SORT-ING.
 01 SORT-REC.
 02 FILLER PICTURE XX.
 02 COMPO PICTURE 9.
 02 VICCC PICTURE X(6).
 02 EDATE PICTURE 9(6).
 02 FILLER PICTURE X(13).
 02 AUTHR PICTURE X(15).
 02 FILLER PICTURE X(31).
 02 EGCON PICTURE X.
 02 ESCON PICTURE X.

FD ALT-PRINT-FILE LABEL RECORD OMITTED.
 FD FAS-OUT BLOCK 24 RECORDS LABEL RECORD OMITTED RECORDING
 MODE IS 1.

01 FAS-REC.
 02 FILLER PICTURE X.
 02 FICD PICTURE X.
 02 CUMPO PICTURE X.
 02 VICCC PICTURE X(6).
 02 EDATE PICTURE 9(6).
 02 FILLER PICTURE X(13).
 02 AUTHR PICTURE X.
 03 UIN PIC XXX.
 03 FLAGS PIC XXXX.

000043 006 01
 000044 006 FD
 000045 006 02
 000046 006 01
 000047 006 02
 000048 006 02
 000049 006 02
 000050 006 02
 000051 006 02
 000052 006 02
 000053 006 02
 000054 006 03
 000055 006 03

```

000056    006      03      MATCH-CODE   PIC X.
000057    006      03      TP      PIC XX.
000058    006      03      RDD      PIC XXX.
000059    006      03      LRE      PIC X.
000060    006      03      TH-CODE   PICTURE X.
000061    006      02      BRNCH    PIC XX.
000062    006      02      CARRS    PIC XX.
000063    006      02      FILLER   PIC X(23).
000064    006      02      DSMP     PIC XX.
000065    006      02      FILLER   PIC XX.
000066    006      02      EGCON    PIC X.
000067    006      02      ESCON    PIC X.
000068    006      02      FILLER   PIC XXX.
000069    006      02      FPLAN    PIC XXX.
000070    006      02      JCSTY    PIC X(5).
000071    006      02      LOCUCU  PIC X(3).
000072    006      02      FILLER   PIC X(39).
000073    006      02      ROBCO    PIC XXX.
000074    006      02      FILLER   PIC X.
000075    006      02      SRC70   PIC X(13).
000076    006      02      FILLER   PIC X(7).
000077    006      02      FILLER   PIC X(17).
000078    006      02      STNRM   PIC X(9).
000079    006      02      FILLER   PIC X(17).
000080    006      02      TPSNA   PIC X(5).
000081    006      02      FILLER   PIC X(9).
000082    006      02      UNHBR   PIC X(4).
000083    006      02      PECOD   PIC X(6).
000084    006      02      ULCCC   PIC X(3).
000085    006      02      UNIDS=18 PIC X(18).
000086    006      02      FILLER   PIC X(3).
000087    006      02      AUOFF   PIC X(5).
000088    006      02      AUOLF   PIC X(5).
000089    006      02      AUENL   PIC X(5).
000090    006      02      AUAGH   PIC X(5).
000091    006      02      AUCJY   PIC X(5).
000092    006      02      FILLER   PIC X(15).
000093    006      02      OPAGR   PIC X(5).
000094    006      02      FILLER   PIC X(5).
000095    006      02      STOFF   PIC X(5).
000096    006      02      STWOF   PIC X(5).
000097    006      02      STENL   PIC X(5).
000098    006      02      STAGH   PIC 9(5).
000099    006      02      STCIV   PIC X(5).
000100    006      02      FILLER   PIC X(5).
000101    006      01      PRINT=FILE LABEL RECORD OMITTED.
000102    006      01      LINE=REC3 PIC X(132).
000103    006      01      WORKING-STORAGE SECTION.
000104    006      77      K      PIC 99 USAGE IS COMPUTATIONAL.
000105    006      77      J      PIC 99 USAGE IS COMPUTATIONAL.
000106    006      77      I      PIC 99 USAGE IS COMPUTATIONAL.
000107    006      77      TIME-PERIOD PIC 99.
000108    006      77      COMPO-CODE PIC X.
000109    006      77      COMPO-CODE=1 PIC 9.
000110    006      01      STAGR=TABLE.
000111    006      02      STAGR=TP OCCURS 10 TIMES.
000112    006      03      STAGR-SUM OCCURS 9 TIMES PIC 9999999.
000112    006      01      SUM=TABLE.

```

••UNCLASSIFIED••

```

000113    006    02 CUM-STAGR-TP OCCURS 10 TIMES.
000114    006    03 CUM-STAGR-SUM OCCURS 9 TIMES PIC 9(7).
000115    006    03 COUNT-REC PICTURE 9(5) USAGE IS COMPUTATIONAL VALUE ZERO.
000116    006    77 LINE-NR   PIC 99 USAGE IS COMPUTATIONAL.
000117    006    77 LENO-OF-FILE PICTURE 9 VALUE 2.
000118    006    77 FASBIN-REC=312 PICTURE X(312).
000119    006    01 LINE-REC VALUE SPACES.
000120    006    02 SEQNR PIC 9(5).
000121    006    02 FILLER PIC X.
000122    006    02 COMPO PIC X.
000123    006    02 FILLER PIC X(5).
000124    006    02 UICCC PIC X(6).
000125    006    02 FILLER PIC X.
000126    006    02 EDATE PIC 9(6).
000127    006    02 FILLER PIC X.
000128    006    02 SRCTO PIC X(13).
000129    006    02 FILLER PIC X.
000130    006    02 TPSNA PIC X(5).
000131    006    02 FILLER PIC X.
000132    006    02 FPLAN PIC X(3).
000133    006    02 FILLER PIC X(5).
000134    006    02 CARSS PIC XX.
000135    006    02 FILLER PIC X.
000136    006    02 UNMBR PIC X(4).
000137    006    02 FILLER PIC XX.
000138    006    02 BRNCH PIC X(2).
000139    006    02 FILLER PIC X.
000140    006    02 ULCCC PIC X(3).
000141    006    02 FILLER PIC X.
000142    006    02 UNTDS=18 PIC X(18).
000143    006    02 FILLER PIC X.
000144    006    02 STNM PIC X(9).
000145    006    02 FILLER PIC X.
000146    006    02 LOCNO PIC X(3).
000147    006    02 FILLER PIC XXX.
000148    006    02 AUTHR.
000149    006    03 VIN PIC XXX.
000150    006    03 FILLER PIC X.
000151    006    03 FLAGS PIC XXXX.
000152    006    03 FILLER PIC X.
000153    006    03 MATCH-CODE PIC X.
000154    006    03 FILLER PIC X.
000155    006    03 TP PIC XX.
000156    006    03 FILLER PIC X.
000157    006    03 RDD PIC XXX.
000158    006    03 FILLER PIC X.
000159    006    03 LRE PIC X.
000160    006    03 FILLER PIC X.
000161    006    03 TH-CODE PIC X.
000162    006    02 FILLER PIC X.
000163    006    02 FILLER PIC XX.
000164    006    02 FILLER PIC XXX.
000165    006    01 LINE-REC=2 VALUE SPACES.
000166    006    02 FILLER PIC X(11).
000167    006    02 USCMP PIC XX.
000168    006    02 FILLER PIC X(4).
000169    006    02 JCSTY PIC X(5).

```

••UNCLASSIFIED••

••UNCLASSIFIED••

```

000170    006      02 FILLER          PIC X.
000171    006      02 NUBCO          PIC XXX.
000172    006      02 FILLER          PIC XXX.
000173    006      02 PECD             PIC X(6).
000174    006      02 FILLER          PIC X.
000175    006      02 STAGR             PIC X(5).
000176    006      02 FILLER          PIC X(91).
000177    006      01 FASBIN=REC=307.
000178    006      02 FILLER          PICTURE X.
000179    006      02 FICODE          PICTURE X.
000180    006      02 COMPO            PICTURE 9.
000181    006      02 UICC              PICTURE X(6).
000182    006      02 EDATE            PICTURE 9(6).
000183    006      02 FILLER          PICTURE X(13).
000184    006      02 AUTHR            PIC X(15).
000185    006      02 FILLER          PICTURE X(31).
000186    006      02 EGCON            PICTURE X.
000187    006      02 ESCON            PICTURE X.
000188    006      02 FILLER          PICTURE X(151).
000189    006      02 STRENGTHS        PIC X(75).
000190    006      02 FILLER          PIC X(5).
000191    006      01 HEADER=1.
000192    006      02 FILLER          PIC X(89) VALUE *SEQNR CUMPU UICC EDATE SRCTU -
000193    006      * - = TPSNA FPLAN CA UNMBR BR ULC UNITS - - - - .
000194    006      02 FILLER          PIC X(35) VALUE 'STNRM LOCCO AUTHR - - - -
000195    006      * - = .
000196    006      02 FILLER          PIC X(8) VALUE SPACES.
000197    006      01 HEADER=2.
000198    006      02 FILLER          PIC X(44) VALUE ?
000199    006      *PECD STAGR*.           DSC JCSTY RUBCO
000200    006      02 FILLER          PIC X(88) VALUE SPACES.
000201    006      PROCEDURE DIVISION.
000202    006      OPEN=UP SECTION.
000203    007      OPEN OUTPUT FAST-OUT PRINT=FILE ALT=PRINT=FILE.
000204    006      FAST-SORT SECTION.
000205    006      SORT SORTING ON ASCENDING KEY CUMPU UICC EDATE
000206    006      INPUT PROCEDURE IS ENTER=FORTRAN
000207    006      OUTPUT PROCEDURE IS WRITE-TAPE.
000208    006      GO TO END-RUN.
000209    006      ENTER FORTRAN READBU SUBROUTINE REFERENCING
000210    006      FASBIN=REC=312 IEND=OF=FILE.
000211    006      IF IEND=OF=FILE = 4 GO TO CLOSE=307.
000212    006      ADD 1 TO COUNT=REC.
000213    006      MOVE FASBIN=REC=312 TO FASBIN=REC=307.
000214    006      MOVE RECORDS, TO SRCTU IN LINE=REC.
000215    006      EXAMINE STRINGS REPLACING ALL SPACES BY ZERO.
000216    006      RELEASE SORT=REC FROM FASBIN=REC=307.
000217    006      GO TO ENTER=FORTRAN.
000218    006      CLOSE=307.
000219    006      MOVE SPACES TO LINE=REC MOVE COUNT=REC TU SEQNR.
000220    006      MOVE RECORDS, TO SRCTU IN LINE=REC.
000221    006      WRITE LINE=REC=3 FROM LINE=REC.
000222    006      MOVE ZERO TO SEQNR.
000223    006      WRITE-TAPE SECTION.
000224    008      PERFORM SET=ZERO VARYING J FROM 1 BY 1 UNTIL J = 11.
000225    006      SET=HEADER.
000226    006      MOVE ZERO TO LINE=NR.

```

••UNCLASSIFIED••

••UNCLASSIFIED••

```

000227    007      WRITE ALT-REC FROM HEADER-1 AFTER ADVANCING TOP-OF-PAGE.
000228    007      WRITE ALT-REC FROM HEADER-2 MOVE SPACES TO LINE-REC-3.
000229    007      WRITE ALT-REC.
000230    006      WRITE-TAPE-LINES.
000231    006      RETURN SORT-ING RECORD INTO FAS-REC AT END GO TO PARA-1.
000232    009      IF TP IN FAS-REC NOT NUMERIC OR COMPO IN FAS-REC
000233    009      NOT NUMERIC GO TO SKIP-COMP.
000234    006      MOVE TP IN FAS-REC TO TIME-PERIOD.
000235    009      IF TIME-PERIOD < 1 UK > 6 GO TO SKIP-COMP.
000236    009      MOVE COMPO IN FAS-REC TO COMPO-CODE-1.
000237    006      ADD STAGR IN FAS-REC TO
000238    006      STAGR-SUM(TIME-PERIOD, CUMPO-CODE-1).
000239    009      SKIP-COMP.
000240    006      ADD I TO SEQINK.
000241    006      MOVE CORRESPONDING FAS-REC TO LINE-REC.
000242    007      WRITE ALT-REC FROM LINE-REC.
000243    006      MOVE CORRESPONDING FAS-REC TO LINE-REC-2.
000244    007      WRITE ALT-REC FROM LINE-REC-2 WRITE FAS-REC.
000245    006      ADD 2 TO LINE-NR.
000246    006      IF LINE-NR = 54 GO TO SET-HEADERK.
000247    006      GO TO WRITE-TAPE-LINES.
000248    006      PARA-1.
000249    006      EXIT.
000250    006      END-RUN SECTION.
000251    006      PERFORM COMPUTE-SUM VARYING J FROM 1 BY 1 UNTIL
000252    006      I = 11.
000253    006      PERFORM COMP-CUM-SUM VARYING J FROM 2 BY 1
000254    006      UNTIL J = 11.
000255    006      CLOSE PRINT-FILE.
000256    007      CLOSE FAS-OUT ALT-PRINT-FILE.
000257    006      STOP RUN.
000258    006      SET-ZERO.
000259    006      PERFORM SET-I VARYING I FROM 1 BY 1 UNTIL I = 10.
000260    006      SET-I.
000261    006      COMPUTE STAGR-SUM(J, 1) = 0.
000262    006      COMPUTE CUM-STAGR-SUM(J, 1) = 0.
000263    006      COMPUTE-SUM.
000264    009      COMPUTE STAGR-SUM(I, 6) = STAGR-SUM(I, 2) +
000265    009      STAGR-SUM(I, 3).
000266    009      COMPUTE STAGR-SUM(I, 7) = STAGR-SUM(I, 6) +
000267    009      STAGR-SUM(I, 4).
000268    009      COMPUTE STAGR-SUM(I, 8) = STAGR-SUM(I, 1) +
000269    006      STAGR-SUM(I, 6).
000270    009      COMPUTE STAGR-SUM(I, 9) = STAGR-SUM(I, 7) +
000271    009      STAGR-SUM(I, 1).
000272    006      MOVE STAGR-TP(I) TO LINE-REC-3 WRITE LINE-REC-3.
000273    006      COMP-CUM-SUM.
000274    006      PERFORM COMP-CUM-SUM-I VARYING I FROM 1 BY 1 UNTIL
000275    006      I = 10.
000276    006      MOVE CUM-STAGR-TP(I) TO LINE-REC-3 WRITE
000277    006      LINE-REC-3.
000278    006      COMP-CUM-SUM-I.
000279    006      COMPUTE K = J - 1 COMPUTE CUM-STAGR-SUM(J, 1) =
000280    010      CUM-STAGR-SUM(K, 1) + STAGR-SUM(K, 1).

END ELT.
```

```

@ELT.L 24MONTAIGNE READBIN
ELT007 RL1B70 08/16/07:40:48-(29.)
000001    025      SUBROUTINE READBIN (FASBIN,IEND)
000002        025      DATA IFILE/2/ICOUNT/0/KCOUNT/D/LCOUNT/U/
000003        025      DIMENSION FASBIN(52)
000004    029      C   THIS SUBROUTINE READS A BINARY UNFORMATTED FORTRAN FILE.
000005    029      C   THE FILE CONTAINS FAS RECORDS WITH MATCH RESULTS.
000006    025      C   RECORDS ARE 52 WORDS (312 CHARACTERS). READBIN IS MEANT TO
000007    025      C   BE CALLED BY A COBOL PROGRAM.
000008    025      C   DO STATEMENT FOR DEBUG ONLY.
000009    025      C   DO 200 I = 1, 50
000010    029      200     READ (IFILE,END=30) FASBIN
000011    025      KCOUNT = KCOUNT + 1
000012    025      120     RETURN
000013    025      199     FORMAT (10X,15,5X,15)
000014    025      30      IEND = 1H4
000015    025      PRINT 199, KCOUNT
000016    025      RETURN
000017    025      END
END ELT.

```

SHDG MRG PRE-PROCESSOR PROGRAM SORTARLOC ••UNCLASSIFIED•• L+D

••UNCLASSIFIED••

WELT, 24MONTAGNE•ARLOCDSORT
 ELT007 RLIB70 08/16-07:40:49 (1.)
 IDENTIFICATION DIVISION.
 PROGRAM-ID. ARLOCDSORT.
 AUTHOR. E MONTAGNE.
 DATE-WRITTEN. 9 JULY 1975.
 REMARKS. INPUT IS ARLOC TAPE FROM AOC. TAPE CONTENTS ARE
 PRINTED, THEN SORTED BY LOCNA, AREA, AND TLAC. THE SORTED
 FILE IS PRINTED AND OUTPUT TO TAPE.

ENVIRONMENT DIVISION.
 CONFIGURATION SECTION.
 SOURCE-COMPUTER. UNIVAC-1108.
 OBJECT-COMPUTER. UNIVAC-1108.
 INPUT-OUTPUT SECTION.
 FILE-CONTROL.

000009 000 INPUT ASSIGN TO UNISERVO TAPE-SORT.
 000010 000 SELECT SORT-ING ASSIGN TO MASS-STORAGE XA.
 000011 000 SELECT PRINT-FILE ASSIGN TO PRINTER.

000012 000 SELECT TAPE-FILE ASSIGN TO UNISERVO TAPE-FILE.

000013 000 DATA DIVISION.
 000014 000 FILE SECTION.
 000015 000 SUB SORT-ING.
 000016 000 D1 SORTGEOREC.

000017 000 D2 AREA PICTURE X(3).
 000018 000 D2 FILLER PICTURE X(5).
 000019 000 D2 ARLOC PICTURE X(5).
 000020 000 D2 FILLER PICTURE X(4).
 000021 000 D2 GELOC PICTURE X(4).
 000022 000 D2 FILLER PICTURE X(5).
 000023 000 D2 LOCNA PICTURE X(9).
 000024 000 D2 FILLER PICTURE X(4).
 000025 000 D2 LOCNM PICTURE X(17).
 000026 000 D2 GRID PICTURE X(8).
 000027 000 D2 TLAC PICTURE X(3).
 000028 000 D2 FILLER PICTURE X(10).
 000029 000 D2 FCTCD PICTURE X(18).
 000030 000 D2 FILLER PICTURE X(2).
 000031 000 D2 GRID PICTURE X(11).
 000032 000 D2 FILLER PICTURE X(3).
 000033 000 D2 FILLER PICTURE X(10).
 000034 000 D2 FCTCD PICTURE X(18).
 000035 000 D2 FILLER PICTURE X(2).
 000036 000 D2 GRID PICTURE X(11).
 000037 000 D2 FILLER PICTURE X(3).
 000038 000 D2 LFLLC PICTURE X(15).
 000039 000 D2 FILLER PICTURE X(2).
 000040 000 D2 STAT PICTURE X(1).
 000041 000 D2 FILLER PICTURE X(3).
 000042 000 FD AFTER-SORT LABEL RECORD OMITTED.
 000043 000 D1 SORTED-REC PICTURE X(132).
 000044 000 FD PRINT-FILE LABEL RECORD OMITTED.
 000045 000 D1 PRINT-LINE PICTURE X(132).
 000046 000 FD TAPE-FILE LABEL RECORD OMITTED RECORDING MODE IS 1.
 000047 000 D1 TAPE-REC PICTURE X(132).
 000048 000 WORKING-STORAGE SECTION.
 000049 000 D1 HEADER-LINE.
 000050 000 D2 FILLER PICTURE X(26) VALUE 'AREA' ARLOC GELUC ..
 000051 000 D2 FILLER PICTURE X(26) VALUE 'LOCNA' LOCNA ..
 000052 000 D2 FILLER PICTURE X(25) VALUE 'TLAC' TLAC ..
 000053 000 D2 FILLER PICTURE X(25) VALUE 'FCTCD' UGRID ..
 000054 000 D2 FILLER PICTURE X(26) VALUE 'LFLLC' LFLLC ..
 000055 000 D2 FILLER PICTURE X(14) VALUE 'STAT' ..

```

000050    000      01 TOP=HEADER.
000057    000      02 FILLER PICTURE X(55) VALUE SPACES.
000058    000      02 FILLER PICTURE X(23) VALUE "DA GEOGRAPHIC LOCATIONS".
000059    000      02 FILLER PICTURE X(41) VALUE SPACES.
000060    000      02 FILLER PICTURE X(51) VALUE PAGE*.
000061    000      02 PAGEN PICTURE Y49 VALUE 0.
000062    000      02 FILLER PICTURE X(51) VALUE SPACES.
000063    000      01 LAST=LINE.
000064    000      02 FILLER PICTURE X(24) VALUE * NUMBER OF RECORDS IS *.
000065    000      02 U=REC-COUNT PICTURE ZZZZZ.
000066    000      02 FILLER PICTURE X(103) VALUE SPACES.
000067    000      77 LINE-COUNT PICTURE 99.
000068    000      77 REC-COUNT PICTURE 99999 VALUE ZERO.
000069    000      PROCEDURE DIVISION.
000070    000      OPEN FILES.
000071    000      OPEN INPUT TAPE-FILE.
000072    000      OPEN OUTPUT PRINT-FILE.
000073    000      OPEN OUTPUT AFTER-SURT.
000074    000      A= SORT SECTION.
000075    000      SORT SORT-ING ON ASCENDING KEY LOCNA AREA TLAC
000076    000      INPUT PROCEDURE IS I=SORt
000077    000      OUTPUT PROCEDURE IS O=SORt.
000078    000      GO TO PRINT-SURT.
000079    000      I= SORT SECTION.
000080    000      SET=HEADER.
000081    000      ADD I TO PAGENR MOVE I TO LINE-COUNT.
000082    000      WRITE PRINT-LINE FROM TOP=HEADER AFTER ADVANCING
000083    000      TOP=OF=PAGE.
000084    000      MOVE SPACES TU PRINT-LINE WRITE PRINT-LINE.
000085    000      WRITE PRINT-LINE FROM HEADER-LINE.
000086    000      MOVE SPACES TO PRINT-LINE WRITE PRINT-LINE.
000087    000      READ=FILE.
000088    000      READ TAPE-FILE AT END GO TO END-I=SURT.
000089    000      ADD I TO REC-COUNT WRITE PRINT-LINE FROM TAPE=REC.
000090    000      RELEASE SORTGEOREC FROM TAPE=REC.
000091    000      IF LINE-COUNT EQUAL TO 53 GO TO SET=HEADER.
000092    000      ADD I TO LINE-COUNT GO TO READ=FILE.
000093    000      END-I=SURT.
000094    000      CLOSE TAPE-FILE MOVE REC-COUNT TO O=REC-COUNT.
000095    000      WRITE PRINT-LINE FROM LAST-LINE.
000096    000      O= SORT SECTION.
000097    000      RETURN SORT-ING RECORD INTO SORTED=REC AT END GO TO
000098    000      END-O=SORT.
000099    000      WRITE SORTED=REC GO TO O=SORT.
000100    000      END-O=SORT.
000101    000      CLOSE AFTER-SURT.
000102    000      PRINT-SORTED SECTION.
000103    000      OPEN INPUT AFTER-SORT.
000104    000      MOVE U TO PAGENR.
000105    001      MOVE 0 TO REC-COUNT.
000106    000      RESET=HEADER.
000107    000      ADD I TO PAGENR MOVE I TO LINE-COUNT.
000108    000      WRITE PRINT-LINE FROM TOP=HEADER AFTER ADVANCING
000109    000      TOP=OF=PAGE.
000110    000      WRITE PRINT-LINE FROM HEADER-LINE AFTER 2.
000111    000      MOVE SPACES TO PRINT-LINE WRITE PRINT-LINE.
000112    000      READ-SORTED=FILE.

```

```

000113    000      READ AFTER-SORT AT END GO TO END-RUN.
000114    000      ADD 1 TO REC-COUNT WRITE PRINT-LINE FROM SORTED-REC.
000115    000      IF LINE-COUNT EQUAL TO 53 GO TO RESET-HEADER.
000116    000      ADD 1 TO LINE-COUNT GO TO READ-SORTED-FILE.
000117    000      END-RUN.
000118    000      MOVE REC-COUNT TO O-REC-COUNT.
000119    000      WRITE PRINT-LINE FROM LAST-LINE.
000120    000      CLOSE AFTER-SORT PRINT-FILE.
000121    000      STOP RUN.

END ELT.

```

```

BETAL 24MONTAGNE-ARLOC=23
ELT007 RL1B70 06/16-07:40:51-(14)
000001   010      IDENTIFICATION DIVISION.
000002   010      PROGRAM-ID. ARLOC=23.
000003   010      AUTHOR. E MONTAGNE.
000004   010      DATE-WRITTEN. 12 SEPT 75.
000005   010      REMARKS. PROGRAM SORTS SELECTED FIELDS OF ARLOC FILE AND
000006   010      PUTS RESULTS IN FILE 24SORTARLOC.
000007   010      ENVIRONMENT DIVISION.
000008   010      CONFIGURATION SECTION.
000009   010      SOURCE=COMPUTER. UNIVAC=1108.
000010   010      OBJECT=COMPUTER. UNIVAC=1108.
000011   010      INPUT-OUTPUT SECTION.
000012   010      FILE-CONTROL.
000013   010      SELECT OUT-FILE ASSIGN TO PRINTER 24SORTARLOC.
000014   010      SELECT SORT-ING ASSIGN TO MASS-STORAGE XA.
000015   010      SELECT PRINT-FILE ASSIGN TO PRINTER.
000016   010      SELECT ARLOC-FILE ASSIGN TO UNISERVO ARLOC-FILE.
000017   010      DATA DIVISION.
000018   010      FILE SECTION.
000019   010      SD SORT-ING.
000020   010      SORTGEOREC.
000021   011      02 AREA-AREA PIC X(3).
000022   010      02 LOCNA PIC X(9).
000023   010      02 GELOC PIC X(4).
000024   010      02 ARLOC PIC X(5).
000025   014      02 SAVE-AREA-1 PIC X.
000026   010      02 TLAC PIC X(3).
000027   010      FD ARLOC-FILE LABEL RECORD OMITTED RECORDING MODE IS 1.
000028   010      01 ARLOC-REC.
000029   011      02 AREA-AREA PIC X(3).
000030   010      02 FILLER PIC X(5).
000031   010      02 ARLOC PIC X(5).
000032   010      02 FILLER PIC X(4).
000033   010      02 GELOC PIC X(4).
000034   010      02 FILLER PIC X(5).
000035   010      02 LOCNA PIC X(9).
000036   010      02 FILLER PIC X(4).
000037   010      02 LOCNH PIC X(17).
000038   010      02 FILLER PIC X(8).
000039   010      02 TLAC PIC X(3).
000040   010      02 FILLER PIC X(10).
000041   010      02 FCTCD PIC X(18).

```

```

000042    010      02 FILLER   PIC X(2) .
000043    010      02 UGRID   PIC X(11) .
000044    010      02 FILLER   PIC X(3) .
000045    010      02 LFLC    PIC X(15) .
000046    010      02 FILLER   PIC X(2) .
000047    010      02 STAT    PIC X(1) .
000048    010      02 FILLER   PIC X(3) .
000049    010      FD OUT-FILE LABEL RECORD OMITTED.
000050    010      01 OUT-REC .
000051    011      02 AREA=AREA  PIC X(3) .
000052    010      02 LOCNA   PIC X(9) .
000053    010      02 GELOC   PIC X(4) .
000054    010      02 ARLOC   PIC X(5) .
000055    011      02 SAVE=AREA=1 PIC X .
000056    010      FD PRINT-FILE LABEL RECORD OMITTED.
000057    010      01 PRINT-LINE PIC X(132) .
000058    010      WORKING-STORAGE SECTION.
000059    010      01 SORT=REC .
000060    011      02 AREA=AREA .
000061    011      03 AREA=1  PIC X .
000062    011      03 AREA=2=3 PIC XX .
000063    010      02 LOCNA   PIC X(9) .
000064    010      02 GELOC   PIC X(4) .
000065    010      02 ARLOC   PIC X(5) .
000066    014      02 SAVE=AREA=1 PIC X .
000067    014      02 TLAC    PIC X(3) .
000068    010      01 LAST-LINE .
000069    010      02 FILLER   PIC XX VALUE SPACES.
000070    010      02 U-REC-COUNT PIC ZZZZ .
000071    010      02 FILLER   PIC X(9) VALUE IS * RECORDS* .
000072    010      02 FILLER   PIC X(116) VALUE SPACES .
000073    010      01 TEMP-TABLE .
000074    010      02 OCCURS 6 TIMES .
000075    011      03 AREA=AREA  PIC X(3) .
000076    010      03 LOCNAME PIC X(9) .
000077    010      03 GELOC   PIC X(4) .
000078    010      03 ARLOC   PIC X(5) .
000079    012      03 SAVE=AREA=1 PIC X .
000080    014      03 TLACE   PIC X(3) .
000081    010      77 KAIN    PIC 9 USAGE IS COMPUTATIONAL VALUE ZERO .
000082    010      77 KCTY    PIC 9 USAGE IS COMPUTATIONAL VALUE ZERO .
000083    010      77 I      PIC 99 USAGE IS COMPUTATIONAL VALUE ZERO .
000084    010      77 J      PIC 99 USAGE IS COMPUTATIONAL .
000085    010      77 REC-COUNT PIC 99999 USAGE IS COMPUTATIONAL VALUE ZERO .
000086    010      PROCEDURE DIVISION .
000087    010      OPEN INPUT ARLOC-FILE OPEN OUTPUT OUT-FILE PRINT-FILE .
000088    010      A-SORT SECTION .
000089    011      SORT SORTING ON ASCENDING KEY AREA=AREA LOCNA .
000090    010      INPUT PROCEDURE IS I-SORT .
000091    010      OUTPUT PROCEDURE IS O-SORT .
000092    010      GO TO END-RUN .
000093    010      I-SORT SECTION .
000094    010      READ-FILE .
000095    010      READ ARLOC-FILE AT END GO TO END-I-SORT .
000096    010      ADD I TO REC-COUNT .
000097    010      MOVE CORRESPONDING ARLOC-REC TO SORT-REC .
000098    012      IF AREA=1 IN SORT-REC IS NUMERIC PERFORM

```

MRG PRE-PROCESSOR PROGRAM SORTARLOC •UNCLASSIFIED•

DATE 081676 PAGE 68

```

000099    012      SCRATCH=NUMERIC.
000100    010      RELEASE SORTGEOREC FROM SORT=REC.
000101    010      GO TO READ=FILE.
000102    012      SCRATCH=NUMERIC.
000103    013      MOVE AREA=I IN SORT=REC TO SAVE=AREA=I IN SORT=REC.
000104    012      MOVE SPACE TO AREA=I IN SORT=REC.
000105    010      END=I=SURT.
000106    010      MOVE REC=COUNT TO U=REC=COUNT.
000107    010      WRITE PRINT=LINE FROM LAST=LINE.
000108    010      MOVE ZERO TO REC=COUNT MOVE SPACES TO PRINT=LINE.
000109    010      O=SORT SECTION.
000110    010      *
000111    010      *
000112    010      *
000113    010      *
000114    010      *
000115    010      ADD I TO I.
000116    010      RETURN SORT=ING RECORD INTO TEMP(1) AT END GO TO END=O=SURT.
000117    010      IF LOCNAME(I) = LOCNAME(1) GO TO CHECK=DUP.
000118    010      PERFORM SELECT=LOCNA THRU LAST=SEL.
000119    010      MOVE TEMP(1) TO TEMP(1) MOVE I TO I GO TO CHECK=DUP.
000120    010      *
000121    010      * SELECT LOCNA = AIN OR CTY IF POSSIBLE.
000122    010      * ELSE ARBITRARILY SELECT TEMP(1).
000123    010      *
000124    010      *
000125    010      *
000126    010      *
000127    010      *
000128    010      *
000129    010      *
000130    010      *
000131    010      *
000132    010      *
000133    010      *
000134    010      *
000135    010      *
000136    010      *
000137    010      *
000138    010      *
000139    010      *
000140    010      *
000141    010      *
000142    010      *
000143    010      *
000144    010      *
000145    010      *
000146    010      *

END ELT.
```

BHDG MRG PRE-PROCESSOR PROGRAM MORSARULL •UNCLASSIFIED• •L•0

MRG PRE-PROCESSOR PROGRAM SORTARLOC •UNCLASSIFIED•

DATE 081676 PAGE 68

GELTL 24PRG*MORSA*ROLL
 ELT007 RL1670 08/16-07:40:54(17.)

000001	013	IDENTIFICATION DIVISION.
000002	013	PROGRAM-ID.
000003	013	AUTHOR.
000004	013	DATE-WRITTEN.
000005	013	REMARKS. PROGRAM READS MORSA FILE, ELIMINATES ARMY RECORDS AND INTRA-THEATER RECORDS, SORTS ON ROD, DESTINATION, ORIGIN, TRAVEL MODE AND AVAIL DATE. THE REMAINING RECORDS ARE PACKAGED TO PRODUCE SMOOSHED CARDS.
000006	013	ENVIRONMENT DIVISION.
000007	013	CONFIGURATION SECTION.
000008	013	SOURCE-COMPUTER. UNIVAC-1108.
000009	013	OBJECT-COMPUTER. UNIVAC-1108.
000010	013	INPUT-OUTPUT SECTION.
000011	013	FILE-CONTROL.
000012	013	SELECT PACKAGE=FILE ASSIGN TO PRINTER 24 PACKAGE.
000013	013	SELECT MORSA=FILE ASSIGN TO UNISERVO 24MURSA=TP.
000014	013	SELECT PRINT=FILE ASSIGN TO PRINTER.
000015	013	SELECT O-NODE=FILE ASSIGN TO CARD-READER.
000016	013	SELECT D-NODE=FILE ASSIGN TO CARD-READER.
000017	013	SELECT D-NODE=FILE ASSIGN TO MASS-STORAGE XA.
000018	013	SELECT SORT-ING ASSIGN TO MASS-STORAGE XA.
000019	013	SELECT CARD=FILE ASSIGN TO CARD-READER.
000020	013	DATA DIVISION.
000021	013	FILE SECTION.
000022	013	FD CARD=FILE LABEL RECORD OMITTED.
000023	013	01 CARD-IN PIC X(80).
000024	013	02 CNTL.
000025	013	03 PLAN-ID PIC X*.
000026	013	03 SERV PIC X*.
000027	013	03 SEQ PIC 9(4).
000028	013	03 TT PIC X*.
000029	013	02 AGG-SEQ PIC X(4).
000030	013	02 RT PIC X*.
000031	013	02 REC-X(132).
000032	013	02 MORSA=FILE BLOCK 6 RECORDS RECORDING MODE 1
000033	013	LABEL RECORD OMITTED.
000034	013	01 MORSA-REC.
000035	013	02 CNTL.
000036	013	03 PLAN-ID PIC X(4).
000037	013	03 SERV PIC X*.
000038	013	03 SEQ PIC 9(4).
000039	013	03 TT PIC X*.
000040	013	02 AGG-SEQ PIC X(4).
000041	013	02 RT PIC X*.
000042	013	02 REC-X(132).
000043	013	LABEL RECORD OMITTED.
000044	013	01 MORSA-REC.
000045	013	02 CNTL.
000046	013	03 PLAN-ID PIC X(4).
000047	013	03 SERV PIC X*.
000048	013	03 SEQ PIC 9(4).
000049	013	03 TT PIC X*.
000050	013	02 AGG-SEQ PIC X(4).
000051	013	02 RT PIC X*.
000052	013	02 REC-X(132).
000053	013	LABEL RECORD OMITTED.
000054	013	01 MORSA-REC.
000055	013	02 CNTL.
		03 NAME-P PIC X(14).
		03 INST-O PIC X(3).
		03 CODE-Z-0 PIC XX.
		03 CODE-S-0 PIC X(5).
		03 GEO-0 PIC X(4).
		02 PDR.
		03 NAME-P PIC X(14).

••UNCLASSIFIED••

000056	013	03	INST-P	PIC X(3).	00005100
000057	013	03	CODE-2-P	PIC AX.	00005400
000058	013	03	CODE-5-P	PIC X(5).	00005500
000059	013	03	GEO-P	PIC X(4).	00005400
000060	013	02	DESTINATION-SET.		00005300
000061	013	03	NAME-U	PIC X(14).	00005600
000062	013	03	INST-U	PIC X(3).	00005700
000063	013	03	CODE-2-D	PIC AX.	00005600
000064	013	03	CODE-5-D	PIC X(5).	00005400
000065	013	03	GEO-D	PIC X(4).	00006000
000066	013	03	DATA SCALED BY	*UDI FOR SMBSMOD.	• •
000067	013	03	MORSA UNITS ARE UNIT PAX, TUNS OR SQ FT		00006100
000068	013	03	SMBSMOD UNITS ARE THOUSANDS.	• •	00006200
000069	013	02	PAX	PIC 999V999.	00006400
000070	013	02	AMMO	PIC 999V999.	00006500
000071	013	02	SUP	PIC 999V999.	00006600
000072	013	02	BULK	PIC 999V999.	00006700
000073	013	02	OVERPOL	PIC 999V999.	00006800
000074	013	02	OUT-SZ	PIC 999V999.	00006900
000075	013	02	NAT	PIC 999V999.	00007000
000076	013	02	TOTAL-WT	PIC 999V999.	00007100
000077	013	02	TPSN	PIC X(5).	00007200
000078	013	02	SRC	PIC X(11).	00007300
000079	013	02	FRN	PIC X(4).	00007400
000080	013	02	UTC	PIC X(5).	00007500
000081	013	02	VIC	PIC X(6).	00007600
000082	013	02	AC-NR	PIC X(3).	00007700
000083	013	02	FILLER	PIC X(10).	00007800
000084	013	02	TIME-SAVE.		00007900
000085	013	03	SAVE-RDD	PIC 999.	00007A00
000086	013	03	NSDA-SQ-FT	PIC 999V999.	00007B00
000087	013	02	FILLER	PIC X(12).	00007C00
000088	013	02	PREPO	PIC X(3).	00008100
000089	013	02	00-NODE	PIC 999.	00008400
000090	013	02	0D-NODE	PIC 999.	00008700
000091	013	02	SORT-REC.	PIC X.	00008800
000092	013	02	FILLER	PIC X(35).	00008700
000093	013	02	PRINT-FILE	LABEL RECORD OMITTED.	00009000
000094	013	01	PRINT-LINE	PIC X(132).	00008400
000095	013	SD	SORT-ING.		00008700
000096	013	01	SORT-REC.		00009400
000097	013	02	FILLER	PIC X(128).	00009200
000098	013	02	T-MODE1	PIC X.	00009300
000099	013	02	FILLER	PIC XX.	00009100
000100	013	02	AVAIL	PIC 999.	00009400
000101	013	02	RDD	PIC 999.	00009500
000102	013	02	FILLER	PIC X(23).	00009400
000103	013	02	CODE-2-O	PIC XX.	00009200
000104	013	02	FILLER	PIC X(54).	00009400
000105	013	02	CODE-2-D	PIC XX.	00009400
000106	013	02	FILLER	PIC X(128).	00009400
000107	013	02	00-NODE	PIC 999.	00009400
000108	013	02	DD-NODE	PIC 999.	00009400
000109	013	02	FILE	PIC X(36).	00009400
000110	013	FD	0-NODE-FILE	LABEL RECORD OMITTED.	00009400
000111	013	01	0-NODE-REC.		00010000
000112	013	01			

MKG PRE-PROCESSOR PROGRAM MOKSAROLL

••UNCLASSIFIED••

DATE 081676 PAGE 71

```

000113    013      02  ORIG   PIC XX.
000114    013      02  FILLER PIC X.
000115    013      02  ORIG-NODE PIC 999.
000116    013      02  FILLER PIC X(74).
000117    013      FD  D-NODE-FILE LABEL RECORD OMITTED.
000118    013      01  D-NODE-REC.
000119    013      02  DEST   PIC XX.
000120    013      02  FILLER PIC X.
000121    013      02  DEST-NODE PIC 9(3).
000122    013      02  FILLER PIC X(74).
000123    013      COMMON-STORAGE SECTION.
000124    013      77  CARDS-ABC PIC X(64).
000125    013      01  ARRAY-1.
000126    013      03  PKG   PIC 9(6).
000127    013      03  RUD   PIC 999.
000128    013      03  AVAIL  PIC 999.
000129    013      03  DD-NODE PIC 999.
000130    013      03  OO-NODE PIC 999.
000131    013      03  MODE-7S PIC X.
000132    013      03  PAX   PIC 9(5)V999.
000133    013      03  NAT   PIC 9(5)V999.
000134    013      03  NSDA-NAT PIC 9(5)V999 VALUE ZERO.
000135    013      03  NSDA-SQ-FT PIC 9(5)V999.
000136    013      03  VEH-OUT  PIC 9(5)V999 VALUE ZERO.
000137    013      03  PUL   PIC 9(5)V999.
000138    013      03  FILLER PIC X(29) VALUE SPACES.
000139    013      03  OUT-SZ PIC 9(5)V999.
000140    013      03  NSDA-OVR-C PIC 9(5)V999 VALUE ZERO.
000141    013      03  NSDA-OVR-NC PIC 9(5)V999 VALUE ZERO.
000142    013      03  VEH-OVR-C PIC 9(5)V999 VALUE ZERO.
000143    013      03  VEH-OVR-NC PIC 9(5)V999 VALUE ZERO.
000144    013      03  OVR   PIC 9(5)V999 VALUE ZERO.
000145    013      03  NV-OVR-C PIC 9(5)V999 VALUE ZERO.
000146    013      03  VEH-BULK-C PIC 9(5)V999 VALUE ZERO.
000147    013      03  BULKJ  PIC 9(5)V999.
000148    013      03  DRY-RESUP PIC 9(5)V999 VALUE ZERO.
000149    013      03  RESUP-AMMO PIC 9(5)V999 VALUE ZERO.
000150    013      03  FILLER PIC X(8) VALUE '999999'.
000151    013      WORKING-STORAGE SECTION.
01  C-CARD.
000152    013      02  FILLER PIC X(8) VALUE '544444'.
000153    013      02  FILLER PIC X(22) VALUE SPACES.
000154    013      02  FILLER PIC XX VALUE '00'.
000155    013      02  FILLER PIC X(8) VALUE '00'.
000156    013      02  FILLER PIC XX VALUE '00'.
000157    013      02  FILLER PIC X(38) VALUE SPACES.
000158    013      02  FILLER PIC X(12) VALUE 'NSDA-SQFT'.
000159    013      01  HEADER-1.
000160    013      02  FILLER PIC X(30) VALUE 'ORIGIN' LBN NAME.
000161    013      02  FILLER PIC X(30) VALUE 'RDU DESTINATION M KTR'.
000162    013      02  FILLER PIC X(30) VALUE 'D AVL PAX A-SUP BUL'.
000163    013      02  FILLER PIC X(30) VALUE 'K UV/POL OUT NAT TOTAL'.
000164    013      02  FILLER PIC X(12) VALUE 'NSDA-SQFT'.
000165    013      01  LINE-1.
000166    013      02  ORIGIN-SET.
000167    013      03  NAME-0 PIC X(14).
000168    013      03  CODE-ZERO PIC XX.
000169    013      02  FILLER PIC X VALUE SPACE.

```

••UNCLASSIFIED••

```

000170    013      02 LEVEL    PIC X(3)•
000171    013      02 FILLER  PIC X VALUE SPACES.
000172    013      02 REC-NAME PIC X(12)•
000173    013      02 FILLER  PIC X VALUE SPACES.
000174    013      02 RUD    PIC 999•
000175    013      02 FILLER  PIC X VALUE SPACES.
000176    013      02 DESTINATION-SET.
000177    013      02 NAME-U  PIC X(14)•
000178    013      03 CODE--Z-D  PIC XX•
000179    013      02 FILLER  PIC X VALUE SPACES.
000180    013      02 T-MODE.
000181    013      03 T-MODE1  PIC X•
000182    013      02 FILLER  PIC X VALUE SPACES.
000183    013      02 RT     PIC X•
000184    013      02 RD     PIC X•
000185    013      02 FILLER  PIC XXX VALUE SPACES.
000186    013      02 AVAIL   PIC 999.
000187    013      02 PAX    PIC 999V999•
000188    013      02 FILLER  PIC X VALUE SPACES.
000189    013      02 A-AMMO  PIC 999V999•
000190    013      02 FILLER  PIC X VALUE SPACES.
000191    013      02 A-SUP   PIC 999V999•
000192    013      02 OUT-SZ  PIC 999V999•
000193    013      02 FILLER  PIC X VALUE SPACES.
000194    013      02 BULK   PIC 999V999•
000195    013      02 FILLER  PIC X VALUE SPACES.
000196    013      02 OVER-POL PIC 999V999•
000197    013      02 FILLER  PIC X VALUE SPACES.
000198    013      02 OUT-WT  PIC 999V999•
000199    013      02 FILLER  PIC X VALUE SPACES.
000200    013      02 NAT    PIC 999V999•
000201    013      02 FILLER  PIC X VALUE SPACES.
000202    013      02 TOTAL-WT PIC 999V999•
000203    013      02 FILLER  PIC X VALUE SPACES.
000204    013      02 NSDA-SQ-FT PIC 999V999•
000205    013      02 FILLER  PIC X(4) VALUE SPACES.
000206    013      01 A-CARD•
000207    013      02 FILLER  PIC X VALUE SPACE.
000208    013      02 FILLER  PIC X(2) VALUE 'OTHER SERVICE PKG NR'•
000209    013      02 PKG-NR=O  PIC 22229.
000210    013      02 FILLER  PIC X(17) VALUE .
000211    013      02 RDD    PIC 9(3).
000212    013      02 FILLER  PIC X(15) VALUE '00
000213    013      02 AVAIL   PIC 9(3).
000214    013      02 FILLER  PIC XX VALUE '00'.
000215    013      02 NEG    PIC X(14) VALUE SPACES.
000216    013      01 D-NODE-TABLE•
000217    013      02 TABLE=0 OCCURS 20 TIMES.
000218    013      03 ORIGIN  PIC XX•
000219    013      03 O-NODE  PIC 999.
000220    013      01 D-NODE-TABLE•
000221    013      02 TABLE=D OCCURS 20 TIMES.
000222    013      03 DESTIN  PIC XX•
000223    013      03 D-NODE  PIC 999.
000224    013      01 CARGO-TYPE=TABLE•
000225    013      02 FILLER  PIC 99 VALUE 1.
000226    013      02 FILLER  PIC 99 VALUE 15.

```

••UNCLASSIFIED••

000227	013	02 FILLER	PIC 99 VALUE 12.	00013400
000228	013	02 FILLER	PIC 99 VALUE 6.	00013500
000229	013	02 FILLER	PIC 99 VALUE 7.	00013400
000230	013	02 FILLER	PIC 99 VALUE 2.	00013500
000231	013	02 FILLER	PIC 99 VALUE 15.	00013600
000232	013	02 FILLER	PIC 99 VALUE 15.	00013700
000233	013	02 FILLER	PIC 99 VALUE 4.	
000234	013	02 FILLER	PIC 99 VALUE 17.	
000235	013	01 TABLE-CARGO-TYPE REDEFINES CARGO-TYPE-TABLE.		00013400
000236	013	02 CARGO-TYPE PIC 99 OCCURS 10 TIMES.		
000237	013	01 NO-NODE-LINE.		
000238	013	02 FILLER PIC X(19) VALUE '•••NOUE NOT FOUND ••'.		00014100
000239	013	02 CODE=2 PIC XX.		00014200
000240	016	02 FILLER PIC X VALUE SPACES.		
000241	013	02 FLAG=1 PIC 9 VALUE 2.		
000242	016	02 FILLER PIC X VALUE SPACES.		
000243	016	02 TOTAL=WT PIC 999V999.		
000244	016	02 BULK PIC 999V999.		
000245	016	02 PAX PIC 999V999.		
000246	016	02 RDD PIC 999.		
000247	016	02 AVAIL PIC 999.		
000248	016	02 FILLER PIC X(84).		
000249	013	01 COM-PARE.		00014300
000250	013	02 T-MODE.		00014700
000251	013	03 T-MODE1 PIC X.		00014600
000252	013	02 00-NODE PIC 999.		
000253	013	02 DD-NODE PIC 999.		
000254	013	02 RDO PIC 999.		
000255	013	02 AVAIL PIC 999.		
000256	013	01 SAVE-DATA.		00015400
000257	013	02 COMPARE-SET.		00015500
000258	013	03 T-MODE.		
000259	013	04 T-MODE1 PIC X.		00015700
000260	013	03 00-NODE PIC 999.		
000261	013	03 DD-NODE PIC 999.		
000262	013	03 RDO PIC 999.		
000263	013	03 AVAIL PIC 999.		
000264	013	02 ADD-SET USAGE IS COMPUTATIONAL.		00016100
000265	013	03 PAX PIC 9(5)V999 VALUE ZERO.		00016400
000266	013	03 BULKI PIC 9(5)V999 VALUE ZERO.		00016300
000267	013	03 OVR PIC 9(5)V999 VALUE ZERO.		00016400
000268	013	03 POL PIC 9(5)V999 VALUE ZERO.		00016200
000269	013	03 OUT-SZ PIC 9(5)V999 VALUE ZERO.		00016000
000270	013	03 NAT PIC 9(5)V999 VALUE ZERO.		00016700
000271	013	03 A-AMMO PIC 9(5)V999 VALUE ZERO.		00016800
000272	013	03 A-SUP PIC 9(5)V999 VALUE ZERO.		00016700
000273	013	03 NSDA-SQ-FT PIC 9(5)V999 VALUE ZERO.		
000274	013	03 RESUP-AMMO PIC 9(5)V999 VALUE ZERO.		
000275	013	02 QTY-TABLE REDEFINES ADD-SET USAGE IS CUMP.		00017100
000276	013	03 QTY PIC 9(5)V999 OCCURS 10 TIMES.		
000277	013	01 DELTA-CARD.		
000278	013	02 DELTA-RDO PIC 99.		
000279	013	02 DELTA-AVAIL PIC 99.		
000280	013	02 FILLER PIC X(76).		
000281	013	01 B-CARD.		00017000
000282	013	02 FILLER PIC X(4) VALUE SPACES.		00017400
000283	013	02 AVAIL PIC 999.		00017500

••UNCLASSIFIED••

```

000284    013      02 FILLER   PIC X(5)  VALUE ' '  .
000285    013      02 DEST-NODE  PIC 999.
000286    013      02 FILLER   PIC XX   VALUE SPACES.
000287    013      02 ORIG-NODE  PIC 999.
000288    013      02 FILLER   PIC X(4)  VALUE SPACES.
000289    013      02 T-MODE   PIC X   VALUE ZERO.
000290    013      02 FILLER   PIC X   VALUE SPACES.
000291    013      02 PAX     PIC 9(5)*999 VALUE ZERO.
000292    013      02 FILLER   PIC X   VALUE SPACES.
000293    013      02 AREG    PIC 9(5)*999 VALUE ZERO.
000294    013      02 CARGO-TYPE=FBLK  PIC ZZZZ9.
000295    013      02 FILLER   PIC X(25) VALUE SPACES.
000296    013      77 J PICTURE 99 VALUE 1 USAGE IS COMP.
000297    013      77 PKG=NR  PIC 9(5) USAGE IS COMPUTATIONAL VALUE ZERO.
000298    013      77 COMP=POL  PIC 9(6)*999 USAGE IS COMP.
000299    013      77 O=CNT    PIC 9(4) USAGE IS COMPUTATIONAL VALUE ZERO.
000300    013      77 D-CNT    PIC 9(4) USAGE IS COMPUTATIONAL VALUE ZERO.
000301    013      77 LINE-COUNT  PIC 99 USAGE IS COMP VALUE 54.
000302    013      77 HALF=DELTA-AVAIL  PIC 99 USAGE IS COMP.
000303    013      77 HALF=DELTA-RDD  PIC 99 USAGE IS COMP.
000304    017      77 POL=WT  PIC 999V999 USAGE IS COMP.
000305    013      PROCEDURE DIVISION.
000306    013      OPEN INPUT MORSA-FILE O=NODE-FILE.
000307    013      OPEN OUTPUT PRINT-FILE PACKAGE=FILE.
000308    013      OPEN INPUT NUOE TABLES***.
000309    013      READ NUOE NODE-FILE.
000310    013      READ O=NODE-FILE AT END GO TO REAO=U-NODE.
000311    013      ADD 1 TO O-CNT MOVE ORIG-NODE IN O-NODE-REC.
000312    013      TO U-NODE(O-CNT) MOVE ORIG TO ORIGIN(O-CNT).
000313    013      GO TO READ-O-NODE.
000314    013      READ-D-NODE.
000315    013      CLOSE O=NODE-FILE OPEN INPUT U=NUOE-FILE.
000316    013      ADD 1 TO O-CNT.
000317    013      READ-DD-NODE.
000318    013      READ U=NODE-FILE AT END GO TO END-D.
000319    013      ADD 1 TO D-CNT MOVE DEST-NODE IN D-NODE-REC
000320    013      TO D-NODE(D-CNT).
000321    013      MOVE DEST TO DESTIN(D-CNT).
000322    013      GO TO READ-DD-NODE.
000323    013      END-D.
000324    013      ADD 1 TO D-CNT.
000325    013      CLOSE D-NODE-FILE.
000326    013      OPEN INPUT CARD-FILE.
000327    013      READ CARD-FILE INTO DELTA-CARD AT END NEXT SENTENCE.
000328    013      COMPUTE HALF=DELTA-AVAIL = DELTA-AVAIL / 2.
000329    013      COMPUTE HALF=DELTA-RDD = DELTA-RDD / 2.
000330    013      A=SORT SECTION.
000331    013      SORT SORTING ON ASCENDING KEY RUD AVAIL T-MODEL
000332    013      O=NUOE DD-NODE
000333    013      INPUT PROCEDURE IS SORT1
000334    013      OUTPUT PROCEDURE IS SM08SMOD.
000335    013      GO TO END-RUN.
000336    013      SORT1 SECTION.
000337    013      READ=MORSA.
000338    013      * ELIMINATE ARMY RECORDS AND INTRA THEATER RECORDS***.
000339    013      *
000340    013      *

```

••UNCLASSIFIED••

```

000341    Q13      READ MORSA-FILE AT END GO TO END-SORT-I.
          IF SERV IN MORSA-REC = 'A' GO TO READ-MORSA.
          ***** DEBUG *****
          *     IF ROD IN MORSA-REC GREATER THAN 45 GO TO READ-MORSA.
          *     DEBUG *****
          *     IF T-MODEL IN MORSA-REC = TU 'A' OR 'P' OR 'S'
          *     PERFORM SET-NODES.
          ELSE GU TO READ-MORSA.
          IF FLAG-I NOT LESS THAN 2 PERFORM RULL-ON-DELTA.
          GO TO READ-MORSA.
          ***** DEBUG *****
          ROLL-ON-DELTA.
          *     ROD *   .
          MOVE ROD IN MORSA-REC TO SAVE-RDU
          MOVE AVAIL IN MORSA-REC TO SAVE-AVAIL.
          DIVIDE DELTA-ROD INTO RDU IN MORSA-REC.
          DIVIDE DELTA-AVAIL INTO AVAIL IN MORSA-REC.
          *     MODE *   .
          MOVE T-MODEL IN MORSA-REC TO SVMD.
          IF SVMD = 'P' MOVE 'U' TO T-MODEL IN MORSA-REC.
          IF SVMD = 'S'
          IF PAX IN MORSA-REC > 0 MOVE 'J' TO T-MODEL
          IN MORSA-REC
          ELSE MOVE '2' TO T-MODEL IN MORSA-REC.
          IF SVMD = 'A'
          IF NAT IN MORSA-REC = 0 MOVE '1' TO T-MODEL
          IN MORSA-REC
          ELSE IF PAX IN MORSA-REC = 0 MOVE '2' TO
          T-MODEL IN MORSA-REC
          ELSE MOVE '3' TO T-MODEL IN MORSA-REC.
          IF RT IN MORSA-REC = 'P' AND OVER-PUL IN MORSA-REC > 0
          PERFORM CHECK-FOK-PKG-POL
          ELSE RELEASE SORT-REC FROM MORSA-REC.
          ***** DEBUG *****
          END-SORT-I.
          CLOSE MORSA-FILE.
          *     NODES*   *
          0-NODES SECTION.
          MOVE 2 TO FLAG-I.
          IF CODE=2=0 IN MORSA-REC = ORIGIN(I) MOVE
          O-NODE(J) TO 0-NODE IN MORSA-REC GO TO J-1
          ELSE ADD 1 TO J GO TO 0-NODES.
          J-1.
          MOVE 1 TO J.
          D-NODES.
          IF J = D-CNT MOVE CODE=2=D IN MORSA-REC TO CODE=2
          MOVE CORR MORSA-REC TO NO-NODE-LINE
          MOVE Q TO FLAG-I WRITE PRINT-LINE FROM NO-NODE-LINE
          GO TO SKIP-REC.
          IF CODE=2=D IN MORSA-REC = DESTIN(I) MOVE D-NODE(J)
          TO DD-NODE IN MORSA-REC GO TO SKIP-REC
          ELSE ADD 1 TO J GO TO D-NODES.
          *** DO NOT PROCESS RECORD IF NODE NOT FOUND***.
          SKIP-REC.

```

••UNCLASSIFIED••

••UNCLASSIFIED••

```

000396 013 MOVE 1 TO J.
000399 013 SHOBSMOD SECTION.
000400 013 RETURN SORT-ING RECORD INTO MORSA-REC AT END GO
          TO ENDS. PERFORM RE-SET-DATES.
000401 013 PERFORM SAVE-INFO.
000402 013 RETURN AGAIN.
000403 013
000404 013 RETURN SORT-ING RECORD INTO MURSA-REC AT END GO
          TO ENDS.
000405 013 RE-SET-DATES.
000406 013 COMPUTE AVAIL IN MORSA-REC = AVAIL IN MORSA-REC *
          DELTA-AVAIL + HALF-DELT-AVAIL.
000407 013 COMPUTE RDO IN MORSA-REC = RDO IN MORSA-REC *
          DELTA-RDU + HALF-DELT-A RDD.
000408 013
000409 013
000410 013 P=1.
000411 013 MOVE CORRESPONDING MURSA-REC TO CUM-PARE.
000412 013 IF COMPARE = COMPARE-SET PERFORM ADD-PRUC
          ELSE PERFORM SHOBSMOD-PROC THRU END-SMOB.
000413 013 GO TO RETURN AGAIN.
000414 013
000415 013
000416 013 ADD-PROC.
000417 013 PERFORM PACKAGE-DETAIL.
000418 013 ADD CORR MORSA-REC TO ADDU-SET.
000419 013 IF RT IN MORSA-REC = 'P' MOVE OVER-POL IN MORSA-REC TO
          COMP-POL.
000420 013 COMPUTE COMP-POL = COMP-POL * 1000,
          ADD COMP-POL TO POL IN SAVE-DATA
000421 013 ELSE ADD OVER-POL IN MORSA-REC TO OVR IN SAVE-DATA.
000422 013 IF RT IN MORSA-REC = 'S' AND RD IN MORSA-REC = 'A'
          ADD BULK IN MORSA-REC TO RESUP-AMMO IN SAVE-DATA,
          ELSE ADD BULK IN MORSA-REC TO BULKI IN SAVE-DATA.
000423 013 SHOBSMOD-PROC.
000424 013   *   *   A CARD   *   *
000425 013   ADD 1 TO PKG-NR MOVE PKG-NR TO PKG-NR=0.
000426 013 MOVE CORR COMPARE-SET TO A-CARD.
000427 013 WRITE PRINT-LINE FROM A-CARD AFTER 2.
000428 013 MOVE A-CARD TO CARDS-ABC.
000429 013 ENTER FORTRAN SMOBS SUBROUTINE.
000430 013
000431 013   *   *   BOTTOM LINE PACKAGE DETAIL   *   *
000432 013   WRITE PACK-REC FROM A-CARD MOVE SPACES TO PACK-REC
000433 013   MOVE AVAIL IN A-CARD TO AVAIL IN B-CARD.
000434 013   WRITE PACK-REC ADD 2 TO LINE-COUNT.
000435 013
000436 013   *   *   B CARDS   *   *
000437 013   *   *   AVAIL   *   *
000438 013
000439 013
000440 013   MOVE T-MODEL IN DATA TO T-MODE IN B-CARD.
000441 013   MOVE DD-NODE IN SAVE-DATA TO WEST-NODE IN B-CARD.
000442 013   MOVE OO-NODE IN SAVE-DATA TO ORIG-NODE IN B-CARD.
000443 013   *** PAX ***
000444 013   IF PAX IN SAVE-DATA NOT GREATER THAN ZERO GO TO CARGO.
000445 013   MOVE PAX IN SAVE-DATA TU PAX IN B-CARD. MOVE 1 TO
          CARGO-TYPE-FBLK. WRITE PRINT-LINE FROM B-CARD.
000446 013   MOVE B-CARD TO CARUS-ABC.
000447 013   ENTER FORTRAN SMOBS SUBROUTINE.
000448 013   MOVE ZERO TO PAX IN B-CARD.
000449 013   ***CARGO***.
000450 013
000451 013
000452 013   PERFORM A-REG VARYING J FROM 2 BY 1 UNTIL J = 11.
000453 013   MOVE ZERO TO AREG IN B-CARD.
000454 013   *   *   C-CARD   *   *

```

```

000455      C13      MOVE C-CARD TO CARDS=ABC.
000456      013      ENTER FORTRAN SMOBS SUBROUTINE.
000457      013      ••• WRITE ARRAY FOR PATTY. ••
000458      013      MOVE CORR ADD-SET TO ARRAY-I MOVE CORR COMPARE-SET
000459      013      TO ARRAY-I MOVE PKG-NR TO PKG.
000460      013      MOVE T-MODE IN B-CARD TO MUDENT$.
000461      013      ENTER FORTRAN SMOBS2 SUBROUTINE.
000462      013      MOVE I TO J.
000463      013      SAVE INFO.
000464      013      PERFORM PACKAGE-DETAIL.
000465      013      MOVE CORR MORSA-REC TO COMPARE-SET.
000466      013      MOVE CORR MORSA-REC TO AUD-SET.
000467      013      IF RT IN MORSA-REC = 'S' AND RD IN MORSA-REC = 'A'
000468      013      MOVE BULK IN MORSA-REC TO RESUP-AMMO IN SAVE-DATA
000469      013      MOVE ZERO TO BULKI IN SAVE-DATA
000470      013      ELSE MOVE BULK IN MORSA-REC TO BULKI IN SAVE-DATA
000471      013      MOVE ZERO TO RESUP-AMMO IN SAVE-DATA.
000472      013      IF RT IN MORSA-REC = 'P' MOVE OVER-POL IN
000473      013      MORSA-REC TO COMP-POL COMPUTE COMP-POL =
000474      013      COMP-POL * 1000 MOVE COMP-POL TO POL IN SAVE-DATA
000475      013      MOVE ZERO TO QVR IN SAVE-DATA
000476      013      ELSE MOVE OVER-POL IN MORSA-REC TO QVR IN SAVE-DATA
000477      013      MOVE ZERO TO POL IN SAVE-DATA.
000478      013      END-SMOB.
000479      013      EXIT.
000480      013      A-REG.
000481      013      IF QTY(J) GREATER THAN ZERO, MOVE WTY(J) TO
000482      013      AREA IN B-CARD, MOVE CARGO-TYPE(J) TO
000483      013      CARGO-TYPE-FBLK, MOVE B-CARD TO CARDS-ABC,
000484      013      ENTER FORTRAN SMOBS SUBROUTINE,
000485      013      WRITE PRINT-LINE FROM B-CARD.
000486      013      END-S.
000487      013      PERFORM SMOBSMOD-PROC THRU CARGO.
000488      013      MOVE C-CARD TO CARDS=ABC.
000489      013      ENTER FORTRAN SMOBS1 SUBROUTINE.
000490      013      END-RUN SECTION.
000491      013      CLOSE PRINT-FILE PACKAGE-FILE.
000492      013      CLOSE CARD-FILE.
000493      013      STOP RUN.
000494      013      ••• EACH RECORD MAKING UP A PACKAGE IS PRINTED•••
000495      013      PACKAGE-DETAIL SECTION.
000496      013      MOVE SPACES TO PACK-REC WRITE PACK-REC.
000497      013      CHECK-COUNT.
000498      013      IF LINE-COUNT LESS THAN 54 GO TO PRINT-DETAIL.
000499      013      SET-HEADER.
000500      013      MOVE ZERO TO LINE-COUNT WRITE PACK-REC FROM
000501      013      HEADER-1 AFTER ADVANCING TOP-OF-PAGE.
000502      013      MOVE SPACES TO PACK-REC WRITE PACK-REC.
000503      013      PRINT-DETAIL.
000504      013      MOVE CORR MORSA-REC TO LINE-1.
000505      013      MOVE SVMD TO T-MODEL IN LINE-1.
000506      013      MOVE SAVE-ROU TO RDU IN LINE-1.
000507      013      MOVE SAVE-AVAIL TO AVAIL IN LINE-1.
000508      013      WRITE PACK-REC FROM LINE-1.
000509      013      ADD 1 TO LINE-COUNT.
000510      013      SEPARATE-POL SECTION.
000511      013      CHECKFOR-PKG-POL.
000512      013      IF BULK IN MORSA-REC > 0 PERFORM MOVE-Z THRU MOVE-1

```

MRG PRE-PROCESSOR PROGRAM MOKSAROLL

DATE 081676

PAGE 78

••UNCLASSIFIED••

```

000512    013      MOVE=2.
000513    013      MOVE=2.
000514    013      * * MAKE SEPARATE RECORD FOR PACKAGE PUL. *
000515    013      MOVE OVER-POL IN MOKSA-REC TO COMP-POL.
000516    013      MOVE ZERO TO OVER-POL IN MOKSA-REC.
000517    013      * * 1000/7.213 BBL'S PER ST = 138.639 ST PER 1000 BBL'S. *
000518    013      COMPUTE POL=WT = 138.639 * COMP=PUL.
000519    014      SUBTRACT POL=WT FROM TOTAL=WT IN MOKSA-REC.
000520    013      RELEASE SORT=REC FROM MOKSA-REC.
000521    013      MOVE POL=WT TO TOTAL=WT IN MOKSA-REC MOVE COMP=POL TO
000522    013      OVER=POL IN MOKSA-REC.
000523    015      MOVE ZERO TO BULK IN MOKSA-REC.
000524    013      * * MAKE RECORD FOR POL. SET NUOE = 191 FOR GALVESTON. *
000525    013      MOVE=1.
000526    013      MOVE 191 TO CO-NODE IN MOKSA-REC.
000527    013      RELEASE SORT=REC FROM MOKSA-REC.

END ELT.

```

```

@ELT.L 24PRG-SMOHS
ELT007 RL1B70 08/16-07:40:57-(2.)
000001    000      SUBROUTINE SMOBS
000002    002      COMMON DUMMY, CARDS(14),AI(16),A2(16)
000003    000      I02      FORMAT (1I4A6)
000004    000      WRITE (2,I02) CARDS
000005    000      RETURN
000006    002      ENTRY SMOBS2
000007    002      WRITE (3,I03) A1
000008    002      WRITE (3,I03) A2
000009    002      FORMAT (1I6A6)
000010    002      RETURN
000011    000      ENTRY SMOBS1
000012    000      WRITE (2,I02) CARDS
000013    000      WRITE (2,I02) CARDS
000014    000      ENFILE 2
000015    002      ENFILE 3
000016    000      RETURN
000017    000      END

END ELT.

```

@HDG MRG PRE-PROCESSOR PROGRAM TUCHAROLL ••UNCLASSIFIED•• L10

MRG PRE-PROCESSOR PROGRAM MOKSAROLL ••UNCLASSIFIED••

MRG PRE-PROCESSOR PROGRAM MOKSAROLL ••UNCLASSIFIED••

DATE 081676

PAGE 78

@EITL 32MARTIN*TUSUM
 ELT007 RL1870 08/16-07:40:58-(33.)
 000001 029 IDENTIFICATION DIVISION.
 000002 029 PROGRAM-ID. LOAD-FIF2.
 000003 029 AUTHOR. GOLMARTIN
 000004 029 DATE-WRITTEN. JANUARY 1975
 000005 029 DATE-COMPILED.
 000006 029 INSTALLATION. US ARMY CAA.
 000007 029 SECURITY. UNCLASSIFIED.
 000008 029 REMARKS. PROGRAM LOADS CAMP FIF2 FILE FROM A
 000009 029 NONSTANDARD TUCHA FILE WITH SRC APPENDED TO THE
 ABF1 RECORD.
 000010 029 ENVIRONMENT DIVISION.
 000011 029 CONFIGURATION SECTION.
 000012 029 SOURCE-COMPUTER. UNIVAC-1108.
 000013 029 OBJECT-COMPUTER. UNIVAC-1108.
 000014 029 INPUT-OUTPUT SECTION.
 000015 029 FILE-CONTROL.
 000016 029 SELECT PRINT-FILE ASSIGN TO PRINTER.
 000017 029 SELECT CARD-FILE ASSIGN TO CARD-READER.
 000018 029 SELECT TUCHA ASSIGN TO UNISERVO TUCHA.
 000019 029 SELECT SAVE-FILE ASSIGN TO UNISERVO SAVE.
 000020 029 SELECT SORT-FILE ASSIGN TO MASS-STORAGE XA.
 000021 029 SELECT FS ASSIGN TO MASS-STORAGE 32F1F2
 000022 029 ORGANIZATION IS INDEXED
 000023 029 FILE-DESCRIPTION IS FS-DESC
 000024 029 ACCESS MODE IS RANDOM
 000025 029 SYMBOLIC KEY IS FSKEY.
 000026 029 DATA DIVISION.
 000027 029 FILE SECTION.
 000028 029 FD PRINT-FILE
 000029 029 LABEL RECORDS ARE OMITTED
 000030 029 DATA RECORD IS PRINT-LINE.
 000031 029 01 PRINT-LINE PICTURE IS X(132).
 000032 029 FD CARD-FILE
 000033 029 LABEL RECORDS ARE OMITTED
 000034 029 DATA RECORD IS INPUT-CARU.
 000035 029 01 INPUT-CARD PICTURE IS X(60).
 000036 029 FD SAVE-FILE
 000037 029 LABEL RECORDS ARE OMITTED
 000038 029 BLOCK CONTAINS 24 RECORDS
 000039 029 RECORD CONTAINS 138 CHARACTERS
 000040 029 DATA RECORD IS SAVE-REC.
 000041 029 01 SAVE-REC PICTURE IS X(138).
 000042 029 FD TUCHA
 000043 029 LABEL RECORDS ARE OMITTED
 000044 029 BLOCK CONTAINS 24 RECORDS
 000045 031 DATA RECORDS ARE FI-REC. F2=REC. F3=REC.
 000046 029 01 FI=REC.
 000047 029 02 ABF1.
 000048 029 03 TYPEA.
 000049 029 05 UTC PICTURE IS X(105).
 000050 029 05 CARGO. PICTURE IS A(U1).
 000051 029 07 CARGO1 PICTURE IS A(U1) VALUE IS 'G'.
 000052 029 88 BULKPOL PICTURE IS A(U1).
 000053 029 07 CARGO2 PICTURE IS 9(U1).
 000054 029 05 CONTAINER PICTURE IS A(U1).
 000055 029

••UNCLASSIFIED••

000056	029	05 TUTYPE	PICTURE IS X(12).
000057	029	08 F1TYPE	PICTURE IS X(12).
000058	029	08 F2TYPE	PICTURE IS X(12).
000059	029	08 F3TYPE	PICTURE IS X(12).
000060U	029	05 F3DNU	PICTURE IS X(12).
000061	029	05 ULC	PICTURE IS X(12).
000062	029	05 DEPLOYMENT	PICTURE IS X(12).
000063	029	05 SERVICE	PICTURE IS X(12).
000064	029	05 SECURE	PICTURE IS X(12).
000065	029	05 SHORT-NAME	PICTURE IS X(12).
000066	029	05 VALIDITY	PICTURE IS X(12).
000067	029	08 TYPE-RCRD	PICTURE IS X(12).
000068	029	05 TYPE-STATUS	PICTURE IS X(12).
000069	029	08 CANCELLED	PICTURE IS X(12).
000070	029	05 FICLASS	PICTURE IS X(12).
000071	029	03 FIDATA.	PICTURE IS X(12).
000072	029	05 TYPE-NAME	PICTURE IS X(54).
000073	029	05 VIC	PICTURE IS X(12).
000074	029	05 CREATE-DATE	PICTURE IS X(12).
000075	029	05 CHANGE-DATE	PICTURE IS X(12).
000076	029	05 AUTH-WAR-STR	PICTURE IS X(12).
000077	029	05 NOPAX	PICTURE IS X(12).
000078	029	05 F2REQ	PICTURE IS X(12).
000079	029	05 NOF2	PICTURE IS X(12).
000080	029	05 NEWFL	PICTURE IS X(12).
000081	029	02 F1-SRC.	PICTURE IS X(12).
000082	029	05 SRC	PICTURE IS X(12).
000083	033	05 FILLER	PICTURE IS X(12).
000084	029	01 F2-REC.	PICTURE IS X(12).
000085	029	03 TUF2.	PICTURE IS X(12).
000086	029	05 F2RKEY	PICTURE IS X(12).
000087	029	05 F2CLASS	PICTURE IS X(12).
000088	029	05 NEWF2	PICTURE IS X(12).
000089	029	05 HLC	PICTURE IS X(12).
000090U	029	05 FILLER	PICTURE IS X(12).
000091	029	05 F2SQFT	PICTURE IS X(12).
000092	029	05 F2STON	PICTURE IS X(12).
000093	029	05 F2MTON	PICTURE IS X(12).
000094	029	05 MBPOL	PICTURE IS X(12).
000095	029	05 F3REQ	PICTURE IS X(12).
000096	029	05 NOF3	PICTURE IS X(12).
000097	029	03 F2-FIL.	PICTURE IS X(12).
000098	029	05 FILLER	PICTURE IS X(12).
000099	029	01 F3-REC.	PICTURE IS X(12).
000100	029	03 TUF3.	PICTURE IS X(12).
000101	029	05 F3RKEY	PICTURE IS X(12).
000102	029	05 F3CLASS	PICTURE IS X(12).
000103	029	05 NEWF3	PICTURE IS X(12).
000104	029	05 F3DESC	PICTURE IS X(14).
000105	029	05 LENGTH	PICTURE IS X(14).
000106	029	05 WIDTH	PICTURE IS X(14).
000107	029	05 HEIGHT	PICTURE IS X(14).
000108	029	05 F3SOFT	PICTURE IS X(14).
000109	029	05 PIECES	PICTURE IS X(14).
000110	029	05 F3TON	PICTURE IS X(14).
000111	029	05 F3HTN	PICTURE IS X(14).
000112	029	05 FILLER	PICTURE IS X(14).

••UNCLASSIFIED••

000113	029	03 F3-FIL.	PICTURE IS X(78).
000114	029	05 FILLER	DATA RECORD IS LOG-REC.
000115	029	SD SORT-FILE	
000116	029	01 LOG-REC.	
000117	029	05 SENO	PICTURE IS 9(US).
000118	029	05 COTYPE.	
000119	029	07 COTYPE1	PICTURE IS A(U1).
000120	029	07 COTYPE2	PICTURE IS 9(U1).
000121	029	05 PERTO	PICTURE IS 9(US).
000122	029	05 CRCAT.	
000123	029	07 CRCAT1	PICTURE IS X(U1).
000124	029	07 CRCAT2	PICTURE IS X(U1).
000125	029	05 CONCO	PICTURE IS X(U1).
000126	029	05 SWFT	PICTURE IS 9(U1).
000127	029	05 STOF	PICTURE IS 9(U2).
000128	029	05 STON	PICTURE IS 9(U6).
000129	029	05 MTON*	
000130	029	07 MTOF	PICTURE IS 9(U1).
000131	029	07 WHMT0	PICTURE IS 9(US).
000132	029	07 TEMET	PICTURE IS 9(U1).
000133	029	05 MELCO	PICTURE IS A(U1).
000134	029	05 SRC*	
000135	029	07 SRC19	PICTURE IS X(U9).
000136	029	07 SRC10	PICTURE IS X(U1).
000137	029	07 SRC11-12	PICTURE IS X(U2).
000138	029	05 UTC	PICTURE IS X(US).
000139	029	05 VIC	PICTURE IS X(U6).
000140	029	05 FILLER	PICTURE IS X(US).
000141	029	66 LEVCO	RENAMES CRCAT THRU CONCU.
000142	029	66 UNSTR	RENAMES SQFT.
000143	029	66 UNAME	RENAMES STUF THRU TEMET.
000144	029	66 UPIND	RENAMES HELCO.
000145	029	FD FS	
000146	029	LABEL RECORDS ARE STANDARD	
000147	029	DATA RECORD IS RFS.	
000148	029	01 RFS	PICTURE IS X(5376).
000149	029	COMMON-STORAGE SECTION.	
000150	029	01 LINE1.	
000151	029	05 SRC1*	
000152	029	07 SRC1-9	PIC X(9).
000153	029	07 SRCPAR	PIC X(2).
000154	029	05 LINE-1	PICTURE X(1) VALUE •1•.
000155	029	05 FILLER	PIC X(2) VALUE SPACES.
000156	029	05 VLC	PIC X(3).
000157	029	05 FILLER	PIC X(2) VALUE SPACES.
000158	029	05 UTC	PIC X(5).
000159	029	05 STR	PIC Z(5)Y.
000160	029	05 STON-AU	PIC Z(5)Y.
000161	029	05 STON-BU	PIC Z(5)Y.
000162	029	05 STON-B1	PIC Z(5)Y.
000163	029	05 STON-A1	PIC Z(5)Y.
000164	029	05 STON-J1	PIC Z(5)Y.
000165	029	05 STON-B2C	PIC Z(5)Y.
000166	029	05 STON-B2D	PIC Z(5)Y.
000167	029	05 STON-A2C	PIC Z(5)Y.
000168	029	05 STON-A2D	PIC Z(5)Y.
000169	029	05 STON-J2D	PIC Z(5)Y.

••UNCLASSIFIED••

```

000170    029      05 STON=J2C          PIC Z(5)9.
000171    029      05 STON=A3C          PIC Z(5)9.
000172    029      05 STON=J3C          PIC Z(5)9.
000173    029      05 STON=JJC          PIC Z(5)9.
000174    029      05 STON=M7C          PIC Z(5)9.
000175    029      05 STON=UE          PIC Z(5)9.
000176    029      05 STON=AS          PIC Z(5)9.
000177    029      01 LINE2.
000178    029      05 SRC2             PIC X(11) VALUE 020.
000179    029      05 LINE=2           PIC X(11) VALUE 020.
000180    029      05 NAME             PIC X(12).
000181    029      05 PAX              PIC Z(5)9.
000182    029      05 SQFT=AO          PIC Z(5)9.
000183    029      05 SQFT=BO          PIC Z(5)9.
000184    029      05 SQFT=B1          PIC Z(5)9.
000185    029      05 SQFT=A1          PIC Z(5)9.
000186    029      05 FILLER           PIC X(6) VALUE SPACES.
000187    029      05 SQFT=B2C         PIC Z(5)9.
000188    029      05 SQFT=B2D         PIC Z(5)9.
000189    029      05 SQFT=A2C         PIC Z(5)9.
000190    029      05 SQFT=A2D         PIC Z(5)9.
000191    029      05 FILLER           PIC X(12) VALUE SPACES.
000192    029      05 SQFT=A3C         PIC Z(5)9.
000193    029      05 FILLER           PIC X(18) VALUE SPACES.
000194    029      05 SQFT=NSDA        PIC Z(5)9.
000195    029      05 SQFT=VEM          PIC Z(5)9.
000196    029      05 WORKING-STORAGE SECTION.
000197    029      77 C=FLAG            PICTURE IS X VALUE SPACE.
000198    029      77 E=FLAG            PICTURE IS X VALUE SPACE.
000199    029      77 COUNT             PICTURE IS 9(06).
000200    029      77 TUNEXT            PICTURE IS 9.
000201    029      77 NREQ              PICTURE IS 9(10) COMPUTATIONAL.
000202    029      77 N3REQ             PICTURE IS 9(10) COMPUTATIONAL.
000203    029      77 FSKEY             PICTURE IS 9(06).
000204    029      77 UNCOUNT           PICTURE IS 9(06) VALUE 18.
000205    029      77 CAT                PICTURE IS 9(02).
000206    029      01 CAT=ARRAYS.
000207    029      02 STONA OCCURS 18 TIMES PIC 9(06).
000208    029      02 SQFTA OCCURS 18 TIMES PIC 9(06).
000209    029      01 HEAD=LINE.
000210    029      05 MD01=05 PIC X(30) VALUE 0   SRC          UTC     PAX".
000211    029      05 MD06=10 PIC X(30) VALUE 0   AU           B0     A1     J1".
000212    029      05 MD11=14 PIC X(24) VALUE 1   B2C          B2D     A2D".
000213    029      05 MD15=18 PIC X(24) VALUE 1   J2U          J2C     A3C".
000214    029      05 MD19=22 PIC X(24) VALUE 1   J7C          AMMO   AS/A".
000215    029      01 FS=WORK.
000216    029      05 FSSEQ             PICTURE IS 9(05).
000217    029      05 FILLER           PICTURE IS X(6).
000218    029      01 FS=DESC.
000219    029      05 F$MAXCRDS        PIC 9(10) VALUE 35000 COMPUTATIONAL.
000220    029      05 FSRECLEN          PIC 9(10) VALUE 66 COMPUTATIONAL.
000221    029      05 FILLER            PIC 9(10) VALUE 0 COMPUTATIONAL.
000222    029      05 FSKEYLEN          PIC 9(10) VALUE 6 COMPUTATIONAL.
000223    029      05 F$NR0FA           PIC 9(10) VALUE 5 COMPUTATIONAL.
000224    029      05 F$NT0FA           PIC 9(10) VALUE 20 COMPUTATIONAL.
000225    029      05 F$DW011          PIC X(03) VALUE SPACES.
000226    029      07 F$DW01A          PIC X(03) VALUE SPACES.

```

000227	029	07	FSDWDLB	PIC X(03)	VALUE SPACES.
000228	029	01	FS=INFO.		
000229	029	05	FSRBLKS	PICTURE IS 9(10)	COMPUTATIONAL.
000230	029	05	FSIBLK5	PICTURE IS 9(10)	COMPUTATIONAL.
000231	029	05	FSN10FB	PICTURE IS 9(10)	COMPUTATIONAL.
000232	029	05	FSNRCRU	PICTURE IS 9(10)	COMPUTATIONAL.
000233	029	05	FSNRI0F	PICTURE IS 9(10)	COMPUTATIONAL.
000234	029	05	FSNRI0F	PICTURE IS 9(10)	COMPUTATIONAL.
000235	029	05	FSNREAD	PICTURE IS 9(10)	COMPUTATIONAL.
000236	029	05	FSNF10F	PICTURE IS 9(10)	COMPUTATIONAL.
000237	029	05	FSNWRITE	PICTURE IS 9(10)	COMPUTATIONAL.
000238	029	01	FS=INFORMATION.		
000239	029	05	FSRBLKS	PICTURE IS 9(10).	
000240	029	05	FS FILLER	PICTURE IS X(02)	VALUE IS SPACES.
000241	029	05	FSIBLK5	PICTURE IS 9(10).	
000242	029	05	FS FILLER	PICTURE IS X(02)	VALUE IS SPACES.
000243	029	05	FSN10FB	PICTURE IS 9(10).	
000244	029	05	FS FILLER	PICTURE IS X(02)	VALUE IS SPACES.
000245	029	05	FSNRCRD	PICTURE IS 9(10).	
000246	029	05	FS FILLER	PICTURE IS X(02)	VALUE IS SPACES.
000247	029	05	FSNRI0F	PICTURE IS 9(10).	
000248	029	05	FS FILLER	PICTURE IS X(02)	VALUE IS SPACES.
000249	029	05	FSNDEL	PICTURE IS 9(10).	
000250	029	05	FS FILLER	PICTURE IS X(02)	VALUE IS SPACES.
000251	029	05	FSNREAD	PICTURE IS 9(10).	
000252	029	05	FS FILLER	PICTURE IS X(02)	VALUE IS SPACES.
000253	029	05	FSNF10F	PICTURE IS 9(10).	
000254	029	05	FS FILLER	PICTURE IS X(02)	VALUE IS SPACES.
000255	029	05	FSNWRITE	PICTURE IS 9(10).	
000256	029	05	FS FILLER	PICTURE IS X(02)	VALUE IS SPACES.
000257	029	01	CARD=WORK.		
000258	029	05	CUT=OFF	PICTURE IS 9(05).	
000259	029	05	TCOPY=FLAG	PICTURE IS X(05).	
000260	029	88	TCOPY	PICTURE IS X(05)	VALUE IS 'TCOPY'.
000261	029	05	LOADS=FLAG	PICTURE IS X(05).	
000262	029	88	LOADS	PICTURE IS X(05)	VALUE IS 'LOADS'.
000263	029	05	PRINT=FLAG1	PICTURE IS X(05).	
000264	029	88	PRINT=TY	PICTURE IS X(05)	VALUE IS 'TYPEA'.
000265	029	05	PRINT=FLAG2	PICTURE IS X(05).	
000266	029	88	PRINT=F1	PICTURE IS X(05)	VALUE IS 'ABFL1'.
000267	029	05	PRINT=FLAGS	PICTURE IS X(05).	
000268	029	88	PRINT=L1	PICTURE IS X(05)	VALUE IS 'ABFL0'.
000269	029	05	PRINT=FLAG4	PICTURE IS X(05).	
000270	029	88	PRINT=F2	PICTURE IS X(05)	VALUE IS 'TUF21'.
000271	029	05	PRINT=FLAGS	PICTURE IS X(05).	
000272	029	88	PRINT=L2	PICTURE IS X(05)	VALUE IS 'TUF20'.
000273	029	05	PRINT=FLAG6	PICTURE IS X(05).	
000274	029	88	PRINT=F3	PICTURE IS X(05)	VALUE IS 'TUF31'.
000275	029	05	PRINT=FLAG7	PICTURE IS X(05).	
000276	029	88	PRINT=LO	PICTURE IS X(05)	VALUE IS 'F1F20'.
000277	029	05	FILLER	PICTURE IS X(30).	
000278	029	01	ERROR=WORK.		
000279	029	05	NUMB	PICTURE IS X(06).	
000280	029	05	FILLER	PICTURE IS X(01)	VALUE IS SPACE.
000281	029	05	MESSAGE	PICTURE IS X(125).	
000282	029		PROCEDURE DIVISION.		
000283	029		DECLARATIVES.		

••UNCLASSIFIED•

```

000264    029    BAD-TAPE SECTION. USE AFTER STANDARD ERROR PROCEDURE ON TUCHA.
000285    029    TUCHA-ERROR-PROC.
000286    029    DISPLAY 'TAPE ERROR ON TUCHA'.
000287    029    DISPLAY 'TYPE LOST - PREVIOUS LOG REC'.
000288    029    MOVE TUNEXT TO NUMB.
000289    029    MOVE LOG-REC TO MESSAGE.
000290    029    DISPLAY ERROR-WORK.
000291    029    MOVE 'E' TO E-FLAG.
000292    029    IF TUNEXT EQUALS 1 MOVE 'C' TO C-FLAG.
000293    029    END DECLARATIVES.
000294    029    NORMAL-PROCESSING-SECTION.
000295    029    OPEN-FILES.
000296    029    OPEN INPUT TUCHA CARD-FILE OUTPUT PRINT-FILE.
000297    029    IF TCOPY OPEN OUTPUT SAVE-FILE.
000298    029    IF LOADS OPEN OUTPUT FS.
000299    029    READ-CARD.
000300    029    READ CARD-FILE INTO CARD-WORK AT END GO TO END-CARD.
000301    029    READ CARD-FILE INTO CARD-WORK AT END GO TO END-CARD.
000302    029    END-CARD.
000303    029    CLOSE CARD-FILE.
000304    029    MOVE ZERO TO COUNT.
000305    029    MOVE ZERO TO FSKEY.
000306    029    SORT SORT-FILE ON ASCENDING KEY SRC IN LOG-REC
000307    029    UTC IN LOG-REC CDTYPE CREAT CONCO IN LOG-REC
000308    029    INPUT PROCEDURE IS NEXT-TUCHA END-TUCHA
000309    029    OUTPUT PROCEDURE IS LOAD-FS THRU END-LOAD.
000310    029    GO TO CLOSE-FILES.
000311    029    NEXT-TUCHA.
000312    029    IF COUNT IS NOT LESS THAN CUT-OFF GO TO CLOSE-TUCHA.
000313    029    READ TUCHA AT END GO TO CLOSE-TUCHA.
000314    029    IF E-FLAG EQUALS 'E' MOVE SPACE TO E-FLAG GO TO NEXT-TUCHA.
000315    029    IF TCOPY WRITE SAVE-REC FROM FI-REC.
000316    029    IF TUTYPE EQUALS 1 IF TYPEA-RCHD GO TO USE-TYPEA
000317    029    ELSE GO TO USE-ABF1
000318    029    ELSE IF F2TYPE GO TO USE-TUF2
000319    029    ELSE IF F3TYPE GO TO USE-TUF3
000320    029    ELSE TYPE-ERR.
000321    029    MOVE TUTYPE TO NUMB.
000322    029    MOVE 'TYPE TUCHA RECORD NOT EXPECTED' TO MESSAGE.
000323    029    WRITE PRINT-LINE FROM ERROR-WORK.
000324    029    GO TO CLOSE-TUCHA.
000325    029    USE-TYPEA.
000326    029    IF PRINT-TY MOVE TYPEA TU PRINT-LINE PERFORM PRINT-OUT.
000327    029    GO TO NEXT-TUCHA.
000328    029    USE-ABF1.
000329    029    IF PRINT-FI
000330    029    MOVE SRC IN FI-REC TO PRINT-LINE PERFORM PRINT-OUT
000331    029    MOVE ABF1 TO PRINT-LINE PERFORM PRINT-OUT.
000332    029    IF CANCELLED MOVE 'C' TO C-FLAG GO TO NEXT-TUCHA
000333    029    ELSE MOVE SPACE TO C-FLAG.
000334    029    ADD 1 TO COUNT.
000335    029    MOVE SPACES TO LOG-REC.
000336    029    MOVE COUNT TO SEQNO IN LOG-REC.
000337    029    MOVE 'FI' TO CDTYPE IN LOG-REC.
000338    029    MOVE NOPAX TU PERTO IN LOG-REC.
000339    029    MOVE ULC IN FI-REC TO LEVCO.
000340    029

```

```

000341    029      MOVE AUTH-WAK-STR TO UNSTR.
000342    029      MOVE SHORT-NAME TO UNAME.
000343    029      MOVE DEPLOYMENT TO UPIND.
000344    029      MOVE SRC IN F1-REC TO SRC IN LOG-REC.
000345    029      MOVE UTC IN ABF1 TO UTC IN LOG-REC.
000346    029      MOVE UIC IN ABF1 TO UIC IN LOG-REC.
000347    029      IF PRINT-L1 MOVE LOG-REC TO PRINT-LINE PERFORM PRINT-OUT.
000348    029      IF SRCID EQUALS *1 RELEASE LOG-REC.
000349    029      MOVE NDF2 TO NREQ.
000350    029      IF NREQ EQUALS ZERO MOVE 1 TO TUNEXT
000351    029      ELSE MOVE 2 TO TUNEXT.
000352    029      GO TO NEXT-TUCHA.

000353    029      USE-TUF2*
000354    029      IF PRINT-F2 MOVE TUF2 TO PRINT-LINE PERFORM PRINT-OUT.
000355    029      IF CFLAG EQUALS *C GO TO NEXT-TUCHA.
000356    029      ADD 1 TO COUNT.
000357    029      MOVE COUNT TO SEQNO IN LOG-REC.
000358    029      MOVE *F2* TO CDTYPE IN LOG-REC.
000359    029      MOVE ZERO TO PERTO IN LOG-REC.
000360    029      MOVE CARGO TO CRCAT IN LOG-REC.
000361    029      MOVE CONTAINER TO CONCO IN LOG-REC.
000362    029      MOVE F2SWFT TO SGFT IN LOG-REC.
000363    029      MOVE ZERO TO STOF IN LOG-REC.
000364    029      MOVE F2STON TO STON IN LOG-REC.
000365    029      MOVE ZERO TO MTOT IN LOG-REC.
000366    029      IF BULKPOL MOVE MBPOL TU WHMTO IN LOG-REC.
000367    029      ELSE MOVE F2MTON TU WHMTO IN LOG-REC.
000368    029      MOVE ZERO TU TEMET IN LOG-REC.
000369    029      MOVE HLC IN TUF2 TO HELCU IN LOG-REC.
000370    029      IF PRINT-L2 MOVE LOG-REC TO PRINT-LINE PERFORM PRINT-OUT.
000371    029      MOVE UTC IN ABF1 TO UTC IN LOG-REC.
000372    029      IF SRCID EQUALS *1 RELEASE LOG-REC.
000373    029      SUBTRACT 1 FROM NREQ.
000374    029      IF NREQ EQUALS ZERO MOVE 1 TO TUNEXT
000375    029      ELSE MOVE NDF3 TO NREQ
000376    029      IF NREQ EQUALS ZERO MOVE 2 TO TUNEXT
000377    029      ELSE MOVE 3 TO TUNEXT.
000378    029      GO TO NEXT-TUCHA.

000379    029      USE-TUF3*
000380    029      IF PRINT-F3 MOVE TUF3 TU PRINT-LINE PERFORM PRINT-OUT.
000381    029      SUBTRACT 1 FROM NREQ.
000382    029      IF NREQ EQUALS ZERO MOVE 2 TO TUNEXT.
000383    029      GO TO NEXT-TUCHA.
000384    029      CLOSE-TUCHA.
000385    029      CLOSE TUCHA.
000386    029      IF COPY CLOSE SAVE-FILE.
000387    029      END-TUCHA.
000388    029      EXIT.
000389    029      LOADFS.
000390    029      RETURN SORT-FILE RECORD INTO FS-WORK AT END GO TO LAST-SUM.
000391    029      ADD 1 TO FSKEY.
000392    029      MOVE FSKEY TO FSSEQ IN FS-WORK.
000393    029      IF PRINT-LO MOVE FS-WORK TO PRINT-LINE PERFORM PRINT-OUT.
000394    029      IF LOADS WRITE RFS FROM FS-WORK INVALID KEY GO TO KEY-ERR.
000395    029      IF CDTYPE EQUALS *F1 GO TO FIRROLL ELSE GO TO F2ROLL.
000396    029      F2ROLL.
000397    032      IF CREATI EQUALS *A OR *C GU TO VEHICLE.

```

••UNCLASSIFIED•

DATE 081676 PAGE 86

```
IF CMCAT1 EQUALS 'B' GO TO NSDA.  
IF CMCAT1 EQUALS 'J' GO TO NON-VEH.  
IF CMCAT1 EQUALS 'M' GO TO AMMO.  
MOVE CMCAT TO NUMB.  
MOVE *CMCAT NOT EXPECTED* TO MESSAGE.  
WRITE PRINT-LINE FROM ERROR-WRK.  
GO TO LOAD-FS.  
  
VEHICLE.  
0.49  
0.49 IF CONCO EQUALS 'H' OR 'C' MOVE 8 TO CAT  
ELSE MOVE 9 TO CAT.  
IF CMCAT2 EQUALS 'U' MOVE 1 TO CAT.  
IF CMCAT2 EQUALS 'P' MOVE 4 TO CAT.  
IF CMCAT2 EQUALS '3' MOVE 12 TO CAT.  
ADD SQFT TO SQFTA(17).  
GO TO SUM-CAT.  
NSDA.  
0.49 IF CONCO EQUALS 'C' OR 'B' MOVE 6 TO CAT  
ELSE MOVE 7 TO CAT.  
IF CMCAT2 EQUALS 'D' MOVE 2 TO CAT.  
IF CMCAT2 EQUALS '1' MOVE 3 TO CAT.  
ADD SQFT TO SQFTA(16).  
GO TO SUM-CAT.  
NON-VEH.  
0.49 IF CONCO EQUALS 'C' OR 'B' MOVE 11 TO CAT  
ELSE MOVE 10 TO CAT.  
IF CMCAT2 EQUALS 'D' MOVE 1 TO CAT.  
IF CMCAT2 EQUALS '1' MOVE 5 TO CAT.  
IF CMCAT2 EQUALS '3' MOVE 13 TO CAT.  
IF CMCAT2 EQUALS '7' MOVE 14 TO CAT.  
GO TO SUM-CAT.  
AMMO.  
0.49 MOVE 15 TO CAT.  
SUM-CAT.  
0.49 ADD STON TO STONA(CAT).  
0.49 ADD SQFT TO SQFTA(CAT).  
0.49 IF CAT IS LESS THAN 14 ADD STON TO STONA(16)  
ADD STON TO STONA(17).  
0.49 ELSE ADD STON TO STONA(17).  
0.49 GO TO LOAD-FS.  
FIRROLL.  
0.49 IF FSSEQ EQUALS 1 GO TO FISAVE.  
PRINT-SUM.  
0.49 IF UNCOUNT EQUALS 18 MOVE ZERO TO UNCOUNT  
WRITE PRINT-LINE FROM HEAD-LINE  
AFTER ADVANCING TOP-OF-PAGE LINES.  
0.49 ADD 1 TO UNCOUNT.  
MOVE STONA(1) TO STON-A0 IN LINE1.  
0.49 MOVE STONA(2) TO STON-B0 IN LINE1.  
0.49 MOVE STONA(3) TO STON-B1 IN LINE1.  
0.49 MOVE STONA(4) TO STON-A1 IN LINE1.  
0.49 MOVE STONA(5) TO STON-J1 IN LINE1.  
0.49 MOVE STONA(6) TO STON-B2C IN LINE1.  
0.49 MOVE STONA(7) TO STON-B2D IN LINE1.  
0.49 MOVE STONA(8) TO STON-A2C IN LINE1.  
0.49 MOVE STONA(9) TO STON-A2D IN LINE1.  
0.49 MOVE STONA(10) TO STON-J2D IN LINE1.  
0.49 MOVE STONA(11) TO STON-J2C IN LINE1.  
0.49 MOVE STONA(12) TO STON-A3C IN LINE1.
```

MKG PRE-PROCESSOR PROGRAM TUCHAROLL

••UNCLASSIFIED•

DATE 081676 PAGE 86

••UNCLASSIFIED••

```

000455    029      MOVE STONA(13)          TO STON=J3C IN LINE1.
000456    029      MOVE STONA(14)          TO STON=J7C IN LINE1.
000457    029      MOVE STONA(15)          TO STON=M7C IN LINE1.
000458    029      MOVE STONA(16)          TO STON=UE IN LINE1.
000459    029      MOVE STONA(17)          TO STON=AS IN LINE1.
000460    029      WRITE PRINT-LINE FRUM LINE1 AFTER ADVANCING 2 LINES.
000461    029      MOVE SQFTA(1)          TO SQFT=AO IN LINE4.
000462    029      MOVE SQFTA(2)          TO SQFT=BO IN LINE2.
000463    029      MOVE SQFTA(3)          TO SQFT=B1 IN LINE2.
000464    029      MOVE SQFTA(4)          TO SQFT=A1 IN LINE2.
000465    029      MOVE SQFTA(6)          TO SQFT=b2C IN LINE2.
000466    029      MOVE SQFTA(7)          TO SQFT=b2D IN LINE2.
000467    029      MOVE SQFTA(8)          TO SQFT=a2C IN LINE2.
000468    029      MOVE SQFTA(9)          TO SQFT=a2D IN LINE2.
000469    029      MOVE SQFTA(12)          TO SQFT=a3C IN LINE2.
000470    029      MOVE SQFTA(16)          TO SQFT=NSDA.
000471    029      MOVE SQFTA(17)          TO SQFT=VEH IN LINE2.
000472    029      WRITE PRINT-LINE FROM LINE2.
000473    029      ENTER FORTRAN SQFTU SUBROUTINE.
000474    029      F1SAVE.
000475    029      MOVE SRC19 IN LOG=REC TO SRC1=9 IN LINE1.
000476    029      MOVE SRC11=12          TO SRCPAR IN LINE1.
000477    029      MOVE LEVCO          TO ULC IN LINE1.
000478    029      MOVE UTC   IN LOG=REC TU UTC IN LINE1.
000479    029      MOVE UNSTR          TO STR IN LINE1.
000480    029      MOVE SRC1 IN LINE1          TO SRC2 IN LINE2.
000481    029      MOVE UNAME          TU NAME IN LINE2.
000482    029      MOVE PERTO IN LOG=REC TU PAX IN LINE2.
000483    029      PERFORM ZERO=ARRAYS VARYING CAT FROM 1 BY 1
000484    029      UNTIL CAT IS GREATER THAN 18.
000485    029      GO TO LOAD=FS.
000486    029      ZERO=ARRAYS.
000487    029      MOVE ZEROS TO STONA(CAT) SQFTA(CAT).
000488    029      LAST=SUM.
000489    029      PERFORM PRINT=SUM.
000490    029      ENTER FORTRAN EOF12 SUBROUTINE.
000491    029      END=LOAD.
000492    029      EXIT.
000493    029      KEY=ERR.
000494    029      MOVE FSKEY TO NUMB.
000495    029      MOVE *INVALID KEY FOR FIR2 FILE* TO MESSAGE.
000496    029      MOVE ERROR=WORK TO PRINT-LINE.
000497    029      PRINT=OUT.
000498    029      WRITE PRINT-LINE.
000499    029      CLOSE=FILES.
000500    029      IF LOADS CLOSE FS USING FS=INFO.
000501    029      MOVE *FS INFORMATION AREA* TO PRINT-LINE.
000502    029      PERFORM PRINT=OUT.
000503    029      MOVE CORRESPONDING FS=INFO TO FS=INFORMATION.
000504    029      MOVE FS=INFORMATION TO PRINT-LINE.
000505    029      PERFORM PRINT=OUT.
000506    029      CLOSE PRINT=FILE.
000507    029      STOP RUN.
END ELT.

```

MRG PRE=PROCESSOR PROGRAM TUCHAROLL ••UNCLASSIFIED••

DATE 081676 PAGE 88

```
ELT.L 32MARTIN.SDFTU
ELT007 RL1870 08/16-07:41:01-(1.)
000001    000      SUBROUTINE SDFTU
000002    000      COMMON DUMMY, LINE1(22), LINE2(22)
000003    000      WRITE (12,4) LINE1
000004    000      WRITE (12,4) LINE2
000005    000      RETURN
000006    000      4 FORMAT (Z2A6)
000007    000      ENTRY EOF12
000008    000      ENDFILE 12
000009    000      RETURN
000010    000      END
END ELT.
```

BHDG MRG PRE=PROCESSOR PROGRAM PUMCUSRULL ••UNCLASSIFIED•• L.0

MRG PRE=PROCESSOR PROGRAM TUCHAROLL ••UNCLASSIFIED••

DATE 081676 PAGE 88

DATE 081676 PAGE 89

000050	015	015	88 FTYPE	PICTURE IS 9(01)	VALUE IS 3.
000057	015	015	05 FILLER	PICTURE IS X(01)*	
000058	015	015	05 UTC	PICTURE IS X(05)*	
000059	015	015	05 POMCUS-CODE1	PICTURE IS X(01)*	
000060	015	015	05 FILLER	PICTURE IS X(04)*	
000061	015	015	05 NOPAX	PICTURE IS X(05)*	
000062	015	015	05 F2REQ	PICTURE IS 9(03)*	
000063	015	015	05 FILLER	PICTURE IS X(44)*	
000064	015	015	05 VIC	PICTURE IS X(06)*	
000065	015	015	05 FILLER	PICTURE IS X(13)*	
000066	015	015	05 SRC	PICTURE IS X(12)*	
000067	015	015	05 FILLER	PICTURE IS X(19)*	
000068	015	015	66 AUTH-WAR-STR	RENAME\$ NOPAX.	
000069	015	015	66 NOF2	RENAME\$ F2REQ.	
000070	015	01	F2-REC*		
000071	015	015	03 TUF2*		
000072	015	015	05 FILLER	PICTURE IS X(06)*	
000073	015	015	05 TUTYPE2	PICTURE IS X(01)*	
000074	015	015	05 FILLER	PICTURE IS X(01)*	
000075	015	015	05 UTC	PICTURE IS X(05)*	
000076	015	015	05 POMCUS-CODE2	PICTURE IS A(01)*	
000077	015	015	88 TAT	PICTURE IS A(01) VALUE IS 'A'.	
000078	015	015	88 OTHER	PICTURE IS A(01) VALUE IS 'B'.	
000079	015	015	88 PREPO	PICTURE IS A(01) VALUE IS 'C'.	
000080	015	015	05 FILLER	PICTURE IS X(19)*	
000081	015	015	05 CARGO*		
000082	015	015	07 CARGO1	PICTURE IS A(01)*	
000083	015	015	88 BULKPOL	PICTURE IS A(01) VALUE IS 'G'.	
000084	015	015	07 CARGO2	PICTURE IS 9(01)*	
000085	015	015	05 CONTAINER	PICTURE IS A(01)*	
000086	015	015	05 F2SOFT	PICTURE IS 9(06)*	
000087	015	015	05 FILLER	PICTURE IS X(02)*	
000088	015	015	05 F2STON	PICTURE IS 9(06)*	
000089	015	015	05 FILLER	PICTURE IS X(01)*	
000090	015	015	05 FMTON	PICTURE IS 9(06)*	
000091	015	015	05 FILLER	PICTURE IS X(01)*	
000092	015	015	05 HLC	PICTURE IS A(01)*	
000093	015	015	05 F3REQ	PICTURE IS 9(03)*	
000094	015	015	05 FILLER	PICTURE IS X(08)*	
000095	015	015	05 F2UIC	PICTURE IS X(06)*	
000096	015	015	05 FILLER	PICTURE IS X(13)*	
000097	015	015	05 F2SRC	PICTURE IS X(12)*	
000098	015	015	05 FILLER	PICTURE IS X(19)*	
000099	015	015	66 NOF3	RENAME\$ F3REQ.	
000100	015	01	F3-REC*		
000101	015	015	03 TUF3*		
000102	015	015	05 FILLER	PICTURE IS X(06)*	
000103	015	015	05 TUTYPE3	PICTURE IS 9(01)*	
000104	015	015	05 FILLER	PICTURE IS X(01)*	
000105	015	015	05 UTC3	PICTURE IS X(05)*	
000106	015	015	05 POMCUS-CODE3	PICTURE IS A(01)*	
000107	015	015	05 FILLER	PICTURE IS X(04)*	
000108	015	015	05 CARGO3	PICTURE IS X(03)*	
000109	015	015	05 F3DNU	PICTURE IS 9(03)*	
000110	015	015	05 F3UESC	PICTURE IS X(13)*	
000111	015	015	05 LENGTH	PICTURE IS 9(04)*	
000112	015	015	05 WIDTH	PICTURE IS 9(03)*	

MRG PRE-PROCESSOR PROGRAM POMCUSROLL

••UNCLASSIFIED••

DATE 081676 PAGE 91

000113	015	05 HEIGHT	PICTURE IS 9(03).
000114	015	05 F3SGFT	PICTURE IS 9(04).
000115	015	05 PIECES	PICTURE IS 9(03).
000116	015	05 F3STON	PICTURE IS 9(06).
000117	015	05 F3MTON	PICTURE IS 9(06).
000118	015	05 FILLER	PICTURE IS X(04).
000119	015	05 F3UIC	PICTURE IS X(06).
000120	015	05 FILLER	PICTURE IS X(13).
000121	015	05 F3SRC	PICTURE IS X(12).
000122	015	05 FILLER	PICTURE IS X(19).
000123	016	SD SORT-FILE	DATA RECORD IS SORT-REC.
000124	016	01 SORT-REC	
000125	016	05 FILLER	PICTURE IS X(05).
000126	017	05 SRTYPE	PICTURE IS X(02).
000127	016	05 FILLER	PICTURE IS X(05).
000128	016	05 SRCAT	PICTURE IS X(03).
000129	016	05 FILLER	PICTURE IS X(40).
000130	016	05 SRUIC	PICTURE IS X(06).
000131	015	05 FILLER	PICTURE IS X(01).
000132	016	05 SRPOM	PICTURE IS A(01).
000133	015	05 FILLER	PICTURE IS X(03).
000134	015	FD FS	LABEL RECORDS ARE STANDARD
000135	015	DATA RECORD IS RFS.	
000136	015	01 RFS	PICTURE IS X(5376).
000137	015	01 COMMON-STORAGE SECTION.	
000138	015	01 LINE1.	
000139	015	05 SRC1.	
000140	015	07 SRC1=9	PIC X(9).
000141	015	07 SRCPAR	PIC X(2).
000142	015	05 LINE1	PIC X(1) VALUE '1'.
000143	015	05 FILLER	PIC X(2) VALUE SPACES.
000144	015	05 ULC	PIC X(3).
000145	015	05 FILLER	PIC X(2) VALUE SPACES.
000146	015	05 UTC	PIC X(5).
000147	015	05 STR	PIC Z(5)9.
000148	015	05 STON-A0	PIC Z(5)Y.
000149	015	05 STON-B0	PIC Z(5)Y.
000150	015	05 STON-B1	PIC Z(5)Y.
000151	015	05 STON-A1	PIC Z(5)Y.
000152	015	05 STON-J1	PIC Z(5)Y.
000153	015	05 STON-A2D	PIC Z(5)9.
000154	015	05 STON-J20	PIC Z(5)9.
000155	015	05 STON-J2C	PIC Z(5)9.
000156	015	05 STON-A3C	PIC Z(5)9.
000157	015	05 STON-J3C	PIC Z(5)9.
000158	015	05 STON-M7C	PIC Z(5)Y.
000159	015	05 STON-UE	PIC Z(5)Y.
000160	015	05 STON-AS	PIC Z(5)9.
000161	015	01 LINE2.	
000162	015	05 FILLER	PICTURE IS X(05) VALUE SPACES.
000163	015	05 FILLER	PICTURE IS X(11) VALUE 20.
000164	015	05 VIC	
000165	015	05 FILLER	
000166	015	05 LINE2.	
000167	015	05 FILLER	
000168	015	05 FILLER	
000169	015	05 FILLER	

MRG PRE-PROCESSOR PROGRAM POMCUSROLL

••UNCLASSIFIED••

DATE 081676 PAGE 91

```

000170    015      05 NAME          PIC X(112)*
000171    015      05 PAX           PIC Z(5)9*
000172    015      05 SQFT-A0     PIC Z(5)9*
000173    015      05 SQFT-BU     PIC Z(5)9*
000174    015      05 SQFT-B1     PIC Z(5)9*
000175    015      05 SQFT-A1     PIC Z(5)9*
000176    015      05 FILLER       PIC X(6)  VALUE SPACES*
000177    015      05 SQFT-B2C    PIC Z(5)9*
000178    015      05 SQFT-B2D    PIC Z(5)9*
000179    015      05 SQFT-A2C    PIC Z(5)9*
000180    015      05 SQFT-A2D    PIC Z(5)9*
000181    015      05 FILLER       PIC X(12)  VALUE SPACES*
000182    015      05 SQFT-A3C    PIC Z(5)9*
000183    015      05 FILLER       PIC X(18)  VALUE SPACES*
000184    015      05 SQFT-NSDA   PIC Z(5)9*
000185    015      05 SQFT-VEH    PIC Z(5)9*
000186    015      WORKING-STORAGE SECTION.
000187    015      77 C=FLAG        PICTURE IS X  VALUE SPACE.
000188    015      77 E=FLAG        PICTURE IS X  VALUE SPACE.
000189    015      77 COUNT         PICTURE IS 9(U6)*
000190    015      77 TUNEXT        PICTURE IS 9*
000191    015      77 N2REQ        PICTURE IS 9(U1) COMPUTATIONAL.
000192    015      77 N3REQ        PICTURE IS 9(U1) COMPUTATIONAL.
000193    015      77 FSKEY         PICTURE IS 9(U6)*
000194    015      77 UNCOUNT       PICTURE IS 9(U6)  VALUE 10*
000195    015      77 PT            PICTURE IS 9(U1)  VALUE 1.
000196    015      77 CAT           PICTURE IS 9(U2)*
000197    015      77 UIC=SEQ        PICTURE IS 9(U2)*
000198    015      77 NO-UICS        PICTURE IS 9(U2)  VALUE ZERO*
000199    015      01 UIC=ARRAY     PICTURE IS X(U6)
000200    015      03 UIC=TABLE      OCCURS 100 TIMES.
000201    015      05 OLD-UIC       PICTURE IS X(U6).
000202    015      05 NEW-UIC       PICTURE IS X(U6)*
000203    015      01 UIC=CARD       PICTURE IS X(U6)*
000204    015      03 NOT-UIC       PICTURE IS X(U6)*
000205    015      03 FILLER        PICTURE IS X(U1)*
000206    015      03 POM-UIC      PICTURE IS X(U6)*
000207    015      01 CAT=ARRAYS    PICTURE IS X(U6)
000208    015      03 POMCUS-TYPE OCCURS 2 TIMES.
000209    015      05 STONA          OCCURS 18 TIMES PIC 9(06)*
000210    015      05 SQFTA          OCCURS 18 TIMES PIC 9(06).
000211    016      01 LOG=REC        PICTURE IS 9(U5)*
000212    016      05 SEQNO         PICTURE IS 9(U5)*
000213    016      05 CDTYPE        PICTURE IS X(U1)*
000214    016      07 CRCAT1        PICTURE IS A(U1)*
000215    016      07 CTYPE1         PICTURE IS 9(U1)*
000216    016      05 CONCO         PICTURE IS X(U1)*
000217    016      05 PERTO         PICTURE IS 9(U5)*
000218    016      05 CRCAT2        PICTURE IS X(U1)*
000219    016      07 CTYPE2         PICTURE IS 9(U1)*
000220    016      05 CONCO         PICTURE IS X(U1)*
000221    016      05 SQFT           PICTURE IS 9(U6)*
000222    016      05 STUF           PICTURE IS 9(U2)*
000223    016      05 STON           PICTURE IS 9(U6)*
000224    016      05 MTON           PICTURE IS 9(U1)*
000225    016      07 MTOF           PICTURE IS 9(U6)*
000226    016      07 WHMTO          PICTURE IS 9(U6)*

```

000227	016	07	TEMET	PICTURE IS 9(01).
000228	016	05	MELCO	PICTURE IS A(01).
000229	016	05	SRC*	
000230	016	07	SRC19	PICTURE IS X(09).
000231	016	07	SRC10	PICTURE IS X(01).
000232	016	07	SRC11=12	PICTURE IS X(02).
000233	016	05	UTC	PICTURE IS X(05).
000234	016	05	VIC	PICTURE IS X(06).
000235	016	05	FILLER	PICTURE IS X(01).
000236	016	05	POMCUS-CODE	PICTURE IS A(01).
000237	016	05	FILLER	PICTURE IS X(03).
000238	016	66	LEVCO	RENAMES CRCAT THRU CONCO.
000239	016	66	UNSTR	RENAMES SWFT.
000240	016	66	UNAME	RENAMES STOF THRU TEMET.
000241	016	66	UPIND	RENAMES MELCO.
000242	015	01	HEAD-LINE.	
000243	015	05	WD01-US	PIC X(30) VALUE !
000244	015	05	WD06=10	PIC X(30) VALUE !
000245	015	05	WD11=14	PIC X(24) VALUE !
000246	015	05	WD15=18	PIC X(24) VALUE !
000247	015	05	WD19=22	PIC X(24) VALUE !
000248	015	01	FS=WORK.	
000249	015	05	FSSEQ	PICTURE IS 9(05).
000250	015	05	FILLER	PICTURE IS X(61).
000251	015	01	FS=DESC.	
000252	015	05	FSMAXCROS	PIC 9(10) VALUE 35000 COMPUTATIONAL.
000253	015	05	FSRECLEN	PIC 9(10) VALUE 66 COMPUTATIONAL.
000254	015	05	FILLER	PIC 9(10) VALUE 0 COMPUTATIONAL.
000255	015	05	FSKEYLEN	PIC 9(10) VALUE 6 COMPUTATIONAL.
000256	015	05	FSNRFA	PIC 9(10) VALUE 5 COMPUTATIONAL.
000257	015	05	FSN10FA	PIC 9(10) VALUE 20 COMPUTATIONAL.
000258	015	05	FSDWDL1	
000259	015	07	FSDDWDL1A	PIC X(03) VALUE SPACES.
000260	015	07	FSDDWDL1B	PIC X(03) VALUE SPACES.
000261	015	01	FS=INFO.	
000262	015	05	FSRBLKS	PICTURE IS 9(10) COMPUTATIONAL.
000263	015	05	FSIBLKS	PICTURE IS 9(10) COMPUTATIONAL.
000264	015	05	FSN10FB	PICTURE IS 9(10) COMPUTATIONAL.
000265	015	05	FSNRCD	PICTURE IS 9(10) COMPUTATIONAL.
000266	015	05	FSNR10F	PICTURE IS 9(10) COMPUTATIONAL.
000267	015	05	FSNDEL	PICTURE IS 9(10) COMPUTATIONAL.
000268	015	05	FSNREFD	PICTURE IS 9(10) COMPUTATIONAL.
000269	015	05	FSNFI0F	PICTURE IS 9(10) COMPUTATIONAL.
000270	015	05	FSNWRITE	PICTURE IS 9(10) COMPUTATIONAL.
000271	015	01	FS=INFORMATION.	
000272	015	05	FSRBLKS	PICTURE IS 9(10). VALUE IS SPACES.
000273	015	05	FILLER	PICTURE IS X(02) VALUE IS SPACES.
000274	015	05	FSIBLKS	PICTURE IS 9(10).
000275	015	05	FILLER	PICTURE IS X(02) VALUE IS SPACES.
000276	015	05	FSN10FB	PICTURE IS 9(10).
000277	015	05	FILLER	PICTURE IS X(02) VALUE IS SPACES.
000278	015	05	FSNRCD	PICTURE IS 9(10).
000279	015	05	FILLER	PICTURE IS X(02) VALUE IS SPACES.
000280	015	05	FSNR10F	PICTURE IS 9(10).
000281	015	05	FILLER	PICTURE IS X(02) VALUE IS SPACES.
000282	015	05	FSNDEL	PICTURE IS 9(10).
000283	015	05	FILLER	PICTURE IS X(02) VALUE IS SPACES.

```

000284    015      OS F$NREAD          PICTURE IS 9(1U)*   VALUE IS SPACES.
000285    015      OS FILLER           PICTURE IS X(02)*
000286    015      OS F$N1OF           PICTURE IS 9(1U)*   VALUE IS SPACES.
000287    015      OS FILLER           PICTURE IS X(02)*
000288    015      OS F$NWRITE          PICTURE IS 9(1U)*   VALUE IS SPACES.
000289    015      OS FILLER           PICTURE IS X(02)*
000290    015      01 CARD=WORK.        PICTURE IS 9(05)*
000291    015      05 CUT=OFF          PICTURE IS X(05)*
000292    015      05 COPY=FLAG         PICTURE IS X(05)*
000293    015      05 LOADS=FLAG        PICTURE IS X(05)*
000294    015      05 LOADS             PICTURE IS X(05)*
000295    015      05 PRINT=FLAG1        PICTURE IS X(05)*
000296    015      05 PRINT=FLAG1        PICTURE IS X(05)*
000297    015      05 PRINT=TY           PICTURE IS X(05)*
000298    015      05 PRINT=FLAG2        PICTURE IS X(05)*
000299    015      05 PRINT=FLG1         PICTURE IS X(05)*
000300    015      05 PRINT=FLAG3        PICTURE IS X(05)*
000301    015      08 PRINT=L1           PICTURE IS X(05)*
000302    015      05 PRINT=FLAG4        PICTURE IS X(05)*
000303    015      05 PRINT=F2           PICTURE IS X(05)*
000304    015      05 PRINTFLAGS         PICTURE IS X(05)*
000305    015      05 PRINT=L2           PICTURE IS X(05)*
000306    015      05 PRINT=FLAG6        PICTURE IS X(05)*
000307    015      08 PRINT=F3           PICTURE IS X(05)*
000308    015      05 PRINT=FLAG7        PICTURE IS X(05)*
000309    015      08 PRINT=LO           PICTURE IS X(05)*
000310    015      05 FILLER            PICTURE IS X(05)*
000311    015      01 ERROR=WORK.        PICTURE IS X(05)*
000312    015      05 NUMB              PICTURE IS X(06)*
000313    015      05 FILLER            PICTURE IS X(05)*   VALUE IS SPACE.
000314    015      05 MESSAGE           PICTURE IS X(125)*
000315    015      PROCEDURE DIVISION.
000316    015      OPEN INPUT POMCUS CARD=FILE OUTPUT PRINT=FILE.
000317    015      IF COPY OPEN OUTPUT SAVE=FILE.
000318    015      IF LOADS OPEN OUTPUT FS.
000319    015      READ=CARD.
000320    015      READ CARD=FILE INTO CARD=WORK AT END GO TO END=CARD.
000321    015      READ CARD=FILE INTO CARD=WORK AT END GO TO END=CARD.
000322    015      MOVE POMCUS THRU END=POMCUS
000323    015      MOVE NOT=UIC TO NEW=UIC(N=UICS).
000324    015      SORT SORT=FILE ON ASCENDING KEY SRUJC SRPOM SRTYPE SRCAT
000325    015      ADD 1 TO NO=UICS.
000326    015      READ CARD=FILE INTO UIC=CARO AT END GO TO END=CARD.
000327    015      MOVE UIC=CARD TO PRINTER LINE PERFORM PRINT=OUT.
000328    015      MOVE POMCUS THRU END=POMCUS
000329    015      MOVE NOT=UIC TO NEW=UIC(N=UICS).
000330    015      GO TO NEXT=CARD.
000331    015      END=CARD.
000332    015      CLOSE CARD=FILE.
000333    015      MOVE ZERO TO COUNT.
000334    015      MOVE ZERO TO F5KEY.
000335    016      SORT=CONTROL.
000336    016      INPUT PROCEDURE IS NEXT=POMCUS THRU END=POMCUS
000337    015      OUTPUT PROCEDURE IS LOAD=FS THRU END=LOAD.
000338    015      GO TO CLOSE=FILES.
000339    015      NEXT=POMCUS.

```

••UNCLASSIFIED••

```

000341    015      IF COUNT IS NOT LESS THAN CUT-OFF GO TO CLOSE-POMCUS.
000342    015      READ POMCUS AT END GO TO CLOSE-POMCUS.
000343    015      IF E-FLAG EQUALS 'E' MOVE SPACE TO E-FLAGS GO TO NEXT-POMCUS.
000344    015      IF TCOPY WRITE SAVE-REC FROM FI-REC.
000345    015      IF F1TYPE
000346    015          IF F2TYPE          GO TO USE-TUF1
000347    015          ELSE   IF F3TYPE          GO TO USE-TUF2
000348    015          ELSE   ELSE           GO TO USE-TUF3
000349    015      TYPE-ERR.
000350    015      MOVE TUTYPE TO NUMB.
000351    015      MOVE 'TYPE POMCUS RECORD NOT EXPECTED' TU MESSAGE.
000352    015      WRITE PRINT-LINE FROM ERROR-WORK.
000353    015      GO TO CLOSE-POMCUS.
000354    015      USE-TUF1.
000355    015      IF PRINT-F1
000356    015          MOVE SRC IN FI-REC TO PRINT-LINE PERFORM PRINT-OUT
000357    015          MOVE TUF1   TO PRINT-LINE PERFORM PRINT-OUT.
000358    015          ADD 1 TO COUNT.
000359    015          MOVE SPACES TO LOG-REC.
000360    015          MOVE COUNT TO SEQNO IN LOG-REC.
000361    015          MOVE *FI* TO CDTYPE IN LOG-REC.
000362    015          MOVE NOPAX TO PERTO IN LOG-REC.
000363    015          MOVE AUTH-WAR-STR TO UNSTR.
000364    015          MOVE SRC IN FI-REC TO SRC IN LOG-REC.
000365    015          MOVE ZEROS TO SRC1-J12.
000366    015          MOVE UTC IN TUFI TO UTC IN LOG-REC.
000367    015          MOVE VIC IN TUFI TO VIC IN LOG-REC.
000368    015          MOVE POMCUS-CODE1 TO POMCUS-CODE2.
000369    015          IF PRINT-L1 MOVE LOG-REC TO PRINT-REC.
000370    016          RELEASE SORT-REC FROM LOG-REC.
000371    015          PERFORM VIC-SEARCH VARYING VIC-SEQ FROM 1 BY 1
000372    015          UNTIL VIC-SEQ EQUALS NO-VICS.
000373    015          MOVE NOFZ TO NREQ.
000374    015          IF NREQ EQUALS ZERO MOVE 1 TO TUNEXT
000375    015          ELSE MOVE 2 TO TUNEXT.
000376    015          GO TO NEXT-POMCUS.
000377    015          USE-TUF2.
000378    015          IF PRINT-F2 MOVE TUF2 TO PRINT-LINE PERFORM PRINT-OUT.
000379    015          ADD 1 TO COUNT.
000380    015          MOVE COUNT TO SEQNO IN LOG-REC.
000381    015          MOVE *F2* TO CDTYPE IN LOG-REC.
000382    015          MOVE ZEROS TO PERTO IN LOG-REC.
000383    015          MOVE CARGO TO CRCAT IN LOG-REC.
000384    015          MOVE CONTAINER TO CUNCO IN LOG-REC.
000385    015          MOVE F2SQFT TO SQFT IN LOG-REC.
000386    015          MOVE ZERO TO STOF IN LOG-REC.
000387    015          MOVE F2STON TO STON IN LOG-REC.
000388    015          MOVE F2MTON TU MMTO IN LOG-REC.
000389    015          MOVE ZERO TO TEMET IN LOG-REC.
000390    015          MOVE HLC IN TUF2 TO HELCU IN LOG-REC.
000391    015          MOVE UTC IN TUFI TO UTC IN LOG-REC.
000392    015          MOVE F2VIC TO VIC IN LOG-REC.
000393    015          MOVE POMCUS-CODE2 TO POMCUS-CODE2.
000394    015          IF PRINT-L2 MOVE LOG-REC TO PRINT-LINE PERFORM PRINT-OUT.
000395    016          RELEASE SORT-REC FROM LOG-REC.
000396    015          PERFORM VIC-SEARCH VARYING VIC-SEQ FROM 1 BY 1
000397    015          UNTIL VIC-SEQ EQUALS NO-VICS.

```

••UNCLASSIFIED••

```

000396    015      SUBTRACT 1 FROM N2REQ.
000399    015      IF N2REQ EQUALS ZERO MOVE 1 TO TUNEXT
000400    015      ELSE MOVE NOF3 TO N3REQ
000401    015      IF N3REQ EQUALS ZERO MOVE 2 TO TUNEXT
000402    015      ELSE MOVE 3 TO TUNEXT.
000403    015      GO TO NEXT-POMCUS.

000404    015      USE-TUFS.
000405    015      IF PRINT-F3 MOVE TUFS TO PRINT-LINE PERFORM PRINT-OUT.
000406    015      SUBTRACT 1 FROM N2REQ.
000407    015      IF N2REQ EQUALS ZERO MOVE 2 TO TUNEXT.
000408    015      GO TO NEXT-POMCUS.

000409    015      CLOSE-POMCUS.
000410    015      CLOSE-POMCUS * SAVE-FILE.
000411    015      IF ICOPY CLOSE SAVE-FILE.
000412    015      END-POMCUS.
000413    015      EXIT.

000414    015      UIC-SEARCH.
000415    015      IF UIC IN LOG-REC EQUAL OLD-UIC(UIC-SEQ)
000416    016      MOVE NEW-UIC(UIC-SEQ) TO UIC IN LOG-REC
000417    019      RELEASE SORT-REC FROM LOG-REC
000418    019      MOVE OLD-UIC(UIC-SEQ) TO UIC IN LOG-REC.
000419    015      LOAD-F5.
000420    015      RETURN SORT-FILE RECORD INTO F5-WORK AT END GO TO LAST-SUM.
000421    017      MOVE F5-WORK TO LOG-REC.
000422    015      ADD 1 TO FSKEY.
000423    015      MOVE FSKEY TO FSSED IN F5-WORK.
000424    015      IF PRINT-LO MOVE F5-WORK TO PRINT-LINE PERFORM PRINT-OUT.
000425    015      IF LOADS WRITE RFS FROM F5-WORK INVALID KEY GO TO KEY-ERR.
000426    015      IF CDTYPE EQUALS 'FI' GO TO FIRULL ELSE GO TO F2ROLL.
000427    015      F2ROLL.
000428    015      IF PT EQUALS 1 AND PUMCUS-CODE EQUALS 'C'
000429    015      PERFORM PRINT-SUM MOVE 2 TO PT.
000430    015      IF CRCAT1 EQUALS 'A' OR 'C' GO TO VEHICLE.
000431    015      IF CRCAT1 EQUALS 'B' GO TO NSUA.
000432    015      IF CRCAT1 EQUALS 'J' GO TO NON-VEH.
000433    015      IF CRCAT1 EQUALS 'M' GO TO AMMO.
000434    015      MOVE CRCAT TO NUMB.
000435    015      MOVE 'CRCAT NOT EXPECTED' TO MESSAGE.
000436    015      WRITE PRINT-LINE FROM ERROR-WORK.
000437    015      GO TO LOAD-F5.

000438    015      VEHICLE.
000439    015      IF CONCO EQUALS 'H' OR 'B' MOVE 8 TO CAT
000440    015      ELSE MOVE 9 TO CAT.
000441    015      IF CRCAT2 EQUALS 'O' MOVE 1 TO CAT.
000442    015      IF CRCAT2 EQUALS 'I' MOVE 4 TO CAT.
000443    015      IF CRCAT2 EQUALS '3' MOVE 12 TO CAT.
000444    015      ADD SQFT TO SWFTA(PT, 16).
000445    015      GO TO SUM-CAT.

000446    015      NSDA.
000447    015      IF CONCO EQUALS 'C' OR 'B' MOVE 6 TO CAT
000448    015      ELSE MOVE 7 TO CAT.
000449    015      IF CRCAT2 EQUALS 'O' MOVE 2 TO CAT.
000450    015      IF CRCAT2 EQUALS 'I' MOVE 3 TO CAT.
000451    015      ADD SQFT TO SWFTA(PT, 16).
000452    015      GO TO SUM-VEH.
000453    015      NON-VEH.
000454    015      IF CONCO EQUALS 'C' OR 'B' MOVE 11 TO CAT

```

```

000455      015      ELSE MOVE 10 TO CAT.
000456      015      IF CRCAT2 EQUALS '0' MOVE 1 TO CAT.
000457      015      IF CRCAT2 EQUALS '1' MOVE 5 TO CAT.
000458      015      IF CRCAT2 EQUALS '3' MOVE 13 TO CAT.
000459      015      IF CRCAT2 EQUALS '7' MOVE 14 TO CAT.
000460      015      GO TO SUM-CAT.
000461      015      AMMO.
000462      015      MOVE 15 TO CAT.
000463      015      SUM-CAT.
000464      015      ADD STUN TO STONA(PT, CAT).
000465      015      ADD SQFT TO SQFTA(PT, CAT).
000466      015      IF CAT IS LESS THAN 14 ADD STUN TO STONA(PT, 16)
000467      015      ELSE ADD STUN TO STONA(PT, 17).
000468      015      GO TO LOAD-FS.
000469      015      FROLL.
000470      015      IF FSSEQ EQUALS 1 GO TO FISAVE.
000471      015      PRINT-SUM.
000472      015      IF UNCOUNT EQUALS 10 MOVE ZERO TO UNCOUNT
000473      015      WRITE PRINT-LINE FROM HEAD-LINE
000474      015      AFTER ADVANCING TOP-OF-PAGE LINES.
000475      015      ADD 1 TO UNCOUNT.
000476      015      IF PT EQUALS 1
000477      015      MOVE *1 TO BE MOVED.
000478      015      MOVE *1, TO NAME IN LINE2
000479      015      MOVE *2, TO LINE-1 IN LINE1
000480      015      ELSE MOVE *PREPO * TO STR IN LINE1
000481      015      MOVE ZERO TO PAX IN LINE2
000482      015      MOVE ZERO TO LINE-2 IN LINE2
000483      015      MOVE *3, TO NAME IN LINE2
000484      015      MOVE *4, TO LINE-2 IN LINE2.
000485      015      MOVE STONA(PT, 1) TO STON-A0 IN LINE1.
000486      015      MOVE STONA(PT, 2) TO STON-B0 IN LINE1.
000487      015      MOVE STONA(PT, 3) TO STON-B1 IN LINE1.
000488      015      MOVE STONA(PT, 4) TO STON-B2 IN LINE1.
000489      015      MOVE STONA(PT, 5) TO STON-B3 IN LINE1.
000490      015      MOVE STONA(PT, 6) TO STON-B4 IN LINE1.
000491      015      MOVE STONA(PT, 7) TO STON-B5 IN LINE1.
000492      015      MOVE STONA(PT, 8) TO STON-B6 IN LINE1.
000493      015      MOVE STONA(PT, 9) TO STON-B7 IN LINE1.
000494      015      MOVE STONA(PT, 10) TO STON-B8 IN LINE1.
000495      015      MOVE STONA(PT, 11) TO STON-B9 IN LINE1.
000496      015      MOVE STONA(PT, 12) TO STON-B10 IN LINE1.
000497      015      MOVE STONA(PT, 13) TO STON-B11 IN LINE1.
000498      015      MOVE STONA(PT, 14) TO STON-B12 IN LINE1.
000499      015      MOVE STONA(PT, 15) TO STON-B13 IN LINE1.
000500      015      MOVE STONA(PT, 16) TO STON-B14 IN LINE1.
000501      015      MOVE STONA(PT, 17) TO STON-B15 IN LINE1.
000502      015      IF PT EQUALS 1
000503      015      WRITE PRINT-LINE FROM LINE1 AFTER ADVANCING 2 LINES
000504      015      ELSE WRITE PRINT-LINE FROM LINE1 AFTER ADVANCING 1 LINES.
000505      015      MOVE SQFTA(PT, 1) TO SUFF-A0 IN LINE2.
000506      015      MOVE SQFTA(PT, 2) TO SUFF-B0 IN LINE2.
000507      015      MOVE SQFTA(PT, 3) TO SUFF-B1 IN LINE2.
000508      015      MOVE SQFTA(PT, 4) TO SUFF-A1 IN LINE2.
000509      015      MOVE SQFTA(PT, 6) TO SUFF-B2C IN LINE2.

```

```

000512    O15      MOVE SQFTA(PT, 7)   TO SFT-B2D IN LINE2.
000513    O15      MOVE SQFTA(PT, 8)   TO SFT-A2C IN LINE2.
000514    O15      MOVE SQFTA(PT, 9)   TO SFT-A2D IN LINE2.
000515    O15      MOVE SQFTA(PT, 12)  TO SFT-A3C IN LINE2.
000516    O15      MOVE SQFTA(PT, 16)  TO SFT-NSUA.
000517    O15      MOVE SQFTA(PT, 17)  TO SFT-VER IN LINE2.

000518    O15      WRITE PRINT-LINE FROM LINE2.

000519    O15      ENTER FORTRAN SQFTU SUBROUTINE.

000520    O15      FISAVE.

000521    O15      MOVE SRC19 IN LOG-REC TU SRC1-9 IN LINE1.
000522    O15      MOVE SRC11-12 TO SRC1H IN LINE1.
000523    O15      MOVE LEVCO TO ULC IN LINE1.
000524    O15      MOVE UTC IN LOG-REC TU UTC IN LINE1.
000525    O15      MOVE UNSTR TO STR IN LINE1.
000526    O15      MOVE UIC IN LOG-REC TU UIC IN LINE1.
000527    O15      MOVE PERTO IN LOG-REC TU PAX IN LINE2.
000528    O15      MOVE 2 TO PT.
000529    O15      PERFORM ZERO-ARRAYS VARYING CAT FROM 1 BY 1
                  UNTIL CAT IS GREATER THAN 18.
000530    O15      MOVE 1 TO PT.
000531    O15      PERFORM ZERO-ARRAYS VARYING CAT FROM 1 BY 1
                  UNTIL CAT IS GREATER THAN 18.
000532    O15      GO TO LOAD-F5.
000533    O15      ZERO-ARRAYS.
000534    O15      MOVE ZEROS TO STONA(PT, CAT) SQFTA(PT, CAT).
000535    O15      LAST-SUM.
000536    O15      PERFORM PRINT-SUM.
000537    O15      ENTER FORTRAN EOF12 SUBROUTINE.
000538    O15      END-LOAD.
000539    O15      EXIT.
000540    O15      KEY-ERR.
000541    O15      MOVE FSKEY TO NUMB.
000542    O15      IF LOADS CLOSE FS USING FS-INFO.
000543    O15      MOVE *INVALID KEY FOR F1FZ FILE* TO MESSAGE.
000544    O15      MOVE ERROR-WORK TO PRINT-LINE.
000545    O15      PRINT-OUT.
000546    O15      CLOSE-FILES.
000547    O15      MOVE *FS INFORMATION AREA* TO PRINT-LINE.
000548    O15      MOVE *FS CORRESPONDING FS-INFO TO FS-INFORMATION*.
000549    O15      MOVE *FS INFORMATION TO PRINT-LINE.
000550    O15      MOVE *FS-INFORMATION PERFORM PRINT-OUT.
000551    O15      MOVE *FS-INFORMATION PERFORM PRINT-OUT.
000552    O15      CLOSE PRINT-FILE.
000553    O15      STOP RUN.

END ELT.

```

#H0G MRG PROGRAM GEO

UNCLASSIFIED

```

S8T,L 58CAMP.GEO
ELT007 RL1870 08/16-07:43:31-(20, )
000001 016 PARAMETER NG=9000
000002 016 IMPLICIT INTEGER (A=2)
000003 016 REAL ACC
000004 016 DIMENSION THTR(7),AVAIL(7),DEST(7,2),AVL(7),
000005 016 * XPSN(20),XDSN(20),XAVL(20),XRDO(20),XMDE(20),
000006 016 * XTHR(20),XORG(20),XORGN(20)
000007 016 DIMENSION SRC(2),UNTDS(2),MDF1(17)
000008 016 EQUIVALENCE (MDF1(1),SRC) * 246
000009 016 * (MDF1(3),VIC), A 6
000010 016 * (MDF1(4),TPSN), B 15
000011 016 * (MDF1(5),ROB ), C A 1
000012 016 * (MDF1(6),GOZ4), C A 6
000013 016 * (MDF1(7),GUZ4), C A 6
000014 016 * (MDF1(8),ONOD), C 13
000015 016 * (MDF1(9),DNOD), C 13
000016 016 * (MDF1(10),RUD ), C 13
000017 016 * (MDF1(11),AVL ), C 13
000018 016 * (MDF1(12),MUD ), C A 1
000019 016 * (MDF1(13),THR ), C 11
000020 016 * (MDF1(14),MCODE), C 11
000021 016 * (MDF1(15),UNTDS), C 246
000022 016 * (MDF1(17),FPSAV) * 12
000023 016 DIMENSION FASREC(52),F(52),LOCNAM(2),FNAME(3)
000024 016 *, LIST(3,NO),FIRST(2),LAST(2)
000025 016 EQUIVALENCE (F,FASREC)
000026 016 EQUIVALENCE (LN1,LOCNAM(1)),(LN2,LOCNAM(2))
000027 016 C
000028 016 DATA FIRST/20/
000029 016 DATA FNAME/SH1FAS
000030 016 *, BH1GEU
000031 018 BH1NODE/
000032 016 DATA IFL/17/
000033 016 DIMENSION FILE(2)
000034 016 DATA FILE /'GEO','NODE'/
000035 016 DATA T/*XXXXXXXX*/ , B/*XXXXXXXX*/ , E/*XXXXXXXX*/ , R/*XXXXXXXX*/
000036 016 * ONE/*XXXXXXXX*/ , BLANK/*      */ , MZERO/*0*/ , M/*XXXXXXXX*/
000037 016 * MED/*XXXXXXXX*/ , DC/*XXXXXXXX*/ , FOUR/*XXXXXXXX*/
000038 019 * TWO/*XXXXXXXX*/ , THREE/*XXXXXXXX*/ , NINE/*XXXXXXXX*/
000039 016 C
000040 016 DATA KEY/1,1,36,0,0,1, SKC(1)
000041 016 * 2,1,36,0,0,2, SKC(2)
000042 016 * 99999/ LOGICAL ERROR
000043 016 C
000044 016 C
000045 016 C
000046 016 C
000047 016 C
000048 016 DEFINE C1(X) = FLD(1,6,X)
000049 016 DEFINE C2(X) = FLD(16,6,X)
000050 016 DEFINE C3(X) = FLD(12,6,X)
000051 016 DEFINE C4(X) = FLD(18,6,X)
000052 016 DEFINE C5(X) = FLD(24,6,X)
000053 016 DEFINE C6(X) = FLD(30,6,X)
000054 016 DEFINE C12(X) = FLD(0,12,X)
000055 016 DEFINE C13(X) = FLD(0,18,X)

```

AD-A048 554

ARMY CONCEPTS ANALYSIS AGENCY BETHESDA MD
COMPUTER ASSISTED MATCH PROGRAM (CAMP), (U)
AUG 76 G L MARTIN, E R MONTAGNE

UNCLASSIFIED

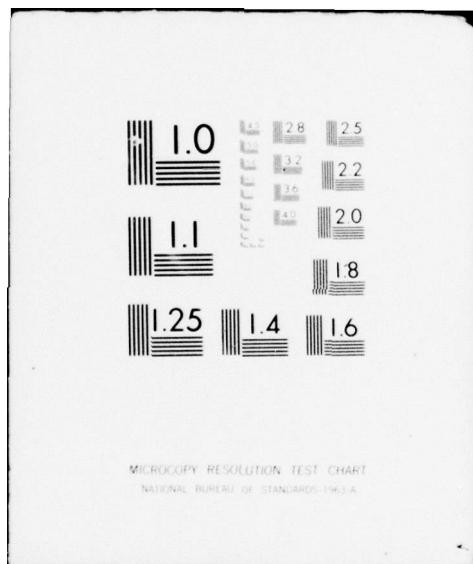
CAA-D-76-5

F/6 15/7

NL

3 OF 4
AD-A048 554





MRG PROGRAM GEO **UNCLASSIFIED**

DATE 081676

PAGE 100

```

000056    016   DEFINE C14(X) = FLD(0,24,X)
000057    016   DEFINE C15(X) = FLD(0,30,X)
000058    016   DEFINE C23(X) = FLD(6,12,X)
000059    016   DEFINE C24(X) = FLD(6,18,X)
000060    016   DEFINE C25(X) = FLD(6,24,X)
000061    016   DEFINE C26(X) = FLD(6,30,X)
000062    016   DEFINE C34(X) = FLD(12,12,X)
000063    016   DEFINE C35(X) = FLD(12,18,X)
000064    016   DEFINE C36(X) = FLD(12,24,X)
000065    016   DEFINE C45(X) = FLD(18,12,X)
000066    016   DEFINE C46(X) = FLD(18,18,X)
000067    016   DEFINE C56(X) = FLD(24,12,X)
000068    016   C
000069    016   C CREATES MOFI FILE IN SRC SEQUENCE
000070    016   C
000071    016   C
000072    016   C ENTER NUMBER OF THEATERS
000073    016   READ(5,1000) NTH
000074    016   1000 FORMAT(1I1)
000075    016   C ENTER DESTINATION GEO AND NODE, AVAIL DAY
000076    016   READ(5,1001) (THTR(K)),AVAIL(K),DEST(K,1),DEST(K,2),AVT(K),
000077    016   • K = 1,NTH
000078    016   1001 FORMAT(1I1,1X,13,1X,44,1X,13,1X,13)
000079    016   C ENTER TPSN LIST FOR EXCEPTIONS
000080    016   READ(5,1021) NTPSNX
000081    016   IFINTPSNX *EQ. 0) GO TO 1109
000082    016   READ(5,1002) (XTPSN(1)),XDSTG(1),XUSTN(1),XAVL(1),XRDD(1),XMODE(1),
000083    016   • XTHR(1),XORG(1),XORGN(1),1=NTPSNX
000084    016   1002 FORMAT((15,1X,A4,3)(1X,13),1X,A1,1X,11,1X,A4,1X,13))
000085    016   1020 FORMAT(1Z)
000086    016   C
000087    016   C PRINT OUT INPUT
000088    016   1109 PRINT 1110, NTH,NTPSNX
000089    016   1110 FORMAT(1I1, NUMBER OF THEATERS * ,12/
000090    016   • NUMBER OF EXCEPTIONS * ,12)
000091    016   PRINT 1120,(THTR(K))AVAIL(K),DEST(K,1),DEST(K,2),AVT(K),K=1,NTH)
000092    016   1120 FORMAT(1V, THTR AVAIL DEST(G) UEST(N) AVL(T),/
000093    016   • 13X,11,3X,13,3X,A4,13,3X,A4,13,3X,A4,13)
000094    016   IFINTPSNX *EQ. 0) GO TO 1131
000095    016   PRINT 1130, (XTPSN(1)),XDSTG(1),XUSTN(1),XAVL(1),XRDD(1),XMODE(1),
000096    016   • XTHR(1),XORG(1),XORGN(1),1=NTPSNX
000097    016   1130 FORMAT(1V, TPSN DEST(G) UEST(N) AVL ROD MODE THR),
000098    016   • ORIG(G) ORIGIN)* /
000099    016   • (1X,15,3X,A4,4X,13,5X,13,2X,13,4X,A1,4X,11,4X,A4,5X,13))
000100    016   C ERROR CHECK
000101    016   1131 IFINTH *GT. 0 AND NTH *LE. 7) GO TO 1150
000102    016   PRINT 1140, NTH
000103    016   1140 FORMAT(1X,12, THEATERS INPUT. MUST BE BETWEEN 0 - 7*)
000104    016   IER = 1

```

```

000113 016   SU    IG=IG+1
000114 016   READ(15,1,END=60) (LIST(1,IG),I=1,3)
000115 016   GOTO50
000116 016   C   ENTER NODE TABLE (LIST)
000117 016   C   ENTER NODE TABLE (LIST)
000118 016   6U   LAST(1)=IG
000119 016   6U   IG=IG+1
000120 016   FIRST(2)=IG
000121 016   IR=IG
000122 016   PRINT 95,IR,FNAME(2)
000123 016   95 FORMAT(1B,, RECORDS ON FILE *2A6)
000124 016   C
000125 016   7U   IG=IG+1
000126 016   READ(16,1003,END=79) LIST(1,IG),LIST(3,IG),LIST(2,IG)
000127 016   1U03  FORMAT(1A6,6X,A6,3X,13)
000128 016   C46(LIST(1,IG)) = U
000129 016   I FORMAT(12A6)
000130 016   GOTO70
000131 016   75  PRINT 76, IG
000132 016   FORMAT(16,*, ENTRIES IN GEO AND NODE. CAN ONLY HAVE 9000*)
000133 016   STOP
000134 016   79  CONTINUE
000135 016   IF(IG .GT. 9001) GO TO 75
000136 016   LAST(2)=IG
000137 016   IR=IG-IR-1
000138 016   PRINT 95,IR,FNAME(3)
000139 016   C
000140 016   C
000141 016   PRINT 97
000142 016   97 FORMAT(1,
000143 016   *          UNITS      ACTIVE      NO FIND      RESERVE*)
000144 016   C
000145 016   C   SET TO SORT OUTPUT ON SRC
000146 016   CALL SOPEN3($100,$990,17,2,KEY)
000147 016   C   MAIN LOOP
000148 016   C
000149 016   100  CONTINUE
000150 016   READ(1F1,END=900) FASREC
000151 017   C   THEATER CODE
000152 016   THR = C1(F(8))-48
000153 016   DO 101 1TH = 1,NTH
000154 016   IF(THR .EQ. THTR(1TH)) GO TO 102
000155 016   101  CONTINUE
000156 016   GO TO 100
000157 016   C   SKIP IF UNIT IS DISPLAY ONLY
000158 016   1U2   IF(1C56(F(12)) .NE. DC) GO TO 100
000159 016   C   IF SRC IS BLANK / TDA UNIT/ DO NOT CONSIDER
000160 016   SRC(1) = C26(F(23))*2**6 + C1(F(24))
000161 016   IF(SRC(1) .EQ. BLANK) GO TO 100
000162 016   SRC(2) = C24(F(24))*2**16 + C6(F(24))*2**12 + C1(F(25))*2**6
000163 016   C
000164 016   C3(F(1))
000165 016   UIC = C46(F(1))*2**16 + C13(F(2))
000166 016   IF(COMPO .EQ. FOUR .AND. C12(UIC) .EQ. X8) GO TO 100
000167 016   IF(COMPO .EQ. ONE .AND. C4(F(14)) .EQ. B1) GO TO 100
000168 016   KU = KU +
000169 016   C   PROGRESS REPORT

```

```

000170    016      IF(IKU/SOU*500*EQ.KU) PRINT 99,KU,KAN,KR,KRN,ACC
000171    016      DECODE(LIU,1004,F(30)) TPSN
000172    016      LUW4 FORMAT(SA,15)
000173    016      C
000174    016      C
000175    016      C
000176    016      COMPUTE /MCODE/
000177    016      C      D=IN COUNTRY. 1=PKEPU, 2=CONUS ORIENTED UN NATO, 3=CONUS OTHER
000178    016      C
000179    016      ROB = BLANK
000180    016      MCODE = 3
000181    016      IF(COMPO *NE. ONE) GO TO 200
000182    016      P3 = C6(F(122))
000183    016      IF(P3*EQ.T*OR. P3*EQ.E) C1(RUB) = P3
000184    016      IF(P3 *EQ. B) C1(ROB) = E
000185    016      P2 = C5(F(122))
000186    016      IF(P2 *EQ.R) C1(RUB) = P2
000187    016      IF(C46(F(122)) *EQ. MED) C1(ROB) = H
000188    016      IF(ROB *NE. BLANK) MCODE = 1
000189    019      C      CHECK ADCOL FIELD - POS 119
000190    020      IF(C5(F140)) *EQ. E *OR. C5(F(20)) *EQ. NINE) MCODE = 0
000191    016      IF(MCODE *NE. 1) ROB = BLANK
000192    016      C
000193    016      C
000194    016      C      ACTIVE UNIT
000195    016      C      LOCNO STNNM
000196    016      KA=KA+1
000197    016      LN1 = C46(F(126))
000198    016      C13(LN1) = C46(F(115))
000199    016      IF(C11(LN1)*GE.48 *AND. C11(LN1)*LE.57) C1(LN1) = BLANK
000200    016      LN2 = F(127)
000201    016      LG = LOCATE(LOCNAM,1)
000202    016      IF(LG*LE.U) KAN=KAN+
000203    016      IF(LG *EQ. 0) PRINT 91, FILE(1),LOCNAM,UIC
000204    016      C
000205    016      C      LOCNO
000206    016      C13(LOCNO) = C13(LN1)
000207    016      LN = LOCATE(LOCNO,2)
000208    016      IF(LN.GT.0) GOTOS00
000209    016      C
000210    016      C      DIAGNOSTIC
000211    016      PRINT 91, FILE(2),LOCNAM,LOCNO,UIC
000212    016      91 FORMAT(* ••ACTIVE UNIT AREA NOT FOUND IN *AB*FILE *,
000213    016      * 3X,ZA6,2(2X,A6))
000214    016      C
000215    016      C      GOTOS00
000216    016      C
000217    016      C
000218    016      C
000219    016      C      RESERVE UNIT
000220    016      C      200 CONTINUE
000221    016      C      KR=KR+1
000222    016      C
000223    016      C
000224    016      C      MBLOC MBSTA
000225    016      C      LN1 = C6(F(16))*2**30 + C12(F(17))*2**18 + C56(F(17))*2**6
000226    016      C

```

HKG PROGRAM GEU **UNCLASSIFIED**

```

000227    016    IF(C1(LN1)*GE*48 *AND* C1(LN1)*LE*57) C1(LN1) = BLANK
000228    016    LN2 = C26(F1(18))*2006 + C1(F1(19))
000229    016    LG = LOCATE(LOCNAM,1)
000230    016    C
000231    016    IF(LG*EQ*0) PRINT #2, FILE(1),LOCNAM,UIC
000232    016    C
000233    016    C MBLUC
000234    016    C13(MBLUC) = C13(LN1)
000235    016    LN = LOCATE(MBLUC,2)
000236    016    IF(LN*GT;0) GOTOSUU
000237    016    C
000238    016    C LOCCO
000239    016    C13(LOCCO) = C46(F1(15))
000240    016    IF(C1(LOCCO)*GE*48 *AND* C1(LOCCO)*LE*57) C1(LOCCO) = BLANK
000241    016    LN = LOCATE(LOCCO,2)
000242    016    IF(LN*GT;0) GOTOSUU
000243    016    C
000244    016    C
000245    016    PRINT #2, FILE(2),LOCNAM,LUCCO,UIC
000246    016    92 FORMAT(* *** RESERVE UNIT AREA NOT FOUND IN *A5,*FILE *)
000247    016    .
000248    016    C
000249    016    C
000250    016    C
000251    016    C
000252    016    C
000253    016    C BUILD MOVEMENT DATA FILE RECORD
000254    016    SUD CONTINUE
000255    016    C
000256    016    C
000257    016    C
000258    016    C
000259    016    C RDD, AVAIL
000260    016    DECODE(6,1005,F(7)) RDD
000261    016    1005 FORMAT(2X,13)
000262    016    AVL = AVAIL(1TH)
000263    016    IF(PSN.LT. 20000 *AND* (COMPU.EQ.TNO .OK. COMPU.EQ.THREE))
000264    016    .
000265    016    C MODE, ULC
000266    016    MODE = 'P'
000267    016    IF(MODE *EQ* 0) MODE = 'Z'
000268    016    IF(MODE *EQ* 1) MODE = 'A'
000269    016    ULC = C6(F(34))*200*24
000270    016    C
000271    016    C UNTDS(1-12)
000272    016    UNTDS(1) = C36(F(35))*200*12 + C12(F(36))
000273    016    UNTDS(2) = C36(F(36))*200*12 + C12(F(37))
000274    016    C
000275    016    C ORIGIN: G024 ARLOC (1-2) CK MATCH RESULTS
000276    016    IF(LN*EQ;0) GO TO 95U
000277    016    IF(LG*EQ;0) LG=LN
000278    016    C
000279    016    G024 = LIST(3,LG)
000280    016    ONOD = LIST(2,LN)
000281    016    C
000282    016    C DESTINATION
000283    016    GD24 = DEST(1TH,1)

```

HKG PROGRAM GEU **UNCLASSIFIED**

```

000284 016      C
000285 016      C
000286 016      C IF(LCODE •NE• 0) GO TO 1040
000287 016      C IN COUNTRY = SET ORIGIN TO DESTINATION. NO EXCEPTION LIST
000288 016      C GO24 = GO24
000289 016      C SEE IF UNIT IS ON EXCEPTION LIST
000290 016      C 1040 DO 1050 I = 1,NTPSN
000291 016      C IF(TPSN •EQ• XTPSN(I)) GO TO 1060
000292 016      C CONTINUE
000293 016      C 1050 CONTINUE
000294 016      C GO TO 1090
000295 016      C 1060 IF(XDSTG(I) •NE• BLANK) GD24 = XDSTG(I)
000296 016      C IF(XOSTN(I) •NE• MZERO) UN00 = XDSIN(I)
000297 016      C IF(XRDD(I) •NE• MZERO) RUD = XRDU(I)
000298 016      C IF(XAVL(I) •NE• MZERO) AVL = XAVL(I)
000299 016      C IF(XMODE(I) •NE• BLANK) MODE = XMODE(I)
000300 016      C IF(XTHR(I) •NE• MZERO) THR = XTMR(I)
000301 016      C IF(XORGG(I) •NE• BLANK) GD24 = XORGG(I)
000302 016      C IF(XORGN(I) •NE• MZERO) ON00 = XORGN(I)
000303 016      C WRITE RECORD
000304 016      C DEBUG TO UNIT 7
000305 016      C 1090 WRITE(7,1100) MDF1
000306 016      C 1100 FORMAT(1X,2A6,1X,A6,1X,15,1X,A6),4(1X,13),1X,A1,2(1X,11),
000307 016      C * 1X,2A6,1X,11)
000308 016      C CALL SRREL(MDF1,17)
000309 016      C ACC = ((KU-1)*ACC+KC)/KU
000310 016      C KC=0
000311 016      C GOTO100
000312 016      C
000313 016      C
000314 016      C 900 ENDFILE ZI
000315 016      C PRINT 99,KU,KA,KAN,KR,CRN,ACC,KF
000316 016      C 99 FORMAT(1
000317 016      C SORT MDF1 ACCORDING TO SRC
000318 016      C 980 CALL $S0MT
000319 016      C 990 CALL SRRET(MDF1,17,$995)
000320 016      C WRITE(29) MDF1
000321 016      C 900 GO TO 990
000322 016      C 995 ENDFILE Z9
000323 016      C IF(ERROR) RETURN 0
000324 016      C STOP
000325 016      C
000326 016      C
000327 016      C CAN'T OUTPUT THIS MDF = SAVE FAS RECORD FOR REPROCESSING
000328 016      C 950 KU = KU - 1
000329 016      C KF = KF + 1
000330 016      C ERROR = •TRUE•
000331 016      C GO TO 100
000332 016      C
000333 016      C
000334 016      C *****
000335 016      C FUNCTION LOCATE(ARR,N)
000336 016      C DIMENSION ARR(2)
000337 016      C
000338 016      C LOCATE=0
000339 016      C HI=LASTIN(N)
000340 016      C LO=FIRST(N)

```

••UNCLASSIFIED••

```

000341    016   C
000342    016   C BINARY SEARCH
000343    016   C
000344    016   I10  LP=LO+(HI-LO)/2
000345    016   99  FORMAT()
000346    016   KC=KC+1
000347    016   1   FORMAT(2X,2A6,2X,2A6,16)
000348    016   I1IARR(1)=LIST(1,LP) 200,I1I0,400
000349    016   I10  IF(NEQ.2) GOTO300
000350    016   IF(IARR(2)=LIST(2,LP)) 200,I1I0,400
000351    016   C
000352    016   C HIGH
000353    016   200  IF(ILP=LO.LE.1) RETURN
000354    016   HI=LP
000355    016   GOTO100
000356    016   C
000357    016   C HIT
000358    016   300  LOCATE=LP
000359    016   RETURN
000360    016   C
000361    016   C LOW
000362    016   400  IF(HI=LP.LE.1) RETURN
000363    016   LO=LP
000364    016   GOTO100
000365    016   END
END ELT.

```

ENDDG

MRG PROGRAM LOG

••UNCLASSIFIED•• •L,0

```

DELTIL 58CAMP.LOG
ELTQ07 RL1870 08/16 07:43:36-(0)
000001    000      IMPLICIT INTEGER (A-X)
000002    000      DIMENSION SRC(2),UNTDS(2),MDF1(17),MDFIA(20)
000003    000      EQUIVALENCE (MDF1,MDFIA)
000004    000      EQUIVALENCE (MDF1(1),SRC),
000005    000      *          (MDF1( 3),UIC),
000006    000      *          (MDF1( 4),TPSN),
000007    000      *          (MDF1( 5),RUB),
000008    000      *          (MDF1( 6),GOZ4),
000009    000      *          (MDF1( 7),GUZ4),
000010    000      *          (MDF1( 8),ONOD),
000011    000      *          (MDF1( 9),DNOD),
000012    000      *          (MDF1(10),RVL),
000013    000      *          (MDF1(11),AVL),
000014    000      *          (MDF1(12),MODE),
000015    000      *          (MDF1(13),THR),
000016    000      *          (MDF1(14),MCODE),
000017    000      *          (MDF1(15),UNTDS),
000018    000      *          (MDF1(16),FPSSAV),
000019    000      *          (MDF1(17),FPSSAV),
000020    000      DIMENSION P(22,4)
000021    000      EQUIVALENCE (P,TUCHA), (P(1,1),PUMCUS)
000022    000      DIMENSION TUCHA(22,2),TSRC(2),TNAM(2)
000023    000      EQUIVALENCE (TUCHA( 1,1), TSRC),
000024    000      *          (TUCHA( 1,2), PUJC),
000025    000      *          (TUCHA( 3,1), ULC),
000026    000      *          (TUCHA( 4,1), UTC),
000027    000      *          (TUCHA( 6,1), ZVEHNA),
000028    000      *          (TUCHA( 7,1), ZNSDNA),
000029    000      *          (TUCHA( 8,1), ZNSDDO),
000030    000      *          (TUCHA(10,1), ZNVOOUT),
000031    000      *          (TUCHA(11,1), ZNSOVC),
000032    000      *          (TUCHA(12,1), ZNSDVN),
000033    000      *          (TUCHA(13,1), ZVHOVC),
000034    000      *          (TUCHA(14,1), ZVHOVN),
000035    000      *          (TUCHA(15,1), ZNVOUN),
000036    000      *          (TUCHA(16,1), ZNVOVVC),
000037    000      *          (TUCHA(17,1), ZVEMBC),
000038    000      *          (TUCHA(18,1), ZNVBC)
000039    000      DIMENSION POMCUS(22,2)
000040    000      EQUIVALENCE (POMCUS( 1,1),ZNVOOUT),
000041    000      *          (POMCUS( 6,1),YVEHNA),
000042    000      *          (POMCUS( 7,1),YNSUNA),
000043    000      *          (POMCUS( 8,1),YNSDOU),
000044    000      *          (POMCUS( 9,1),YVEHOU),
000045    000      *          (POMCUS(10,1),YVHOUP),
000046    000      *          (POMCUS(11,1),YNSOVC),
000047    000      *          (POMCUS(12,1),YNSUVN),
000048    000      *          (POMCUS(13,1),YMHVUC),
000049    000      *          (POMCUS(14,1),YMHVUN),
000050    000      *          (POMCUS(15,1),YNVUVN),
000051    000      *          (POMCUS(16,1),YNEHBC),
000052    000      *          (POMCUS(17,1),YNEHBC),
000053    000      *          (POMCUS(18,1),YNBBC),
000054    000      *          (MORSW(2),PLANI(7),MORSW(6),MORSW(6),
000055    000      EQUIVALENCE (MORSW(1),ASUPLY),
000056    000      (MORSW(1),PASUPLY),

```

```

000056   000      * (M0RSW(2), BULK), (M0RSWP(2)), PBULK1
000057   000      * (M0RSW(3), OVER), (M0RSWP(3)), POVER1
000058   000      * (M0RSW(4), OUT), (M0RSWP(4)), POUT1
000059   000      * (M0RSW(5), NAT), (M0RSWP(5)), PNAT1
000060   000      * (M0RSW(6), ACAMMO), (M0RSWP(6)), PACAMM1
000061   000      * DIMENSION SEQ(7),THTR(7),TSAV(2),ZBASR(2),THTRD(7),
000062   000      * ICT(7)
000063   000      * LOGICAL END*, ENDP, ENUM, ERRUR, FIND
000064   000      * VIMENSION SSRC(4,99)
000065   000      * VIMENSION IZERO(44)
000066   000      * DATA IZERO /44*0/
000067   000      * DIMENSION KEY(7), KEY1(13)
000068   000      * DATA KEY /3,1,36,0,0,1, * UIC
000069   000      * 999999/
000070   000      * DATA KEY1 /1,1,36,0,0,1, * SRC(1)
000071   000      * 2,1,36,0,0,2, * SRC(2)
000072   000      * 999999/
000073   000      * DATA HD/*2/, PAVL/999/, PROD/0/
000074   000      C
000075   000      C
000076   000      C
000077   000      C
000078   000      C READ(5,1) IN,NTH,THTR,THTRD,PLANID
000079   000      1 FORMAT(2(1,I1),2(71,I1),7A1)
000080   000      2 READ(5,2) PORTS,ZBASR,ZAASH * DEBARKATION AND ASR(LBS)
000081   000      2 FORMAT(2(A4,I1),4(F6.0,I1))
000082   000      3 READ(5,3) NSRCX
000083   000      3 FORMAT(12)
000084   000      4 IF(NSRCX *EQ* 0) GO TO 44
000085   000      4 READ(5,4) ((SSRC(1,J),J=1,4),J=1,NSRCX)
000086   000      4 FORMAT(4A6)
000087   000      C SORT SRC INPUT = MATCH UPMUFI INPUT
000088   000      40 CALL SOPEN(1840,542,4,2,KEY1)
000089   000      41 CALL SRREL((SSRC(1,1),4))
000090   000      42 CALL SSORT
000091   000      43 1 = 1
000092   000      43 CALL SRRET((SSRC(1,1),4,344))
000093   000      44 1 = 1 + 1
000094   000      44 GO TO 43
000095   000      44 CONTINUE
000096   000      C
000097   000      C
000098   000      C IF(INTH *LE* 0 *OR* IN *GT* 7) IER = 1
000099   000      C IF(S,I = 1,IN
000100   000      C 1F(THTRD(I)) *EQ* U) IER = IER + 4
000101   000      C IF(I *GT* NTH) GO TO 5
000102   000      C IF(PLANID(I) *EQ* * *) IER = IER + 8
000103   000      C CONTINUE
000104   000      C PRINT 6, IN,NTH
000105   000      C FORMAT( * THTR SET PLANID* )
000106   000      C 1F(  * NUMBER OF THEATERS * ,I2/
000107   000      C  * NUMBER OF SETS * ,I2)
000108   000      C PRINT 7
000109   000      C FORMAT( * THTR SET PLANID* )
000110   000      C 1F(  * J = THTRD(I)
000111   000      C PRINT 9, THTRD(I),THTRD(J),PLANID(J)
000112   000      C FORMAT(3X,11,4X,11,6X,A1)

```

••UNCLASSIFIED••

```

000113    000      PRINT 10
000114    000      10      FORMAT(6X,'AIRPORT',6X,'SEAPORT',1UX,'NON=POMCUS ASR',15X,
000115    000      *     POMCUS ASR',/33X,'SUPPLY',9X,'AMMO',7X,'SUPPLY',9X,'AMMO')
000116    000      PRINT 11,ZBASR(1),ZAASR(1),1=1,2)
000117    000      11      FORMAT(8X,A4,9X,A4,5X,(F9.3,5X,F9.3,3X))
000118    000      IFINSRCX *EQ* 0) GO TO 16
000119    000      PRINT 17,((SSRC(1,J),J=1,4),J=1,NSRCX)
000120    000      17      FORMAT(/,SRC LIST/(2X,2A6,2X,2A6))
000121    000      16      IFILER *EQ* 0) GO TO 98
000122    000      IF(MOD(IER,2)*NE*0) PRINT 12
000123    000      12      FORMAT(*,***ERROR**** NUMBER OF THEATERS*)
000124    000      IER = IER/2
000125    000      13      IF(MOD(IER,2)*NE*0) PRINT 13
000126    000      14      FORMAT(*,***ERROR**** NUMBER OF SETS*)
000127    000      IER = IER/2
000128    000      15      IF(MOD(IER,2)*NE*0) PRINT 14
000129    000      14      FORMAT(*,***ERROR**** SET NUMBERS*)
000130    000      IER = IER/2
000131    000      15      IF(MOD(IER,2)*NE*0) PRINT 15
000132    000      15      FORMAT(*,***ERROR**** PLANID ERROR*)
000133    000      RETURN 0
000134    000      98      CONTINUE
000135    000      C
000136    000      C      READ MDFL. FIND MATCH ON TUCHA (AND POMCUS IF MCODE = 1). FILES IN SRC SET
000137    000      C      PRODUCE UNIT MORSA CARDS AND MUF2
000138    000      C      29 = MDFL, 28 = TUCHA, 27 = POMCUS, 26 = MUF2, 10 = MORSA CARDS
000139    000      C
000140    000      99      CALL SOPEN2(1599,8430,20,3,KEY)
000141    000      99      POM = 1
000142    000      000      FIND * .TRUE.
000143    000      000      DO 999 1 = 1,2
000144    000      000      CONVERT TO TONS
000145    000      000      ZBASR(1) = ZBASR(1)/2000.
000146    000      000      999      ZAASR(1) = ZAASR(1)/2000.
000147    000      000
000148    000      000      READ(28,151) TUCHA
000149    000      100      READ(29,END=400) MUF1
000150    000      000      IF(NDT) GO TO 180
000151    000      000      NU = NU + 1
000152    000      000      11U      IF(SSRC(1) = TSRC(1)) 180,120,150
000153    000      000      C      CHECK ONLY 7,8,9 OF SRC(2)
000154    000      000      12U      IF(IFLD(0,18,SR(2)) = FLD(0,18,TSRC(2))) 180,<00,150
000155    000      000      15U      READ(28,151,END=1030) TUCHA
000156    000      000      15I      FORMAT(16,5X,A3,2X,A5,18F6.1/A6,A5,1X,2A6,1816)
000157    000      000      GO TO 11U
000158    000      000      C      NO MATCH FOR MDFL UNIT ON TUCHA
000159    000      180      IF(SSRC(1) *NE* TS(1)) GO TO 185
000160    000      000      IF(SSRC(2) *NE* TS(2)) GO TO 185
000161    000      000      185      PRINT 181, SRC,UIC,TSRC ,NU
000162    000      000      18I      FORMAT(*,NO MATCH FOR SRC *,A6,* UN TUCHA FILE *,2A6,
000163    000      000      * 16)
000164    000      000      TSAV(1) = SRC(1)
000165    000      000      TSAV(2) = SRC(2)
000166    000      000      19U      ERROR = *TRUE*
000167    000      000      NCT = NCT + 1
000168    000      000      GO TO 100

```


••UNCLASSIFIED••

```

000227    000      C   WRITE OUT DATA FOR LAYIN
000228    000      250  TOTAL = 0
000229    000      DU 240 1 = 1,6
000230    000      240  TOTAL = TOTAL + MORSW(1)
000231    000      WRITE(11,241) TAVL,UIC,RD,SEQNTH,GO24,JD24,MODE,TRDD,DNGD,UNOD,
000232    000      • BULK,OVER,OUT,NAT,NSDASQ,TUTA,ASUPLY,IZER(1),TPAX,ACAMMO
000233    000      241  FORMAT(3X,J3,46,5X,11,5X,J6,24,A1,4X,IX,3J3,2X,5X,10J5)
000234    000      C
000235    000      C   PROCESSING POMCUS?
000236    000      IF (IENDM) GO TO 475
000237    000      C   WRITE MDF2
000238    000      C   WRITE(26) MDF1,TUCHA,ASUPPLY,ACAMMO
000239    000      GO TO 100
*
000240    000      C
000241    000      C   SAVE POMCUS UNITS
000242    000      MDF1A(18) = ULC
000243    000      MDF1A(19) = UTC
000244    000      MDF1A(20) = PAX
000245    000      NP = NP + 1
000246    000      CALL SRREL(MDF1A,ZU)
000247    000      GO TO 100
000248    000      C
000249    000      C   END OF MDF1
000250    000      400  ENDN = •TRUE•
000251    000      UIC  PRINT 1011, ICT, SEQNCT
000252    000      POM = 2
000253    000      READ(27,151) P
000254    000      C   SORT POMCUS UNITS ON UIC
000255    000      CALL SSORT
000256    000      430  CALL SRRET(MDF1A,20,$1000)
000257    000      IF (IENDP) GO TO 460
000258    000      FIND = •TRUE•
000259    000      C   FIND MATCH ON POMCUS FILE
000260    000      440  IF(UIC = PUIC) 460,470,450
000261    000      450  READ(27,151,END=1040) P
000262    000      GO TO 440
000263    000      C   NO MATCH
000264    000      460  PRINT 461, SRC,UIC,PUIC
000265    000      461  FORMAT(• NO MATCH FOR SRC •,ZAB,• UIC •,A6,• UN POMCUS FILE •,A6)
000266    000      NCT = NCT + 1
000267    000      C   WRITE ZERO RECORD. USE PAX,UTC,ULC FROM TUCHA
000268    000      FIND = •FALSE•
000269    000      TPAX = MUFLA(20)
000270    000      UO 462 1 = 1,6
000271    000      MORSW(1) = 0
000272    000      462  MUFSW(1) = 0
000273    000      NSDAST = 0
000274    000      NSDASQ = 0
000275    000      PNDSST = 0
000276    000      PNDSQ = 0
000277    000      IZERO(3) = ULC
000278    000      IZERO(4) = UTC
000279    000      IZERO(27) = TPAX
000280    000      GO TO 470
000281    000      C
000282    000      C   PROCESS POMCUS UNIT = CREATE 2 SETS OF MURSA CARDS. SMOBSMOD
000283    000      C   DATA ONLY FOR STUFF TO BE MOVED

```

```

000264    000      C      ULC = MDFIA(18)
000265    000      C      UTC = MDFIA(19)
000266    000      C      WRITE CARDS FOR STUFF TO BE MOVED
000267    000      C      GO TO 215
000268    000      C
000269    000      C      WRITE(10,476) SEQ(1TH),PLANID(1TH),ROB
000270    000      C
000271    000      C      IF(.NOT. FIND) GO TO 477
000272    000      C      COMPUTE AMOUNT ALREADY THERE
000273    000      C      PBULK = YVEHBC + YNVBC * 5
000274    000      C      POVER = YVHOVC + YVHOVN + YNSOVC + YNSOVN + .5
000275    000      C      POUT = YVEHOU + YNVOU + YNSOOU + .5
000276    000      C      PNAT = YVHNNA + YNSDNA + .5
000277    000      C      PASUPL = FLOAT(PAXP) * ZAASRPOM + .5
000278    000      C      PACAMM = FLOAT(PAXP) * ZAASRPOM + .5
000279    000      C      PNSDST = YNSDNA + YNSDOU + YNSOVC + YNSOVN + .5
000280    000      C      PNSDSQ = NSDNAP + NSDOUP + NSUVCP + NSOVNP
000281    000      C      WRITE CARDS FOR STUFF ALREADY THERE
000282    000      C      477 SEQ(1TH) = SEQ(1TH) + 1
000283    000      C      WRITE(10,210) SEQ(1TH),PLANID(1TH),RD,UNTS,ULC,MD,PAVL,PKDD,GUZ4,
000284    000      C      RD24,GUZ4,PAXP,TPSN
000285    000      C      WRITE(10,220) SEQ(1TH),PLANID(1TH),MORSWP,SRCP,FRN,UTC,UIIC
000286    000      C      IF(IPNSDST + PNSDSQ .NE. 0) WRITE(10,230) SEQ(1TH),PLANID(1TH),
000287    000      C      PNSDST,PNSDSQ
000288    000      C      WRITE(10,476) SEQ(1TH),PLANID(1TH),ROB
000289    000      C      FORMAT(4,A,A1,F4.1,X,A1,7UX)
000290    000      C
000291    000      C      IF(.NOT. FIND) GO TO 480
000292    000      C      MDF2 FILE SHOULD CONTAIN AMOUNTS TO BE MOVED
000293    000      C
000294    000      C      WRITE(26) MDF1,TUCHA,ASUPPLY,ACAMMO
000295    000      C      GO TO 430
000296    000      C      WRITE ZERO RECORD
000297    000      C      480 WRITE(26) MDF1,12ERO,ASUPPLY,ACAMMO
000298    000      C      GO TO 430
000299    000      C      END OF MDF1 AND POMCUS UNITS
000300    000      C      WRITE OUT SEQ TO BE USED IN NUR FOR REST OF MORSIA CARDS
000301    000      C      1000 DO 1010 I = 1,7
000302    000      C      1010 MDF1(I) = SEQ(I)
000303    000      C      SET RDU 50 IT WILL SORT OUT FIRST IN NUR
000304    000      C      MDF1(10) = 999999
000305    000      C      WRITE(26) MDF1,TUCHA,ASUPPLY,ACAMMO
000306    000      C      ENDFILE 26
000307    000      C      ENDFILE 10
000308    000      C      ENDFILE 11
000309    000      C      PRINT 1011, ICT,SEWNCT
000310    000      C      1011 FORMAT(9,UNITS IN THEATER SETS *717/
000311    000      C      * FINAL SEQUENCE NUMBERS *717/
000312    000      C      * NO MATCHES *717)
000313    000      C      IF(ERROR) RETURN 0
000314    000      C      STOP
000315    000      C
000316    000      C      END OF TUCHA FILE. STILL HAVE MUF1 RECORUS LEFT
000317    000      C      1030 PRINT 1031
000318    000      C      1031 FORMAT(* END OF TUCHA FILE *)
000319    000      C
000320    000      C      END OF TUCHA FILE. STILL HAVE MUF1 RECORUS LEFT
000321    000      C      1030 PRINT 1031
000322    000      C      1031 FORMAT(* UNITS IN THEATER SETS *717/
000323    000      C      * FINAL SEQUENCE NUMBERS *717/
000324    000      C      * NO MATCHES *717)
000325    000      C      IF(ERROR) RETURN 0
000326    000      C      STOP
000327    000      C
000328    000      C      END OF TUCHA FILE. STILL HAVE MUF1 RECORUS LEFT
000329    000      C      1030 PRINT 1031
000330    000      C      1031 FORMAT(* END OF TUCHA FILE *)
000331    000      C      END OF TUCHA FILE. STILL HAVE MUF1 RECORUS LEFT
000332    000      C      1030 PRINT 1031
000333    000      C      1031 FORMAT(* UNITS IN THEATER SETS *717/
000334    000      C      * FINAL SEQUENCE NUMBERS *717/
000335    000      C      * NO MATCHES *717)
000336    000      C      IF(ERROR) RETURN 0
000337    000      C      STOP
000338    000      C
000339    000      C      END OF TUCHA FILE. STILL HAVE MUF1 RECORUS LEFT
000340    000      C      1030 PRINT 1031
000341    000      C      1031 FORMAT(* END OF TUCHA FILE *)

```

MRG PROGRAM LOG

DATE 081676 PAGE 112

```

        ••UNCLASSIFIED••
000341      000      ENDT = *TRUE*
000342      000      GO TO 18U
000343      000      C   END OF POMCUS FILE. STILL HAVE MDFIA RECORDS LEFT
000344      000      C
000345      000      1040 PRINT 1041
000346      000      1041 FORMAT(* END OF POMCUS FILE *)
000347      000      ENDP = *TRUE*
000348      000      GO TO 46U
000349      000      C
000350      000      C   BAD MATCH WITH SRC UPDATES
000351      000      1050 PRINT 1051, (MDF1(1),I=1,4),FPSAV,(SSRC(1,FPSAV),I=1,4)
000352      000      1051 FORMAT(* UNIT *,2A6,1X,A6,I5,* NO MATCH TO REVERT BACK TO *
000353      000      *   ORIGINAL SRC. ENTRY NUMBER IS *12/
000354      000      *   OLD SRC IS *,2A6*, NEW SRC IS *,2A6*
000355      000      RETURN 0
000356      000      END
END ELT.

```

MRG PROGRAM UPM0F1

SHDG

••UNCLASSIFIED•• •L0

MRG PROGRAM LOG

DATE 081676 PAGE 112

••UNCLASSIFIED••

```

BETYL 58CAMP•UPMDF1
ELT007 RL1670 08/16/07:43:39-(0.)
000001 000 C THIS ROUTINE UPDATES SRC'S BASED ON AN INPUT TABLE • USED IF ERRORS
000002 000 C IN MATCHING UNITS IN LOG
000003 000 IMPLICIT INTEGER(I=2)
000004 000 DIMENSION MDF1(17),SRC(4,100),KEY(13),KEY1(13)
000005 000 DATA KEY /1,1,36,0,0,1,
000006 000 * 2,1,36,0,0,2,
000007 000 * 99999/
000008 000 DATA KEY1/1,1,36,0,0,1,
000009 000 * 2,1,36,0,0,2,
000010 000 * 99999/
000011 000 LOGICAL END
000012 000 READ(5,1) NSRC # OF UPDATE ENTRIES
000013 000 I FORMAT(12)
000014 000 READ(5,2) (SRC(J,I),J=1,4),I=1,NSRC) # OLD AND NEW
000015 000 2 FORMAT(4A6)
000016 000 END = •FALSE•
000017 000 C SRT INPUT SRC'S
000018 000 C MDF1 SHOULD BE IN SRC SORT (OUTPUT FROM GEO)
000019 000 CALL SOPEN(1$100,$200,4,2,KEY)
000020 000 DO 110 I = 1,NSRC
000021 000 110 CALL SRREL(SRC(1,I),4)
000022 000 CALL SSORT
000023 000 2U0 I = 1
000024 000 2U0 CALL SRRET(SRC(1,I),4,$250)
000025 000 I = I + 1
000026 000 GO TO 210
000027 000 250 I = 1
000028 000 C FINAL MDF1 MUST BE IN SRC SORT
000029 000 CALL SOPEN(1$300,$410,17,2,KEY1)
000030 000 300 READ(29,END=400) MDF1
000031 000 IF(ND1 GO TO 330
000032 000 305 IF(MDF1(1) = SRC(1,1)) 330,310,340
000033 000 310 IF(MDF1(2) = SRC(2,1)) 330,320,340
000034 000 320 MDF1(1) = SRC(3,1)
000035 000 MDF1(2) = SRC(4,1)
000036 000 MDF1(17) = 1
000037 000 330 CALL SRREL(MDF1,17)
000038 000 GO TO 300
000039 000 340 I = I + 1
000040 000 IF(I •GT• NSRC) GO TO 350
000041 000 GO TO 305
000042 000 350 END = •TRUE•
000043 000 400 CALL SSORT
000044 000 400 CALL SRRET(MDF1,17,$500)
000045 000 410 CALL SRRET(25) MDF1
000046 000 WRITE(25) MDF1
000047 000 GO TO 410
000048 000 500 ENDFILE 25
000049 000 STOP
000050 000 END
END ELT.
```

MRG PROGRAM UPMDF1

••UNCLASSIFIED••

DATE 081676 PAGE 114

SHDG MRG PROGRAM NUR

••UNCLASSIFIED•• •L.O

MRG PROGRAM UPMDF1

••UNCLASSIFIED••

DATE 081676 PAGE 114

••UNCLASSIFIED••

```

BELT,L 58CAMP.NUR
ELT007 RL1870 08/16-07:43:42-(10, )
00001 006 IMPLICIT INTEGER (A-W)
00002 006 DIMENSION MDF2(63)
00003 006 DIMENSION SRC(2),MUF1(17)
00004 006 EQUIVALENCE (MDF1( 1),SRC),
00005 006   * (MDF1( 3),UJC), 246
00006 006   * (MDF1( 4),TPSN), 15
00007 006   * (MDF1(10),RDD ), 13
00008 006   * (MDF1(11),AVL ), 13
00009 006   * (MDF1(13),THR ), 11
00010 006   * (MDF1(14),MCODE) 11
00011 006 DIMENSION TUCHA(22,2)      (TUCHA( 5,2), PAX)
00012 006 EQUIVALENCE (MDF2(18),TUCHA),
00013 006   * EQUIVALENCE (MDF2(62),ASUPPLY), (MUF2(63),ACAMMO)
00014 006   * EQUIVALENCE (MDF2(62),BLDUP(7),PRD(8,7),XLEVEL(3,7),LDAY(7),FDAY(7)
00015 006   * DIMENSION CDAY(7),BLDUP(7),PRD(8,7),XLEVEL(3,7),LDAY(7),FDAY(7)
00016 006   * XSAFE(3,7),GORG(20),NORG(20),XPCT(2,20),XCNSM(3,7,8)
00017 006   * XASR(3,7,2),XRPLC(8,7),XSLOPE(3,7),PLANID(7),THTRD(7)
00018 006   * XSTREN(7),SEW(7),XRPLCE(7),XKSL(3,7),DDAY(7),PER(7)
00019 006   * RT(3),RD(4),RN(2,8),LVL(3),RDAY(7),ARLEV(3,7),AVDAY(7)
00020 006   * DEST(2,7),KU(7),THTR(7),THEND(7),XTEND(7),XTUN(210)
00021 006 EQUIVALENCE (XTUN,XCNSM), (XTUN(169),XASK)
00022 006 DIMENSION SMOB(8),KEY(7)
00023 006 DATA RT/IMS,IHS,IHP/
00024 006   * RD/IMG,IMA,IM2,IMF/
00025 006   * RN/*RESUPPLY DRY,
00026 006   * RESUPPLY AMM,
00027 006   * RESUPPLY POL,
00028 006   * REPLACEMENTS,
00029 006   * FILLER
00030 006   * PWRS DRY
00031 006   * PWRS AMMO
00032 006   * PWRS POL
00033 006 DATA LVL/3HPKG,3HPKG,3HPOL/
00034 006 DATA PER/7*1/, BLANK/, /*, MZERO/-0/, IZERO/0/
00035 006 DATA KEY /10,1,36,1,0,1,99999/  RDD SORT
00036 006 DIMENSION ADAY(17),XFR(17),BDAY(3,7),XBFK(3,7),MD(4),MOE(7)
00037 006 DATA MD/*P*,*S*,*A*,*Z/
00038 006 LOGICAL ENDM
00039 006 C COMPUTE NON-UNIT MOVEMENT REQUIREMENTS
00040 006 C
00041 006 C
00042 006 C
00043 006 C INITIALIZE
00044 006 C THEATER DEFINITION
00045 006 READ(S,IU01) IN,NTH,THTR,THTRD,PLANID
00046 006 I0U1 FORMAT(1I1,1X),2(1I1,1X),7A1)
00047 006 C DAYS,PERIODS,LEVELS - BY SET
00048 006 READ(S,IU02) (K,DDAY(K),RDAY(K),BLDUP(K),COAY(K),ADAY(K),
00049 006   * (PRD(L,K),L=1,B),(XLEVEL(L,K),L=1,3),(SAFE(L,K),L=1,3),
00050 006   * I = 1,NTH)
00051 006 I0U2 FORMAT(1I1,1X,13(13,1X),6(F3.0,U,1X))
00052 006 C BASE, FILLER, DEST = BY SET
00053 006 READ(S,IU03) (K,(XNSL,K),L=1,3),XFR(K),(BDAY(L,K),L=1,3),
00054 006   * (XBFK(L,K),L=1,3),(UEST(L,K),L=1,2),ADAY(K),I = 1,NTH
00055 006 I0U3 FORMAT(1I1,1X,3(F9.0,U,1X),3(F4.0,U,1X),4,2(1X,13)))

```

```

000056   006   C  REPL (CAS) BY SET
          READ(5,1004) (K,(XRPCL(L,K)),L=1,8),L=1,NTH
000057   006   1004  FORMAT((11,1X,8(F5.0,1X)))
          C  ASK BY SET
000058   006   1005  READ((11,XASR(J,K,L)),J=1,3),(L=1,2),L=1,NTH
000059   006   1005  READ((11,XASR(J,K,L)),J=1,3),(L=1,2),L=1,NTH
000060   006   1005  READ((11,XASR(J,K,L)),J=1,3),(L=1,2),L=1,NTH
000061   006   1005  READ((11,XASR(J,K,L)),J=1,3),(L=1,2),L=1,NTH
000062   006   C  CONSUMPTION = BY TYPE/SET
          READ(5,1006) ((K,11,(XCNSM(J,K,L)),L=1,8),J=1,3),L=1,NTH
000063   006   1006  FORMAT((11,1X,8(F6.0,1X)))
          C  ORIGINS
000064   006   1007  READ(5,1007) (GORG(L),NORG(L),(XPCT(J,L)),J=1,2),L=1,20)
000065   006   1007  FORMAT((14,1X,13,1X,2(F4.0,1X)))
000066   006   C  PRINT 1100, IN,NTH
          1100  FORMAT(* NUMBER OF THEATERS *,12/
          * NUMBER OF SETS   *,12)
000067   006   1101  PRINT 1101, (THTR1), THTR1,11,1,IN)
000068   006   1101  FORMAT(* THTR SET*/(3X,11,3X,11/))
000069   006   1102  PRINT 1102, SET PLAN DDAY RDAY BLDUP COAY ADAY 1 2 3 4 5
000070   006   1102  FORMAT(* 6 7 8 BLDUP LEVELS  SAFE LEVELS*)
000071   006   1103  DO 1103 K = 1,NTH
000072   006   1103  PRINT 1104, K,PLANID(K),UDAY(K),RDAY(K),BLDUP(K),CDAY(K),
          * DAY(K),PRO(L,K),L=1,8),(XLEVEL(L,K),L=1,3),(XSAFE(L,K),
000073   006   1104  PRINT 1104, SET PLAN DDAY RDAY BLDUP COAY ADAY 1 2 3 4 5
000074   006   1104  FORMAT((2X,11,3X,A1,4X,13,2X,13,2(F4.0,1X)),
          * 2(1X,3(1X,F4.0)))
000075   006   1105  PRINT 1105, FORMAT(* SET*,14X,*THEATER BASE*,14X,*FILLER*,5X,*FILLER*,10X,
          * FILLER*,25X,*DAY*/9X,*DRY*,9X,*AMMO*,1UX,*POL*,7X,*PCT*,7X,
          * DAYS*,12X,*PCTS*,9X,*DEST(G)* DEST(N) AVL*)
000076   006   1106  DO 1106 K = 1,NTH
000077   006   1106  PRINT 1107, K,(XRS(L,K),L=1,3),(XFR(L,K),(BDAY(L,K))L=1,3),
          * (XBFR(L,K),L=1,3),(DEST(L,K),L=1,2),AVDAY(K)
000078   006   1107  FORMAT((2X,11,1X,3(1X,F12*3),2X,FS*3,2X,3(13,1X),3(1X,FS*3),
          * 2X,A4,2(5X,13))
000079   006   1108  PRINT 1108, FORMAT(* REPLACEMENTS BY TIME PERIOD (MEN/1000/DAY)*)
000080   006   1109  DO 1109 K = 1,NTH
000081   006   1109  PRINT 1109, K,(XRPCL(L,K),L=1,8)
000082   006   1110  FORMAT((1X,11,1X,B(2X,F12*5))
          * 5X, NON-POMC*,33X,*PUMCUS*)
000083   006   1111  DO 1112 K = 1,NTH
000084   006   1111  PRINT 1111, K,(XASR(J,K,L)),J=1,3),L=1,2)
000085   006   1112  PRINT 1112, K,(XASR(J,K,L)),J=1,3),L=1,2)
000086   006   1113  PRINT 1113, FORMAT(* CONSUMPTION RATES (LBS/MAN/DAY) = BY TIME PERIOD*)
000087   006   1114  DO 1114 K = 1,NTH
000088   006   1114  PRINT 1114, K,(XCNSM(J,K,L),L=1,8),J=1,3)
000089   006   1115  FORMAT((2X,11,2X,*DRY*,B(2X,F12*5),5X,*AMMO*,B(2X,F12*5))/
          * 5X,*POL*,B(2X,F12*5))
000090   006   1116  PRINT 1116, (GORG(L),NORG(L),(XPCT(J,L)),J=1,2),L=1,20)
000091   006   1116  FORMAT(* ORIGIN(G) ORIGIN(N) DRY PCT AMMO PCT*)
000092   006   1117  DO 1117 I = 1,20
          XTOT1 = XTOT1 + XPCT(I,1)
000093   006

```

```

000113    006    1117   XTOT2 = XTOT2 + XPCY(2,1)
000114    006    1ER = 0
000115    006    TOT = XTOT1+100. + .5
000116    006    IF(TOT .EQ. 100) GO TO 1119
000117    006    IER = 1
000118    006    PRINT 1118, XTOT1
000119    006    1118  FORMAT('*****ERROR**** DRY PERCENTS ADD UP TO ',F5.3)
000120    006    1119  TOT = XTOT2+100. + .5
000121    006    IF(TOT .EQ. 100) GO TO 1121
000122    006    IER = 1
000123    006    PRINT 1120, XTOT2
000124    006    1120  FORMAT('*****ERROR**** AMMO PERCENTS ADD UP TO ',F5.3)
000125    007    1121  IF(IN *LE. 7) GO TO 1123
000126    007    PRINT 1122, IN
000127    007    IER = 1
000128    007    1123  IF(NTH *LE. 7) GO TO 1126
000129    007    PRINT 1127, NTH
000130    007    IER = 1
000131    007    1128  DO 1130 I = 1,IN
000132    007    1122  FORMAT('*****ERROR**** ILLEGAL VALUE FOR NUMBER OF THEATERS ',I2)
000133    007    1127  FORMAT('*****ERROR**** ILLEGAL VALUE FOR NUMBER OF THEATER SETS ',I2)
000134    008    IF(THTRID(I) *GT. 0 AND. THTRID(I) *LE. NTH) GO TO 1125
000135    006    PRINT 1124, THTRID(I)
000136    006    1124  FORMAT('*****ERROR**** ILLEGAL VALUE FOR SET ',I2)
000137    006    1125  IF(I *GT. NTH) GO TO 1130
000138    006    IF(PLANID(I) *NE. 0) GO TO 1130
000139    006    IER = 1
000140    006    PRINT 1126, !'BLANK PLANID FOR SET ',I2!
000141    006    1126  FORMAT('*****ERROR**** BLANK PLANID FOR SET ',I2)
000142    006    1130  CONTINUE
000143    006    1F11ER *NE. 0) RETURN U
000144    006    C CONVERT CONSUMMATION AND ASK DATA TO TONS
000145    006    DO 7 I = 1,210
000146    006    7 ATON(I) = XTON(I)/2000.
000147    006    DO 8 K = 1,NTH
000148    006    C SET FIRST MODE
000149    006    MOE(K) = MDL(I)
000150    006    C FIX COAY TO GET ALL UNITS ON THAT DAY
000151    006    6 CODAY(K) = CDAY(IK) + 1
000152    006    C SET LAST DAY OF THEATER
000153    006    DO 9 K = 1,NTH
000154    006    DO 92 J = 1,B
000155    006    C IF(PRD1(J,K) *EQ. MZERO) GO TO 91
000156    006    CONTINUE
000157    006    92 PRINT 10
000158    006    LDAY(K) = PRD(8,K)
000159    006    GO TO 9
000160    006    91 LDAY(K) = PRD(9-J,K)
000161    006    C CONTINUE
000162    006    C WRITE HEADING
000163    006    10 FORMAT(1H1,' DAY THR UNITS STRENGTH REPLACEMENTS TYPE ',*
000164    006    10 FORMAT(1H1,' DAY THR UNITS STRENGTH REPLACEMENTS TYPE ',*
000165    006    C PRINT 10
000166    006    C *DAYS OH DAYS DESRD TONS OH TONS REQD),
000167    006    C SORT MDF2 BY RRD
000168    006    CALL SOPEN3(3850,870,63,1U,KEY)
000169    006    READ(126,END=60) MDF2

```

```

000176    006      CALL SRRELIMDF2,63)
000171    006      GO TO 50
000172    006      CALL SSORT
000173    006      C
000174    006      C FIRST RECORD SHOULD BE SEQ NO$.
000175    006      70      CALL SRRET(MDF2,63,$1000)
000176    006      DO 90 I = 1,7
000177    006      90      SEQ(I) = MDF2(1)
000178    006      C
000179    006      C WRITE CARDS FOR THEATER BASE
000180    006      AVL = 999
000181    006      RDD = 0
000182    006      DO 96 K = 1,NTH
000183    006      DO 95 I = 1,3
000184    006      IF(XRS(I,K)) *EQ. 0.) GO TO 95
000185    006      SEK(K) = SEQ(K) + 1
000186    006      WRITE(24,497) SEQ(K),PLANID(K),RT(1),RN(1,1,5),RN(2,1,5),
000187    006      * LVL(1),MD(1),AVL,RDD,DEST(I,K),DEST(I,K),IZERO
000188    006      IF(I *EQ. 3) GO TO 94
000189    006      AMT = XRS(I,K) + .5
000190    006      WRITE(24,498) SEQ(K),PLANID(K),AMT
000191    006      GO TO 95
000192    006      94      AMT = XRS(I,K) / 1000. + .5
000193    006      WRITE(24,499) SEQ(K),PLANID(K),AMT
000194    006      C CONVERT BARRELS TO TUNS
000195    006      XRS(I,K) = XRS(I,K) / 7.213
000196    006      95      CONTINUE
000197    006      96      CONTINUE
000198    006      C
000199    006      GO TO 399
000200    006      C MAIN LOOP
000201    006      C
000202    006      200      DAY=DAY+1
000203    006      C THEND = 0 - THEATER IS CURRENT
000204    006      C THEND = 1 - THEATER HAS ENDED. NEEDS DATA WRITTEN
000205    006      C THEND = 2 - THEATER HAS ENDED. ALL DATA WRITTEN
000206    006      DO 201 K = 1,NTH
000207    006      IF(THEND(K) *NE. 0) GO TO 201
000208    006      PR = PER(K)
000209    006      IF(1DAY *GT. PRO(PRK)) PER(K) = PER(K) + 1
000210    006      IF(1DAY *LE. LDAY(K)) GO TO 201
000211    006      PER(K) = PER(K) - 1
000212    006      THEND(K) = 1
000213    006      CONTINUE
000214    006      DO 202 K = 1,NTH
000215    006      IF(THEND(K) *NE. 2) GO TO 206
000216    006      202      CONTINUE
000217    006      GO TO 900
000218    006      C
000219    006      C COMPUTE FILLER IF IT'S TIME
000220    006      206      DO 207 K = 1,NTH
000221    006      IF(DAY *NE. CDAY(K)) GO TO 207
000222    006      XFR(K) = XFR(K) * ASTREN(K)
000223    006      PRINT 410, DAY,K,XFR(K),ASTREN(K)
000224    006      LNS = LNS + 1
000225    006      207      CONTINUE
000226    006      C SET ANCHOR POINT FOR BUILDUP FUNCTION

```

••UNCLASSIFIED••

```

000227    006    209    DO 220 K = 1,NTH
                IF(DAY .NE. RDAY(K)) GO TO 220
                IF(KU(K)) .EQ. 0) GO TO 215
                IF(THEND(K)) .NE. 0) GO TO 220
                PR = PERIK)
                DO 210 I=1,3
                  C DAYS OF SUPPLY ON HAND AT END OF RDAY=1
                  XLEVEL(I,K) = XRS(I,K)/(XCNSM(I,K,PR)*XSTREN(K))
                  XSLOPE(I,K) = (XLEVEL(I,K) - XLEVEL(I,K))/(BLDUP(K) - RDAY(K))
                  C ALREADY OVER REQUIRED LEVEL?
                  IF(XSLOPE(I,K) .GT. 0.) GO TO 210
                  XSLOPE(I,K) = 0
                  XLEVEL(I,K) = XLEVEL(I,K)
                  CONTINUE
                  GO TO 220
0002241   009    C NO UNITS ON RDAY. UP IT TO NEXT DAY
0002242   009    C 215 RDAY(K) = RDAY(K) + 1
                  CONTINUE
0002243   009    C 220 CONTINUE
0002244   006    C
0002245   006    300  CONTINUE
0002246   006    C
0002247   006    C
0002248   006    C
0002249   006    C
0002250   006    C ENTER NEXT FORCE UNIT DATA
0002251   006    DO 301 ITH = 1,N
0002252   006    IF(THR .EQ. THTR(ITH)) GO TO 302
0002253   006    301  CONTINUE
0002254   006    PRINT 2000, THTR, SRC, UIC, TPSN, THR
0002255   006    2000  FORMAT(7I6/* NO THEATER MATCH FOR *,2A6,IX,A6,IX,15,IX,13)
0002256   006    LNS = LNS + 2
0002257   006    GO TO 399
0002258   006    302  ITH = THTRD(ITH)
                IF(THEND(ITH)) .NE. 0) GO TO 399
                XPAX = PAX
                XSTREN(ITH)=XSTREN(ITH)+XPAX
                IF(KU(ITH)) .EQ. 0) FDAY(ITH) = DAY
                KU(ITH)=KU(ITH)+1
                IF(DAY .LE. CDAY(ITH)) GO TO 399
                POM = 1
                IF(MCODE .EQ. 1) PUM = 2
0002260   006    C ACCOMPANYING SUPPLY
0002261   006    DO 305 I=1,3
0002262   006    C TOTAL TONS ON HAND
0002263   006    305  XRS(I,ITH)=XRS(I,ITH)+XASH(I,ITH,POM)*XPAX
0002264   006    C
0002265   006    C
0002266   006    C
0002267   006    C
0002268   006    C READ NEXT UNIT
0002274   006    399  CALL SRRET(MDF2,63,$1000)
0002275   006    C
0002276   006    C
0002277   006    C
0002278   006    C
0002279   006    C
0002280   006    C
0002281   006    C CHECK 5-DAY INTERVAL
0002282   006    400  IF(DAY/5 .NE. DAY) GO TO 600
0002283   006    C

```

••UNCLASSIFIED••

```

000264    006      JDAY = DAY = 4
000285    006      C WRITE 5-DAY ROLLUPS
000286    006      C
000287    006      C CYCLE ON THEATER
000288    006      C
000289    006      DO 520 K = 1,NTH
                  IF(THEND(K) *EQ* 2) GO TO 520
                  IF(THEND(K) *EQ* 1) THEND(K) = 2
000290    006      C
000291    006      C CHECK FOR DAY TO COMMENCE RESUPPLY
000292    006      IF(IDAY.LT.RDAY(K)) GO TO 520
000293    006      IDAY = JDAY
000294    006      IF(IDAY.LT.FDAY(K)) IDAY = FDAY(K)
000295    006      IF(IDAY.GT.ADAY(K)) MOE(K) = MD(2)
000296    006      AVL = AVDAY(K)
000297    006      IF(AVL.LT.0) AVL = IDAY + AVL
000298    006      IF(AVL.GE.1DAY) AVL = CDAY(K)
000299    010
000300    006      C
000301    006      SMOB(1) = IDAY
000302    006      SMOB(2) = PLAND(K)
000303    006      SMOB(3) = DEST(2,K)
000304    006      SMOB(7) = MOE(K)
000305    006      SMOB(8) = AVL
000306    006      PR = PER(K)
000307    006      XDAY = DAY - RDAY(K)
000308    006      C CYCLE ON SUPPLY TYPE
000309    006      C
000310    006      IF(LNS.LT.501 GO TO 403
000311    006      PRINT 10
000312    006      LNS = 1
000313    006      DO 510 J = 1,3
000314    006      DO S10 J = 1,3
000315    006      C SET RESUPPLY REQUIREMENTS FOR TYPE
000316    006      C XDESIR = NEEDED - DAYS OF SUPPLY
000317    006      XDESIR = XSLOPE(1,K) * XDAY + XRLEV(1,K)
000318    006      IF(IDAY.EQ.RDAY(K)) XDESIR = XRLEV(1,K)
000319    006      IF(IDAY.GE.BLDUP(K)) XDESIR=XLVEL(1,K)
000320    006      C XDESRD = NEEDED QUANTITY OF SUPPLY
000321    006      XDESRD = XDESIR*XCNSM(1,K)*PR1*XSTREN(K)
000322    006      XAMT = XUESRD - XRS11(K)
000323    006      IF(XAMT.LE.0) GO TO 510
000324    006      XAMT = XRS11(K)/(XCNSM(1,K)*PR1*XSTREN(K))
000325    006      C CONVERT TO THOUSANDS OF BARRELS
000326    006      IF(1 *EQ* 3) XAMT = 7.213 * XAMT / 1000.
000327    006      XRS11(K)=XDESRD
000328    006      LNS = LNS +
000329    006      PRINT 410, DAY,K,KU(K),XSTREN(K),XREPLACE(K),1,XOND,XDESIR,XRS11(K).
000330    006      * XAMT
000331    006      410 FORMAT(1X,13,3X,11,3X,15,2(2X,F10.0),5x,11,2X,4(2X,F10.0))
000332    006      C
000333    006      C
000334    006      C
000335    006      C
000336    006      IND = 18
                  IF(1 *EQ* 3) 1ST = 19
                  IF(1 *EQ* 3) IND = 19
000337    006      C CYCLE ON ORIGIN
000338    006      DO 500 J = 1ST,IND
000339    006      C
000340    006      C

```

••UNCLASSIFIED••

```

000341 006 1F(1 • EQ• .3) GO TO 450
000342 006 1F(1XPCT(1,J)) •EQ• 0•.) GO TO 500
000343 006 AMT = XAMT • XPCT(1,J) + .5
000344 006 GO TU 460
000345 006 450 AMT = XAMT + .5
000346 006 C
000347 006 460 AMT = AMT - 999999
000348 006 IF(AMT • 6T. 0) AMT = 999999
000349 006 IF(AMT • 6T. 12 • OR. 1 • EQ. 3) GO TO 480
000350 006 C SEND MINIMUM OF 12 SHORT TUNS
000351 006 XRS(1,K) = XRS(1,K) + FLOAT(12 - AMT)
000352 006 AMT = 12
000353 006 C
000354 006 C WRITE MORSA CARDS
000355 006 SEQ(K) = SEQ(K) +
000356 006 WRITE(24,4971) SEQ(K),PLANID(K),RT(1),RN(1,1),RN(2,1),LVL(1),
000357 006 • MOE(K),AVL,1DAY,GORG(1),DEST(1,K),DEST(1,K),1ZERO
000358 006 497 FORMAT(14, "A", "A", "A")
000359 006 C BULK/AMMO
000360 006 4F1 • NE• .3) WRITE(24,4981) SEW(K),PLANID(K),AMT
000361 006 498 FORMAT(14, "A", "A", "W", "6X,1,6,61A)
000362 006 C POL
000363 006 499 FORMAT(14, "A", "A", "W", "12X,1,6,55X)
000364 006 499 FORMAT(14, "A", "A", "W", "12X,1,6,55X)
000365 006 KM=KM+2
000366 006 SMOB(4) = 1
000367 006 SMOB(5) = AMT
000368 006 SMOB(6) = NORG(J)
000369 006 WRITE(23) SMOB
000370 006 WRITE(12, "96) AVL,RT(1),RN(1,1),SEQ(K),GORG(1),DEST(1,K),MGE(K),1DAY
000371 006 • DEST(2,K),NORG(W),LVL(1),RN(1,1),RN(2,1),AMT,1
000372 006 496 FORMAT(3A4, "J3,2A1,4X,5X,16,24A,1,4X,1X,3J3,2X,5X,A3,ZAB,4X,2J6)
000373 006 IF(AMT1 • LE. 0) GO TO 500
000374 006 AMT = AMT1
000375 006 GO TO 460
000376 006 CONTINUE
000377 006 S10 CONTINUE
000378 006 C
000379 006 C REPLACEMENTS
000380 006 C
000381 006 C ENTER NOPAX
000382 006 1RPL = XRPCLCE(K) + .5
000383 006 IF(1RPL • EQ. 0) GO TO 520
000384 006 SEQ(K) = SEQ(K) + 1
000385 006 XRPCLCE(K) = 0.
000386 006 C
000387 006 WRITE(24,4971) SEQ(K),PLANID(K),RT(1),RN(1,1),RN(2,4),RN(2,4),LVL(1),
000388 006 • MD(3),AVL,1DAY,GORG(2U),DEST(1,K),IRPL
000389 006 KM=KM+1
000390 006 SMOB(4) = 4
000391 006 SMOB(5) = IRPL
000392 006 SMOB(6) = NORG(2D)
000393 006 SMOB(7) = MD(3)
000394 006 WRITE(12, "96) AVL,RT(1),RN(1,1),SEQ(K),GORG(2U),DEST(1,K),MD(3),1DAY
000395 006 • DEST(2,K),NORG(2D),RN(1,4),RN(2,4),IRPL,SMOB(4)
000396 006 S20 CONTINUE
000397

```

```

000396 006 C
000399 006 C
000400 006 C
000401 006 C DAILY COMPUTATIONS
000402 006 C CONTINUE
000403 006 C SMOB(1) = DAY
000404 006 C CONSUMPTION
000405 006 DO 700 K = 1,NTH
000406 006 IF(KU(K)) *EQ* U1 GO TO 700
000407 006 IF(THEND(K)) *NE* U1 GO TO 700
000408 006 PR = PER(K)
000409 006 IF(1DAY *GT* ADAY(K)) MOE(K) = MD(2)
000410 006 AVL = AVDAY(K)
000411 006 IF(AVL *LT* U1) AVL = DAY + AVL
000412 010 IF(AVL *GE* DAY) AVL = CDAY(K)
000413 006 SMOB(2) = PLANID(2)
000414 006 SMOB(3) = DEST(2,K)
000415 006 SMOB(7) = MOE(K)
000416 006 SMOB(8) = AVL
000417 006 IF(LNS *LT* 50) GO TO 605
000418 006 PRINT 10
000419 006 LNS = 1
000420 006 DO 650 I=1,3
000421 009 IF(XCNSM(1,K,PR) *EQ* 0) GO TO 650
000422 006 C TOTAL LBS ON HAND AFTER CONSUMPTION
000423 006 XRS(1,K) = XRS(1,K)*XSTREN(K)*XCNSM(1,K,PR)
000424 006 IF(1DAY *GE* RDAY(K)) GO TO 650
000425 006 C CHECK FOR EMERGENCY RESUPPLY SHIPMENT
000426 006 XHD = XRS(1,K)/(XCNSM(1,K,PR) * XSTREN(K))
000427 006 IF(XHD *GE* XSAFE(1,K)) GO TO 650
000428 006 C GENERATE RESUPPLY TO BRING UP TO SAFE
000429 006 X = XSAFE(1,K) * XCNSM(1,K,PR) * XSTREN(K)
000430 006 XAMT = X - XRS(1,K)
000431 006 IF(XAMT *EQ* 0) GO TO 650
000432 006 IF(1DAY *EQ* 3) XAMT = 7*213 * XAMT / 1000.
000433 006 PRINT 410, DAY,K,KU(K),XSTREN(K),XPLCE(K),I,XHD,XSAFE(1,K),
000434 006 * XRS(1,K),XAMT
000435 006 LNS = LNS + 1
000436 006 XRS(1,K) = X
000437 006 C CYCLE ON ORIGIN
000438 006 C 1ST = 1
000439 006 IND = 18
000440 006 IF(1 *EQ* 3) 1ST = 19
000441 006 IF(1 *EQ* 3) IND = 19
000442 006 DO 630 J = 1ST,IND
000443 006 C SEQUENCE NUMBER
000444 006 SEQ(K) = SEQ(K)+1
000445 006 C
000446 006 C 1F(1 *EQ* 3) GO TO 610
000447 006 IF(1 *EQ* 3) GO TO 610
000448 006 IF(XPCT(1,J) *EQ* 0) GO TO 630
000449 006 AMT = XAMT * XPCT(1,J) + .5
000450 006 GO TO 620
000451 006 AMT = XAMT + .5
000452 006 C WRITE MURSA CARDS
000453 006 C WRITE(24,497) SEQ(K),PLANID(K),RT(1),RN(1,1),RN(2,1),LVL(1),
000454 006 C

```

••UNCLASSIFIED•

```

000455    006      * MOE(K),AVL,DAY,GORGLJ,DEST(L,K),DEST(L,K),IZERO
000456    006      C BULK/AMMO
000457    006      C IF(L •NE• 3) WRITE(24,498) SEQ(K),PLANID(K),AMT
000458    006      C POL
000459    006      C IF(L •EQ• 3) WRITE(24,499) SEQ(K),PLANID(K),AMT
000460    006      C KM=KM+2
000461    006      C N = 1
000462    006      C SMOB(4) = 1
000463    006      C SMOB(5) = AMT
000464    006      C SMOB(6) = NORGLJ
000465    006      C WRITE(23) SMOB
000466    006      C WRITE(12,496) AVL,RT(L),RD(L),SEQ(K),GORGLJ,DEST(L,K),MOE(K),DAY,
000467    006      C DEST(L,K),NORG(L),LVL(L),RN(L,1),RN(2,1),AMT,L
000468    006      C CONTINUE
000469    006      C 630
000470    006      C CONTINUE
000471    006      C CHECK FOR FILLER
000472    006      C IF(DAY •NE• BDAY(L,K)) GO TO 690
000473    006      C SEND FILLER
000474    006      C FIL = XFR(K) • XBFR(L,K) + .5
000475    006      C BDAY(L,K) = BDAY(Z,K)
000476    006      C BDAY(Z,K) = BDAY(3,K)
000477    006      C BDAY(3,K) = 99999
000478    006      C XBFR(L,K) = XBFR(Z,K)
000479    006      C XBFR(Z,K) = XBFR(3,K)
000480    006      C SEQ(K) = SEQ(K) + 1
000481    006      C WRITE(24,497) SEQ(K),PLANID(K),RT(L),RD(4),RN(L,5),RN(2,5),LVL(L),
000482    006      C MD(3),AVL,DAY,GORGLJ,ZO,DEST(L,K),FIL
000483    006      C KM = KM + 1
000484    006      C SMOB(7) = MD(3)
000485    006      C SMOB(8) = 4
000486    006      C SMOB(5) = FILE
000487    006      C SMOB(6) = NORGLJ
000488    006      C WRITE(23) SMOB
000489    006      C WRITE(12,496) AVL,RT(L),RD(4),SEQ(K),GORGLJ,DEST(L,K),MD(3),DAY,
000490    006      C DEST(L,K),NORG(20),LVL(L),RN(L,5),RN(2,5),FIL,SMOB(4)
000491    006      C REPLACEMENTS
000492    006      C CHECK FOR D-DAY
000493    006      C 690
000494    006      C IF(DAY •LT• DDAY(L,K)) GO TO 700
000495    006      C XADD = XSTREN(K)•XPCLCP,K)/1000
000496    006      C XRPCLCE(K) = XRPCLCE(K) + XADD
000497    006      C CONTINUE
000498    006      C GO TO 200
000499    006      C
000500    006      C
000501    006      C
000502    006      C PRINT STATISTICS
000503    006      C 900 CONTINUE
000504    006      C ENDFILE 24
000505    006      C ENDFILE 23
000506    006      C ENDFILE 12
000507    006      C REWIND 23
000508    006      C IF(ENDM) GO TO 909
000509    006      C PRINT 901
000510    006      C FORMAT • UNITS NOT PROCESSED •
000511    006      C CALL SRRET(MDF2,63,$909)

```

MRG PROGRAM NUR ••UNCLASSIFIED••

DATE 08/16/76 PAGE 124

```
000512    006      PRINT 902, SRC,UIC,TPSN,THR,RDD
000513    006      902      FORMAT(1X,2A6,1X,A6,3(1X,15))
000514    006      GO TO 905
000515    006      CALL SMQBST
000516    006      PRINT 910,KU,KM,SEY
000517    006      910      FORMAT(1X, UNITS IN THEATER
000518    006      *       , 717/* CARDS PRODUCED *, 17/
000519    006      *       FINAL SEQUENCE NUMBERS *, 717)
000520    006      STOP
000521    006      C       RAN OUT OF MUF2 BEFORE ALL PERIODS SATISFIELD
000522    006      1000      PRINT 1010, DAY
000523    006      1010      FORMAT(1X, END OF MUF2 FILE, DAY = *,15)
000524    006      RDD = 999999
000525    006      ENDM = *TRUE*
000526    006      GO TO 400
000527    006      END
END ELT.
```

@HUG MRG PROGRAM MEGEMOKSA ••UNCLASSIFIED•• •L0

MRG PROGRAM NUR ••UNCLASSIFIED••

DATE 08/16/76 PAGE 124

```

      58CAMP•MEGEMORSA
      ELT07 RL1870 08/16-07:43:47-(0.)
      000001    000      IMPLICIT INTEGER 1A-Z)
      000002    000      DIMENSION IN(14),SEQ(14),SVC(14),PLAN(14),INN(13)
      000003    000      EQUIVALENCE (IN(12),INN(1))
      000004    000      DATA SVC/14••A/
      000005    000      C MERGES UNIT AND NON-UNIT MURSA CARDS ON ONE FILE
      000006    000      1 GO TO 1
      000007    000      C UNIT CARDS
      000008    000      1U READ(IU,J,END=19) IPLN,INN
      000009    000      1 FORMAT(5X,A1,I2A6,A2)
      000010    000      GO TO 100
      000011    000      C READ NON-UNIT CARDS
      000012    000      19 1 GO = 2
      000013    000      20 READ(124,1,END=200) IPLN,INN
      000014    000      C FIX UP SEQ NO. IF NECESSARY
      000015    000      C CARD TYPE A?
      000016    000      1UU IF(IFLD(10,6,IN(2)) •NE• '0000000A') GO TO 140
      000017    000      DO 110 J = 1,14
      000018    000      IF(IPLN(J) •EW• IPLN) GO TO 130
      000019    000      IF(IPLN(J) •EG• 0) GO TO 125
      000020    000      1UU CONTINUE
      000021    000      125 PLAN(J) = IPLN
      000022    000      130 SEQ(J) = SEQ(J) + 1
      000023    000      140 IF(SEQ(J) •LT• 10000) GO TO 140
      000024    000      C OVER 4 CHAR, START OVER WITH SVC CODE = B
      000025    000      1UU SEQ(J) = 1
      000026    000      SVC(J) = 'B'
      000027    000      C FIX UP WORD ONE
      000028    000      140 ENCODE(6,150,IN(1)) SEQ(J),SVC(J),PLAN
      000029    000      150 FORMAT(14,A1,A1)
      000030    000      CALL INTRAN(8,1,14,IN,L,22)
      000031    000      GO TO (10,20), 1 GO
      000032    000      C WRITE END OF FILE
      000033    000      200 ZUU
      000034    000      CALL INTRAN(8,9)
      000035    000      PRINT 210,PLAN,SVC,SEQ
      000036    000      FORMAT(5X,'PLANID',5X,'14AO/IX','SERVICE',4X,'14A6/IX','SEQUENCE'
      000037    000      210   • 3X,14(J4,2X))
      000038    000      STOP
      000039    000      END
      END ELT.
```

MRG PROGRAM PACKAGE ••UNCLASSIFIED•• •L•O

#HUG

```

      S8CAMP PACKAGE
EL1007 RL1870 08/16-07:43:49 (15.)
000001 001 C CREATS SMOBSMOD PACKAGES OF HDF2 AND NUR OUTPUT
000002 001 C INPUT FILES 26 = HDF2, 63 = SMUB OUTPUT FROM NUR (SORTED)
000003 001 C OUTPUT FILES 22 = SMOBSMOD CARUS
000004 001 IMPLICIT INTEGER (A-Y)

000005 001 DIMENSION MDF2(63),KEY(31)
000006 001 DIMENSION SRC(2),MUF1(16)
000007 001 EQUIVALENCE (MDF1( 1),SRC),          B 246
000008 001 * (MDF1( 3),UIC),                   C AB
000009 001 * (MDF1( 4),TPSN),                  C 15
000010 001 * (MDF1( 8),ONOD),                  C 13
000011 001 * (MDF1( 9),DNOD),                  C 13
000012 001 * (MDF1(10),RDD),                  C 13
000013 001 * (MDF1(11),AVL),                  C 13
000014 001 * (MDF1(12),MOUT),                 C A1
000015 001 * (MDF1(13),THR ),                 C 11
000016 001 * (MDF1(14),MCODE)                 C 11
000017 001 DIMENSION TUCHA(22,2)
000018 001 EQUIVALENCE (TUCHA( 5,2), PAX),
000019 001 * (TUCHA( 6,1),ZVEMNA),
000020 001 * (TUCHA( 7,1),ZNSDNT),          (TUCHA( 7,2),ZNSDNT),
000021 001 * (TUCHA( 8,1),ZNSDUU),          (TUCHA( 8,2),ZNSDOUT),
000022 001 * (TUCHA( 9,1),ZVEMOU),
000023 001 * (TUCHA(10,1),ZVOUT),
000024 001 * (TUCHA(11,1),ZNSOVC),          (TUCHA(11,2),ZNSOVC),
000025 001 * (TUCHA(12,1),ZNSOVN),          (TUCHA(12,2),ZNSOVN),
000026 001 * (TUCHA(13,1),ZVHOVC),
000027 001 * (TUCHA(14,1),ZVHOVN),
000028 001 * (TUCHA(15,1),ZNOVOVN),
000029 001 * (TUCHA(16,1),ZNOVOVC),
000030 001 * (TUCHA(17,1),ZVEMBC),
000031 001 * (TUCHA(18,1),ZNVBC)
000032 001 EQUIVALENCE (MDF2,MDF1), (MDF2(18),TUCHA(1,1)),
000033 001 * (MDF2(92),ASUPRL), (MDF2(63),ACAMMO)
000034 001 DATA KEY/ 9,1,36,1,0,1,          B UNOD
000035 001 * 12,1,36,1,0,2,          B MODE (MODIFIED)
000036 001 * 8,1,36,1,0,3,          B UNOD
000037 001 * 10,1,36,1,0,4,          B RUD
000038 001 * 11,1,36,1,0,5,          B AVL
000039 001 * 99999/
000040 001 LOGICAL ENDM, ENDS
000041 001 DIMENSION SMOB(8)
000042 001 C 1 = RDN, 2 = PLANID, 3 = DEST, 4 = TYPE, 5 = AMT, 6 = ORIG, 7 = MODE.
000043 001 C B = AVL
000044 001 DIMENSION ZTUCHA(22,2)
000045 001 EQUIVALENCE (TUCHA,ZTUCHA)
000046 001 DIMENSION STOT(17,3),ZSTOT(17,3),MTOT(17),ZMTOT(17)
000047 001 EQUIVALENCE (STOT,ZSTOT), (MTOT,ZMTOT)
000048 001 DIMENSION IN(24),ZN(24),KEY1137,
000049 001 EQUIVALENCE (IN,ZIN)
000050 001 DATA KEY1/ 2,1,36,1,0,1,          B KUD
000051 001 * 3,1,36,1,0,2,          B AVL
000052 001 * 4,1,36,1,0,3,          B QUEST
000053 001 * 5,1,36,1,0,4,          B URIG
000054 001 * 6,1,36,1,0,5,          B PCK
000055 001 * 6,1,36,1,0,6,          B MODE

```

```

0000056      *          999999/
0000057      001      DIMENSION PACK(4,600),KPCCK(3), MDI(4),MD2(4), MINTP(2)
0000058      001      DATA MDI /1,0,2,3/, MD2 /2,1,3,4/, MINTP(2)/100000/
0000059      003      DIMENSION XTHR(7), XDAY(7),
0000060      001      C
0000061      001      C
0000062      001      C      WRITE(21,1)
0000063      001      1      FORMAT(5X,PSRC,9X,'UIC',4X,'TPSN',PACK
0000064      001      *      'RD',AVL,UNITS,TOT,PAX,TOT,STN,DEST,ORIG,MODE
0000065      001      *      WRITE(20,2)
0000066      001      2      FORMAT(*,PACK,DEST,ORIG,MODE,RDU,AVL,UNIT*)
0000067      001      *      *      TOT,PAX,TOT,STN,STN,FT/BRL')
0000068      001      C
0000069      001      C      SORT MDF2
0000070      001      C      CALL SOPEN(10,850,63,12,KEY)
0000071      001      C      READ(26,END=30) MDF2
0000072      001      10
0000073      001      C      SKIP IF MOKSA SEQ NUMBERS
0000074      001      C      IF(IRD0 .EQ. 99999) GO TO 10
0000075      001      C      SKIP IF NO MOVE
0000076      001      C      IF(IMODE .EQ. 0) GO TO 10
0000077      001      C      FIX UP MODE FOR SORT
0000078      001      C      H = 2
0000079      001      C      IF(MODE .EQ. 'A') H = 1
0000080      001      C      IF(MODE .EQ. 'S') H = 4
0000081      001      C      I(ZVEHNA + ZNSDNA .NE. 0.) H = 4
0000082      001      C      T = 100000
0000083      001      C      IF(TPSN .LT. 20000) T = TPSN
0000084      001      C      MODE = T*10 + H
0000085      001      C      CALL SRREL(MDF2,63)
0000086      001      C      GO TO 10
0000087      001      C
0000088      001      30      READ(5,31) DTROD,DTAVL
0000089      001      31      FORMAT(12,IX,12)
0000090      001      32      PRINT 32, DTROD,DTAVL
0000091      001      C      FORMAT*, DELTA FOR RDU = *,12/
0000092      001      C      *      DELTA FOR AVL = *,12*
0000093      003      C      READ(5,33) (XTHR(I),XDAY(I),I=1,7)
0000094      003      33      FORMAT(11,IX,13,IX)
0000095      003      C      PRINT 34, XTHR,XDAY
0000096      003      34      FORMAT*, THEATER *,716/* DAY*,5X,*16)
0000097      001      C
0000098      001      C      CALL SSORT
0000099      001      50      CALL SRRET(MDF2,63,8500)
000100      001      C      KU = 1
000101      001      C      GO TO 200
000102      001      C
000103      001      C      IF(IONOD.NE.MB .OR. DNOUNE.M9 .OR. MODEUNE.MCUMP .OR.
000104      001      *      RD.GT.LIMRDU .OR. AVL.GT.LIMAVL) GO TO 250
000105      001      150      IF(AVL .GT. AVLSAV) AVLSAV = AVL
000106      001      C      ADD TO PACKAGE = UNIT DATA
000107      001      C      DO 160 I = 1,14
000108      001      C      NSDA? USE 56 FT
000109      001      C      GO TO 155,151,155,155,151,151,155,151,151,151,151,151,151,151,151
000110      001      C      ZMTOT(1) = ZMTOT(1) + ZTUCHA(I+4,1)
000111      001      C      IF(ZMTOT(1) .GT. 99999999) GU TO 170
000112      001      C

```


MING PROGRAM PACKAGE

DATE 081676

PAGE 129

••UNCLASSIFIED•

```

000170 001 C WRITE OUT PACKAGE - UNIT DATA
000171 001 ZAVL = AVLSAV
000172 001 PCK = PCK + 1
000173 001 ZTOTST = 0
000174 001 ZTOTSF = 0
000175 001 DO 260 1 = 1,14
000176 001 GO TO (255,251,255,251,251,255,255,251,251,251,251,251,251)
000177 001 251 ZMTOT(1) = ZMTOT(1) / 1000.
000178 001 ZTOTST = ZTOTST * ZMTOT(1)
000179 001 GO TO 260
000180 001 255 ZMTOT(1) = FLOAT(ZMTOT(1)) / 1000.
000181 001 IF(I1 •EQ• 1) GO TO 260
000182 001 ZTOTSF = ZTOTSF * ZMTOT(1)
000183 001 CONTINUE
000184 001 260 CONTINUE
000185 001 DO 270 I = 15,7,-1
000186 001 270 ZMTOT(1) = ZMTOT(1-1)
000187 001 ZMTOT(6) = 0
000188 003 C CHANGE PACKAGE MODE IF NECESSARY
000189 004 DO 271 I = 1,7
000190 003 IF(THRSAV •EQ• XTHRI1) GO TO 273
000191 003 CONTINUE
000192 003 PRINT 272, THRSAV
000193 003 FORMAT(1X, A6.5(2X,15),2(2X,F4.0),2X,15.3(2X,F9.3))
000194 003 273 IF(IRDSSAV •LT• XDAY(1)) GO TO 279
000195 003 M12 = 4
000196 003 279 WRITE(22) PCK, ZRDD, ZAVL, M9, M6, M12, (ZMTOT(1), I=1,17), MINTP(CBT)
000197 001 C RETURN 0
000198 001 FORMATT(1) ERROR IN THEATER INPUT. NEED ENTRY FUR THEATER, 15)
000199 001 IF(INPACK •GT• MAX) MAX = NPCK
000200 001 WRITE(21,281) ((PACK1, J), I=1,4), PCK, M9, M6, M11(M12), ZRDD,
000201 001 ZAVL, NPCK, ZMTOT(1), ZTOTST, ZTOTSF, J=1, NPCK)
000202 001 281 FORMAT(1X, A6.5(2X,15),2(2X,F4.0),2X,15.3(2X,F9.3))
000203 001 WRITE(20,422) PCK, M9, M6, M11(M12), ZRDD, ZAVL, NPCK, ZMTOT(1), ZTOTST,
000204 001 ZTOTSF, MINTP(CBT)
000205 001 NPCK = 0
000206 001 DO 280 I = 1,14
000207 001 280 MTOT(1) = 0
000208 001 IF(I1GO •EQ• 0) GO TO 299
000209 001 IGO = 0
000210 001 MINTP(1) = TPSN
000211 001 IF(JGO •EQ• 0) GO TO 150
000212 001 JGO = 0
000213 001 MINTP(1) = 100000
000214 001 GO TO 199
000215 001 299 IF(I •NOT• END1) GO TO 200
000216 001 C READ FIRST SMOB RECORD
000217 001 READ(23) SMOB
000218 001 KV = 1
000219 001 GO TO 510
000220 001 C READ NUR DATA
000221 001 3NU IF(SMOB(6) •NE• 56 •OR• SMOB(3) •NE• 53
000222 001 •OR• SMOB(1) •GT• LIMRD) GO TO 400
000223 001 C ADD TO PACKAGE - NUR DATA
000224 001 1 = DRY BULK (TONS), 2 = AMMO (TONS), 3 = POL (1000 BARRELS). 4 = PEOPLE
000225 001 C OUTPUT ALL IN THOUSANDS
000226 001 C

```

••UNCLASSIFIED•

DATE 081676

PAGE 129

DRAFT DRAFT DRAFT

HKG PROGRAM PACKAGE ••UNCLASSIFIED••

DATE 081676

PAGE 130

```

000227 001 360 M = 2
000228 001 IF(SMOB(7) *EQ. 'A') M = 1
000229 001 IF(SMOB(7) *EQ. 'S') M = 3
000230 001 IF(SMOB(8) *GT. AVLSAV) SMOB(8)
000231 001 I = SMOB(4)
000232 001 STOT(1,M) = SMOB(5)
000233 001 IF(I *EQ. 3 *AND. STOT(1,M) *GT. 99999) GO TO 362
000234 001 IF(STOT(1,M) *LE. 99999999) GU TO 370
000235 001 C
000236 001 C SUBTRACT FROM OVERFILLED PACKAGE
000237 001 364 STOT(1,M) = STOT(1,M) - SMOB(5)
000238 001 IGO = M
000239 001 PRINT 361, 1,M,STOT(1,M),SMOB(5),$6,53
000240 001 361 FORMAT(1,SMOB 6,6I10)
000241 001 GO TO 400
000242 001 C
000243 001 390 KPCK(M) = KPCK(M) + 1
000244 001 C
000245 001 HEAD(123,END=550) SMOB
000246 001 KV = KV + 1
000247 001 GO TO 300
000248 001 C
000249 001 400 CONTINUE
000250 001 C WRITE OUT PACKAGE - NUR DATA
000251 001 ZAVL = AVLSAV
000252 001 IS = 1
000253 001 IE = 3
000254 001 IF(IGO *NE. 0) IS = 1GO
000255 001 IF(IGO *NE. 0) IE = 1GO
000256 001 DO 435 M = IS,IE
000257 001 IF(KPCK(M) *EQ. 0) GO TO 435
000258 001 PCK = PCK + 1
000259 001 MPCK = MPCK + 1
000260 001 ZSTOT(6,M) = STOT(3,M)          w POL
000261 001 ZSTOT(16,M) = FLOAT(STOT(1,M))/1000.    w BULK
000262 001 ZSTOT(17,M) = FLOAT(STOT(2,M))/1000.    w AMMO
000263 001 ZSTOT(18,M) = FLOAT(STOT(4,M))/1000.    w PEOPLE
000264 001 ZTOTST = ZSTOT(16,M) + ZSTOT(17,M)
000265 001 C ZERO PACKAGE DATA
000266 001 DO 430 I = 2,4
000267 001 ZSTOT(1,M) = 0
000268 001 WRITE(22) PCK,ZRDU,ZAVL,S3,S6,M,(ZSTOT(1,M),I=1,17),MPCK
000269 001 WRITE(20,422) PCK,S3,S6,MU1(M),ZRDU,ZAVL,KPCK(M),ZSTOT(1,M),
000270 001 * ZTOTST,ZSTOT(6,M),MPCK
000271 001 WRITE(19,422) PCK,S3,S6,MU1(M),ZRDU,ZAVL,KPCK(M),ZSTOT(1,M),
000272 001 * ZTOTST,ZSTOT(6,M)
000273 001 422 FORMAT(4(2X,15),(2X,F4,0),2X,15,3(2XF9.3),2X,15)
000274 001 KPCK(M) = 0
000275 001 STOT(1,M) = 0
000276 001 435 CONTINUE
000277 001 IF(IGO *EQ. 0) GO TO 440
000278 001 IGO = 0
000279 001 GO TO 360
000280 001 440 IF(ENDS) GO TO 1000
000281 001 GO TO 510
000282 001 C
000283 001 500 END = TRUE.

```

HKG PROGRAM PACKAGE ••UNCLASSIFIED••

DATE 081676

PAGE 130

```

000284 001      GO TO 250
000285 001      C
000286 001      C   SAVE DATA FROM PACKAGE'S STARTING RECORD
000287 001      C
000288 001      S10      S6 = SMOB(6)
000289 001      S3 = SMOB(3)
000290 001      ZRDD = SMOB(1)
000291 001      LIMRD = SMOB(1) + DTRDD
000292 001      LIMAVL = SMOB(8) + DTAVL
000293 001      AVLSAV = SMOB(8)
000294 001      GO TO 360
000295 001      S5U      ENDS = *TRUE*
000296 001      GO TO 400
000297 001      C
000298 001      1000      ENDFILE 22
000299 001      REWIND 22
000300 001      C   SORT 22 BY AVL, ROD
000301 001      CALL SOPEN3($1005,$1005,24,6,KEY1)
000302 001      C   READ OTHER SERVICE DATA, THEN FILE 22
000303 001      1005      READ(18,1006,END=1010) IN
000304 001      1006      FORMAT(16,2F3.0,2I3,I1.6(F8.3)/I1(F8.3),16)
000305 001      C   FIX UP MODE FOR SORT
000306 001      J = IN(6) + 1
000307 001      IN(6) = MD2(J)
000308 001      KO = KO + 1
000309 001      PCK = PCK + 1
000310 001      CALL SRREL(IN,24)
000311 001      GO TO 1005
000312 001      1010      READ(22,END=1020) IN
000313 001      CALL SRREL(IN,24)
000314 001      GO TO 1010
000315 001      1020      REWIND 22
000316 001      CALL SSORT
000317 001      1030      CALL SRREL(IN,24,$1100)
000318 001      SEQ = SEQ + 1
000319 001      C   OTHER SERVICE DATA?
000320 001      IF(IN(24) *EQ* 9994999) GO TO 1040
000321 001      TP = *
000322 001      IF(IN(24)*GT*0 *AND* IN(24)*LT*100000) ENCODE(5,1029,TP,L) IN(24)
000323 001      1029      FORMAT(LJ5)
000324 001      WRITE(22,1031) IN(1),TP,IN(2),IN(3),SEQ
000325 001      1031      FORMAT(PACKAGE *,J6,5X,A5,1X,R0D= *,F6.2,6X*,AVL= *,F6.2,16)
000326 001      1032      IF(IN(24) *LT* 0) GO TO 1050
000327 001      1035      S = SEQ
000328 001      C   OTHER SERVICE DATA
000329 001      1040      WRITE(22,1041) IN(1),I=1,3,SEQ
000330 001      1041      FORMAT(OTHER SERVICE PACKAGE *,J6,7X,R0D= *,F6.2,6X,
000331 001      *    AVL= *,F6.2,16)
000332 001      1045      GO TO 1035
000333 001      1050      S = SEQ
000334 001      C   SET MODE PROPERLY FOR CARDS
000335 001      1060      J = IN(6)
000336 001      IN(6) = MD1(J)
000337 001      IF(IN(7) *NE* 0) WRITE(22,1032) IN(1),I=3,7,1,S
000338 001      DO 1070 I = 6,23
000339 001      N = 1 = 6
000340 001

```

```

000341 001 IF(IIN(1) *NE* 0) WRITE(22,1033) (IN(K),K=3,6),ZIN(1),N,S
000342 001 1070 CONTINUE
000343 001 1032 FORMAT(1X,F9.2,2X,13,2X,11,1X,F9.3,14X,10,15)
000344 001 1033 FORMAT(1X,F9.2,2X,13,2X,11,1X,F9.3,3X,12,15)
000345 001 1034 FORMAT(3X,*5444,122X*'U','BX','0')
000346 001 WRITE(22,1034)
000347 001 GO TO 1030
000348 001 C
000349 001 1100 ENDFILE 22
000350 001 NPCK = -NPCK
000351 001 PRINT 1101, KU,KV,PCK,MPCK,KO,MAX
000352 001 1101 FORMAT(1X, UNITS PROCESSED ,17/
000353 001   *          , NUR PROCESSED ,17/
000354 001   *          , TOT # OF PACKAGES ,17/
000355 001   *          , # OF NUR PACKS ,17/
000356 001   *          , OTHER SERVICES ,17/
000357 001   *          , MAX UNITS IN PCK ,17)
000358 001 STOP
000359 001 END
END ELT.

```

#HDG MRG POST-PROCESSOR PROGRAM INLAY ••UNCLASSIFIED•• .L.U

••UNCLASSIFIED••

```

S8CAMP•LAYIN
ELT007 RL1870 08/16-07:43:54-(25)
      IMPLICIT INTEGER(A-Z)
      DIMENSION F(52), UF(52,24), U(19),
           N(13),
           N(13),
           P( 2)          6 UNIT 13 PACKAGE INPUT
      EQUIVALENCE (N,U), (OF,F)
      DIMENSION EDATE(12)
      DIMENSION KEYU(7), KEYF(7), KEYUF(7)
      DATA KEYU /2, 1,36,0,0,1,99999/   6 UIC IN UNIT DATA
      DATA KEYF /1, 1,36,0,0,1,99999/   6 UIC IN PACKAGE DATA
      DATA KEYUF/1, 7,90,0,0,1,99999/  6 KEY FIELD IN OUTPUT FAS
      LOGICAL ENDU, ENDP
      DATA ZERO/000000/
      DEFINE CU1(X) = FLD(0,6,X)
      DEFINE CU2(X) = FLD(6,6,X)
      DEFINE CU3(X) = FLD(12,6,X)
      DEFINE CU4(X) = FLD(18,6,X)
      DEFINE CU5(X) = FLD(24,6,X)
      DEFINE CU6(X) = FLD(30,6,X)
      DEFINE C12(X) = FLD(0,12,X)
      DEFINE C13(X) = FLD(0,18,X)
      DEFINE C14(X) = FLD(0,24,X)
      DEFINE C15(X) = FLD(0,30,X)
      DEFINE C23(X) = FLD(6,12,X)
      DEFINE C24(X) = FLD(6,18,X)
      DEFINE C25(X) = FLD(6,24,X)
      DEFINE C26(X) = FLD(6,30,X)
      DEFINE C34(X) = FLD(12,12,X)
      DEFINE C35(X) = FLD(12,18,X)
      DEFINE C36(X) = FLD(12,24,X)
      DEFINE C45(X) = FLD(18,12,X)
      DEFINE C46(X) = FLD(18,18,X)
      DEFINE CS6(X) = FLD(24,12,X)
      SORT UNIT DATA
      CALL SOPEN3($10,$3U,19,2,KEYU)
      READ(11,1'END=20) U
      FORMAT(19A6)
      CALL SRREL1U,19)
      KU = KU + 1
      GO TO 10
      REWIND 11
      CALL SSORT
      CALL SRRET1U,19,340)
      WRITE(11,1) U
      GO TO 30
      ENDFILE 11
      REWIND 11
      SORT PACKAGE DATA
      READ HEADER RECORD
      READ(21,51) P

```

```

000058    021      CALL SOPEN(1$50,$70,2,1,KEYP)
000057    021      C   PICK UP UIC AND PACKAGE NUMBER
000058    021      5U   READ(21,5J,END=60) P
000059    021      5I   FORMAT(1$A,A6,A6)
000060    021      CALL SRREL(1,2)
000061    021      KP = KP + 1
000062    021      GU TO 5U
000063    021      6U   CALL SSORT
000064    021      7U   CALL SRRET(1,2,$8U)
000065    021      WRITE(13,1) P
000066    021      GO TO 7U
000067    021      ENDFILE 13
000068    021      REWIND 13
000069    021      C
000070    021      C   SORT FAS FILE
000071    021      CALL SOPEN(1$100,$120,52,2,KEYF)
000072    021      10U   READ(17,END=110) F
000073    021      CALL SRREL(1,52)
000074    021      KF = KF + 1
000075    021      GO TO 10U
000076    021      11U   CALL SSORT
000077    021      C   NOW PROCESS UNIT RECORDS
000078    021      C
000079    021      12U   CALL SRRET(1,1),52,$155)
000080    021      UIC = C46(F(1)) * 2 * 18 + C13(F(2))
000081    021      LF = LF + 1
000082    021      READ(11,1) U
000083    021      READ(13,1) P
000084    021      LU = LU + 1
000085    021      LP = LP + 1
000086    021      IF(U(2) = P(1)) 125,130,121
000087    021      PRINT 122,U(2),P(1)
000088    021      122  FORMAT(* NO MATCH FOR UNIT *,A6,* ON PACKAGE FILE *,A6*)
000089    021      STOP
000090    021      125  PCK = ZERO
000091    021      GO TO 131
000092    021      130  PCK = P(2)
000093    021      READ(13,1) P
000094    021      LP = LP + 1
000095    021      131  IF(U(2) = U(1C)) 140,160,150
000096    021      C   NO MATCH
000097    021      140  PRINT 141,U(2),UIC
000098    021      141  FORMAT(* NO MATCH FOR UNIT *,A6,* ON FAS *,A6*)
000099    021      *   JOB IS BEING TERMINATED *)
000100    021      GO TO 515
000101    021      C   NO MATCH. KEEP LOOKING
000102    021      15U   WRITE(14) F
000103    021      CALL SRRET(1,1),52,$155)
000104    021      LF = LF + 1
000105    021      JF(ENDIF) GO TO 15U
000106    021      UIC = C46(F(1)) * 2 * 18 + C13(F(2))
000107    021      GO TO 131
000108    021      155  IF(ENDIF) GO TO 18U
000109    021      PRINT 156,U(2)
000110    021      156  FORMAT(* REACHED END OF FAS BEFORE UNITS *,A6*)
000111    021      STOP
000112    021      C   MATCHED FAS. ADD DATA

```

```

000113      025      C    SAVE POSITIONS 37,38 IN 12U,121
000114      025      16U   CO6(F(20)) = CO1(F(7))
000115      025      C01(F(21)) = CO2(F(7))
000116      025      C46(F( 6)) = U(1)      b AVL
000117      021      C01(F( 7)) = 'B6666U'      b RT
000118      021      CO2(F( 7)) = U(3)      b RD
000119      021      CO6(F( B)) = U(4)      b MOKSA SEQ NO
000120      021      F( 9) = U(5)      b MOKSA SEQ NO, GEO ORIG
000121      021      F(10) = U(6)      b GEO ORIG, DEST
000122      021      C12(F(11)) = C12(U(7))      b GEO DEST, MUDL
000123      021      C26(F(19)) = U(8)      b RDU, NODE DEST
000124      021      C14(F(20)) = C14(U(9))      b NODE DEST, ORIG
000125      023      C15(F(28)) = PCK      b PACKAGE NO
000126      021      CO6(F(38)) = U(10)      b BULK
000127      021      DO 170 I = 1,18      b BULK,OVER,OUT,NAT,NSDA,TOTL,SUPPLY,PAX,AMMO
000128      021      F11+28) = U(11)      b BULK
000129      021      CO1(F(47)) = CO1(U(19))      b AMMO
000130      021      C
000131      021      READ(11,1,END=175) U
000132      021      LU = LU + 1
000133      021      IF(ENDP) GO TO 171
000134      021      IF(IU(2) = P(1)) 171,172,121
000135      021      171      PCK = ZERO
000136      021      GO TO 15U
000137      021      172      PCK = P(2)
000138      021      READ(13,1,END=176) P
000139      021      LP = LP + 1
000140      021      GO TO 15U
000141      021      175      ENDU = •TRUE•
000142      021      GO TO 15U
000143      021      176      ENDP = •TRUE•
000144      021      GO TO 171
000145      021      C    SORT ACCORDING TO KEY FIELD
000146      021      16U   ENDFILE 14
000147      021      REWIND 14
000148      021      CALL SOPEN3(18185,$195,$2,3,KEYOF)
000149      021      165      READ(14,END=190) F
000150      021      CALL SRREL1(F,$2)
000151      021      GO TO 185
000152      021      19U   CALL SSORT
000153      021      195      DO 198 I = 1,24
000154      021      198      ISAV = 1
000155      021      CALL SRRET1(F(1,1),$2,$2UU)
000156      021      198      CONTINUE
000157      021      CALL INTRAN(15,1,1248,OFLL,22)
000158      021      GO TO 195
000159      021      C    PROCESS NON UNIT DATA • GENERATE NEW FAS RECORDS
000160      021      C
000161      021      C    READ INPUT DATA
000162      021      20U   READ(5,21) FICOD,EDATE
000163      021      211      FORMAT(A1,IX,A6,A1)
000164      021      PRINT 212, FICOD,EDATE
000165      021      212      FORMAT(A1,FICOD,EDATE)
000166      021      213      EDATE = 'A6,A1'
000167      021      214      F1 = ''
000168      021      215      F2 = ''
000169      021      216      F3 = ''

```

```

000170 021 F3 = *
000171 021 C04(F1) = C01(F1UD)
000172 021 C56(F1) = '9999N'
000173 021 C36(F2) = C13(EDATE(1))
000174 021 C13(F3) = EDATE(1)
000175 021 C04(F3) = C01(EDATE(2))
000176 021 ICT = ISAV = 1
000177 021 C
000178 021 220 READ(12,221,END=500) N,ITYP
000179 021 221 FORMAT(1$AB,16)
000180 021 ICT = ICT + 1
000181 021 KN = KN + 1
000182 021 225 DO 225 I = 4,52
000183 021 OF(1,ICT) = ; ;
000184 021 C
000185 021 C SET FAS DATA
000186 021 C
000187 021 OF(1,2,ICT) = F2
000188 021 OF(1,3,ICT) = F3
000189 021 OF(12,ICT) = ; DC*
000190 021 SEQ = SEQ + 1
000191 021 ENCODE(9,226,OF(1,ICT),L) SEQ
000192 021 226 FORMAT(4X,J5)
000193 021 C24(OF(1,ICT)) = F1
000194 021 DO 227 I = 1,6
000195 021 OF(1+5,ICT) = N(I) W AVL,RT,RD,MORSA SEQ NO., GEO ORG,DEST,MODE
000196 021 DU 228 I = 7,8
000197 021 OF(1+12,ICT) = N(I) W RDO,NUDE WEST,ORIG
000198 021 DU 229 I = 9,12
000199 021 OF(1+25,ICT) = N(I) W LVL,NAME
000200 021 GU TO (231,231,233,234), ITYP
000201 021 C DRY/AMMO
000202 021 231 C06(OF(38,ICT)) = C02(N(I3)) W AMT
000203 021 C14(OF(39,ICT)) = N(I3) W AMT
000204 021 C15(OF(45,ICT)) = N(I3) W TOTAL
000205 021 GO TO 240
000206 021 C POL
000207 021 233 C56(OF(44,ICT)) = C23(N(I3)) W AMT
000208 021 C13(OF(45,ICT)) = N(I3) W AMT
000209 021 GO TO 240
000210 021 C PAX
000211 022 234 C46(OF(45,ICT)) = C24(N(I3)) W AMT
000212 021 C12(OF(46,ICT)) = N(I3) W AMT
000213 021 C
000214 021 240 IF(1CT .NE. 24) GO TO 220
000215 021 CALL NTRAN(15,1,1248,OF,L,22)
000216 021 ICT = 0
000217 021 GO TO 220
000218 021 C
000219 021 500 ICT = ICT + 1
000220 021 550 DO 560 J = ICT,24
000221 021 DO 560 K = 1,52
000222 021 560 OF(K,J) = '999999,
000223 024 CALL NTRAN(15,1,1248,OF,L,9,IU,22)
000224 021 515 PRINT $11, K$1,U,KP,LP,KF,LN,KN
000225 021 511 FORMAT(1$11, UNITS READ * 16, PROCESSED * 16,
000226 021 * PACKAGED UNITS READ * 16, PROCESSED * 16/

```

MKG POST-PROCESSOR PROGRAM INLAY ••UNCLASSIFIED••

DATE 081676 PAGE 137

```
000227    021      *     FAS UNITS READ   *16.* PROCESSED *16/  
000228    021      *     NON UNIT FAS RECORDS CREATED *16)  
000229    021      STOP  
000230    021      END  
  
END ELT.
```

SHUG MKG POST-PROCESSOR PROGRAM PRTPCK ••UNCLASSIFIED•• •L.O

MKG POST-PROCESSOR PROGRAM INLAY ••UNCLASSIFIED••

DATE 081676 PAGE 137

```

S8CAMP•PRTCPCK
ELT007 RL1B70 08/16:43:57(11)
000001 007 C PRINT UNITS IN PACKAGES
000002 007 IMPLICIT INTEGER (A-Y)
000003 007 DIMENSION IN(11),ZIN(3),PRT(4,4),JIN(7),ZUN(3)
000004 007 READ HEADING RECORD
000005 007 READ(21,1) IN(1)
000006 007 PRINT 2
000007 007 2 FORMAT(I1H1, PACKAGE DEST ORIG MODE RDO AVL UNITS )
000008 009 * TOT PAX
000009 007 * SQ FT // TOT STON TOT SQ FT ,22H(1000'S OF PAX, TONS,
000010 010 10 READ (21,1,END=80) IN,2IN
000011 007 1 FORMAT(1X,2A6,2X,A6,5(2X,15),2X,13,3X,13,3X,13,(2X,F9.3))
000012 007 1 IF(IN5) *EQ. PACK) GO TO 50
000013 007 15 IF(1CT *NE. 0) GO TO 70
000014 007 15 PACK = IN(5)
000015 007 15 ICT = 0
000016 008 15(LNS *LT. 52) GO TO 18
000017 007 PRINT 2
000018 007 LNS = 0
000019 007 18 PRINT 3, (IN(1),I=5,11),ZIN
000020 007 3 FORMAT(//4X,15,4X,13,3X,13,5X,11,3X,13,2X,13,2X,15,3(2X,F9.3))
000021 007 2 LNS = LNS + 2
000022 007 C
000023 007 50 ICT = ICT + 1
000024 007 DO 55 I = 1,4
000025 007 55 PRT(I,ICT) = IN(I)
000026 007 IF(1CT *NE. 4) GO TO 10
000027 007 IF(LNS *LT. 54) GO TO 60
000028 007 PRINT 2
000029 007 60 LNS = 0
000030 007 60 PRINT 5, PRT
000031 007 5 FORMAT(1UX,4(5X,246,1X,A6,1X,15))
000032 007 55 ICT = 0
000033 007 LNS = LNS + 1
000034 007 GO TO 10
000035 007 70 IF(LNS *LT. 54) GO TO 75
000036 007 PRINT 2
000037 007 LNS = 0
000038 007 75 PRINT 5, ((PRT(I,J),I=1,4),J=1,1,ICT)
000039 007 ICT = 0
000040 007 LNS = LNS + 1
000041 007 GO TO 15
000042 011 80 IF(ICT *EQ. 0) GO TO 100
000043 011 100 IF(LNS *LT. 54) GO TO 65
000044 011 PRINT 2
000045 011 LNS = 0
000046 011 85 PRINT 5, ((PRT(I,J),I=1,4),J=1,1,ICT)
000047 011 LNS = LNS + 1
000048 007 C PROCESS NUR PACKAGES
000049 007 100 PRINT 101
000050 007 101 FORMAT(I1H1, PACKAGE DEST ORIG MODE RDO AVL ENTRY )
000051 009 * TOT PAX TOT STON TOT BARRL 9,22H(1000'S OF PAX, TONS,
000052 007 * BARRELS //)
000053 007 110 LNS = 0
000054 007 READ(19,11,I=1000) JN,ZUN
000055 007 111 FORMAT(4(2X,15),2X,13,3X,13,3X,15,3(2X,F9.3))

```

```
000056    008      IF(LNS .LT. 52) GO TO 120
000057    007      LNS = 0
000058    007      PRINT 101
000059    008      120      LNS = LNS + 2
000060    007      PRINT 3,JN,ZJN
000061    007      GO TO 110
000062    007      1000    STOP
000063    007      END
END ELT.
```

ENDG MRG POST-PROCESSOR PROGRAM BUILDMRG

••UNCLASSIFIED•• •L•U

BELT,L 24MONTAINE•BUILD•FASMRG
 ELT007 RL1670 08/16•07:44:00-(1.)
 000001 000 01UU0 IDENTIFICATION DIVISION.
 000002 000 01UU02 PROGRAM-ID. 'BUILD'.
 000003 000 01UU030 AUTHOR. J MEYEROWITZ.
 000004 000 01UU040 DATE WRITTEN. 02 MAY 1973.
 000005 000 01UU050 REMARKS. READ A FAS FILE FROM TAPE
 JU7 CHARACTERS BLOCKED 24 PER RECORD.
 000006 000 01UU070 WRITE A UDF FILE TO MASS STORAGE USING ISFM
 360 CHARACTERS PER RECORD.
 000007 000 01UU080
 000008 000 01UU090
 000009 000 02UU010 ENVIRONMENT DIVISION.
 000010 000 02UU020 CONFIGURATION SECTION.
 000011 000 02UU030 SOURCE=COMPUTER. UNIVAC•1108.
 000012 000 02UU040 OBJECT=COMPUTER. UNIVAC•1108.
 000013 000 02UU050 INPUT-OUTPUT SECTION.
 000014 000 02UU060 FILE-CONTROL.
 000015 000 02UU070 SELECT MASTER=FILE ASSIGN TO MASS=STORAGE FORCE
 000016 000 02UU080 ACCESS MODE IS RANDOM SYMBOLIC KEY IS REAL=KEY
 - 000017 000 02UU085 ORGANIZATION IS INDEXED FILE=DESCRIPTION IS FILE=SCRIPT.
 - 000018 000 02UU120 SELECT FAS=FILE ASSIGN TO UNISERVO FAS=FILE.
 000019 000 02UU130 SELECT PRINT=FILE ASSIGN TO PRINTER.
 000020 000 03UU010 DATA DIVISION.
 000021 000 03UU020 FILE SECTION.
 000022 000 03UU030 FD MASTER=FILE
 000023 000 03UU040 LABEL RECORDS ARE STANDARD
 000024 000 03UU050 DATA RECORD IS MASTER=REC.
 000025 000 03UU060 01 MASTER=REC PICTURE IS X(10752).
 000026 000 03UU101 FD FAS=FILE
 000027 000 03UU1020 RECORD IS OMITTED
 000028 000 03UU1030 RECORD CONTAINS 7488 CHARACTERS
 000029 000 03UU1035 RECORDING MODE IS 1
 000030 000 03UU1040 DATA RECORD IS TAPE=BLOCK.
 000031 000 03UU1050 01 TAPE=BLOCK PICTURE IS X(17468).
 000032 000 03UU1010 FD PRINT=FILE
 000033 000 03UU2020 RECORD CONTAINS 132 CHARACTERS
 000034 000 03UU2030 LABEL RECORD IS OMITTED
 000035 000 03UU2040 DATA RECORD IS PRINT=LINE.
 000036 000 03UU2050 01 PRINT=LINE PICTURE IS X(1132).
 000037 000 04UU010 WORKING-STORAGE SECTION.
 000038 000 04UU020 77 INDEX PICTURE IS 99 COMP SYNC RIGHT VALUE IS 0.
 000039 000 04UU030 77 N PICTURE IS H9 VALUE IS ZERO.
 000040 000 04UU040 01 WORK=BLOCK.
 000041 000 04UU050 02 WORK=REC OCCURS 24 TIMES.
 000042 000 04UU060 03 PART=1.
 000043 000 04UU070 04 FILLER PICTURE IS X.
 000044 000 04UU140 04 WORKID. PICTURE IS X.
 000045 000 04UU143 05 FICUD PICTURE IS X.
 000046 000 04UU144 05 COMPU PICTURE IS X.
 000047 000 04UU145 05 UICCC PICTURE IS X(6).
 000048 000 04UU146 05 EDATE PICTURE IS X(6).
 000049 000 04UU150 04 FILLER PICTURE IS X(11).
 000050 000 04UU160 03 PART=2.
 000051 000 04UU162 04 FILLER PIC X(12).
 000052 000 04UU163 04 THEATER-CODE PIC X.
 000053 000 04UU164 04 FILLER PIC X(31).
 000054 000 04UU165 04 DSCMP PIC XX.
 000055 000 04UU166 04 FILLER PIC XXX.

```

000056    000  04164   04  ESCON   PIC X.
000057    000  04166   04  FILLER  PIC X(16).
000058    000          04  TRCON   PIC X.
000059    000          04  FILLER  PIC X(127).
000060    000  050010 01  DATA-REC*
000061    000  050020   02  SEG-1   PICTURE IS X(126).
000062    000  050030   02  FILLER  PICTURE IS X VALUE IS *X*.
000063    000  050040   02  SEG-2   PICTURE IS X(333).
000064    000  060010 01  PRT-AREA*
000065    000  060020   02  PRT-ITEM  PICTURE IS X(16) OCCURS 7 TIMES.
000066    000  080010 01  ER-LINE.
000067    000  080020   02  FILLER  PICTURE IS X(12) VALUE IS *INVALID KEY*.
000068    000  080030   02  ER-KEY   PICTURE IS X(14).
000069    000  150010 01  REAL-KEY.
000070    000  150020   02  REC-KEY  PICTURE IS X(14).
000071    000  150030   02  FILLER  PICTURE IS X(4).
000072    000  180010 01  FILE-DESCRIP*.
000073    000  180020   02  NUMBER-OF-RECORDS  PICTURE IS H(10) VALUE IS 1400.
000074    000  180030   02  RECORD-LENGTH  PICTURE IS H(10) VALUE IS 360.
000075    000  180040   02  RECORD-LENGTH-MAX  PICTURE IS H(10) VALUE IS 0.
000076    000  180050   02  RECORD-KEY-LENGTH  PICTURE IS H(10) VALUE IS 16.
000077    000  180060   02  OVERRLOW-AREA   PICTURE IS H(10) VALUE IS 10.
000078    000  180070   02  1=OF                PICTURE IS H(10) VALUE IS 1000.
000079    000  180080   02  DATA-NAME-8*.
000080    000  180090   03  DATA-NAME-9  PICTURE IS X(3).
000081    000  180100   03  DATA-NAME-10 PICTURE IS X(3).
000082    000  190010 01  INFORM.
000083    000  190020   02  NUMBER-OF-BLOCKS PICTURE IS H(10).
000084    000  190030   02  NUMBER-OF-INDEX-BLOCKS PICTURE IS H(10).
000085    000  190040   02  NUMBER-OF-OVERFL-BLOCKS PICTURE IS H(10).
000086    000  190050   02  NUMBER-OF-RECORDS  PICTURE IS H(10).
000087    000  190060   02  NUMBER-OF-RECORDS-IN-1OF PICTURE IS H(10).
000088    000  190070   02  NUMBER-OF-RECORDS-DELRD PICTURE IS H(10).
000089    000  190080   02  NUMBER-OF-RECORDS-READ-IF PICTURE IS H(10).
000090    000  190090   02  NUMBER-OF-RECORDS-READ-IF PICTURE IS H(10).
000091    000  190100   02  NUMBER-OF-RECORDS-WRITTEN PICTURE IS H(10).
000092    000  195010 01  INFORM-FL-DATA*.
000093    000  195020   02  NUMBER-OF-BLOCKS PICTURE IS 9(6).
000094    000  195030   02  NUMBER-OF-INDEX-BLOCKS PICTURE IS 9(6).
000095    000  195040   02  NUMBER-OF-OVERFL-BLOCKS PICTURE IS 9(6).
000096    000  195050   02  NUMBER-OF-RECORDS  PICTURE IS 9(6).
000097    000  195060   02  NUMBER-OF-RECORDS-IN-1OF PICTURE IS 9(6).
000098    000  195070   02  NUMBER-OF-RECORDS-DELRD PICTURE IS 9(6).
000099    000  195080   02  NUMBER-OF-RECORDS-READ-IF PICTURE IS 9(6).
000100    000  195090   02  NUMBER-OF-RECORDS-READ-IF PICTURE IS 9(6).
000101    000  195100   02  NUMBER-OF-RECORDS-WRITTEN PICTURE IS 9(6).
000102    000  200000  PROCEDURE DIVISION.
000103    000  200010  START-TEST.
000104    000  200020  OPEN INPUT FAS-FILE WITH NO REWIND.
000105    000  200030  OPEN OUTPUT PRINT-FILE.
000106    000  200040  OPEN OUTPUT MASTER-FILE.
000107    000  210000  TAPE-READ.
000108    000  210010  MOVE ZERO TO INDEX.
000109    000  210020  READ FAS-FILE AT END GO TO FINI.
000110    000  210030  MOVE TAPE-BLOCK TO WORK-BLOCK.
000111    000  220000  GET-ITEM.
000112    000  220010  ADD 1 TO INDEX.

```

```

000113      000    220020  IF INDEX = 25 GO TO TAPE-READ.
000114      000    220021  IF WORKID (INDEX) = SPACES GO TO GET-ITEM.
000115      000    220025  IF WORKID (INDEX) = *BLANKS* GO TO GET-ITEM.
000116      000    MOVE THEATER-CODE (INDEX) TO TRCON(INDEX).
000117      000    IF COMPOINDEX = '9' MOVE 'DC' TO DSCMP(INDEX).
000118      000    MOVE PART-1 (INDEX) TO SEG-1.
000119      000    220030  MOVE PART-2 (INDEX) TO SEG-2.
000120      000    220040  MOVE WORKID (INDEX) TO REAL-KEY.
000121      000    220050  ADD 1 TO N.
000122      000    220060  IF N = 8 PERFORM LINE-LIST THRU X-LIST.
000123      000    220065  WRITE MASTER-REC FROM DATA-REC INVALID KEY GO TO ERR-0.
000124      000    220070  MOVE REAL-KEY TU PRT-ITEM (N).
000125      000    220080  GO TO GET-ITEM.
000126      000    225010  LINE-LIST.
000127      000    225020  MOVE 1 TO N.
000128      000    225030  WRITE PRINT-LINE FROM PRT-AREA.
000129      000    225040  MOVE SPACES TU PRT-AREA.
000130      000    225050  X=LIST.
000131      000    225060  EXIT.
000132      000    226010  ERR-0.
000133      000    226020  MOVE REAL-KEY TU ER-KEY.
000134      000    226025  WRITE PRINT-LINE FROM ER-LINE.
000135      000    226030  GO TO FINI.
000136      000    230000  FINI.
000137      000    230020  CLOSE MASTER-FILE USING INFORM.
000138      000    230030  MOVE CORRESPONDING INFORM TO INFORM-FL-DATA.
000139      000    230035  WRITE PRINT-LINE FROM PRT-AREA.
000140      000    230040  WRITE PRINT-LINE FROM INFORM-FL-DATA AFTER 2 LINES.
000141      000    230050  CLOSE PRINT-FILE.
000142      001    230010  CLOSE FAS-FILE.
000143      000    230060  STOP RUN.

```

BAGEL BAKING

COMPUTER ASSISTED MATCH PROGRAM (CAMP)

CHAPTER VIII

SAMPLE OUTPUT

@RUN, /PRNT 6IZ9E, H3683P304JK, UNCLASSIFIED, 100,300 • RSORT/TEST

SHDG RSORT/TEST ••• UNCLASSIFIED •••

@MSG,N INPUT FILES

•EQUAL UNCLASSIFIED

@ASG,A •24TESTRUK. • CAMPUSUM. REQUIREMENTS FILE FROM FASTALS

@USE 14,•24TESTRUK.

@ASG,T 15

VIII-3

@ED 24TESTDATA,LOUIN,15. • UIN TO BE DELETED FROM REQUIREMENTS FILE
CASE UPPER ASSUMED
ED 15,00-08/19/76 1U1Z3:40-(2,0)
EDIT
LINES:2 FIELDATA

@MSG,N OUTPUT FILES

@DELETE,C 24UIN.
24REG IS NOT CATALOGUED OR ASSIGNED
FAC STATUS: 4000UUUUUUUU

@DELETE,C 24REQ.

@DELETE,C 24TDA.

@ASG,UP 24UIN,•F4U,844UB • REQUIREMENTS DELETED BASED ON UIN

RSORT/TEST *** UNCLASSIFIED ***

PAGE 3

DATE 081976

@ASG,UP 24REQ.,F40,6440B * REQUIREMENTS TO BE MATCHED

@ASG,UP 24TDA.,F40,6440C * TDA UNITS DELETED FROM REQUIREMENTS

@USE 11,24UIN.

@USE 12,24REQ.

@USE 13,24TDA.

@ASG,A OFFRS.

@USE TPP\$,OFFRS.

@XGT

RSORT/TEST *** UNCLASSIFIED ***

PAGE 3

DATE 081976

RSORT/TEST *** UNCLASSIFIED ***

FIRST TIME PERIOD = 1

*** HAND-PLAYED=UN=TABLE ***

SEQ VIN TP

1 4 0

RSORT/TEST DATE 081976 PAGE 4

VIII-5

RSORT/TEST *** UNCLASSIFIED ***

RSORT/TEST DATE 081976 PAGE 4

RSORT/TEST *** UNCLASSIFIED ***

DATE 081976 PAGE 5

SEQ 1 UIC 4 TP 0 COUNT 1

VITI-6

RSORT/TEST *** UNCLASSIFIED ***

DATE 081976 PAGE 5

RSORT/TEST *** UNCLASSIFIED ***

PAGE 6 DATE 081976

*** TOTALS ***

HAND-PLAYED-LIN	=	1
TOA-UNITS	=	1
REQUIREMENTS	=	18
TOTAL	=	20

@HDDG RSORT UIN FILE *** UNCLASSIFIED ***

@DATA!L 11.
DATA T7 RL70-S 08/19-10:24:12
1. 17052 00 5 MO 0 D 1 HHC ARMU CAV RG T W/AT 1000 < 2 2 00000 00030 00020 00168 00238 4 AR 238
END DATA.

@HDDG RSORT REQ FILE *** UNCLASSIFIED ***

@DATA!L 12.
DATA T7 RL70-S 08/19-10:24:12
VIII-7
1* 5035 99 2 HS 0 0 1 BN COMBAT 0010 2 1 2 31300 00040 00000 00745 00785 270 EN 765 100
2* 5035 99 2 HS 0 0 1 BN COMBAT 0010 2 1 2 31300 00040 00000 00745 00785 270 EN 765 200
3* 5035 99 3 HS 0 0 1 BN COMBAT 0010 2 1 2 31300 00040 00000 00745 00785 270 EN 765 300
4* 5115 99 2 HS 0 0 1 BN CMBT H VY 0011 5 1 2 31300 00043 00000 00804 00847 290 EN 847 400
5* 5115 99 2 HS 0 0 1 BN CMBT H VY 0011 5 1 2 31300 00043 00000 00804 00847 290 EN 847 500
6* 5115 99 3 HS 0 0 1 BN CMBT H VY 0011 5 1 2 31300 00043 00000 00804 00847 290 EN 847 600
7* 5115 99 3 HS 0 0 1 BN CMBT H VY 0011 5 1 2 31300 00043 00000 00804 00847 290 EN 847 700
8* 5115 99 4 HS 0 0 1 BN CMBT H VY 0011 5 1 2 31300 00043 00000 00804 00847 290 EN 847 800
9* 5115 99 4 HS 0 0 1 BN CMBT H VY 0011 5 1 2 31300 00043 00000 00804 00847 290 EN 847 900
10* 5327 99 4 G6 0 0 1 CO TOPOGR APHIC CORPS 0010 2 1 2 31531 00004 00004 00138 00146 308 EN 147 1000
11* 5510 FA 2 H2 0 1 1 TM FIREFIGHTIN G HG 0010 5 1 2 31572 00001 00000 00003 00004 324 EN 4 11FA
12* 5510 FA 2 H2 0 1 1 TM FIREFIGHTIN G HG 0010 5 1 2 31572 00001 00000 00003 00004 324 EN 4 12FA
13* 5510 FB 2 H2 0 1 1 TM FIRE TRUCK 0010 5 1 2 31300 00000 00000 00006 00006 322 EN 6 13FB
14* 5510 FB 2 H2 0 1 1 TM FIRE TRUCK 0010 5 1 2 31300 00000 00000 00006 00006 322 EN 6 14FB
15* 5510 FB 2 H2 0 1 1 TM FIRE TRUCK 0010 5 1 2 31300 00000 00000 00006 00006 324 EN 6 15FB
16* 5510 FB 3 H2 0 1 1 TM FIRE TRUCK 0010 5 1 2 31300 00000 00000 00006 00006 324 EN 6 16FB
17* 5510 FB 3 H2 0 1 1 TM FIRE TRUCK 0010 5 1 2 31300 00000 00000 00006 00006 324 EN 6 17FB
18* 5510 FB 3 H2 0 1 1 TM FIRE TRUCK 0010 5 1 2 31300 00000 00000 00006 00006 324 EN 6 18FB
END DATA.

@HDDG RSORT TDA FILE *** UNCLASSIFIED ***

@DATA!L 13.
DATA T7 RL70-S 08/19-10:24:13
1. 0 1 HHC THEAT ER ARMY 010U 5 2 2 39900 00045 00000 00839 00884 2 M3 604
END DATA.

RSORT/TEST *** UNCLASSIFIED ***

PAGE 6 DATE 081976

SPRT,1
FURPUR 27R1 RL71=3 08/19/76 10:24:13
UNCLASSIFIED•TPF•101,F40/30,T
UNCLASSIFIED•24TESTH•11,F40/30,A 14,
UNCLASSIFIED•15(U),F40/30,T
UNCLASSIFIED•ED•TCB124E(01),F40/30,T EOSTC,
UNCLASSIFIED•24UINI1,F40/30,C 11,
UNCLASSIFIED•24REQ(1),F40/30,C 12,
UNCLASSIFIED•24TDA(1),F40/30,C 13,
UNCLASSIFIED•F5RS111,F40/30,A TPPD,
UNCLASSIFIED•XA(U),F40/30,T SA,
UNCLASSIFIED•XB(U),F14/24,T SB,

START START•24KTEST•FSORT/TEST

8-111A
8-111B

BRUNN/PRNT B124A•H3863P3U43K•UNCLASSIFIED•100•500 • FSORT/TEST

ENDG FSORT/TEST ••• UNCLASSIFIED •••

MSG,N INPUT FILES

BASG,T •32TESTFORCE• • FAS FILE OUTPUT BY SORTIUDS

USE 2,032TESTFORCE•

BASG,T 14,F40 • HAND PLAYED UNIT DATA

BASG,T 15,F40 • LOCKED OUT UNIT DATA

VIII-9

BASG,T 16,F40 • ALTERNATE THEATER UNIT DATA

BASG,T 17,F40 • M-CODE 1 (POMCUS) UNIT DATA

BASG,T 18,F40 • M-CODE 0 (IN-COUNTRY) UNIT DATA

BASG,T 19,F40 • LOCK OUT COMPO DATA

USE TPFS,24TESTDATA•

MSG,N LOAD DATA INTO FILES

GED MPUIC,14.
CASE UPPER ASSUMED
ED 15,00=08/19776=10:24:42-(1+)
EDIT
LINES:1 FIELDATA

FSORT/TEST *** UNCLASSIFIED ***

DATE 061976 PAGE 3

BED LOAD1,15.
CASE UPPER ASSUMED
ED 15•00•08/19/76•10:24:46-(0,)
EDIT
LINES:1 FIELDATA

BED ALTHR,16.
CASE UPPER ASSUMED
ED 15•00•08/19/76•10:24:52-(0,)
EDIT
LINES:1 FIELDATA

BED ICMC1,17.
CASE UPPER ASSUMED
ED 15•00•08/19/76•10:24:55-(0,)
EDIT
LINES:1 FIELDATA

BED ICMCO,18.
CASE UPPER ASSUMED
ED 15•00•08/19/76•10:24:58-(0,)
EDIT
LINES:2 FIELDATA

BED LOCMP,19.
CASE UPPER ASSUMED
ED 15•00•08/19/76•10:25:01-(0,)
EDIT
LINES:2 FIELDATA

MSGN OUTPUT FILES

@DELETE,C 24LOU^{*}
FURPUR 27R1 RL71•3 08/19/76 10:25:03

@DELETE,C 24ATL.

@DELETE,C 24ALT.

FSORT/TEST *** UNCLASSIFIED ***

DATE 061976 PAGE 3

FSORT/TEST *** UNCLASSIFIED ***

DATE 081976 PAGE 4

DELETE,C 24HPU.

DELETE,C 24CAN.

ASSG,UP 24LOU,F40,84408 • LOCKED OUT UNIT FILE

ASSG,UP 24ALT,F40,84408 • ABOVE-THE-LINE UNIT FILE

ASSG,UP 24ALT,F40,84408 • ALTERNATE THEATER UNIT FILE

ASSG,UP 24HPU,F40,84408 • HAND PLAYED UNIT FILE

ASSG,UP 24CAN,F40,84408 • MATCH CANDIDATE FILE

USE 31,24LOU.

USE 32,24ALT.

USE 33,24ALT.

USE 34,24HPU.

USE 13,24CAN.

FREE,A TPP\$

EQUAL UNCLASSIFIED

ASSG,A •FSFS•

FSORT/TEST *** UNCLASSIFIED ***

DATE 081976 PAGE 4

FSORT/TEST *** UNCLASSIFIED ***

DATE 061976

PAGE 5

BUSE TPFS, FFSFS.

BXGT

VIII-12

FSORT/TEST *** UNCLASSIFIED ***

DATE 061976

PAGE 5

FSORT/TEST *** UNCLASSIFIED ***

DATE 081976

PAGE 6

*** HAND-PLAYED-UNITS-TABLE ***

SEQ	UIC	ROBCO	ADC01	ADC02	ADC03
1	TEST24	1			059

1

VIII-13

FSORT/TEST *** UNCLASSIFIED ***

DATE 081976

PAGE 6

FSORT/TEST *** UNCLASSIFIED ***

DATE 081976 PAGE 7

*** LOCKOUT TABLE ***

SEQ ADC01

1 2

VIII-14

FSORT/TEST *** UNCLASSIFIED ***

DATE 081976 PAGE 7

F SORT/TEST ••• UNCLASSIFIED •••

••• ALTERNATE-THEATER-TABLE •••

SEQ ADC01

1 4

DATE 081976 PAGE 8

F SORT/TEST * * * UNCLASSIFIED * * *

* * * MCODE & I TABLE * * *

SEQ ROBCCO RDO/ATL RDO/BTL

I ROB 075

DATE 081976 PAGE 9

FSORT/TEST ••• UNCLASSIFIED •••

••• MCODE = O TABLE •••

SEQ COMPO

1	000
2	7

DATE 081976 PAGE 10

FSORT/TEST *** UNCLASSIFIED ***

*** HAND-PLAYED-COMPOS-TABLE ***

SEQ COMPO

1 4
2 5

DATE 081976 PAGE 11

VIII-18

FSORT/TEST *** UNCLASSIFIED ***

DATE 081976 PAGE 11

F SORT/TEST *** UNCLASSIFIED ***

DATE 081976 PAGE 12

*** TOTALS ***

LOCKOUT	=	1
ABOVE-THE-LINE	=	5
ALT-THEATER	=	2
HAND-PLAYED-UNITS	=	2
MATCH-CANDIDATES	=	13
TOTAL	=	23

SHDG,P LOCKOUT *** UNCLASSIFIED ***

DATA T7 RL70-5 08/19-10:25:41
1. 55128002 TI0040TESTUH5200TCU MEDIUM BOAT
END DATA.

SHDG,P ABOVE - THE - LINE *** UNCLASSIFIED ***

VIII-L
DATA T7 RL70-5 08/19-10:25:42
1. 17051013T10010TESTUH100ARSW CAVALRY
2. 170551013T10010TESTUH100ARSW CAVALRY
3. 170551013T10010TESTUH100ARSW CAVALRY
4. 170551013T10010TESTUH100ARSW CAVALRY
5. 173870013T10020TESTUH100ARCO ATK HEL
END DATA.

32.

DATA T7 RL70-5 08/19-10:25:42
1. 170551013T10010TESTUH100AVCO CORPS
2. 01207001 TI0000TESTUH2100AVU AIR TRAFFIC CON
END DATA.

SHDG,P ALTERNATE - THEATER *** UNCLASSIFIED ***

DATA T7 RL70-5 08/19-10:25:43
1. 01127001 TI0000TESTUH110AVC CO CORPS
2. 01207001 TI0000TESTUH2100AVU AIR TRAFFIC CON
END DATA.

33.

DATA T7 RL70-5 08/19-10:25:43
1. 050790011T10040TESTUH4100ENCU ASLT FLT ORG RIB 21435RR0BFT BLVOIRIVAD0176103075
2.

SHDG,P HAND - PLAYE D **** UNCLASSIFIED ***

F SORT/TEST *** UNCLASSIFIED ***

DATE 081976 PAGE 12

H A N D - P L A Y E D ••• UNCLASSIFIED •••

DATE 081976 PAGE 1

2. US1240024TIU00TEST24G6BUUDENCO DUMP TRUCK
END DATA.

GMDG,P MATCH - CANDIDATE ••• UNCLASSIFIED •••

DATA'1 L3.

DATA'1 RL70+5 08/19/10 125:43

1.	05035449133100020TEST1H5100ENBN COMBAT ARMY	21353XXFT L WOODSM0000000102015
2.	05035999133100030TEST1H5100ENBN COMBAT ARMY	21353XXFT CAMPBLLK000808102021
3.	050359924310050TEST1H5100ENBN COMBAT ARMY	21353XXASHURON 65000765103036
4.	050359924310050TEST1H5100ENBN COMBAT ARMY	21353XXASHLAND SKY00785103046
5.	050359924310060TEST1H5100ENBN COMBAT ARMY	21353XXAMERCN FK6U00078104071
6.	051159913310030TEST1H5100ENBN COMBAT [HVV]	21364XXAFT RILEY 6KS000845102015
7.	051159924310060TEST1H5200ENBN COMBAT [HVV]	21364XXAGULFPORT 1MS000847102018
8.	051159924310070TEST1H3200ENBN COMBAT [HVV]	21364XXAPORTLAND 1M6000847103051
9.	051159924310070TEST1H3200ENBN COMBAT [HVV]	21364XXBINGHAMN NY00847103026
10.	051159924310080TEST1H3200ENBN COMBAT [HVV]	21364XXABA ROUGESLA000847103041
11.	053279934310090TEST21G6200ENCO TOPO CORPS	31531XXFT BLVURIRIVADO147105101
12.	0532799343100TEST22G6200ENCO TOPO CORPS	31531XXBELL 6CA00147103026
13.	05510FA0431010TEST23H2100ENPL FIREFIGHTING	31557XXDANVERS 1MA00028104076

END DATA.

SPRT'1

FURPUR 27R1 RL71+3 08/19/76 10:25:44

UNCLASSIFIED•TPFS(U),F40/30,T

UNCLASSIFIED•32TESTFORCE(1),F40/30,A 2.

UNCLASSIFIED•14(U),F40/30,T

UNCLASSIFIED•15(U),F40/30,T

UNCLASSIFIED•16(U),F40/30,T

UNCLASSIFIED•17(U),F40/30,T

UNCLASSIFIED•18(U),F40/30,T

UNCLASSIFIED•19(U),F40/30,T

UNCLASSIFIED•EDSTCB124A(U),F40/30,T EDSTC,

UNCLASSIFIED•24LOU(U),F40/30,C 31,

UNCLASSIFIED•24ATL(1),F40/30,C 32,

UNCLASSIFIED•24ALT(1),F40/30,C 33,

UNCLASSIFIED•24HPU(U),F40/30,C 34,

UNCLASSIFIED•24CAN(1),F40/30,C 13,

UNCLASSIFIED•FFS(1),F40/30,A TPFS,

UNCLASSIFIED•XA(U),F40/30,T SA,

UNCLASSIFIED•XB(U),F14/24,T 38,

START START•24RTEST•ATL/TEST

H A N D - P L A Y E D ••• UNCLASSIFIED •••

DATE 081976 PAGE 1

BRUN•/PRNT B124B•H38663P6141•UNCLASSIFIED•3U•100

SHDG ATL/TEST ••• UNCLASSIFIED •••

MSG,N INPUT FILES

MSG,T 11

MSG,T 12

GED 24TESTDATA•SPRUD,11.
CASE UPPER ASSUMED
ED 15•00•08/19/76•11:25:07~(2,)
EDIT
LINES:10 FIELDATA

VIII-21

GED 24TESTDATA•ATLRUD,12.
CASE UPPER ASSUMED
ED 15•00•08/19/76•11:25:09~(1,)
EDIT
LINES:1 FIELDATA

MSG,A 24ATL • ABOVE-THE-LINE FILE FROM FSORT

BUSE 13,24ATL

MSG,N OUTPUT FILES

DELETE,C 24MATL
FURPUR 27RI RL71-3 08/19/76 11:25:10

MSG,UP 24MATL•F40,644408 • MODIFIED ABOVE-THE-LINE FILE (W/RUD)

卷之三

UNCLASSIFIED

DATE 08/19/76

EQUAL UNCLASSIFIED

BAGGIA - UP 3A/L!

GUSE TPE 8,0 F5ATL.

ALL RESEARCHERS

DATA		L	14.
	T7	RL70-5	08/19-11:25:16
1.	170520013T1U00DTESTUH01DQARHT	RGT CAVALRY	18U03XXXAFT BLISS STX002411U05059 1 NO
2.	170551013T1U00DTESTUH01DQARSQ	CAVALRY	18U03XXXAFT BLISS STX009361U05059 2 NO
3.	170551013T1U00DTESTUH01DQARSH	CAVALRY	18U03XXXAFT BLISS STX009361U05059 3 NO
4.	170551013T1U00DTESTUH01DQARSW	CAVALRY	18U03XXXAFT BLISS STX009361U05059 4 NO
5.	173876013T1U020TESTUH51UDARCO	ATK HEL	18U03XXXAFT HOOD STX003591U05059 5 NO

PART I

FURPUR 27RI RL71-3 08/19/76 11:25:17
UNCLASSIFIED TPF\\$1(0), F40/30, T
UNCLASSIFIED 11(U) F40/30, T
UNCLASSIFIED 12(U) F40/30, T
UNCLASSIFIED E&STC B1248(1), F40/30, T
UNCLASSIFIED 24ATL(1), F40/30, A 13,
UNCLASSIFIED 24MATL(1), F40/30, C 14,
UNCLASSIFIED FSATL(1), F40/30, A TPF\$.

THE INSTITUTE OF CHARTED ACCOUNTANTS OF INDIA

BRUNI/PRNT B124C/M3883P6141, UNCLASSIFIED, JU, IUC • ALT/TEST

@MSG,N ALT/TEST
*** UNCLASSIFIED ***

@MSG,N INPUT FILES

@ASSG,T 11

@ED 24TESTDATA,ALTHR,11 • ALTERNATE THEATER DATA
CASE UPPER ASSUMED
ED 15:00-08/19/76-10:26:34-(0,1)
EDIT
LINES:1 FIELDATA

@ASSG,A 24MALT*

VIII-23 @USE 12,24MALT*

@MSG,N OUTPUT FILES

@DELETE,C 24MALT*
PURPUR 27RI RL71=3 08/19/76 10:26:36

@ASSG,UP 24MALT*,F40,6440B • ALTERNATE THEATER FILE MODIFIED (W/RUD)

@USE 13,24MALT*

@EQUAL UNCLASSIFIED

@ASSG,A *FSALT*

ALT/TEST

*** UNCLASSIFIED ***

DATE 081976

PAGE 3

USE TPFS, OFFSALT.

EXGT

VIII-24

ALT/TEST

*** UNCLASSIFIED ***

DATE 081976

PAGE 3

ALT/TEST *** UNCLASSIFIED ***

ADCO1 LOWER-LIMIT UPPER-LIMIT INCRE NEW=ADCO1

4 010 020 00Z 4
*** ALTERNATE=THEATER FINI ***

@HDG ALT RESULTS *** UNCLASSIFIED ***

@DATA'L 13.
DATA T7 RL70-S 08/19-10:26:40
1. 01127001 T10000TEST03H10DAVCO CORPS JU623XXXFT BRAGG INC00110400010 1
2. 01207001 T10000TEST04H210DAVU AIR TRAFFIC CUN JU612XXXFT BRAGG INC0033940012 2
END DATA.

@PRT,I
FURPUN 27R1 RL71-3 08/19/76 10:26:40
UNCLASSIFIED•TPFS(U),F40/30,T
UNCLASSIFIED•11(U) F40/30,T
UNCLASSIFIED•ED•TCB124C10),F40/30,T EDSTC,
UNCLASSIFIED•24ALT(1),F40/30,A 12,
UNCLASSIFIED•24MALT(1),F40/30,C 13,
UNCLASSIFIED•FSALT(1),F40/30,A TPFS,
VIII-25

@START START•24RTEST•MATCH/TEST

DATE 081976 PAGE 4

B124F.H3883PS141.UNCLASSIFIED,100,500 • MATCH/TEST

SHDG MATCH/TEST ••• UNCLASSIFIED •••

MSG,N INPUT FILES

BASG,A 24REQ. • REQUIREMENTS FILE FROM RSURT

BASG,A 24CAN. • MATCH CANDIDATES FILE FROM FSORT

BUSE 1,24CAN.

BUSE 2,24REQ.

BASG,T 11,F4U • PECOD DATA

BASG,T 12,F4U • SUBPERIOD RRD DATA

BASG,T 13,F4U • NOTIONAL UNIT DATA

BUSE TPF\$,24TESTDATA.

BED PECOD,11.
CASE UPPER ASSUMED
ED 15,00=08/19/76-10:27:09-(0,0)
EDIT
LINES:23 FIELDATA

BED SPRUD,12.
CASE UPPER ASSUMED
ED 15,00=08/19/76-10:27:10-(1,0)
EDIT
LINES:10 FIELDATA

MATCH/TEST ••• UNCLASSIFIED •••

DATE 081976 PAGE 3

WED NOTIN.13.
CASE UPPER ASSUMED
ED 15.00=08/19/76=10:27:12-(0+)
EDIT
LINES:20 FIELDATA

@FREE:1A TPP\$

@MSG:IN OUTPUT FILES

@DELETE:C 24MOVR.
FURPUR 27R1 RL71-3 08/19/76 10:27:13

@DELETE:C 24MREQ.

@DELETE:C 24MATCHRPT.

VIII-27

@ASG:UP 24MOVR.,F40,8440A • THIS FILE NOT USED

@ASG:UP 24MREQ.,F14,PACK61 • MATCH REQUIREMENTS (MATCHES AND NOTIONALS)

@ASG:UP 24MATCHRPT.,F40 • MATCH REPORT FILE

@USE 3.24MOVR.

@USE 8.24MREQ.

@USE 19.24MATCHRPT.

EQUAL UNCLASSIFIED

MATCH/TEST ••• UNCLASSIFIED •••

DATE 081976 PAGE 3

MATCH/TEST *** UNCLASSIFIED ***

DATE 081976 PAGE 4

@ASG,A @FSFM.

@USE TPFS, @FSFM.

DELETE,C F5TPRT.
FURPUR 27R1 RL71-3 08/19/76 10:26:35

@ASG,UP F5TPRT.,F40 * INTERMEDIATE PRINT FILE

@BRKPT PRINTS/F5TPRT

REQ-SRC	FORCE-SRC	BRNCH	LEVEL	UNITS	CUMPO	UIC	TPSN	UIN	TP	RSEQ	MC	ROBCO	STN/M	LOC CO	RSTK	FSTK	FSEQ
05035 00	05035 00	EN	BN	COMBAT ARMY	1	TEST10	21353	270	2	1	XXX	FT L WOOD	SNO	00785	00808	1	
05035 00	05035 00	EN	BN	COMBAT ARMY	1	TEST11	21353	270	2	2	XXX	FT CAMPBL	1KY	00785	00808	2	
05035 00	05035 00	EN	BN	COMBAT ARMY	2	TEST13	21353	270	3	3	XXX	HUNON	6SD	00785	00785	3	
05035 00	05035 00	EN	BN	COMBAT ARMY	2	TEST12	21353		4	3	XXX	ASHLAND	SKY	00785	00785	4	
05035 00	05035 00	EN	BN	COMBAT ARMY	2	TEST14	21353		4	4	XXX	AMERCN FK	6UT	00785	00785	5	
05115 00	05115 00	EN	BN	COMBAT CHVY	1	TEST15	21364	290	2	4	3	XXX	FT RILEY	6KS	00847	00845	6
05115 00	05115 00	EN	BN	COMBAT CHVY	2	TEST16	21364	290	2	5	4	XXX	GULFPORT	1HS	00847	00847	7
05115 00	05115 00	EN	BN	COMBAT CHVY	2	TEST17	21364	290	3	6	4	XXX	PORLND	1ME	00847	00847	8
05115 00	05115 00	EN	BN	COMBAT CHVY	2	TEST18	21364	290	3	7	4	XXX	BINGHAMTN	1NY	00847	00847	9
05115 00	05115 00	EN	BN	COMBAT CHVY	2	TEST19	21364	290	4	8	4	XXX	BAI ROUGE	SLA	00847	00847	10
05115 00	05115 00	EN	BN	CBT HVY	4	X50001	31300	290	4	9			FT RILEY	6KS	00847	00847	
05327 00	05327 00	EN	CO	TOPO CORPS	3	TEST21	31531	308	4	10	4	XXX	FT BLVOIR	1VA	00147	00147	11
05327 00	05327 00	EN	CO	TOPO CORPS	3	TEST22	31531		4	4	XXX	BELL	6CA	00147	00147	12	
05510 FA	05510 FA	EN	PLT	FIREFIGHTING	3	TEST23	31557	324	2	11	4	XXX	DA'VERS	1MA	00004	00026	13
05510 FA	05510 FA	EN	TM	FIREFIGHTING HQ	4	X50002	31572	324	2	12			FT RILEY	6KS	00004	00004	
05510 FB	05510 FB	EN	TH	FIRE TRUCK	4	X50003	31300	322	2	13			FT RILEY	6KS	00006	00006	
05510 FB	05510 FB	EN	TH	FIRE TRUCK	4	X50004	31300	324	2	14			FT RILEY	6KS	00006	00006	
05510 FB	05510 FB	EN	TH	FIRE TRUCK	4	X50005	31300	324	2	15			FT RILEY	6KS	00006	00006	
05510 FB	05510 FB	EN	TH	FIRE TRUCK	4	X50006	31300	324	3	16			FT RILEY	6KS	00006	00006	
05510 FB	05510 FB	EN	TH	FIRE TRUCK	4	X50007	31300	324	3	17			FT RILEY	6KS	00006	00006	
05510 FB	05510 FB	EN	TH	FIRE TRUCK	4	X50008	31300	324	3	18			FT RILEY	6KS	00006	00006	

ORUN /PRINT B124G.H3883P6141,UNCLASSIFIED,100,300 • LAYIN/TEST

SHDG LAYIN ••• UNCLASSIFIED •••

MSG,N INPUT FILES

@ASG,T 10.

24TESTDATA.SPRDD,10.
CASE UPPER ASSUMED
ED 15:00-U8/19/76-11:26:38-(12,1)
EDIT
LINES:10 FIELDATA

@ASG,A 24MALT. • ALTERNATE THEATER UNITS FROM ATL

VTTT.20 @ASG,A 24MALT. • ABOVE-THE-LINE UNITS FROM ATL

@ASG,A 24LOU. • LOCK OUT UNITS FROM FSORT

@ASG,A 24HPU. • HAND PLAYED UNITS FROM FSORT

@ASG,A 24MREQ. • MATCHES AND NOTIONALS FROM MATCH

@ASG,A 32TESTFORCE. • FORCE FILE FROM SORTUDS

@USE 11,24MALT.

@USE 12,24LOU.

@USE 13,24HPU.

LAYIN

@USE 14,24HPU.

@USE 15,24HREQ.

@USE 16,32TESTFORCE.

MSG,N OUTPUT FILES@DELETE,C 24FOUT.
FURPUR 27R1 RL71=3 08/19/76 11:28:12

@DELETE,C 24FPRT.

@MSG,UP 24FOUT,F14,PACK62 • FORCE OVERLAI WITH MATCH RESULTS

VIII-31
MSG,N 24FOUT WILL BE INPUT TO MRG

@MSG,UP 24FPRT,F4U • INTERMEDIATE PRINT FILE

@USE 17,24FOUT.

@USE 18,24FPRT.

EQUAL UNCLASSIFIED

@MSG,A OFSLAY

@USE TPP3,OFSLAY

BRUN./R C124A.H3883PS121.UNCLASSIFIED.15.500 • GEORUN

GHDG GEO RUN

GASG.A 24FOUT. • FORCE FILE OUTPUT BY FMA PROGRAM LAYIN

USE 17.24FOUT.

EQUAL UNCLASSIFIED

GASG.A • 32GEO. • GEO FILE OUTPUT BY SORTARLOC

GASG.A • 32NODE. • NODE TABLE

VIII-33

GASG.T 32F7. • PRINT OF MDFI FILE

GASG.T 32F29 • MDFI FILE - OUTPUT (SRC SEQNFNCE)

USE 15. • 32GEO.

USE 16. • 32NODE.

USE 7.32F7.

USE 29.32F29.

GASG.XA • 58CAMP.

SPRT.S • 24TESTDATA.GFODATA

GEO RUN

DATE 082576 PAGE 3

FURPUR 27RI RL71+3 08/25/76 08:58:24

VIII-34

GEO RUN

DATE 082576 PAGE 3

UNCLASSIFIED•24TESTDATA(1),GEODATA

1	2
2	1 000 XPKX 004 000
3	4 010 WTGR 012 010
4	1
5	18003 A HCRL

@XQT •58(CAMP.GF0ARS

GADD,P *24TESTDATA.GEODATA
 NUMBER OF THEATERS 2
 NUMBER OF EXCEPTIONS 1

THTR AVAIL DEST(G) DEST(N) AVL(T)
 1 0 XPKX 4 0
 4 10 WTGR 12 10

TPSN DEST(G) DEST(N) AVL RDD MODE THR ORIG(G) ORIG(N)
 18003 0 0 A 0 HCRL 0
 800 RECORDS ON FILE BIGEO
 83 RECORDS ON FILE BINODE
 VIII UNITS ACTIVE NO FIND RESERVE NO FIND AVE ACC/U
 27 11 0 16 0 15.852
 0

VIII-35

@PRT.1
 FURPUR 27R1 RL71-1 08/25/76 09:00:23
 UNCLASSIFIED•TPFS(1),F40/30,T
 UNCLASSIFIED•24FOU(1),F14/24,A 17,
 UNCLASSIFIED•32GEN(1),F14/24,A 15,
 UNCLASSIFIED•32NDF(1),F14/24,A 16,
 UNCLASSIFIED•32F7(1),F40/30,T 7,
 UNCLASSIFIED•32F29(1),F40/30,A 29,
 UNCLASSIFIED•58CAMP(1),F14/24,AX CSINTNAME\$,
 UNCLASSIFIED•XA(1),F40/30,T SA,
 UNCLASSIFIED•XR(1),F14/24,T SB,
 UNCLASSIFIED•21(1),F40/30,T

GEO,R 32F7.
 READ-ONLY MODE
 CASE UPPER ASSUMED
 ED 15.00=08/25/76-09:00:24-(1.)
 EDIT

01127H10000	TEST03 30623	HCTL37 WTGR	190	12	10	10	P 4 3	CORPS
01207H20000	TEST04 30612	HCTL37 WTGR	190	12	12	10	P 4 3	IR TRAFFIC C
17055H00000	TEST05 18003	HCRL XPKX	210	4	59	0	A 1 3	RGT CAVALRY
17055H01000	TEST06 18003	HCRL XPKX	210	4	59	0	A 1 3	CAVALRY
17055H01000	TEST07 18003	HCRL XPKX	210	4	59	0	A 1 3	CAVALRY
17055H01000	TEST08 18003	HCRL XPKX	210	4	59	0	A 1 3	CAVALRY

GEO RUN	TEST#	18003	HCR	XPQK	210	4	59	O A 1 1 ATK HEL
1738TH50000	TEST10	21353	H65H29	XPQK	186	4	2	O P 1 3 COMBAT ARMY
05035H50000	TEST11	21353	H6BL21	XPQK	227	4	2	O P 1 3 COMBAT ARMY
05035H50000	TEST15	21364	HKBN20	XPQK	178	4	5	O P 1 3 COMBAT CHVY
05115H30000	TEST20	21435	E HCMLS1	XPQK	192	4	75	O A 1 1 ASLT FLT BRG
05035H50000	TEST13	21353	HFTZ48	XPQK	210	4	20	O P 1 1 COMBAT ARMY
05115H30000	TEST16	21364	HFTZ48	XPQK	210	4	5	O P 1 3 COMBAT CHVY
05115H30000	TEST17	21364	HFTZ48	XPQK	210	4	23	O P 1 3 COMBAT CHVY
05115H30000	TEST18	21364	HFTZ48	XPQK	210	4	26	O P 1 3 COMBAT CHVY
05115H30000	TEST19	21364	HFTZ48	XPQK	210	4	38	O P 1 3 COMBAT CHVY
05121H60000	TEST24	31436	HFTZ48	XPQK	210	4	59	O P 1 3 DUMP TRUCK
05327H60000	TEST21	31531	HFTZ48	XPQK	210	4	41	O P 1 3 TOPO CORPS
05510H2FA00	TEST23	31557	HFTZ48	XPQK	210	4	8	O P 1 3 FIREFIGHTIN
05510H50000	X50001	31300	HKBN20	XPQK	178	4	44	O P 1 3 CMBT HVY
05510H2FA01	X50002	31572	HKBN20	XPQK	178	4	8	O P 1 3 FIREFIGHTIN
05510H2FB01	X50003	31300	HKBN20	XPQK	178	4	11	O P 1 3 FIRE TRUCK
05510H2FB01	X50004	31300	HKBN20	XPQK	178	4	14	O P 1 3 FIRE TRUCK
05510H2FB01	X50005	31300	HKBN20	XPQK	178	4	17	O P 1 3 FIRE TRUCK
05510H2FB01	X50006	31300	HKBN20	XPQK	178	4	29	O P 1 3 FIRE TRUCK
05510H2FB01	X50007	31300	HKBN20	XPQK	178	4	32	O P 1 3 FIRE TRUCK
05510H2FB01	X50008	31300	HKBN20	XPQK	178	4	35	O P 1 3 FIRE TRUCK
EOF:27 SCAN:26								
NO CORRECTIONS APPLIED.								

VIII-36

@FREE 32F7.

@FREE 32F29.

@MSG+N START•24RTFST•LOGSUBRUN

GRUN. /PRNT A124R. H3883P6141. UNCLASSIFIED. 30,30 • LOGSUBRUN

SHDG UPDATING MDFI SRC'S - LOG SUB RUN

EQUAL UNCLASSIFIED

@ASG.A 32F29. • 32CAMP.

@USE 29., 32F29. • MDFI FILE WITH BAD MATCH ON TUCHA

@USE 29., 32F29.

@ASG.A 32F29UP. • NEW MDFI WITH FIXED UP SRC'S

@USE 25., 32F29UP.

GRPT.S • 24TESTDATA•LOGSUBDATA
PUR 27R1 RL71-3 08/24/76 18:59:19

UPDATING MDFI SRC'S - LOG SUB RUN

DATE 082476

PAGE 3

UNCLASSIFIED•24TESTDATA(1).LOGSUBDATA

1
2 05115H0000 05115H30000

@XQT •32CAMP.UPMDF1

@ADD.P •24TESTDATA.LOGSUBDATA

@PRT.I
FURPUR 27RL RL71=3 08/24/76 18:59:25
UNCLASSIFIED•TPFS(10),F40/30,T
UNCLASSIFIED•32CAMP(11),F14/24,AX CSINTNAME\$,
UNCLASSIFIED•32F29(11),F40/30,A 29,
UNCLASSIFIED•32F29(11),F40/30,A 25,
UNCLASSIFIED•XA(10),F40/30,T SA,
UNCLASSIFIED•XA(10),F14/24,T SB,

@START START•24RTFST.LOGUPPRUN

BRUN, /PRNT A124C • H1883P6141, UNCLASSIFIED, 50,50 • LOGUPRUN

@HDG LOG RUN

EQUAL UNCLASSIFIED

@ASG,XA • 58CAMP.

@ASG,A 32F29UP. • UPDATED MDF1 FILE

@ASG,A • 32TUSUM. • TUCHA FILE (SRC SEQUENC)

@ASG,A 24POMSUM.

@ASG,A 32F26. • MDF2 FILE - OUTPUT

@ASG,A 32F11. • INTERMEDIATE FILE FOR RPG

@ASG,A 32F10. • UNIT MORSA CARDS - OUTPUT

@USE 11••32F11.

@USE 10••32F10.

@USE 29••32F29UP.

@USE 28••32TUSUM.

@USE 27••24POMSUM.

LOG RUN

GUSE 260032F26.

DATE 082476

PAGE

3

@PRT.S *24TSTDATA.LOGDATA
FURPUR 27R1 RL71-3 08/24/76 18:59:48

UNCLASSIFIED//~~24TESTDATA~~//LOGDATA
 2 2 14 12
 200.0 100.0 25.0 25.0
 UNCLASSIFIED//LOGSUDATA

WIGT * SACAMP * LOGARS

UNCLASSIFIED//~~24TESTDATA~~//LOGDATA

NUMBER OF THEATERS 2

NUMBER OF SETS 2

THTR SET PLANIN

1 1

4 2 2

AIRPORT SEAPORT

NON-POMCUS ASR

SUPPLY AMMO

200.000 25.000

POMCUS ASR

SUPPLY AMMO

0.000 25.000

SRC LIST

05115H50000 05115H30000

UNITS IN THEATER SETS 24

FINAL SEQUENCE NUMBERS 24

NO MATCHES 0

UNITS IN THEATER SETS 26

FINAL SEQUENCE NUMBERS 26

NO MATCHES 0

@PRT.1
 PURPUR 27R1 RL71=3 08/24/76 19:00:25
 UNCLASSIFIED//TPFS(0),F40/30,T
 UNCLASSIFIED//5BCAMP(1),F14/24,AX CSINTNAMES,
 UNCLASSIFIED//32F29UP(1),F40/30,A 29,
 UNCLASSIFIED//32TUSUM(1),F40/30,A 28,
 UNCLASSIFIED//24POMSUM(1),F40/30,A 27,
 UNCLASSIFIED//32F24(1),F40/30,A 26,
 UNCLASSIFIED//32F11(1),F40/30,A 11,
 UNCLASSIFIED//32F10(1),F40/30,A 10,
 UNCLASSIFIED//XA(0),F40/30,T SA,

READ R 10.
 READ-ONLY MODE
 CASE UPPER ASSUMED
 ED 15.00-08/24/76-19:00:25-(0,)
 EDIT

00012A U7CORPS CO P 010010 HCTLWTGRTGR00010203n623
 00012W00001000002100010800000000000000000000419n3AAE7TEST03
 00012FN 000016002839
 0002A2A U7IR TRAFFIC CU P 010012 HCTLWTGRTGR00033803n612
 0002A2W000034000047000316000000000000000000401207H2000041903W9ACTEST04
 0002A2FN 000009001629

VIII-42

LOG RUN

DATE 082476 PAGE

DATE 082476 PAGE 6

ESTATE PLANNING - NUMBER NINETY-EIGHT

GRUNN./PRNT A124D.H3883P6141, UNCLASSIFIED, 100,300 • NURRUN

RHDG NUR RUN

EQUAL UNCLASSIFIED

@ASG,A 32F26 • MDF2 FILE IN/NON-POMCUS IN SRC / POMCUS IN UIC SEQ

@USE 26,32F26

@ASG,A 32F24 • NUR MORSA CARDS = OUTPUT (RDD SEQUENCE)

@USE 24,32F24

VIII-44 @ASG,A 32F23 • NUR DATA FOR PACKAGE = OUTPUT (RDD SEQUENCE)

@USE 23,32F23

@ASG,A 32F12 • INTERMEDIATE FILE FOR RPG

@USE 12,32F12

@ASG,XA *56CAMP

SPRT,S *24TESTDATA.NURDATA
PURPUR 27RI RL71=3 08/24/76 19:00:46

UNCLASSIFIED • 24TESTDATA(1) • NURDATA

1	2	2	14	12	12
2	1	18	28	75	00
3	2	18	28	75	00
4	1	5000.0	800.0	40000.0	0.0
5	2	1000.0	200.0	1000.0	0.0
6	1	0.90	0.80	0.70	0.60
7	2	0.77	0.77	0.77	0.77
8	1	200.0	25.0	0.0	100.0
9	2	200.0	25.0	0.0	100.0
10	11	30.00	50.00	40.00	30.00
11	12	0.0	100.0	50.0	20.0
12	13	45.00	45.00	45.00	45.00
13	21	29.00	29.00	29.00	29.00
14	22	22.43	22.63	22.63	22.63
15	23	55.00	55.00	55.00	45.00
16	RPCA	216	1.0	0.0	NEW CUMBERLAND
17	AKWQ	174	0.0	1.0	ANNISTON - AMMO
18			0.0	0.0	NOT USED
19			0.0	0.0	NOT USED
20			0.0	0.0	NOT USED
21			0.0	0.0	NOT USED
22			0.0	0.0	NOT USED
23			0.0	0.0	NOT USED
24			0.0	0.0	NOT USED
25			0.0	0.0	NOT USED
26			0.0	0.0	NOT USED
27			0.0	0.0	NOT USED
28			0.0	0.0	NOT USED
29			0.0	0.0	NOT USED
30			0.0	0.0	NOT USED
31			0.0	0.0	NOT USED
32			0.0	0.0	NOT USED
33			0.0	0.0	NOT USED
34	HQLH	191	0.0	0.0	GALVESTON - POL
35	HEKP	187	0.0	0.0	FT DIX - PAX

@XQT • 58CAMP • NURARS

SET PLAN DDAY RDAY BLDDUP CDAY ADAY
 NUMBER OF THEATERS 2
 NUMBER OF SETS 2
 THTR SET
 1 1

SET	THEATER BASE	FILLER	FILLER	BLDDUP LEVELS	SAFE LEVELS
4	2			1 2 3 4 5 6 7 8	10. 10. 10. 10.
1	18	75	0	35 17 35 53 71 89 89 89	25. 30. 25. 25. 30. 25. 25. 25.
2	18	75	0	35 17 35 53 71 89 89 89	25. 30. 25. 25. 30. 25. 25. 25.

NUR RUN PAGE 4 DATE 082476

	DRY	AMMO	POL	PCT	DAY	PCTS	DEST(G)	DEST(N)	AVL
1	5000.000	800.000	40000.000	.000	0 0	0 000	0 000	X P Q K	4 10
2	1000.000	200.000	10000.000	.000	0 0	0 000	0 000	W T G R	12 10

REPLACEMENTS BY TIME PERIOD (MEN/1000/DAY)

1	.90000	.80000	.70000	.68000	.60000	.60000	.60000	.60000
2	.77000	.77000	.77000	.77000	.77000	.77000	.77000	.77000

ACCOMPANYING SUPPLY RATES (LBS/MAN)

	NON-POMCUS	POMCUS
1	200.00000	25.00000
2	200.00000	25.00000

CONSUMPTION RATES (LBS/MAN/DAY) - BY TIME PERIOD

1 DRY	30.00000	50.00000	40.00000	30.00000	30.00000	30.00000	30.00000
AMMO	.00000	100.00000	50.00000	50.00000	20.00000	20.00000	10.00000
POL	45.00000	45.00000	45.00000	45.00000	45.00000	45.00000	45.00000
2 DRY	29.00000	29.00000	29.00000	29.00000	29.00000	25.00000	25.00000
AMMO	22.63000	22.63000	22.63000	22.63000	22.63000	22.00000	22.00000
POL	55.00000	55.00000	55.00000	55.00000	45.00000	45.00000	45.00000

ORIGIN ORIGIN DRY PCT AMMO PCT

RPCA	216	1.000	.000				
AKWG	174	.000	1.000				
	0	.000	.000				
	0	.000	.000				
	0	.000	.000				
	0	.000	.000				
	0	.000	.000				
	0	.000	.000				
	0	.000	.000				
HQLH	191	.000	.000				
HEKP	187	.000	.000				

VIII-46

NUR RUN

DATE 082476

PAGE 4

NUR RUN	DAY	THR	UNITS	STRENGTH	REPLACEMENTS	TYPE	DAYS ON	DAYS DESRD	TONS OH	TONS REQD
	1	1	0	0.						
	1	2	0	3280.	0.	2	4.	10.	677.	963.
	18	1	9	3280.	3.	2	9.	10.	1476.	164.
	19	1	9	3280.	5.	2	7.	10.	1447.	583.
	20	1	10	4060.						
	20	2	2	440.	1.	3	2.	2.	24.	0.
	21	1	10	4060.	8.	2	9.	10.	1827.	203.
	21	2	2	440.	1.	3	1.	2.	12.	0.
	22	1	10	4060.	12.	2	9.	10.	1827.	203.
	22	2	2	440.	1.	3	1.	2.	12.	0.
	23	1	11	4907.	15.	2	7.	10.	1795.	658.
	23	2	2	440.	2.	3	1.	2.	12.	0.
	24	1	11	4907.	19.	2	9.	10.	2208.	245.
	24	2	2	440.	2.	3	1.	2.	12.	0.
	25	1	11	4907.	23.	2	9.	10.	2208.	245.
	25	2	2	440.	2.	3	1.	2.	12.	0.
	26	1	12	5754.	27.	2	8.	10.	2176.	701.
	26	2	2	440.	3.	3	1.	2.	12.	0.
	27	1	12	5754.	31.	2	9.	10.	2589.	288.
	27	2	2	440.	3.	3	1.	2.	12.	0.
	30	1	13	5760.	45.	1	24.	25.	3600.	143.
	30	1	13	5760.	45.	2	8.	11.	3125.	824.
	30	1	13	5760.	45.	3	25.	25.	3240.	0.
	30	2	2	440.	4.	2	23.	25.	125.	11.
	30	2	2	440.	3.	0.	0.	3.	36.	0.
	30	2	2	440.	23.	1	20.	25.	3607.	727.
	35	1	15	5772.	23.	2	6.	13.	3746.	2061.
	35	1	15	5772.	23.	3	20.	25.	3247.	5.
	35	1	15	5772.	23.	2	20.	26.	127.	27.
	35	2	2	440.	2.	2	20.	25.	66.	1.
	35	2	2	440.	2.	3	-2.	5.	3309.	257.
	40	1	16	6619.	22.	1	23.	25.	3723.	8.
	40	1	16	6619.	22.	3	17.	25.	4282.	28.
	40	2	2	440.	2.	2	21.	26.	130.	28.
	40	2	2	440.	2.	3	0.	8.	95.	1.
	45	1	16	7612.	24.	1	18.	25.	3806.	1088.
	45	1	18	7612.	24.	2	10.	17.	3280.	1282.
	45	1	18	7612.	24.	3	17.	25.	4282.	10.
	45	2	2	440.	2.	2	21.	27.	133.	28.
	45	2	2	440.	2.	3	3.	10.	125.	1.
	50	1	18	7612.	27.	1	20.	25.	3806.	761.
	50	1	18	7612.	27.	2	12.	19.	3685.	1356.
	50	1	18	7612.	27.	3	20.	25.	4282.	6.
	50	2	2	440.	2.	2	22.	28.	138.	28.
	55	2	2	440.	2.	3	10.	15.	151.	0.
	55	2	2	440.	2.	3	1.	15.	414.	1317.
	60	1	24	10972.	25.	1	17.	25.	6478.	3382.
	60	1	24	10972.	25.	2	1.	24.	6172.	20.
	60	1	24	10972.	25.	3	14.	25.		

VIII-47

NUR RUN	DAY	THR	UNITS	STRENGTH	REPLACEMENTS	TYPE	DAY'S OH	DAY'S DESRD	TONS OH	TONS REQRD
	60	2	2	440.	2.	2.	23.	28.	141.	28.
	60	2	2	440.	2.	3	10.	18.	175.	1.
	65	1	24	10972.	33.	1	20.	25.	4114.	823.
	65	1	24	10972.	33.	2	19.	26.	7062.	1955.
	65	1	24	10972.	33.	3	20.	25.	6172.	9.
	65	2	2	440.	2.	2	23.	29.	144.	28.
	65	2	2	440.	2.	3	13.	20.	199.	1.
	70	1	24	10972.	33.	1	20.	25.	4114.	823.
	70	1	24	10972.	33.	2	21.	28.	7645.	1955.
	70	1	24	10972.	33.	3	20.	25.	6172.	9.
	70	2	2	440.	2.	2	24.	29.	147.	28.
	70	2	2	440.	2.	3	15.	23.	223.	1.
	END OF MDF2 FILE. DAY # 75									
	75	1	25	11063.	33.	1	20.	25.	4149.	852.
	75	1	25	11063.	33.	3	20.	25.	6223.	9.
	75	2	2	440.	2.	2	24.	30.	149.	28.
	75	2	2	440.	2.	3	18.	25.	247.	1.
	80	1	25	11063.	33.	1	20.	25.	4149.	830.
	80	1	25	11063.	33.	3	20.	25.	6223.	9.
	80	2	2	440.	2.	2	25.	30.	149.	25.
	80	2	2	440.	2.	3	20.	25.	247.	0.
	85	1	25	11063.	33.	1	20.	25.	4149.	830.
	85	1	25	11063.	33.	3	20.	25.	6223.	9.
	85	2	2	440.	2.	2	25.	30.	149.	25.
	85	2	2	440.	2.	3	20.	25.	247.	0.
	90	1	25	11063.	33.	1	20.	25.	4149.	830.
	90	1	25	11063.	33.	3	20.	25.	6223.	9.
VIII-48	90	2	2	440.	2.	2	25.	30.	149.	25.
	90	2	2	440.	2.	3	20.	25.	247.	0.
	UNITS IN THEATER				25	2	0	0	0	0
	CARDS PRODUCED 180				255	52	0	0	0	0
	FINAL SEQUENCE NUMBERS									

GPMDE
PHD NOT ALLOWED

SPRT. I
PURPUR 27RI RL71-3 08/24/76 19:01:03
UNCLASSIFIED•TPFS(0),F40/30,T
UNCLASSIFIED•32F26(1),F40/30,A 26,
UNCLASSIFIED•32F24(1),F40/30,A 24,
UNCLASSIFIED•32F23(1),F40/30,A 23,
UNCLASSIFIED•32F12(1),F40/30,A 12,
UNCLASSIFIED•5RCAMP(1),F14/24,AX CSINTNAME\$,
UNCLASSIFIED•XA(0),F40/30,T 58,
UNCLASSIFIED•XA(0),F14/24,T 58,

GEO.R 32F24.
READ-ONLY MODE
CASE UPPER ASSUMED

ED 15:00:00 / 24/74 - 18:01:03:10:

EDIT		0027A1A		SGPWS DRY		PKGZ		999000		XPQKXPQKXPQK00000000	
0027A1W		0050000		SAPWRS AMMO		PKGZ		999000		XPQKXPQKXPQK00000000	
0028A1A		00008000		P2PWRS POL		POLZ		999000		XPQKXPQKXPQK00000000	
0029A1W		00004000		SGPWS DRY		PKGZ		999000		WTGRWTGRWTGR000000	
0030A2A		0010000		SAPWRS AMMO		PKGZ		999000		WTGRWTGRWTGR000000	
0030A2W		00002000		P2PWRS POL		POLZ		999000		WTGRWTGRWTGR000000	
0031A1A		00000001		SARESUPPLY		AMMPKGPF		010018		AKWQXPQKXPQK000000	
0031A1W		0000963		SARESUPPLY		AMMPKGPF		010019		AKWQXPQKXPQK000000	
0049A1A		00014		SARESUPPLY		AMMPKGPF		010020		AKWQXPQKXPQK000000	
0067A1A		0005A3		P2RESUPPLY		POLPOLP		010020		HQLHWTGRWTGR000000	
0006A2A		00000000		SARESUPPLY		AMMPKGPF		010021		AKWQXPQKXPQK000000	
0085A1A		0000203		P2RESUPPLY		POLPOLP		010021		HQLHWTGRWTGR000000	
0007A2A		00000000		P2RESUPPLY		POLPOLP		010021		HQLHWTGRWTGR000000	
0103A1A		0000203		SARESUPPLY		AMMPKGPF		010022		AKWQXPQKXPQK000000	
0103A1W		00000000		P2RESUPPLY		POLPOLP		010022		HQLHWTGRWTGR000000	
0008A2A		00000000		SARESUPPLY		AMMPKGPF		010023		AKWQXPQKXPQK000000	
0121A1A		0000658		P2RESUPPLY		POLPOLP		010023		HQLHWTGRWTGR000000	
0009A2A		00000000		SARESUPPLY		AMMPKGPF		010024		AKWQXPQKXPQK000000	
0139A1A		0000245		P2RESUPPLY		POLPOLP		010024		HQLHWTGRWTGR000000	
0010A2A		00000000		SARESUPPLY		AMMPKGPF		010025		AKWQXPQKXPQK000000	
0157A1A		0000245		P2RESUPPLY		POLPOLP		010025		HQLHWTGRWTGR000000	
0011A2A		00000000		SARESUPPLY		AMMPKGPF		010026		AKWQXPQKXPQK000000	
0175A1A		0000701		P2RESUPPLY		POLPOLP		010026		HQLHWTGRWTGR000000	
0012A2A		00000000		SGRESUPPLY		DRYPKGPF		010026		RPCAXPQKXPQK000000	
0121A1A		000143		SARESUPPLY		AMMPKGPF		010027		AKWQXPQKXPQK000000	
0211A1W		0000824		P2RESUPPLY		POLPOLP		010027		HQLHWTGRWTGR000000	
0212A1A		00000000		SARESUPPLY		AMMPKGPF		010026		AKWQXPQKXPQK000000	
0212A1W		00000000		P2RESUPPLY		POLPOLP		010026		HQLHXPQKXPQK000000	

0014A2A 0014A2W	SARESUPPLY AMMPKG 000012	010026	AKWQWTGRNTGR000000
0015A2A 0015A2W	P2RESUPPLY POLPOLP 000000	010026	HQLHWTGRNTGR000000
0016A2A 0016A1A	SGREPLACEMENTSPKG SARESUPPLY DRYPKG 0000727	010026 010031	HEKPWTGRNTGR000004 RPCAXPQQKXPQK000000
0017A1W	SARESUPPLY AMMPKG 002061	010031	AKWQXPQQKXPQK000000
0216A1A	P2RESUPPLY POLPOLP 000005	010031	HQLHXPQQKXPQK000000
0216A1W	SGREPLACEMENTSPKG 000005	010031	HEKPXPQQKXPQK000023
0017A2A 0017A2W	SARESUPPLY AMMPKG 000027	010031	AKWQWTGRNTGR000000
0018A2A 0018A2W	P2RESUPPLY POLPOLP 000001	010031	HQLHWTGRNTGR000000
0019A2A 0218A1A	SGREPLACEMENTSPKG SGRESUPPLY DRYPKGS 000257	010031 010036	HEKPWTGRNTGR000002 RPCAXPQQKXPQK000000
0219A1A	P2RESUPPLY POLPOLS 000008	010036	HQLHXPQQKXPQK000000
0219A1W	SGREPLACEMENTSPKG SGRESUPPLY AMMPKS 000028	010036 010036	HEKPXPQQKXPQK000022 AKWQWTGRNTGR000000
0021A2A 0021A2W	P2RESUPPLY POLPOLS 000001	010036	HQLHWTGRNTGR000000
0022A2A 0221A1A	SGREPLACEMENTSPKG SGRESUPPLY DRYPKGS 001088	010036 010041	HEKPWTGRNTGR000002 RPCAXPQQKXPQK000000
0222A1A	SARESUPPLY AMMPKGS 001282	010041	AKWQXPQQKXPQK000000
0222A1W	P2RESUPPLY POLPOLS 000000	010041	HQLHXPQQKXPQK000000
0223A1A	SARESUPPLY AMMPKGS 0024A1W	010041	HEKPXPQQKXPQK000024
0224A1A	SARESUPPLY AMMPKGS 0025A2A	010041	AKWQWTGRNTGR000000
0023A2W	P2RESUPPLY POLPOLS 000028	010041	HQLHWTGRNTGR000000
0024A2A 0024A2W	SARESUPPLY AMMPKGS 0025A2A	010041	HEKPWTGRNTGR000002
0225A1A	SARESUPPLY AMMPKGS 0025A2W	010041	RPCAXPQQKXPQK000000
0225A1W	P2RESUPPLY POLPOLS 000028	010041	HQLHWTGRNTGR000000
0226A1A	SARESUPPLY AMMPKGS 0026A1W	010046	AKWQXPQQKXPQK000000
0227A1A	P2RESUPPLY POLPOLS 000006	010046	HQLHXPQQKXPQK000000
0227A1W	SARESUPPLY AMMPKG 0026A2A	010046	HEKPXPQQKXPQK000027
0026A2A 0026A2W	SARESUPPLY AMMPKG 000028	010046	AKWQWTGRNTGR000000
0027A2A	P2RESUPPLY POLPOLS 000761	010046	HQLHWTGRNTGR000000
0027A2W	SARESUPPLY AMMPKGS 0027A2W	010046	HEKPWTGRNTGR000002
0028A2A	SARESUPPLY AMMPKGS 0028A1A	010046	AKWQXPQQKXPQK000000
0229A1W	P2RESUPPLY POLPOLS 001356	010051	HQLHXPQQKXPQK000000
0229A1A	SARESUPPLY AMMPKGS 001356	010051	HEKPXPQQKXPQK000026
0230A1A	P2RESUPPLY POLPOLS 000006	010051	AKWQWTGRNTGR000000
0230A1W	SARESUPPLY AMMPKG 0029A2A	010051	AKWQWTGRNTGR000000

NUR RUN	0029A2W	000028	P2RESUPPLY POLPOLS	010051	HGLHWTGRWTGR000000
	0030A2A	000000	SGREPLACEMENTSPKG A	010051	HEKPWTGRWTGR000002
	0030A2W	000000	SGRESUPPLY DRYPKGS	010056	RPCAXPQKXPQK000000
	0031A2A	001317	SARESUPPLY AMMPKGS	010056	AKWQXPQKXPQK000000
	0232A1A	0033A1W	SARESUPPLY AMMPKGS	010056	A KWQXPQKXPQK000000
	0232A1W	0033A1A	P2RESUPPLY POLPOLS	010056	HQLHXPQKXPQK000000
	0233A1A	0033A1W	P2RESUPPLY POLPOLS	010056	HQLHXPQKXPQK000000
	0234A1A	0034A1W	SGREPLACEMENTSPKG A	010056	HEKPXPQKXPQK000025
	0235A1A	0035A1W	SARESUPPLY AMMPKGS	010056	AKWQWTGRWTGR000000
	0032A2A	000028	SGREPLACEMENTSPKG A	010056	HEKPWTGRWTGR000002
	0232A2W	0032A2A	SARESUPPLY AMMPKGS	010056	RPCAXPQKXPQK000000
	0033A2A	0033A2W	P2RESUPPLY POLPOLS	010056	HQLHWTGRWTGR000000
	0033A2W	0033A2A	SGREPLACEMENTSPKG A	010056	HEKPXPQKXPQK000025
	0034A2A	0034A2W	SARESUPPLY AMMPKGS	010056	AKWQWTGRWTGR000000
	0236A1A	0036A1W	P2RESUPPLY POLPOLS	010056	HQLHWTGRWTGR000000
	0236A1W	0036A1A	SARESUPPLY AMMPKGS	010056	AKWQXPQKXPQK000000
	0237A1A	0037A1W	SARESUPPLY AMMPKGS	010056	A KWQXPQKXPQK000000
	0238A1A	0038A1W	P2RESUPPLY POLPOLS	010061	HQLHXPQKXPQK000000
	0238A1W	0038A1A	SARESUPPLY AMMPKGS	010061	HEKPXPQKXPQK000033
	0239A1A	0039A1W	SARESUPPLY AMMPKGS	010061	AKWQWTGRWTGR000000
	0035A2A	0035A2W	P2RESUPPLY POLPOLS	010061	HQLHWTGRWTGR000000
	0035A2W	0035A2A	SARESUPPLY AMMPKGS	010061	AKWQXPQKXPQK000000
	0036A2A	0036A2W	P2RESUPPLY POLPOLS	010061	HQLHWTGRWTGR000000
	0036A2W	0036A2A	SARESUPPLY AMMPKGS	010061	HEKPWTGRWTGR000002
	0037A2A	0037A2W	SARESUPPLY AMMPKGS	010061	RPCAXPQKXPQK000000
	0240A1A	0040A1W	SARESUPPLY AMMPKGS	010066	000001
	0241A1A	0041A1W	SARESUPPLY AMMPKGS	010066	HEKPXPQKXPQK000033
	0241A1W	0041A1A	P2RESUPPLY POLPOLS	010066	AKWQXPQKXPQK000000
	0242A1A	0042A1W	SARESUPPLY AMMPKGS	010066	HQLHXPQKXPQK000000
	0242A1W	0042A1A	P2RESUPPLY POLPOLS	010066	HEKPXPQKXPQK000033
	0243A1A	0043A1W	SARESUPPLY AMMPKGS	010066	AKWQWTGRWTGR000000
	0038A2A	0038A2W	SARESUPPLY AMMPKGS	010066	HQLHWTGRWTGR000000
	0038A2W	0038A2A	P2RESUPPLY POLPOLS	010066	HEKPWTGRWTGR000002
	0039A2A	0039A2W	SARESUPPLY AMMPKGS	010066	RPCAXPQKXPQK000000
	0040A2A	0040A2W	SARESUPPLY AMMPKGS	010066	HQLHXPQKXPQK000000
	0244A1A	0044A1W	SARESUPPLY AMMPKGS	010071	HEKPXPQKXPQK000033
	0041A2A	0041A2W	P2RESUPPLY POLPOLS	010071	AKWQWTGRWTGR000000
	0244A1W	0044A1A	SARESUPPLY AMMPKGS	010071	HQLHXPQKXPQK000000
	0245A1A	0045A1W	P2RESUPPLY POLPOLS	010071	HEKPWTGRWTGR000002
	0042A2A	0042A2W	SARESUPPLY AMMPKGS	010071	RPCAXPQKXPQK000000
	0246A1A	0046A1W	SARESUPPLY AMMPKGS	010071	HQLHXPQKXPQK000000
	0041A2A	0041A2W	P2RESUPPLY POLPOLS	010071	HEKPXPQKXPQK000033
	0247A1A	0047A1W	SARESUPPLY AMMPKGS	010076	AKWQWTGRWTGR000000
	0247A1W	0047A1A	P2RESUPPLY POLPOLS	010076	HQLHXPQKXPQK000000
	0248A1A	0048A1W	SARESUPPLY AMMPKGS	010076	HEKPXPQKXPQK000033
	0044A2A	0044A2W	SARESUPPLY AMMPKGS	010076	AKWQWTGRWTGR000000
	0044A2W	0044A2A	P2RESUPPLY POLPOLS	000025	HQLHXPQKXPQK000000

NUR RUN

DATE 082476

PAGE 10

NUR RUN	P2RESUPPLY	POLPOLS	010076	HQLHWTGRWTGRO0000
0045A2A	00000			
0045A2W	SGREPLACEMENTSPKG A	010076	HEKPWTGRWTGRO0002	
0046A2A	SGRESUPPLY DRYPKGS	010081	RPCAXPQQXPQK000000	
0250A1A				
0250A1W	000830			
0251A1A	P2RESUPPLY POLPOLS	010081	HQLHXPQQXPQK000000	
0251A1W	000009			
0252A1A	SGREPLACEMENTSPKG A	010081	HEKPXPQKXPQK000033	
0047A2A	SARESUPPLY AMMPKGS	010081	AKWQHTGRWTGRO0000	
0047A2W	000025			
0048A2A	P2RESUPPLY POLPOLS	010081	HQLHWTGRWTGRO0000	
0048A2W	00000			
0049A2A	SGREPLACEMENTSPKG A	010081	HEKPWTGRWTGRO0002	
0253A1A	SGRESUPPLY DRYPKGS	010086	RPCAXPQQXPQK000000	
0253A1W	000830			
0254A1A	P2RESUPPLY POLPOLS	010086	HQLHXPQQXPQK000000	
0254A1W	000009			
0255A1A	SGREPLACEMENTSPKG A	010086	HEKPXPQKXPQK000033	
0050A2A	SARESUPPLY AMMPKGS	010086	AKWQHTGRWTGRO0000	
0050A2W	000025			
0051A2A	P2RESUPPLY POLPOLS	010086	HQLHWTGRWTGRO0000	
0051A2W	00000			
0052A2A	SGREPLACEMENTSPKG A	010086	HEKPWTGRWTGRO0002	
E0F:192 SCAN:191	NO CORRECTIONS APPLIED.			

#START START#24RTFST.MORSARUN

VIII-52

NUR RUN

DATE 082476

PAGE 10

GRUN./PRNT A124E • H3883PS121 • UNCLASSIFIED • 100,300 • MORSARUN

@HDG MERGE MORSARUN CARDS ON ONE TAPE

@QUAL UNCLASSIFIED

@ASG,AX • SACAMP.

@ASG,TIME 8.,,8C,SAVEW

@ASG,A 32F10. • UNIT CARDS

@ASG,A 32F24. • NON UNIT CARDS

VIII-53

@USE 10.,,32F10.

@USE 24.,,32F24.

@XQT • SACAMP • MERGFMORSA
PLANID 2 1
SERVICE A A A A A A A A A A A A
SEQUENCE 0052 0085 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000

@MARK 8.
PURPUR 27RI RL71-3 08/24/76 19:02:40

@START START•24RTTEST•PKGRUN

GRUN./PRT A124F.H1883P3043K,UNCLASSIFIED,10,30 * PKGRUN

SHDG PACKAGE RUN

EQUAL UNCLASSIFIED

GASG.AX *58CAMP

GASG.A 32F26* * MDF2 FILE

GASG.A 32F23* * NUR DATA (ORIG,DEST,RDD SEQUENCE)

GASG.A 32F22* * SMOOSHMOD CARDS - OUTPUT (RDD SEQUENCE)

GASG.A 32F21* * PRINT OF UNITS IN PACKAGES

GASG.A 32F20* * PRINT OF ONE LINE/PACKAGE

GASG.A 32F19* * NUR PACKAGE DATA

GASG.A *24TOSV * OTHER SERVICE PACKAGE DATA

USE 26* *32F26*

USE 23* *32F23*

USE 22* *32F22*

USE 21* *32F21*

AD-A048 554

ARMY CONCEPTS ANALYSIS AGENCY BETHESDA MD
COMPUTER ASSISTED MATCH PROGRAM (CAMP), (U)
AUG 76 G L MARTIN, E R MONTAGNE

F/6 15/7

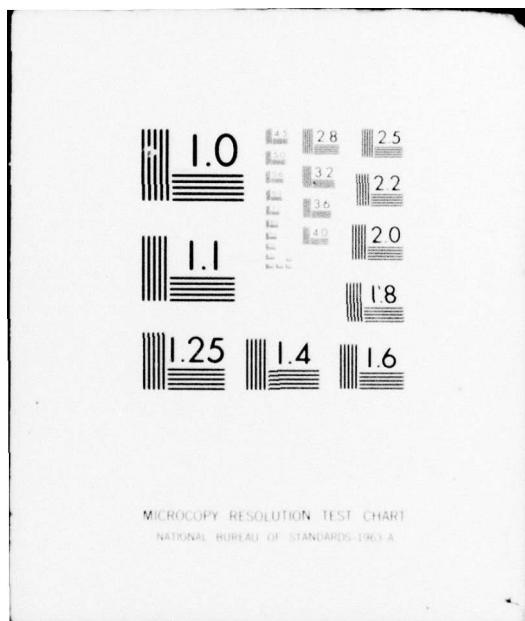
UNCLASSIFIED

CAA-D-76-5

NL

4 OF 4
AD
AD48554

END
DATE FILMED
2 -78
DDC



PACKAGE RUN

PAGE 3

DATE 082476

@USE 20...32F20.

@USE 19...32F19.

@USE 18...024705V.

BART-S 24TESTDATA PKGDATA
PURPUR 27RI RL71-3 08/24/76 19:03:09

VIII-55

PACKAGE RUN

PAGE 3

DATE 082476

UNCLASSIFIED 24 TESTDATA(1).PKGDATA
 1 10 1
 2 1 999 4 999 7 999 8 999 9 999

EXQT *58CAMP.PCKARS

```
QADD,P 24TESTDATA.PKGDATA
  DELTA FOR RDD = 10
  DELTA FOR AVL = 1
  THEATER 1   4   7   8   9   0   0
  DAY     999  999  999  999  999  0   0
  UNITS PROCESSED 27
  NUR PROCESSED 103
  TOT N OF PACKAGES 52
  # OF NUR PACKS 39
  OTHER SERVICES 0
  MAX UNITS IN PCK 5
```

SPMD.E

VIII-56

QPT.1 FURPUR 27R1 RL71=1 08/24/76 19:03:24

```
UNCLASSIFIED*PFPS(01,F40/30,T
UNCLASSIFIED*58CAMP(1),F14/24,AX CSINTNAMES,
UNCLASSIFIED*32F24(1),F40/30,A 26,
UNCLASSIFIED*32F24(1),F40/30,A 23,
UNCLASSIFIED*32F23(1),F40/30,A 22,
UNCLASSIFIED*32F22(1),F40/30,A 21,
UNCLASSIFIED*32F21(1),F40/30,A 20,
UNCLASSIFIED*32F20(1),F40/30,A 19,
UNCLASSIFIED*32F19(1),F40/30,A 18,
UNCLASSIFIED*24705Y(1),F40/30,A 18,
UNCLASSIFIED*XAI(0),F40/30,Y SA,
UNCLASSIFIED*XRI(0),F2,T 9B,
```

QED,R 32F22.
 READ-ONLY MODE
 CASE UPPER ASSUMED
 ED 15:00-08/24/76-19:03:24-(0.)
 EDIT

PACKAGE	000007	RDD=	2.00	AVL=	.00	I
0.00	4 186	0	780	1		
0.00	4 186	0		.387	5	
0.00	4 186	0		.004	7	
0.00	4 186	0		.120	8	
0.00	4 186	0		.365	9	
0.00	4 186	0		.404	10	
0.00	4 186	0		1.137	11	

10.00	4	174	0	0.	5.077	17	-7
5444.	PACKAGE 000009	0.	0.	0.	0.	0.	0.
0.00	4	210	0	2,474	RDD= 20.00	AVL= .00	8
0.00	4	210	0		3,908	1	8
0.00	4	210	0		.027	7	8
0.00	4	210	0		.120	8	8
0.00	4	210	0		.365	9	8
0.00	4	210	0		1,630	10	8
0.00	4	210	0		2,777	11	8
0.00	4	210	0		.008	12	8
0.00	4	210	0		.536	13	8
0.00	4	210	0		.016	14	8
0.00	4	210	0		.699	15	8
5444.	PACKAGE 000041	0.	0.	0.	RDD= 20.00	AVL= 10.00	9
5444.	PACKAGE 000025	0.	0.	0.	RDD= 26.00	AVL= 10.00	10
10.00	4	187	1	.090	1	-10	
5444.	PACKAGE 000035	0.	0.	0.	RDD= 26.00	AVL= 10.00	11
10.00	4	191	0	0.	5,000	6	-11
5444.	PACKAGE 000036	0.	0.	0.	RDD= 26.00	AVL= 10.00	12
10.00	4	191	2	.000	8,000	4	-12
5444.	PACKAGE 000047	0.	0.	0.	RDD= 26.00	AVL= 10.00	13
10.00	4	216	0	.070	16	-13	
5444.	PACKAGE 000048	0.	0.	0.	RDD= 26.00	AVL= 10.00	14
10.00	4	216	2	.257	16	-14	
5444.	PACKAGE 000019	0.	0.	0.	RDD= 26.00	AVL= 10.00	15
10.00	12	174	0	.039	17	-15	
5444.	PACKAGE 000020	0.	0.	0.	RDD= 26.00	AVL= 10.00	16
10.00	12	174	2	.028	17	-16	
5444.	PACKAGE 000030	0.	0.	0.	RDD= 26.00	AVL= 10.00	17
10.00	12	187	1	.008	1	-17	
5444.	PACKAGE 000005	0.	0.	0.	RDD= 29.00	AVL= .00	18
0.00	4	176	0	.018	1	18	
0.00	4	176	0	.028	10	18	
0.00	4	176	0	.003	15	18	
5444.	PACKAGE 000015	0.	0.	0.	RDD= 31.00	AVL= 10.00	19
10.00	4	174	0	2,061	17	-19	
5444.	PACKAGE 000016	0.	0.	0.	RDD= 31.00	AVL= 10.00	20
10.00	4	174	2	1,282	17	-20	
5444.	PACKAGE 000042	0.	0.	0.	RDD= 31.00	AVL= 10.00	21
10.00	12	191	0	1,000	6	-21	
5444.	PACKAGE 000043	0.	0.	0.	RDD= 31.00	AVL= 10.00	22
10.00	12	191	2	2,000	6	-22	

5444.		PACKAGE 000010		0.		0.		RDD= 38.00		AVL= .00		23	
.00		4 210		0		.993		1.962		1		23	
.00		4 210		0		0.		.011		5		23	
.00		4 210		0		0.		.365		7		23	
.00		4 210		0		0.		.365		9		23	
.00		4 210		0		0.		.741		10		23	
.00		4 210		0		0.		.856		11		23	
.00		4 210		0		0.		.004		12		23	
.00		4 210		0		0.		.236		13		23	
.00		4 210		0		0.		.007		14		23	
.00		4 210		0		0.		.303		15		23	
5444.		PACKAGE 000026		0.		0.		RDD= 41.00		AVL= 10.00		24	
10.00		4 187		1		.077		1		-24		-	
5444.		PACKAGE 000037		0.		0.		0.		0.		-	
10.00		4 191		2		0.		22.000		6		-25	
5444.		PACKAGE 000049		0.		0.		RDD= 41.00		AVL= 10.00		25	
10.00		4 216		2		0.		1.849		16		-26	
5444.		PACKAGE 000021		0.		0.		0.		0.		10.00	
10.00		12 174		2		0.		.084		17		-27	
5444.		PACKAGE 000031		0.		0.		0.		0.		10.00	
10.00		12 187		1		.006		RDD= 41.00		AVL= 10.00		26	
5444.		PACKAGE 000006		0.		0.		0.		0.		-	
.00		4 179		0		.847		RDD= 44.00		AVL= 10.00		27	
.00		4 178		0		0.		1.760		1		28	
.00		4 178		0		0.		.011		7		28	
.00		4 178		0		0.		.613		10		29	
.00		4 178		0		0.		.820		11		29	
.00		4 178		0		0.		.004		12		29	
.00		4 178		0		0.		.232		13		29	
.00		4 178		0		0.		.006		14		29	
.00		4 178		0		0.		.242		15		29	
5444.		PACKAGE 000017		0.		0.		0.		0.		-	
10.00		4 174		2		0.		6.094		17		-30	
5444.		PACKAGE 000044		0.		0.		0.		0.		-	
10.00		12 191		2		0.		2.000		6		-31	
5444.		PACKAGE 000038		0.		0.		RDD= 56.00		AVL= 10.00		31	
10.00		4 191		1		.091		0.		1		-32	
5444.		PACKAGE 000027		0.		0.		38.000		6		-33	
5444.		PACKAGE 000050		0.		0.		RDD= 56.00		AVL= 10.00		34	
10.00		4 216		2		0.		2.963		16		-34	
5444.		PACKAGE 000022		0.		0.		RDD= 56.00		AVL= 10.00		35	
10.00		12 174		2		0.		.084		17		-35	
5444.		PACKAGE RUN		0.		0.		0.		0.		-	

PACKAGE 000032	10.00	12	187	1	.006	RDD=	56.00	1	AVL=	10.00	36
5444.					0.	RDD=	59.00	1	AVL=	.00	37
PACKAGE 000001			18003		3.253	RDD=					
*.00	4	210	1			4.100	1	37			
*.00	4	210	1			2.400	5	37			
*.00	4	210	1			6.205	9	37			
*.00	4	210	1			2.287	10	37			
*.00	4	210	1			3.439	11	37			
*.00	4	210	1			1.195	13	37			
*.00	4	210	1			.016	14	37			
*.00	4	210	1			.724	15	37			
5444.					0.	RDD=	59.00	1	AVL=	.00	38
PACKAGE 000011						RDD=					
*.00	4	210	0		.107			1	38		
*.00	4	210	0			.020	5	38			
*.00	4	210	0			.032	10	38			
*.00	4	210	0			.553	11	38			
*.00	4	210	0			.025	15	38			
5444.					0.	RDD=	61.00	1	AVL=	10.00	39
PACKAGE 000018	10.00	4	174	2	0.		3.910	17	-39		
5444.					0.	RDD=	61.00	1	AVL=	.00	40
PACKAGE 000045	10.00	12	191	2	0.		3.000	6	-40		
VIII-60	5444.				0.	RDD=	71.00	1	AVL=	10.00	41
PACKAGE 000039	10.00	4	191	2	0.		27.000	6	-42		
5444.					0.	RDD=	71.00	1	AVL=	10.00	42
PACKAGE 000051	10.00	4	216	2	0.		2.512	16	-43		
5444.					0.	RDD=	71.00	1	AVL=	10.00	43
PACKAGE 000023	10.00	12	174	2	0.		.078	17	-44		
5444.					0.	RDD=	71.00	1	AVL=	10.00	44
PACKAGE 000033	10.00	12	187	1	.006						
5444.					0.	RDD=	75.00	1	AVL=	.00	45
PACKAGE 000002	*.00	4	192	1	.091						
5444.					0.	RDD=	76.00	1	AVL=	10.00	46
PACKAGE 000029	10.00	4	187	1	.033		86.00	1	AVL=	10.00	48
5444.					0.	RDD=	86.00	1	AVL=	10.00	49
PACKAGE 000040	10.00	4	191	2	0.		9.000	6	-49		
5444.					0.	RDD=					

PACKAGE	000052	RDD	86.00	AVL	10.00	50
10.00	4	216	2	0.	.830	-50
5444,				0.	0.	
PACKAGE	000024	RDD	86.00	AVL	10.00	51
10.00	12	174	2	0.	.025	-51
5444,				0.	0.	
PACKAGE	000034	RDD	86.00	AVL	10.00	52
10.00	12	187	1	.002	1	-52
5444,				0.	0.	
EOF:245	SCAN:244					

NO CORRECTIONS APPLIED.

GEO.R 32F20.
READ-ONLY MODE
CASE UPPER ASSUMED
ED 15.00-08/24/76-19:03:26-(0.)

EDIT VIII-61

PACK	DFST	ORIG	MODE	RDD	AVL	# UNIT	TOT PAX	TOT STON	SQ FT/BRL
1	4	210	1	59*	0*	5	3.253	10.761	6.605
2	4	192	1	75*	0*	1	*0.91	*0.06	2.178
3	4	178	0	5*	0*	4	*863	3.715	*0.00
4	4	178	0	17*	0*	1	*0.06	*0.10	*0.00
5	4	178	0	29*	0*	3	*0.18	*0.31	*0.00
6	4	178	0	44*	0*	1	*0.47	3.699	*0.00
7	4	186	0	2*	0*	1	*780	2.223	*485
8	4	210	0	5*	0*	2	*851	3.694	*0.00
9	4	210	0	20*	0*	3	2.474	9.601	*485
10	4	210	0	36*	0*	2	*993	4.120	*365
11	4	210	0	59*	0*	1	*107	*630	*0.00
12	4	227	0	2*	0*	1	*780	2.223	*485
13	4	190	0	10*	10*	2	*440	*546	*4.468
14	4	174	0	18*	10*	11	*0.00	5.077	*0.00
15	4	174	0	31*	10*	1	*0.00	2.061	*0.00
16	4	174	2	31*	10*	1	*0.00	1.282	*0.00
17	4	174	2	46*	10*	3	*0.00	6.094	*0.00
18	4	174	2	61*	10*	2	*0.00	3.910	*0.00
19	4	12	174	0	26*	10*	*0.00	*0.39	*0.00
20	4	12	174	2	26*	10*	*0.00	*0.28	*0.00
21	4	12	174	2	41*	10*	*0.00	*0.84	*0.00
22	4	12	174	2	56*	10*	*0.00	*0.84	*0.00
23	4	12	174	2	71*	10*	*0.00	*0.78	*0.00
24	4	12	174	2	86*	10*	*0.00	*0.25	*0.00
25	4	187	1	26*	10*	1	*0.00	*0.00	*0.00
26	4	187	1	41*	10*	3	*0.77	*0.00	*0.00
27	4	187	1	56*	10*	3	*0.91	*0.00	*0.00
28	4	187	1	71*	10*	3	*0.99	*0.00	*0.00
29	4	187	1	86*	10*	1	*0.33	*0.00	*0.00
30	4	12	187	1	26*	10*	*0.08	*0.00	*0.00
31	4	12	187	1	41*	10*	*0.00	*0.06	*0.00
32	4	12	187	1	56*	10*	*0.04	*0.00	*0.00
33	4	12	187	1	71*	10*	*0.04	*0.00	*0.00
34	4	12	187	1	86*	10*	*0.02	*0.00	*0.00
35	4	191	0	26*	10*	2	*0.00	*0.00	*0.00
36	4	191	2	26*	10*	1	*0.00	*0.00	*0.00
37	4	191	2	41*	10*	3	*0.00	*0.00	*0.00

PACKAGE RUN	1	2	56*	10*	3	*000	*000	38.000	-25
38	4	191	2	56*	10*	3	*000	*000	27.000
39	4	191	2	71*	10*	3	*000	*000	-26
40	4	191	2	86*	10*	1	*000	*000	-27
41	12	191	0	20*	10*	9	*000	*000	-28
42	12	191	0	31*	10*	1	*000	*000	-29
43	12	191	2	31*	10*	2	*000	*000	-30
44	12	191	2	46*	10*	3	*000	*000	-31
45	12	191	2	61*	10*	3	*000	*000	-32
46	12	191	2	76*	10*	3	*000	*000	-33
47	4	216	0	26*	10*	2	*000	*000	-34
48	4	216	2	26*	10*	1	*000	*257	*000
49	4	216	2	41*	10*	2	*000	1.849	*000
50	4	216	2	56*	10*	3	*000	2.963	*000
51	4	216	2	71*	10*	3	*000	2.512	*000
52	4	216	2	86*	10*	1	*000	*830	*000

EOF:153 SCAN:152

NO CORRECTIONS APPLIED.

@Hdg Print of Unit Packages

@X@T *58CAMP*PRTPCK

PRINT OF UNIT PACKAGES

DATE 082476

PAGE 11

PACKAGE	DEST	ORIG	MODE	RDD	AVL	UNITS	TOT PAY	TOT STON	TOT SQ FT (1000'S OF PAX, TONS, SQ FT)		
SRC	UIC	TPSN	SRC	UIC	TPSN	SRC	UIC	TPSN	SRC	UIC	TPSN
1	4	210 17307H500000	59 TEST09	0 18003	5	3.253	10.761	8.05			
							TEST07	18003	17055H01000	TEST06	18003
									17055H01000	TEST08	18003
2	4	192 05079H400000	1 TEST20	75 21435	1	.091	.006				
3	4	178 05115H300000	0 TEST15	5 21364	4	.863	3.715	.000			
							05510H2FA01	X50002 31572	05510H2FB01	X50003 31300	05510H2FB01
									X50004 31300		
4	4	178 05510H2FB01	0 X50005	17 31300	1	.006	.010	.000			
5	4	178 05510H2FB01	0 X50006	29 31300	3	.018	.031	.000			
							05510H2FB01	X50007 31300	05510H2FB01	X50008 31300	05510H2FB01
									X50009 31300		
6	4	178 05115H500000	0 X50001	44 31300	1	.847	3.689	.000			
7	4	186 05035H500000	0 TEST10	2 21353	1	.780	2.223	.485			
VIII-63	8	4	210 05115H30300	0 TEST16	5 21364	2	.851	3.694	.000		
							05510H2FA00	TEST23 31557			
	9	4	210 05035H500000	0 TEST13	20 21353	3	2.474	9.601	.485		
							05115H30000	TEST17 21364	05115H30000	TEST18 21364	05115H30000
	10	4	210 05115H30000	0 TEST19	38 21364	2	.993	4.120	.365		
							05327660008	TEST21 31531			
	11	4	210 05124G660000	0 TEST24	59 31436	1	.107	.630	.000		
	12	4	227 05035H500000	0 TEST11	2 21353	1	.780	2.223	.485		
	13	12	190 01127H10000	0 TEST03	10 30623	2	.440	.546	.4468		
							01207H20000	TEST04 30612			

PACKAGE DEST ORIG MODE ROD AVL ENTRY TOT PAY TOT STON TOT BARRL (1000'S OF PAX, TONS, BARRELS)

14	4	174	0	18	10	11	.000	5.077	.000
15	4	174	0	31	10	1	.000	2.061	.000
16	4	174	2	31	10	1	.000	1.0282	.000
17	4	174	2	46	10	3	.000	6.094	.000
18	4	174	2	61	10	2	.000	3.0910	.000
19	12	174	0	26	10	2	.000	.039	.000
20	12	174	2	26	10	1	.000	.028	.000
21	12	174	2	41	10	3	.000	.084	.000
22	12	174	2	56	10	3	.000	.084	.000
23	12	174	2	71	10	3	.000	.078	.000
24	12	174	2	86	10	1	.000	.025	.000
25	4	187	1	26	10	3	.090	.000	.000
26	4	187	1	41	10	3	.077	.000	.000
27	4	187	1	56	10	3	.091	.000	.000
28	4	187	1	71	10	3	.099	.000	.000
29	4	187	1	86	10	1	.033	.000	.000
30	12	187	1	26	10	3	.008	.000	.000
31	12	187	1	41	10	3	.006	.000	.000
32	12	187	1	56	10	3	.006	.000	.000
33	12	187	1	71	10	3	.006	.000	.000
34	12	187	1	86	10	1	.002	.000	.000
35	4	191	0	26	10	2	.000	.000	5.000
36	4	191	2	26	10	1	.000	.000	8.000
37	4	191	2	41	10	3	.000	.000	22.000
38	4	191	2	56	10	3	.000	.000	38.000
39	4	191	2	71	10	3	.000	.000	27.000

VIII-64

PRINT OF UNIT PACKAGES

DATE 082476

PAGE 13

PACKAGE DEST ORIG MODE RDD AVL ENTRY TOT PAY TOT STON TOT BARRL (1000's OF PAX, TONS, BARRELS

40	4	191	2	86	10	1	•000	•000	9•000
41	12	191	0	20	10	9	•000	•000	•000
42	12	191	0	31	10	1	•000	•000	1•000
43	12	191	2	31	10	2	•000	•000	2•000
44	12	191	2	46	10	3	•000	•000	2•000
45	12	191	2	61	10	3	•000	•000	3•000
46	12	191	2	76	10	3	•000	•000	•000
47	4	216	0	26	10	2	•000	•870	•000
48	4	216	2	26	10	1	•000	•257	•000
49	4	216	2	41	10	2	•000	1•849	•000
50	4	216	2	56	10	3	•000	2•963	•000
51	4	216	2	71	10	3	•000	2•512	•000
52	4	216	2	86	10	1	•000	•830	•000

MSG.N START@24R.LAYINRUN

VIII-65

PRINT OF UNIT PACKAGES

DATE 082476

PAGE 13

78