AD-A233 963

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USER'S MANUAL

FOR THE

WARTIME PERSONNEL ASSESSMENT MODEL

(WARPAM)

17 July 1990

Prepared for:

TRADOC ANALYSIS COMMAND
Building 401B
Fort Benjamin Harrison, Indiana 46216-5000

Contract Number MDA903-88-D-1000
Task Order 0037

Prepared by:

James A. Wojcik
John A. Tenshaw
Beth A. White
Tanya L. Reaves

Science Applications International Corporation
1710 Goodridge Drive
McLean, Virginia 22102

91 3 25 036

REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION	1b. RESTRICTIVE MARKINGS
Unclassified	None

2a. SECURITY CLASSIFICATION AUTHORITY	3. DISTRIBUTION / AVAILABILITY OF REPORT
N/A	
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE	Unlimited
N/A	

4. PERFORMING ORGANIZATION REPORT NUMBER(S)	5. MONITORING ORGANIZATION REPORT NUMBER(S)
SAIC-90/1459	To be assigned

6a. NAME OF PERFORMING ORGANIZATION	6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION
Science Applications International Corporation	N/A	TRADOC Analysis Command-FT Benjamin Harrison

6c. ADDRESS (City, State, and ZIP Code)	7b. ADDRESS (City, State, and ZIP Code)
1710 Goodridge Drive, T1-7-2 McLean, VA 22102	ATTN: ATRC-B (BLDG 401-B) Fort Benjamin Harrison, IN 46216-5000

8a. NAME OF FUNDING / SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER
TRAC-FBHN		MDA903-88-D-1000

8c. ADDRESS (City, State, and ZIP Code)	10. SOURCE OF FUNDING NUMBERS			
	PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO. 0037	WORK UNIT ACCESSION NO. -
ATTN: ATRC-B (BLDG 401B) Fort Benjamin Harrison, IN 46216-5000				

11. TITLE (Include Security Classification)

USERS MANUAL
Wartime Personnel Assessment Model (WARPAM)

12. PERSONAL AUTHOR(S)
James A. Wojcik, John A. Tenshaw, Beth A. White

13a. TYPE OF REPORT	13b. TIME COVERED	14. DATE OF REPORT (Year, Month, Day)	15. PAGE COUNT
Descriptive Documentation	FROM 6/30/89 TO 8/31/90	~~1991 March 25~~ 7-17-90	40

16. SUPPLEMENTARY NOTATION

17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
FIELD	GROUP	SUB-GROUP	Personnel Replacements, Return-to-duty Personnel, CONUS Replacement Center, Replacement Battalion, Reclassification.

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

The Wartime Personnel Assessment Model (WARPAM) is a skeletal model, designed for operation on a Sun workstation, links the outputs from several Army models and then through a series of simulations produces a comprehensive depiction of the Army wartime personnel replacement system. Specifically, WARPAM provides the capability to: forecast the personnel system's potential to satisfy projected requirements, link doctrinal concepts with output from current "stand alone" Army models, simulate the reclassification of return-to-duty personnel, generate logistical needs to support the personnel system and perform "What if" analysis regarding force structure or doctrinal changes. These capabilities enable TRAC-FBHN to provide quantitative input to the Army's macro-level decision-making process in regards to analyzing and evaluating force structure and personnel replacement doctrine and also satisfy the Army's requirements for micro-level modeling of replacement center activities.

20. DISTRIBUTION / AVAILABILITY OF ABSTRACT	21. ABSTRACT SECURITY CLASSIFICATION	
☒ UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT. ☐ DTIC USERS	Unclassified	
22a. NAME OF RESPONSIBLE INDIVIDUAL	22b. TELEPHONE (Include Area Code)	22c. OFFICE SYMBOL
MAJ James Thomas	(317)543-6883	

DD FORM 1473

SECTION 1
GENERAL

1.1   PURPOSE OF THE USER'S MANUAL

The objective of the User's Manual (UM) is to provide the non-programmer the information necessary to effectively use WARPAM. The user should be familiar with the operation of a Sun workstation, standard personnel computer (PC) and the U.S. Army wartime personnel replacement system. The UM provides the necessary information to enter the WARPAM system, initiate the various models/modules and generate reports.

1.2   PRIMARY PROJECT REFERENCES

The primary references upon which WARPAM is designed are listed below.

o   Wartime Personnel Assessment Model (WARPAM), Government Statement of Work, April 1989.

o   Personnel Serv ° Support (PSS) in Army Models (Draft), TRADOC Analysis Command - Fort Benjamin Harrison, Major James Thomas, 1989.

o   Wartime Replacement System Study (WRSS), Soldier Support Center, Fort Benjamin Harrison, March 1987.

o   FM 12-6, Personnel Doctrine (Final Coordinating Draft), HQ, Department of the Army, August 1988.

o   TOE Number 12406L0, HHD, Personnel Replacement Battalion, HQ, Department of the Army, October 1987.

.o   TOE Number 12407L0, Replacement Company, HQ, Department of the Army, October 1987.

o   FM 12-6, Personnel Doctrine (Final Approved Draft), HQ, Department of the Army, June 1989.

o   ARTEP Number 12-406-01-MTP, Personnel Replacement Battalion (GS/DS) (Coordinating Draft), HQ, Department of the Army, undated.

o   ARTEP Number 12-407-30-MTP, Replacement Company (GS/DS), HQ, Department of the Army, July 1989.

o   ARTEP Number 12-406-02-MTP, Personnel Replacement Battalion/Company (CRC) (Draft), HQ, Department of the Army, undated.

1.3   TERMS AND ABBREVIATIONS

Annex A contains a listing of terms, definitions, and acronyms unique to the development of WARPAM and subject to interpretation by the user of this document.   This listing does not include data item names or codes which are discussed, as appropriate, within the body of the document.

SECTION 2
SYSTEM SUMMARY

2.1   SYSTEM BACKGROUND

Failure to represent the doctrinal force structure's inherent capabilities in the flow of replacements was historically a serious flaw in the Army Family of Models.   In addition to the potential problem of making incorrect force structure and tactical decisions from an overly simplistic representation of the system, the lack of a model linking the various stages of the replacement process precluded detailed analysis of the personnel system's ability to deliver qualified replacements on the Airland Battlefield. Complicating the modeling problems caused by omitting the doctrinal force structure, the Wartime Replacement System Study (WRSS) estimates 40-50% of all replacements in the first 90 days of warfare will be returns to duty (RTDs) from the medical system. To rectify these flaws, TRAC-FBHN in 1989 contracted for the development of a series of models (WARPAM) which would accurately depict this flow and the effects of reclassification at the Army-level as well as at the replacement activity level.

2.2   SYSTEM CAPABILITIES

WARPAM is designed to resolve many of the US Army's modeling shortcomings associated with representing the flow of qualified replacements to the Airland Battlefield. This skeletal model, designed for operation on a Sun workstation, links the outputs from several Army models and then through a series of simulations produces a comprehensive depiction of the Army wartime personnel replacement system. Specifically, WARPAM provides the capability to: forecast the personnel system's potential to satisfy projected requirements, link doctrinal concepts with output from current "stand alone" Army models, simulate the reclassification of return-to-duty personnel, generate logistical and equipment requirements to support the personnel system and perform "What if" analysis in regards to force structure or doctrinal changes. These capabilities enable TRAC-FBHN to provide quantitative input to the Army's macro-level decision-making process in regards to analyzing and evaluating force structure and personnel replacement doctrine.   Secondly, it satisfies the Army's requirements for micro-level modeling of replacement center activities enabling the analysis of contemplated changes prior to implementation. The following is a summary of WARPAM capabilities:

   o   Comparison of requirements generated by other Army models.

   o   Evaluation of the effects of proposed reclassification policy on replacement flow operations.

   o   Micro-level modeling of replacement activity operations to include force structure evaluation and personnel policy.

o   What-If modeling of personnel policy and force structure with rapid response times.

o   Determination of transportation and support requirements.

o   Interface with other Army models to improve personnel modeling in the -family of Army models.

o   Evaluation of the capability of active and reserve forces to support multiple theaters operations.

2.3 SYSTEM FUNCTIONS

The primary functions of WARPAM are the preparation of data from other Army models in a preprocessor phase, the reclassification of theater return-to-duty personnel, the time-phased processing of personnel through the replacement system, and the comparison of CONUS and OCONUS replacement activities. These function are described in detail in the following sections.

2.4 SYSTEM OPERATION

WARPAM is designed to be operated by TRAC-FBHN in support of TRAC, the Soldiers Support Center, and HQDA ODSPER.

2.5 SYSTEM CONFIGURATION

2.5.1 HARDWARE

WARPAM is designed to operate on the TRAC-FBHN SUN 4/110-FCE-8 workstation with the following major components:

o 16" color monitor
o 32 MB memory
o 327 MB hard disk
o 60 MB 1/4" tape cartridge drive
o Ethernet link to 5 1/4" diskette drive

2.5.2 SOFTWARE

WARPAM utilizes the following software:

o   The SUN system "C" programming language for its executive program

o   FORTRAN for deterministic models and for ancillary programming requirements in conjunction with SLAM II.

o   SLAM II, a higher order modeling language, for stochastic modeling

2.6 SYSTEM ORGANIZATION

2.6.1 OPERATIONAL ORGANIZATION

WARPAM is organized with five major sub-systems. These are the preprocessor, reclassification model, CRC/RPL CO model, Transportation model and Report Generator. All but the report generator, which is performed on an IBM compatible PC, are run on the Sun workstation. The specific function of the major systems and their sub-components, as appropriate, are described in detail in subsequent sections. The following chart depicts the WARPAM operational organization.

WARPAM OPERATIONAL ORGANIZATION

```
                    +---------------------+
                    |  EXECUTIVE PROGRAM  |
                    +---------------------+
                              |
        +---------------------+---------------------+
        |                     |                     |
+---------------+   +---------------------+   +------------------+
| PREPROCESSOR  |   | OPERATIONAL MODELS  |   | REPORT GENERATOR |
+---------------+   +---------------------+   +------------------+


AUTOREP MODULE          RECLASSIFICATION MODEL

MOB TRAINING BASE       CRC/RPL CO MODEL
   MODULE
                        TRANSPORTATION MODEL
MOBMAN MODULE

CSMII MODULE

REQUIREMENTS/ASSETS
   GENERATOR
```
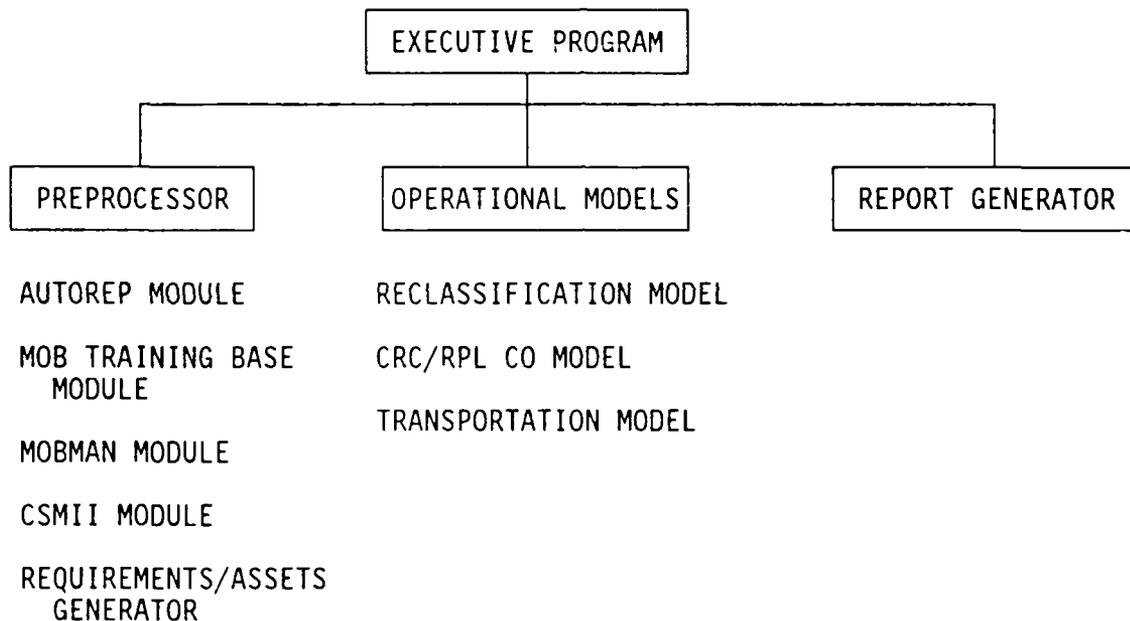
2.6.2 SUB-DIRECTORY ORGANIZATION

WARPAM programs and files are organized on the Sun workstation in sub-directories based on the function of the program. These sub-directories are located in the WARPAM directory under the data directory. The sub-directories and their contents are:

    o   FORTRAN   All FORTRAN programs

    o   SLAM   All SLAM II programs

o   DBASE   All DBASE programs if loaded on the Sun workstation. These may be found only on the PC linked by network to the workstation

o   IOFILES   All data bases and look-up tables

2.7   DATA BASES

WARPAM utilizes the output files from several military models and look-up tables which are updated by the user. The data bases created from military models are discussed in detail in sections 4 - 7 and the user look-up tables are discussed in section 8.

SECTION 3
SYSTEM INITIATION & OPERATION

3.1   SYSTEM INITIATION

The main WARPAM program is initiated from the Sun workstation in the UNIX mode. To enter WARPAM the following steps are required:

o   Invoke Sunview by entering at the prompt: SUNVIEW

o   Go to the WARPAM sub-directory by entering: CD /DATA/WARPAM
         (NOTE: There is one space following the CD)

o   To initiate WARPAM, enter: WARPAM

3.2   WARPAM EXECUTIVE PROGRAM (MAIN PROGRAM)

Once WARPAM is activated, the screen depicted below on the left will appear. To enter the WARPAM modules, place the cursor (using the mouse) in the WARPAM box and press enter. This will bring up the center screen which allows you access to the WARPAM modules. To exit WARPAM from the initial screen place the cursor in the lower box. Once in the screen depicted in the center, either the WARPAM modules may be entered or the utility screen shown on the right. Procedures to activate the individual WARPAM programs are discussed in the sections describing each. (NOTE: REPORT GENERATOR IS DISCUSSED BELOW)

WARPAM
PUSH BUTTON TO EXIT
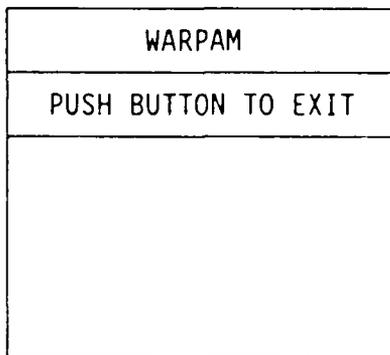
ACTIVATED FROM
WARPAM SCREEN

FRAME	— —
PREPROCESSOR	
CRC MODEL	
RECLAS MODEL	
TRANS MODEL	

CLOSE
MOVE
RESIZE
FRONT
BACK
PROPS
REDISPLAY
QUIT
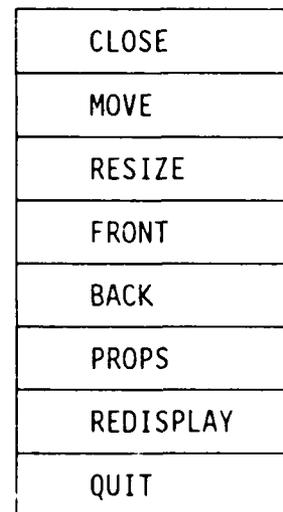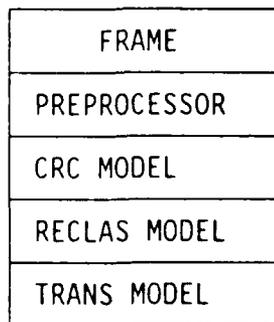
3.3   REPORT GENERATOR INITIATION

The Report Generator is a DBASE III based application which is activated from either a standard IBM compatible PC linked to the Sun workstation by LAN network or through the DOS Windows program directly on the workstation. These applications convert the ASCII files created by the WARPAM models to a standard DBASE III format which can then be accessed. The programs are initiated from the dot prompt in DBASE III. Details on the operation of the Report Generator are discussed in section 9.

SECTION 4
PREPROCESSOR

4.1   PURPOSE

The Preprocessor is designed to convert the output files of current military personnel mobilization models to a standard format and consolidate these into a single data base. To accomplish this, the preprocessor has five modules to convert the data, and a requirements/assets generator module to merge these converted files into a single data base. The files which WARPAM is currently configured to convert are described below. This conversion process to a standard data base format includes the following steps:

o   Aggregate occupational specialties into branch/grade groupings.

o   Prioritize branches.

o   Assign code numbers to each entry which represents the appropriate time period, branch priority and requirement or asset designator.

4.2   INITIATION

Each module of the preprocessor is initiated by user input from a Sun window which activates the FORTRAN program. This window is reached by using the WARPAM Executive Windows Program which allows the user to reach any module by simply placing the workstation mouse over the appropriate window. THIS IS THE ONLY COMMAND REQUIRED TO RUN THE PREPROCESSOR PROGRAMS. Files produced from previous runs of the preprocessor should be stored in a different sub-directory or under a different file name prior to running the preprocessor modules. Any file of the same name in the IOFILE sub-directory on the Sun workstation will be overwritten by the new output file. After a conversion module is used to create a new file the requirements/assets generator program must also be run to bring this new file into the REQAST.TBL which is used by all the models in WARPAM. The individual files are NOT USED as separate entities by any program.

4.3   INPUT FILES

When a new input file is received the previous version should be stored in a different sub-directory and the new file stored in the WARPAM IOFILE sub-directory. Prior to initiating the conversion modules, the look-up tables should be reviewed to ensure these reflect the desired policy. If any of these tables are not present the program will not be initiated. The programmer's guide should be consulted to determine if the files are present, in the correct sub-directory and are in the correct format.

4.4   USER INPUT FILES

The preprocessor uses a number of look-up tables described in section 8 of this manual. These look-up tables effectively convert personnel policy into information usable by the preprocessor and the other WARPAM models.

4.5   INPUT VARIABLES

The preprocessor modules do not have input variables. User changes are effected by altering the values in the look-up tables which the various sub-modules utilize in generating the output files.

4.6   OUTPUT REPORTS

The Requirements/Assets report may be review by using Dbase III Plus on a standard PC in a LAN configuration with the workstation or by using the Sun DOS window program.

4.7   PREPROCESSOR MODULES

4.7.1   AUTOREP

This module converts the shelf requisition file created by US ARMY PERSCOM to standard WARPAM format. The new file from PERSCOM is received on 5 1/4" floppy disks and is loaded onto the Sun drive by way of the network and PC. Requirements created by this module are labeled as theater requirements AE1 for Europe and AKO for Korea. As with all modules in the preprocessor, AUTOREP is initiated by placing the workstation mouse arrow over the appropriate block. This module use two look-up tables, the Branch table and the Time Period tables to convert the MOS to branches and convert the time periods to standard WARPAM time periods.

4.7.2   MOBILIZATION TRAINING BASE   (MOBTNGBS)

This module converts the projected skill level one training base output created by ODCSPER, HQDA to standard WARPAM format. The new file is received on 5 1/4" floppy disks and is loaded onto the Sun drive by way of the network and PC. Assets developed from this file are labeled as "TRN". This module requires only the Branch look-up table.

4.7.3   MOBMAN

This module converts the MOBMAN model output developed for the Mobilization Directorate of PERSCOM to standard format. The new file is received on 1/2" tape and must be converted by programmer personnel. The output of this conversion

process creates both requirements labeled "DEG" for Defense Guidance and assets labeled: THS-active THS, SEL-select reserves, IRR-initial ready reserve, STY-standby reserve and IMA and RET-category one retirees. This module requires the Branch look-up table.

4.7.4 CASUALTY STRATIFICATION MODEL II (CSMII)

This module converts the CSMII model output created by Soldiers Support Center to usable WARPAM configuration. The new file is received on 5 1/4" floppy disks and is loaded onto the Sun drive by way of the network and PC. Conversion of this file results in the creation of two requirement files labeled, CSMT for the total casualty requirement and CSMB for the battle casualty only portion of the output. This module requires the Branch look-up table.

4.7.5 REQUIREMENTS/ASSETS GENERATOR

This module merges the converted files listed above into a single file, assigns branch priorities, assigns a unique code number, and sorts the file by code number. The output of this module is the REQAST.TBL which can be viewed by using the REQAST DBASE program. This file is used in subsequent WARPAM modeling. The requirement asset gene tor uses two look-up tables, the WARPAM Branch Priority and the Theater/Re cement Type.

SECTION 5
RECLASSIFICATION MODEL

5.1 PURPOSE

The Reclassification Model is designed to return a percentage of the casualties (requirements) sustained within a theater during a time period back to duty in a number of new branches over several later time periods to simulate the effects of hospitalization and reclassification actions. The model allows the user through the control of various input variables and user created tables to simulate current personnel policy or conduct "What If" analysis. Casualties are reclassified into new branches specified in the officer and enlisted reclassification tables which are located in the user input section of the preprocessor. The current model then distributes these reclassified personnel over six time periods according to percentages found in the reclassification delay table which is also located in the user input tables.

5.2 INITIATION

The Reclassification Model is initiated through user input from a Sun window which activates the Reclassification FORTRAN program. This window is reached by using the WARPAM Executive Windows Program which allows the user to reach any module by simply placing the workstation mouse over the appropriate window. Files required to operate the model are listed at the top of the input screen. If the required files are in place and the user is prepared to proceed, the user must type "go" on the response line to advance to the first input variable. This input line ONLY ACCEPTS the word "go" in small case letters. Files produced from previous runs of the preprocessor should be stored in a different sub-directory or under a different file name (as with the date run) prior to running the preprocessor modules. Any file of the same name in the IOFILE sub-directory on the Sun workstation will be overwritten by the new output file.

5.3 INPUT FILES

The initiation window for the Reclassification Model lists those files which must be present on the workstation before the model can be initiated. If the program fails to find any of the files it will not initiate. The programmers guide should be consulted to determine if the files are present, in the correct sub-directory, and in the correct format.

5.4 INPUT VARIABLES

The user is prompted by the input screen to input the desired value of the following variables on a response line: (input variables from previous runs are shown on the input screen prior to the first response)

- Requirement File: Which of the various requirement files does the user desire to use for this run of the model. The available requirement files are listed at the input line. The Reclassification Model will not accept the MAX requirement file as an input and will run the DEG file in its place.

- Time Periods: A time period is 10 days. The model will only run for the time periods chosen. The user must input both the start time period and the end time period for the run. If start time period is "1" and end time period is "10" the model will run time periods "1-10" inclusive. Due to the confiauration of current input data (MOBMAN has all assets in time period one), the model MUST BE STARTED WITH TIME PERIOD ONE.

- Branch: Branch represents the specialties/MOS and grade combinations which have been grouped together in the preprocessor. These branches are then prioritized in the Branch Look-Up Table and given a priority number. The user shoulu consult the current table in the preprocessor to determine the priority code for specific branches. The model can be run with from one or up to the maximum number of branches which were created in the preprocessor. The initial version of WARPAM has 67 branch/grade combinations.

- Return-to-Duty Rate: This is the percentage of casualties which the user desires to return to duty within the theater. The model will accept either a rate (decimal) or percentage (whole number) ranging from .1% (.001) to 99.99% (.9999). Based on 1989 CAA estimates the recommended rate for current policy is 20%.

5.5   OUTPUT REPORTS

Output reports from the reclassification model are created using Dbase III Plus on a standard PC in a LAN configuration with the workstation or by using the Sun DOS window program as described in section 9.

SECTION 6
CONUS REPLACEMENT CENTER / OCONUS REPLACEMENT CO. (CRC) MODEL

6.1 PURPOSE

The CRC Model is designed to represent the flow of personnel replacements through a CRC or OCONUS Replacement Company. The model, designed in FORTRAN and SLAM II, depicts the micro-level flow of personnel through the various stations in the replacement facilities over a number of time periods to meet a specific requirement designated by the user. Statistics are provided for both the operation of the replacement facility and the macro-level flow through the system.

6.2 INITIATION

The CRC Model is initiated through user input from a Sun window which activates the SLAM II and FORTRAN programs. This window is reached by using the WARPAM Executive Windows Program which allows the user to reach any module by simply placing the workstation mouse over the appropriate window. Files required to operate the model are listed at the top of the input screen. If the required files are in place and the user is prepared to proceed, the user must type "go" on the response line to advance to the first input variable. This input line ONLY ACCEPTS the word "go" in small case letters.

6.3 INPUT FILES

The initiation window for the CRC Model lists those files which must be present on the workstation before the model can be initiated. If the program fails to find any of the files it will not initiate. The programmers guide should be consulted to determine if the files are present, in the correct sub-directory and are in the correct format.

6.4 INPUT VARIABLES

The user is prompted by the input screen to input the following input variables on a response line: (input variables from previous runs are shown on the input screen prior to the first response)

- Requirement File: Which of the various requirement files does the user desire to use for this run of the model. The available requirement files are listed at the input line. The Reclassification Model will not accept the MAX requirement file as an input and will run the DEG file in its place.

- Time Periods: A time period is 10 days. The model will only run for the time periods inputted. The user must input both the start time period and the end time period for the run. If start time period is "1" and end time period is "10" the model will run time periods "1-10" inclusive. The current configuration of

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WARPAM must be started with time period one due to the available data (all MOBMAN assets are in time period one at the beginning of the model run).

- Branch: Branch represents the specialties/MOS and grade combinations which have been grouped together in the preprocessor. These branches are then prioritized in the Branch Look-Up Table and given a priority number. The user should consult the current table in the preprocessor to determine the priority code for specific branches. The model can be run with one up to the maximum number of branches which were created in the preprocessor. The initial version of WARPAM has 67 branch/grade combinations.

- CRC or Replacement Co: The user must select either a CRC or an OCONUS Replacement Company operation to model. The CRC model does not process Theater Return-To-Duty personnel, but reduces the requirement by an equal amount to account for these personnel being supplied from within a theater. The CRC model also increases the requirement for each branch to offset transient casualties based on a user inputted attrition factor.

-Attrition Factor: When operated as a CRC model, the requirement for each branch for each time period is increased to account for transient replacement casualties. The user is asked to enter a rate (percentage) which the model uses to calculate this increase. The response line will accept a percentage ranging from .1% (.001) to 99.9% (.999). This response should be typed in decimal format (eg .04). However, the model will accept integers and transforms these to decimal input internally.

- Type Flow: The user must select the type of replacement flow desired to be modeled. If REQ (requirement flow) is selected the model will make a single pass through the requirement file attempting to satisfy the requirements for each branch in priority and terminate operation with the last branch regardless of remaining time or transportation assets. If MAX (Maximum Flow) is selected the model does a "second pass" of the assets file. This flow maximizes time and transportation assets within a time period. Assets not used on the first pass are placed in a que following the last requirement's assets and are processed through the model based on branch priority. As there are no requirements, the model processes as many of these assets in branch priority until either the time or transportation constraints are met for a time period.

- SLAM II variables: The Programmers manual should be consulted for desired changes in the SLAM section of the model. Specific variables which must be considered in operating the model which are situated with SLAM are:

- Time Constraint: The CRC model will suspend operation for a time period if the specified time for a time period has elapsed.

- Transportation Constraint: The CRC model will suspend operation for a time period if the specified transportation assets for a time period have been expended.

6.5 OUTPUT REPORTS

Output reports from the reclassification model are created using Dbase III Plus on a standard PC in a LAN configuration with the workstation or in the Sun DOS window program as described in section 9.

SECTION 7
TRANSPORTATION MODEL

7.1   PURPOSE

The Transportation Model is designed to represent the macro-level flow of personnel replacements through the CRC(s) and a specified OCONUS Replacement Company (RPLCO). The model matches the replacement flow through the CRC and RPLCO to determine if these organizations can meet the requirements for a theater and if the flow is balanced through the two facilities. Statistics are provided regarding the replacement requirement satisfied and the difference in flow capacities of these facilities. The model uses the output files from a CRC model run and a RPLCO model run. The files selected should be based on the same requirement file and number of time periods to produce meaningful results. Currently, the user could select the any of the single theater requirement files: Europe (AE1), Korea (AKO), maximum flow (MAX) or either of the CSM II files (CST or CSB).

7.2   INITIATION

The Transportation Model is initiated through user input from a Sun window which activates the FORTRAN program. This window is reached by using the WARPAM Executive Windows Program which allows the user to reach any module by simply placing the workstation mouse over the appropriate window. Files required to operate the model are listed at the top of the input screen. If these files are in place and the user is prepared to proceed, the user must type "go" on the response line to advance to the first input variable. This input line ONLY ACCEPTS the word "go" in small case letters.

7.3   INPUT FILES

The initiation window for the Transportation Model lists those files which must be present on the workstation before the model can be initiated. If the program fails to find any of the files it will not initiate. The programmers guide should be consulted to determine if the files are present, in the correct sub-directory and are in the correct format.

7.4   INPUT VARIABLES

The user is prompted by the input screen to input the desired value of the following variables on a response line: (input variables from previous runs are shown on the input screen prior to the first response)

- CRC: The user must select a CRC output file from those stored in the IOFILE sub-directory.

- REPL CO :   The user must select a Replacement company output file from

those stored in the IOFILE sub-directory.

7.5   OUTPUT REPORTS

Output reports from the Transportation Model are created using Dbase III Plus on a standard PC in a LAN configuration with the workstation or in the Sun DOS window program as described in section 9.

SECTION 8
LOOK-UP TABLES

8.1   WARPAM BRANCH TABLE CODES:

        The following is an overview of the coding system used in WARPAM to create the standard data format used throughout the system. The translation of specific data elements are accomplished by the look-up tables in the later paragraphs of this section.

1ST DIGIT: CATEGORY IDENTIFIER

                O-OFFICER
                W-WARRANT
                E-ENLISTED

2ND & 3RD DIGITS: BRANCH IDENTIFIER

        IN-INFANTRY   AR-ARMOR   FA-FIELD ARTILLERY
        AD-AIR DEFENSE   AV-AVIATION   CE-ENGINEER
        SC-SIGNAL/COMMO   MP-MIL POLICE   MC-MEDICAL
        MI-MIL INTEL   CM-CHEMICAL   TC-TRANSPORTATION
        OD-ORDINANCE   QM-QUARTERMASTER   SM-SIGNAL MAINT
        MM-MECHANICAL MAINT
        CS-OTHER COMBAT SERVICE SUPPORT

4TH & 5TH DIGIT: GRADE

        FD-FIELD GRADE OFFICER (O4 THRU O9)
        CO-COMPANY GRADE OFFICER (O1 THRU O3)
        WW-ALL WARRANT OFFICER GRADES (W1 THRU W4)
        59-ENLISTED NCO GRADES (E5 THRU E9)
        14-ENLISTED SKILL LEVEL ONE GRADES (E1-E4)

EXAMPLE

                OINCO

                                        GRADE: COMPANY GRADE

                                        BRANCH: INFANTRY

                                        CATEGORY: OFFICER

19
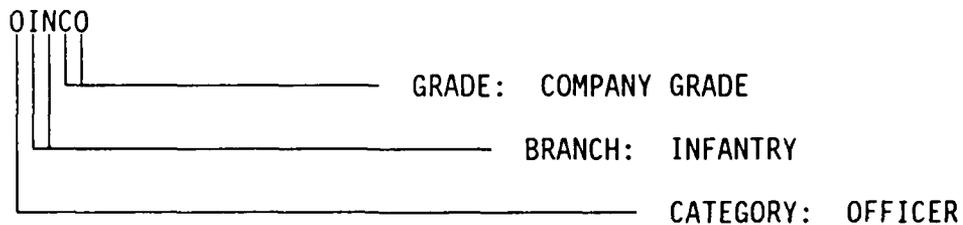
8.2   BRANCH AGGREGATION TABLE

FILE NAME: BRANCH.WR1

Location: The Lotus/Symphony spreadsheet is stored on a standard PC. The table which is created must be stored on the sun workstation in the IOFILE sub-directory.

Use: The Branch Table converts officer and enlisted MOS to the standard branches used in WARPAM. This table is used by the all the FORTRAN conversion programs in the preprocessor.

Structure: As MOS are created or redesignated, the user may desire to update the file by changes branch groupings or creating new branches. However, many changes may not be required as the file is designed with "wild card" designators, noted by the *. which denotes that the branch includes any MOS with the first two characters.   In those cases when an MOS could not be placed in a general category, it is shown individually. When this occurs the general category MOS will read all MOS with the first two digits as shown, except the MOS listed individually (eg all enlisted MOS 76 are grouped in quartermaster (EQM), but the special case MOS 76J is grouped with medical corps (EMC). The file is structured to have two digits, a single character (letter or *), one space and three characters for the branch code. To update the file, the desired changes should be entered manually and the file sorted on the MOS field to restore the numerical order of the file. When all changes are entered and the worksheet saved, the actual table used by the WARPAM models is extracted to file by the method described below.

Note: Wherever feasible MOS have been grouped into CMF equivalents. The table contains several MOS which have been entered twice with one entry containing the most common errors as with 0OR vs 00R (ZERO ZERO ROMEO).

Conversion to table: To convert this worksheet to a table format for use in the preprocessor, the block containing the MOS and code only are saved to a print file with a .tbl extension using the normal Lotus structured commands. During the print command sequence, the user must select the Lotus command to save the table to "file" (disk) vice the normal printer command. When complete the file is loaded in the sub-directory containing the other Lotus tables.

BRANCH AGGREGATION TABLES

COMMISSIONED OFFICER

CATEGORY/BRANCH CODE SPECIFIC Specialties	BRANCHES (Specialties) INCLUDED IN CODED BRANCH
OIN 11A 11B 11C 11X 18A	BR 11 & 18
OAR 12A 12B 12C 12X	BR 12
OFA 13A 13B 13C 13D 13E	BR 13
OAD 14A 14B 14C 14D 14E	BR 14
OAV 15A 15B 15C 15D 15E	BR 15
OCE 21A 21B 21C 21D	BR 21
OSC 25A 25B 25C 25D 25E	BR 25
OMP 31A 31B 31C 31D	BR 31
OMI 35A 35B 35C 35D 35E 35F 35G	BR 35

OMC   ·   BR 60   (60-68)
60A 60B 60C 60D 60F 60G 60H 60J 60K 60L 60M 60N 60P 60Q 60R 60S 60T 60U 60V 60W
61A 61B 61C 61D 61E 61F 61G 61H 61J 61K 61L 61M 61N 61P 61Q 61R 61U 61W 61Z 62A
62B 63A 63B 63D 63E 63F 63H 63K 63M 63N 63P 63R 64A 64B 64C 64D 64E 64F 65A 65B
65C 66A 66B 66C 66D 66E 66F 66G 66H 66J 67A 67B 67C 67D 67E 67F 67G 67H 67J 67K
67L 68A 68B 68C 68D 68E 68F 68G 68H 68J 68K 68L 68M 68N 68P 68R 68S 68T 68U

OCM 74A 74B 74C	BR 74
OTC 88A 88B 88C 88D 88E	BR 88
OOD 91A 91B 91C 91D 91E	BR 91

OQM   BR 92
92A 92B 92D 92F 92G

OCS   ALL LESS THOSE LISTED ABOVE
00B 01A 02A 03A 04A 38A 39A 39B 39C 41A 42A 42B 42C 42E 44A 45A 45B 46A 46B 47A
47B 48A 48B 48C 48D 48E 48F 48G 48H 48I 48J 49A 49B 49C 49D 49E 49W 49X 50A 51A
51B 51C 51D 52A 52B 53A 53B 53C 54A 55A 55B 56A 56D 97A 97B 97C

WARRANT OFFICER

CATEGORY/BRANCH CODE   BRANCHES (MOS)
SPECIFIC MOS   INCLUDED IN CODED BRANCH

WCB   ALL 130, 140, 150, 180

130A 130B 131A 131B 132A 140A 140B 140C 140D 140E 150A 151A 152B 152C 152D 152F
152G 153A 153B 153C 153D 154A 154B 154C 155A 155D 155E 156A 130A

WCS   ALL 210, 213, 215, 250, 251, 252, 256 311, 600, 640, 670 210A

213A 215A 215B 215C 215D 250A 250B 251A 252A 256A 311A 600A 640A 670A

WCC   ALL LESS WCB & WCS

350B 350D 350L 351B 351C 351E 352C 352D 352G 352H 352J 352K 353A 420A 420C 420D
550A 880A 881A 910A 911A 912A 913A 914A 915A 915B 915C 915D 915E 920A 920B 921A
922A

ENLISTED

CATEGORY/BRANCH CODE   CMF INCLUDED IN EACH
SPECIFIC MOS   CODED BRANCH

EIN   CMF 11 & 18
11B 11C 11H 11M 11Z 18B 18C 18D 18E 18F 18Z

EAR   CMF 19
19D 19E 19K 19Z

EFA   CMF 13
13B 13C 13E 13F 13M 13N 13P 13R 13T 13Z 15E 17B 21G 82C 93F

EAD   CMF 16
16D 16E 16F 16G 16H 16J 16P 16R 16S 16T 16Z

EAV   CMF 67 & 93
66G 66H 66J 66N 66R 66S 66T 66U 66V 66X 66Y 67G 67H 67N 67R 67S 67T 67U 67V 67X
67Y 67Z 68B 68D 68F 68G 68H 68J 68K 68L 68N 68P 68Q 68R 93B 93C 93D 93P

ECE   CMF 12, 51, 81
00B 12B 12C 12F 12Z 41B 51B 51G 51H 51K 51M 51R 51T 51Z 52E 52G 62E 62F 62G 62H
62J 62N 81B 81C 81Q 81Z 82B 82D 83E 83F

ESC   CMF 31
31C 31D 31F 31G 31K 31L 31M 31N 31Q 31V 31W 31Y 31Z 36L 36M 72E 72G

EMP   CMF 95
95B 95C 95D

EMI   CMF 96 & 98
05D 05H 05K 96B 96D 96F 96H 96R 96Z 97B 97E 97G 97Z 98C 98G 98J 98Z

EMC   CMF 91
01H 35G 35U 42C 42D 42E 71G 76J 91A 91B 91C 91D 91E 91F 91G 91H 91J 91L 91N 91P
91Q 91R 91S 91T 91U 91V 91W 91X 91Y 92B 92E 94F

ECM
54B

ETC   CMF 88
88H 88K 88L 88M 88N 88P 88Q 88R 88S 88T 88U 88V 88W 88X 88Y 88Z

EOD   CMF 63
41C 44B 44E 45B 45D 45E 45G 45K 45L 45N 45T 45Z 52C 52D 52F 52X 62B 63B 63D 63E
63G 63H 63J 63N 63S 63T 63W 63Y 63Z

EQM   CMF 55, 76, 77, 94
43E 43M 55B 55D 55G 55R 55X 55Z 57E 57F 76C 76P 76V 76X 76Y 76Z 77F 77L 77W 94B

EMM   CMF 24 & 27
24C 24G 24M 24N 24R 24S 24T 24U 25L 26H 21L 24H 24K 27B 27C 27D 27E 27F 27G 27H
27J 27K 27L 27M 27N 27V 27Z 46N

ESM   CMF 29 & 33
29E 29F 29J 29M 29N 29P 29S 29T 29V 29W 29X 29Y 29Z 35H 39B 39C 39D 39E 39G 39L
39V 39W 39X 39Y 33M 33P 33Q 33R 33T 33V 33Z

ECS   CMF 25, 46, 71, 74, 79 97 PLUS ANY MOS NOT LISTED ABOVE
00E 00R 00Z 02B 02C 02D 02E 02F 02G 02H 02J 02K 02L 02M 02N 02S 02T 02U 02Z 25P
25Q 25R 25S 25Z 46Q 46R 46Z 71C 71D 71E 71L 71M 73C 73D 73Z 74D 74F 74Z 75B 75C
75D 75E 75F 75Z 79D

BRANCH TABLE
(ACTUAL Lotus TABLE)

00* OCS	41* OCS	67* OMC	02* ECS	39* ESM	72* ESC
00* OCS	42* OCS	68* OMC	05* EMI	41B ECE	73* ECS
00* OCS	44* OCS	74* OCM	05* EMI	41* EOD	74* ECS
00* OCS	45* OCS	88* OTC	11* EIN	42* EMC	75* ECS
01* OCS	46* OCS	91* OOD	12* ECE	43* EQM	76J EMC
01* OCS	47* OCS	92* OQM	13* EFA	44* EOD	76* EQM
02* OCS	48* OCS	95* OTC	15* EFA	45* EOD	77* EQM
02* OCS	49* OCS	97* OCS	16* EAD	46N EMM	79D ECS
03* OCS	50* OCS	1** WCB	17* EFA	46* ECS	81* ECE
03* OCS	50* OCS	2** WCS	18* EIN	51* ECE	82C EFA
04* OCS	51* OCS	3** WCS	19* EAR	52E ECE	82* ECE
04* OCS	52* OCS	4** WCC	21G EFA	52G ECE	88* ETC
11* OIN	53* OCS	5** WCC	21* EMM	52* EOD	91* EMC
12* OAR	54* OCS	6** WCS	24* EMM	54* ECM	92* EMC
13* OFA	55* OCS	7** WCC	25L EMM	55* EQM	93F EFA
14* OAD	56* OCS	8** WCC	25* ECS	57* EQM	93* EAV
15* OAV	60* OMC	9** WCC	26* EMM	62B EOD	94F EMC
18* OIN	60* OMC	00* ECS	27* EMM	62* ECE	94* EQM
21* OCE	61* OMC	00* ECS	29* ESC	63* EOD	95* EMP
25* OSC	62* OMC	00* ECS	31* ESC	66* EAV	96* EMI
31* OMP	63* OMC	00* ECS	33* ESM	67* EAV	97* EMI
35* OMI	64* OMC	01* EMC	35H ESM	68* EAV	98* EMI
38* OCS	65* OMC	01* EMC	35* EMC	71G EMC	
39* OCS	66* OMC	02* ECS	36* ESC	71* ECS	

NOTE: * DESIGNATES THAT ALL SPECIALITIES/MOS WITH THE FIRST TWO DIGITS ARE GROUPED IN THIS BRANCH, EXCEPT WHERE INDIVIDUAL MOS ARE LISTED SEPARATELY.

8.3 WARPAM BRANCH PRIORITY TABLE

FILENAME: WARPRI.WR1

Location: THE Lotus/SYMPHONY file is stored on a standard PC. The table created from this worksheet is stored in the Sun workstation "IOFILE" sub-directory.

Use: Used to construct the officer and enlisted branch priority table for use by the REQAST.FOR program. This look-up table supplies the program with the priority of each of the branch/grade combinations found in the current table. To update the file the priorities are manually changed and the file is then resorted in ascending order using the Lotus sort command.

Structure: The file consists of a two digit number, a space and the five letter code for each branch/grade combination.

Conversion to table: The block consisting of the priority and code letter only is copied to a file (not printer) with the file name "WARPRI.TBL using the standard Lotus print commands.

WARPRI TABLE
(ACTUAL Lotus TABLE)

01 OARFD		35 OMCCO	
02 OAVFD		36 OMICO	
03 OINFD		37 OMPCO	
04 OFAFD		38 OCMCO	
05 OADFD		39 OTCCO	
06 OARCO		40 EMI59	
07 OAVCO		41 EMC59	
08 OINCO		42 EMP59	
09 OFACO		43 ECM59	
10 OADCO		44 ETC59	
11 OCEFD		45 EOD59	
12 OSCFD		46 EMI14	
13 OCECO		47 EMC14	
14 OSCCO		48 EMP14	
15 WCBWW		49 ECM14	
16 EAR59		50 ETC14	
17 EAV59		51 EOD14	
18 EIN59		52 OODFD	
19 EFA59		53 OQMFD	
20 EAD59		54 OCSFD	
21 EAR14		55 WCSWW	
22 EAV14		56 WCCWW	
23 EIN14		57 OODCO	
24 EFA14		58 OQMCO	
25 EAD14		59 OCSCO	
26 ECE59		60 EQM59	
27 ESC59		61 EMM59	
28 ECE14		62 ESM59	
29 ESC14		63 ECS59	
30 OMCFD		64 EQM14	
31 OMIFD		65 EMM14	
32 OMPFD		66 ESM14	
33 OCMFD		67 ECS14	
34 OTCFD			

8.4   THEATER/REPLACEMENT TYPE TABLE

FILENAME: THTRTYPE.WR1

LOCATION: The worksheet is stored on a standard PC. The table created from this worksheet is stored on the Sun workstation in the "IOFILE" sub-directory.

Use: The table is used in the requirements/assets table construction program. The table supplies the code numbers corresponding to the letter code for each type of requirement (by theater) and asset.

Structure: The file may be updated by manually changing either the coded number and corresponding letter code or by adding a new line. The spacing of the file containing the coded numbers and letters may not be changed.

Conversion to table: The block consisting of the coded number and letters is saved to a file named THTRTYPE.TBL using the standard Lotus print commands. Old files may be saved by simply renaming these to a different filename in DOS. Only one file may be present on the Sun workstation with the designated name.

0001	MAX	MAXIMUM FLOW
0010	DEG	DEFENSE GUIDANCE
0021	AE1	AUTOREP--EUROPE
0022	AKO	AUTOREP--KOREA
0023	ASW	AUTOREP--SW ASIA
0031	CST	CSMII--TOTAL
0032	CSB	CSMII--BATTLE ONLY
0100	TRD	THEATER RETURN TO DUTY
0200	THS	ACTIVE THS
0300	SEL	SELECT RESERVES
0400	IRR	INITIAL READY RESERVE
0500	STY	STANDBY BY & IMA
0600	RET	RETIREES
0700	TRN	TRAINING BASE

8.5   AUTOREP TIME PERIOD CONVERSION TABLE

FILE NAME: TP.WR1

LOCATION: THE Lotus/SYMPHONY worksheet is stored on a standard PC. The table which is created must be stored on the sun workstation in the IOFILE sub-directory.

Use: Used to construct the time periods conversion table for use in the AUTOREP FORTRAN program. This table converts the coded time periods in the input file to 10 day standard format time periods. The TP.Tbl file must be present to run the AUTOREP.FOR program.

Structure: This file should not have to be updated unless there is a change in the AUTOREP input file structure. The table is designed to start at the left MOS margin and consist of two letters, a space and two digits.

Warning: This table structure must not be altered unless the FORTRAN programs which utilizes it is also altered.

Conversion to table: The block consisting of coded letters and conversion numbers below without any header information is saved as a print file with a .TBL extension. To accomplish this in Lotus, print this block to file vice printer in the Lotus structured commands. The file name must be TP.Tbl. Several files may be created, but only one can be present with this specific name in the Sun sub-directory.

CA 01	AM 08
AA 02	AN 08
AB 02	AO 09
AC 03	AP 09
AD 03	AQ 10
AE 04	AR 10
AF 04	AS 11
AG 05	AT 11
AH 05	AU 12
AI 06	AV 12
AJ 06	AW 13
AK 07	AX 13
AL 07	

8.6   OFFICER RECLASSIFICATION PERCENTAGE TABLE

FILE: ORCLSPER.WR1

USE: Used to construct the reclassification table for the RECLAS module. This table prescribes what percentage of the old branch is reclassified into the new branches.

Structure: This file may be easily updated by manually inserting new percentages into each line. However, the total of the line must be 100%. This may be accomplished on this worksheet by having the CS column equal the difference between 100% and the sum of the other columns. If another method is used than a check column with the sum of the percentages in the line should be used to verify the sum.

Note: The column spacing may not be changed.

Conversion to table: The portion of the file containing the actual branch codes and percentages should be copied without headers or other the standard Lotus print commands.

OFFICER RECLASSIFICATION PERCENTAGES

NEW MOS

OLD MOS	IN	AR	FA	AD	AV	CE	SC	MP	MI	MC	CM	TC	OD	QM	CS	CB	CS	CC
IN	20								2					5	74			
AR		20				1			1			3	3	5	67			
FA			20						2			2	2	3	72			
AD				20		1			1			2	2	3	71			
AV					20	1	2		7			2	2	4	62			
CE						30					1	2	2	3	63			
SC							30		1					1	68			
MP								40	4		1	1	1	4	51			
MI							1	1	40						58			
MC										100								
CM											50	5	5	1	39			
TC											1	50		6	43			
OD											1		70	6	23			
QM												6	6	70	18			
CS															100			
CB																20	40	40
CS																	80	20
CC																		100

8.7   ENLISTED RECLASSIFICATION PERCENTAGE TABLE

FILE: ERCLSPER.WR1

USE: Used to construct the Reclassification table for the RECLAS module.
This table prescribes what percentage of the old branch is reclassified into the
new branches.

Structure: This file may be easily updated by manually inserting new percentages
into each line. However, the total of the line must be 100%. This may be
accomplished on this worksheet by having the CS column equal the difference
between 100% and the sum of the other columns. If another method is used, then
a check column with the sum of the percentages in the line should be used to
verify the sum.

Note: The column spacing may not be changed.

Conversion to table: The portion of the file containing the actual branch codes
and percentages should be copied without headers or other the standard Lotus
print commands.

ENLISTED RECLASSIFICATION PERCENTAGES

	AR	AV	IN	FA	AD	CE	CM	MI	MP	SC	MC	TC	MM	OD	QM	SM	CS
AR	20								10	10		10	10	10	10		20
AV		20							10	10		10	20	20	10		
IN			20							10		20	10	10	10		20
FA				20					10	10		10	10	20	10		10
AD					20				10	10		10	10	10	10	10	10
CE						20			10	10		20	10	20	10		
CM							30	10		10		10	20	10			10
MI								30	10	20		10		10	10	10	
MP									30	10		20	10	10	10		10
SC										30		10	10	10	10	20	10
MC											100						
TC												40	20	20	20		
MM													50	20	20		10
OD														60	20		20
QM															90		10
SM																100	
CS																	100

8.8   RECLASSIFICATION DELAY TABLE

FILE NAME: RCLSDLY.WR1

Location: The worksheet is stored on a standard PC. The table created from this worksheet is stored on the Sun workstation in the "IOFILE" sub-directory.

Use: Used to construct the reclassification delay table (RCLSDLY.TBL) used in the reclassifaction module. This table distributes the reclassified personnel after they have been given a new branch into one of six time periods after the current time period. The percentage in each time period is based on information provided by Soldier Support Center. To update the table these percentages are changed manually by the user and re-saved with the same name. Although all time periods contain the same percentages in this developmental model, these may be changed to a different percentage for each time period.

Structure: Although the file may be updated, the structure of the file as the width of rows, may not be changed. A change in structure will cause the FORTRAN program to read the file incorrectly.

Conversion to table: The block consisting of the data only without any header information is copied to "file" vice printer using the standard Lotus print commands and given a extension of.TBL. Previous tables may be saved by simply renaming the old file with standard DOS commands.

TIME PERIODS TO DELAY RETURN OF TRD
AND PERCENTAGE INTO EACH TIME PERIOD

TP	1	2	3	4	5	6
01	0.12	0.27	0.31	0.23	0.05	0.02
02	0.12	0.27	0.31	0.23	0.05	0.02
03	0.12	0.27	0.31	0.23	0.05	0.02
04	0.12	0.27	0.31	0.23	0.05	0.02
05	0.12	0.27	0.31	0.23	0.05	0.02
06	0.12	0.27	0.31	0.23	0.05	0.02
07	0.12	0.27	0.31	0.23	0.05	0.02
08	0.12	0.27	0.31	0.23	0.05	0.02
09	0.12	0.27	0.31	0.23	0.05	0.02
10	0.12	0.27	0.31	0.23	0.05	0.02
11	0.12	0.27	0.31	0.23	0.05	0.02
12	0.12	0.27	0.31	0.23	0.05	0.02
13	0.12	0.27	0.31	0.23	0.05	0.02
14	0.12	0.27	0.31	0.23	0.05	0.02
15	0.12	0.27	0.31	0.23	0.05	0.02
16	0.12	0.27	0.31	0.23	0.05	0.02
17	0.12	0.27	0.31	0.23	0.05	0.02
18	0.12	0.27	0.31	0.23	0.05	0.02

SECTION 9
REPORT GENERATOR

9.1   PURPOSE

The Report Generator is designed to convert the output files produced from the Preprocessor Module and the WARPAM Models from ASCII format to DBASE III format and provide standard report formats for the user without any programming requirements.   The DBASE III format allows the user to then tailor reports to specific requirements using only the standard DBASE III menu system. This report format utilizes a copy of the actual WARPAM UNIX file. These duplicates are generated automatically at the end of each program.   The report generator does not allow the user to change the actual file used by the WARPAM system.   If an error is detected or a change is required, the actual UNIX file must be altered by a programmer using an editor. As the system is refined through continued use, it may be advisable to modify the programs to read the data from a different sub-directory to protect the DBASE programs. If this is done, then all the DBASE programs should be kept in the same directory since several programs use sub-programs not discussed by title in this section.

9.2   INITIATION

The Report Generator is initiated from a Standard PC linked by network to the Sun workstation or through a Sun equipped with DOS Windows. Once the system is in the DOS mode, DBASE III is activated.   The user then through the assist window should go to the right most window,"SET DRIVE" and set the program for the drives which contain the programs and database.   All subsequent commands are entered from the DBASE III "DOT PROMPT".   These commands prompt a batch file operation which accomplishes the conversion. Specific step-by-step commands for each report program are discussed below.

9.3   REPORT PROGRAMS

9.3.1   REQUIREMENTS/ASSETS FILE REPORT

This report allows the user to review the contents of the requirements/assets file which is produced in the preprocessor and contains the converted input files from other military models.

To activate the program, the following steps are required:

o   Ensure the DBASE programs and the data base file REQAST.OUT are on the same drive.

o   Activate DBASE III.

o   Using assist windows or at the dot prompt set the drive.

o   If in assist windows, escape by pressing: "ESCAPE"

o   At the dot prompt, enter: "DO REQAST"
(This command converts the ASCII file to DBASE format)

o   When the conversion program is complete, enter: "ASSIST"

o   Request the data base for use (Since data bases are arranged by time period and branch they probably do not have to be indexed).

o   Move the highlighted area to "modify reports" and request the REQAST.FRM. This is the standard format for the REQAST Report. The user may select specific portions of the report by pressing "F10" and selecting the data elements to set the report on and the parameters desired for the report.

9.3.2 MODIFIED REQUIREMENTS/ASSETS FILE REPORT

This report allows the user to review the Modified Requirements/Assets file which is produced following the Reclassification Model and has Theater Return-To-Duty personnel added to the Requirement/Assets File.

To activate the program, the same steps are followed as with the Requirements/Assets report with the following exceptions: load the MODRQAST.OUT file and to convert the program enter: "DO MODREQAS".

9.3.3 CRC/RPL CO MODEL REPORTS

The CRC/RPLCO Output Reports allows the user to review the outputs of specific model runs and produce reports for each. As the sequence of actions required to produce this are identical the steps will be discussed once with variations noted.

To activate the program, the following steps are required:

o   Ensure the DBASE programs and the data base file are on the same drive. For this report the data base files are titled by six letters with the first three being the type activity (CRC or RPL) and the last three the requirement file used (eg. DEG) with an OUT extension.

o   Activate DBASE III.

o   Using assist windows or at the dot prompt set the drive.

o   If in assist windows, escape by pressing: "ESCAPE"

o   At the dot prompt, enter: "DO TITLE" (EG DO CRCDEG)
(This command converts the ASCII file to DBASE format)

o   When the conversion program is complete, enter: "ASSIST"

o   Request the data base for use (Since data bases are arranged by time period and branch they probably do not have to be indexed).

o   Move the highlighted area to "modify reports" and request the CRCRPT.FRM report format. This is the standard format for the CRC Report. The user may select specific portions of the report by pressing "F10" and selecting the data elements to set the report on and the parameters desired for the report.

9.3.4 TRANSPORTATION MODEL REPORTS

The Transportation Model Report allows the user access to the output of the Transportation model which compare the outputs of two model runs (a CRC and a RPL) and produces reports.

To activate the program, the following steps are required:

o   Ensure the DBASE programs and the data base file titled TRANS{requirement} (eg. TRANSAE1.OUT) are on the same drive.

o   Activate DBASE III.

o   Using assist windows or at the dot prompt set the drive.

o   If in assist windows, escape by pressing: "ESCAPE"

o   At the dot prompt, enter: "DO TITLE" (EG DO TRANSDEG)
(This command converts the ASCII file to DBASE format)

o   When the conversion program is complete, enter: "ASSIST"

o   Request the data base for use (Since data bases are arranged by time period and branch, they probably do not have to be indexed).

o   Move the highlighted area to "modify reports" and request the TRANSRPT.FRM report format. This is the standard format for the transportation report. The user may select specific portions of the report by pressing "F10" and selecting the data elements to set the report on and the parameters desired for the report.

ANNEX A
TERMS & ABBREVIATIONS

ASSET: Personnel inventory used to satisfy requirements. There are seven classes of assets: TRD-Theater Return-To-Duty, THS-active duty transients, holdees, students and hospital, SEL-Select Reserve, IRR-Initial Ready Reserve, STY-Stand By and IMA, RET-retirees, TRN-skill level one trainees.

AUTOREP: US ARMY PERSCOM shelf requestion system.

Branch: Branch represents the specialties/MOS and grade combinations which have been grouped together in the preprocessor. These branches are then prioritized in the Branch Look-Up Table and given a priority number. The initial version of WARPAM has 67 branch/grade combinations.

CSM II: Soldier Support Center casualty stratification model.

MOBARPRINT: HQDA, ODCSPER system for the projection od skill level one training base output. MOBTNGBS is used interchangeable in WARPAM.

MOBMAN: US ARMY PERSCOM ـdel to project defense guidance level requirements and personnel assets.

Return-to-Duty Rate: This is the percentage of casualties which the user desires to return to duty within the theater. The model will accept either a rate (decimal) or percentage (whole number) ranging from .1% (.001) to 99.99% (.9999). Based on 1989 CAA estimates the recommended rate for current policy is 23%.

Requirements: Personnel requirements in a theater caused by either a shortage of personnel or by casualties. Requirements are derived from other military model outputs and are found in the requirement/assets file.

Requirements/Assets Generator: This module merges the files derived from other military models into a single file, assigns branch priorities, assigns a unique code number, and sorts the file by code number. The output of this module is the REQAST.TBL.

Time Periods: A time period is 10 days.