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(NASA-TM-78284) PAYLOAD CREW TRAINING  
SCHEDULER (PACTS) USER'S MANUAL (NASA)  
308 p ac A14/4F A01 CSCL J5A

NSJ-3227J

Unclass

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# NASA TECHNICAL MEMORANDUM

NASA TM-78284

PAYLOAD CREW TRAINING SCHEDULER (PACTS)  
USER'S MANUAL

Prepared by

David L. Shipman  
Systems Analysis and Integration Laboratory

July 1980

**NASA**

*George C. Marshall Space Flight Center  
Marshall Space Flight Center, Alabama*



PAYLOAD CREW TRAINING SCHEDULER  
(FACTS) USER'S MANUAL

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## **CHAPTER I: GENERAL**

### **101 PURPOSE**

**This manual provides procedures for operating the Payload Crew Training Scheduler (PACTS).**

### **102 APPLICABILITY**

**The provisions of this handbook are applicable to all Marshall Space Flight Center (MSFC) organizations which use PACTS for scheduling purposes.**

### **103 DEFINITIONS**

**For definitions applicable to this manual, see Appendix A.**

## CHAPTER II: RESPONSIBILITIES

### 201 DOCUMENTATION MAINTENANCE

The Operations Planning and Analysis Branch, Systems Analysis and Integration Laboratory is responsible for documentation maintenance and will:

1. Assess all UNIVAC 1108, PDP 11/70, PDP 11/45, and Marshall Integrated Planning Systems (MIPS) changes for possible impact on PACTS operations.
2. Update PACTS documentation periodically and notify users of any changes to operating procedures.

### 202 TRAINING

The Operations Planning and Analysis Branch will provide training to PACTS users on an individual request basis.

### 203 PROGRAM UTILIZATION

MSFC organizations which use PACTS for scheduling purposes will:

1. Provide trained personnel to run the PACTS program.
2. Provide Cathode Ray Tube (CRT) terminals for accessing the UNIVAC 1108 and PDP 11/70 and 11/45 computers to run the PACTS program.

## CHAPTER III: SYSTEM DESCRIPTION

### 301 UNIVAC 1108 COMPUTER SYSTEM

PACTS is designed to run on the UNIVAC 1108, Executive 8 computer system at operating level 33R2. The UNIVAC 1108 is a large class general purpose computer with a variety of peripheral equipment available including line printers, plotters, and interactive CRT terminals.

At MSFC, interactive access to the UNIVAC 1108 is by telephone line using a Modem (data set). A Modem converts computing equipment digital signals into signals that can be used by the voice-oriented transmission system. Actual hookup between the CRT terminal and the UNIVAC 1108 is accomplished by dialing the computer number and pulling the white receiver button up when a high pitched tone is heard. The hookup is terminated by replacing the telephone receiver in its cradle.

### 302 PDP 11/70 AND 11/45 COMPUTER SYSTEMS

The PDP 11/70 and 11/45 are mini class general purpose computers which provide high speed, real time access for large multi-user, multi-task, time-shared applications requiring large amounts of addressable memory space. The PDP 11/70 is the larger of the two computers and is linked to the UNIVAC 1108 by two 1200 baud telephone lines which limit the transfer of data across the lines to 1200 bits per second. The MIPS program is mounted in resident storage in the PDP 11/70; thus, UNIVAC 1108 MIPS data can be transferred directly to the PDP 11/70 MIPS files.

Although the PDP 11/45 is smaller, it has additional features which are useful for running PACTS. Specifically, it is equipped with an Interactive Graphics Display System which is linked to a CALCOMP 960 plotter. IGDS is used to interact with PACTS and the 960 plotter is used to produce 30 x 60 inch waterfall schedules. Univac 1108 data is transferred to and from the PDP 11/45 by two methods. The first method is to transfer the data to the PDP 11/70 via the 1200 baud telephone lines and store it on a cartridge disk. This disk is

manually transferred from the PDP 11/70 to the PDP 11/45. An alternate method of transferring data is to store the UNIVAC 1108 data on a magnetic tape which can be hand transported to the PDP computer room and mounted in the PDP 11/45 tape drive. A chart of the UNIVAC 1108 - PDP 11/70/45 hardware system showing these data transfer features is shown in Figure 1.

### 303 MARSHALL INTERACTIVE PLANNING SYSTEM (MIPS)

The Marshall Interactive Planning System (MIPS) is designed to provide the user with a close interface to his analysis through the use of interactive graphics at a remote computer terminal. The standard systems approach is employed in MIPS whereby analysis and utility modules (programs) can be linked together with a simple interactive control language. The user is able to use MIPS to coordinate the sequence of execution of modules, to facilitate the handling of data, and to control the problem flow. The user of MIPS is, in effect, interactively constructing a computerized solution to a planning problem while working at the CRT.

The PACTS program was built using MIPS. A user of PACTS is actually running the computerized MIPS solution (latest version of the program) to the Payload Crew Training Scheduling problem. The sequence of execution, data handling and problem flow were determined previously and are invisible to the PACTS user. The PACTS user sees only a set of tutorials which advise him of what input data is required and after PACTS has been run, he will see the scheduling results (output). All other operations of the scheduler and MIPS are masked to the PACTS user.

### 304 PACTS SYSTEM

PACTS is a fully automated, interactive, computerized scheduling program equipped with tutorial displays. The tutorial displays are sufficiently detailed for use by a user having no previous computer terminal experience. The man machine interface (computer terminal) uses a cursor-CRT technique for making real time scheduling changes.



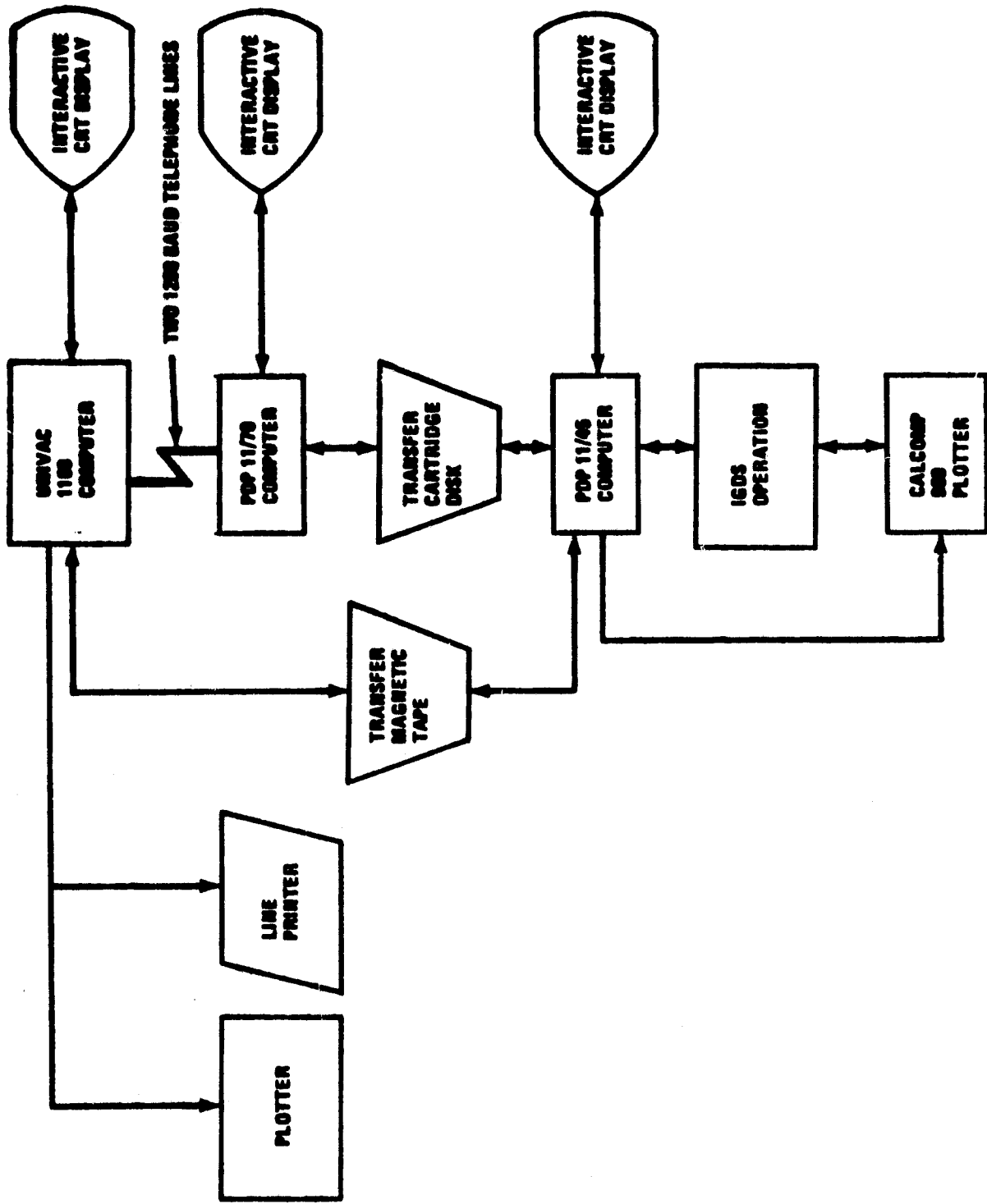


FIGURE 1. UNIVAC 1108 - PDP 11/70/45 HARDWARE SYSTEM

**PACTS is designed to operate on the UNIVAC 1108, Executive 8, in the MIPS operating mode. It has the capability to load PACTS output into the PDP 11/45 Interactive Graphics Display System (IGDS) which will permit schedule interaction by the user and will printout a 30 by 60 inch annotated waterfall schedule using the CALCOMP 960 plotter.**

**Other functional features of the system are:**

**The system can schedule up to three overlapping missions.**

**PACTS has four independent modules; an input module, Payload Crew Training Data Base (PACTDB); a computation module, Payload Crew Training Scheduler (PACTS); an editing module, Payload Crew Training Editor (PACTED); and an output module, Payload Crew Training Report Generator (PACTRG).**

**A system flowchart of the four modules with the PDP 11/70 and 11/45 conversion programs is shown in Figure 2.**

**Figure 2 explanation:**

**PACTDB creates a Name Directed File (NDF) which contains data that is stored and retrieved by name.**

**PACTS uses the Name Directed File (NDF) to create a List Directed File (LDF), which contains event timeline data that is stored and retrieved when specified acceptance conditions are met, and an ON/OFF file which contains crew activity data.**

**PACTED uses the List Directed File (LDF) and Name Directed Files (NDF) to allow manual editing and the writing of new List Directed Files (LDF) and ON/OFF files.**

**PACTRG used the Name Directed File (NDF), the List Directed File (LDF) and the ON/OFF file to generate specialized tabulations and plots.**

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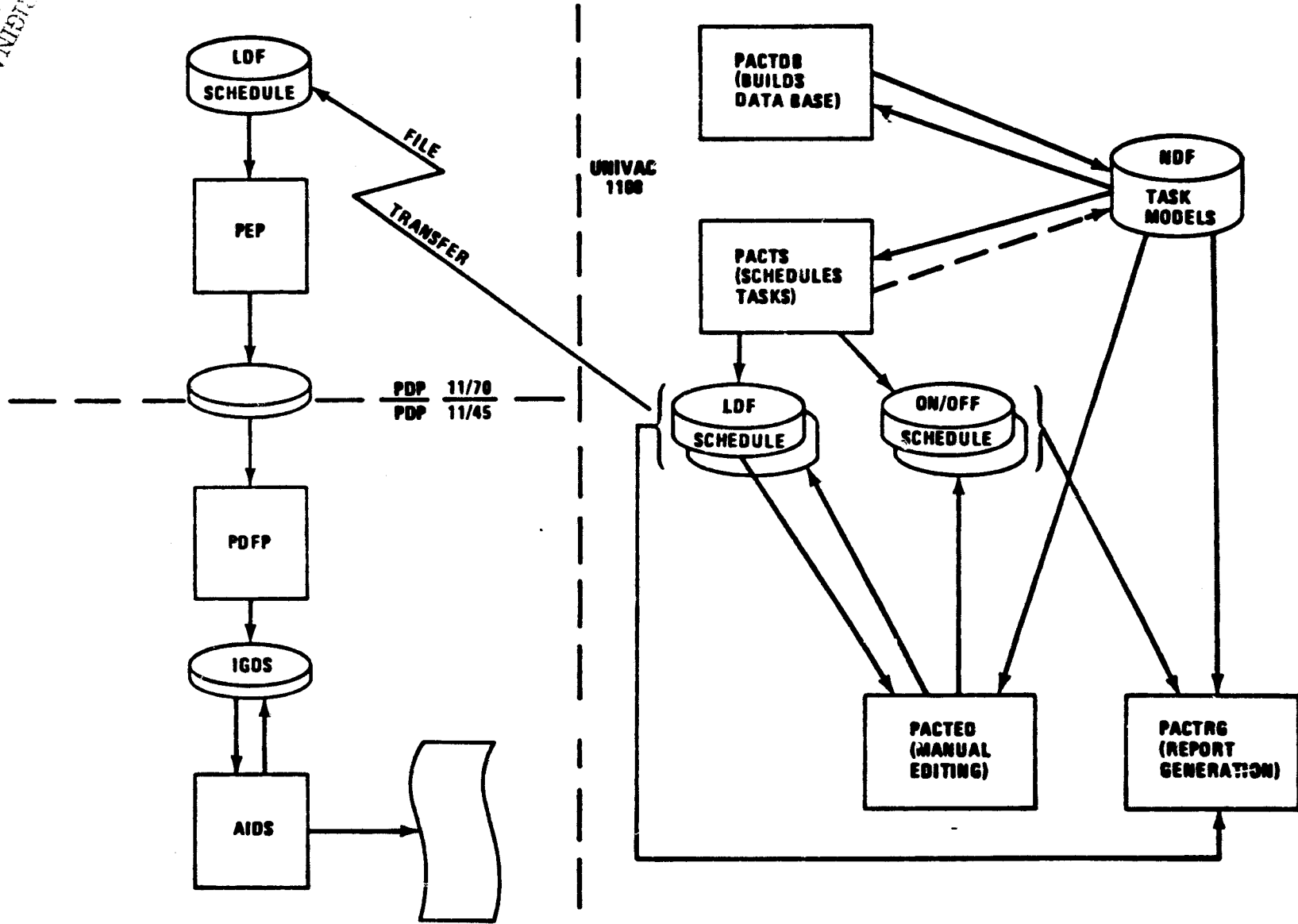


FIGURE 2. PACTS SYSTEM FLOW CHART

The PDP 11/70 PACTS Extract Program (PEP) converts and transfers the List Directed File (LDF) to a disk cartridge for transfer to the PDP 11/45.

The PDP 11/45 PACTS Design File Program (PDFP) converts and transfers the List Directed File (LDF) to IGDS.

A Scheduler Operational Flow is shown in Figure 3.

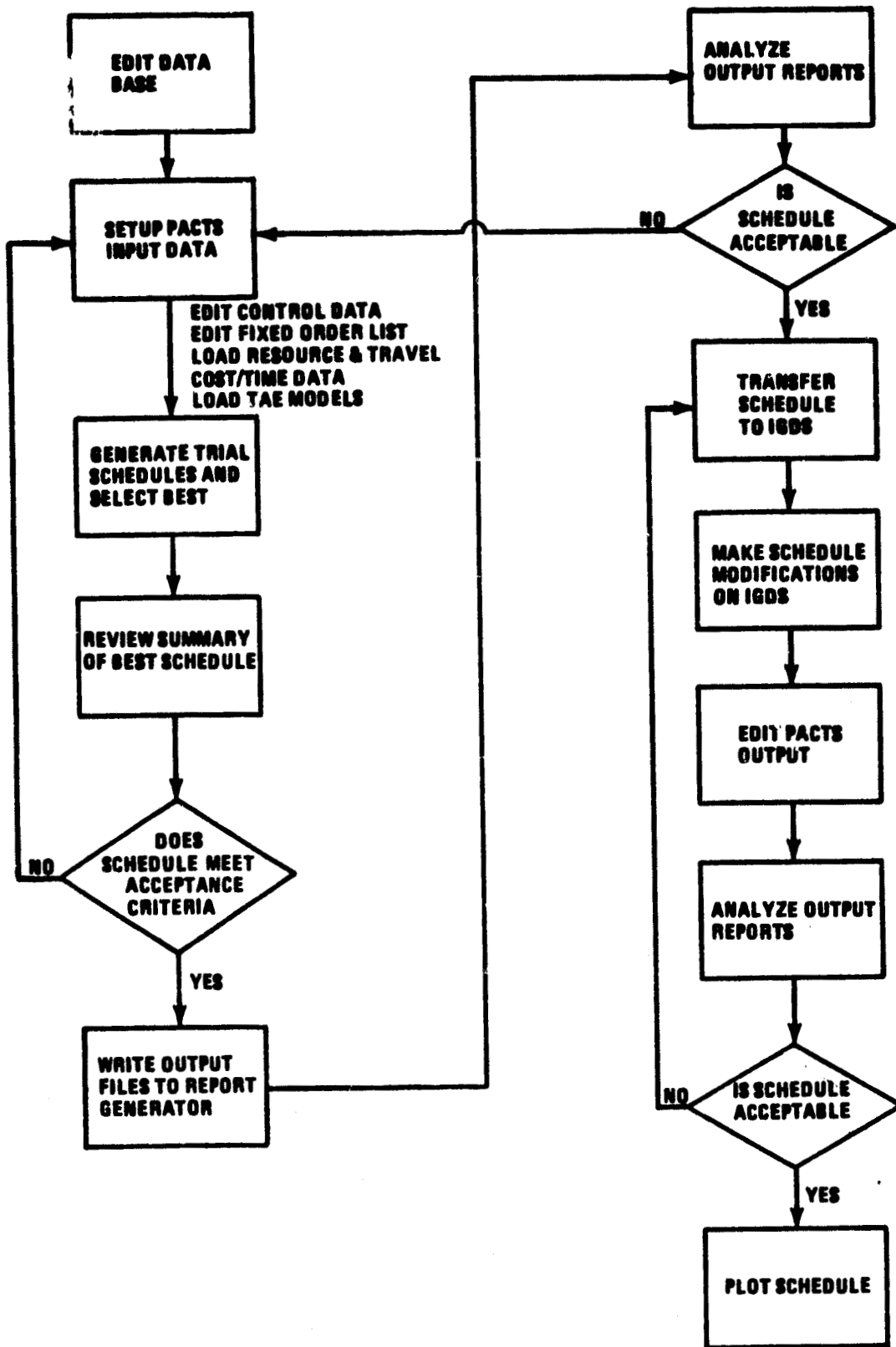


FIGURE 3. SCHEDULER OPERATIONAL FLOW

## CHAPTER IV: SYSTEM OPERATION

### 401 PACTS DATA BASE MODULE (PACTDB)

PACTDB module performs data input and editing of a PACT Name Directed File (NDF) to be used in module PACTS. Data which can be inputted or edited are the lists of TAE groups, list of payload specialists and their initial locations, list of work locations, travel cost, travel time data to and from a location, detailed group and task activity element (TAE) data and list of resources. Special provisions are included to initialize an empty data file. The module includes an option to print the entire data base on a alternate print file for any specified mission and in the same format as the CRT displays. The only exception is that the travel cost/time data is displayed in matrix form in the alternate print file. A program block diagram and computer configuration are included in Appendix B.

The user can run PACTS in batch mode or online from a CRT. The only option which is restricted is the detailed group and TAE data which must be run on the CRT.

PACTDB is an all tutorial program which uses standard input images and has two menus, PACTDB main menu and travel cost and time data menu. A complete set of tutorial displays for PACTDB is included in Appendix C.

### 402 PACTS SCHEDULER MODULE (PACTS)

PACTS module receives input data from the PACTDB module, performs scheduling operations and transfers the results to the PACTRG module. PACTS has options to create a MIPS file, to transfer to PACTDB, setup input data, generate trial schedules and select the best, display a summary of the best schedule, tabulate schedule and write in the output file, transfer to PACTRG, and save control data for future use. Utilizing a pseudo-random selection process, PACTS generates a family of schedules and selects the best on the basis of user determined priorities, such as schedule cost and number of activities scheduled. After selection, TAES are scheduled at the earliest opportunity time, without violating resource and travel constraints. A program block diagram and computer configuration are included in Appendix D.

**PACTS accepts input from the TAE data base created by the PACTDB module which can be assessed for editing purposes from PACTS. Schedule control and mission level data may be input from the terminal or stored and retrieved from a MIPS name-directed file (NDF). This data may also be edited to test alternative schedules.**

**PACTS produces a schedule summary table for display at the terminal and a schedule tabulation on the alternate print file. The module also produces a List Directed File (LDF) and an ON/OFF file. The user may transfer to the PACTRG module to display these files.**

**PACTS is an all tutorial program which uses standard input images and has two menus, PACTS main menu and a Setup/Edit Input Data Menu. A complete set of tutorial displays for PACTS is included in Appendix E. PACTS is available at a CRT terminal or in batch mode.**

**403**

#### **PACTS TIMELINE EDITOR MODULE (PACTED)**

**Payload Crew Training Editor (PACTED) is an interactive module which displays and edits the timeline produced by the scheduling module (PACTS). PACTED uses the List Directed File (LDF) created by PACTS and the Name Directed File (NDF) created by PACTDB to create a Scratch File for editing. Upon completion of editing PACTED writes updated List Directed Files and ON/OFF Files. Travel analysis is performed only when the option to edit the event timeline is being executed. Data which may be displayed and edited are the crew timeline, the event timeline, and the composite timeline. Additional options are available to delete a TAE group from the timeline, delete a crew from the timeline, and to write new timeline files. Finally, options are available for transfer either to PACTRG module or PACTDB module. A program block diagram and computer configuration are included in Appendix F.**

**PACTED is an all tutorial module which uses standard input images and has a main menu, input menu, output menu and a control menu. A complete set of tutorial displays for PACTED is included in Appendix G. PACTED is available at a CRT terminal or in batch mode.**

#### 404 PACTS REPORT GENERATOR MODULE (PACTRG)

Payload Crew Training Report Generator (PACTRG) uses the PACT data base file containing Training Activity Element (TAE) descriptions and the output files from the module PACTS containing the crew training schedule to generate specialized tabulations and plots. Tabulations available are: a composite schedule, a composite schedule with cost and duration, a schedule summary for all the TAE groups, unscheduled time for all crewmen, a schedule for an individual crewman, and unscheduled time and locations for an individual crewman. Tabulations on the terminal may be omitted when producing tabulations on the print file. The module includes an option to print on the page file all tabulations for a specified time frame. Bar graph plots available are: a schedule for all TAE groups, scheduling opportunities for all TAE groups, unscheduled time for all crewmen, a timeline of locations, a resource utilization timeline, and a location timeline for an individual crewman. A program block diagram and computer configuration are included in Appendix H. The user can run PACTRG in batch mode or online from a CRT. The only exception is that plots must be run on the CRT.

PACTRG is an all tutorial program which uses standard input images and has a main menu and a display menu. A complete set of tutorial displays for PACTRG is included in Appendix I.

#### 405 PACTS/IGDS INTERFACE MODULES

Several programs have been developed which, when used with the general file transfer capability of MIPS provide display of a crew training schedule through the Interface Graphics Design System (IGDS) on the CALCOM 960 plotter (Ref: Fig. L-1, App. L).

PACTS List-Directed File Conversion Program(PACT36):

PACT36 was developed to convert the 24-word list-directed file output by the PACTS module to a 36-word list-directed file containing 4 character alphanumeric data for transfer from the UNIVAC 1108 to the PDP 11/70.

A 36-word list-directed file has been created with an expiration date of ten years. The maximum number of records that can be written on the file is 5000. If the user should need a larger file



or more than one file, the MIPS CF Command on the UNIVAC 1108 or the IN Command on the PDP 11/70 may be used. An example of a PACT36 run and a CF and IN Command are included in Appendix L.

#### MIPS GET Command and UPFIT Module:

After running PACT36, the user may use the MIPS GET Command on the PDP 11/70 or the UPFIT Module on the UNIVAC 1108/80 to write the file to tape for transfer to the PDP 11/70. Examples of a GET Command and the use of the UPFIT Module are included in Appendix L.

#### PACTS Extract Program (PEP):

PEP on the PDP 11/70 reads the list-directed file, reformats the data and writes a sequential file for use as input to the PACTS Design File Program (PDFP) on the PDP 11/45. Output from PEP may be written directly to a small disk pack by selecting the option for the disk drive on which the disk has been mounted. Examples of PEP runs are included in Appendix L.

#### PACTS Design File Program (PDFP)

PDFP on the PDP 11/45 uses files written by the PEP module on the PDP 11/70 as input. PDFP stores three levels of data in the design file. Level two contains the event bars. Level three contains the test associated with each bar (words 7, 8, 10, 11, 12, 13, and 14 from the 36-word list-directed file). The first level contains a frame and the alphanumeric dates associated with the event bars.

The lengths of the event bars are calculated from the event times read from the list-directed file, i. e.,  $\text{length (in days)} = (\text{end of event}) - (\text{start of event})$ . PDFP uses a scale of 50 units of resolution (UORs) per day. The height of each bar is 72 UORs and text dimensions are: height = 50 UORs, and width = 50 UORs.

Minimum and maximum X-coordinates are 2736 and 18,300 UORs respectively. Minimum and maximum Y-coordinates are 0 and 7650 UORs initially. For each new year to be stored Y-axis coordinates are calculated using the formulas  $Y_{\text{MIN}} = Y_{\text{MAX}} + 1000$  and  $Y_{\text{MAX}} = Y_{\text{MAX}} + 7650$ .

## CHAPTER V: PACTS OPERATING PROCEDURES

### 501 UNIVAC 1108 LOGON/LOGOFF PROCEDURES

#### UNIVAC 1108 LOGON Procedure (Refer to Appendix J)

The user dials 3-4850 on the modem telephone of any terminal that is linked to the UNIVAC 1108. Upon hearing a high pitch sound, the user pulls the white receiver button upward which completes the modem connection. The telephone receiver will then be placed along side the modem telephone.

Note: A busy signal upon completion of dialing means all the UNIVAC 1108 lines are busy and the user must wait.

As soon as the user pulls the white receiver button up, the CRT screen will activate and the user will see the words SIGNON. The user must then type in the number of the terminal being used and strike the return key.

Note: During all interaction with the computer, the user acknowledges the end of his input with the return key.

The computer will acknowledge the user's terminal number by typing ENTER USERID/PASSWORD: Beginning with this acknowledgement, the computer will call for user input by the symbol > at the start of each input line. For this particular input, the user must type in PACTS/HCC after the symbol >.

The computer will acknowledge the USERID/PASSWORD by printing out several lines of information concerning the UNIVAC 1108 system. Then it calls for user input with the symbol >. The user must then type in @MIPS, L. This command brings the MIPS system to the user's terminal. The user must now use MIPS commands to direct computer operations.

#### UNIVAC 1108 LOGOFF Procedure (refer to Appendix J)

The user issues two commands to terminate the UNIVAC 1108 hookup. The first command @ FIN advises the computer that

the run is finished. The computer will then print the run ID, time, date, and other accounting information and will end its communication with \*TERMINAL INACTIVE\*.

The second command @@TERM advises the computer to terminate the connection between the CRT and the UNIVAC 1108. The computer responds by dropping the line which causes the modem to disconnect.

## 502 MIPS COMMANDS (Refer to Appendix K)

After the user has completed the UNIVAC 1108 logon procedures and has typed in @MIPS, L, the terminal mode will be MIPS. All further command lines on the CRT terminal will be preceded by the word MIPS>, (e.g., MIPS> RUN PACTDB).

MIPS will first ask the user for the ORGANIZATION NO. /PROJECT ID/TERMINAL SITE ID. The user must provide this information.

MIPS will acknowledge the above information with a request to SELECT NEW PRINT FILE OPTION. 1 - WRITE PRINT ON PAPER 2 - WRITE PRINT ON FICHE. The user must select one of these options.

MIPS will acknowledge the print file option by giving the print file a number. The user will then give the command RUN PACTDB or RUN PACTS. The computer responds by moving to the next line on the CRT terminal. The user then types GO. MIPS will then bring in the PACTS module requested. The user must now use PACT commands to direct further computer operations.

To terminate MIPS, the user types STOP (Refer to Appendix K). This command terminates MIPS but leaves the terminal hooked up to the UNIVAC 1108 computer. To terminate the UNIVAC 1108 hookup, the user must use the UNIVAC 1108 commands. (Refer to Appendix J).

## 503 PACTS COMMANDS

The user calls up the PACT modules, PACTDB, PACTS, PACTED or PACTRG using the MIPS command RUN (selected module) and GO. The UNIVAC 1108 computer will bring the selected module to the CRT terminal and then PACTS commands must be used to

control operations of the computer. These commands are all tutorial (self explanatory) and are shown in Appendices C, E, G, and I. The command to terminate PACTDB, PACTS, PACTED or PACTRG is always option 0 on the main menu which returns the control of computer operations to MIPS.

504 PDP COMMANDS

PDP LOGON Procedures (Refer to Appendix L)

The user enters the following commands from a terminal:

>HEL [100, 1]/ SAIL

>RUN DP:MIPS

PDP LOGOFF Procedures (Refer to Appendix L)

The user enters the following command from a terminal:

MIPS > STOP

>BYE

PDP Programs (Refer to Appendix L)

The user may run the following programs from a terminal:

PEP PDP 11/70 MIPS

MIPS > RUN PEP

MIPS > GO

PDFP PDP 11/45

MCR > INS [15, 2] PDFP

MCR > FIX PDFP

MCR > RUN PDFP (\$)

.  
. .  
.

MCR > UNF PDFP

MCR > REM PDFP

DECWRITER COMMANDS

Mount/Dismount Disk PDP 11/70

> MOU DK<sub>n</sub>: /OVR (n = 0 or 1 drive)

.  
. .  
. .  
. .

> DMO DK<sub>n</sub>:

Install MIPS PDP 11/70

> Set /UIC = [100, 1]

> @ MIPSTASKS

Mount/Dismount Disk PDP 11/45

MCR > LOA DK

MCR > MOU DK: /OVR

.  
. .  
. .

MCR > DMO DK:

MCR > UNL DK

**APPENDIX A**  
**DEFINITIONS**

## APPENDIX A

**List - Directed File** - Files whose records contain identical lists of data. The corresponding data value in each list is the same parameter for every list in the file, e.g., event timeline.

**Marshall Interactive Planning System (MIPS)** - A computer program which facilitates the handling and execution of other computer programs.

**Name-Directed File** - Files which contain data that are associated with names, e.g., Training contains training requirements for Spacelab payload crewmen.

**On/Off File** - Files which are data oriented rather than retrieval oriented, e.g., crew activity.

**Payload Crew Training Data Base (PACTDB)** - A data base file for storage of Spacelab payload crew training requirements.

**Payload Crew Training Report Generator (PACTRG)** - A computer program which utilizes PACTS files to generate Spacelab payload crew training reports.

**Payload Crew Training Scheduler (PACTS)** - A computer program which utilizes PACTDB files to schedule Spacelab payload crew training.

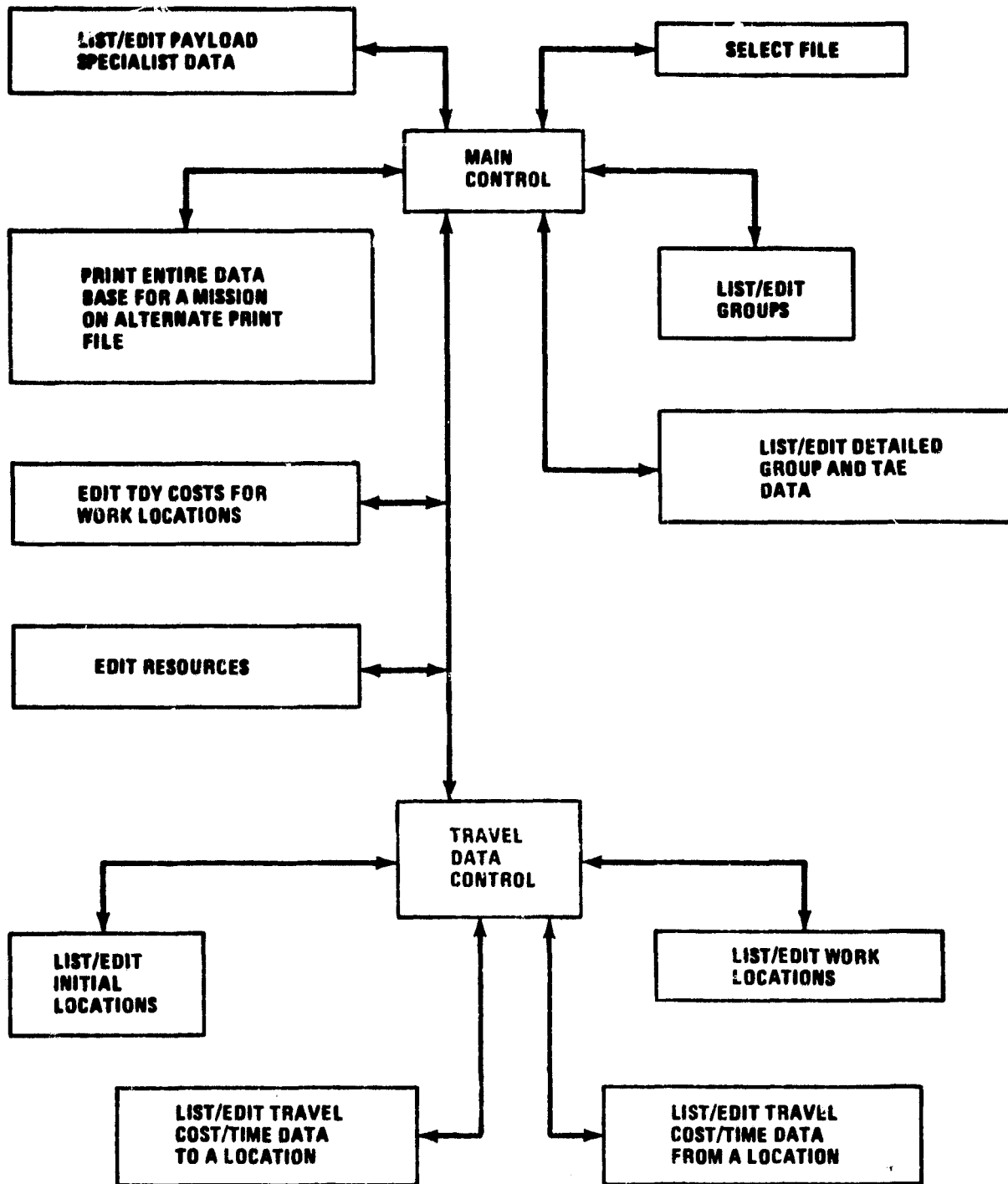
**Task Activity Element (TAE)** - The smallest identifiable activity in which the payload crew trains.

**APPENDIX B**

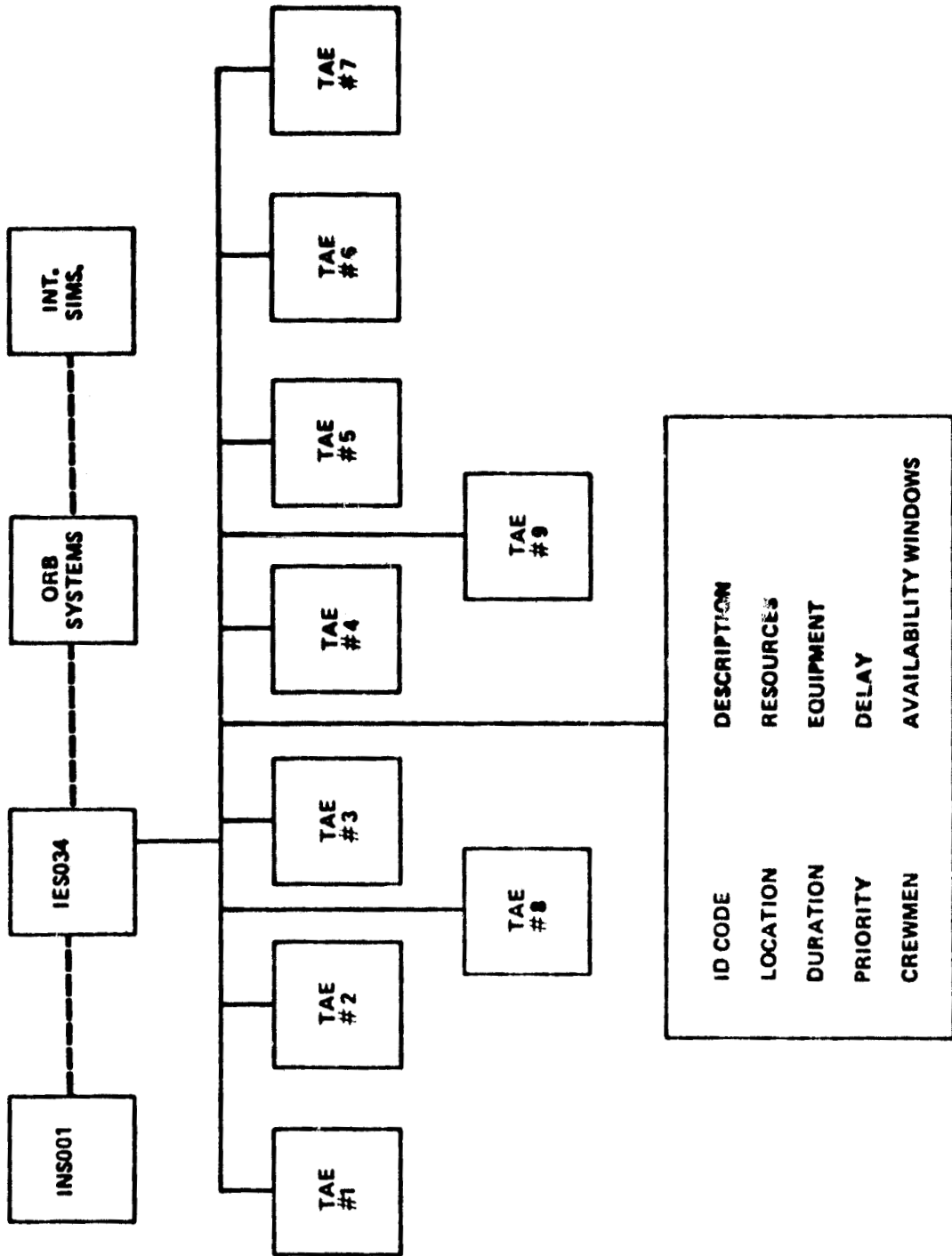
**PACTDB MODULE BLOCK DIAGRAM  
AND COMPUTER CONFIGURATION**



# PACTDB MODULE BLOCK DIAGRAM



# DATA BASE FORMAT



## **Computer Configuration**

**Language - Fortran**

**Core Requirement - 39.75K**

**Input Files: A PACT Data Base Name-directed File to input/edit data**

**APPENDIX C**

**PACTDB TUTORIAL DISPLAYS**

## PACTDB EXPLANATORY NOTES

Page No.	Explanation
C1	Main Menu page.
C2	Main menu page, Option 1, has been selected by the user. When the return key is hit, the page will turn. Note: An illegal number or no number will turn the page back to the main menu when the return key is hit.
C3	User has specified a file labeled <u>TRAINING</u> . The computer has asked for a write key which the user must know to access the file. The write key is entered directly on the five ampersands (@@@@@) to prevent its divulgence to unauthorized viewers. If the key is correct, the page will turn when the return key is hit. Otherwise, the user will be asked to enter the correct key.
C4	Main Menu, Option 2, has been selected by the user. When the return key is hit, the page will turn.
C5	The user must specify a mission if different from the current mission shown. Note: There may be no current mission shown, in which case, the user must specify a mission. When the return key is hit, the page will turn.
C6	The user can add, delete or edit TAE groups. The <u>Insert New</u> command will add a new TAE group after the last TAE group listed, e.g., <u>Insert LST</u> would add LST following SLSY53. The <u>Insert New After Old</u> command would add a new TAE group after the old TAE grouping. <u>Insert LSS After INS003</u> would add LSS between INS003 and INS004. The <u>Delete Old</u> command will delete the TAE group specified, e.g., <u>Delete 1ES027</u> would cause 1ES027 to be deleted. The <u>Redraw</u> command would be given to update the screen after all changes have been made, e.g., after adding and deleting TAE groups.
C6A	The <u>Edit Old</u> command allows the user to proceed to another page and change detail TAE data, e.g., <u>EDIT INS005</u> calls up page C7. If the return key is hit with no entry, the page will turn to the Main Menu.
C7	Tutorial instructions for editing the selected TAE group. When the return key is hit, the page will turn.

Page No.	Explanation
C8	Detailed TAE Group Data. When S is entered followed by hitting the return key, the page will turn to the Main Menu.
C9	Main Menu Option 3 has been selected by the user. When the return key is hit, the page will turn.
C10	User has specified a file labeled <u>TRAINING</u> . The computer has asked for a write key which the user must know to access the file. The write key is entered directly on the five ampersands (#####) to prevent its divulgence to unauthorized viewers. If the key is correct, the page will turn when the return key is hit. Otherwise, the user will be asked to enter the correct key. Note: File and key specified only once.
C11	The user must specify a mission if different from the current mission shown. Note: There may be no current mission shown in which case, the user must specify a mission. When the return key is hit, the page will turn.
C12	User must select a TAE group to edit, e.g., INS005. When the return key is hit, the page will turn.
C13	Tutorial instructions for editing the selected TAE Group. When the return key is hit, the page will turn.
C14	Detailed TAE Group Data. When S is entered followed by hitting the return key, the page will turn to the Main Menu.
C15	Main Menu Option 4 has been selected by the user. When the return key is hit, the page will turn.
C16	Travel Menu Option 1 has been selected. When the return key is hit, the page will turn.
C17	The user can add and delete initial locations. The commands are the same as Page C6.
C18	Travel Menu, Option 2 has been selected by the user. When the return key is hit, the page will turn.

Page No.	Explanation
C19	The user can add and delete work locations. Commands are the same as page C5.
C20	Travel Menu, Option 3 has been selected by the user. When the return key is hit, the page will turn.
C21	The user must specify a location, e.g., LA. When the return key is hit, the page will turn.
C22	The user can add time and cost data, e.g., Europe = 100 100 will add 100 in the cost column and 100 in the time column by Europe after the command Redraw is given. When the return key is hit with no entry, the page is turned to the Travel Menu.
C23	Travel Menu, Option 4 has been selected by the user. When the return key is hit, the page will turn.
C24	The user must specify a location, e.g., LA. When the return key is hit, the page will turn.
C25	The user can add time and cost data, e.g., Europe = 100 100 will add 100 in the cost column and 100 in the time column by Europe after the command Redraw is given. When the return key is hit with no entry, the page is turned to the Travel Menu.
C26	Travel Menu, Option 0 has been selected. When the return key is hit, the main menu page will return.
C27	Main Menu, Option 5 has been selected by the user. When the return key is hit, the page will turn.
C28	The user must specify a mission if different from the current mission shown.
C29	To add a payload specialist, the user types <u>Insert New</u> e.g., <u>Insert PS6</u> to add a location, the user types <u>old</u> = <u>Initial Location Code</u> , e.g., PS7 = DENVER. When the return key is hit with no entry, the page will turn to the main menu.

Page No.	Explanation
C30	Main Menu, Option 6 has been selected by the user. When the return key is hit the page will turn.
C31	The user can assign TDY costs to one location by command LOCATION = COST e.g., EUROPE = 60 or to all locations by command ALL = COST e.g. ALL = 60.
C32	Main Menu, Option 7 has been selected by the user. When the return key is hit the page will turn.
C33	The user can add and delete resources using commands insert, insert after, and delete.
C34	Main Menu, Option 8 has been selected by the user. When the return key is hit, the page will turn.
C35	The user must specify a mission is different from the current mission shown.
C36	The computer prints out the indicated information on the line printer. When the return key is hit with no entry, the page will turn to the main menu.
C37	Main Menu, Option 0 has been selected by the user. When the return key is hit, the page will turn and PACTS will be terminated. The system will then be in the MIPS mode.
C38	Standard UNIVAC 1108 Termination Procedures.

- NOTE: 1. Tutorial Display Data in this appendix is SL1 Mission Data.
2. PACTDB can be called by standard UNIVAC 1108 and MIPS procedures as shown on the tutorial displays on pages 27 and 28; however, PACTDB can also be called up by using PACTS Main Menu Item 2 or PACTED Main Menu Item 7.



PORT 25/49 SIGNON - HOST1(2X0) UP HOST2(2X0) UP  
DTK051  
ENTER USERID/PASSWORD:  
>PACTS/HCC

\*DESTROY USERID/PASSWORD ENTRY  
\*UNIVAC 1100 OPERATING SYSTEM LEV. AL36R2BHOST1(RSI)\*  
\*\*\*\*\*

RUN NUMBER 12

LAST RUN AT: 070280 083555  
DATE: 070280 TIME: 083933  
>@MIPS,L

MIPS INITIALIZATION IS IN PROGRESS  
OFF-LINE MAINTENANCE PROCESSOR LAST RUN AT 06/25/79 05:41:52  
TOTAL SUP TIME - 19.85 MIN  
SELECT NEW PRINT FILE OPTION:  
1 - WRITE PRINT FILE ON PAPER  
2 - WRITE PRINT FILE ON FICHE  
MIPS>1  
A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS093645IP8F8.  
INSERT COMMANDS : (INSERT HELP FOR TUTORING)  
MIPS>RUN PACTDB  
MIPS>GO

08/24/78 10:02:24



**PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )**

- 0 - TERMINATE**
- 1 - SPECIFY PACTS DATA BASE FILE**
- 2 - EDIT LIST OF TAE GROUPS**
- 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA**
- 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA**
- 5 - EDIT PAYLOAD SPECIALIST DATA**
- 6 - EDIT TDY COST FOR WORK LOCATIONS**
- 7 - EDIT LIST OF RESOURCES**
- 8 - LIST PACTS INPUT DATA BASE**

**NIPS>**

08/24/78 10:02:24



**PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )**

- 0 - TERMINATE**
- 1 - SPECIFY PACTS DATA BASE FILE**
- 2 - EDIT LIST OF TAE GROUPS**
- 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA**
- 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA**
- 5 - EDIT PAYLOAD SPECIALIST DATA**
- 6 - EDIT TDY COST FOR WORK LOCATIONS**
- 7 - EDIT LIST OF RESOURCES**
- 8 - LIST PACTS INPUT DATA BASE**

**MIPS>1**

SPECIFY FILE NAME OF PACTS DATA BASE FILE

CURRENTLY

MIPS>TRAINING

NDF TRAINING LAST WRITE 08/23/78 13:19:04 1% OF USABLE SPACE

WHAT IS WRITE KEY FOR FILE TRAINING

MIPS>000000

08/24/78 10:03:35



PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )

- 0 - TERMINATE
  - 1 - SPECIFY PACTS DATA BASE FILE
  - 2 - EDIT LIST OF TAE GROUPS
  - 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA
  - 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA
  - 5 - EDIT PAYLOAD SPECIALIST DATA
  - 6 - EDIT TDY COST FOR WORK LOCATIONS
  - 7 - EDIT LIST OF RESOURCES
  - 8 - LIST PACTS INPUT DATA BASE
- MIPS>2

ORIGINAL PAGE IS  
OF POOR QUALITY

**NIPS>SL1**  
**SPECIFY MISSION**

**- CURRENTLY**







08/24/78 10:15:22

NIPS

## INSTRUCTIONS FOR EDITING A GROUP OF TAEs

LOCATE CROSSHAIRS ON VALUE TO BE CHANGED, ENTER CONTROL CHARACTER AND RETURN KEY  
(IF CROSSHAIR(S) ARE NOT VISIBLE THEY MAY BE OFF SCREEN - TURN THUMB WHEELS AND/OR PRESS RETURN KEY)

THE FOLLOWING CONTROL CHARACTERS ARE VALID, OTHERS WILL BE IGNORED

- E - ENTER NEW VALUE OVERSTRIKING OLD VALUE
- B - ENTER NEW VALUE AT BOTTOM OF SCREEN
- O OR 0 - OMIT ALL DATA FOR THIS ITEM
- R - REDRAW ENTIRE SCREEN
- S - RETURN TO PRECEDING MENU
- 1,2...9 - REDRAW SCREEN STARTING WITH INDICATED TAE
- A - ADD OR INSERT ANOTHER TAE TO THIS GROUP  
QUESTION 'WHICH TAE' WILL BE ASKED AND SCREEN WILL BE REDRAWN
- D - DELETE A TAE ( QUESTION 'WHICH TAE' WILL BE ASKED )
- H - WILL REDISPLAY THIS PAGE
- N - NEXT GROUP TO BE DISPLAYED

NOTE: QUESTION 'WHICH GROUP TO BE DISPLAYED NEXT' WILL BE ASKED  
WHEN EDITING RESOURCES, EQUIPMENT, OR CREWMAN, THE ENTIRE  
STRING MUST BE ENTERED SEPARATED BY SPACES  
WHEN EDITING A DATE THE MONTH, DAY AND YEAR MUST  
BE ENTERED ( MM/DD/YY )

READ/COPY - THIS INPUT WILL NOT BE INTERPRETED  
NIPS>

HIPS

06/25/79 09:50:24

GROUP ID IN5005 ( SL1 ) TYPE EXP EFFECTIVE DATE 6/1/79

NUMBER OF TAE'S 4

DESCRIPTION:		AVOIDANCE WINDOWS FOR ENTIRE GROUP		NUMBER OF TAE'S		EFFECTIVE DATE	
TO	TO	TO	TO	TO	TO	TO	TO
TRAINING ACTIVITY ELEMENT (TAE) NUMBER 1							
LOCATION CODE : 0F DELAY (DY):							
BURSTION (HRS) : 20 RESOURCES:							
PRIORITY (H,M,L) : H EQUIPMENT: FLTHOU							
PAYLOAD CREWMAN: ALL							
DESCRIPTION: SCIENCE, HDWARE, & PROCEDURES		TAE ID : SHAP		3/1/79 TO 12/1/79		TO	
TAE ID : SHAP				TO		TO	
TRAINING ACTIVITY ELEMENT (TAE) NUMBER 2							
LOCATION CODE : 0F DELAY (DY):							
BURSTION (HRS) : 8 RESOURCES: NETS							
PRIORITY (H,M,L) : H EQUIPMENT:							
PAYLOAD CREWMAN: ALL							
DESCRIPTION: DDS INTERFACE TNG(1)		TAE ID : DDS1		2/1/80 TO 6/1/80		TO	
TAE ID : DDS1				TO		TO	
TRAINING ACTIVITY ELEMENT (TAE) NUMBER 3							
LOCATION CODE : 0F DELAY (DY): 10							
BURSTION (HRS) : 8 RESOURCES: NETS							
PRIORITY (H,M,L) : H EQUIPMENT:							
PAYLOAD CREWMAN: ALL							
DESCRIPTION: DDS INTERFACE TNG(2)		TAE ID : DDS2		3/1/80 TO 5/30/80		TO	
TAE ID : DDS2				TO		TO	
TRAINING ACTIVITY ELEMENT (TAE) NUMBER 4							
LOCATION CODE : 0F DELAY (DY): 0							
BURSTION (HRS) : 4 RESOURCES: NETS							
PRIORITY (H,M,L) : H EQUIPMENT:							
PAYLOAD CREWMAN: ALL							
DESCRIPTION: DDS REPEATER TRAINING		TAE ID : DDS3		7/1/80 TO 12/3/80		TO	
TAE ID : DDS3				TO		TO	

08/24/78 10:19:01

MIPS

PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )

- 0 - TERMINATE
- 1 - SPECIFY PACTS DATA BASE FILE
- 2 - EDIT LIST OF TAE GROUPS
- 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA
- 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA
- 5 - EDIT PAYLOAD SPECIALIST DATA
- 6 - EDIT TDY COST FOR WORK LOCATIONS
- 7 - EDIT LIST OF RESOURCES
- 8 - LIST PACTS INPUT DATA BASE

MIPS>3

DO YOU WISH TO CHANGE MISSION ID

MIPS>NO

SPECIFY FILE NAME OF PACTS DATA BASE FILE

CURRENTLY

MIPS>TRAINING

NDF

WHAT IS WRITE KEY FOR FILE TRAINING

MIPS>000000

11:38:12 24X OF USABLE SPACE

ORIGINAL PAGE IS  
OF POOR QUALITY

CURRENTLY

SPECIFY MISSION

NIPS>SLI

SPECIFY GROUP OF TAE'S TO BE EDITTED - CURRENTLY 1NS005  
ENTER RETURN TO RETURN TO MAIN MENU  
MIPS>

03/31/78 12:56:48

HIPS

### INSTRUCTIONS FOR EDITING A GROUP OF TAES

LOCATE CROSSHAIRS ON VALUE TO BE CHANGED. ENTER CONTROL CHARACTER AND RETURN KEY.  
(IF CHARACTER IS NOT VISIBLE THEY MAY BE OFF SCREEN - TURN THEM UP OR DOWN WITH RETURN KEY)

THE FOLLOWING CONTROL CHARACTERS ARE VALID. OTHERS WILL BE IGNORED

- E - ENTER NEW VALUE OVERSTRIKING OLD VALUE
- B - ENTER NEW VALUE AT BOTTOM OF SCREEN
- O OR @ - OMIT ALL DATA FOR THIS ITEM
- R - REDRAW ENTIRE SCREEN
- S - RETURN TO PRECEDING MENU
- 1,2,...,9 - REDRAW SCREEN STARTING WITH INDICATED TAE
- A - ADD OR INSERT ANOTHER TAE TO THIS GROUP
- D - QUESTION 'WHICH TAE' WILL BE ASKED AND SCREEN WILL BE REFORMED
- H - DELETE A TAE ( QUESTION 'WHICH TAE' WILL BE ASKED )
- M - WILL REDISPLAY THIS PAGE
- M - NEXT GROUP TO BE DISPLAYED
- M - QUESTION 'WHICH GROUP TO BE DISPLAYED NEXT' WILL BE ASKED

NOTE: WHEN EDITING RESOURCES, EQUIPMENT, OR CREWMAN, THE ENTIRE STRING MUST BE ENTERED, SEPARATED BY SPACES. WHEN EDITING A DATE THE MONTH, DAY AND YEAR MUST BE ENTERED ( MM/DD/YY )

ORIGINAL PAGE IS OF THIS QUALITY

READ/COPY - THIS INPUT WILL NOT BE INTERPRETED  
HIPS2





06/25/79 09:53:18

EFFECTIVE DATE 8/1/78

GROUP ID 1N5005 ( SL1 ) TYPE EXP

DESCRIPTION:

TO TO  
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08/24/78 10:04:49

MIPS

PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )

- 0 - TERMINATE
- 1 - SPECIFY PACTS DATA BASE FILE
- 2 - EDIT LIST OF TAE GROUPS
- 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA
- 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA
- 5 - EDIT PAYLOAD SPECIALIST DATA
- 6 - EDIT TDY COST FOR WORK LOCATIONS
- 7 - EDIT LIST OF RESOURCES
- 8 - LIST PACTS INPUT DATA BASE

MIPS>4

TRAVEL COST AND TRAVEL TIME DATA

- 0 - RETURN TO MAIN CONTROL
  - 1 - EDIT LIST OF INITIAL LOCATIONS
  - 2 - EDIT LIST OF WORK LOCATIONS
  - 3 - EDIT TRAVEL COST/TIME DATA TO A PARTICULAR LOCATION
  - 4 - EDIT TRAVEL COST/TIME DATA FROM A PARTICULAR LOCATION
- HIPS>1

06/25/79 09:54:51

MIPS

LIST OF INITIAL LOCATIONS

FOLLOWING COMMANDS ARE VALID  
INSERT NEW  
INSERT NEW AFTER OLD  
DELETE OLD  
REDRAW

EUROPE  
BOSTON  
JSC  
LA  
MIPS) INSERT KSC  
MIPS) INSERT AFSC AFTER JSC  
MIPS) DELETE KSC  
MIPS) DELETE AFSC  
MIPS)

RECEIVED  
MIPS QUALITY

TRAVEL COST AND TRAVEL TIME DATA

- 0 - RETURN TO MAIN CONTROL
  - 1 - EDIT LIST OF INITIAL LOCATIONS
  - 2 - EDIT LIST OF WORK LOCATIONS
  - 3 - EDIT TRAVEL COST/TIME DATA TO A PARTICULAR LOCATION
  - 4 - EDIT TRAVEL COST/TIME DATA FROM A PARTICULAR LOCATION
- MIPS>2

06/25/79 09:58:18

MIPS

LIST OF WORK LOCATIONS

FOLLOWING COMMANDS ARE VALID  
INSERT NEW  
INSERT NEW AFTER OLD  
DELETE OLD  
REDRAW

ARHJS  
SF

KSC  
RICH  
RSFC  
CANADA  
PHILY  
JAPAN  
PORZ  
PARIS  
MUNICH  
FRANK  
LONDON  
ORLEAN  
TOULOU  
BREMEN  
LINDAU  
MIPS>

TRAVEL COST AND TRAVEL TIME DATA

- 0 - RETURN TO MAIN CONTROL
  - 1 - EDIT LIST OF INITIAL LOCATIONS
  - 2 - EDIT LIST OF WORK LOCATIONS
  - 3 - EDIT TRAVEL COST/TIME DATA TO A PARTICULAR LOCATION
  - 4 - EDIT TRAVEL COST/TIME DATA FROM A PARTICULAR LOCATION
- MIPS>3

SPECIFY LOCATION FOR WHICH TRAVEL COST/TIME DATA IS TO BE EDITED  
CURRENTLY  
MIPS>LA



MIPS

06/25/79 09:59:40

TRAVEL COST/TIME DATA TO LA

COST IN FV1977 DOLLARS	EDIT VIA LOCATION - COST TIME	FROM	COST	TIME
TIME IN DAYS	ENTER HEREIN TO REDRAW	FROM	COST	TIME
FROM	FROM	FROM	COST	TIME
EUROPE	612			2
BOSTON	239			1
LSC	138			0
LA	0			0
KSC	0			0
RICH	183			1
MSFC	170			1
CANADA	201			1
PHILY	215			1
JAPAN	859			1
PORT	612			2
PARIS	612			2
MUNICH	612			2
FRANK	612			2
LONDON	612			2
ORLEAN	0			2
TOULOU	0			2
BREVEN	0			2
LINDAU	0			2
AGNIS	0			2
SF	40			2

MIPS

TRAVEL COST AND TRAVEL TIME DATA

- 0 - RETURN TO MAIN CONTROL
  - 1 - EDIT LIST OF INITIAL LOCATIONS
  - 2 - EDIT LIST OF WORK LOCATIONS
  - 3 - EDIT TRAVEL COST/TIME DATA TO A PARTICULAR LOCATION
  - 4 - EDIT TRAVEL COST/TIME DATA FROM A PARTICULAR LOCATION
- MIPS>4

SPECIFY LOCATION FOR WHICH TRAVEL COST/TIME DATA IS TO BE EDITED  
CURRENTLY LA  
MIPS>

ORIGINAL PAGE IS  
OF POOR QUALITY

MIPS

06/25/79 10:01:04

TRAVEL COST/TIME DATA FROM LA

COST IN DAYS	TIME TO	EDIT VIA LOCATION - COST TIME	ENTER REDRAW TO REDRAW	TO	COST	TIME
EUROPE	512					2
BOSTON	230					1
JSC	138					1
NICH	183					1
CANADA	201					1
PHILLY	215					1
JAPAN	250					1
FORZ	0					1
PARIS	0					1
MUNICH	0					1
FRANK	0					1
LONDON	0					1
ORLEAN	0					1
TOULOU	0					1
BREITEN	0					1
LITHUAN	0					1
ARRUS	0					1
SF	40					1
LA	0					1
MSFC	170					1

MIPS

TRAVEL COST AND TRAVEL TIME DATA

- 0 - RETURN TO MAIN CONTROL
  - 1 - EDIT LIST OF INITIAL LOCATIONS
  - 2 - EDIT LIST OF WORK LOCATIONS
  - 3 - EDIT TRAVEL COST/TIME DATA TO A PARTICULAR LOCATION
  - 4 - EDIT TRAVEL COST/TIME DATA FROM A PARTICULAR LOCATION
- MIPS>0

MIPS

08/24/78 10:05:28

PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )

- 0 - TERMINATE
- 1 - SPECIFY PACTS DATA BASE FILE
- 2 - EDIT LIST OF TAE GROUPS
- 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA
- 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA
- 5 - EDIT PAYLOAD SPECIALIST DATA
- 6 - EDIT TDY COST FOR WORK LOCATIONS
- 7 - EDIT LIST OF RESOURCES
- 8 - LIST PACTS INPUT DATA BASE

MIPS>5

- CURRENTLY SL1

SPECIFY MISSION

NIPS>

ORIGINAL PAGE IS  
OF PAIR OF 111

06/25/79 10:02:41

MIPS

LIST OF PAYLOAD SPECIALIST FOR MISSION SL1

FOLLOWING COMMANDS ARE UNLID  
INSERT NEW  
INSERT NEW AFTER OLD  
DELETE OLD  
REPAIR  
OLD = INITIAL LOCATION CODE

ID	HOME	ID	HOME
PS1	LA	MS1	JSC
PS2	BOSTON	MS2	JSC
PS3	EUROPE		
PS4	EUROPE		
PS5	EUROPE		

MIPS>



08/24/78 10:06:07

MIPS

PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )

- 0 - TERMINATE
- 1 - SPECIFY PACTS DATA BASE FILE
- 2 - EDIT LIST OF TAE GROUPS
- 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA
- 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA
- 5 - EDIT PAYLOAD SPECIALIST DATA
- 6 - EDIT TDY COST FOR WORK LOCATIONS
- 7 - EDIT LIST OF RESOURCES
- 8 - LIST PACTS INPUT DATA BASE

MIPS>6



06/25/79 10:03:28

TDY COST FOR WORK LOCATIONS

FOLLOWING COMMANDS ARE VALID  
LOCATION - COST  
ALL - COST  
REDRAW

LOCATION	TDY COST	LOCATION	TDY COST	LOCATION	TDY COST
KSC	36				
RICH	36				
NSFC	36				
CANADA	48				
PHILY	36				
JAPAN	75				
SF	48				
PORTZ	60				
PARIS	60				
MUNICH	60				
FRANK	60				
LONDON	60				
ORLEAN	60				
TOLLOU	60				
BREMEN	60				
LINDSU	60				
AGRLS	60				
JSC	36				
LA	48				
EUROPE	60				

MIPS>

MIPS

08/24/78 10:06:42

PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )

- 0 - TERMINATE
  - 1 - SPECIFY PACTS DATA BASE FILE
  - 2 - EDIT LIST OF TAE GROUPS
  - 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA
  - 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA
  - 5 - EDIT PAYLOAD SPECIALIST DATA
  - 6 - EDIT TDY COST FOR WORK LOCATIONS
  - 7 - EDIT LIST OF RESOURCES
  - 8 - LIST PACTS INPUT DATA BASE
- MIPS>

SECRET

06/25/79 10:04:34

MIPS

### LIST OF RESOURCES

FOLLOWING COMMANDS ARE VALID  
INSERT NEW  
INSERT NEW AFTER OLD  
DELETE OLD  
REDRAW

METS  
CLROOM  
ALTRM  
IUFAC  
SLM/U  
KC135  
SLED

MIPS>

08/24/78 10:07:18

MIPS

PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )

- 0 - TERMINATE
- 1 - SPECIFY PACTS DATA BASE FILE
- 2 - EDIT LIST OF TAE GROUPS
- 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA
- 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA
- 5 - EDIT PAYLOAD SPECIALIST DATA
- 6 - EDIT TDY COST FOR WORK LOCATIONS
- 7 - EDIT LIST OF RESOURCES
- 8 - LIST PACTS INPUT DATA BASE

MIPS>8

SL1

~ CURRENTLY

SPECIFY MISSION

MIPS>

SPECIFY MISSION

- CURRENTLY SL1

MIPS>

LIST OF TAE GROUPS FINISHED  
GROUP AND TAE DATA FINISHED  
INITIAL LOCATIONS FINISHED  
WORK LOCATIONS FINISHED  
PAYLOAD SPECIALIST FINISHED  
TDY LIST COMPLETE  
RESOURCES LIST COMPLETE  
LIST OF PACT DATA BASE COMPLETE  
READ/COPY - THIS INPUT WILL NOT BE INTERPRETED  
MIPS>

MIPS

08/24/78 10:46:12

PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )

- 0 - TERMINATE
  - 1 - SPECIFY PACTS DATA BASE FILE
  - 2 - EDIT LIST OF TAE GROUPS
  - 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA
  - 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA
  - 5 - EDIT PAYLOAD SPECIALIST DATA
  - 6 - EDIT TDY COST FOR WORK LOCATIONS
  - 7 - EDIT LIST OF RESOURCES
  - 8 - LIST PACTS INPUT DATA BASE
- MIPS>0



TOTAL SUP TIME - 1.58 MIN  
IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

SELECT NEW PRINT FILE OPTION:

1 - WRITE PRINT FILE ON PAPER

2 - WRITE PRINT FILE ON FICHE

MIPS>1

A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS100629XPSFS.

INSERT COMMANDS : (INSERT HELP FOR TUTORING)

MIPS>STOP

MIPS IS EXITING

PRINT FILES WILL BE DELETED IF NOT TRANSMITTED

IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

NORMAL EXIT.

DS)STOP: MIPS

>@FIN

14885 (MILLISECON

295 TOTAL SUPS:

RUNID: ELPACT ACCT: 1HEL12493200 PROJECT: JACKIEBIN207

STOP: MIPS

TIME;

SUPS: 00:01:47.014

CPU: 00:00:11.721

CC/ER: 00:00:59.368

READ: 66 PAGES: 33

START: 09:40:37 JUN 25, 1979

CBSUPS: 030037005

I/O: 00:00:35.924

WAIT: 00:15:42.083

FIN: 10:07:29 JUN 25, 1979

-----  
TECHNENT TYPE YOU WILL GET ANY TYPE SERVO THAT HAPPENS TO BE  
AVAILABLE, EX: U34, U30, 8C, OR 8C9. ALL QASG CARDS THAT YOU USE 'T'  
EQUIPMENT TYPES SHOULD BE CHANGED TO U9S IMMEDIATELY.  
EXAMPLE: QASG,T FILENAME,T,REELNR CHANGE TO QASG,T FILENAME,U9S,REELNR  
-----

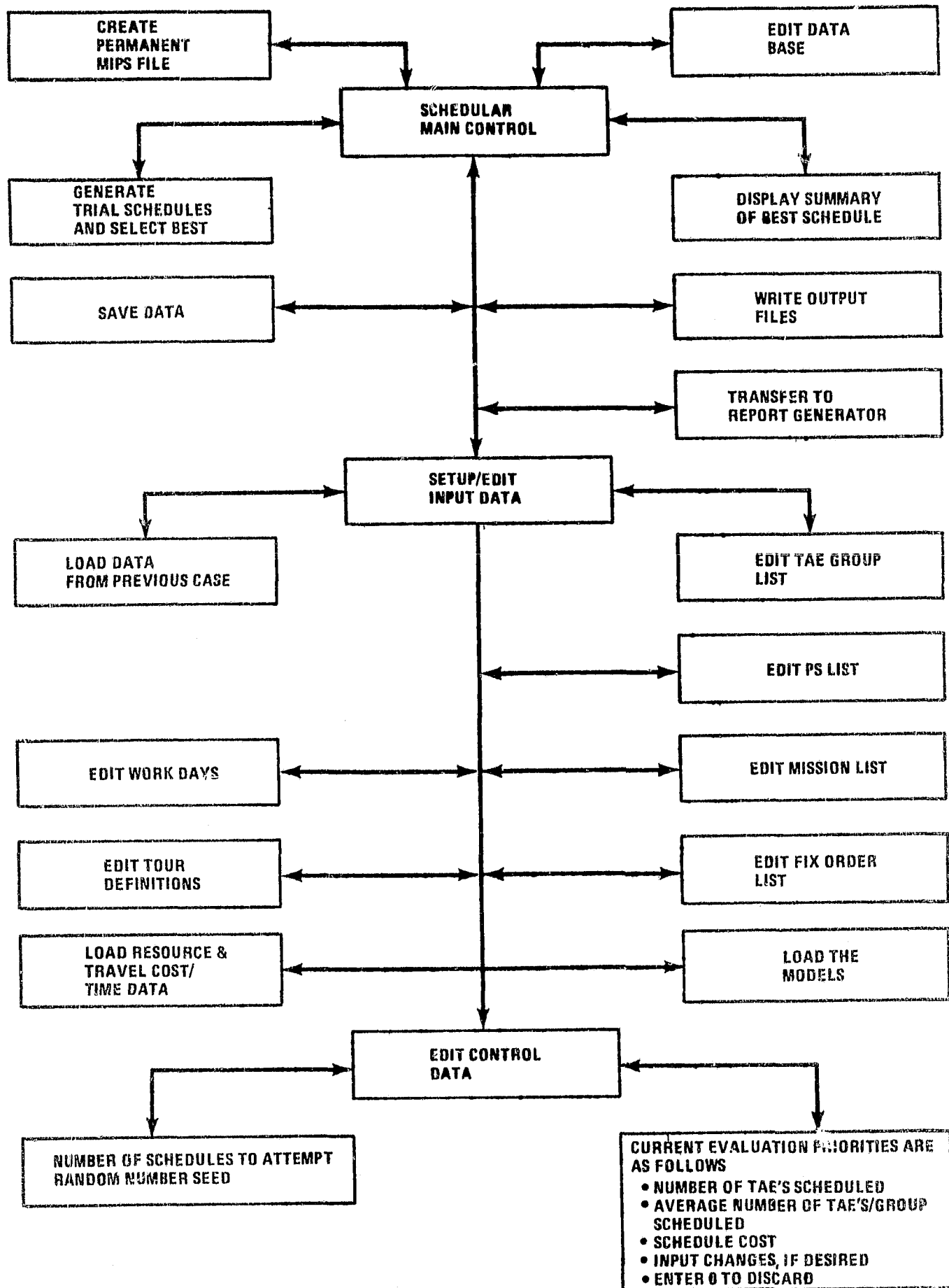
\$TERMINAL INACTIVE\$

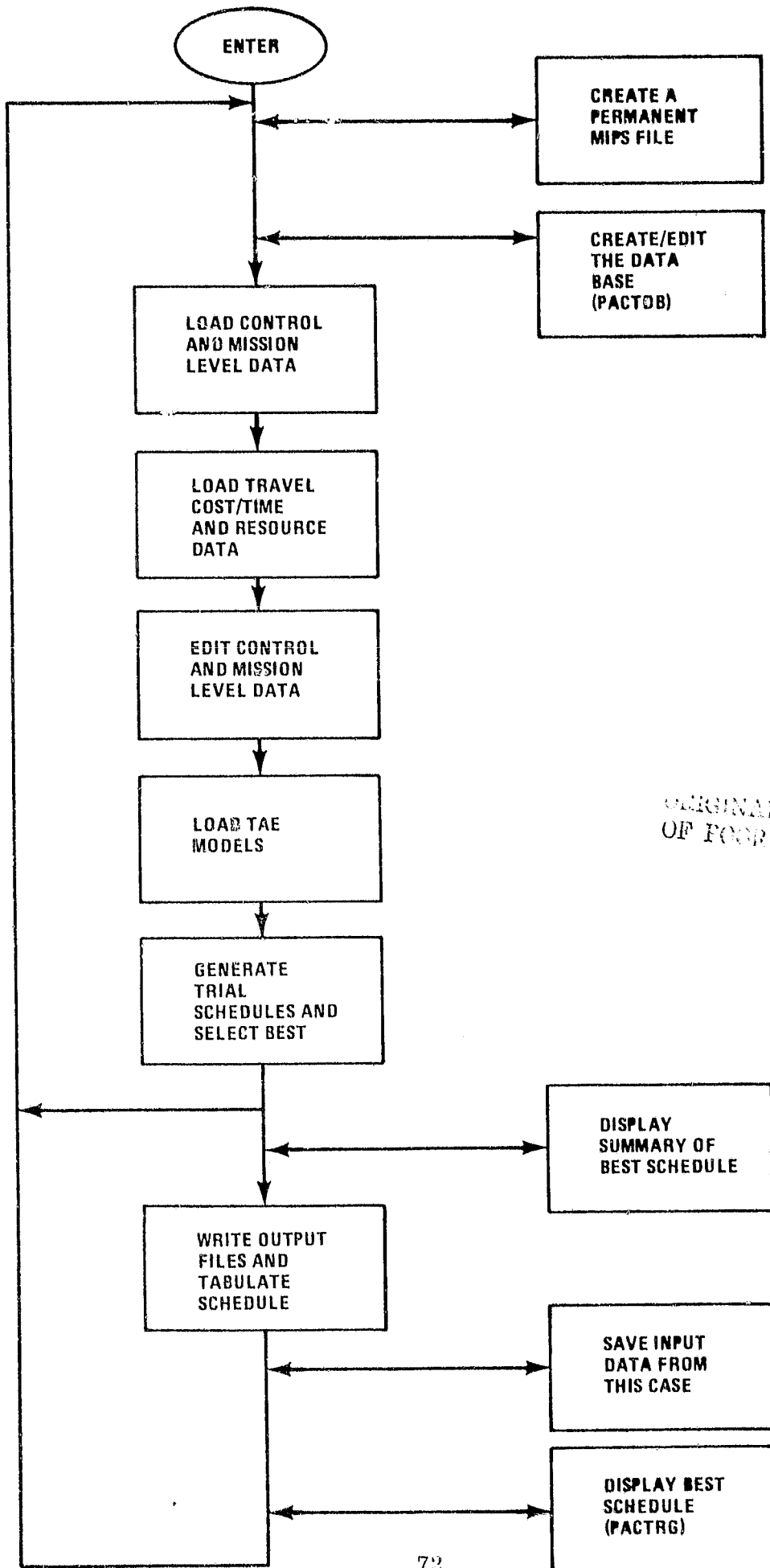
>@OTERM

APPENDIX D

FACTS MODULE BLOCK DIAGRAM  
AND COMPUTER CONFIGURATION

# PACTS MODULE BLOCK DIAGRAM





ORIGINAL PAGE  
OF FOUR

## Computer Configuration

Language: FORTRAN

Core Requirement = 33.27K

Input Files: Name-Directed File (NDF) which contains mission dependent data and TAE models.

Output Files: List Directed Files (LDF) which contains schedule time, resource, and travel cost/time data.

ON/OFF file contains Crew activities.

APPENDIX E  
FACTS TUTORIAL DISPLAYS

## PACTS EXPLANATORY NOTES

Page No.	Explanation
E1	Main Menu page
E2	Main Menu, Option 1, has been selected by the user. When the return key is hit, the page will turn. Note: Options 4, 5, and 6 are not available.
E3	Name-directed, list-directed, or ON-OFF files can be created by the user, e.g., PACTS-LD is a list directed file.
E4(A, B, C)	Name-directed, list-directed, or ON-OFF files can be created by the user, e.g., PACTS-OF-1 is an ON/OFF file.
E5	Main Menu, Option 2, has been selected by the user. Note: Options 4, 5, and 6 are not available.
E6	The PACTDB menu is available to the user. Note: For use of this menu, refer to Appendix C. PACTDB menu, Option 0, has been selected by the user which return the user to the PACTS menu.
E7	Main Menu, Option 3, has been selected by the user. Note: At this point options 4, 5, and 6 are not available.
E8	The SETUP/EDIT INPUT DATA Menu is available to the user.
E9	Setup Menu, Option 1, has been selected by the user.
E10	A file name and case number must be supplied by the user, e.g., PACTS-SCHED, Case 11.
E11	Setup Menu, Option 2, has been selected by the user.
E12	A file for reading travel/cost and resource data must be specified by the user, e.g., TRAINING.
E13	Setup Menu, Option 3, has been selected by the user.
E14	The number of schedules to run and random seed must be specified by the user, e.g., 1 1.
E15	The evaluation criteria must be specified by the user, e.g., 1 2 3.
E16	Setup Menu, Option 4, has been selected by the user.

Page No.	Explanation
E17	The user may insert or delete tours and assign starting and ending dates for a tour, e.g., DELETE INSERT , and = 7/1/78 8/1/79
E18	Setup Menu, Option 5, has been selected by the user. (Not available).
E19	Setup Menu, Option 6, has been selected by the user.
E20	The user may specify that mission data be loaded from a PACTDB file, e.g., TRAINING.
E21	Setup Menu, Option 7, has been selected by the user.
E22	The user must specify the mission, e.g., SL1.
E23	The user may insert, delete, or assign locations to the Payload Specialists, e.g., INSERT PS7, DELETE PS7, PS7 = KOKO.
E24	Setup Menu, Option 8, has been selected by the user.
E25	The user may insert or delete TAE groups, e.g., INSERT HS7, INSERT HS8 AFTER MEU, DELETE HS7, DELETE HS8.
E26	Setup Menu, Option 9, has been selected by the user.
E27	The user may insert or delete TAE groups into the fixed order scheduling list, e.g., insert INS001.
E28	Setup Menu, Option 10, has been selected by the user.
E29	The PACTDB file containing the TAE models must be specified, e.g., TRAINING.
E30	Setup Menu, Option 0, has been selected.
E31	Main Menu, Option 4, is now ready and has been selected. Note: Options 5 and 6 are still unavailable.
E32	PACT is generating schedule.



Page No.	Explanation
E33	Main Menu, Option 5, has been selected by the user. Note: Options 5 and 6 are ready.
E34	PACTS prints out the schedule summary.
E35	Main Menu, Option 6, has been selected by the user.
E36	The user must specify the LDF and ON/OFF files, e.g., PACTLD and PACTOF.
E37	Main Menu, Option 7, has been selected by the user. The user has an option to write the files and go to the Report Generator by answering YES or to go directly to the Report Generator by answering NO.
E38	PACTRG Main Menu, Option 0, returns user to PACTS.
E39	Main Menu, Option 8, has been selected by the user.
E40	The file for writing the data must be specified by the user e.g., TRAINING, CASE 11.
E41	Main Menu, Option 0, has been selected by the user which puts the user back into the MIPS system.
E42	Standard UNIVAC 1108 Termination Procedures.

- NOTE: 1. Tutorial Display Data in this Appendix is SL1 Mission Data.
2. PACTS can be called up by standard Univac procedures as shown on the tutorial on Pages 37 and 37A.

PORT 25/49 SIGNON - HOST1(2X0) UP HOST2(2X0) UP  
DTK051  
ENTER USERID/PASSWORD:  
>PACTS/HCC

\*DESTROY USERID/PASSWORD ENTRY  
\*UNIVAC 1100 OPERATING SYSTEM LEU. AL36R2BHOST1(RSI)\*  
\*\*\*\*\*SY\*\*\*\*\*

RUN NUMBER 12

LAST RUN AT: 070280 083555  
DATE: 070280 TIME: 083933  
>@MIPS,L

MIPS INITIALIZATION IS IN PROGRESS  
OFF-LINE MAINTENANCE PROCESSOR LAST RUN AT 06/21/79 10:59:43  
TOTAL SUP TIME = 1.77 MIN  
SELECT NEW PRINT FILE OPTION:  
1 - WRITE PRINT FILE ON PAPER  
2 - WRITE PRINT FILE ON FICHE  
MIPS>1  
A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS142010XP9F8.  
INSERT COMMANDS : (INSERT HELP FOR TUTORING)  
MIPS>RUN PACTS  
MIPS>GO

ORIGINAL FILE

06/21/79 14:22:33

MIPS

PAYLOAD CREW SCHEDULER

- 0 - TERMINATE
- 1 - CREATE A PERMANENT MIPS FILE
- 2 - TRANSFER TO DATA BASE EDITOR (PACTDB)
- 3 - SETUP/EDIT INPUT DATA
- 4 - GENERATE TRIAL SCHEDULES AND SELECT BEST
- 5 - DISPLAY SUMMARY OF BEST SCHEDULE
- 6 - TABULATE SCHEDULE AND WRITE OUTPUT FILE
- 7 - TRANSFER TO REPORT GENERATOR (PACTRG)
- 8 - SAVE DATA FROM THIS CASE FOR FUTURE USE

OPTIONS 4, 5 AND 6 ARE NOT AVAILABLE  
MIPS>

06/21/79 14:22:33

**RIPS**

**PAYLOAD CREW SCHEDULER**

- 0 - TERMINATE
- 1 - CREATE A PERMANENT RIPS FILE
- 2 - TRANSFER TO DATA BASE EDITOR (PACTDB)
- 3 - SETUP/EDIT INPUT DATA
- 4 - GENERATE TRIAL SCHEDULES AND SELECT BEST
- 5 - DISPLAY SUMMARY OF BEST SCHEDULE
- 6 - TABULATE SCHEDULE AND WRITE OUTPUT FILE
- 7 - TRANSFER TO REPORT GENERATOR (PACTRG)
- 8 - SAVE DATA FROM THIS CASE FOR FUTURE USE

**OPTIONS 4, 5 AND 6 ARE NOT AVAILABLE**

**RIPS>1**

THE ENTRY OF A \$ SIGN WILL ABORT FILE CREATION  
WHAT IS THE NAME OF THE FILE TO BE CREATED?

UP TO 12 CHARACTERS ( A-Z, 0-9, - )

MIPS>PACT-LD-4  
SPECIFY THE TYPE OF FILE BY NUMBER

1- NAME-DIRECTED

2- LIST-DIRECTED

3- ON-OFF

MIPS>2  
SPECIFY THE MAXIMUM NUMBER OF RECORDS

MIPS>5000

SPECIFY A READ KEY IF DESIRED

MIPS>

SPECIFY A WRITE KEY IF DESIRED

MIPS>

SPECIFY NAME OF PERSON RESPONSIBLE FOR THIS FILE

MIPS>SHIPMAN

HOW LONG IS THE FILE TO BE MAINTAINED - DAYS?

MIPS>1

SPECIFY A 66 CHARACTER DESCRIPTION OF THE FILE

MIPS>PACTS OUTPUT FILE

DOES A DICTIONARY CURRENTLY EXIST FOR THIS FILE?

MIPS>NO

SPECIFY THE NUMBER OF WORDS PER RECORD

MIPS>12

SPECIFY FORTRAN DISPLAY FORMAT FOR DATA - DEFAULT

((IX,IPSE14.6))

USE ; TO CONTINUE FORMAT ONTO NEXT CARD

72 CHARACTERS PER CARD, 4 CARDS MAXIMUM

MIPS>

SPECIFY MNEMONIC FOR WORD 1

MIPS>A

SPECIFY MNEMONIC FOR WORD 2

MIPS>B

SPECIFY MNEMONIC FOR WORD 3

MIPS>

THE ENTRY OF A \$ SIGN WILL ABORT FILE CREATION  
WHAT IS THE NAME OF THE FILE TO BE CREATED?

UP TO 12 CHARACTERS ( A-Z, 0-9, - )

NIPS>FACTS-OF-2

SPECIFY THE TYPE OF FILE BY NUMBER

1- NAME-DIRECTED

2- LIST-DIRECTED

3- ON-OFF

NIPS>3

SPECIFY THE MAXIMUM NUMBER OF RECORDS

NIPS>10000

SPECIFY A READ KEY IF DESIRED

NIPS>

SPECIFY A WRITE KEY IF DESIRED

NIPS>

SPECIFY NAME OF PERSON RESPONSIBLE FOR THIS FILE

NIPS>DAVID SHIPMAN

HOW LONG IS THE FILE TO BE MAINTAINED - DAYS?

NIPS>180

SPECIFY A 66 CHARACTER DESCRIPTION OF THE FILE

NIPS>OUTPUT FILE FOR SL1



06/21/79 14:31:42

PAYLOAD CREW SCHEDULER

- 0 - TERMINATE
- 1 - CREATE A PERMANENT MIPS FILE
- 2 - TRANSFER TO DATA BASE EDITOR (PACTDB)
- 3 - SETUP/EDIT INPUT DATA
- 4 - GENERATE TRIAL SCHEDULES AND SELECT BEST
- 5 - DISPLAY SUMMARY OF BEST SCHEDULE
- 6 - TABULATE SCHEDULE AND WRITE OUTPUT FILE
- 7 - TRANSFER TO REPORT GENERATOR (PACTRG)
- 8 - SAVE DATA FROM THIS CASE FOR FUTURE USE

OPTIONS 4, 5 AND 6 ARE NOT AVAILABLE  
MIPS>2



06/21/79 14:32:35

MIPS

PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )

- 0 - TERMINATE
  - 1 - SPECIFY PACTS DATA BASE FILE
  - 2 - EDIT LIST OF TAE GROUPS
  - 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA
  - 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA
  - 5 - EDIT PAYLOAD SPECIALIST DATA
  - 6 - EDIT TDY COST FOR WORK LOCATIONS
  - 7 - EDIT LIST OF RESOURCES
  - 8 - LIST PACTS INPUT DATA BASE
- MIPS>0

06/21/79 14:33:42

MIPS

PAYLOAD CREW SCHEDULER

- 0 - TERMINATE
- 1 - CREATE A PERMANENT MIPS FILE
- 2 - TRANSFER TO DATA BASE EDITOR (PACTDB)
- 3 - SETUP/EDIT INPUT DATA
- 4 - GENERATE TRIAL SCHEDULES AND SELECT BEST
- 5 - DISPLAY SUMMARY OF BEST SCHEDULE
- 6 - TABULATE SCHEDULE AND WRITE OUTPUT FILE
- 7 - TRANSFER TO REPORT GENERATOR (PACTRG)
- 8 - SAVE DATA FROM THIS CASE FOR FUTURE USE

OPTIONS 4, 5 AND 6 ARE NOT AVAILABLE  
MIPS>3

06/21/79 14:34:08

**MIPS**

- - RETURN TO MAIN CONTROL
- 1 - LOAD DATA FROM PREVIOUS CASE
- 2 - LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 - EDIT CONTROL DATA
- 4 - EDIT TOUR DEFINITIONS
- 5 - EDIT WORK DAY DURATIONS
- 6 - EDIT MISSION LIST
- 7 - EDIT LIST OF PAYLOAD SPECIALISTS
- 8 - EDIT LIST OF TAE GROUPS
- 9 - EDIT FIXED ORDER LIST
- 10 - LOAD TAE MODELS

MIPS>

06/21/79 14:34:08

MIPS

- 0 - RETURN TO MAIN CONTROL
- 1 - LOAD DATA FROM PREVIOUS CASE
- 2 - LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 - EDIT CONTROL DATA
- 4 - EDIT TOUR DEFINITIONS
- 5 - EDIT WORK DAY DURATIONS
- 6 - EDIT MISSION LIST
- 7 - EDIT LIST OF PAYLOAD SPECIALISTS
- 8 - EDIT LIST OF TAE GROUPS
- 9 - EDIT FIXED ORDER LIST
- 10 - LOAD TAE MODELS

MIPS>1

SPECIFY FILE NAME CONTAINING PACTS DATA  
MIPS>PACTS--SCHEM , 6 CHARACTERS MAX.  
ENTER CASE IDENTIFIER  
MIPS>CASE11

06/21/79 14:37:59

MIPS

- 0 - RETURN TO MAIN CONTROL
- 1 - LOAD DATA FROM PREVIOUS CASE
- 2 - LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 - EDIT CONTROL DATA
- 4 - EDIT TOUR DEFINITIONS
- 5 - EDIT WORK DAY DURATIONS
- 6 - EDIT MISSION LIST
- 7 - EDIT LIST OF PAYLOAD SPECIALISTS
- 8 - EDIT LIST OF TAE GROUPS
- 9 - EDIT FIXED ORDER LIST
- 10 - LOAD TAE MODELS

MIPS>2

MIPS

06/21/79 14:38:36

SPECIFY FILE FOR READING TRAVEL/COST AND RESOURCE DATA  
MIPS>TRAINING  
TRAVEL COST/TIME AND RESOURCE DATA IS LOADED  
READ/COPY - THIS INPUT WILL NOT BE INTERPRETED  
MIPS>

ORIGINAL PAGE IS  
OF POOR QUALITY

06/21/79 14:39:40

**MIPS**

- 0 - RETURN TO MAIN CONTROL
- 1 - LOAD DATA FROM PREVIOUS CASE
- 2 - LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 - EDIT CONTROL DATA
- 4 - EDIT TOUR DEFINITIONS
- 5 - EDIT WORK DAY DURATIONS
- 6 - EDIT MISSION LIST
- 7 - EDIT LIST OF PAYLOAD SPECIALISTS
- 8 - EDIT LIST OF TAE GROUPS
- 9 - EDIT FIXED ORDER LIST
- 10 - LOAD TAE MODELS

MIPS>3



1  
1

NUMBER OF SCHEDULES TO ATTEMPT  
RANDOM NUMBER SEED  
RIPS>1 85041

CURRENT EVALUATION PRIORITIES ARE AS FOLLOWS

NUMBER OF TAES SCHEDULED  
AVERAGE NUMBER OF TAES/GROUP SCHEDULED  
SCHEDULE COST

INPUT CHANGES, IF DESIRED  
ENTER 0 TO DISCARD  
MIPS>1 2 3

1 ● ●



06/21/79 14:41:00

- 0 - RETURN TO MAIN CONTROL
- 1 - LOAD DATA FROM PREVIOUS CASE
- 2 - LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 - EDIT CONTROL DATA
- 4 - EDIT TOUR DEFINITIONS
- 5 - EDIT WORK DAY DURATIONS
- 6 - EDIT MISSION LIST
- 7 - EDIT LIST OF PAYLOAD SPECIALISTS
- 8 - EDIT LIST OF TAE GROUPS
- 9 - EDIT FIXED ORDER LIST
- 10 - LOAD TAE MODELS

MIPS>4

ORIGINAL PAGE IS  
OF FOUR QUALITY

TOUR DEFINITIONS

THE FOLLOWING COMMANDS ARE VALID

INSERT TOUR ID

DELETE TOUR ID

TOUR ID - STARTING DATE ENDING DATE

RETRN

TOUR	STARTING DATE	ENDING DATE
ESA1	10/9/78	12/8/78
ESA2	4/9/79	7/20/79
ESA3	10/1/79	12/22/79
ESA4	1/10/80	2/2/80
ESA5	6/2/80	6/27/80
US1	1/3/79	3/31/79
US2	8/6/79	9/28/79
US3	1/2/80	1/9/80
US4	2/4/80	5/17/80
US5	6/30/80	12/5/80
OR1	7/3/78	7/7/78
OR2	8/3/78	8/14/78
JAP1	4/2/79	4/6/79

MIPS>

06/21/79 14:42:01



- 0 - RETURN TO MAIN CONTROL
- 1 - LOAD DATA FROM PREVIOUS CASE
- 2 - LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 - EDIT CONTROL DATA
- 4 - EDIT TOUR DEFINITIONS
- 5 - EDIT WORK DAY DURATIONS
- 6 - EDIT MISSION LIST
- 7 - EDIT LIST OF PAYLOAD SPECIALISTS
- 8 - EDIT LIST OF TAE GROUPS
- 9 - EDIT FIXED ORDER LIST
- 10 - LOAD TAE MODELS

NIPS>5

ORIGINAL PAGE IS  
OF POOR QUALITY

- 0 - RETURN TO MAIN CONTROL
- 1 - LOAD DATA FROM PREVIOUS CASE
- 2 - LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 - EDIT CONTROL DATA
- 4 - EDIT TOUR DEFINITIONS
- 5 - EDIT WORK DAY DURATIONS
- 6 - EDIT MISSION LIST
- 7 - EDIT LIST OF PAYLOAD SPECIALISTS
- 8 - EDIT LIST OF TAE GROUPS
- 9 - EDIT FIXED ORDER LIST
- 10 - LOAD TAE MODELS

MIPS>6

MIPS

06/21/79 14:42:54

CURRENT MISSIONS ARE :  
ENTER NEW MISSION LIST, IF DESIRED  
MIPS>SLI  
DO YOU WANT TO LOAD MISSION LEVEL DATA FROM A PACTDB FILE ?  
MIPS>YES  
SPECIFY FILE FOR LOADING MISSION LEVEL DATA  
CURRENTLY :  
MIPS>TRAINING  
MISSION LEVEL DATA HAS BEEN LOADED  
READ/COPY - THIS INPUT WILL NOT BE INTERPRETED  
MIPS>

06/21/79 14:43:50

**NIPS**

- 0 - RETURN TO MAIN CONTROL
- 1 - LOAD DATA FROM PREVIOUS CASE
- 2 - LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 - EDIT CONTROL DATA
- 4 - EDIT TOUR DEFINITIONS
- 5 - EDIT WORK DAY DURATIONS
- 6 - EDIT MISSION LIST
- 7 - EDIT LIST OF PAYLOAD SPECIALISTS
- 8 - EDIT LIST OF TAE GROUPS
- 9 - EDIT FIXED ORDER LIST
- 10 - LOAD TAE MODELS

**NIPS>7**





06/21/79 14:44:14

SPECIFY MISSION (ENTER BLANK IMAGE TO RETURN)  
NIPS>SL1

06/21/79 14:44:36

**MIPS**

**PAYLOAD SPECIALISTS FOR SL1**

THE FOLLOWING COMMANDS ARE VALID  
INSERT PAYLOAD SPECIALIST  
DELETE PAYLOAD SPECIALIST  
PAYLOAD SPECIALIST • LOCATION CODE  
REDRAW

<b>PAYLOAD SPECIALIST</b>	<b>LOCATION</b>
PS1	LA
PS2	BOSTON
PS3	EUROPE
PS4	EUROPE
PS5	EUROPE
MS1	JSC
MS2	JSC

**MIPS>**

06/21/79 14:45:17

**MIPS**

- 0 - RETURN TO MAIN CONTROL
- 1 - LOAD DATA FROM PREVIOUS CASE
- 2 - LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 - EDIT CONTROL DATA
- 4 - EDIT TOUR DEFINITIONS
- 5 - EDIT WORK DAY DURATIONS
- 6 - EDIT MISSION LIST
- 7 - EDIT LIST OF PAYLOAD SPECIALISTS
- 8 - EDIT LIST OF TAE GROUPS
- 9 - EDIT FIXED ORDER LIST
- 10 - LOAD TAE MODELS

**MIPS>8**



06/21/79 14:45:37

TAE GROUP LIST

FOLLOWING COMMANDS ARE UNLID  
INSERT NEW  
INSERT NEW AFTER OLD  
DELETE OLD  
REDOU

1ES001  
1ES002  
1ES003  
1ES004  
1ES005  
1ES006  
1ES007  
1ES008  
1ES009  
1ES010  
1ES011  
1ES012  
1ES013  
1ES014  
1ES015  
1ES016  
1ES017  
1ES018  
1ES019  
1ES020  
1ES021  
1ES022  
1ES023  
1ES024  
1ES025

1ES026  
1ES027  
1ES028  
1ES029  
1ES030  
1ES031  
1ES032  
1ES033  
1ES034  
1ES035  
1ES036  
EPLAN  
ESRINT  
ORIENT  
INTSIN  
FK  
POOC  
MINIL  
STSON  
ORSYS1  
ORSYS2  
HAB1  
HAB2  
HAB  
PWADE  
SLSY61

SLSY52  
SLSY53  
LEVIO  
EPLAN  
LSI

INFO

06/21/79 14:46:29

**MIPS**

- -- RETURN TO MAIN CONTROL
- 1 -- LOAD DATA FROM PREVIOUS CASE
- 2 -- LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 -- EDIT CONTROL DATA
- 4 -- EDIT TOUR DEFINITIONS
- 5 -- EDIT WORK DAY DURATIONS
- 6 -- EDIT MISSION LIST
- 7 -- EDIT LIST OF PAYLOAD SPECIALISTS
- 8 -- EDIT LIST OF TAE GROUPS
- 9 -- EDIT FIXED ORDER LIST
- 10 -- LOAD TAE MODELS

**MIPS>9**

06/21/79 14:50:10

MIPS

FIXED ORDER TAE GROUPS

FOLLOWING COMMANDS ARE VALID  
INSERT NEW AFTER OLD  
DELETE OLD  
REDRAW

ORIENT  
LSI  
MIMIL  
1ES300

MIPS>

06/21/79 14:50:31



- - RETURN TO MAIN CONTROL
- 1 - LOAD DATA FROM PREVIOUS CASE
- 2 - LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 - EDIT CONTROL DATA
- 4 - EDIT TOUR DEFINITIONS
- 5 - EDIT WORK DAY DURATIONS
- 6 - EDIT MISSION LIST
- 7 - EDIT LIST OF PAYLOAD SPECIALISTS
- 8 - EDIT LIST OF TAE GROUPS
- 9 - EDIT FIXED ORDER LIST
- 10 - LOAD TAE MODELS

MIPS>10

HIPS

06/22/79 09:15:46

SPECIFY PACTDB FILE CONTAINING TAE MODELS  
HIPS>TRAINING



06/22/79 09:20:35

MIPS

- 0 -- RETURN TO MAIN CONTROL
- 1 -- LOAD DATA FROM PREVIOUS CASE
- 2 -- LOAD RESOURCE AND TRAVEL COST/TIME DATA
- 3 -- EDIT CONTROL DATA
- 4 -- EDIT TOUR DEFINITIONS
- 5 -- EDIT WORK DAY DURATIONS
- 6 -- EDIT MISSION LIST
- 7 -- EDIT LIST OF PAYLOAD SPECIALISTS
- 8 -- EDIT LIST OF TAE GROUPS
- 9 -- EDIT FIXED ORDER LIST
- 10 -- LOAD TAE MODELS

MIPS>0

07/02/80 07:54:00

MIPS

PAYLOAD CREW SCHEDULER

- 0 - TERMINATE
- 1 - CREATE A PERMANENT MIPS FILE
- 2 - TRANSFER TO DATA BASE EDITOR (PACTDB)
- 3 - SETUP/EDIT INPUT DATA
- 4 - GENERATE TRIAL SCHEDULES AND SELECT BEST
- 5 - DISPLAY SUMMARY OF BEST SCHEDULE
- 6 - TABULATE SCHEDULE AND WRITE OUTPUT FILE
- 7 - TRANSFER TO REPORT GENERATOR (PACTRG)
- 8 - SAVE DATA FROM THIS CASE FOR FUTURE USE

OPTION 4 IS READY  
OPTIONS 5 AND 6 ARE NOT AVAILABLE  
MIPS>4

NIPS

06/22/79 09:23:48

FACT IS NOW GENERATING SCHEDULES

ORIGINAL PAGE IS  
OF FOUR QUALITY

06/22/79 09:49:41



PAYLOAD CREW SCHEDULER

BEST SCHEDULE SEED - 86041 COST - \$ 138367.50

- 0 - TERMINATE
- 1 - CREATE A PERMANENT MIPS FILE
- 2 - TRANSFER TO DATA BASE EDITOR (PACTDB)
- 3 - SETUP/EDIT INPUT DATA
- 4 - GENERATE TRIAL SCHEDULES AND SELECT BEST
- 5 - DISPLAY SUMMARY OF BEST SCHEDULE
- 6 - TABULATE SCHEDULE AND WRITE OUTPUT FILE
- 7 - TRANSFER TO REPORT GENERATOR (PACTRG)
- 8 - SAVE DATA FROM THIS CASE FOR FUTURE USE

OPTIONS 5 AND 6 ARE READY  
MIPS>5

SCHEDULE: 86041 MISSIONS: SL1

COST: 138367.50

GROUP	TRES	SCHEDULED	FAILED
1NE001	4	4	
1NE002	7	7	
1NE003	7	5	4 5
1NE004	2	2	
1NE005	4	4	
1NE006	3	3	
1NE008	6	6	
1NT011	4	3	4
1NT012	4	4	
1NS101	2	2	
1NS102	6	5	1
1NS103	4	4	
1NS104	8	8	
1ES013	4	3	2
1ES014	3	3	
1ES015	3	3	
1ES016	4	4	
1ES017	3	3	
1ES019	4	4	
1ES020	4	4	
1ES021	1	1	
1ES022	4	4	
1ES023	3	3	
1ES024	3	3	
1ES025	1	1	
1ES026	2	2	
1ES027	1	1	
1ES028	1	1	
1ES029	1	1	
1ES030	1	1	
1ES031	1	1	
1ES033	3	3	
1ES034	3	3	
1ES040	3	3	3
1ES300	3	3	
EPLAN	3	3	3
LEVU	3	3	3
ESMINT	3	3	3
LSI	3	3	4 5
ORIENT	3	3	
INTSIN	4	4	
RPLAN	3	3	
FRP	1	1	
POC	1	1	
RIDIL	1	1	
STGSI	1	1	
GRYS1	1	1	
GRYS2	1	1	
MSI	7	7	
MS2	4	4	

GROUP	TRES	SCHEDULED	FAILED
RED	6	6	
PHASE	7	7	
SLSYS1	6	6	
SLSYS2	4	4	
SLSYS3	4	4	

RECEIVED  
 TELETYPE UNIT  
 JAN 11 1968

READ/COPY - THIS INPUT WILL NOT BE INTERPRETED  
 RIPS0

06/22/79 09:51:27

MIPS

PAYLOAD CREW SCHEDULER

BEST SCHEDULE SEED - 86041 COST - \$ 138367.50

- 0 - TERMINATE
- 1 - CREATE A PERMANENT MIPS FILE
- 2 - TRANSFER TO DATA BASE EDITOR (PACTDB)
- 3 - SETUP/EDIT INPUT DATA
- 4 - GENERATE TRIAL SCHEDULES AND SELECT BEST
- 5 - DISPLAY SUMMARY OF BEST SCHEDULE
- 6 - TABULATE SCHEDULE AND WRITE OUTPUT FILE
- 7 - TRANSFER TO REPORT GENERATOR (PACTRG)
- 8 - SAVE DATA FROM THIS CASE FOR FUTURE USE

OPTIONS 5 AND 6 ARE READY  
MIPS>6



06/25/79 09:12:18

SELECT PRINT AND FILE OPTIONS.

DEFAULT PRINT OPTION

- 0- NO PRINT OUT
- 1- PRINT ON TIMES ONLY
- 2- PRINT ALL TIMES

DEFAULT FILE OPTION

- 0- NO FILE
- 1- WRITE LDF FILE
- 2- WRITE ON/OFF FILE
- 3- WRITE BOTH

ENTER CHANGES

MIPS>

SPECIFY FILE NAME FOR WRITING THE FOLLOWING

CREW TRAINING TIMELINE ( LDF )

MIPS>PACTLD

WHAT IS WRITE KEY FOR FILE PACTLD

MIPS>000000

SPECIFY FILE NAME FOR WRITING THE FOLLOWING

(IF NAME INCLUDES \$ IT WILL BE TEMPORARY)

SCHEDULE TIMELINE ( ON/OFF )

FILE NAME WILL DEFAULT TO 000000000000

MIPS>PACTOF

DO YOU WANT TO ADD MORE SUBJECTS TO EXISTING DATA FILE

MIPS>NO

WHAT IS WRITE KEY FOR FILE PACTOF

MIPS>000000

06/22/79 10:29:54

MIPS

PAYLOAD CREW SCHEDULER

BEST SCHEDULE SEED - 86041 COST - \$ 138367.50

- 0 - TERMINATE
- 1 - CREATE A PERMANENT MIPS FILE
- 2 - TRANSFER TO DATA BASE EDITOR (PACTDB)
- 3 - SETUP/EDIT INPUT DATA
- 4 - GENERATE TRIAL SCHEDULES AND SELECT BEST
- 5 - DISPLAY SUMMARY OF BEST SCHEDULE
- 6 - TABULATE SCHEDULE AND WRITE OUTPUT FILE
- 7 - TRANSFER TO REPORT GENERATOR (PACTRG)
- 8 - SAVE DATA FROM THIS CASE FOR FUTURE USE

MIPS>7



06/22/79 10:31:01

**NIPS**

PACTRG MAIN MENU

- 0 - TERMINATE
  - 1 - DISPLAY USAGE INFORMATION ( HELP )
  - 2 - DISPLAY PLOTS ON TEKTRONIX AND TABLES ON TEKTRONIX AND PRINT FILE
  - 3 - DISPLAY TABLES ON PRINT FILE
- NIPS>0

06/22/79 10:28:07

MIPS

PAYLOAD CREW SCHEDULER

BEST SCHEDULE SEED = 86041 COST = \$ 138367.50

- 0 - TERMINATE
- 1 - CREATE A PERMANENT MIPS FILE
- 2 - TRANSFER TO DATA BASE EDITOR (PACTDB)
- 3 - SETUP/EDIT INPUT DATA
- 4 - GENERATE TRIAL SCHEDULES AND SELECT BEST
- 5 - DISPLAY SUMMARY OF BEST SCHEDULE
- 6 - TABULATE SCHEDULE AND WRITE OUTPUT FILE
- 7 - TRANSFER TO REPORT GENERATOR (PACTRG)
- 8 - SAVE DATA FROM THIS CASE FOR FUTURE USE

MIPS>8

SPECIFY FILE NAME FOR WRITING PACTS DATA  
MIPS>PACTS-SCHED  
ENTER CASE IDENTIFIER , 6 CHARACTERS MAX.  
MIPS>CASE11

MIPS

06/22/79 10:32:01

PAYLOAD CREW SCHEDULER

BEST SCHEDULE SEED - 86041 COST = \$ 138367.50

- 0 - TERMINATE
- 1 - CREATE A PERMANENT MIPS FILE
- 2 - TRANSFER TO DATA BASE EDITOR (PACTDB)
- 3 - SETUP/EDIT INPUT DATA
- 4 - GENERATE TRIAL SCHEDULES AND SELECT BEST
- 5 - DISPLAY SUMMARY OF BEST SCHEDULE
- 6 - TABULATE SCHEDULE AND WRITE OUTPUT FILE
- 7 - TRANSFER TO REPORT GENERATOR (PACTRG)
- 8 - SAVE DATA FROM THIS CASE FOR FUTURE USE

MIPS>0

TOTAL SUP TIME - 1.58 MIN  
IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

SELECT NEW PRINT FILE OPTION:

1 - WRITE PRINT FILE ON PAPER

2 - WRITE PRINT FILE ON FICHE

MIPS>1

A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS100629XPSFS.

INSERT COMMANDS : (INSERT HELP FOR TUTORING)

MIPS>STOP

MIPS IS EXITING

PRINT FILES WILL BE DELETED IF NOT TRANSMITTED

IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

NORMAL EXIT.

DS)STOP: MIPS

>OFIN

(MILLISECON

14885

TOTAL SUPS:

295

ORIGINAL PAGE IS  
OF POOR QUALITY

RUNID: ELPACT ACCT: 1HEL12493200 PROJECT: JACKIEBIN207

STOP: MIPS

TIME; SUPS: 00:01:47.014 CBSUPS: 030037005

CPU: 00:00:11.721 I/O: 00:00:35.924

CC/ER: 00:00:59.368 WAIT: 00:15:42.083

IMAGES READ: 66 PAGES: 33

START: 09:40:37 JUN 25, 1979 FIN: 10:07:29 JUN 25, 1979

-----  
TECHNENT TYPE YOU WILL GET ANY TYPE SERVO THAT HAPPENS TO BE  
AVAILABLE, EX: U34, U30, 8C, OR 8C9. ALL 0ASG CARDS THAT NOW USE 'T'  
EQUIPMENT TYPES SHOULD BE CHANGED TO UDS IMMEDIATELY.  
EXAMPLE: 0ASG,T FILENAME,T,REELNR CHANGE TO 0ASG,T FILENAME, UDS, REELNR  
-----

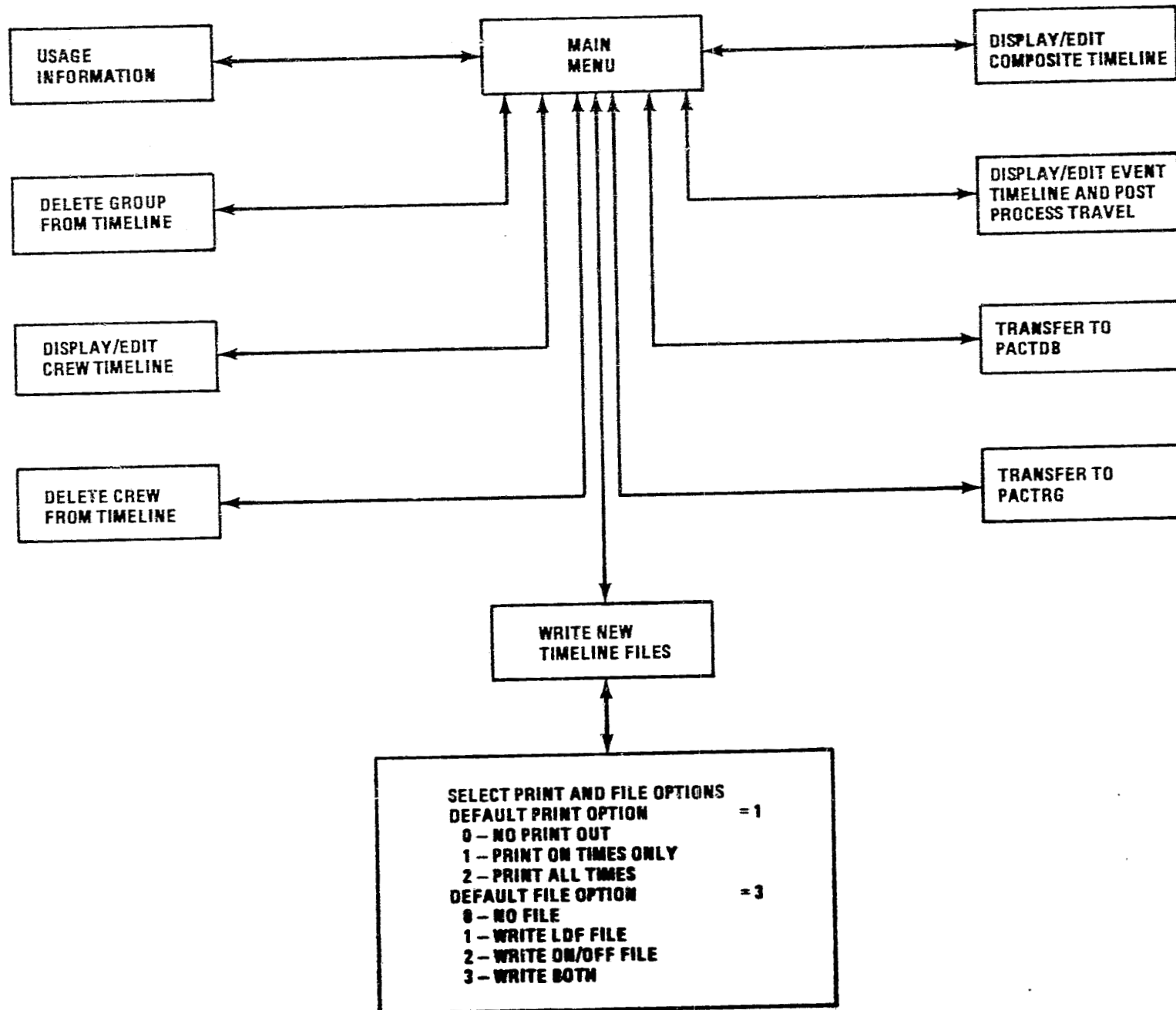
STERMINAL INACTIVE

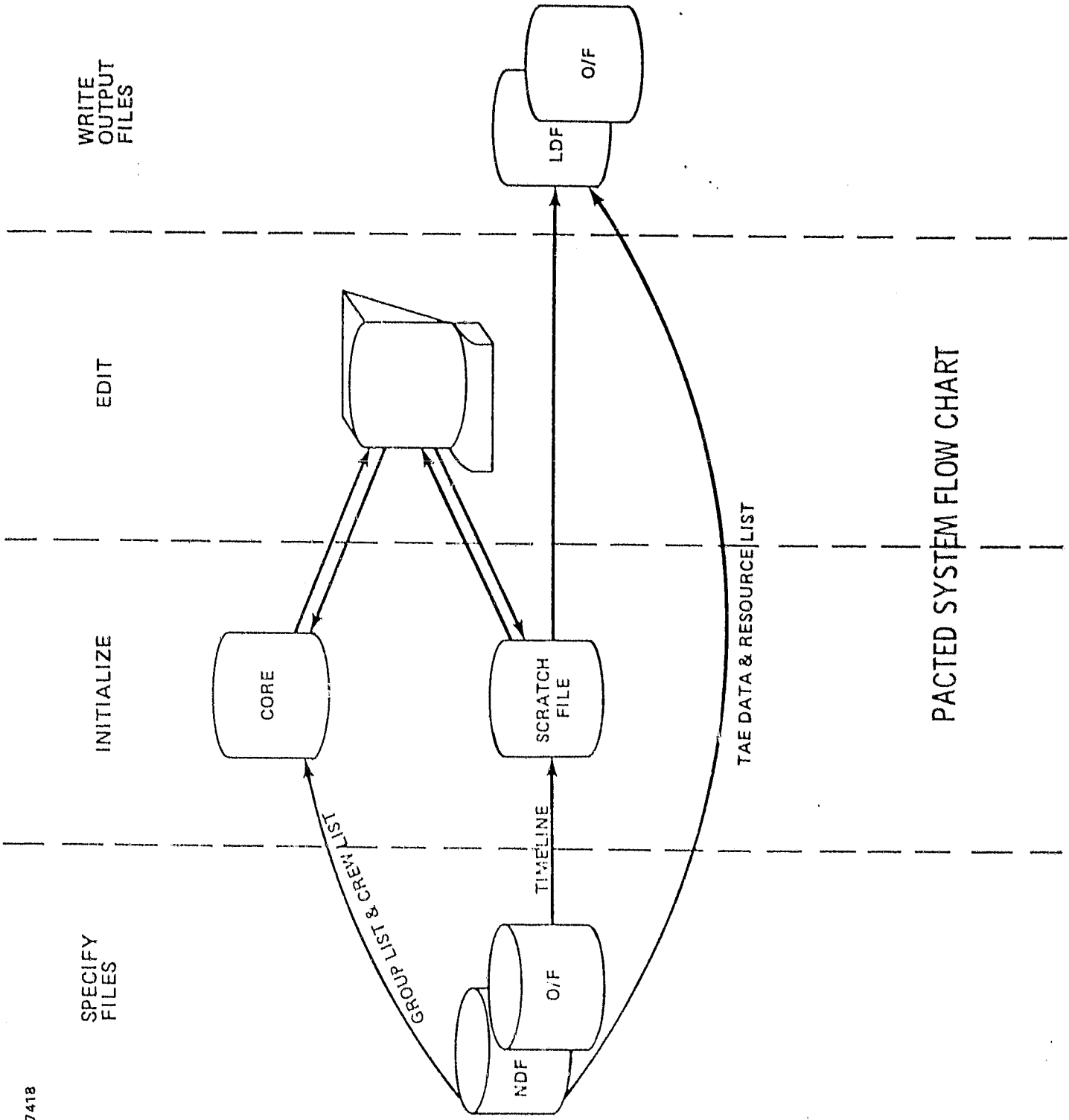
>OOTERM

APPENDIX F

PACTED MODULE BLOCK DIAGRAM  
AND COMPUTER CONFIGURATION

# PACTED MODULE BLOCK DIAGRAM







## Computer Configuration

Language - FORTRAN

Core Requirement - 35.47K

Input Files: Name Directed File (NDF) which contains mission dependent data and TAE Models. List Directed File (LDF) which contains mission timeline status.

Output Files: List Directed File (LDF) which contains mission timeline status. ON/OFF File which contains crew activities.

APPENDIX G

PACKED TUTORIAL DISPLAYS

## PACTED EXPLANATORY NOTES

Page No.	Explanation
G1	Main Menu Page
G2	Main Menu Page, Option 1, has been selected by the user. When the return key is hit, the page will turn. Note: An illegal number or no number will turn the page back to the main menu when the return key is hit.
G3	Editing Instructions for PACTED.
G4	Main Menu Page, Option 2, has been selected by the user. When the return key is hit, the page will turn.
G5	The user must specify a starting time if different from the one shown or if there is no starting time shown. When the return key is hit, the page will turn.
G6	Upon completion of printing the composite timeline, the terminal will give in audible beep and the crosshairs will appear on the screen. The user may make changes to the page, call for the next page, time point or crewman or terminate the editing on this page. When the return key is hit, the page will turn.
G7	Main Menu Page Option 3 has been selected by the user. When the return key is hit, the page will turn.
G8	The user must specify a starting time if different from the one shown or if there is no starting time shown. When the return key is hit, the page will turn.
G9	Upon completion of printing the event timeline, the terminal will give an audible beep and the crosshairs will appear on the screen. The user may make changes to the page, call for the next page, time point or crewman, or terminate the editing on this page. When the return key is hit, the page will turn.
G10	Main Menu Page, Option 4, has been selected by the user. When the return key is hit, the page will turn.

- G11 The user must specify the TAE Group to be deleted from the timeline. When the return key is hit, the group will be deleted and the page will turn.
- G12 Main Menu Page, Option 5, has been selected by the user. When the return key is hit, the page will turn.
- G13 The user must specify the crewman (crewmen) for which a timeline is to be displayed. When the return key is hit, the page will turn.
- G14 The user must specify a starting time if different from the one shown or if there is no starting time shown. When the return key is hit, the page will turn.
- G15 Upon completion of the printing of the composite timeline for the specified crewman, the terminal will give an audible beep and the crosshairs will appear on the screen. The user may make changes to the page, call for the next page, time point or crewman, or terminate the editing on this page. When the return key is hit, the page will turn.
- G16 Main Menu Page, Option 6 has been selected by the user. When the return key is hit, the page will turn.
- G17 The user must specify a start and end time for deletion if different from the time shown or if no times are shown. When the return key is hit, the terminal will prompt the user to specify the crewman to be selected. The user must then specify the crewman to be deleted. When the return key is hit the page will turn.
- G18 Main Menu Page, Option 7, has been selected by the user. When the return key is hit, the terminal will transfer to PACTDB.
- G19 Main Menu Page of PACTDB is on the screen. The user may exercise all options as described in Appendix C or select option 0 to return to the PACTED. When the return key is hit, the terminal will return to PACTED.
- G20 Main Menu Page, Option 8, has been selected by the user. When the return key is hit, the page will turn.

- G21           The user must specify the file for writing the new training timeline. When the return key is hit, the terminal will prompt the user for a write key. If the proper write key is not supplied, the files will not be written. When the return key is hit, the terminal will prompt the user for an ON/OFF name. The user must supply a file name. When the return key is hit, the terminal will prompt the user to determine if more subjects are to be added to the file. The user must answer yes or no. When the return key is hit, the terminal will prompt the user for a write key for the ON/OFF file. If the proper write key is not provided, the file will not be written. When the return key is hit, the page will turn.
- G22           Main Menu Page, Option 9, has been selected by the user. When the return key is hit, the terminal will transfer to PACTRG.
- G23           Main Menu Page of PACTRG is on the screen. The user may exercise all options as described in Appendix I or select Option 0 to return to the PACTED. When the return key is hit, the terminal will return to PACTED.
- G24           Main Menu Page, Option 0, has been selected by the user. When the return key is hit, the terminal will return to the MIPS mode.
- G25           Standard UNIVAC 1108 Termination Procedure.

- NOTE: 1. Tutorial Display Data in this Appendix is SL1 Mission Data.
2. PACTED can be called up using standard UNIVAC 1108 and MIPS procedures as shown on tutorials on Pages 46 and 47.
3. File names must be specified prior to editing as shown on Page 48.

PORT 25/26 SIGNON - HOST1(2X0) UP HOST2(2X0) UP  
DTK051  
ENTER USERID/PASSWORD:  
>PACTS/HCC

\*DESTROY USERID/PASSWORD ENTRY  
\*UNIVAC 1100 OPERATING SYSTEM LEV. AL36R2BHOST1(RSI)\*  
\*\*\*\*\*

RUN NUMBER 11

LAST RUN AT: 070280 071857  
DATE: 070280 TIME: 083554  
>@MIPS,L

130

ORIGINAL PAGE IS  
OF POOR QUALITY

MIPS INITIALIZATION IS IN PROGRESS  
OFF-LINE MAINTENANCE PROCESSOR LAST RUN AT 06/20/79 04:54:18  
TOTAL SUP TIME .65 MIN  
SELECT NEW PRINT FILE OPTION:  
1 - WRITE PRINT FILE ON PAPER  
2 - WRITE PRINT FILE ON FICHE  
MIPS>1  
A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS132054IP0F8.  
INSERT COMMANDS : (INSERT HELP FOR TUTORING)  
MIPS>RUN PACTED  
MIPS>GO

**PAYLOAD CREW TRAINING EDITOR ( PACTED )**

**SPECIFY NAME OF PACTS NAME-DIRECTED FILE  
CURRENTLY  
MIPS>TRAINING**

**SPECIFY NAME OF LIST-DIRECTED FILE FOR TIMELINE INPUT DATA  
MIPS>PACTLD**



06/20/79 13:28:16



PAYLOAD CREW TRAINING EDITOR ( PACTED )  
MAIN MENU

- 0 - TERMINATE
- 1 - DISPLAY USAGE INFORMATION
- 2 - DISPLAY/EDIT COMPOSITE TIMELINE
- 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
- 4 - DELETE GROUP FROM TIMELINE
- 5 - DISPLAY/EDIT CREW TIMELINE
- 6 - DELETE CREW FROM TIMELINE
- 7 - TRANSFER TO PACT DATA BASE MODULE ( PACTDB )
- 8 - WRITE NEW TIMELINE FILES
- 9 - TRANSFER TO PACT REPORT GENERATOR ( PACTRG )

MIPS>



06/20/79 13:26:16

PAYLOAD CREW TRAINING EDITOR ( PACTED )  
MAIN MENU

- 0 - TERMINATE
- 1 - DISPLAY USAGE INFORMATION
- 2 - DISPLAY/EDIT COMPOSITE TIMELINE
- 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
- 4 - DELETE GROUP FROM TIMELINE
- 5 - DISPLAY/EDIT CREW TIMELINE
- 6 - DELETE CREW FROM TIMELINE
- 7 - TRANSFER TO PACT DATA BASE MODULE ( PACTDB )
- 8 - WRITE NEW TIMELINE FILES
- 9 - TRANSFER TO PACT REPORT GENERATOR ( PACTRG )

MIPS>1

## EDITING INSTRUCTIONS

LOCATE CROSSHAIRS ON VALUE TO BE EDITED, ENTER COMMAND CHARACTER, AND PRESS RETURN KEY.  
(IF CROSSHAIRS ARE NOT VISIBLE THEY MAY BE OFF SCREEN, TURN TRACK WHEELS AND/OR PRESS RETURN KEY.)

EDITING COMMAND CHARACTERS ARE LISTED BELOW.

- |     |   |   |
|-----|---|---|
| E   | - | ENTER NEW VALUE, OVERSTRIKING OLD VALUE                               |
| B   | - | ENTER NEW VALUE IN BLANK AREA OF SCREEN                               |
| A   | - | ADD SPECIFIED TAE(S) TO A GROUP<br>(MULTIPLE QUESTIONS WILL BE ASKED) |
| D   | - | DELETE SPECIFIED TAE ( EVENT )  |
| R   | - | REDRAW SCREEN   |
| S   | - | STOP EDITING  |
| T   | - | SPECIFY TIME POINT FOR NEXT PAGE                                      |
| C   | - | CONTINUE, BEGINNING WITH NEXT TIME POINT                              |
| (N) | - | BEGIN PROCESSING ANOTHER CREWMAN                                      |
| H   | - | REDISPLAY THIS TUTORING (HELP)  |

READ/COPY - THIS INPUT WILL NOT BE INTERPRETED  
NIPS)

06/20/79 13:28:19



PAYLOAD CREW TRAINING EDITOR ( PACTED )  
MAIN MENU

- 0 - TERMINATE
- 1 - DISPLAY USAGE INFORMATION
- 2 - DISPLAY/EDIT COMPOSITE TIMELINE
- 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
- 4 - DELETE GROUP FROM TIMELINE
- 5 - DISPLAY/EDIT CREW TIMELINE
- 6 - DELETE CREW FROM TIMELINE
- 7 - TRANSFER TO PACT DATA BASE MODULE ( PACTDB )
- 8 - WRITE NEW TIMELINE FILES
- 9 - TRANSFER TO PACT REPORT GENERATOR ( PACTRG )

MIPS>2

SPECIFY STARTING TIME OF FIRST DISPLAY  
USE MM/DD/YY FORMAT  
CURRENTLY : 8/1/78  
NIPS>

Page 11 of 11  
REALITY



06/20/79 13:39:48



PAYLOAD CREW TRAINING EDITOR ( PACTED )  
MAIN MENU

- 0 - TERMINATE
- 1 - DISPLAY USAGE INFORMATION
- 2 - DISPLAY/EDIT COMPOSITE TIMELINE
- 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
- 4 - DELETE GROUP FROM TIMELINE
- 5 - DISPLAY/EDIT CREW TIMELINE
- 6 - DELETE CREW FROM TIMELINE
- 7 - TRANSFER TO PACT DATA BASE MODULE ( PACTDB )
- 8 - WRITE NEW TIMELINE FILES
- 9 - TRANSFER TO PACT REPORT GENERATOR ( PACTRG )

NIPPS>3

SPECIFY STARTING TIME OF FIRST DISPLAY  
USE MM/DD/YY FORMAT  
CURRENTLY : 8/1/78  
MIPS>





06/20/79 13:33:01



PAYLOAD CREW TRAINING EDITOR ( PACTED )  
MAIN MENU

- 0 - TERMINATE
- 1 - DISPLAY USAGE INFORMATION
- 2 - DISPLAY/EDIT COMPOSITE TIMELINE
- 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
- 4 - DELETE GROUP FROM TIMELINE
- 5 - DISPLAY/EDIT CREW TIMELINE
- 6 - DELETE CREW FROM TIMELINE
- 7 - TRANSFER TO PACT DATA BASE MODULE ( PACTDB )
- 8 - WRITE NEW TIMELINE FILES
- 9 - TRANSFER TO PACT REPORT GENERATOR ( PACTRG )

HIPS>4

06/20/79 13:30:31



SPECIFY GROUP TO BE DELETED  
ENTER BLANK IMAGE TO RETURN TO MAIN MENU  
RIPS>

06/20/79 13:38:08



PAYLOAD CREW TRAINING EDITOR ( PACTED )  
MAIN MENU

- 0 - TERMINATE
- 1 - DISPLAY USAGE INFORMATION
- 2 - DISPLAY/EDIT COMPOSITE TIMELINE
- 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
- 4 - DELETE GROUP FROM TIMELINE
- 5 - DISPLAY/EDIT CREW TIMELINE
- 6 - DELETE CREW FROM TIMELINE
- 7 - TRANSFER TO PACT DATA BASE MODULE ( PACTDB )
- 8 - WRITE NEW TIMELINE FILES
- 9 - TRANSFER TO PACT REPORT GENERATOR ( PACTRG )

MIPS>5

SPECIFY CREWMAN FOR DISPLAY  
ENTER 'ALL' FOR ALL CREWMAN OF FILE

PS1  
PS2  
PS3  
PS4  
PS5  
PS6  
PS7  
PS8  
PS9  
PS10  
PS11  
PS12  
PS13  
PS14  
PS15  
PS16  
PS17  
PS18  
PS19  
PS20  
PS21  
PS22  
PS23  
PS24  
PS25  
PS26  
PS27  
PS28  
PS29  
PS30  
PS31  
PS32  
PS33  
PS34  
PS35  
PS36  
PS37  
PS38  
PS39  
PS40  
PS41  
PS42  
PS43  
PS44  
PS45  
PS46  
PS47  
PS48  
PS49  
PS50  
PS51  
PS52  
PS53  
PS54  
PS55  
PS56  
PS57  
PS58  
PS59  
PS60  
PS61  
PS62  
PS63  
PS64  
PS65  
PS66  
PS67  
PS68  
PS69  
PS70  
PS71  
PS72  
PS73  
PS74  
PS75  
PS76  
PS77  
PS78  
PS79  
PS80  
PS81  
PS82  
PS83  
PS84  
PS85  
PS86  
PS87  
PS88  
PS89  
PS90  
PS91  
PS92  
PS93  
PS94  
PS95  
PS96  
PS97  
PS98  
PS99  
PS100

END

SPECIFY STARTING TIME OF FIRST DISPLAY  
USE MM/DD/YY FORMAT  
CURRENTLY : 8/1/78  
MIPS>

06/20/79 13:37:19



COMPOSITE TIMELINE FOR PEL

CONTINUED: E.S.A.D.R.S.Y.C.M.H-HELP

GROUP	TRF	LOCATION	ON TIME	OFF TIME	CYCLE									
NUM	ID		DATE	HR	DATE	HR								
TUNNEL	TO: REFC	FROM: LA	8/6/78	8	8/6/78	E	PS1							
ORIENT	1	NACOU	REFC	8/7/78	8	8/7/78	12	PS2	PS1	PS6	PS4	PS3	PS8	PS1
ORIENT	2	THCOU	REFC	8/7/78	12	8/7/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
ORIENT	3	SLOU	REFC	8/8/78	8	8/8/78	12	PS2	PS1	PS6	PS4	PS3	PS8	PS1
ORIENT	4	SLOU	REFC	8/8/78	12	8/8/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
ORIENT	5	PLSCOU	REFC	8/8/78	8	8/8/78	10	PS2	PS1	PS6	PS4	PS3	PS8	PS1
ORIENT	6	PLECOU	REFC	8/8/78	10	8/8/78	12	PS2	PS1	PS6	PS4	PS3	PS8	PS1
ORIENT	7	HPOU	REFC	8/8/78	12	8/8/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
ORIENT	8	BOCOU	REFC	8/10/78	8	8/10/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
TUNNEL	TO: LA	FROM: REFC	8/11/78	8	8/11/78	E	PS1							
NONE	0	LA	LA	8/12/78	8	9/20/78	4	PS1						
TUNNEL	TO: PORZ	FROM: LA	9/30/78	8	10/1/78	E	PS1							
EPLAN	1	1	PORZ	10/2/78	8	10/5/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9916	1	SADISC	PORZ	10/2/78	8	10/2/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9916	2	1	PORZ	10/10/78	8	10/10/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9901	1	1	PORZ	10/11/78	8	10/11/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9902	1	1	PORZ	10/12/78	8	10/12/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9903	1	1	PORZ	10/13/78	8	10/15/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9904	1	1	PORZ	10/16/78	8	10/16/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
TUNNEL	TO: PARIS	FROM: PORZ	10/18/78	E	10/18/78	E	PS1	PS2	PS3	PS4	PS5	PS1	PS2	
1E9913	1	1	PARIS	10/19/78	8	10/19/78	12	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9914	1	1	PARIS	10/19/78	12	10/19/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9917	1	1	PARIS	10/20/78	8	10/20/78	12	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9915	1	1	PARIS	10/20/78	12	10/20/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9919	1	1	PARIS	10/25/78	8	10/25/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9909	1	1	PARIS	10/29/78	8	10/29/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
TUNNEL	TO: MUNCH	FROM: PARIS	10/29/78	E	10/29/78	E	PS1	PS2	PS3	PS4	PS5	PS1	PS2	
1E9920	1	1	MUNCH	10/30/78	8	11/1/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9904	1	1	MUNCH	11/2/78	8	11/5/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9909	1	1	MUNCH	11/5/78	8	11/20/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1
TUNNEL	TO: FRANK	FROM: MUNCH	11/21/78	E	11/21/78	E	PS1	PS2	PS3	PS4	PS5	PS1	PS2	
1E9905	1	1	FRANK	11/22/78	8	11/22/78	12	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9907	1	1	FRANK	11/22/78	12	11/22/78	8	PS2	PS1	PS6	PS4	PS3	PS8	PS1
1E9902	1	1	FRANK	11/22/78	8	11/22/78	4	PS2	PS1	PS6	PS4	PS3	PS8	PS1

06/20/79 13:34:36



PAYLOAD CREW TRAINING EDITOR ( PACTED )  
MAIN MENU

- 0 - TERMINATE
- 1 - DISPLAY USAGE INFORMATION
- 2 - DISPLAY/EDIT COMPOSITE TIMELINE
- 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
- 4 - DELETE GROUP FROM TIMELINE
- 5 - DISPLAY/EDIT CREW TIMELINE
- 6 - DELETE CREW FROM TIMELINE
- 7 - TRANSFER TO PACT DATA BASE MODULE ( PACTDB )
- 8 - WRITE NEW TIMELINE FILES
- 9 - TRANSFER TO PACT REPORT GENERATOR ( PACTRG )

MIPS>6



ENTER START TIME AND END TIME FOR DELETION  
ENTER 'ALL' FOR COMPLETE DATA  
USE MM/DD/YY MM/DD/YY FORMAT  
CURRENTLY START - 7/1/78 END - 1/1/85  
RIPS>  
SPECIFY CREWMAN(MEN) TO DELETE FOR SPECIFIED TIME  
ENTER BLANK IMAGE TO RETURN TO MAIN MENU  
ENTER 'ALL' TO DELETE ALL CREWMAN FOR TIME FRAME  
RIPS>

06/20/79 13:30:48



PAYLOAD CREW TRAINING EDITOR ( PACTED )  
MAIN MENU

- 0 - TERMINATE
- 1 - DISPLAY USAGE INFORMATION
- 2 - DISPLAY/EDIT COMPOSITE TIMELINE
- 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
- 4 - DELETE GROUP FROM TIMELINE
- 5 - DISPLAY/EDIT CREW TIMELINE
- 6 - DELETE CREW FROM TIMELINE
- 7 - TRANSFER TO PACT DATA BASE MODULE ( PACTDB )
- 8 - WRITE NEW TIMELINE FILES
- 9 - TRANSFER TO PACT REPORT GENERATOR ( PACTRG )

MIPS>7



06/21/79 13:30:11

PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )

- - TERMINATE
- 1 - SPECIFY PACTS DATA BASE FILE
- 2 - EDIT LIST OF TAE GROUPS
- 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA
- 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA
- 5 - EDIT PAYLOAD SPECIALIST DATA
- 6 - EDIT TDY COST FOR WORK LOCATIONS
- 7 - EDIT LIST OF RESOURCES
- 8 - LIST PACTS INPUT DATA BASE

MIPS>●

06/20/79 13:30:20



PAYLOAD CREW TRAINING EDITOR ( PACTED )  
MAIN MENU

- - TERMINATE
- 1 - DISPLAY USAGE INFORMATION
- 2 - DISPLAY/EDIT COMPOSITE TIMELINE
- 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
- 4 - DELETE GROUP FROM TIMELINE
- 5 - DISPLAY/EDIT CREW TIMELINE
- 6 - DELETE CREW FROM TIMELINE
- 7 - TRANSFER TO PACT DATA BASE MODULE ( PACTDB )
- 8 - WRITE NEW TIMELINE FILES
- 9 - TRANSFER TO PACT REPORT GENERATOR ( PACTRG )

MIPS>8

PRINTING OF ON AND OFF TIMES IN PROGRESS  
WRITING OF FILES IN PROGRESS  
SPECIFY FILE NAME FOR WRITING THE FOLLOWING  
CREW TRAINING TIMELINE ( LDF )  
MIPS>PACTLD  
WHAT IS WRITE KEY FOR FILE PACTLD  
MIPS>00000

SPECIFY FILE NAME FOR WRITING THE FOLLOWING  
( IF NAME INCLUDES \$ IT WILL BE TEMPORARY )  
SCHEDULE TIMELINE ( ON/OFF )  
FILE NAME WILL DEFAULT TO 000000000000  
MIPS>PACTOF  
DO YOU WANT TO ADD MORE SUBJECTS TO EXISTING DATA FILE  
MIPS>NO  
WHAT IS WRITE KEY FOR FILE PACTOF  
MIPS>00000

END PAGE 10  
10/10/10

05/14/79 15:52:04

MIPS

PAYLOAD CREW TRAINING EDITOR ( PACTED )  
MAIN MENU

- 0 - TERMINATE
- 1 - DISPLAY USAGE INFORMATION
- 2 - DISPLAY/EDIT COMPOSITE TIMELINE
- 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
- 4 - DELETE GROUP FROM TIMELINE
- 5 - DISPLAY/EDIT CREW TIMELINE
- 6 - DELETE CREW FROM TIMELINE
- 7 - TRANSFER TO PACT DATA BASE MODULE ( PACTDB )
- 8 - WRITE NEW TIMELINE FILES
- 9 - TRANSFER TO PACT REPORT GENERATOR ( PACTRG )

MIPS>9

MIPS

06/21/79 13:40:40

PACTRG MAIN MENU

- 0 - TERMINATE USAGE INFORMATION ( HELP )
  - 1 - DISPLAY PLOTS ON TEKTRONIX AND TABLES ON TEKTRONIX AND PRINT FILE
  - 2 - DISPLAY TABLES ON PRINT FILE
  - 3 - DISPLAY TABLES ON PRINT FILE
- MIPS>0

MIPS

05/14/79 15:54:21

PAYLOAD CREW TRAINING EDITOR ( PACTED )  
MAIN MENU

- 0 - TERMINATE
- 1 - DISPLAY USAGE INFORMATION
- 2 - DISPLAY/EDIT COMPOSITE TIMELINE
- 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
- 4 - DELETE GROUP FROM TIMELINE
- 5 - DISPLAY/EDIT CREW TIMELINE
- 6 - DELETE CREW FROM TIMELINE
- 7 - TRANSFER TO PACT DATA BASE MODULE ( PACTDB )
- 8 - WRITE NEW TIMELINE FILES
- 9 - TRANSFER TO PACT REPORT GENERATOR ( PACTRG )

MIPS>0



TOTAL SUP TIME = 1.58 MIN  
IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

SELECT NEW PRINT FILE OPTION:

1 - WRITE PRINT FILE ON PAPER

2 - WRITE PRINT FILE ON FICHE

MIPS>1

A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS100629XPSFS.

INSERT COMMANDS : (INSERT HELP FOR TUTORING)

MIPS>STOP

MIPS IS EXITING

PRINT FILES WILL BE DELETED IF NOT TRANSMITTED

IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

NORMAL EXIT. CPU TIME: 295 TOTAL SUPS: 14885 (MILLISECON

DS)STOP: MIPS

>@FIN

157

RUNID: ELPACT ACCT: 1HEL12493200 PROJECT: JACKIEBIN207

STOP: MIPS

TIME; SUPS: 00:01:47.014 CBSUPS: 030037005

CPU: 00:00:11.721 I/O: 00:00:35.924

CC/ER: 00:00:59.368 WAIT: 00:15:42.083

IMAGES READ: 66 PAGES: 33

START: 09:40:37 JUN 25,1979 FIN: 10:07:29 JUN 25,1979

-----  
TECHNENT TYPE YOU WILL GET ANY TYPE SERVO THAT HAPPENS TO BE  
AVAILABLE, EX: U34, U30, 8C, OR 8C9. ALL @ASG CARDS THAT YOU USE 'T'  
EQUIPMENT TYPES SHOULD BE CHANGED TO U3S IMMEDIATELY.

EXAMPLE: @ASG,T FILENAME,T,REELNR CHANGE TO @ASG,T FILENAME,U3S,REELNR  
-----

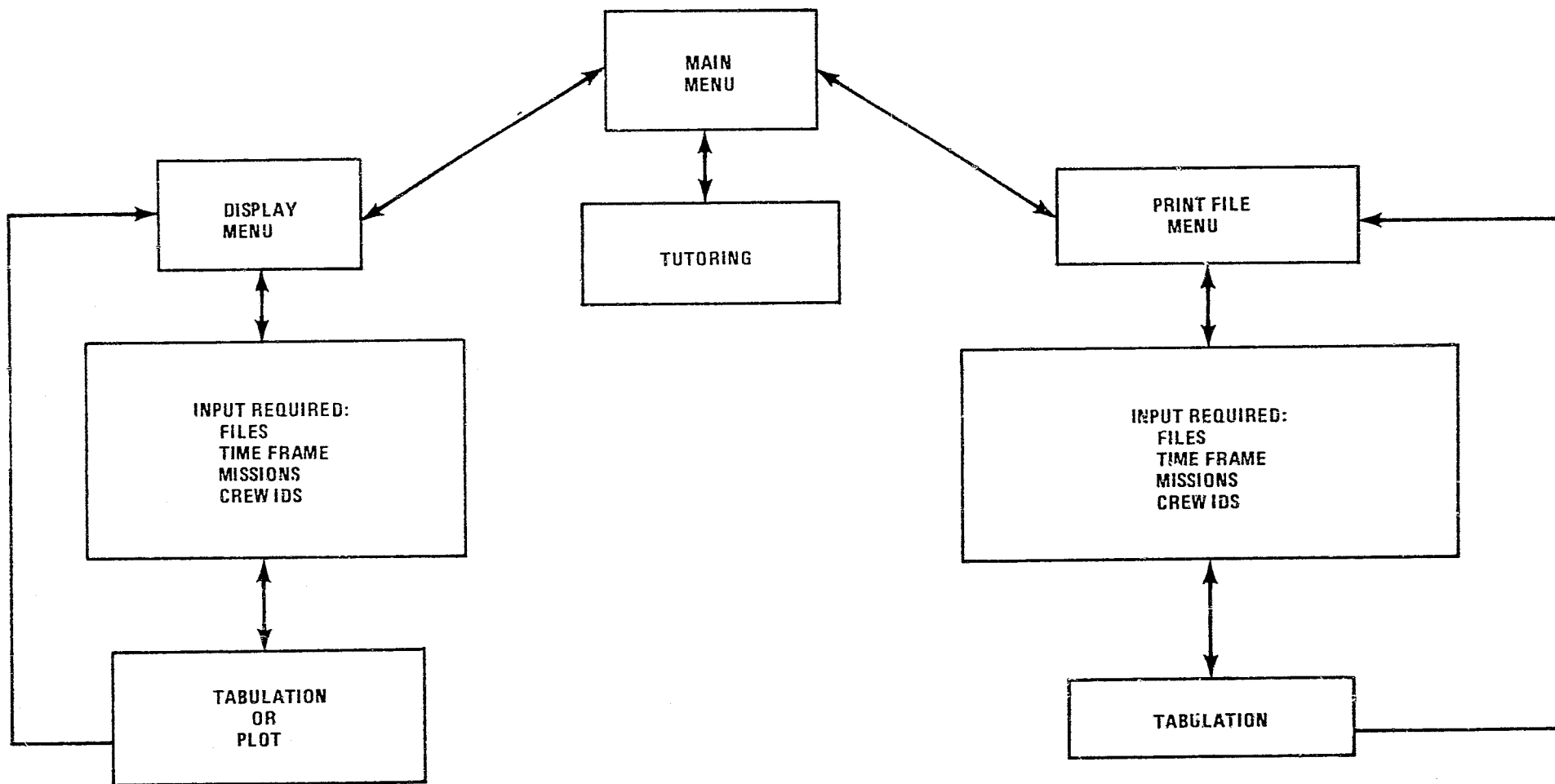
\*TERMINAL INACTIVE\*

>@TERN

APPENDIX H

PACTRG MODULE BLOCK DIAGRAM  
AND COMPUTER CONFIGURATION

# PACTRG MODULE BLOCK DIAGRAM



**\*\*NOTE: TUTORING INFORMATION MAY BE DISPLAYED FROM ANY TABULATION OR PLOT**

## COMPUTER CONFIGURATION

Language - FORTRAN

Core Requirement - 31.63K

Input Files - Name-Directed File (NDF) containing mission dependent data and TAE Models. List Directed File (LDF) containing schedule time, resource and travel cost/time data. ON/OFF File containing crew activities.

APPENDIX I

PACTRG TUTORIAL DISPLAYS

## PACTRG EXPLANATORY NOTES

Page No.	Explanation
I1	PACTRG may be accessed through the Payload Crew Scheduler (Option 7 Main Menu) or by using standard UNIVAC 1108 and MIPS procedures as shown on tutorials on pages 58 and I1.
I2	PACTRG Main Menu.
I3	Main Menu, Option 1, has been selected by the user. When the return key is hit, the page will turn.
I4	Usage information.
I5	Main Menu, Option 2, has been selected by the user. When the return key is hit, the page will turn.
I6	PACTRG Display Menu.
I7	Display Menu, Option 1, has been selected by the user. When the return key is hit, the page will turn.
I8	User must specify PACTS Name-Directed File supporting report generations, e.g., TRAINING. NOTE: Option 14 can also be used prior to selection of any other options.
I9	User must specify PACTS List-Directed File supporting report generation, e.g., PACTLD. NOTE: Option 15 can be used prior to the selection of any other option. When the return key is hit, the page will turn.
I10	User must insert start and end times if different event from the ones shown or if there is none shown. When the return key is hit, the page will turn.
I11	Composite schedule. When the return key is hit, the page will turn.
I12	Display Menu, Option 2, has been selected by the user. When the return key is hit, the page will turn.
I13	User must insert start and end times if different from those shown or if there is none shown. When the return key is hit, the page will turn.
I14	Composite Schedule with Cost and Duration. When the return key is hit, the page will turn.

Page No.	Explanation
I15	Display Menu, Option 3, has been selected by the user. When the return key is hit, the page will turn.
I16	User must specify legend for display, e.g., PACTLD. When the return key is hit, the page will turn.
I17	Mission to be scheduled must be selected. When return key is hit, page will turn.
I18	User must provide start time and delta time if different or if none shown. When return key is hit, page will turn.
I19	Schedule for all TAE Groups. When return key is hit, page will turn.
I20	Display Menu, Option 4, has been selected by the user. When return key is hit, page will turn.
I21	User must specify mission, e.g., SL1. When return key is hit, page will turn.
I22	Schedule Summary for ALL TAE Groups. When return key is hit, page will turn.
I23	Display Menu, Option 5, has been selected by the user. When the return key is hit, the page will turn.
I24	User must specify legend, e.g., PACTLD. When the return key is hit, the page will turn.
I25	User must specify start time and delta time if different from those shown or if none shown. When return key is hit, page will turn.
I26	User must specify mission, e.g., SL1. When return key is hit, page will turn.
I27	Scheduling Opportunities for all Groups. When return key is hit, page will turn.
I28	Display Menu, Option 6, has been selected by the user. When return key is hit, page will turn.

Page No.	Explanation
I29	User must specify legend, e.g., PACTLD. When return key is hit, page will turn.
I30	User must supply start time and delta time if different from those shown or if none shown. When return key is hit, page will turn.
I31	Composite Crewman Unscheduled Time. When return key is hit, page will turn.
I32	Display Menu, Option 7, has been selected by the user. When return key is hit, page will turn.
I33	User must supply start and end time if different from those shown or if none shown. When return key is hit, page will turn.
I34	Unscheduled time. When return key is hit, page will turn.
I35	Display Menu, Option 8, has been selected by the user. When return key is hit, page will turn.
I36	User must specify start and end times if different from those shown or if none shown. When return key is hit, page will turn.
I37	Composite Travel Schedule. When return key is hit, page will turn.
I38	Display Menu, Option 9, has been selected by the user. When return key is hit, page will turn.
I39	User must specify legend, e.g., PACTLD. When return key is hit, page will turn.
I40	User must specify start time and delta time if different from those shown or if none shown. When return key is hit, page will turn.
I41	Composite Timeline for Locations. When return key is hit, page will turn.
I42	Display Menu, Option 10, has been selected by the user. When return key is hit, page will turn.



Page No.	Explanation
I43	User must specify legend, e.g., PACTLD. When return key is hit, page will turn.
I44	User must specify start time and delta time if different from those shown. When return key is hit, page will turn.
I45	User must specify mission. When return key is hit, page will turn.
I46	Composite Resource Timeline. When return key is hit, page will turn.
I47	Display Menu, Option 11, has been selected by the user. When return key is hit, page will turn.
I48	User must specify start and end times. When return key is hit, page will turn.
I49	User must specify crewman for display. When return key is hit, page will turn.
I50	Crewman Schedule PSI. When return key is hit, page will turn.
I51	Display Menu, Option 12, has been selected by the user. When the return key is hit, the page will turn.
I52	User must specify legend, e.g., PACTLD. When the return key is hit, the page will turn.
I53	User must specify start time and delta time. When the return key is hit, the page will turn.
I54	User must specify crewman for display. When the return key is hit, the page will turn.
I55	User must specify the mission. When the return key is hit, the page will turn.
I56	Location Timeline for PSI. When the return key is hit, the page will turn.
I57	Display Menu, Option 13, has been selected by the user. When the return key is hit, the page will turn.
I58	User must specify start and end time. When the return key is hit, the page will turn.

Page No.	Explanation
I59	User must specify crewman for display. When the return key is hit, the page will turn.
I60	Unscheduled Time for PS1. When the return key is hit, the page will turn.
I61	Display Menu, Option 14, has been selected by the user. When the return key is hit, the page will turn.
I62	User must specify PACTS Name-Directed File. When the return key is hit, the page will turn.
I63	Display Menu, Option 15, has been selected by user. When the return key is hit, the page will turn.
I64	User must specify PACTS List-Directed File. When the return key is hit, the page will turn.
I65	Display Menu, Option 16, has been selected by the user. When the return key is hit, the page will turn.
I66	User must specify PACTS ON/OFF File. When the return key is hit, the page will turn.
I67	Display Menu, Option 0, has been selected by the user. When the return key is hit, the page will turn.
I68	Main Menu, Option 3, has been selected by the user. This Option prints the Display on the Alternate Print File. When the return key is hit, the page will turn.
I69	Print Option Menu. User may select, one at a time, as many of these options as desired. When the return key is hit, the page will turn.
I70	Print Option Menu, Option 1, has been selected by the user. When the return key is hit, the page will turn.
I71	User must specify start and end times. When the return key is hit, the page will turn.
I72	User must specify the mission. When the return key is hit, the page will turn.

Page No.	Explanation
I73	Print Option Menu, Option 0, has been selected by the user. When the return key is hit, the page will turn.
I74	PACTRG is exited through the PACTRG Main Menu, Option 0. When the return key is hit, PACTRG will terminate and the terminal will be returned to MIPS.
I75	Standard UNIVAC 1108 termination procedures.

- NOTE:
1. Tutorial Display Data in this appendix is SL1 Mission Data.
  2. PACTRG can be called up by standard UNIVAC 1108 and MIPS procedures as shown on the tutorial displays on pages II and IIA. However, PACTRG can also be called up by using Option 7 of PACTS Main Menu or Option 9 of PACTED.

PORT 25/26 SIGNON - HOST1(2X0) UP HOST2(2X0) UP  
DTK051  
ENTER USERID/PASSWORD:  
>PACTS/HCC

\*DESTROY USERID/PASSWORD ENTRY  
\*UNIUAC 1100 OPERATING SYSTEM LEU. AL36R2BHOST1(RSI)\*  
\*\*\*\*\*

RUN NUMBER 11

LAST RUN AT: 070280 071857  
DATE: 070280 TIME: 083554  
>OMIPS.L

MIPS INITIALIZATION IS IN PROGRESS  
OFF-LINE MAINTENANCE PROCESSOR LAST RUN AT 06/21/79 10:59:43  
TOTAL SUP TIME = .65 MIN  
SELECT NEW PRINT FILE OPTION:  
1 - WRITE PRINT FILE ON PAPER  
2 - WRITE PRINT FILE ON FICHE  
MIPS>1  
A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS140227\*P\$FS.  
INSERT COMMANDS : (INSERT HELP FOR TUTORING)  
MIPS>RUN PACTRG  
MIPS>GO

**HIPS**

06/21/79 14:05:01

PACTRG MAIN MENU

- - TERMINATE
  - 1 - DISPLAY USAGE INFORMATION ( HELP )
  - 2 - DISPLAY PLOTS ON TEKTRONIX AND TABLES ON TEKTRONIX AND PRINT FILE
  - 3 - DISPLAY TABLES ON PRINT FILE
- HIPS>

06/21/79 14:05:01

**NIPS**

PACTRG MAIN MENU

- - TERMINATE
  - 1 - DISPLAY USAGE INFORMATION ( HELP )
  - 2 - DISPLAY PLOTS ON TEKTRONIX AND TABLES ON TEKTRONIX AND PRINT FILE
  - 3 - DISPLAY TABLES ON PRINT FILE
- NIPS>1

ORIGINAL PAGE IS  
OF POOR QUALITY

06/21/79 14:03:51

MIPS

USAGE INFORMATION

- \* PLOTS CAN BE DISPLAYED ONLY ON TEXTRONIX
- \* FILE(S) NEEDED FOR DISPLAY WILL BE ASKED FOR IF THEY HAVE NOT BEEN SUPPLIED
- \* AT THE END OF EACH DISPLAY THE USER SHOULD
  - \* ENTER A BLANK IMAGE TO CONTINUE DISPLAYS
  - \* ENTER 'NEXT' TO STOP THIS DISPLAY OPTION AND CONTINUE TO NEXT SELECTED OPTION
  - \* ENTER 'STOP' TO STOP ALL DISPLAYS AND RETURN TO LAST DISPLAY
  - \* ENTER 'TIME' TO RETURN TO TIME QUESTION FOR DISPLAY
  - \* ENTER 'MISSION' TO RETURN AND INPUT NEW MISSION(S)
  - \* ENTER 'CREW' TO RETURN AND INPUT NEW CREW
  - \* ENTER 'LEGEND' TO RETURN AND INPUT NEW LEGEND
  - \* ENTER 'HELP' TO DISPLAY TUTORING
- \*\*\* NOTE: AN INPUT IS TRANSMITTED WHEN THE RETURN KEY IS PRESSED

\* 'STOP' AND 'RETURN' IS EFFECTIVE AT ANY TIME  
READ/COPY - THIS INPUT WILL NOT BE INTERPRETED  
MIPS>



MIPS

06/21/79 14:05:57

PACTRG MAIN MENU

- - TERMINATE
  - 1 - DISPLAY USAGE INFORMATION ( HELP )
  - 2 - DISPLAY PLOTS ON TEKTRONIX AND TABLES ON TEKTRONIX AND PRINT FILE
  - 3 - DISPLAY TABLES ON PRINT FILE
- MIPS>2

SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE
- 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
- 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATIONS
- 10 - PLOT RESOURCE UTILIZATION TIMELINE
  - xxx BY INDIVIDUAL CREWMAN xxx
- 11 - TABULATE SCHEDULE FOR A CREWMAN
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
  - xxx INPUT FILE SETUP xxx
- 14 - INPUT NAME-DIRECTED FILE
- 15 - INPUT LIST-DIRECTED FILE
- 16 - INPUT ON/OFF FILE

MIPS>

06/21/79 14:09:50



SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 2 - TABULATE COMPOSITE SCHEDULE FOR ALL TAE GROUPS
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
- 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATIONS
- 10 - PLOT RESOURCE UTILIZATION TIMELINE
- 11 - TABULATE SCHEDULE FOR INDIVIDUAL CREWMAN \*\*\*
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- 14 - INPUT NAME-DIRECTED FILE CURRENTLY TRAINING
- 15 - INPUT LIST-DIRECTED FILE CURRENTLY PACTLD
- 16 - INPUT ON/OFF FILE CURRENTLY PACTOF

MIPS>1

ORIGINAL PAGE IS  
OF POOR QUALITY

SPECIFY NAME OF PACTS NAME-DIRECTED FILE  
CURRENTLY  
MIPS>TRAINING

SPECIFY NAME OF PACTS LIST-DIRECTED FILE  
CURRENTLY  
MIPS>PACTLD

ENTER START TIME AND END TIME FOR TABLES  
ENTER 'ALL' FOR COMPLETE DATA FORMAT - 12/3/80  
USE MM/DD/YY MM/DD/YY  
CURRENTLY START = 7/1/78  
MIPS>



SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE
- 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
- 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATIONS
- 10 - PLOT RESOURCE UTILIZATION TIMELINE
- 11 - TABULATE SCHEDULE FOR A CREWMAN
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- 14 - INPUT NAME-DIRECTED FILE
- 15 - INPUT LIST-DIRECTED FILE
- 16 - INPUT ON/OFF FILE

\*\*\* SUMMARY \*\*\*

\*\*\* BY INDIVIDUAL CREWMAN \*\*\*

\*\*\* INPUT FILE SETUP \*\*\*

TRAINING  
PACTLD  
PACTOF

MIPS>2



ENTER START TIME AND END TIME FOR TABLES  
ENTER 'ALL' FOR COMPLETE DATA  
USE MM/DD/YY MM/DD/YY FORMAT  
CURRENTLY START = 7/1/78      END = 12/3/80  
MIPS>



06/22/79 10:40:51

COMPOSITE SCHEDULE WITH COST AND DURATION

SCHEDULE ID - 86041

PACTLD

GROUP	TIME ID	LOCATION	TYPE DESCRIPTION	START TIME	END TIME	T WORK (U DAYS)	T COST (\$)
TWAMEL		FROM: EUROPE	TO : NSFC	8/5/78	8/5/78		1500.00
TWAMEL		FROM: LA	TO : NSFC	8/6/78	8/6/78		1730.00
TWAMEL		FROM: BOSTON	TO : NSFC	8/6/78	8/6/78		1840.00
TWAMEL		FROM: JSC	TO : NSFC	8/6/78	8/6/78		2002.00
ORIENT	MSLON	NSFC	MSA/ESA OVERVIEW	8/7/78	8/7/78	1.50	2002.00
ORIENT	YNGOU	NSFC	TRAINING OVERVIEW	8/7/78	8/7/78	2.00	2002.00
ORIENT	SLGOU	NSFC	SI OVERVIEW	8/8/78	8/8/78	2.50	2002.00
ORIENT	SHOU	NSFC	SHUTTLE OVERVIEW	8/8/78	8/9/78	3.00	2002.00
ORIENT	PLSCOU	NSFC	PL SCIENCE OVERVIEW	8/9/78	8/9/78	3.25	2002.00
ORIENT	PLEXSU	NSFC	PL INTEG OVERVIEW	8/9/78	8/9/78	3.50	2002.00
ORIENT	RF0U	NSFC	MISSION PLANNING OVERVIEW	8/9/78	8/18/78	4.00	2002.00
ORIENT	BS5OU	NSFC	DS6 OVERVIEW	8/10/78	8/18/78	5.00	2002.00
TWAMEL		FROM: NSFC	TO : LA	8/11/78	8/11/78		2172.00
TWAMEL		FROM: NSFC	TO : BOSTON	8/11/78	8/11/78		2235.00
TWAMEL		FROM: NSFC	TO : EUROPE	8/11/78	8/12/78		2302.00
TWAMEL		FROM: NSFC	TO : EUROPE	8/11/78	8/12/78		3202.00
TWAMEL		FROM: NSFC	TO : EUROPE	8/11/78	8/12/78		3042.00
TWAMEL		FROM: NSFC	TO : JSC	8/11/78	8/11/78		3003.00
TWAMEL		FROM: NSFC	TO : JSC	8/11/78	8/11/78		4004.00
NAME	LA			8/12/78	10/8/78	12.00	0004.00
NAME	BOSTON			8/12/78	10/8/78	13.00	0004.00
NAME	JSC			8/12/78	10/8/78	14.00	0004.00
NAME	JSC			8/12/78	10/8/78	15.00	0004.00

PAGE 1

RUPO



06/21/79 14:12:16

SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 2 - TABULATE COMPOSITE SCHEDULE FOR ALL TAE GROUPS
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
- 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATIONS
- 10 - PLOT RESOURCE UTILIZATION ON TIMELINE
- 11 - TABULATE SCHEDULE FOR A CREWMAN
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- 14 - INPUT NAME-DIRECTED FILE
- 15 - INPUT LIST-DIRECTED FILE
- 16 - INPUT ON/OFF FILE

\*\*\* SUMMARY \*\*\*

\*\*\* BY INDIVIDUAL CREWMAN \*\*\*

\*\*\* INPUT FILE SETUP \*\*\*

TRAINING  
PACTLD  
PACTOF

NIPS>3

INPUT LEGEND DESIRED FOR DISPLAY ( UP TO 36 CHARACTERS )  
CURRENTLY : PACTLD  
MIPS>

ENTER MISSION(S) DESIRED  
ENTER 'ALL' FOR ALL MISSIONS INVOLVED  
CURRENTLY :  
MIPS>SL1

**HIPS**

06/22/79 10:42:54

ENTER START TIME AND DELTA TIME OF EACH PLOT  
CURRENTLY: START TIME IN MM/DD/YY FORM  
7/1/78  
DELTA TIME IN WEEKS  
4

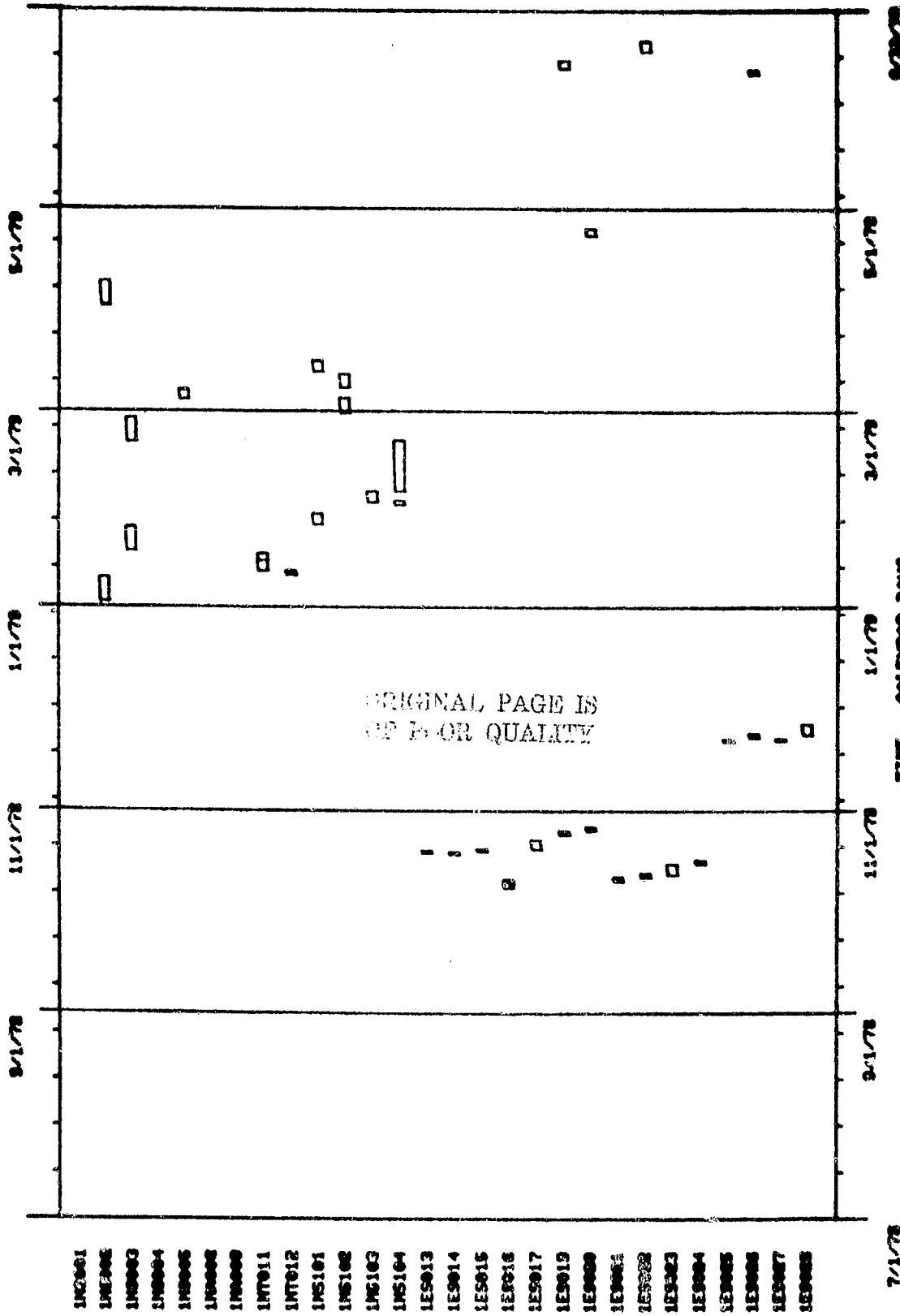
HIPS>

06/22/79 10:43:38  
NIPS

06/22/79 10:43:38

FACTS

7/1/78



7/1/78 9/1/78 11/1/78 1/1/79 3/1/79 5/1/79 6/30/79

TIME - CALENDAR DAYS  
SCHEDULE FOR ALL THE GROUPS

7/1/78

SELECT DISPLAY OPTION(S) DESIRED

06/22/79 10:44:21

MIPS

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE \*\*\* SUMMARY \*\*\*
- 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
- 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATIONS
- 10 - PLOT RESOURCE UTILIZATION TIMELINE
- 11 - TABULATE SCHEDULE FOR A CREWMAN \*\*\* BY INDIVIDUAL CREWMAN \*\*\*
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- 14 - INPUT NAME-DIRECTED FILE CURRENTLY TRAINING
- 15 - INPUT LIST-DIRECTED FILE CURRENTLY PACTLD
- 16 - INPUT ON/OFF FILE CURRENTLY PACTOF

MIPS>4



ENTER MISSION(S) DESIRED  
CURRENTLY : SL1  
MIPS>

FIPS

06/22/79 10:45:31

SCHEDULE SUMMARY FOR ALL TAE GROUPS SCHEDULE ID - 86041

PACTLD

GROUP	GROUP TIME BEGIN	GROUP TIME END	DURATION	GROUP	GROUP TIME BEGIN	GROUP TIME END	DURATION	GROUP	GROUP TIME BEGIN	GROUP TIME END	DURATION
1NS001	567.00	581.00	7.50	POCC	813.37	825.37	1.00				
1NS002	568.00	584.00	16.00	RIMIL	739.90	739.90	0.00				
1NS003	569.00	1013.00	17.00	STSOU	536.90	536.12	1.00				
1NS004	569.00	582.00	1.50	OKSYS1	947.37	947.37	0.00				
1NS005	569.00	585.00	5.00	OKSYS2	947.62	947.62	0.00				
1NS006	569.00	586.50	2.00	HAB1	940.25	940.25	1.75				
1NS007	569.00	901.50	9.50	HAB2	940.25	940.25	1.00				
1NS008	569.00	907.00	5.00	PHASE	921.62	921.62	0.00				
1NS009	569.00	706.00	10.00	PHASE	923.75	923.75	2.75				
1NS010	569.00	439.00	4.00	SI1SYS1	814.00	814.00	0.00				
1NS011	569.00	1039.00	16.00	SI1SYS2	530.62	530.62	0.00				
1NS012	569.00	1063.00	16.00	SI1SYS3	945.00	945.00	0.00				
1NS013	569.00	1053.00	16.00	LEVITU	788.50	788.50	0.00				
1NS014	569.00	972.00	2.00	WPLAN	614.00	614.00	0.00				
1NS015	569.00	961.00	1.50	LS1	979.00	979.00	0.00				
1NS016	569.00	961.00	3.00								
1NS017	569.00	962.00	1.50								
1NS018	569.00	962.00	5.00								
1NS019	569.00	964.00	5.00								
1NS020	569.00	204.00	1.50								
1NS021	569.00	1013.00	5.50								
1NS022	569.00	945.00	2.00								
1NS023	569.00	945.00	2.50								
1NS024	569.00	945.00	2.00								
1NS025	569.00	947.00	2.00								
1NS026	569.00	336.75	1.00								
1NS027	569.00	308.00	1.00								
1NS028	569.00	308.00	1.00								
1NS029	569.00	308.00	1.00								
1NS030	569.00	308.00	1.00								
1NS031	569.00	308.00	1.00								
1NS032	569.00	308.00	1.00								
1NS033	569.00	308.00	1.00								
1NS034	569.00	308.00	1.00								
1NS035	569.00	308.00	1.00								
1NS036	569.00	308.00	1.00								
1NS037	569.00	308.00	1.00								
1NS038	569.00	308.00	1.00								
1NS039	569.00	308.00	1.00								
1NS040	569.00	308.00	1.00								
1NS041	569.00	308.00	1.00								
1NS042	569.00	308.00	1.00								
1NS043	569.00	308.00	1.00								
1NS044	569.00	308.00	1.00								
1NS045	569.00	308.00	1.00								
1NS046	569.00	308.00	1.00								
1NS047	569.00	308.00	1.00								
1NS048	569.00	308.00	1.00								
1NS049	569.00	308.00	1.00								
1NS050	569.00	308.00	1.00								

PAGE 1

06/22/79 10:47:16

MIPS

SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE
- 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
- 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATION
- 10 - PLOT RESOURCE UTILIZATION TIMELINE
- 11 - TABULATE SCHEDULE FOR INDIVIDUAL CREWMAN \*\*\*
- 12 - TABULATE SCHEDULE FOR A CREWMAN
- 13 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 14 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- 15 - INPUT NAME-DIRECTED FILE CURRENTLY TRAINING
- 16 - INPUT LIST-DIRECTED FILE CURRENTLY PACTLD
- 17 - INPUT ON/OFF FILE CURRENTLY PACTOF

MIPS>5

INPUT LEGEND DESIRED FOR DISPLAY ( UP TO 36 CHARACTERS )  
CURRENTLY : TRAINING  
RIPS>PACTLD

C-3

06/22/79 10:48:21

RIPS

ENTER START TIME AND DELTA TIME OF EACH PLOT  
CURRENTLY: START TIME IN MM/DD/YY FORM 7/01/78

DELTA TIME IN WEEKS  
52

RIPS>

REPRINTED PAGE 10

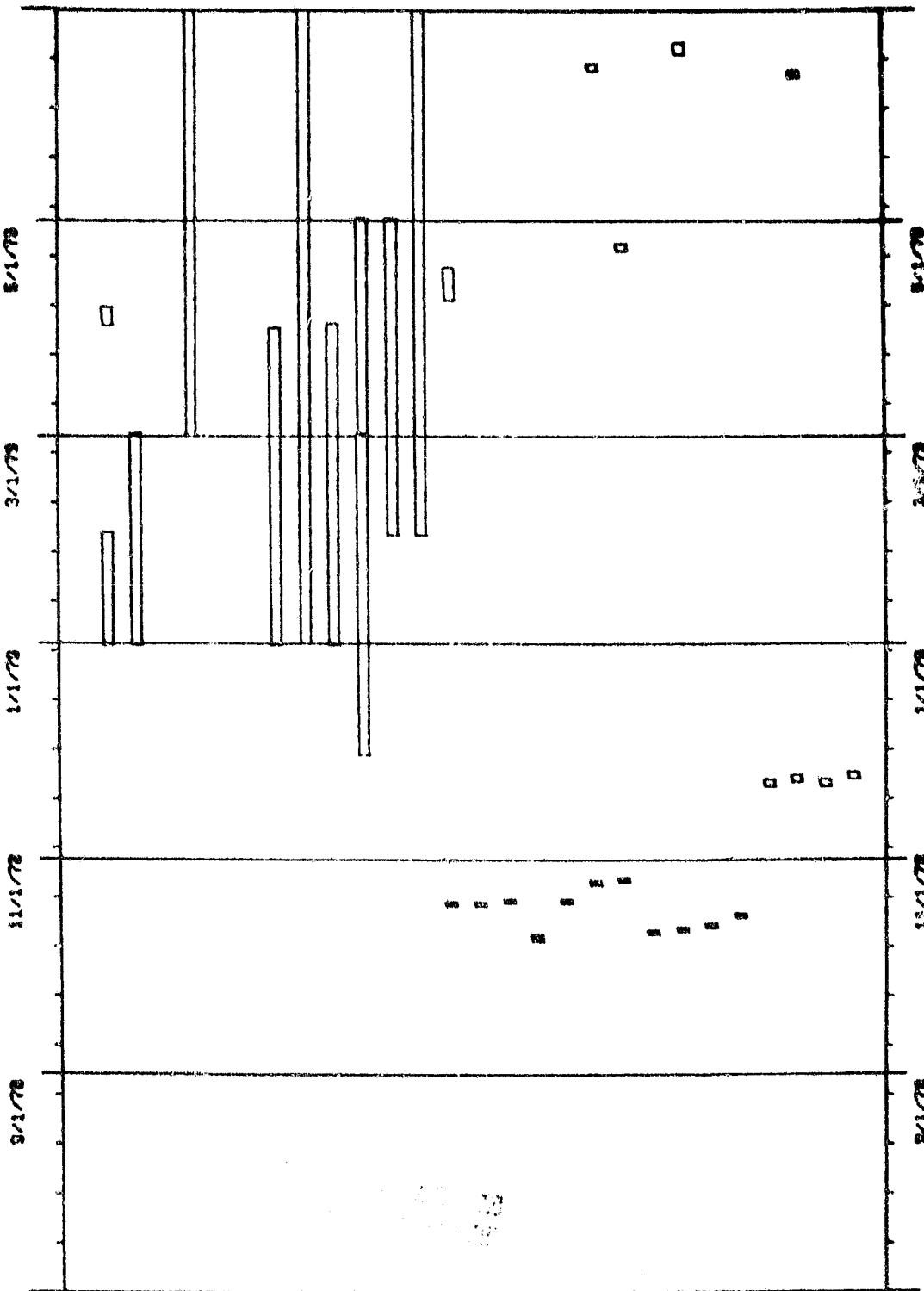
ENTER MISSION(S) DESIRED  
CURRENTLY : SL1  
MIPS>

MIPS  
06/22/79

06/22/79 10:48:54

PACTLD

7/1/78



- 1NS001
- 1NS002
- 1NS003
- 1NS004
- 1NS005
- 1NS006
- 1NS007
- 1NS011
- 1NS012
- 1NS101
- 1NS102
- 1NS103
- 1NS104
- 1ES013
- 1ES014
- 1ES015
- 1ES016
- 1ES017
- 1ES018
- 1ES019
- 1ES020
- 1ES021
- 1ES022
- 1ES023
- 1ES024
- 1ES025
- 1ES026
- 1ES027
- 1ES028

6/22/79  
PAGE 1 OF 2

TIME - CALENDAR DAYS  
SCHEDULING OPPORTUNITIES FOR ALL GROUPS

7/1/78

MIPS

SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE
- 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
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- 10 - PLOT RESOURCE UTILIZATION TIMELINE
- 11 - TABULATE SCHEDULE FOR A CREWMAN
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- 14 - INPUT NAME-DIRECTED FILE
- 15 - INPUT LIST-DIRECTED FILE
- 16 - INPUT ON/OFF FILE

\*\*\* SUMMARY \*\*\*

\*\*\* BY INDIVIDUAL CREWMAN \*\*\*

\*\*\* INPUT FILE SETUP \*\*\*

TRAINING  
PACTLD  
PACTOF

CURRENTLY  
CURRENTLY  
CURRENTLY

MIPS>6



INPUT LEGEND DESIRED FOR DISPLAY ( UP TO 36 CHARACTERS )  
CURRENTLY : PACTLDPACTOF  
RIPS>

06/22/79 10:54:10

MIPS

ENTER START TIME AND DELTA TIME OF EACH PLOT  
CURRENTLY: START TIME IN MM/DD/YY FORM  
7/01/78

DELTA TIME IN WEEKS  
52

MIPS>

**HIPS**

06/22/79 10:52:48

FACTORY

	7/1/78	9/1/78	11/1/78	1/1/79	3/1/79	5/1/79	7/1/79
PS1			□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
PS2			□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
PS3			□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
PS4			□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
PS5			□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
PS1			□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
NEG			□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

7/1/78

9/1/78

11/1/78

1/1/79

3/1/79

5/1/79

7/1/79

030/79  
PAGE 1 OF 1

TIME - CALENDAR DAYS  
COMPOSITE COLUMN UNSCHEDULED TIME

06/22/79 10:54:27

MIPS

SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 2 - TABULATE COMPOSITE SCHEDULE FOR ALL TAE GROUPS
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
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- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATIONS
- 10 - PLOT RESOURCE UTILIZATION TIMELINE
- 11 - TABULATE SCHEDULE FOR A CREWMAN
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- 14 - INPUT NAME-DIRECTED FILE
- 15 - INPUT LIST-DIRECTED FILE
- 16 - INPUT ON/OFF FILE

\*\*\* SUMMARY \*\*\*

TABULATE COMPOSITE SCHEDULE

TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION

PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS

TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS

PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS

PLOT UNSCHEDULED TIME FOR ALL CREWMEN

TABULATE UNSCHEDULED TIME FOR ALL CREWMEN

TABULATE TRAVEL SCHEDULE

PLOT TIMELINE OF LOCATIONS

PLOT RESOURCE UTILIZATION TIMELINE

\*\*\* BY INDIVIDUAL CREWMAN \*\*\*

TABULATE SCHEDULE FOR A CREWMAN

PLOT LOCATION TIMELINE FOR A CREWMAN

TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN

\*\*\* INPUT FILE SETUP \*\*\*

INPUT NAME-DIRECTED FILE

INPUT LIST-DIRECTED FILE

INPUT ON/OFF FILE

TRAINING

PACTLD

PACTOF

MIPS>7

ENTER START TIME AND END TIME FOR TABLES  
ENTER 'ALL' FOR COMPLETE DATA  
USE MM/DD/YY MM/DD/YY FORMAT  
CURRENTLY START = 7/1/78      END = 12/3/80  
MIPS>

06/22/79 10:55:28



UNSCHEDULED TIME  
COMPOSITE

BEGIN	END	DUR (HRS)	PAYLOAD SPECIALISTS							LAST LOCATION
8/5/78	8/7/78	24.000	PS1						LA	
8/6/78	8/7/78	24.000	PS2						BOSTON	
8/6/78	8/8/78	48.000	PS3						EUROPE	
8/5/78	8/7/78	24.000	PS1	PS4	PS5				JSC	
8/7/78	8/8/78	12.000	PS2	PS2					NSFC	
8/7/78	8/8/78	12.000	PS2	PS1	PS4	PS3	PS3	PS1	NSFC	
8/8/78	8/8/78	12.000	PS2	PS1	PS5	PS4	PS3	PS3	NSFC	
8/8/78	8/9/78	12.000	PS2	PS1	PS5	PS4	PS3	PS3	NSFC	
8/8/78	8/9/78	12.000	PS2	PS1	PS5	PS4	PS3	PS3	NSFC	
8/8/78	8/9/78	6.000	PS2	PS1	PS5	PS4	PS3	PS3	NSFC	
8/8/78	8/9/78	6.000	PS2	PS1	PS5	PS4	PS3	PS3	NSFC	
8/9/78	8/10/78	12.000	PS2	PS1	PS5	PS4	PS3	PS3	NSFC	
8/10/78	8/11/78	24.000	PS2	PS1	PS5	PS4	PS3	PS3	NSFC	
8/11/78	8/12/78	24.000	PS1						NSFC	
8/11/78	8/12/78	24.000	PS2						NSFC	
8/11/78	8/12/78	24.000	PS1						NSFC	
8/11/78	8/12/78	24.000	PS2						NSFC	
8/12/78	8/14/78	48.000	PS3						NSFC	
8/12/78	8/14/78	48.000	PS4						NSFC	
8/12/78	8/14/78	48.000	PS5						NSFC	
10/6/78	12/1/78	1341.600	PS1						LA	
10/6/78	12/1/78	1341.600	PS2						BOSTON	
10/6/78	12/2/78	1365.600	PS3						EUROPE	
10/6/78	12/2/78	1365.600	PS4						EUROPE	
10/6/78	12/2/78	1365.600	PS5						EUROPE	
10/6/78	12/1/78	1341.600	PS1						JSC	
10/6/78	12/1/78	1341.600	PS2						JSC	
10/8/78	10/10/78	48.000	PS1						LA	
10/8/78	10/10/78	48.000	PS2						BOSTON	
10/8/78	10/10/78	48.000	PS1	PS2					JSC	
10/8/78	10/10/78	24.000	PS2	PS1	PS5	PS4	PS3	PS3	FORZ	
10/10/78	10/11/78	24.000	PS2	PS1	PS5	PS4	PS3	PS3	FORZ	
10/11/78	10/12/78	24.000	PS2	PS1	PS5	PS4	PS3	PS3	FORZ	
10/12/78	10/13/78	24.000	PS2	PS1	PS5	PS4	PS3	PS3	FORZ	
10/13/78	10/18/78	72.000	PS2	PS1	PS5	PS4	PS3	PS3	FORZ	
10/15/78	10/17/78	24.000	PS2	PS1	PS5	PS4	PS3	PS3	FORZ	
10/18/78	10/20/78	12.000	PS2	PS1	PS5	PS4	PS3	PS3	PARIS	
10/19/78	10/20/78	12.000	PS2	PS1	PS5	PS4	PS3	PS3	PARIS	
10/20/78	10/21/78	12.000	PS2	PS1	PS5	PS4	PS3	PS3	PARIS	
10/20/78	10/23/78	60.000	PS2	PS1	PS5	PS4	PS3	PS3	PARIS	
10/25/78	10/26/78	24.000	PS2	PS1	PS5	PS4	PS3	PS3	PARIS	
10/26/78	10/27/78	24.000	PS2	PS1	PS5	PS4	PS3	PS3	PARIS	
11/1/78	11/4/78	72.000	PS2	PS1	PS5	PS4	PS3	PS3	PARIS	
11/3/78	11/7/78	60.000	PS2	PS1	PS5	PS4	PS3	PS3	PARIS	
11/8/78	12/5/78	300.000	PS1						PARIS	
11/10/78	11/23/78	12.000	PS1						PARIS	
11/10/78	11/23/78	6.000	PS1						PARIS	
11/10/78	11/23/78	6.000	PS1						PARIS	
11/13/78	11/24/78	24.000	PS1						PARIS	

202

ORIGINAL PAGE IS  
OF TYPE OF DATA

SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
  - 1 - TABULATE COMPOSITE SCHEDULE
  - 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
  - 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
  - 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
  - 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
  - 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
  - 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
  - 8 - TABULATE TRAVEL SCHEDULE
  - 9 - PLOT TIMELINE OF LOCATIONS
  - 10 - PLOT RESOURCE UTILIZATION TIMELINE
  - 11 - TABULATE SCHEDULE FOR A CREWMAN
  - 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
  - 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
  - 14 - INPUT NAME-DIRECTED FILE
  - 15 - INPUT LIST-DIRECTED FILE
  - 16 - INPUT ON/OFF FILE
- HIPS>8

\*\*\* SUMMARY \*\*\*

TABULATE COMPOSITE SCHEDULE

TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION

PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS

TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS

PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS

PLOT UNSCHEDULED TIME FOR ALL CREWMEN

TABULATE UNSCHEDULED TIME FOR ALL CREWMEN

TABULATE TRAVEL SCHEDULE

PLOT TIMELINE OF LOCATIONS

PLOT RESOURCE UTILIZATION TIMELINE

\*\*\* BY INDIVIDUAL CREWMAN \*\*\*

TABULATE SCHEDULE FOR A CREWMAN

PLOT LOCATION TIMELINE FOR A CREWMAN

TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN

\*\*\* INPUT FILE SETUP \*\*\*

TRAINING

PACTLD

PACTOF

ENTER START TIME AND END TIME FOR TABLES  
ENTER 'ALL' FOR COMPLETE DATA  
USE . MM/DD/YY MM/DD/YY FORMAT  
CURRENTLY START - 7/1/78 END - 12/3/80  
RIPS>





SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
  - 1 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
  - 2 - TABULATE COMPOSITE SCHEDULE FOR ALL TAE GROUPS
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  - 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
  - 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
  - 8 - TABULATE TRAVEL SCHEDULE
  - 9 - TABULATE TIMELINE OF LOCATIONS
  - 10 - PLOT RESOURCE UTILIZATION TIMELINE
  - 11 - TABULATE SCHEDULE FOR A CREWMAN
  - 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
  - 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
  - 14 - INPUT NAME-DIRECTED FILE
  - 15 - INPUT LIST-DIRECTED FILE
  - 16 - INPUT ON/OFF FILE
- \*\*\* SUMMARY \*\*\*  
 \*\*\* BY INDIVIDUAL CREWMAN \*\*\*  
 \*\*\* INPUT FILE SETUP \*\*\*  
 TRAINING  
 PACTLD  
 PACTOF  
 CURRENTLY  
 CURRENTLY  
 CURRENTLY

HIPS>9

INPUT LEGEND DESIRED FOR DISPLAY ( UP TO 36 CHARACTERS )  
CURRENTLY : PACTLDPACTLD  
MIPS>PACTLD

MIPS

06/22/79 11:06:22

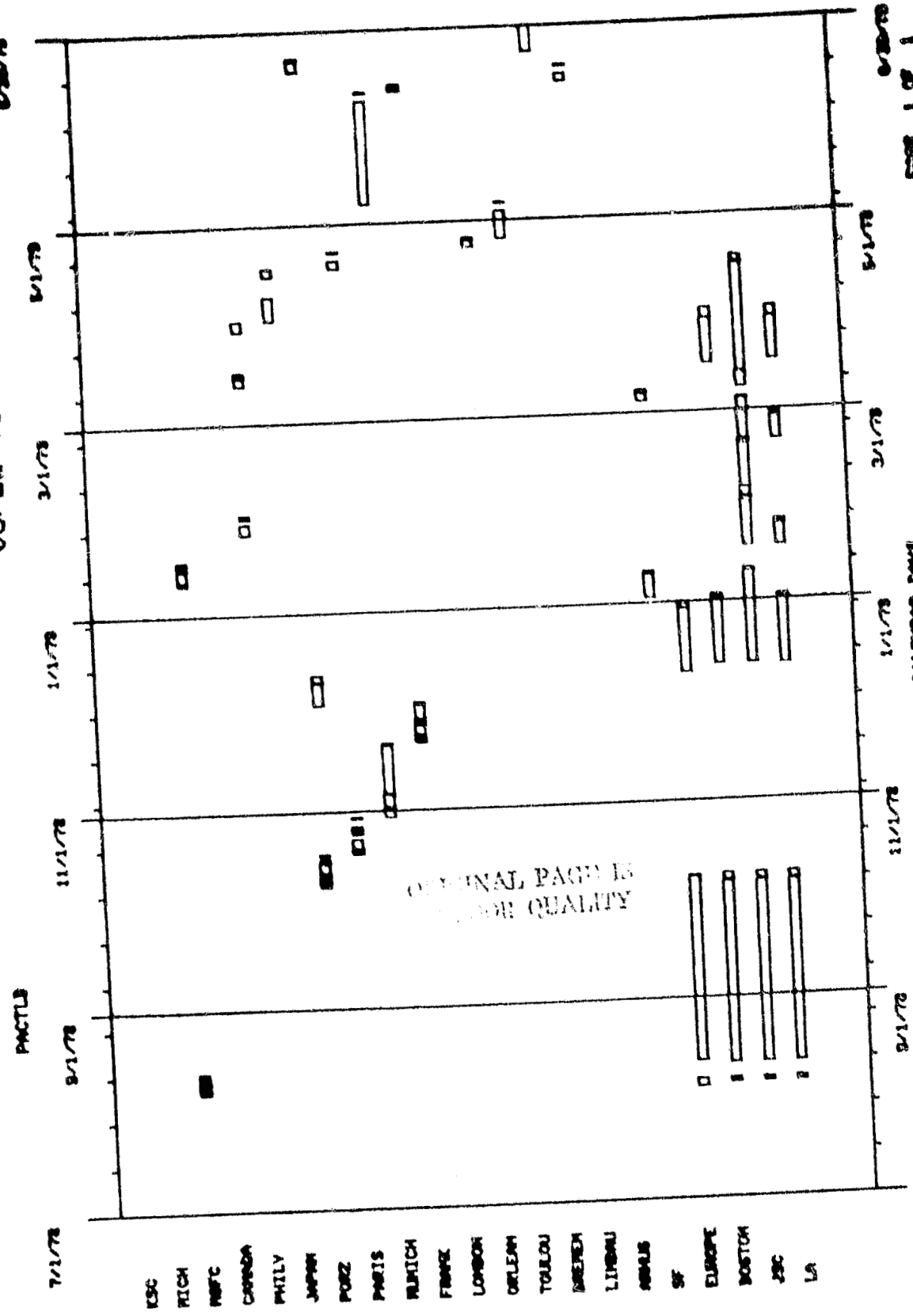
ENTER START TIME AND DELTA TIME OF EACH PLOT  
CURRENTLY: START TIME IN MM/DD/YY FORM  
7/01/78

DELTA TIME IN WEEKS  
52

MIPS>

PIPS

06/22/79 11:05:39



TYPE - CALENDAR DAYS  
COMPOSITE TIMELINE FOR LOCATIONS

7/1/78

PIPS

9/1/78 11/1/78 1/1/78 3/1/78 5/1/78 6/22/79

PAGE 1 OF 1



SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE
- 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
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- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- 14 - INPUT NAME-DIRECTED FILE
- 15 - INPUT LIST-DIRECTED FILE
- 16 - INPUT ON/OFF FILE

\*\*\* SUMMARY \*\*\*

\*\*\* BY INDIVIDUAL CREWMAN \*\*\*

\*\*\* INPUT FILE SETUP \*\*\*

TRAINING  
PACTLD  
PACTOF

MIPS>10

INPUT LEGEND DESIRED FOR DISPLAY ( UP TO 36 CHARACTERS )  
CURRENTLY : PACTLDPACTLD  
MIPS>PACTLD

MIPS

06/22/79 11:03:08

DELTA TIME IN WEEKS  
52

ENTER START TIME AND DELTA TIME OF EACH PLOT  
CURRENTLY: START TIME IN MM/DD/YY FORM  
7/01/78

MIPS>



ENTER MISSION(S) DESIRED  
ENTER 'ALL' FOR ALL MISSIONS INVOLVED  
CURRENTLY : SL1  
MIPS>

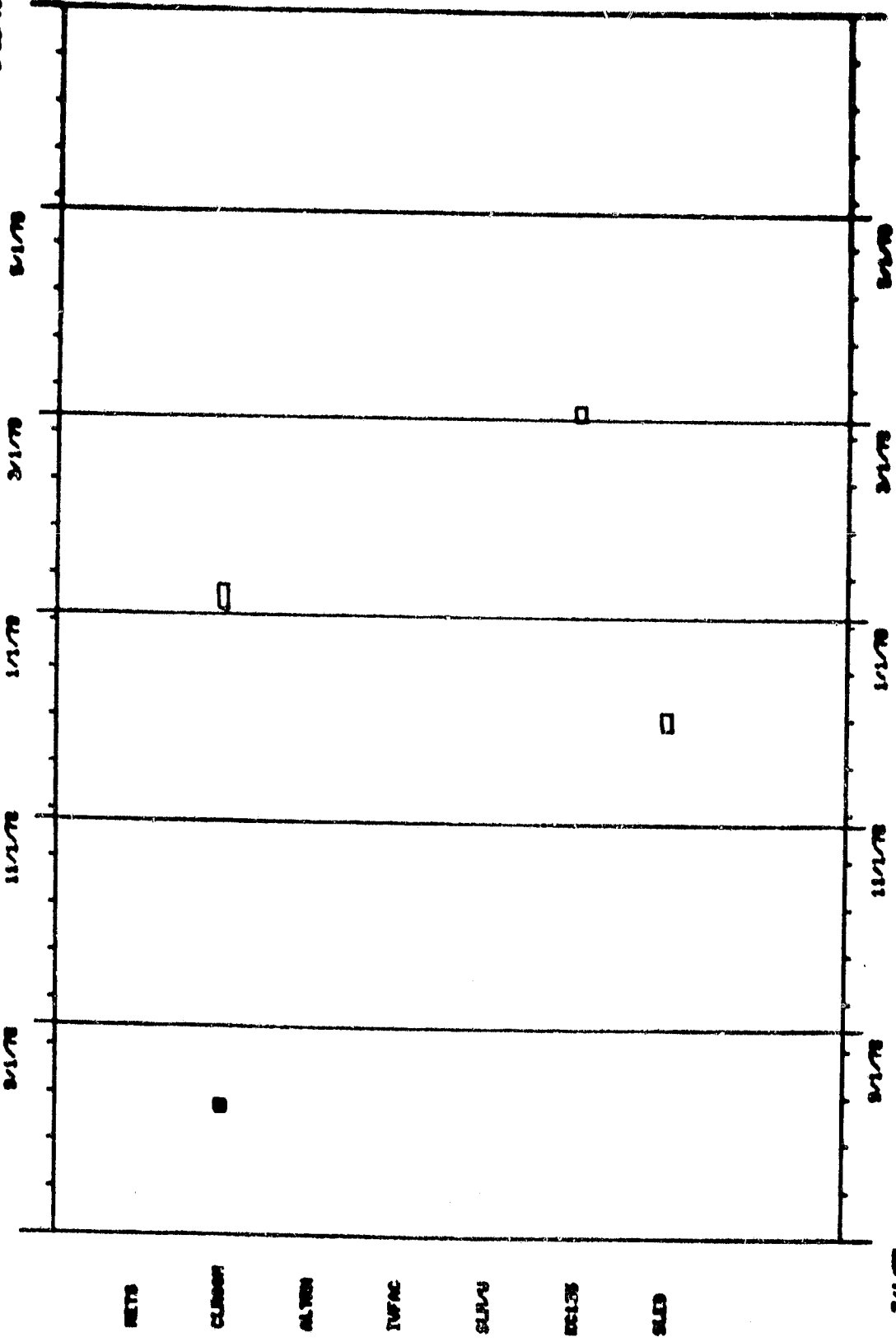
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06/22/79 11:08:55

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06/22/79 11:08:55

06/22/79 11:08:55

06/22/79 11:08:55

06/22/79 11:12:33

MIPS

SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- \*\*\* SUMMARY \*\*\*
- 1 - TABULATE COMPOSITE SCHEDULE
- 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
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- 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATIONS
- 10 - PLOT RESOURCE UTILIZATION TIMELINE
- \*\*\* BY INDIVIDUAL CREWMAN \*\*\*
- 11 - TABULATE SCHEDULE FOR A CREWMAN
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- \*\*\* INPUT FILE SETUP \*\*\*
- 14 - INPUT NAME-DIRECTED FILE      CURRENTLY      TRAINING
- 15 - INPUT LIST-DIRECTED FILE      CURRENTLY      PACTLD
- 16 - INPUT ON/OFF FILE              CURRENTLY      PACTOF

MIPS>11

ENTER START TIME AND END TIME FOR TABLES  
ENTER 'ALL' FOR COMPLETE DATA  
USE MM/DD/YY MM/DD/YY FORMAT  
CURRENTLY START - 7/1/78 END - 12/3/80  
MIPS>

SPECIFY CREWMAN FOR DISPLAY  
ENTER 'ALL' FOR ALL CREWMAN OF FILE

PS1  
PS2  
PS3  
PS4  
PS5  
MS1  
MS2  
RIPSDALL

ORIGINAL PAGE IS  
UNREPRODUCIBLE

RIPS

11:11:03

06/22/79

CREWMAN SCHEDULE  
PS1

SCHEDULE ID - 28041

FACTOF

GROUP	TAE ID	LOCATION	DESCRIPTION	START TIME	END TIME	WORK DAYS
TRAVEL		FROM: SA	TO: MSFC	8/8/78	8/8/78	
ORIENT	MSFC	MSFC	MSFC	8/7/78	8/7/78	1.00
ORIENT	TRACON	MSFC	TRAINING OVERVIEW	8/7/78	8/7/78	1.00
ORIENT	SLON	MSFC	SL OVERVIEW	8/8/78	8/8/78	1.00
ORIENT	SHOU	MSFC	SHUTTLE OVERVIEW	8/8/78	8/8/78	2.00
ORIENT	PLSCOU	MSFC	PL SCIENCE OVERVIEW	8/9/78	8/9/78	2.00
ORIENT	PLEXOU	MSFC	PL ENTER OVERVIEW	8/9/78	8/9/78	2.00
ORIENT	WFOU	MSFC	MISSION PLANNING OVERVIEW	8/9/78	8/9/78	2.00
ORIENT	MSOU	MSFC	ISS OVERVIEW	8/10/78	8/10/78	4.00
TRAVEL		FROM: MSFC	TO: LA	8/11/78	8/11/78	
NONE		LA		8/12/78	8/12/78	4.00
TRAVEL		FROM: LA	TO: FORZ	10/7/78	10/7/78	
LE9016	SABISC	FORZ	SA DISCIPLINE PHASE 2	10/9/78	10/9/78	5.00
LE9016	1	FORZ	PHASE 2	10/10/78	10/10/78	6.00
LE9016	1	FORZ	PHASE 2	10/11/78	10/11/78	7.00
LE9016	1	FORZ	PHASE 2	10/12/78	10/12/78	8.00
LE9016	1	FORZ	PHASE 2	10/13/78	10/13/78	9.00
LE9016	1	FORZ	PHASE 2	10/16/78	10/16/78	10.00
TRAVEL		FROM: FORZ	TO: PARIS	10/18/78	10/18/78	
LE9014	1	PARIS	PHASE 2	10/19/78	10/19/78	10.00
LE9014	1	PARIS	PHASE 2	10/19/78	10/19/78	11.00
LE9014	1	PARIS	PHASE 2	10/20/78	10/20/78	11.00
LE9014	1	PARIS	PHASE 2	10/20/78	10/20/78	12.00
LE9014	1	PARIS	PHASE 2	10/21/78	10/21/78	13.00
LE9014	1	PARIS	PHASE 2	10/22/78	10/22/78	14.00
TRAVEL		FROM: PARIS	TO: RELICH	10/23/78	10/23/78	
SE9000	1	RELICH	PHASE 2	10/29/78	10/29/78	17.00
SE9000	1	RELICH	PHASE 2	11/2/78	11/2/78	18.00
SE9000	1	RELICH	PHASE 2	11/2/78	11/2/78	19.00
TRAVEL		FROM: RELICH	TO: FRANK	11/21/78	11/21/78	
SE9000	1	FRANK	PHASE 2	11/29/78	11/29/78	20.00
SE9000	1	FRANK	PHASE 2	11/29/78	11/29/78	21.00
SE9000	1	FRANK	PHASE 2	11/29/78	11/29/78	22.00

MSFC

MSFC

06/22/79 11:13:07

## SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU  
 \*\*\* SUMMARY \*\*\*
- 1 - TABULATE COMPOSITE SCHEDULE  
 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION  
 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS  
 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS  
 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS  
 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN  
 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN  
 8 - TABULATE TRAVEL SCHEDULE  
 9 - PLOT TIMELINE OF LOCATIONS  
 10 - PLOT RESOURCE UTILIZATION TIMELINE  
 \*\*\* BY INDIVIDUAL CREWMAN \*\*\*
- 11 - TABULATE SCHEDULE FOR A CREWMAN  
 12 - PLOT LOCATION TIMELINE FOR A CREWMAN  
 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN  
 \*\*\* INPUT FILE SETUP \*\*\*
- 14 - INPUT NAME-DIRECTED FILE      TRAINING  
 15 - INPUT LIST-DIRECTED FILE      PACTLD  
 16 - INPUT ON/OFF FILE            PACTOF

MIPS&gt;12

INPUT LEGEND DESIRED FOR DISPLAY ( UP TO 36 CHARACTERS )  
CURRENTLY : PACTLDPACTOF  
MIPS>



MIPS

06/22/79 11:13:55

DELTA TIME IN WEEKS  
52

ENTER START TIME AND DELTA TIME OF EACH PLOT  
CURRENTLY: START TIME IN MM/DD/YY FORM  
7/01/78

MIPS>

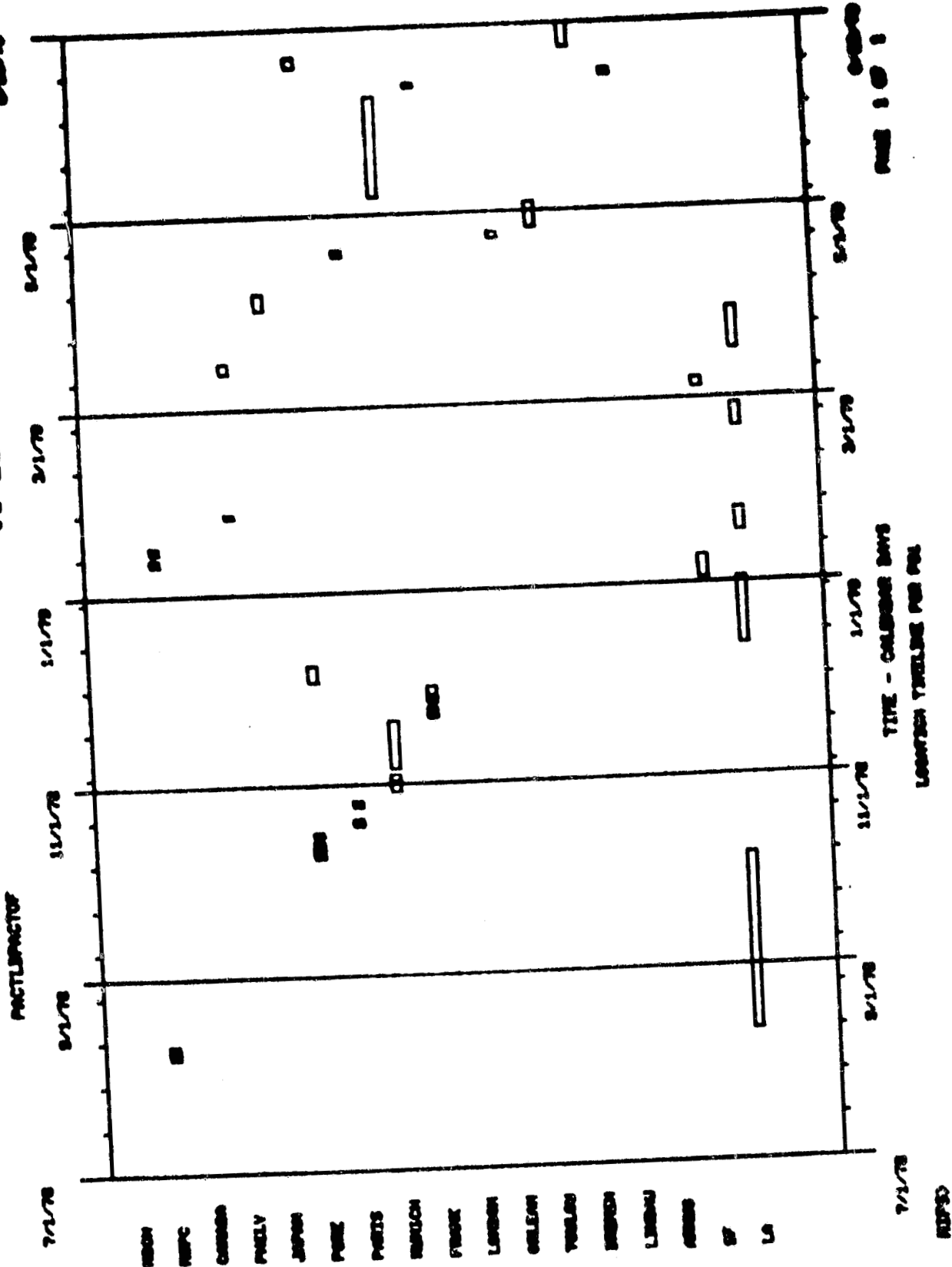
SPECIFY CREWMAN FOR DISPLAY  
ENTER 'ALL' FOR ALL CREWMAN OF FILE

PS1  
PS2  
PS3  
PS4  
PS5  
PS6  
PS7  
PS8  
PS9  
RIPD=ALL

ENTER MISSION(S) DESIRED  
ENTER 'ALL' FOR ALL MISSIONS INVOLVED  
CURRENTLY : SL1  
MIPS>



06/22/79 11:14:52



06/22/79 11:15:32



SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 2 - TABULATE COMPOSITE SCHEDULE FOR ALL TAE GROUPS
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
- 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATIONS
- 10 - PLOT RESOURCE UTILIZATION TIMELINE
- 11 - TABULATE SCHEDULE FOR A CREWMAN
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- 14 - INPUT NAME-DIRECTED FILE
- 15 - INPUT LIST-DIRECTED FILE
- 16 - INPUT ON/OFF FILE

\*\*\* SUMMARY \*\*\*

\*\*\* BY INDIVIDUAL CREWMAN \*\*\*

\*\*\* INPUT FILE SETUP \*\*\*

TRAINING  
PACTLD  
PACTOF

MIPS>13

ENTER START TIME AND END TIME FOR TABLES  
ENTER 'ALL' FOR COMPLETE DATA  
USE       MM/DD/YY MM/DD/YY     FORMAT  
CURRENTLY START = 7/1/78        END = 12/3/80  
RIPS>

SPECIFY CREWMAN FOR DISPLAY  
ENTER 'ALL' FOR ALL CREWMAN OF FILE

PS1  
PS2  
PS3  
PS4  
PS5  
MS1  
MS2  
RTPS>ALL



06/22/79 11:16:45

UNSCHEMULED TIME FOR P81  
FACTOF

START	END	RESORTION ( HRS )	LAST LOCATION	START	END	RESORTION ( HRS )	LAST LOCATION
10/13/78	10/10/78	2.10	POZZ	0/20/79	0/20/79	0.00	LA
10/14/78	10/10/78	2.00	POZZ	0/21/79	0/21/79	1.75	JAC
10/15/78	10/09/78	4.10	PARIS	0/22/79	0/24/79	1.00	JAC
10/16/78	10/09/78	3.00	PARIS	0/23/79	0/24/79	1.00	JAC
10/17/78	11/01/78	2.10	PARIS	0/24/79	0/24/79	1.00	JAC
11/08/78	11/01/78	1.00	PARIS	0/25/79	0/27/79	2.00	JAC
11/09/78	11/01/78	2.10	PARIS	0/26/79	0/27/79	2.10	JAC
11/10/78	11/01/78	2.00	PARIS	0/27/79	0/27/79	2.10	JAC
11/11/78	11/01/78	2.00	PARIS	0/28/79	0/27/79	2.10	JAC
11/12/78	11/01/78	2.00	PARIS	0/29/79	0/27/79	2.10	JAC
11/13/78	11/01/78	2.00	PARIS	0/30/79	0/27/79	2.10	JAC
11/14/78	11/01/78	2.00	PARIS	0/31/79	0/27/79	2.10	JAC
11/15/78	11/01/78	2.00	PARIS	0/01/80	0/11/80	2.00	JAC
11/16/78	11/01/78	2.00	PARIS	0/02/80	0/11/80	2.00	JAC
11/17/78	11/01/78	2.00	PARIS	0/03/80	0/11/80	2.00	JAC
11/18/78	11/01/78	2.00	PARIS	0/04/80	0/11/80	2.00	JAC
11/19/78	11/01/78	2.00	PARIS	0/05/80	0/11/80	2.00	JAC
11/20/78	11/01/78	2.00	PARIS	0/06/80	0/11/80	2.00	JAC
11/21/78	11/01/78	2.00	PARIS	0/07/80	0/11/80	2.00	JAC
11/22/78	11/01/78	2.00	PARIS	0/08/80	0/11/80	2.00	JAC
11/23/78	11/01/78	2.00	PARIS	0/09/80	0/11/80	2.00	JAC
11/24/78	11/01/78	2.00	PARIS	0/10/80	0/11/80	2.00	JAC
11/25/78	11/01/78	2.00	PARIS	0/11/80	0/11/80	2.00	JAC
11/26/78	11/01/78	2.00	PARIS	0/12/80	0/11/80	2.00	JAC
11/27/78	11/01/78	2.00	PARIS	0/13/80	0/11/80	2.00	JAC
11/28/78	11/01/78	2.00	PARIS	0/14/80	0/11/80	2.00	JAC
11/29/78	11/01/78	2.00	PARIS	0/15/80	0/11/80	2.00	JAC
11/30/78	11/01/78	2.00	PARIS	0/16/80	0/11/80	2.00	JAC
12/01/78	11/01/78	2.00	PARIS	0/17/80	0/11/80	2.00	JAC
12/02/78	11/01/78	2.00	PARIS	0/18/80	0/11/80	2.00	JAC
12/03/78	11/01/78	2.00	PARIS	0/19/80	0/11/80	2.00	JAC
12/04/78	11/01/78	2.00	PARIS	0/20/80	0/11/80	2.00	JAC
12/05/78	11/01/78	2.00	PARIS	0/21/80	0/11/80	2.00	JAC
12/06/78	11/01/78	2.00	PARIS	0/22/80	0/11/80	2.00	JAC
12/07/78	11/01/78	2.00	PARIS	0/23/80	0/11/80	2.00	JAC
12/08/78	11/01/78	2.00	PARIS	0/24/80	0/11/80	2.00	JAC
12/09/78	11/01/78	2.00	PARIS	0/25/80	0/11/80	2.00	JAC
12/10/78	11/01/78	2.00	PARIS	0/26/80	0/11/80	2.00	JAC
12/11/78	11/01/78	2.00	PARIS	0/27/80	0/11/80	2.00	JAC
12/12/78	11/01/78	2.00	PARIS	0/28/80	0/11/80	2.00	JAC
12/13/78	11/01/78	2.00	PARIS	0/29/80	0/11/80	2.00	JAC
12/14/78	11/01/78	2.00	PARIS	0/30/80	0/11/80	2.00	JAC
12/15/78	11/01/78	2.00	PARIS	0/01/81	0/11/81	1.01	JAC
12/16/78	11/01/78	2.00	PARIS	0/02/81	0/11/81	1.01	JAC
12/17/78	11/01/78	2.00	PARIS	0/03/81	0/11/81	1.01	JAC
12/18/78	11/01/78	2.00	PARIS	0/04/81	0/11/81	1.01	JAC
12/19/78	11/01/78	2.00	PARIS	0/05/81	0/11/81	1.01	JAC
12/20/78	11/01/78	2.00	PARIS	0/06/81	0/11/81	1.01	JAC
12/21/78	11/01/78	2.00	PARIS	0/07/81	0/11/81	1.01	JAC
12/22/78	11/01/78	2.00	PARIS	0/08/81	0/11/81	1.01	JAC
12/23/78	11/01/78	2.00	PARIS	0/09/81	0/11/81	1.01	JAC
12/24/78	11/01/78	2.00	PARIS	0/10/81	0/11/81	1.01	JAC
12/25/78	11/01/78	2.00	PARIS	0/11/81	0/11/81	1.01	JAC
12/26/78	11/01/78	2.00	PARIS	0/12/81	0/11/81	1.01	JAC
12/27/78	11/01/78	2.00	PARIS	0/13/81	0/11/81	1.01	JAC
12/28/78	11/01/78	2.00	PARIS	0/14/81	0/11/81	1.01	JAC
12/29/78	11/01/78	2.00	PARIS	0/15/81	0/11/81	1.01	JAC
12/30/78	11/01/78	2.00	PARIS	0/16/81	0/11/81	1.01	JAC
12/31/78	11/01/78	2.00	PARIS	0/17/81	0/11/81	1.01	JAC
12/32/78	11/01/78	2.00	PARIS	0/18/81	0/11/81	1.01	JAC
12/33/78	11/01/78	2.00	PARIS	0/19/81	0/11/81	1.01	JAC
12/34/78	11/01/78	2.00	PARIS	0/20/81	0/11/81	1.01	JAC
12/35/78	11/01/78	2.00	PARIS	0/21/81	0/11/81	1.01	JAC
12/36/78	11/01/78	2.00	PARIS	0/22/81	0/11/81	1.01	JAC
12/37/78	11/01/78	2.00	PARIS	0/23/81	0/11/81	1.01	JAC
12/38/78	11/01/78	2.00	PARIS	0/24/81	0/11/81	1.01	JAC
12/39/78	11/01/78	2.00	PARIS	0/25/81	0/11/81	1.01	JAC
12/40/78	11/01/78	2.00	PARIS	0/26/81	0/11/81	1.01	JAC
12/41/78	11/01/78	2.00	PARIS	0/27/81	0/11/81	1.01	JAC
12/42/78	11/01/78	2.00	PARIS	0/28/81	0/11/81	1.01	JAC
12/43/78	11/01/78	2.00	PARIS	0/29/81	0/11/81	1.01	JAC
12/44/78	11/01/78	2.00	PARIS	0/30/81	0/11/81	1.01	JAC
12/45/78	11/01/78	2.00	PARIS	0/01/82	0/11/82	1.01	JAC
12/46/78	11/01/78	2.00	PARIS	0/02/82	0/11/82	1.01	JAC
12/47/78	11/01/78	2.00	PARIS	0/03/82	0/11/82	1.01	JAC
12/48/78	11/01/78	2.00	PARIS	0/04/82	0/11/82	1.01	JAC
12/49/78	11/01/78	2.00	PARIS	0/05/82	0/11/82	1.01	JAC
12/50/78	11/01/78	2.00	PARIS	0/06/82	0/11/82	1.01	JAC
12/51/78	11/01/78	2.00	PARIS	0/07/82	0/11/82	1.01	JAC
12/52/78	11/01/78	2.00	PARIS	0/08/82	0/11/82	1.01	JAC
12/53/78	11/01/78	2.00	PARIS	0/09/82	0/11/82	1.01	JAC
12/54/78	11/01/78	2.00	PARIS	0/10/82	0/11/82	1.01	JAC
12/55/78	11/01/78	2.00	PARIS	0/11/82	0/11/82	1.01	JAC
12/56/78	11/01/78	2.00	PARIS	0/12/82	0/11/82	1.01	JAC
12/57/78	11/01/78	2.00	PARIS	0/13/82	0/11/82	1.01	JAC
12/58/78	11/01/78	2.00	PARIS	0/14/82	0/11/82	1.01	JAC
12/59/78	11/01/78	2.00	PARIS	0/15/82	0/11/82	1.01	JAC
12/60/78	11/01/78	2.00	PARIS	0/16/82	0/11/82	1.01	JAC

PAGE 1

DISPLAY COMPLETE

RECURRING - THIS INPUT WILL NOT BE IMPROVED

ORIGINAL PAGE IS  
OF POOR QUALITY



SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU \*\*\* SUMMARY \*\*\*
- 1 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 2 - TABULATE COMPOSITE SCHEDULE FOR ALL TAE GROUPS
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
- 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATIONS TIMELINE
- 10 - PLOT RESOURCE UTILIZATION CREWMAN \*\*\*  
\*\*\* BY INDIVIDUAL CREWMAN \*\*\*
- 11 - TABULATE SCHEDULE FOR A CREWMAN
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- 14 - INPUT NAME-DIRECTED FILE TRAINING
- 15 - INPUT LIST-DIRECTED FILE PACTLD
- 16 - INPUT ON/OFF FILE PACTOF

MIPS>14

SPECIFY NAME OF PACTS NAME-DIRECTED FILE  
CURRENTLY TRAINING  
NIPS>



06/21/79 14:07:58

SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 2 - TABULATE COMPOSITE SCHEDULE FOR ALL TAE GROUPS
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
- 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATIONS
- 10 - PLOT RESOURCE UTILIZATION TIMELINE
- 11 - TABULATE SCHEDULE FOR A CREWMAN
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- 14 - INPUT NAME-DIRECTED FILE CURRENTLY TRAINING
- 15 - INPUT LIST-DIRECTED FILE CURRENTLY
- 16 - INPUT ON/OFF FILE CURRENTLY

RIPS>15

SPECIFY NAME OF PACTS LIST-DIRECTED FILE  
CURRENTLY  
RIPS>PACTLD



06/21/79 14:09:01

SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
  - 1 - TABULATE COMPOSITE SCHEDULE
  - 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
  - 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
  - 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
  - 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
  - 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
  - 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
  - 8 - TABULATE TRAVEL SCHEDULE
  - 9 - PLOT TIMELINE OF LOCATIONS
  - 10 - PLOT RESOURCE UTILIZATION TIMELINE
  - 11 - TABULATE SCHEDULE FOR A CREWMAN
  - 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
  - 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
  - 14 - INPUT NAME-DIRECTED FILE
  - 15 - INPUT LIST-DIRECTED FILE
  - 16 - INPUT ON/OFF FILE
- \*\*\* SUMMARY \*\*\*  
 \*\*\* BY INDIVIDUAL CREWMAN \*\*\*  
 \*\*\* INPUT FILE SETUP \*\*\*  
 TRAINING  
 PACTLD  
 CURRENTLY  
 CURRENTLY  
 CURRENTLY

NIPS>16

SPECIFY NAME OF PACTS ON/OFF FILE  
CURRENTLY  
RIPS>PACTOF

SELECT DISPLAY OPTION(S) DESIRED

- 0 - RETURN TO MAIN MENU
- 1 - TABULATE COMPOSITE SCHEDULE
- 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
- 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
- 4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS
- 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
- 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
- 8 - TABULATE TRAVEL SCHEDULE
- 9 - PLOT TIMELINE OF LOCATIONS
- 10 - PLOT RESOURCE UTILIZATION TIMELINE
- \*\*\* BY INDIVIDUAL CREWMAN \*\*\*
- 11 - TABULATE SCHEDULE FOR A CREWMAN
- 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
- 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
- \*\*\* INPUT FILE SETUP \*\*\*
- 14 - INPUT NAME-DIRECTED FILE      TRAINING
- 15 - INPUT LIST-DIRECTED FILE      PACTLD
- 16 - INPUT ON/OFF FILE              PACTOF

MIPS>0

06/22/79 11:29:11

NIPS

PACTRG MAIN MENU

- - TERMINATE
  - 1 - DISPLAY USAGE INFORMATION ( HELP )
  - 2 - DISPLAY PLOTS ON TEKTRONIX AND TABLES ON TEKTRONIX AND PRINT FILE
  - 3 - DISPLAY TABLES ON PRINT FILE
- NIPS>3



SELECT PRINT OPTION(S) DESIRED :

- 0 - RETURN TO MAIN MENU
- 1 - PRINT ALL TABLES
  - \*\*\* SUMMARY \*\*\*
- 2 - PRINT COMPOSITE SCHEDULE
- 3 - PRINT COMPOSITE SCHEDULE WITH COST AND DURATION
- 4 - PRINT COMPOSITE SUMMARY FOR ALL TAE GROUPS
- 5 - PRINT UNSCHEDULED TIME FOR ALL CREWMEN
- 6 - PRINT TRAVEL SCHEDULE
  - \*\*\* BY INDIVIDUAL CREWMAN \*\*\*
- 7 - PRINT SCHEDULE FOR A CREWMAN
- 8 - PRINT UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
  - \*\*\* INPUT FILE SETUP \*\*\*
- 9 - INPUT NAME-DIRECTED FILE CURRENTLY TRAINING
- 10 - INPUT LIST-DIRECTED FILE CURRENTLY PACTLD
- 11 - INPUT ON/OFF FILE CURRENTLY PACTOF

MIPS>

06/25/79 09:31:34

**MIPS**

SELECT PRINT OPTION(S) DESIRED :

- 0 - RETURN TO MAIN MENU
- 1 - PRINT ALL TABLES  
    \*\*\* SUMMARY \*\*\*
- 2 - PRINT COMPOSITE SCHEDULE
- 3 - PRINT COMPOSITE SCHEDULE WITH COST AND DURATION
- 4 - PRINT SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PRINT UNSCHEDULED TIME FOR ALL CREWMEN
- 6 - PRINT TRAVEL SCHEDULE  
    \*\*\* BY INDIVIDUAL CREWMAN \*\*\*
- 7 - PRINT SCHEDULE FOR A CREWMAN
- 8 - PRINT UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN  
    \*\*\* INPUT FILE SETUP \*\*\*
- 9 - INPUT NAME-DIRECTED FILE      CURRENTLY
- 10 - INPUT LIST-DIRECTED FILE     CURRENTLY
- 11 - INPUT ON/OFF FILE            CURRENTLY

MIPS>1

238

ORIGINAL PAGE IS  
OF POOR QUALITY

ENTER START TIME AND END TIME FOR TABLES  
ENTER 'ALL' FOR COMPLETE DATA  
USE MM/DD/YY MM/DD/YY FORMAT  
CURRENTLY START = 7/1/78 END = 12/3/80  
MIPS>

ENTER MISSION(S) DESIRED  
CURRENTLY : SL1  
RIPS>

06/22/79 11:48:46

MIPS

SELECT PRINT OPTION(S) DESIRED :

- 0 - RETURN TO MAIN MENU
- 1 - PRINT ALL TABLES
  - \*\*\* SUMMARY \*\*\*
- 2 - PRINT COMPOSITE SCHEDULE
- 3 - PRINT COMPOSITE SCHEDULE WITH COST AND DURATION
- 4 - PRINT SCHEDULE SUMMARY FOR ALL TAE GROUPS
- 5 - PRINT UNSCHEDULED TIME FOR ALL CREWMEN
- 6 - PRINT TRAVEL SCHEDULE
  - \*\*\* BY INDIVIDUAL CREWMAN \*\*\*
- 7 - PRINT SCHEDULE FOR A CREWMAN
- 8 - PRINT UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
  - \*\*\* INPUT FILE SETUP \*\*\*
- 9 - INPUT NAME-DIRECTED FILE CURRENTLY TRAINING
- 10 - INPUT LIST-DIRECTED FILE CURRENTLY PACTLD
- 11 - INPUT ON/OFF FILE CURRENTLY PACTOF

MIPS>0

06/25/79 09:32:07

**RIPS**

PACTRG MAIN MENU

- - TERMINATE
  - 1 - DISPLAY USAGE INFORMATION ( HELP )
  - 2 - DISPLAY PLOTS ON TEKTRONIX AND TABLES ON TEKTRONIX AND PRINT FILE
  - 3 - DISPLAY TABLES ON PRINT FILE
- RIPS>**

TOTAL SUP TIME - 1.58 MIN  
IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

SELECT NEW PRINT FILE OPTION:

1 - WRITE PRINT FILE ON PAPER

2 - WRITE PRINT FILE ON FICHE

MIPS>1

A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS100629XP\$F\$.  
INSERT COMMANDS : (INSERT HELP FOR TUTORING)

MIPS>STOP

MIPS IS EXITING

PRINT FILES WILL BE DELETED IF NOT TRANSMITTED

IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

NORMAL EXIT.

DS)STOP: MIPS

>OFIN

CPU TIME: 295 TOTAL SUPS: 14885 (MILLISECON

RUNID: ELPACT ACCT: 1HEL12493200 PROJECT: JACKIEBIN207

STOP: MIPS

TIME;

SUPS: 00:01:47.014 CBSUPS: 030037005

CPU: 00:00:11.721 I/O: 00:00:35.924

CC/ER: 00:00:59.368 WAIT: 00:15:42.083

IMAGES READ: 66 PAGES: 33

START: 09:40:37 JUN 25,1979 FIN: 10:07:29 JUN 25,1979

-----  
TECHNENT TYPE YOU WILL GET ANY TYPE SERVO THAT HAPPENS TO BE  
AVAILABLE, EX: U34, U30, 8C, OR 8C9. ALL OASG CARDS THAT YOU USE 'T'  
EQUIPMENT TYPES SHOULD BE CHANGED TO U9S IMMEDIATELY.  
EXAMPLE: OASG,T FILENAME,T,REELNR CHANGE TO OASG,T FILENAME,USA,REELNR  
-----

STERMINAL INACTIVE

>OCTERN

APPENDIX J  
UNIVAC 1108 LOGON/LOGOFF  
PROCEDURES



PORT 25/26 SIGNON - HOST1(2X0) UP HOST2(2X0) UP  
DTK051  
ENTER USERID/PASSWORD:  
>PACTS/HCC

\*DESTROY USERID/PASSWORD ENTRY  
\*UNIVAC 1100 OPERATING SYSTEM LEU. AL36R28HOST1(RSI)\*  
\*\*\*\*\*

RUN NUMBER 11

LAST RUN AT: 070280 071857  
DATE: 070280 TIME: 083554  
>@MIPS,L

TOTAL SUP TIME = 1.58 MIN  
IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

SELECT NEW PRINT FILE OPTION:

- 1 - WRITE PRINT FILE ON PAPER
- 2 - WRITE PRINT FILE ON FICHE

MIPS>1

A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS100629XP9FS.

INSERT COMMANDS : (INSERT HELP FOR TUTORING)

MIPS>STOP

MIPS IS EXITING

PRINT FILES WILL BE DELETED IF NOT TRANSMITTED

IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

NORMAL EXIT.

DS)STOP: MIPS

>CFIN

CPU TIME: 295 TOTAL SUPS: 14885 (MILLISECOM

RUNID: ELPACT ACCT: 1HEL12493200 PROJECT: JACKIEBIN207

STOP: MIPS

TIME; SUPS: 00:01:47.014 CBSUPS: 030037005

CPU: 00:00:11.721 I/O: 00:00:35.924

CC/ER: 00:00:59.368 WAIT: 00:15:42.083

IMAGES READ: 66 PAGES: 33

START: 09:40:37 JUN 25, 1979 FIN: 10:07:29 JUN 25, 1979

-----  
TECHNENT TYPE YOU WILL GET ANY TYPE SERVO THAT HAPPENS TO BE  
AVAILABLE, EX: U34, U30, 8C, OR 8C9. ALL OASG CARDS THAT NOW USE 'T'  
EQUIPMENT TYPES SHOULD BE CHANGED TO U9S IMMEDIATELY.  
EXAMPLE: OASG,T FILENAME,T,REELNR CHANGE TO OASG,T FILENAME,U9S,REELNR

-----  
STERMINAL INACTIVEX  
>OCTERN

APPENDIX K  
MIPS COMMANDS

PORT 25/26 SIGNON - HOST1(2X0) UP HOST2(2X0) UP  
DTK051  
ENTER USERID/PASSWORD:  
>PACTS/HCC

\*DESTROY USERID/PASSWORD ENTRY  
\*UNIVAC 1100 OPERATING SYSTEM LEV. AL36R2BHOST1(RSI)\*  
\*XX\*

RUN NUMBER 11

LAST RUN AT: 070280 071857  
DATE: 070280 TIME: 083554  
>@MIPS,L

HIPS IS NOW AT YOUR SERVICE 09:13:14  
OFF-LINE FILE MAINTENANCE PROCESSOR LAST RUN AT 03/31/78  
ENTER ORGANIZATION NO./PROJECT ID/TERMINAL SITE ID

HIPS>E112/PACTS/DTK051  
TOTAL SUP TIME = 1.79 MIN  
SELECT NEW PRINT FILE OPTION:  
1 - WRITE PRINT FILE ON PAPER  
2 - WRITE PRINT FILE ON FICHE  
HIPS>1 A PRINT FILE HAS BEEN ESTABLISHED NAMED HPS100111P8F8.  
INSERT COMMANDS : (INSERT HELP FOR TUTORING)  
HIPS>RUN PACTDB  
HIPS>GO

CONFIDENTIAL  
PROPERTY OF THE  
FEDERAL BUREAU OF INVESTIGATION

TOTAL SUP TIME - 1.58 MIN  
IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

SELECT NEW PRINT FILE OPTION:

1 - WRITE PRINT FILE ON PAPER

2 - WRITE PRINT FILE ON FICHE

MIPS>1

A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS100629XPSFS.

INSERT COMMANDS : (INSERT HELP FOR TUTORING)

MIPS>STOP

MIPS IS EXITING

PRINT FILES WILL BE DELETED IF NOT TRANSMITTED

IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>YES

NORMAL EXIT.

DS)STOP: MIPS

>OFIN

TOTAL SUPS:

14885

(MILLISECON

RUNID: ELPACT ACCT: 1HEL12493200 PROJECT: JACKIEBIN207

STOP: MIPS

TIME; SUPS: 00:01:47.014 CBSUPS: 030037005

CPU: 00:00:11.721 I/O: 00:00:35.924

CC/ER: 00:00:59.368 WAIT: 00:15:42.083

IMAGES READ: 66 PAGES: 33

START: 09:40:37 JUN 25, 1979

FIN: 10:07:29 JUN 25, 1979

-----  
TECHNEMENT TYPE YOU WILL GET ANY TYPE SERVO THAT HAPPENS TO BE  
AVAILABLE. EX: U34, U30, 8C, OR 8C9. ALL SASG CARDS THAT NOW USE 'Y'  
EQUIPMENT TYPES SHOULD BE CHANGED TO U9S IMMEDIATELY.  
EXAMPLE: SASG.T FILENAME, T, REELNR CHANGE TO SASG. Y FILENAME, U9S, REELNR

-----  
STERMINAL INACTIVE

>OSTER

APPENDIX L  
PDP COMMANDS AND  
UNIVAC 1108  
PACT36 AND UPFIT  
COMMANDS

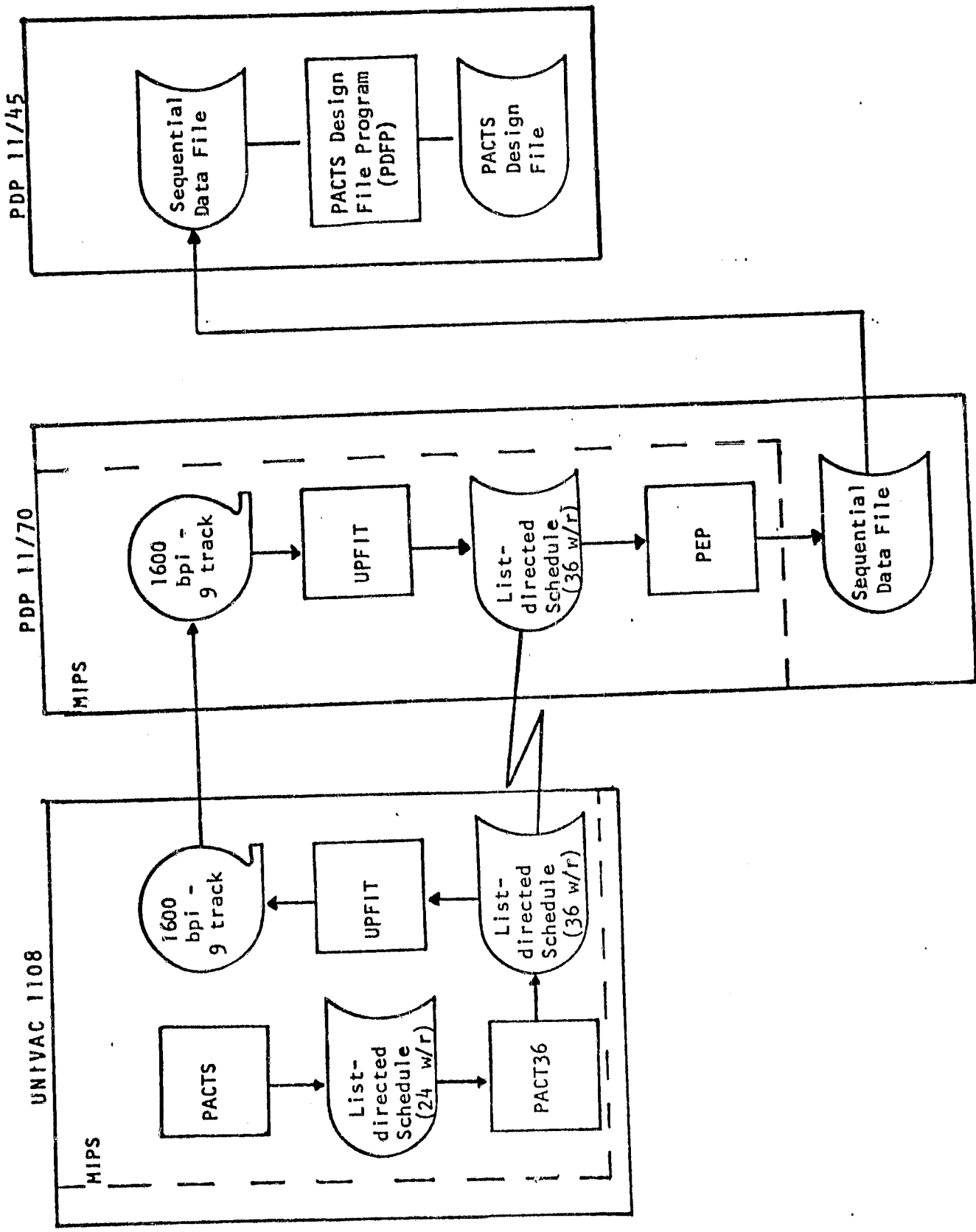


FIGURE L-1 PACTS/IGDS INTERFACE PROGRAMS



MICRO-PROCESSOR PROCEDURE  
(To be used temporarily until automatic system installed)

1. Power On:

Floppy Disk Unit (Back)

Micro-processor (Front)

Terminal (Back)

2. Initialize Floppy Disk Unit

Put Floppy Disk 2 into Slot 2 of Unit

3. Initialize Micro-processor

Press Stop

Press Reset

Press Examine

Press Run

4. Initialize Terminal

Press Space Bar One Time

Type PDPICM1

5. Remove Floppy Disk

1108 HOST 1 MIFS PACT36

PORT 25/23 SIGNON - HOST1(2X0) UP HOST2(2X0) UP  
BTK051  
ENTER USERID/PASSUORD:  
>ELPACTS/HCC

DESTROY USERID/PASSUORD ENTRY  
UNIVAC 1100 OPERATING SYSTEM VER. CI 33R3HOST1(RSI)X  
XX

RUN NUMBER 20

LAST RUN AT: 082179 080112

DUP ID, NEW ID IS C2170  
DATE: 082179 TIME: 121053  
>@HIPS,L

254

ORIGINAL PAGE IS  
OF POOR QUALITY

1108 HOST 1 MIPS PACT36

RIPS INITIALIZATION IS IN PROGRESS  
OFF-LINE MAINTENANCE PROCESSOR LAST RUN AT 08/21/79 11:12:21  
TOTAL SUP TIME = .65 MIN  
SELECT NEW PRINT FILE OPTION:  
1 - WRITE PRINT FILE ON PAPER  
2 - WRITE PRINT FILE ON FICHE  
MIPS>1

A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS121206\*P\$FS.  
INSERT COMMANDS : (INSERT HELP FOR TUTORING)  
MIPS>READY PACTLD

1108 HOST 1 MIPS PACT36.

PACTLD      READY FOR USE  
MIPS>READY PACT36

1108 HOST 1 MIPS PACT36

PACT36      READY FOR USE  
MIPS>RUN PACT36  
MIPS>GO

RECALL PAGES  
OF GOOD QUALITY

SPECIFY FILE NAME FOR READING THE FOLLOWING  
PACTS 24 WORD LIST-DIRECTED FILE

MIPS>PACTLD

LDF PACTLD LAST WRITE 08/31/79 10:28:51 7% OF USABLE SPACE

SPECIFY ACCEPTANCE CONDITIONS, ENTER HELP FOR TUTORING  
UP TO 4 LINES, USE ; FOR CONTINUATION

MIPS>

SPECIFY FILE NAME FOR WRITING THE FOLLOWING  
36 WORD LIST-DIRECTED OUTPUT FILE

MIPS>PACT36

TOTAL SUP TIME = 2.22 MIN  
IS THE CURRENT PRINT FILE TO BE TRANSMITTED?  
MIPS>YES  
SELECT NEW PRINT FILE OPTION:  
1 - WRITE PRINT FILE ON PAPER  
2 - WRITE PRINT FILE ON FICHE  
MIPS>1

A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS110657\*XP\$F\$.  
INSERT COMMANDS : (INSERT HELP FOR TUTORING)  
MIPS>STOP

MIPS IS EXITING  
PRINT FILES WILL BE DELETED IF NOT TRANSMITTED  
IS THE CURRENT PRINT FILE TO BE TRANSMITTED?  
MIPS>YES

NORMAL EXIT. CPU TIME: 306 TOTAL SUPS: 14876 (MILLISECON)  
DS)STOP: MIPS  
>OFIN

RUNID: ELPACT ACCT: 1HEL12493200 PROJECT: JACKIEBIN207  
STOP: MIPS  
TIME; SUPS: 00:02:25.096 CBSUPS: 037602476  
CPU: 00:00:09.829 I/O: 00:00:50.740  
CC/ER: 00:01:24.527 WAIT: 00:07:04.067  
IMAGES READ: 38 PAGES: 17  
START: 10:53:40 AUG 31,1979 FIN: 11:07:48 AUG 31,1979

-----  
DEMAND TERMINAL USER GUIDE UPDATED 08/17/79  
TECHNICAL BULLETIN LAST UPDATED AUGUST 27,1979 (TECH BULLETIN 52)

-----  
\*TERMINAL INACTIVE\*  
>00TERM

PORT 25/26 SIGNON - HOST1(2X0) UP HOST2(2X0) UP  
DTK051  
ENTER USERID/PASSWORD:  
>PACTS/HCC

\*DESTROY USERID/PASSWORD ENTRY  
\*UNIVAC 1100 OPERATING SYSTEM LEU. AL36R2BHOST1(RSI)\*  
\*\*\*\*\*

RUN NUMBER 11

LAST RUN AT: 070280 071857  
DATE: 070280 TIME: 083554  
>@MIPS,L

259A



MIPS INITIALIZATION IS IN PROGRESS  
OFF-LINE MAINTENANCE PROCESSOR LAST RUN AT 07/17/80 04:07:47  
TOTAL SUP TIME = .57 MIN  
SELECT NEW PRINT FILE OPTION:  
1 - WRITE PRINT FILE ON PAPER  
2 - WRITE PRINT FILE ON FICHE  
MIPS>1  
A PRINT FILE HAS BEEN ESTABLISHED NAMED MPS0752591P\$F\$.  
INSERT COMMANDS : (INSERT HELP FOR TUTORING)  
MIPS>RUN UPFIT  
MIPS>GO

SELECT DIRECTION OF FILE TRANSFER  
0 - TERMINATE PROGRAM EXECUTION  
1 - GET MIPS FILE FROM PDP TAPE  
2 - SEND MIPS FILE TO PDP ON TAPE

MIPS>2

ENTER A 24 CHARACTER DESCRIPTION FOR TAPE-SAVE LABEL

MIPS>SL1 PACT36

\*\* \* \*\* WAITING ON TAPE TO BE MOUNTED \*\* \* \*\*

\*\*\*\*\*

IF TAPE IS INPUT TAPE THE TAPE NUMBER  
SHOULD BE CALLED INTO THE TAPE LIBRARY  
LIBRARY PHONE # IS -- 3-4477

\*\*\*\*\*

ENTER MIPS FILE TO BE USED IN TRANSFER

MIPS>PACT36

DO YOU WISH TO DISPLAY DATA ON ALTERNATE PRINT FILE

MIPS>NO

EVRT	DAT1	DAT2	DAT3	DDUR	WDUR	GRUP	GRP2	TCST	TLOC
TLC2	LOC	LOC2	CR1	CR12	CR2	CR3	C3-4	CR4	CR5
C5-6	CR6	CR7	C7-8	CR8	CR9	9-10	CR10	RES1	R1-2
RES2	RES3	R3-4	RES4	RES5	RE-5				

ENTER THE ABOVE MNEMONICS WHICH REPRESENT ALPHANUMERIC DATA

SEPARATE MNEMONICS WITH A SPACE

MIPS>DAT1 DAT2 DAT3 GRUP GRP2 TCST TLOC TLC2 LOC LOC2 CR1 CR12 CR2 CR3 C3-4 ;

MIPS>CR4 CR5 C5-6 CR6 CR7 C7-8 CR8 CR9 9-10 CR10 RES1 R1-2 ;

MIPS>RES2 RES3 R3-4 RES4 RES5 RE-5

250 RECORDS WRITTEN TO TAPE...UPFIT STILL ACTIVE

500 RECORDS WRITTEN TO TAPE...UPFIT STILL ACTIVE

750 RECORDS WRITTEN TO TAPE...UPFIT STILL ACTIVE

1000 RECORDS WRITTEN TO TAPE...UPFIT STI

SELECT DIRECTION OF FILE TRANSFER  
0 - TERMINATE PROGRAM EXECUTION  
1 - GET MIPS FILE FROM PDP TAPE  
2 - SEND MIPS FILE TO PDP ON TAPE

MIPS>0

NEW TAPE NUMBER IS ----

23350

READ/COPY - THIS INPUT WILL NOT BE INTERPRETED

MIPS>

TOTAL SUP TIME - 5.05 MIN  
IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>NO  
INSERT COMMANDS : (INSERT HELP FOR TUTORING)  
MIPS>STOP

MIPS IS EXITING  
PRINT FILES WILL BE DELETED IF NOT TRANSMITTED  
IS THE CURRENT PRINT FILE TO BE TRANSMITTED?

MIPS>NO  
NORMAL EXIT. CPU TIME: 20 TOTAL SUPS: 7116 (MILLISECON)  
DS)STOP: MIPS  
>@FIN

RUNID: PACTS ACCT: 1HEL12401300 PROJECT: JACKIEBIN207

LOAD UNLABELED BLANK TP1 PDPTAP -1 PACTS  
LOAD UNLABELED BLANK TP10 PDPTAP -1 PACTS  
ANSWER WITH REEL NO. ON TP10

0 23360  
0 XXX SAVE XXX 23360 TP10 PDPTAP  
LOAD UNLABELED BLANK TP3 PDPTAP -1 PACTS  
ANSWER WITH REEL NO. ON TP3

0 04869  
0 XXX SAVE XXX 04869 TP3 PDPTAP  
LOAD UNLABELED BLANK TP9 PDPTAP -1 PACTS  
ANSWER WITH REEL NO. ON TP9

0 23350  
0 XXX SAVE XXX 23350 TP9 PDPTAP  
STOP: MIPS  
PACTS FIN

TIME: TOTAL: 00:05:07.643 CBSUPS: 101170559  
CPU: 00:01:22.197 I/O: 00:01:37.923

>HEL I100,11  
PASSWORD:

RSX-11M BL22 MULTI-USER SYSTEM

GOOD AFTERNOON

02-JUL-80 14:13 LOGGED ON TERMINAL TT4:

!! PLEASE PURGE YOUR FILES. THE DISKS ARE GETTING FULL.

#####  
e ALL TASKS MUST BE BUILT WITH THE /FP SWITCH OPTION. e  
e EXAMPLE: TKB>FILNAM/FP=FILNAM e  
e THIS WILL PREVENT FALSE FLOATING POINT ERRORS. e  
#####

>MIPS

PDP11/70 MIPS SYSTEM INITIALIZATION NOW IN PROGRESS

PDP 11/70 MIPS IS NOW AT YOUR SERVICE

DO YOU WISH TO ESTABLISH A NEW PRINT FILE?

MIPS>YES A PRINT FILE HAS BEEN CREATED NAMED DP:E100.1JT04141707.APF

MIPS>YES

A PRINT FILE HAS BEEN CREATED NAMED DP:E100.1JT04141707.APF

INSERT COMMANDS

MIPS>GET

THE ENTRY OF A \$ WILL ABORT THIS PROCEDURE

SPECIFY THE NAME OF THE PDP LOCAL FILE

TO RECEIVE THE UNIVAC CENTRAL FILE

MIPS>PACT36

SPECIFY NAME OF UNIVAC CENTRAL FILE TO RETRIEVE

MIPS>PACT36

SPECIFY THE READ KEY

MIPS>

PROCEDURE SUCCESSFULLY INITIATED

MIPS>STOP

FILE WILL BE DELETED IF NOT PRINTED

IS THE CURRENT PRINT FILE TO BE PRINTED?

MIPS>YES

MIPS IS EXITING

>

PDP11/70 MIPS SYSTEM INITIALIZATION NOW IN PROGRESS  
PDP 11/70 MIPS IS NOW AT YOUR SERVICE  
DO YOU WISH TO ESTABLISH A NEW PRINT FILE?

MIPS>>YES

A PRINT FILE HAS BEEN CREATED NAMED DP:E100,1JT04141837.APF  
INSERT COMMANDS

MIPS>>ST PACT36

DP0E100, 23PACT36 LD INSTALLED 7/30/79 15:55 BY D SHIPMAN  
36 WORD EXPANDED LIST-DIRECTED FILE FOR  
5000 RECORDS. 36 WORDS EACH. KEEP PERIOD3650 DAYS  
LAST LOCAL WRITE 3/31/80 12:35  
GET TRANSMISSION COMPLETED 3/31/80 12:35

STATUS COMPLETED

MIPS>

>HEL 0100,13/SAIL

RSX-11M BL22 MULTI-USER SYSTEM

GOOD AFTERNOON  
31-AUG-79 14:07 LOGGED ON TERMINAL TT14:

\*\*\*\*\*  
\* ALL TASKS MUST BE BUILT WITH THE /FP SWITCH OPTION.  
\* EXAMPLE: TR>FILNAM/FP-FILNAM  
\* THIS WILL PREVENT FALSE FLOATING POINT ERRORS.  
\*\*\*\*\*

<<<<<< THERE IS A MEMO POSTED IN THE TERMINAL ROOMS  
CONCERNING THE LINE PRINTER AND  
SPOOLING TO THE PRINTER. PLEASE READ IT.>>>>>>>>>>

!!  
!!  
!! KEEP YOUR FILES PURGED!  
!!  
!!

----- NOTICE NOTICE -----

- Beginning the first week in Sept., PREVENTIVE MAINTENANCE for the 4014 terminals and hardcopy units will be performed on a regularly scheduled day of the month.
- A sign will be posted in each room with a terminal (or terminals) showing the day and time allotted for the terminals in that room. During these time periods, R & S maintenance personnel have priority on the terminals in that room. Please cooperate with them during these times.

Harrell Phillips

\*\*\*\*\* SPECIAL NOTICE \*\*\*\*\*

- \* A NEW 300 MEGABYTE DISK DRIVE IS NOW ONLINE. IT'S DEVICE NAME IS DP2:
- \* PLEASE TRANSFER SOME OF YOUR FILES FROM DB0: TO DP2: SINCE DB0: IS CRITICALLY LOW ON FREE SPACE. CONTACT ME TO GET YOUR UIC SET UP ON DP2:.

HARRELL PHILLIPS

>MIPS



PDP11/70 MIPS SYSTEM INITIALIZATION NOW IN PROGRESS  
PDP 11/70 MIPS IS NOW AT YOUR SERVICE  
DO YOU WISH TO ESTABLISH A NEW PRINT FILE?

MIPS>YES

A PRINT FILE HAS BEEN CREATED NAMED DP:CI00,1JT14111316.APF  
INSERT COMMANDS

MIPS>ST PACT36

DP0CI00, 2IPACT36 LD INSTALLED 7/30/79 15:55 BY D SHIPMAN  
36 WORD EXPANDED LIST-DIRECTED FILE FOR  
5000 RECORDS. 36 WORDS EACH. KEEP PERIOD3650 DAYS  
LAST LOCAL WRITE 8/29/79 17:7  
GET TRANSMISSION COMPLETED 8/29/79 17:7

STATUS COMPLETED

MIPS>GET

THE ENTRY OF A \$ WILL ABORT THIS PROCEDURE  
SPECIFY THE NAME OF THE PDP LOCAL FILE  
TO RECEIVE THE UNIVAC CENTRAL FILE

MIPS>PACT36

SPECIFY NAME OF UNIVAC CENTRAL FILE TO RETRIEVE

MIPS>PACT36

SPECIFY THE READ KEY

MIPS>

PROCEDURE SUCCESSFULLY INITIATED

MIPS>STOP

FILE WILL BE DELETED IF NOT PRINTED  
IS THE CURRENT PRINT FILE TO BE PRINTED?

MIPS>YES

MIPS IS EXITING

>BYE

>

HAVE A GOOD MORNING

31-AUG-79 11:15 TT14: LOGGED OFF

>

>SET /UIC=C100,11

>MOU DK0: /OVR

>MIPS

POP11/70 MIPS SYSTEM INITIALIZATION NOW IN PROGRESS

POP 11/70 MIPS IS NOW AT YOUR SERVICE

DO YOU WISH TO ESTABLISH A NEW PRINT FILE?

MIPS>YES

A PRINT FILE HAS BEEN CREATED NAMED DP:C100,11T00095342.APF

INSERT COMMANDS

MIPS>RUN PEP

MIPS>GO

>

NONEXISTENT MODULE REFERENCED

MODULE ASSUMED TO BE A FUNCTION MODULE

RUN PEP

FACTS SCHEDULE DATA EXTRACT PROGRAM

SELECT ONE OF THE FOLLOWING:

0 - EXIT PROGRAM

1 - EXTRACT SCHEDULE DATA FROM A LIST-DIRECTED FILE

MIPS>1

INPUT THE MIPS DATA FILE NAME

CONTAINING FACTS SCHEDULE DATA

MIPS>FACT36

SELECT DEVICE FOR STORING OUTPUT#

1 - DK0:

2 - DK1:

3 - SY0:

4 - DP0:

MIPS>1

344 DATA RECORDS HAVE BEEN STORED ON DK0:C100, 1117777.DAT

FACTS SCHEDULE DATA EXTRACT PROGRAM

SELECT ONE OF THE FOLLOWING:

0 - EXIT PROGRAM

1 - EXTRACT SCHEDULE DATA FROM A LIST-DIRECTED FILE

MIPS>0

IS THE CURRENT PRINT FILE TO BE PRINTED?

MIPS>YES

DO YOU WISH TO ESTABLISH A NEW PRINT FILE?

MIPS>NO

INSERT COMMANDS

MIPS>S

MIPS>STOP

MIPS IS EXITING

DMO DK:

>

\*\*\* DK0: --- DISMOUNT COMPLETE

SET /UIC=C1,11

>

```
>MODU DKO: /OUR
>RUN PEP
>
```

```
INITIALIZATION ERROR -- LARGE TEKTRONIX ASSUMED
MIPS INTERFACE WILL BE PERFORMED
```

```
<<< MODULE INITIATED >>>
```

```
MIPS 1.0
```

```
FACTS SCHEDULE DATA EXTRACT PROGRAM
```

```
--- SELECT ONE OF THE FOLLOWING:
```

```
0 - EXIT PROGRAM
```

```
1 - EXTRACT SCHEDULE DATA FROM A LIST-DIRECTED FILE
```

```
MIPS>1
```

```
INPUT THE MIPS DATA FILE NAME
CONTAINING FACTS SCHEDULE DATA
```

```
MIPS>FACT36
```

```
SELECT DEVICE FOR STORING OUTPUT:
```

```
1 - DKO:
```

```
2 - DK1:
```

```
3 - SYO:
```

```
4 - DPO:
```

```
MIPS>1
```

```
344 DATA RECORDS HAVE BEEN STORED ON DKO:1100, 1117777.DAT
READ/COPY -- THIS INPUT WILL NOT BE INTERPRETED
```

```
MIPS>
```

```
FACTS SCHEDULE DATA EXTRACT PROGRAM
```

```
SELECT ONE OF THE FOLLOWING:
```

```
0 - EXIT PROGRAM
```

```
1 - EXTRACT SCHEDULE DATA FROM A LIST-DIRECTED FILE
```

```
MIPS>0
```

```
<<< MIPS MODULE TERMINATED >>>
```

```
MODULE EXITING
```

```
DMD DK:
```

```
>
```

```
*** DKO: -- DISMOUNT COMPLETE
```

```
SET /UIC=11,11
```

```
>
```

PDP 11/45 PDFP

```
MCR>LOA DK
MCR>MOU DK: /OVR
MOUNT-**VOLUME INFORMATION**
      DEVICE  =DKO
      CLASS   =FILE 11
      LABEL   =JSEL15
      UIC     =11,11
      ACCESS  =ERWED,RWED,RWED,RWED
      CHARAC  =11
MCR>INS 115,21 PDFP
MCR>FIX PDFP
MCR>RUN PDFP$
ENTER FILE NAME FROM PEP, ENTER STOP TO TERMINATE
>DK:1100,1117777,DAT
WAS THIS FILE LOADED FROM TAPE? (YES OR NO)
>NO
ENTER DESIGN FILE NAME
>115,21 PACTS.DGN
DESIGN FILE IS BEING WRITTEN
DESIGN FILE HAS BEEN WRITTEN
ENTER FILE NAME FROM PEP, ENTER STOP TO TERMINATE
>STOP
PDFP -- STOP PACTS DESIGN FILE PROGRAM

MCR>UNF PDFP
MCR>REM PDFP
MCR>DMO DK?
-----F11ACP --- DKO: ** DISMOUNT COMPLETE **
MCR>UNL DK
MCR>
```

INS PDFP  
MCR>FIX PDFP  
MCR>RUN PDFP\$  
ENTER FILE NAME FROM PEP, ENTER STOP TO TERMINATE  
>85581.DAT  
ENTER DESIGN FILE NAME  
>[15,2]TEST.DGN  
ENTER CELL LIBRARY FILE NAME  
>[15,2]TRAINING.LIB  
DESIGN FILE IS BEING WRITTEN  
SPECIFY CELL NAME FOR BACKGROUND DATA FOR THE YEAR 1978  
>  
SPECIFY CELL NAME FOR BACKGROUND DATA FOR THE YEAR 1979  
>  
SPECIFY CELL NAME FOR BACKGROUND DATA FOR THE YEAR 1980  
>1980BK  
\*DESIGN FILE HAS BEEN WRITTEN\*  
ENTER FILE NAME FROM PEP, ENTER STOP TO TERMINATE  
>STOP  
PDFP -- STOP PACTS DESIGN FILE PROGRAM

ORIGINAL PAGE IS  
OF POOR QUALITY

36-Word List-directed File Format

A 36-word list-directed file has been created with an expiration date of ten years for the user. The maximum number of records that can be written on the file is 5000. If the user should need a larger file or more than one file, the MIPS CF command on the 1108 or the IN command on the PDP may be used, and the PACT36 dictionary specified, as shown below.

```
MIPS> CF
      THE ENTRY OF A $ SIGN WILL ABORT FILE CREATION
      WHAT IS THE NAME OF THE FILE TO BE CREATED?
      UP TO 12 CHARACTERS ( A-Z, 0-9, -)
MIPS> FILE NAME
      SPECIFY THE TYPE OF FILE BY NUMBER
      1-NAME-DIRECTED
      2-LIST-DIRECTED
      3-ON-OFF
MIPS> 2
      SPECIFY THE MAXIMUM NUMBER OF RECORDS
MIPS> 5000
      SPECIFY A READ KEY IF DESIRED
MIPS>
      SPECIFY A WRITE KEY IF DESIRED
MIPS>
      SPECIFY NAME OF PERSON RESPONSIBLE FOR THIS FILE
MIPS> DAVID SHIPMAN
      HOW LONG IS THE FILE TO BE MAINTAINED - DAYS?
MIPS> 3650
      SPECIFY A 66 CHARACTER DESCRIPTION OF THE FILE
MIPS> 36 WORD IDF FOR TRANSFER TO PDP VIA COM LINE
      DOES A DICTIONARY CURRENTLY EXIST FOR THIS FILE?
MIPS> YES
      SPECIFY NAME OF FILE
MIPS> PACT36
      FILE SUCCESSFULLY CREATED
```

PDP 11/45 LIST DIRECTORY (DK)

MCR>LOA DK  
MCR>MOU DK: /OVR  
MOUNT>\*\*VOLUME INFORMATION\*\*

```

-----
      DEVICE =DKO
      CLASS  =FILE 11
      LABEL  =JSEL15
      UIC    =C1,11
      ACCESS =CRWD,RWED,RWED,RWEDJ
      HARAC  =CJ
-----

```

MCR>PIP  
PIP>DK:[\*,\*J]/LI

DIRECTORY DK0:C15,23  
6-SEP-79 09:39

TOTAL OF 0. BLOCKS IN 0. FILES

DIRECTORY DK0:C100,11  
6-SEP-79 09:39

```

-----
      86041.DAT#1      122.      30-AUG-79 12:47
      86041.DAT#2      122.      30-AUG-79 12:59
      17777.DAT#1      116.      04-SEP-79 10:11
      17777.DAT#2      116.      04-SEP-79 10:22
      17777.DAT#3      116.      04-SEP-79 10:34
-----

```

TOTAL OF 592. BLOCKS IN 5. FILES

DIRECTORY DK0:C100,23  
6-SEP-79 09:39

```

-----
      PEP.FTN#22      2.      14-AUG-79 07:17
      PEP.ODL#21      2.      14-AUG-79 07:18
      DKCOPY.CMD#1    1.      30-JUL-79 15:46
      PEFLST.CMD#6    1.      30-JUL-79 15:47
      PERF4P.CMD#2    1.      30-JUL-79 15:48
      PEP.OBJ#11      3.      14-AUG-79 07:18
      PEP.CMD#26      1.      14-AUG-79 07:18
      PEP.TSK#14      95.     C 14-AUG-79 07:18
      GETFIL.OBJ#11   9.      14-AUG-79 07:18
      GETFIL.FTN#15   6.      14-AUG-79 07:16
      OUTPUT.OBJ#2    8.      14-AUG-79 07:18
      OUTPUT.FTN#20   7.      14-AUG-79 07:18
-----

```

TOTAL OF 136. BLOCKS IN 12. FILES

DIRECTORY DK0:C12,123  
6-SEP-79 09:40

```

-----
      SCANA.FTN#4      1.      24-JUL-79 10:44
      MOUCHR.FTN#3     1.      24-JUL-79 10:44
      PACKL.FTN#4      1.      24-JUL-79 10:44
      SETCRD.FTN#7     2.      24-JUL-79 10:44
      PDFF.FTN#145     11.     24-JUL-79 10:44
      SCANA.OBJ#1      2.      24-JUL-79 10:44
      PACKL.OBJ#1      2.      24-JUL-79 10:44
      MOUCHR.OBJ#1     1.      24-JUL-79 10:44
      PDFF.CMD#27      1.      15-AUG-79 12:51
      SETCRD.OBJ#13    1.      24-JUL-79 10:44
      PDFF.OBJ#43      14.     24-JUL-79 10:44
      PEPINP.TSK#1     31.     C 24-JUL-79 10:44
      PDFF.TSK#11      64.     C 24-JUL-79 10:44
      PDFF.F4P#12      1.      15-AUG-79 12:51
-----

```

TOTAL OF 133. BLOCKS IN 14. FILES

PIP>CZ

MCR>DMD DK:  
F11ACP -- DK0: \*\* DISMOUNT COMPLETE \*\*  
MCR>UNL DK  
MCR>

REPRODUCED PAGE IS  
OF POOR QUALITY

INSTALL MIPS TASK ON PDP 11/70 USING DEC WRITER

```
>SET /UID=C100,11
08:48:42 LOGIN USER C100,71 TT14:
>RMIPSTASKS
>INS DP:C100,1JMIPS
>INS DP:C100,1JMIPS/TASK=...MIP
>INS DP:C100,1JLINK
>INS DP:C100,1JJOAP
>INS DP:C100,1JJOQMP
>INS DP:C100,1JFEP
>INS DP:C100,1JUFFIT
>@ <EOF>
>SET /UID=C1,11
>
```



## UNIVAC TO PDP FILE TRANSFER (UPFIT) MODULE

The UNIVAC to PDP file transfer (UPFIT) module provides general MIPS data file transfer on tape between the UNIVAC 1100/80 and PDP 11/70 computers. Files are written using 1600 BPI - 9 track tape drives. UPFIT output tapes must be checked out of the central site tape library by the user for transfer to the PDP. Blank tapes may be checked out of the tape library for use by the PDP UPFIT module. Tapes output by the PDP UPFIT module must be logged into the central site tape library and a reel number obtained by the user prior to using the UNIVAC UPFIT module for PDP to UNIVAC transfer.

### I. UNIVAC 1100/80

After entering MIPS in the usual manner perform the following:

1. Ready any files which are to be sent to the PDP 11/70.
2. Create or ready any files which are to receive MIPS data from the PDP 11/70.
3. Enter the commands:  
RUN UPFIT  
GO
4. Respond to queries from UPFIT. The UPFIT menu is:  
Select direction of file transfer  
0 - Terminate Program Execution  
1 - Get MIPS file from PDP tape  
2 - Send MIPS file to PDP on tape
5. UPFIT will provide the user with a reel number for output tapes. It is the user's responsibility to make note of and retain this number for use when checking the tape out of the tape library.

### II. PDP 11/70

Tapes must be physically mounted on the PDP 11/70 tape drive by the user. After a tape has been placed on the drive, set the tape density switch to 1600.

NOTE: The tape drive density switch MUST be set to 1600.

The user can now enter MIPS and:

1. Install any files which will be needed.
2. Enter the commands:  
RUN UPFIT  
GO
3. Respond to queries from UPFIT. The UPFIT menu is:  
Select direction of file transfer  
0 - Terminate Program  
1 - Get MIPS file from UNIVAC tape  
2 - Send MIPS file to UNIVAC on tape

For file transfer to the UNIVAC the tape written on the PDP 11/70 must be logged in at central site. The user should obtain the reel number assigned by the tape librarian for use as input to UPFIT.

\*\*\* GRAPHIC DESIGN SYSTEM \*\*\*

IGDS IS A COMPREHENSIVE SET OF INTERACTIVE SOFTWARE THAT PROVIDES TOTAL DESIGN CONTROL THROUGH THE GRAPHICS STATION. THIS CONTROL INCLUDES THE CONSTRUCTION, MANIPULATION, MAINTENANCE, STORAGE, RETRIEVAL, PLOTTING AND ANALYSIS OF GEOMETRIC DESIGNS. IGDS SUPPORTS THE FOLLOWING FEATURES.

DESIGN FILE LOG-ON

[1, 1]

UTILITY SERVICES

e

FEPLACE CELLS IN A DESIGN

e

TERMINATE DESIGN SESSION

e

\*\*\* DESIGN FILE SPECIFICATION \*\*\*

IGDS ALLOWS THE USER TO RECALL AN EXISTING DESIGN FOR ADDITIONAL WORK OR TO CREATE A NEW DESIGN.

TO ACCESS AN EXISTING DESIGN, THE USER IDENTIFICATION CODE (UIC) AND THE DISK DEVICE AND UNIT ASSOCIATED WITH THE DESIGN MUST BE DEFINED AS FOLLOWS:

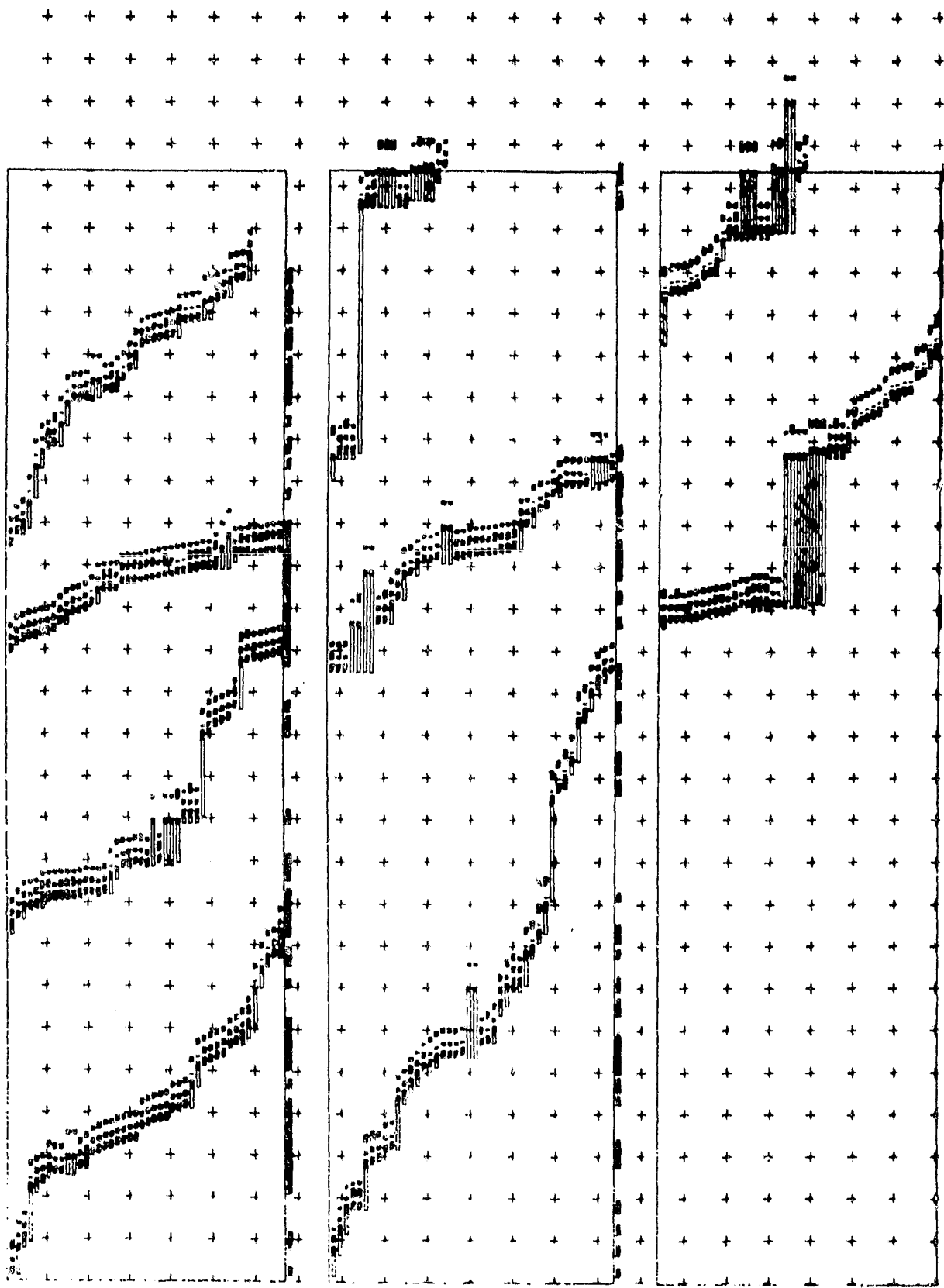
- DDD = DISK DEVICE AND UNIT
- GGG = USER GROUP NUMBER
- UUU = USER NUMBER WITHIN GROUP

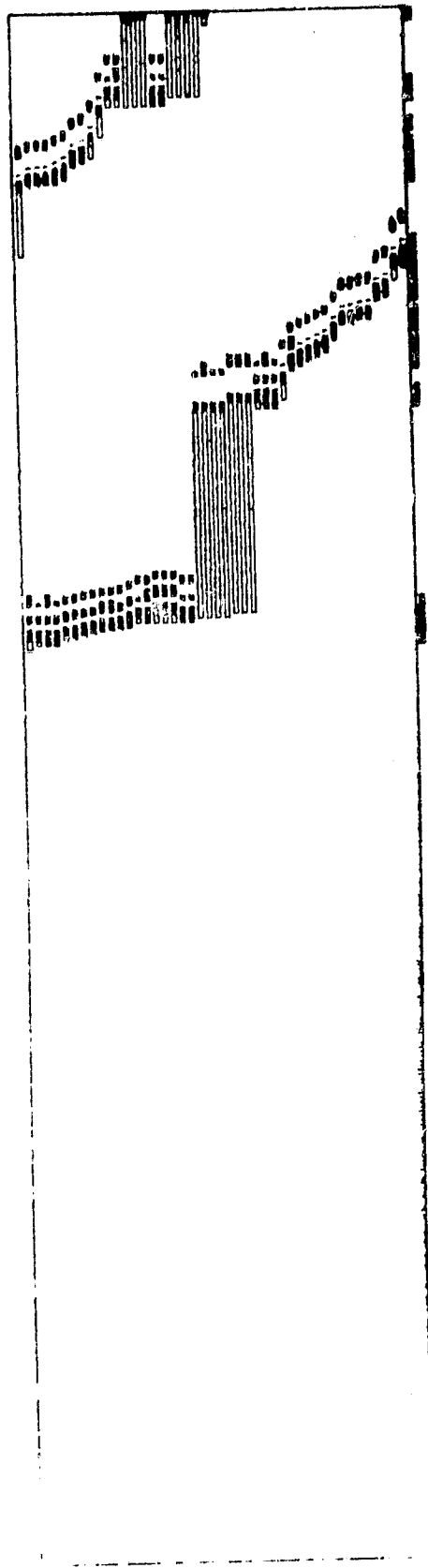
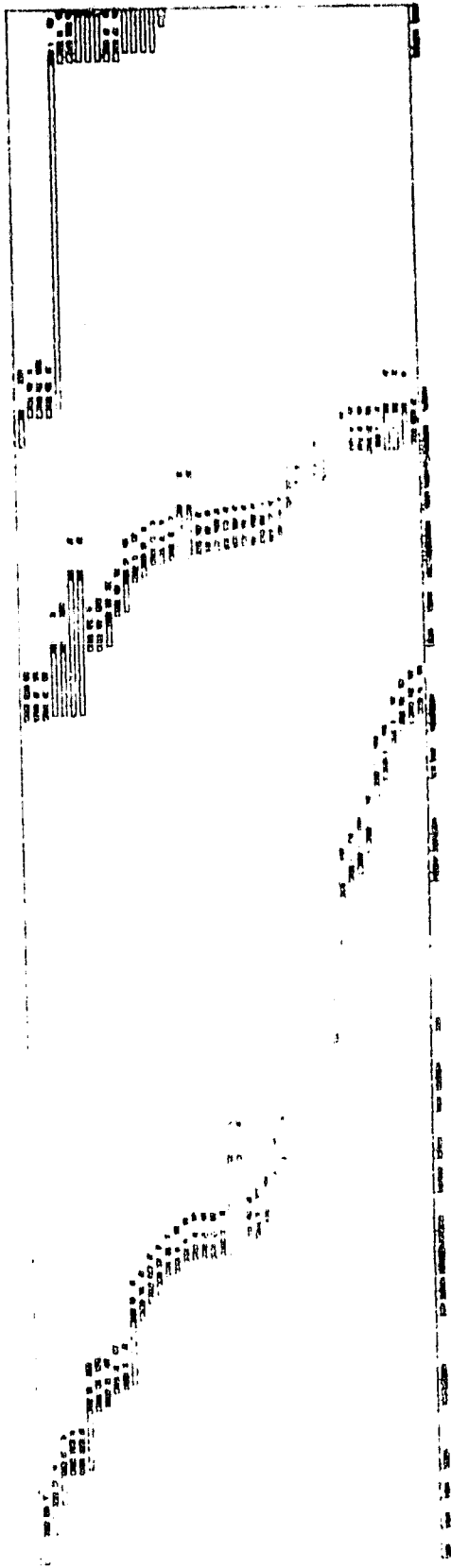
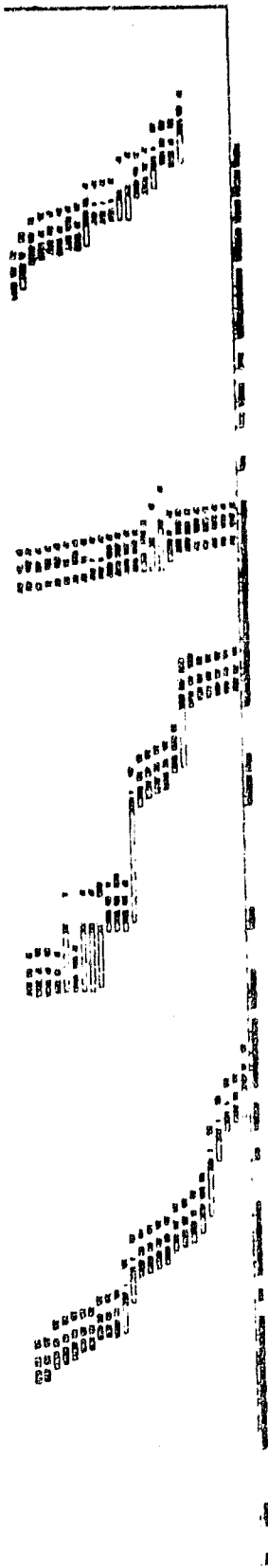
THE OLD LIBRARY ASSOCIATED WITH THE EXISTING DESIGN WILL BECOME THE ACTIVE LIBRARY WHEN THE DESIGN IS RECALLED. TO RECALL AN EXISTING DESIGN, DEFINE ITS DISK FILE NAME (F), EXTENSION (E), AND VERSION (V).

DESIGN FILE NAME      DF0:[15, 2] PACTS.DGN  
                          DDD:GGGG,UUUU]FFFFFFFF.FEE;VVU

CREATE A NEW DESIGN      @

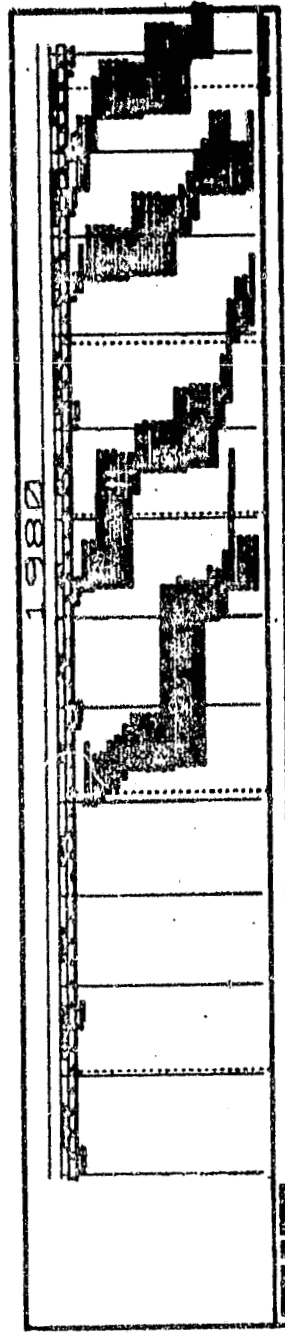
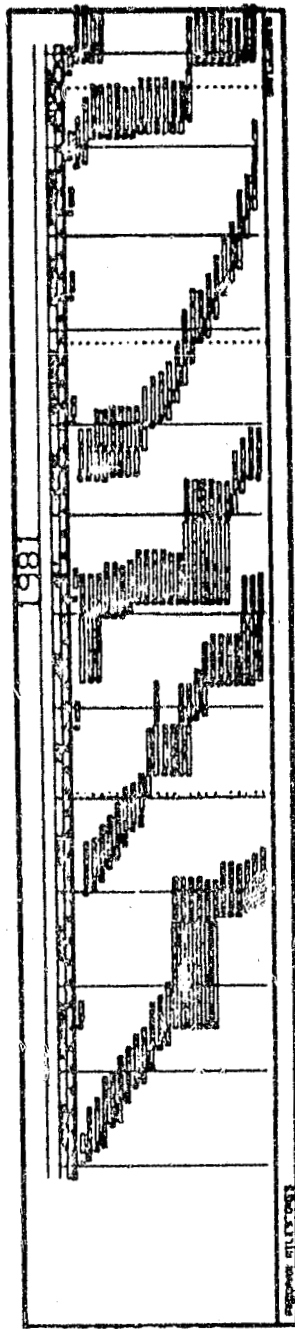
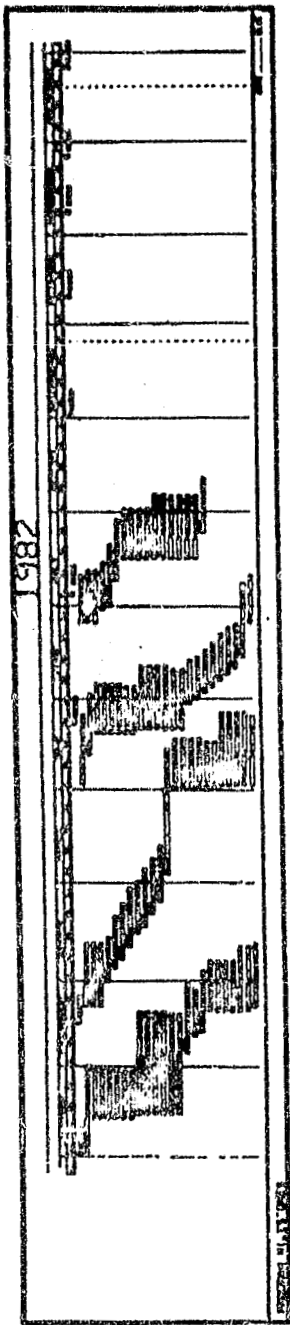
RETURN TO PRIOR LEVEL    @





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INS184 HAP JSC  
INS182 PFOJ JSC  
INS182 HOWARE JSC  
INS085 SHAP SE  
TRAVEL MSFC SF  
+ INT011 SB MSFC  
INT011 4W MSFC  
TRAVEL JSC MSFC  
TRAVEL JSC MSFC  
TRAVEL JSC MSFC  
INS183 SB JSC  
HOME JSC  
HOME JSC  
TRAVEL PHILLY JSC  
INS181 SB PHILLY  
INS181 HAP PHILLY  
TRAVEL JAPAN PHILLY  
INS182 HAP JAPAN  
+ TRAVEL PARIS JAPAN  
TRAVEL PARIS JSC  
IES013 2 PARIS  
IES008 2 PARIS  
IES008 2 ORLEAN  
IES008 3







THE ENTRY OF A \$ SIGN WILL ABORT FILE CREATION  
WHAT IS THE NAME OF THE FILE TO BE CREATED?

UP TO 12 CHARACTERS ( A-Z, 0-9, - )

MIPS>PACTOF

SPECIFY THE TYPE OF FILE BY NUMBER

1- NAME-DIRECTED

2- LIST-DIRECTED

3- ON-OFF

MIPS>3

SPECIFY THE MAXIMUM NUMBER OF RECORDS

MIPS>10000

SPECIFY A READ KEY IF DESIRED

MIPS>OF

SPECIFY A WRITE KEY IF DESIRED

MIPS>OF

SPECIFY NAME OF PERSON RESPONSIBLE FOR THIS FILE

MIPS>D.L.XH

HOW MANY DAYS THE FILE TO BE MAINTAINED - DAYS?

MIPS>365

SPECIFY A 66 CHARACTER DESCRIPTION OF THE FILE

MIPS>OUTPUT FILE OFCR SL1

APPENDIX M  
PROGRAM LISTINGS

FACTDB PAYLOAD CREW TRAINING DATA BASE.

- SELECT FROM THE FOLLOWING:
- 0 RETURN TO THE MAIN GUIDE MENU
  - \$ LIST ALL OF THE FOLLOWING
    - \$ ABSTRACT
    - \$ ENGINEERING INFORMATION
    - \$ PROGRAMMING INFORMATION
    - \$ USER'S INFORMATION
- END

ALL  
 PACTAB  
 PACTEI  
 PACTPT  
 PACTUI

UPDATE PACTAB PACTDB ABSTRACT

PAYLOAD CREW TRAINING DATA BASE (PACTDB) MODULE PERFORMS DATA INPUT AND EDITING OF A PACT DATA BASE FILE TO BE USED IN MODULE PACTS. DATA WHICH CAN BE INPUT OR EDITED ARE THE LIST OF GROUPS, LIST OF PAYLOAD SPECIALIST AND THEIR INITIAL LOCATIONS, LIST OF WORK LOCATIONS, LIST OF INITIAL LOCATIONS, TRAVEL COST AND TRAVEL TIME DATA TO AND FROM A LOCATION, DETAILED GROUP AND TAE DATA, LIST OF RESOURCES, AND TTY COST FOR WORK LOCATIONS. SPECIAL PROVISIONS ARE INCLUDED TO INITIALIZE AN EMPTY DATA FILE. THE MODULE INCLUDES AN OPTION TO PRINT ON THE ALTERNATE PRINT FILE THE ENTIRE DATA BASE FOR A SPECIFIED MISSION, IN A SIMILAR DISPLAY THAT IS USED FOR INPUTTING AND EDITING THE DATA. THE ONLY EXCEPTION IS THAT THE TRAVEL COST/TIME DATA IS DISPLAYED IN MATRIX FORM ON THE ALTERNATE PRINT FILE.

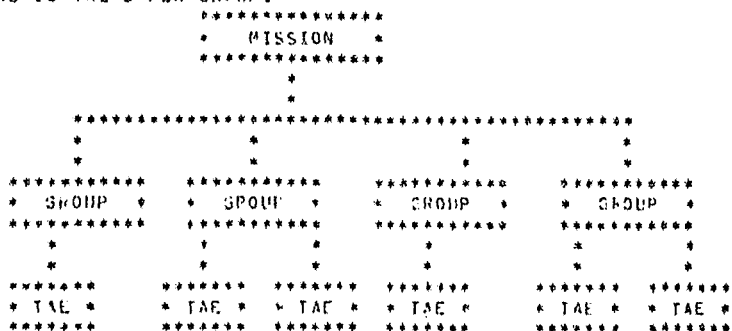
PACTDB IS AVAILABLE AT ANY SITE AND IN BATCH MODE. THE ONLY OPTION WHICH IS RESTRICTED IS THE DETAILED GROUP AND TAE DATA WHICH REQUIRES A 19 INCH TEXTRONIX.

RESPONSIBLE ENGINEERS : DAVID SHIPMAN EL12 453-9775

END

UPDATE PACTEI PACTDB ENGINEERING INFORMATION

BLOCK DIAGRAM OF DATA FILE STRUCTURE (NAME-DIRECTED)  
 THERE CAN BE AS MANY AS 200 GROUPS PER MISSION,  
 AND 10 TAE'S PER GROUP.



END

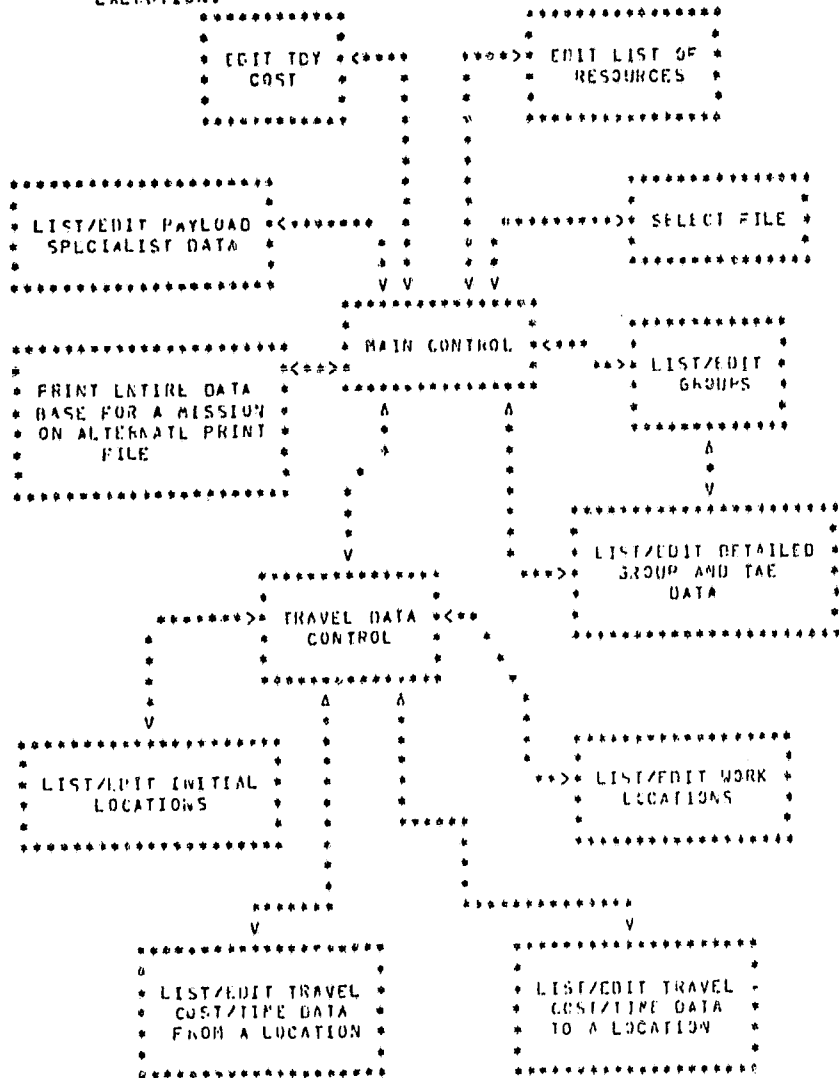
UPDATE PACTPT PACTDB PROGRAMMING INFORMATION

PACTDB PERFORMS DATA INPUT AND EDITING OF A PACT DATA BASE FILE TO BE USED IN MODULE PACTS. DATA WHICH CAN BE INPUT OR EDITED ARE THE LIST OF GROUPS, LIST OF PAYLOAD SPECIALIST AND THEIR INITIAL LOCATIONS, LIST OF WORK LOCATIONS, LIST OF INITIAL LOCATIONS, TRAVEL COST AND TRAVEL TIME DATA TO AND FROM A LOCATION, DETAILED GROUP AND TAE DATA, LIST OF RESOURCES, AND TTY COST FOR WORK LOCATIONS. SPECIAL PROVISIONS ARE INCLUDED TO INITIALIZE AN EMPTY

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DATA FILE. THE MODULE INCLUDES AN OPTION TO PRINT ON THE ALTERNATE PRINT FILE THE ENTIRE DATA BASE FOR A SPECIFIED MISSION, IN A SIMILAR DISPLAY THAT IS USED FOR INPUTTING AND EDITING THE DATA. THE ONLY EXCEPTION IS THAT THE TRAVEL COST/TIME DATA IS DISPLAYED IN MATRIX FORM ON THE ALTERNATE PRINT FILE.

A. PROGRAM BLOCK DIAGRAM  
 BELOW IS A BLOCK DIAGRAM, EACH BLOCK IS TOTAL RESPONSIBLE FOR A SPECIFIED FUNCTION. THE USER CONTROLS THE SEQUENCE OF EXECUTION.



B. COMPUTER CONFIGURATION  
 LANGUAGE : FORTRAN  
 CORE REQUIREMENT : 77.551 K

```

INPUT FILES      : A PACT DATA BASE NAME-DIRECTED FILE
                 : TO INPUT/EDIT DATA
PROGRAM ROUTINES ( NAME/FACTOR ) : BLOCK-DATA - INITIALIZE COMMON BLOCKS
                                   : CSLIST - LOADS DATA FROM A LOCATION FOR DISPLAY
                                   :       OF TRAVEL COST/TIME DATA IN MATRIX
                                   :       FORM
                                   : CSTIME - LOADS DATA FROM A LOCATION
                                   : DATALT - LOADS NECESSARY DATA NEEDED FOR
                                   :       MATRIX DISPLAY OF TRAVEL COST AND
                                   :       TRAVEL TIME DATA
                                   : DELGRO - DELETES SPECIFIED GROUP AND ITS
                                   :       TAE FROM FILE
                                   : DELLOC - DELETES A LOCATION FROM ALL ARRAYS
                                   :       OF COST/TIME DATA AND LIST OF LOCATIONS
                                   : DELTAE - ERASES A TAE FROM A GROUP
                                   : DISPLY - DISPLAYS DETAILED GROUP AND TAE DATA
                                   :       ON PRIMARY PRINT FILE
                                   : DKO   - DECODES EDITING COMMANDS DESCRIBED
                                   :       IN SUBROUTINE OPTION
                                   : DMAT  - PRINTS TRAVEL COST AND TRAVEL TIME
                                   :       DATA ON ALTERNATE PRINT FILE
                                   : EDINTL - MAIN DRIVER FOR EDITING LIST OF
                                   :       INITIAL LOCATIONS
                                   : EDIT  - UPDATES GROUP ARRAY IN CORE
                                   : EDITAE - UPDATES TAE ARRAY IN CORE
                                   : EDITRS - LIST/EDIT RESOURCES
                                   : EDTAE - MAIN CONTROL FOR EDITING DETAILED
                                   :       GROUP AND TAE DATA
                                   : EDTAV - MAIN MENU AND DRIVER OF ALL TRAVEL
                                   :       AND COST/TIME DATA
                                   : EDTRVF - MAIN DRIVER FOR COST/TIME DATA FROM
                                   :       A LOCATION
                                   : EDTRVT - MAIN DRIVER FOR COST/TIME DATA TO A
                                   :       LOCATION
                                   : EDWRKL - MAIN DRIVER FOR EDITING LIST OF WORK
                                   :       LOCATIONS
                                   : INGR0 - CREATE NEW GROUP IN FILE
                                   : INTDY - INSERTS AND DELETES WORK LOCATIONS
                                   :       FROM TDY ARRAY
                                   : LDTAE - LOADS TAE ARRAYS INTO CORE
                                   : LGR0UP - LOADS GROUP DATA INTO CORE FOR A
                                   :       SELECTED MISSION ID.
                                   : LIST0F - MAIN DRIVER FOR LISTING OF ENTIRE
                                   :       DATA BASE
                                   : LISTMX - DOES MATRIX DISPLAY OF TRAVEL
                                   :       COST AND TRAVEL TIME DATA
                                   : LOADGR - LOAD LIST OF GROUPS FOR A SPECIFIED
                                   :       MISSION ID
                                   : LOADLN - LOADS INITIAL AND WORK LOCATIONS
                                   : LOADPY - LOADS PAYLOAD SPECIALISTS AND THEIR
                                   :       INITIAL LOCATION IN CORE
                                   : LOADRS - LOADS RESOURCES
                                   : LOADTY - LOADS TDY COST FOR WORK LOCATIONS
                                   : LOCARY - PUTS A LOCATION WITH ZERO COST AND
                                   :       TIME IN ALL PRESENT COST/TIME DATA
                                   :       ARRAYS AND LIST OF LOCATIONS
                                   : LOCATN - GIVEN LOCATION OF CURSORS IT
                                   :       DETERMINS IF THE DATA ITEM IS GROUP
                                   :       OR TAE, ITS LOCATION IN THE ARRAY,
                                   :       AND MAXIMUM WORD LIMIT. USED IN
                                   :       DETAILED GROUP AND TAE EDITING.
                                   : LTAE  - MAIN CONTROL FOR EDITING LIST OF
                                   :       GROUPS
                                   : MAIN  - MAIN MENU AND CONTROL FOR MODULE
                                   : OPTION - BASIC EDIT OPTICS DISPLAYED
                                   : PAYSPO - MAIN DRIVER FOR PAYLOAD SPECIALISTS

```

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C-4

```

:      AND THEIR INITIAL LOCATION EDITING
: PGROUP - PRINTS LIST OF GROUPS ON ALTERNATE
:          PRINT FILE
: PINITOC - PRINTS LIST OF INITIAL LOCATIONS ON
:           ALTERNATE PRINT FILE
: PPAISP - PRINTS PAYLOAD SPECIALIST ON ALTERNATE
:          PRINT FILE
: PREADA - AVOIDS CARRIAGE RETURN AND GIVES
:          A PROMPTER ON LINE TO BE EDITED
: PRES - PRINTS RESOURCES ONLY ON ALTERNATE
:        PRINT FILE
: PRINT - DISPLAYS DETAILED GROUP AND TAE DATA
:         ON ALTERNATE PRINT FILE
: PIDY - PRINTS TDY COST FOR WORK LOCATIONS
:        ONLY ON ALTERNATE PRINT FILE
: PWKLOC - PRINTS LIST OF WORK LOCATIONS ON
:          ALTERNATE PRINT FILE
: RDOPT - INTERPRETES COMMANDS USED WITH CURSORS
:         UP IN GROUP AND TAE DETAILED EDITING
: SAVE - UPDATES GROUP AND TAE DETAILED DATA
:        ON FILE
: SLFILE - SELECT PACT DATA BASE FILE
: SLGRO - SELECT A GROUP ID
: SLLOC - SELECT LOCATION, INITIAL OR WORK
: SLMIS - SELECT MISSION ID
: TDY - LIST/EDIT TDY COST FOR WORK LOCATIONS
: TOLCAB - LOADS DATA TO A LOCATION
: TUTOR - DISPLAY OF INSTRUCTIONS FOR DETAILED
:         GROUP AND TAE EDITING
:

```

#### C. CREATION OF ABSOLUTE ELEMENT

```

@MAP,IL PACT-MAP,PACT-GO
LID MIFS,ILID,SYSS,MSFC$
SEG MAIN
  IN MAIN,BLOCK-DATA,TKTRX,ADDCUT,FIRST
SEG T&K*(MAIN)
  IN SII,SOFT-SIN,DEFN,SLFILE
  IN PASIT,CHRSEI,TAGS,RODATA
  IN HOLLIT,NEWLIN,ANSTR,GINP,MIPISEF
  SFS A*(TEK)
  IN LTAE,UELGRD,PAYSPC,INGRO
  IN LISTUD
  SES C*(TEK)
  IN EDTAE
SEG C1*(IC)
  IN DISPLY
SEG C2*(IC)
  IN PREADA,RDOPT,LOCATN,EDIT,EDITAE
SEG C3*(IC)
  IN SAVE,DELTAE
  SFS B*(TEK)
  IN EDTAV,EDINTL,EDWRKL,DFLLOC,EDTRVF,EDTRVF,INTDY
  SFS E*(TEK)
  IN TDY
  SFS F*(TEK)
  IN EDITRS
SEG MX*(MAIN)
  IN LISTRX,DATALT
SEG INIT*(TEK)
  IN INITIAL

```

#### D. DATA BASE FILE STRUCTURE

TYPE OF FILE : NAME DIRECTED FILE  
 ALL ATTRIBUTES AND DATA ARE IN ALPHA-NUMERIC FORM  
 THE FOLLOWING REPRESENTS THE ATTRIBUTES OF THE

8-D FILE AND THE RETURNED DATA IN THE FORM:  
ATTRIBUTE = DATA

1. MISSION/LIST = LIST OF MISSIONS (20 WORDS)
2. (MISSION ID.) = LIST OF GROUPS PER MISSION (200 WORDS)
3. (GROUP ID.) = NUMBER OF TAES (1 WORD)  
TYPE OF TAE (1 WORD)  
\*\*\*\*\*  
\* TOTAL OF \* EFFECTIVE DATE (2 WORDS)  
\* 63 WORDS \* IN THE FORM MM/DD/YY  
\* \* DESCRIPTION (10 WORDS)  
\*\*\*\*\*  
\* \* AVOIDANCE WINDOWS (48 WORDS)  
\* \* IN THE FORM MM/DD/YY TO MM/DD/YY  
\* \* (12 WINDOWS, 2 WORDS PER WINDOW)  
\* \* GROUP ID. (1 WORD)
4. (GROUP ID.)/(TAE NO.)/TAE = DESCRIPTION OF TAE (6 WORDS)  
LOCATION CODE (1 WORD)  
\*\*\*\*\*  
\* TOTAL OF \* DELAY (PIA AND MAX ) ( 2 WORDS )  
\* 56 WORDS \* TAE ID. (1 WORD)  
\* \* DURATION (1 WORD)  
\*\*\*\*\*  
\* \* RESOURCES (5 WORDS)  
\* \* PRIORITY (1 WORD)  
\* \* EQUIPMENT (5 WORDS)  
\* \* PAYLOAD CREWMEN (10 WORDS)  
\* \* AVAILABILITY WINDOWS (24 WORDS)  
\* \* IN THE FORM MM/DD/YY TO MM/DD/YY  
\* \* (6 WINDOWS, 2 WORDS PER WINDOW)
5. LOCATN/INITAL = LIST OF INITIAL LOCATIONS (30 WORDS)
6. LOCATN/WORK = LIST OF WORK LOCATIONS (60 WORDS)
7. (LOCATION ID.)/FROM = LOCATION TO,COST,TIME (270 WORDS)
8. (MISSION ID.)/PAYSPC = CREWMEN,HOME LOCATION ( 20 WORDS TOTAL )
9. (WORK LOCATION ID.)/TDY = WORK LOCATION ,TDY COST (120 WORDS TOTAL)

THE ATTRIBUTES IN PARENTHESES INDICATE VALUES WHICH WILL CHANGE,SUCH AS, THERE MAYBE SEVERAL MISSION ID.'S AND ONE MUST BE USED AS AN ATTRIBUTE IN PLACE OF THE ENTRY IN THE PARENTHESES. HOWEVER,SUCH ATTRIBUTES AS MISSION/LIST ARE HARD-WIRED AND ARE NOT CHANGED.

END  
UPDATE PACTH1

RESTRICTIONS PACTH1 USER'S INFORMATION  
: DETAILED GROUP AND TAE DATA CAN ONLY  
: BE EDITED ON A 17 INCH TERMINAL  
OUTPUT : CAN SPECIFY OPTION TO PRINT COMPLETE

INPUT : DATA IN FILE FOR A SPECIFIED MISSION.  
SAMPLE RUN : ALL TUTORIAL USING STANDARD INPUT IMAGE

PAYLOAD CREW TRAINING SCHEDULER DATA BASE ( PACTDB )

- 0 - TERMINATE
- 1 - SPECIFY PACTS DATA BASE FILE
- 2 - EDIT LIST OF TAE GROUPS
- 3 - EDIT DETAILED TRAINING ACTIVITY ELEMENT (TAE) DATA
- 4 - EDIT TRAVEL COST AND TRAVEL TIME DATA
- 5 - EDIT PAYLOAD SPECIALIST DATA
- 6 - EDIT TBY COST FOR WORK LOCATIONS
- 7 - EDIT LIST OF RESOURCES
- 8 - LIST PACTS INPUT DATA BASE

MIPS>

IF 0 IS SELECTED, USER IS RETURNED TO MIPS EXECUTIVE

IF 1 IS SELECTED, USER SPECIFIES DATA BASE FILE TO READ AND WRITE DATA

IF 2 IS SELECTED, USER CAN EDIT LIST OF GROUPS FOR SPECIFIED MISSION USING THE FOLLOWING COMMANDS :

\*\*\*\*\*

INSERT NEW  
INSERT NEW AFTER OLD  
DELETE OLD  
REDRAW

\*\*\*\*\*

\*INSERT NEW\* ADDS NEW VALUE AT THE END OF THE LIST.  
\*INSERT NEW AFTER OLD\* ADDS NEW VALUE AFTER OLD IN THE LIST  
\*DELETE OLD\* DELETES THE OLD ITEM FROM THE LIST AND PACKS THE LIST  
\*REDRAW\* REDRAWS THE SCREEN WITH THE NEW LIST  
BLANK IMAGE RETURNS YOU TO LAST READ

NOTE : THIS OPTION HAS A SPECIAL COMMAND

\*\*\*\*\*

EDIT OLD

\*\*\*\*\*

WHICH ALLOWS THE USER TO GO FROM THE LIST OF GROUPS DIRECTLY TO THE DETAILED GROUP AND TAE DISPLAY TO EDIT THAT DATA AND THEN RETURN TO DISPLAY OF LIST OF GROUPS

IF 3 IS SELECTED, USER CAN EDIT GROUP DATA AND TAE DATA FOR SPECIFIED GROUP USING THE FOLLOWING INSTRUCTIONS

\*\*\*\*\*

INSTRUCTIONS FOR EDITING A GROUP OF TAES

LOCATE CROSSHAIRS ON VALUE TO BE CHANGED, ENTER CONTROL CHARACTER AND RETURN KEY

(IF CROSSHAIRS ARE NOT VISIBLE THEY MAY BE OFF SCREEN - TURN THUMB WHEELS AND/OR PRESS RETURN KEY)

THE FOLLOWING CONTROL CHARACTERS ARE VALID, OTHERS WILL BE IGNORED

- E - ENTER NEW VALUE OVERSTRIKING OLD VALUE
- S - ENTER NEW VALUE AT BOTTOM OF SCREEN
- 0 OR Y - OMIT ALL DATA FOR THIS ITEM
- R - REDRAW ENTIRE SCREEN
- S - RETURN TO PRECEDING MENU
- 1-9 - REDRAW SCREEN STARTING WITH INDICATED TAE
- A - ADD OR INSERT ANOTHER TAE TO THIS GROUP  
QUESTION "WHICH TAE" WILL BE ASKED AND SCREEN WILL BE REDRAWN
- D - DELETE A TAE (QUESTION "WHICH TAE" WILL BE ASKED)
- H - WILL REDISPLAY THIS PAGE  
QUESTION "WHICH GROUP NEXT" WILL BE ASKED
- N - NEXT GROUP TO BE DISPLAYED

NOTE: WHEN EDITING RESOURCES, EQUIPMENT, OR CREWMAN, THE ENTIRE



STRING MUST BE ENTERED SEPARATED BY SPACES  
WHEN EDITING A DATE THE MONTH, DAY AND YEAR MUST  
BE ENTERED ( MM/DD/YY )

.....  
IF 4 IS SELECTED, THE USER SEES THE FOLLOWING MENU:  
TRAVEL COST AND TRAVEL TIME DATA  
0 - RETURN TO MAIN CONTROL  
1 - EDIT LIST OF INITIAL LOCATIONS  
2 - EDIT LIST OF WORK LOCATIONS  
3 - EDIT TRAVEL COST/TIME DATA TO A PARTICULAR LOCATION  
4 - EDIT TRAVEL COST/TIME DATA FROM A PARTICULAR LOCATION  
MIPS>

IF 0 IS SELECTED, USER IS RETURNED TO THE MAIN MENU

IF 1 IS SELECTED, USER CAN EDIT INITIAL LOCATION USING  
THE SAME COMMANDS AS OPTION 2 OF THE  
MAIN MENU

IF 2 IS SELECTED, USER CAN EDIT WORK LOCATIONS USING  
THE SAME COMMANDS AS OPTION 2 OF THE  
MAIN MENU

IF 3 IS SELECTED, USER CAN EDIT TRAVEL COST/TIME DATA  
TO A PARTICULAR LOCATION USING THE  
FOLLOWING COMMANDS:

\*\*\*\*\*  
ENTER REDRAW TO REDRAW  
EDIT VIA OLD = COST TIME  
\*\*\*\*\*  
\*OLD = COST TIME\* PUT AS THE COST AND TIME VALUES FOR  
OLD IN THE DATA CASE. IF ONLY ONE VALUE IS SUPPLIED  
IT IS TAKEN AS THE COST VALUE AND TIME DATA IS NOT  
AFFECTED.

IF 4 IS SELECTED, USER CAN EDIT TRAVEL COST/TIME DATA  
FROM A PARTICULAR LOCATION USING THE  
COMMANDS ABOVE.

IF 5 IS SELECTED, USER CAN EDIT THE PAYLOAD SPECIALIST LIST  
AND HIS INITIAL LOCATION USING THE SAME  
COMMANDS AS OPTION 2 PLUS :

\*\*\*\*\*  
PLD = INITIAL LOCATION  
\*\*\*\*\*  
WHICH ALLOWS THE USER TO INPUT THE  
INITIAL LOCATION FOR AN ALREADY  
EXISTING PAYLOAD SPECIALIST

IF 6 IS SELECTED, THE USER CAN EDIT THE TDY COST FOR WORK  
LOCATIONS USING THE FOLLOWING COMMANDS:

LOCATION = COST  
ALL = COST  
REDRAW  
ALL = COST WILL SET THE TDY COST FOR ALL  
WORK LOCATIONS TO THE VALUE OF COST

IF 7 IS SELECTED, THE USER CAN EDIT THE LIST OF RESOURCES USING  
THE SAME COMMANDS AS OPTION 2.

IF 8 IS SELECTED, THE USER RECEIVES A COMPLETE ALTERNATE PRINT  
FILE OF HIS SPECIFIED FILE AND MISSION. THE  
FORMAT IS VERY SIMILAR TO EDITING DISPLAYS  
EXCEPT TRAVEL COST/TIME DATA IS PRINTED  
IN MATRIX FORM. THIS OPTION DOES NOT TAKE

MORE THAN 3 MINUTES WALL CLOCK TIME AT A  
DEMAND SITE.

UPDATE

IMPACT

PACTS ABSTRACT

THE PAYLOAD CREW TRAINING SCHEDULER (PACTS) IS DESIGNED TO SCHEDULE CREW TRAINING ACTIVITY ELEMENTS (CTA'S) FOR ONE OR MORE SPACELAB MISSIONS. UTILIZING A PSEUDO-RANDOMLY SELECTION PROCESS, PACTS GENERATES A FAMILY OF SCHEDULES AND SELECTS THE BEST ON THE BASIS OF USER DETERMINED PRIORITIES, SUCH AS SCHEDULE COST AND THE NUMBER OF ACTIVITIES SCHEDULED. AFTER SELECTION, TA'S ARE SCHEDULED AT THE EARLIEST OPPORTUNITY TIME, RESOURCE AND TRAVEL CONSTRAINTS ARE MET.

PACTS ACCEPTS INPUT FROM THE TAE DATA BASE CREATED BY THE PACTDB MODULE, WHICH CAN BE ACCESSED FOR EDITING PURPOSES FROM PACTS. SCHEDULE CONTROL AND MISSION LEVEL DATA MAY BE INPUT FROM THE TERMINAL OR STORED AND RETRIEVED FROM A MIP'S NAME-DIRECTED FILE. THIS DATA MAY BE EDITED TO TEST ALTERNATIVE SCHEDULES.

PACTS PRODUCES A SCHEDULE SUMMARY TABLE FOR DISPLAY AT THE TERMINAL AND SCHEDULE TABULATION ON THE ALTERNATE PRINT FILE. THE MODULE ALSO GENERATES A LIST-DIRECTED AND AN ON/OFF FILE. THE USER MAY TRANSFER TO THE PACTDB MODULE TO DISPLAY THESE FILES.

PACTS MAY BE RUN AT ANY TERMINAL OR IN BATCH MODE.  
 RESPONSIBLE ENGINEER : DAVID SHIPMAN ELLP 457-4735

PACTS ENGINEERING INFORMATION

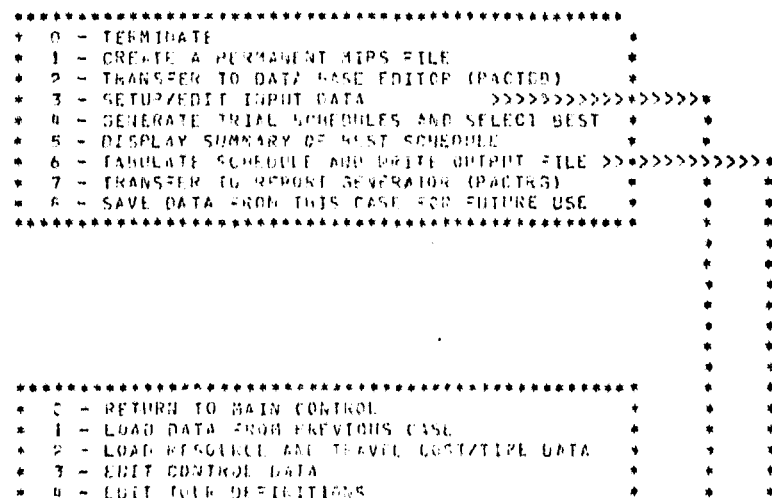
DOES NOT APPLY TO THIS MODULE

PACTS PROGRAMMING INFORMATION

THE PACTS SCHEDULING MODULE (PACTS) IS DESIGNED TO INTERACT WITH THE REPORT GENERATOR (PACTRS) AND THE DATA BASE MODULE (PACTDB). TRANSFER TO THESE MODULES IS EFFECTED BY SETTING THE VALUE OF 'SDTO' IN THE FILE 'MIP'S-TT'. PACTS ALSO READS THE FILES PRODUCED BY THE 'PACTDB' MODULE AND LOADS THE DATA INTO AN MIPAN FILE. THE MODULE SAVES ITS COMMON BLOCKS FROM EXIT SO THAT THEY MAY BE RESTORED UPON RE-ENTRY FROM THE OTHER MODULES. THE PACTS SCHEDULER ALSO CAN EDIT CONTROL AND MISSION LEVEL DATA.

A. PROGRAM BLOCK DIAGRAM

BELOW IS A SIMPLIFIED BLOCK DIAGRAM SHOWING THE CAPABILITIES OF THE MODULE



- 5 - EDIT WORK DAY DURATIONS
- 6 - EDIT MISSION LIST
- 7 - EDIT LIST OF PAYLOAD SPECIALISTS
- 8 - EDIT LIST OF TAE GROUPS
- 9 - EDIT FIXED ORDER LIST
- 10 - LOAD TAE MODELS

- ```

.....
• SELECT PRINT AND FILE OPTIONS.
• DEFAULT PRINT OPTION      = 1
•   0 = NO PRINT OUT
•   1 = PRINT ON TIMES ONLY
•   2 = PRINT ALL TIMES
• DEFAULT FILE OPTION      = 3
•   0 = NO FILE
•   1 = WRITE LDF FILE
•   2 = WRITE ON/OFF FILE
•   3 = WRITE BOTH
.....

```

**B. COMPUTER CONFIGURATION**

```

LANGUAGE      : FORTRAN
CORE REQUIREMENT : 32.27 K
INPUT FILES   : NAME-DIRECTED FILE CONTAINS MISSION
                DEPENDENT DATA AND TAE MODELS
OUTPUTFILES  : LIST-DIRECTED FILE CONTAINS SCHEDULE
                TIME, RESOURCE, AND TRAVEL COST/TIME
                DATA.
                ON/OFF FILE CONTAINS CREW ACTIVITIES

```

```

*** SCHEDULING ROUTINES/FUNCTIONS ***
HEART - MAIN DRIVER FOR SCHEDULING OPERATIONS
CHECK - DETERMINES WHEN A TAE CAN BE SCHEDULED
CHECKR - CHECKS CREW AND RESOURCE AVAILABILITY
CHECKT - CHECKS TRAVEL TIME
CHECKW - FIND A WINDOW FOR SCHEDULING A TAE
CKCREW - RECOVERS THE CREW IN USE FOR AN EVENT
DATES - FIND GREGORIAN DATE, WORK DAY, OR CALENDAR DAY
      AND CHECK FOR A HOLIDAY
EVAL - EVALUATE SCHEDULE AND PRINT EVALUATION INFORMATION
FIXED - SELECTS THE NEXT FIXED ORDER GROUP FOR ATTEMPTED
        SCHEDULING
FIX77 - INITIALIZES INTEGER FIXED ORDER ARRAYS
MC - MAIN DRIVER TO GENERATE RANDOM SCHEDULES AND SELECT
     THE BEST
SCHF - SCHEDULES FIXED ORDER GROUPS
SCHR - SCHEDULES RANDOM ORDER GROUPS
SCOST - CALCULATES TOTAL COST OF A SCHEDULE
SELLOC - SELECTS A TAE AT THE SAME LOCATION FOR SCHEDULING
SELECT - RANDOMLY SELECT THE NEXT GROUP FOR ATTEMPTED SCHEDULING
TDYOST - RETRIEVE THE TDY COST FOR A GIVEN LOCATION
TRAVLT - FIND THE TRAVEL COST FROM ONE LOCATION TO ANOTHER

```

```

***** INTERFACE ROUTINES *****
MAIN - MAIN CONTROL FOR THE MODULE
ASS - ASSIGN TEMPORARY FILES
BLOCK-DATA - INITIALIZE COMMON BLOCKS
CPH01 - DETERMINE START AND STOP TIMES FOR TRAVEL AND CHECK

```

FOR IMMEDIATE HOLIDAYS

CONVERT - CONVERT HOLIDAY DEFINITIONS TO CALENDAR DAYS  
 OKD - DECODE EDITING COMMANDS  
 DRIVER - DISPLAY AND SELECT MAIN MENU OPTIONS  
 DUMP - DISPLAY AND SELECT PRINT AND OUTPUT FILE OPTIONS  
 EDIT FU - EDIT FIXED ORDER GROUP LIST  
 EDIT SL - EDIT MISSION LIST AND LOAD MISSION DATA  
 EDIT PS - EDIT PAYLOAD SPECIALIST LIST AND THEIR INITIAL LOCATIONS  
 EDIT TD - EDIT TOUR DEFINITIONS  
 EDIT WD - EDIT WORK DAY DURATIONS  
 ERRORS - PRINT MESSAGE IF A ERROR HAS OCCURRED DURING SCHEDULING  
 EVO - RECOVERS GROUP, TAE, CREW USED AND RESOURCE USED FOR AN EVENT  
 FOCC - INITIALIZE FIXED ORDER GROUP DATA AND CHECK IF FIXED ORDER GROUP IS IN GROUP LIST  
 GETST1 - FIND AND TRANSFER THE EVENT FROM THE EVENT TIMELINE WHICH FOLLOWS A SPECIFIED TIME  
 GETFT1 - GET THE FIRST EVENT FROM THE EVENT TIMELINE  
 GETNT1 - GET THE NEXT EVENT FROM THE EVENT TIMELINE  
 INPUT C - DISPLAY AND SELECT INITIAL/EDIT SUB-MENU OPTIONS  
 INPUT I - LOAD TAE DATA AND STORE ON NTRAM FILE  
 LOFW - PRINT TIMELINE TABULATION AND WRITE LIST-DIRECTED FILE  
 LOAD C - LOAD INPUT DATA FROM A PREVIOUS CASE  
 LOAD T - LOAD TRAVEL AND RESOURCE DATA  
 ONOFFW - WRITE ON/OFF FILE  
 REINST - RESTORE MODULE STATUS  
 RLB - RELOAD THE BEST SCHEDULE  
 SAVE - SAVE MODULE STATUS  
 SAVEC - SAVE INPUT DATA FROM THIS CASE  
 SETUPG - EDIT NO. OF SCHEDULES TO ATTEMPT, RANDOM NO. SEED AND EVALUATION PRIORITIES  
 SUB W - SUBTRACT AVOIDANCE WINDOWS FROM AVAILABILITY WINDOWS  
 TABLES - DISPLAY SUMMARY OF TAES SCHEDULED  
 TRAVEL - READ TIMELINE AND CALCULATE TRAVEL  
 TRVSC - INSERT TRAVEL INTO TEMPORARY FILE  
 WRITE2 - SAVE COMMON BLOCKS  
 READ2 - RESTORE COMMON BLOCKS  
 WRTAV - WRITE TRAVEL RECORDS IN TEMPORARY FILES  
 WRTEMP - WRITE TAE RECORDS ON TEMPORARY FILES

\*\*\*\*\* TIMELINE I/O SUBROUTINES/FUNCTIONS \*\*\*\*\*

BUFNO - FIND BUFFER CONTAINING A DESIRED TIME POINT OR BUFFER AVAILABLE FOR SPLITTING  
 CLOSE - WRITES OUT ALL UPDATED BUFFERS ONTO THE TIMELINE AND CLOSES TIMELINE FILE  
 COPYF - COPIES THE FIXED ORDER SCHEDULE ONTO A TIMELINE FILE FOR RANDOM ORDER SCHEDULING  
 GETST - RETRIEVE AN EVENT FROM THE TIMELINE WHICH IMMEDIATELY PRECEEDS A SPECIFIED TIME  
 GETNT - RETRIEVES THE NEXT EVENT FROM THE TIMELINE  
 INSERT - INSERTS A NEW TAE PERFORMANCE INTO A TIMELINE FILE  
 ISERCH - BINARY SEARCH TO LOCATE A RECORD IN THE INDEX FOR A SPECIFIED TIME  
 KSERCH - BINARY SEARCH TO LOCATE AN EVENT JUST PRECEDING A SPECIFIED TIME. IF EQUAL TIMEPOINTS ARE FOUND IT SELECTS THE FIRST  
 LSERCH - BINARY SEARCH TO LOCATE AN EVENT JUST PRECEDING A SPECIFIED TIME. IF EQUAL TIMEPOINTS ARE FOUND, IT SELECTS THE LAST  
 OPEN - OPEN AN EVENT TIMELINE FILE  
 READB - READ IN A BUFFER

READ1 - RESTORE SCHEDULE INFORMATION  
 RELOAD - LOADS THE DESIGNED BUFFER WITH NEW DATA AND IF IT IS  
 AN UPDATE FIRST WRITES OUT  
 SPLIT - SPLITS A FULL BUFFER BY MOVING HALF OF IT INTO AN EMPTY  
 BUFFER  
 WRITER - WRITE OUT A BUFFER  
 WRITER - SAVE SCHEDULE INFORMATION

### C. CREATION OF ABSOLUTE ELEMENT

```

AMAP,IL PAC-MAP,PAC-30
LIB MIPS,ILIS,SYSTEMSFCB
SEG MAIN,BLOCK-DATA,CCC,STATE,ADEOUT
SEG CREATE*,(INTERACT)
  IN CREATE
    SEG LDF-DICT*,(CREATE)
      IN LDF-DIC
    SEG NDF-ERASE*,(CREATE)
      IN DNE
SEG START-STOP*,(INTERACT)
  IN INITIAL
    SEG START*,(START-STOP)
      IN ASD,REINST,INITT
    SEG STOP*,(START-STOP)
      IN SAVE,DOWN,SAVCC
SEG INITIALIZE*,(INTERACT)
  IN INPUTC
    SEG CONTROL*,(INITIALIZE)
      IN LOADC,LOAD-TRAVEL
    SEG MODELS*,(INITIALIZE)
      IN INPUT-TAE,CONVERT
SEG DISPLAY*,(INTERACT)
  IN RELOAD-NEXT
    SEG TABULATION*,(DISPLAY)
      IN TABLES
    SEG FILES*,(DISPLAY)
      IN LVD,DUMP,TRAVEL
    SEG LF*,(FILES)
      IN LDFW
    SEG ONDF*,(FILES)
      IN ONDFW
SEG PROCESS*,(MAIN)
  IN CHECK,INSERT,HEART
  SEG FIXED*,(PROCESS)
  IN SCH-F,OPEN
  SEG RANDOM*,(PROCESS)
  IN MONTE-CARLO,SCH-R,CLOSE,EVALUATE
  
```

### D. INPUT FILE STRUCTURE

TYPE OF FILE : NAME DIRECTED FILE  
 ALL ATTRIBUTES AND DATA ARE IN ALPHA-NUMERIC FORM  
 THE FOLLOWING REPRESENTS THE ATTRIBUTES OF THE  
 N-D FILE AND THE RETURNED DATA IN THE FORM:  
 ATTRIBUTE = DATA

1. MISSION/LIST = LIST OF MISSIONS (20 WORDS)
2. (MISSION ID.) = LIST OF GROUPS PER MISSION (200 WORDS)
3. (GROUP ID.) = NUMBER OF TAES (1 WORD)
  - ..... TYPE OF TAE (1 WORD)
  - ..... EFFECTIVE DATE (7 WORDS)

\* TOTAL OF \* IN THE FORM MM/DD/YY  
 \* 63 WORDS \* DESCRIPTION (13 WORDS)  
 \* ..... \* AVOIDANCE WINDOWS (43 WORDS)  
 \* ..... \* IN THE FORM MM/DD/YY TO MM/DD/YY  
 \* ..... \* (12 WINDOWS, 2 WORDS PER WINDOW)  
 \* ..... \* MISSION ID. (1 WORD)

4. (GROUP ID.)/(TAE NO.)/TAE = DESCRIPTION OF TAE (6 WORDS)

\* ..... \* LOCATION CODE (1 WORD)  
 \* ..... \* DELAY (MIN AND MAX) ( 2 WORDS )  
 \* ..... \* TOTAL OF \* TAE ID. (1 WORD)  
 \* ..... \* 56 WORDS \* DURATION (1 WORD)  
 \* ..... \* RESOURCES (5 WORDS)  
 \* ..... \* PRIORITY (1 WORD)  
 \* ..... \* EQUIPMENT (5 WORDS)  
 \* ..... \* PAYLOAD CREWMEN (13 WORDS)  
 \* ..... \* AVAILABILITY WINDOWS (24 WORDS)  
 \* ..... \* IN THE FORM MM/DD/YY TO MM/DD/YY  
 \* ..... \* (6 WINDOWS, 2 WORDS PER WINDOW)

5. LOCATN/INITIAL = LIST OF INITIAL LOCATIONS (30 WORDS)

6. LOCATN/WORK = LIST OF WORK LOCATIONS (60 WORDS)

7. (LOCATION ID.)/FROM = LOCATION ID, COST, TIME (270 WORDS)

8. (MISSION ID.)/PAYSPC = CREWMEN, HOME LOCATION ( 27 WORDS TOTAL )

9. (WORK LOCATION ID.)/TDY = WORK LOCATION, TDY COST (120 WORDS TOTAL)

THE ATTRIBUTES IN PARENTHESES INDICATE VALUES WHICH  
 WILL CHANGE, SUCH AS, THERE MAYBE SEVERAL MISSION ID.'S  
 AND ONE MUST BE USED AS AN ATTRIBUTE IN PLACE OF THE  
 ENTRY IN THE PARENTHESES. HOWEVER, SUCH ATTRIBUTES AS  
 MISSION/LIST ARE HARD-WIRED AND ARE NOT CHANGED.

E. CREW TRAINING TIMELINE FILE DESCRIPTION  
 FACTS OUTPUT FILE (LIST-DIRECTED)

TITLE RECORDS ARE UNDER THE FOLLOWING FORMATS  
 LINE 1 (1) SCHEDULE ID = (1A) BEST SCHEDULE ID  
 LINES 2 THRU 4 (1) RESOURCES = (1AA, 2(11/AA), 15X) RESOURCES  
 LINE 5 (1) RESOURCES = (1AA, 4(11/AA), 45X) RESOURCES  
 LINE 6 (1) TOTAL COST = (110, 2(11/AA), 3X) MISSIONS = (13AA) COST & MISSIONS  
 LINES 7 THRU 9 (1X, 17A, 2(11/AA), 6A, 2) FOUR DEFINITIONS  
 LINE 9 (1X, 8A, 2) FOUR DEFINITIONS

| DATA RECORDS |          |                         |
|--------------|----------|-------------------------|
| WORD         | MNEMONIC | DESCRIPTION             |
| 1            | CCOUNT   | EVENT TIME ( DAY COUNT) |
| 2            | DATE1    | DATE ( MM/DD/YY )       |
| 3            | DATE2    | DATE ( MM/DD/YY )       |

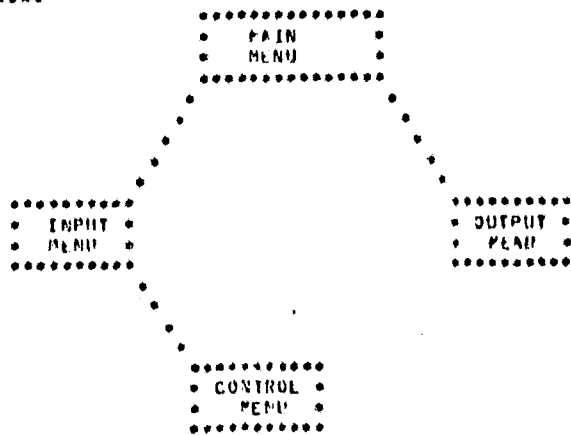
ORIGINAL PAGE IS  
 OF POOR QUALITY

|     |        |                                     |
|-----|--------|-------------------------------------|
| • 4 | DNHR   | DURATION ( DAY COUNT )              |
| • 5 | NDHR   | DURATION ( WORK COUNT )             |
| • 6 | SLOT#  | GROUP ID / TRAVEL / HOME            |
| • 7 | TNUM/C | TAE NUMBER / COST / 0.0             |
| • 8 | TID/LT | TAE ID / LOCATION TO / ' ' *        |
| • 9 | LOC/L* | LOCATION CODE / LOCATION FROM / LOC |
| 10  | CREW1  | CREW ID                             |
| 11  | CREW2  | CREW ID                             |
| 12  | CREW3  | CREW ID                             |
| 13  | CREW4  | CREW ID                             |
| 14  | CREW5  | CREW ID                             |
| 15  | CREW6  | CREW ID                             |
| 16  | CREW7  | CREW ID                             |
| 17  | CREW8  | CREW ID                             |
| 18  | CREW9  | CREW ID                             |
| 19  | CREW10 | CREW ID                             |
| 20  | RES1   | RESOURCES                           |
| 21  | RES2   | RESOURCES                           |
| 22  | RES3   | RESOURCES                           |
| 23  | RES4   | RESOURCES                           |
| 24  | RES5   | RESOURCES                           |

IF THE DURATION GIVEN IN WORDS 4 AND 5 ARE POSITIVE NUMBERS, THEN THE VALUE IS AN ON TIME. IF THE VALUE IS NEGATIVE, THEN THE TIME IS AN OFF TIME.

\* DENOTES FLOATING POINT DATA  
WORDS 6 THROUGH 9 WILL REPRESENT 1 OF 3 DISTINCT AND DIFFERENT VALUES. IF 6 RETURNS A GROUP ID, THEN WORDS 7 THROUGH 9 WILL BE THE FIRST WORD (OR PHRASE) UNDER DESCRIPTION. IF 6 RETURNS THE WORD TRAVEL, THEN USE THE SECOND DESCRIPTION OF WORDS 7-9. IF 6 RETURNS THE WORD HOME, THEN USE THE THIRD DESCRIPTION OF WORDS 7-9. THAT IS, IF 6 = ID, THEN 7 = TAE N. IF 6 = TRAVEL, 7 = COST. IF 6 = HOME, THEN 7 = 0.0

FACTS USER'S INFORMATION  
THE FACTS MODULE HAS FOUR PRINCIPAL MENUS WHOSE RELATIONSHIP IS SHOWN BELOW.



EACH MENU IS SHOWN BELOW WITH AN ACCOMPANYING EXPLANATION WHERE NEEDED. IN THE MAIN AND EACH SUB-MENU ONLY ONE OPTION MAY BE SELECTED AT A TIME.

```

* * * * *
: 0 - TERMINATE
: 1 - CREATE A PERMANENT MIPS FILE
: 2 - TRANSFER TO DATA BASE EDITOR (FACTORS)
* * * * *

```



- 3 - SETUP/EDIT INPUT DATA
- 4 - GENERATE TRIAL SCHEDULES AND SELECT BEST
- 5 - DISPLAY SUMMARY OF BEST SCHEDULE
- 6 - TABULATE SCHEDULE AND WRITE OUTPUT FILE
- 7 - TRANSFER TO REPORT GENERATOR
- 8 - SAVE DATA FROM THIS CASE FOR FUTURE USE

NOTE :

OPTIONS 4, 5 AND 6 ARE NOT AVAILABLE UNTIL DATA IS LOADED VIA OPTION 3 OF THE MAIN MENU AND OPTIONS 1, 2 AND 10 OF THE INPUT MENU. AFTER THIS DATA IS LOADED OPTION 4 IS AVAILABLE BUT 5 AND 6 ARE NOT READY FOR USE UNTIL OPTION 4 IS EXECUTED.

- .....
- INPUT MENU (OPTION 3 OF MAIN MENU)
- 0 - RETURN TO MAIN CONTROL
  - 1 - LOAD DATA FROM PREVIOUS CASE
  - 2 - LOAD RESOURCE AND TRAVE COST/TIME DATA
  - 3 - EDIT CONTROL DATA
  - 4 - EDIT TECH DEFINITIONS
  - 5 - EDIT WORK DAY DURATIONS
  - 6 - EDIT MISSION LIST
  - 7 - EDIT LIST OF PAYLOAD SPECIALISTS
  - 8 - EDIT LIST OF TAE GROUPS
  - 9 - EDIT FIXED ORDER LIST
  - 10 -LOAD TAE MODELS
- .....

NOTE :

OPTIONS 1, 2 AND 10 MUST BE EXECUTED BEFORE TRIAL SCHEDULES CAN BE GENERATED (MAIN MENU). HOWEVER, DATA MAY BE LOADED BY USE OF THE EDIT OPTIONS. OPTION 3 DISPLAYS A SUB-MENU (CONTROL MENU)

BY SELECTION OF OPTION 3 IN THE INPUT MENU THE CONTROL MENU IS DISPLAYED IN THE FORM OF TWO SMALL MENUS

\*\*\* CONTROL MENU \*\*\*

- .....
- NUMBER OF SCHEDULES TO ATTEMPT
  - RANDOM NUMBER SEED
- .....

- .....
- CURRENT EVALUATION PRIORITIES ARE AS FOLLOWS
  - NUMBER OF TAES SCHEDULED
  - AVERAGE NUMBER OF TAES/GROUP SCHEDULED
  - SCHEDULE COST
  - INPUT CHANGES, IF DESIRED
  - ENTER 0 TO DISCARD
- .....

NOTE :

IN BOTH DISPLAYS THE VALUES ARE ENTERED ON ONE LINE SEPARATED BY BLANKS

\*\*\* OUTPUT MENU \*\*\*

- .....
- OUTPUT MENU (OPTION 6 OF MAIN MENU)
- SELECT PRINT AND FILE OPTIONS.
- DEFAULT PRINT OPTION = 1
  - 0 = NO PRINT OUT
  - 1 = PRINT ON TIMES ONLY
  - 2 = PRINT ALL TIMES
  - DEFAULT FILE OPTION = 3
  - 0 = NO FILE
  - 1 = WRITE 100 FILE
  - 2 = WRITE ON/OFF FILE
  - 3 = WRITE BOTH
- .....

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OF POOR QUALITY

: ENTER CHANGES

NOTE :

PCT+ VALUES ARE ENTERED ON ONE LINE SEPARATED BY  
BLANKS

**FACILE ABSTRACT**

THE PAYLOAD CREW TRAINING TIMELINE EDITOR IS AN INTERACTIVE MODULE WHICH DISPLAYS AND EDITS THE TIMELINE PRODUCED BY THE SCHEDULING MODULE (PACTS). THIS MODULE USES THE LIST-DIRECTED AND NAME-DIRECTED FILES FROM PACTS TO CREATE A SCRATCH FILE FOR EDITING. THEN WRITES UPDATED LIST-DIRECTED AND ON/OFF FILES. TRAVEL ANALYSIS IS CALCULATED ONLY IF THE OPTION TO EDIT THE EVENT TIMELINE IS BEING EXECUTED. DATA WHICH MAY BE DISPLAYED OR EDITED ARE THE CREW TIMELINE, THE EVENT TIMELINE, AND THE COMPOSITE TIMELINE. ALSO OPTIONS ARE AVAILABLE TO DELETE A GROUP FROM THE TIMELINE, DELETE A CREW FROM THE TIMELINE, AND TO WRITE NEW TIMELINE FILES. OPTIONS ARE AVAILABLE TO TRANSFER TO EITHER THE REPORT GENERATOR (PACTRG) OR THE DATA BASE EDITOR (PACTDB). THE EDITING OF THE CREW, EVENT AND COMPOSITE TIMELINES REQUIRES A TEKTRONIX TERMINAL; OTHERWISE PACTED IS AVAILABLE AT ANY TERMINAL OR IN BATCH MODE.

RESPONSIBLE ENGINEER : DAVID SHIPMAN ELIP 453-4735

**PACTED ENGINEERING INFORMATION**

DOES NOT APPLY TO THIS MODULE

**PACTED PROGRAMMING INFORMATION**

THE TIMELINE EDITING MODULE (PACTED) INTERACTS WITH THE REPORT GENERATOR (PACTRG) AND THE DATA BASE EDITOR (PACTDB) BY SETTING THE VALUE OF 'ISOTO' IN THE MIPS NAME-DIRECTED FILE 'MFS-IT'. A NAME-DIRECTED FILE WHICH IS GENERATED BY PACTDB IS REQUIRED FOR INPUT. THIS FILE IS READ AND DATA IS LOADED INTO AN NTRAA FILE FOR EDITING. THE MODULE SAVES ITS COMMON BLOCKS FOR USE WHEN RETURNING FROM PACTDB AND PACTRG.

**A. PROGRAM BLOCK DIAGRAM  
BELOW IS A SIMPLIFIED BLOCK DIAGRAM  
SHOWING THE CAPABILITIES OF THE PROGRAM**

- \* 0 - TERMINATE \*
- \* 1 - DISPLAY USAGE INFORMATION >>>>>>>>>>>>>>>> \*
- \* 2 - DISPLAY/EDIT COMPOSITE TIMELINE >>>>>>>>>>>>>>> \*
- \* 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL >>>>>>>>>>>>>>> \*
- \* 4 - DELETE GROUP FROM TIMELINE \*
- \* 5 - DISPLAY/EDIT CREW TIMELINE >>>>>>>>>>>>>>> \*
- \* 6 - DELETE CREW FROM TIMELINE \*
- \* 7 - TRANSFER TO PACT DATA BASE MODULE (PACTDB) \*
- \* 8 - WRITE NEW TIMELINE FILES >>>>>>>>>>>>>>>>>>> \*
- \* 9 - TRANSFER TO PACT REPORT GENERATOR (PACTRG) \*

- \* EDITING INSTRUCTIONS \*
- \* LOCATE CROSSHAIRS OR VALUE TO BE EDITED. \*
- \* ENTER COMMAND CHARACTER AND PRESS RETURN KEY \*
- \* (IF CROSSHAIRS ARE NOT VISIBLE THEY MAY BE OFF SCREEN. TURN THUMB WHEELS AND/ OR PRESS RETURN KEY.) \* <<<<<<<<
- \* EDITING COMMANDS ARE LISTED BELOW \*
- \* E - ENTER NEW VALUE, OVERSTRIKING OLD VALUE \*
- \* P - ENTER NEW VALUE IN PLANK AREA OF SCREEN \*
- \* A - ADD SPECIFIC TALS(S) TO A GROUP \*
- \* (MULTIPLE QUESTIONS WILL BE ASKED)

ORIGINAL PAGE IS OF POOR QUALITY

```

*   Q - DELETE SPECIFIED TAF (EVENT)
*   R - REDRAW SCREEN
*   S - STOP EDITING
*   T - SPECIFY TIME POINT FOR NEXT PAGE
*   C - CONTINUE, BEGINNING WITH NEXT TIME POINT
*   N - BEGIN PROCESSING ANOTHER CREWMAN
*   H - REDISPLAY THIS TUTORIAL (HELP)
*   .....

```

```

*   .....
*   SELECT PRINT AND FILE OPTIONS.
*   DEFAULT PRINT OPTION      = 1
*   0 - NO PRINT OUT
*   1 - PRINT ON TIMES ONLY
*   2 - PRINT ALL TIMES
*   DEFAULT FILE OPTION      = 3
*   0 - NO FILE
*   1 - WRITE LOG FILE
*   2 - WRITE ON/OFF FILE
*   3 - WRITE BOTH
*   .....

```

**B. COMPUTER CONFIGURATION**

```

LANGUAGE           : FORTRAN
CORE REQUIREMENT  : 35.47 K
INPUT FILES       : NAME-DIRECTED FILE CONTAINING
                   MISSION DEPENDENT DATA AND TAF MODELS.
                   LIST-DIRECTED FILE CONTAINING
                   MISSION TIMELINE STATUS
OUTPUT FILES      : LIST-DIRECTED FILE CONTAINING
                   MISSION TIMELINE STATUS
                   ON/OFF FILE CONTAINING
                   CREW ACTIVITIES

```

**\*\*\*\*\* SUBROUTINE FUNCTIONS \*\*\*\*\***

```

AGD      - ADDS SPECIFIC TAF'S TO A GROUP
BLOCK DATA - INITIALIZES COMMON BLOCKS
CKCREW   - CHECKS FOR CREWMAN TRAVEL FOR AN EVENT
DATES     - CONVERTS GREGORIAN DATE, WORK DAY, OR CALENDAR
           DAY, AND CHECK FOR A HOLIDAY
DECDAY   - CHECK DATE INPUT FOR MONTH/DAY/YEAR FORMAT
DELGRW   - DELETES CREWMAN(MEN) FOR A SPECIFIED TIME FRAME
DELETE   - DELETES AN ENTIRE GROUP FROM THE TIMELINE
           AND GROUP LIST
DELGR    - DRIVER TO DELETE A GROUP FROM THE TIMELINE
DELREC   - DELETE A RECORD FROM TIMELINE
DSCOM    - DISPLAYS COMPOSITE TIMELINE
DSCFW   - DISPLAYS CREW TIMELINE
DSDFW   - CONVERTS RECATING POINT ON AND OFF TIMES
           TO A GREGORIAN DATE AND HOUR
DSEVE    - DISPLAYS EVENT TIMELINE
DUMP     - DISPLAY AND SELECT PRINT AND OUTPUT FILE OPTIONS
EDCOM    - DRIVER TO DISPLAY AND EDIT COMPOSITE TIMELINE
EDCRW   - DRIVER TO DISPLAY AND EDIT THE CREW TIMELINE
EDLVE   - DRIVER TO DISPLAY AND EDIT THE EVENT TIMELINE
EDIT     - UPDATES TIMELINE ARRAYS WITH EDITS
ESCRW   - PRINTS A MESSAGE ON GRAPHICS SCREEN BUT NOT ON
           PRINT FILE
HELP     - DISPLAYS EDITING COMMANDS FOR TIMELINE EDITS
INSERT   - INSERT A NEW RECORD IN FILE
LDFW    - WRITE LIST-DIRECTED FILE FOR TIMELINE STATUS
LOADMD   - LOAD GROUP LIST AND FAYLOAD SPECIALIST LIST
LOADT    - LOAD TRAVEL COST AND TRAVEL TIME DATA
LOCVE    - CALCULATES THE LOCATION AND WORD SIZE BASED ON THE

```

POSITION OF THE CURSOR CROSSHAIRS FOR TIMELINE  
 DISPLAYS (NOT USED FOR TRAVEL RECORDS)  
 LOCTAV - CALCULATES THE LOCATION AND WORD SIZE BASED ON THE  
 POSITION OF THE CURSOR CROSSHAIRS FOR TIMELINE  
 DISPLAYS (USED FOR TRAVEL RECORDS)  
 MAIN - MAIN CONTROL FOR PROGRAM AND MAIN MENU DISPLAY  
 ONFWRT - WRITES ON/OFF SCRATCH FILE  
 ONOFFW - WRITES ON/OFF FILE FOR OUTPUT  
 OPTION - PRESENTS EDIT COMMANDS AT TOP OF PAGE OF TIMELINE  
 DISPLAYS  
 PREADA - DISPLAYS MESSAGE ON SCREEN AND AVOIDS CARRIAGE  
 RETURN  
 PRINT - PRINTS TIMELINE RECORDS ON ALTERNATE PRINT FILE  
 PDCH12 - READS UP TO 14 WORDS OF INPUT FROM INTERACTIVE  
 TERMINALS TO ADD TAPE'S TO A GROUP  
 FDOPT - READS AND INTERPRETS EDITING COMMANDS  
 READ - READS A RECORD FROM THE SCRATCH FILE  
 READS - READS RECORDS FROM THE SCRATCH FILE BY GROUP CHAIN  
 READ? - RESTORES COMMON BLOCKS UPON RE-ENTRY TO THE MODULE  
 SAVE - SAVES COMMON BLOCKS UPON EXIT FROM THE MODULE  
 SLOAT - READS START AND STOP TIMES FOR CREWMAN DELETION  
 SLFILE - REQUESTS NAME-DIRECTED AND LIST-DIRECTED FILE NAMES  
 FOR DATA INPUT  
 SLPYL - REQUESTS USER TO SPECIFY CREW FOR CREW TIMELINE  
 STDATE - REQUESTS USER TO INPUT STARTING DATE FOR DISPLAY  
 AND CHECKS FOR MONTH/DAY/YEAR FORMAT  
 TO - READS A CREW TRAINING LIST-DIRECTED FILE AND WRITES  
 AN NTRAN FILE IN TIME ORDER BY ON TIME  
 TRAVCT - RETRIEVES TRAVEL COST AND TIME FROM ONE LOCATION  
 TO ANOTHER  
 TRAVEL - CALCULATES TRAVE POST-PROCESSING FOR OPTION 3 OF  
 THE MAIN MENU  
 WRDATE - CONVERTS GREGORIAN ON AND OFF TIMES TO A DECIMAL  
 NUMBER  
 WRTAV - WRITES TRAVEL RECORDS ON SCRATCH FILE AND PRINTS  
 A MESSAGE FOR TRAVEL VIOLATION ON ALTERNATE  
 PRINT FILE  
 WRFIL - WRITES LIST-DIRECTED FILE FOR TIMELINE STATUS AND  
 ON/OFF FILE IF SELECTED ON OUTPUT FILE OPTIONS

C. CREATION OF ABSOLUTE ELEMENT  
 @MAP,L ED-MAP,ED-DO  
 LIE MIPS\*ILIB,SYSS\*MSFCB  
 SEG MAIN  
 IN MAIN,BLOCK DATA,CCC,ADOUT  
 SEG INITAL\*,(MAIN)  
 IN SLFILE,LOADND,TO  
 SEG EDCOM\*,(MAIN)  
 IN EDCOM,EDCOM  
 SEG EDEVE\*,(MAIN)  
 IN EDEVE,TEST  
 SEG DISPLAY\*,(EDEVE)  
 IN DSEVE  
 SEG TRAVEL\*,(EDEVE)  
 IN LOAD1,CKCREW,WRTAV,TRAVCT  
 SEG DELGR\*,(MAIN)  
 IN DELGR  
 SEG EDCRW\*,(MAIN)  
 IN EDCRW,SLPYL,DCRW  
 SEG DELCRW\*,(MAIN)  
 IN DELCRW,SLOAT  
 SEG WRTFIL\*,(MAIN)  
 IN WRTFIL,PRINT,ONFWRT,LDFW,CHPP

D. NAME-DIRECTED INPUT FILE STRUCTURE  
 TYPE OF FILE : NAME DIRECTED FILE

THE FOLLOWING REPRESENTS THE ATTRIBUTES OF THE  
 N-D FILE AND THE RETURNED DATA IN THE FORM:  
 ATTRIBUTE = DATA

- MISSION/LIST = LIST OF MISSIONS (20 WORDS)
- (MISSION ID.) = LIST OF GROUPS PER MISSION (200 WORDS)
- (GROUP ID.) = NUMBER OF TAES (1 WORD)  
 TYPE OF TAE (1 WORD)  
 EFFECTIVE DATE (2 WORDS)  
 DESCRIPTION (11 WORDS)  
 AVOIDANCE WINDOWS (40 WORDS)  
 IN THE FORM MM/DD/YY TO MM/DD/YY  
 (12 WINDOWS, 2 WORDS PER WINDOW)  
 GROUP ID.  
 (TOTAL OF 63 WORDS RETURNED)
- (GROUP ID.)/(TAE ID.)/TAE = DESCRIPTION OF TAE (6 WORDS)  
 LOCATION CODE (1 WORD)  
 DELAY (MINIMUM AND MAXIMUM)  
 (2 WORDS)  
 TAE ID. (1 WORD)  
 DURATION (1 WORD)  
 RESOURCES (5 WORDS)  
 PRIORITY (1 WORD)  
 EQUIPMENT (5 WORDS)  
 PAYLOAD CREWMEN (10 WORDS)  
 AVAILABILITY WINDOWS (24 WORDS)  
 IN THE FORM MM/DD/YY  
 (8 WINDOWS, 2 WORDS PER WINDOW)
- LOCATN/INITIAL = LIST OF INITIAL LOCATIONS (30 WORDS)
- LOCATN/WORK = LIST OF WORK LOCATIONS (60 WORDS)
- (LOCATION ID.)/FROM = LOCATION TO, COST, TIME (270 WORDS)
- (MISSION ID.)/PAYSPC = CREWMEN, HOME LOCATION (20 WORDS TOTAL)
- (WORK LOCATION ID.)/TDY = WORK LOCATIONS, TDY COST (120 WORDS TOTAL)

THE ATTRIBUTES IN PARENTHESES INDICATE VALUES WHICH  
 WILL CHANGE, SUCH AS, THERE MAYBE SEVERAL MISSION ID.'S  
 AND ONE MUST BE USED AS AN ATTRIBUTE IN PLACE OF THE  
 ENTRY IN THE PARENTHESES, HOWEVER, SUCH ATTRIBUTES AS  
 MISSION/LIST ARE HARD WIRED AND ARE NOT USER CHANGED.

E. CREW TRAINING TIMELINE FILE DESCRIPTION

PACTED OUTPUT FILE (LIST-DIRECTED)

TITLE RECORDS ARE UNDER THE FOLLOWING FORMATS  
 LINE 1 (\* SCHEDULE ID = \*,16) SFT SCHEDULE ID  
 LINES 2 THRU 4 (\* RESOURCES = \*,AA,?,(?,?,AA),15X) RESOURCES  
 LINE 5 (\* RESOURCES = \*,AA,?(?,?,AA),4XX) RESOURCES  
 LINE 6 (\* TOTAL COST = \*,11,?,4X) MISSIONS = \*,AA) COST & MISSIONS  
 LINES 7 THRU 8 (1X,12R,2,?,45B,?) TOUR DEFINITIONS  
 LINE 9 (1X,9?,?) TOUR DEFINITIONS

| WORD | DATA RECORDS | DESCRIPTION |
|------|--------------|-------------|
|      | MMMM-IC      |             |

|    |        |                                     |
|----|--------|-------------------------------------|
| 1  | DCOUNT | EVENT TIME ( DAY COUNT)             |
| 2  | DATE1  | DATE ( MM/DD/YY )                   |
| 3  | DATE2  | DATE ( MM/DD/YY )                   |
| 4  | DDUR   | DURATION ( DAY COUNT )              |
| 5  | WOUR   | DURATION ( WORK COUNT )             |
| 6  | SID/TR | GROUP ID / TRAVEL / HOME*           |
| 7  | TNUM/C | TAF NUMBER / COST / 0.0             |
| 8  | TID/LT | TAF ID / LOCATION TC / * *          |
| 9  | LOC/LC | LOCATION CODE / LOCATION FROM / LOC |
| 10 | CREW1  | CREW ID                             |
| 11 | CREW2  | CREW ID                             |
| 12 | CREW3  | CREW ID                             |
| 13 | CREW4  | CREW ID                             |
| 14 | CREW5  | CREW ID                             |
| 15 | CREW6  | CREW ID                             |
| 16 | CREW7  | CREW ID                             |
| 17 | CREW8  | CREW ID                             |
| 18 | CREW9  | CREW ID                             |
| 19 | CREW10 | CREW ID                             |
| 20 | RES1   | RESOURCES                           |
| 21 | RES2   | RESOURCES                           |
| 22 | RES3   | RESOURCES                           |
| 23 | RES4   | RESOURCES                           |
| 24 | RES5   | RESOURCES                           |

\* DENOTES FLOATING POINT DATA  
 THE DURATIONS GIVEN IN WORDS 4 AND 5 WILL REPRESENT  
 ON TIMES IF POSITIVE AND OFF TIMES IF NEGATIVE.  
 WORDS 6 THROUGH 9 WILL REPRESENT 1 OF 3 DISTINCT AND  
 DIFFERENT VALUES. IF WORD 6 RETURNS A GROUP ID, THEN  
 WORDS 7 THROUGH 9 WILL BE THE FIRST WORD (OR PHRASE)  
 UNDER DESCRIPTION. IF 6 RETURNS THE WORD TRAVEL, THEN  
 USE THE SECOND DESCRIPTION OF WORDS 7-9. IF 6 RETURNS  
 THE WORD HOME, THEN USE THE THIRD DESCRIPTION OF WORDS  
 7-9. THAT IS, IF 6 = ID, THEN 7 = TAF #, IF 6 = TRAVEL,  
 7 = COST, IF 6 = HOME, THEN 7 = 0.0

PACKED USER'S INFORMATION  
 THE PACKED MODULE HAS A MAIN MENU FOR MAIN PROGRAM CONTROL, A  
 SUB-MENU FOR OUTPUT AND A LIST OF EDITING COMMANDS WHICH APPLY TO THE  
 TIMELINE EDIT OPTIONS FROM THE MAIN MENU. THE FOLLOWING IS A BRIEF  
 SUMMARY OF THEIR INTERACTION.

- ```

.....
MAIN MENU
: 0 - TERMINATE
: 1 - DISPLAY USAGE INFORMATION
: 2 - DISPLAY/EDIT COMPOSITE TIMELINE
: 3 - DISPLAY/EDIT EVENT TIMELINE AND POST-PROCESS TRAVEL
: 4 - DELETE GROUP FROM TIMELINE
: 5 - DISPLAY/EDIT CREW TIMELINE
: 6 - DELETE CREW FROM TIMELINE
: 7 - TRANSFER TO PACT DATA BASE MODULE (PACTDB)
: 8 - WRITE NEW TIMELINE FILES
: 9 - TRANSFER TO PACT REPORT GENERATOR (PACTRG)
.....
  
```

NOTE : TRAVEL IS NOT INSERTED EXCEPT BY OPTION 3 (EVENT  
 TIMELINE) IN 2 AND 5 THE USER MUST ALLOW FOR THIS.  
 TOTAL TRAVEL COST IS CALCULATED BEFORE NEW FILES  
 ARE WRITTEN.

NOTE : OPTION 8 DISPLAYS A SUB-MENU (OUTPUT MENU).  
 OPTIONS 1, 2, 3 AND 5 DISPLAY THE EDITING  
 INSTRUCTIONS AND EDITING COMMANDS. HOWEVER,  
 OPTIONS 2, 3 AND 5 DO NOT DISPLAY THESE IF IT  
 HAS BEEN DONE BEFORE.

```

.....
          EDITING INSTRUCTIONS
          (OPTIONS 1, 2, 3, AND 5 OF MAIN MENU)
LOCATE CROSSHAIRS ON VALUE TO BE EDITED, ENTER COMMAND
CHARACTER, AND PRESS RETURN KEY.
(IF CROSSHAIRS ARE NOT VISIBLE THEY MAY BE OFF SCREEN, TURN
 THUMB WHEELS AND/OR PRESS RETURN KEY.)

          EDITING COMMANDS ARE LISTED BELOW
E - ENTER NEW VALUE, OVERSTRIKING OLD VALUE
9 - ENTER NEW VALUE IN BLANK AREA OF SCREEN
A - ALL SPECIFIED TAF(S) TO A GROUP
    (MULTIPLE QUESTIONS WILL BE ASKED)
D - DELETE SPECIFIED TAF (EVENT)
R - REDRAW SCREEN
T - SPECIFY TIME POINT FOR NEXT PAGE
C - CONTINUE, BEGINNING WITH NEXT TIME POINT
(IN) - BEGIN PROCESSING ANOTHER CREWMAN
H - REDISPLAY THIS TUTORING (HELP)
.....

```

NOTE : THE N OPTION APPLIES ONLY TO THE CREW TIMELINE



PACTRG ABSTRACT

THE PAYLOAD CREW TRAINING REPORT GENERATOR (PACTRG) USES THE PACT DATA BASE FILE CONTAINING TRAINING ACTIVITY ELEMENT (TAE) DESCRIPTIONS AND THE OUTPUT FILES FROM THE MODULE PACTS CONTAINING THE CREW TRAINING SCHEDULE TO GENERATE SPECIALIZED TABULATIONS AND PLOTS. TABULATIONS AVAILABLE ARE : A COMPOSITE SCHEDULE, A COMPOSITE SCHEDULE WITH COST AND DURATION, A SCHEDULE SUMMARY FOR ALL THE TAE GROUPS, UNSCHEDULED TIME FOR ALL CREWMEN, A SCHEDULE FOR AN INDIVIDUAL CREWMAN, AND UNSCHEDULED TIME AND LOCATIONS FOR AN INDIVIDUAL CREWMAN. TABULATIONS ON THE TERMINAL MAY BE OMITTED WHILE PRODUCING TABULATIONS ON THE PRINT FILE. THE MODULE INCLUDES AN OPTION TO PRINT ON THE PRINT FILE ALL TABULATIONS FOR A SPECIFIED TIME FRAME. BAR GRAPH PLOTS AVAILABLE : A SCHEDULE FOR ALL TAE GROUPS, SCHEDULING OPPORTUNITIES FOR ALL CREWMEN, A TIMELINE OF LOCATIONS, A RESOURCE UTILIZATION TIMELINE AND A LOCATION TIMELINE FOR AN INDIVIDUAL CREWMAN. THE PLOTS CAN BE DISPLAYED ONLY AT A 19-INCH GRAPHICS TERMINAL.

PACTRG IS AVAILABLE AT ANY SITE AND IN BATCH MODE WITH THE EXCEPTION OF PLOTS WHICH REQUIRE A 19-INCH GRAPHICS TERMINAL.

RESPONSIBLE ENGINEER : DAVID SHIPMAN ELL2 453-4735

PACTRG ENGINEERING INFORMATION

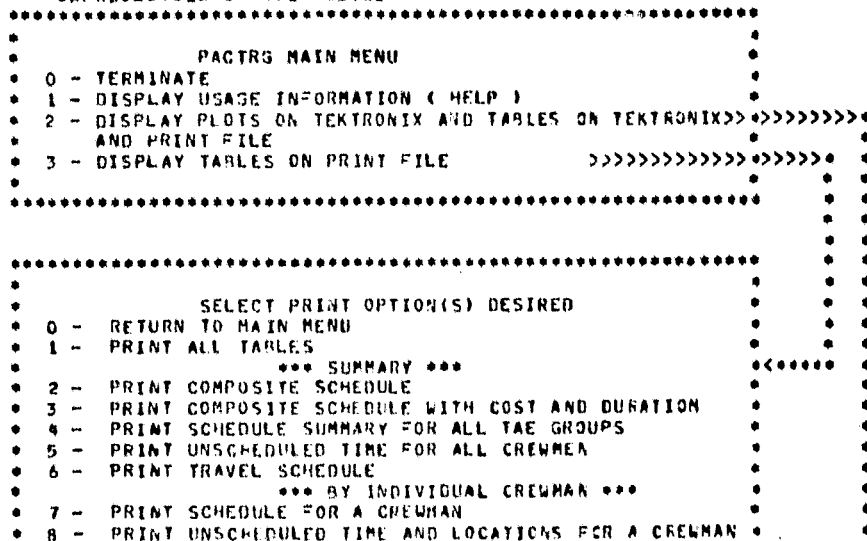
DOES NOT APPLY TO THIS MODULE

PACTRG PROGRAMMING INFORMATION

THE PACT REPORT GENERATOR GENERATES TABLES VIA THE TEKTRONIX TERMINAL SCREEN AND THE HIGH SPEED PLOTTER. PLOTS ARE ALSO DISPLAYED VIA THE TEKTRONIX TERMINAL. NAME-DIRECTED, LIST-DIRECTED AND ON/OFF FILES PRODUCED BY THE AUTOMATIC SCHEDULER (PACT) OR THE MANUAL SCHEDULER (PACTED) ARE NEEDED FOR USE OF ALL OF THE OPTIONS.

A. PROGRAM BLOCK DIAGRAM

BELOW IS A SIMPLIFIED BLOCK DIAGRAM WHICH SHOWS THE CAPABILITIES OF THE MODULE



ORIGINAL PAGE IS  
OF POOR QUALITY

```

    *** INPUT FILE SETUP ***
    9 - INPUT NAME-DIRECTED FILE  CURRENTLY
    10 - INPUT LIST-DIRECTED FILE  CURRENTLY
    11 - INPUT ON/OFF FILE         CURRENTLY
  
```

```

    .....
    SELECT DISPLAY OPTION(S) DESIRED
    0 - RETURN TO MAIN MENU
      *** SUMMARY ***
    1 - TABULATE COMPOSITE SCHEDULE
    2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
    3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL TAE GROUPS
    4 - TABULATE SCHEDULE SUMMARY FOR ALL TAE GROUPS
    5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL
      GROUPS
    6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
    7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
    8 - TABULATE TRAVEL SCHEDULE
    9 - PLOT TIMELINE OF LOCATIONS
    10 - PLOT RESOURCE UTILIZATION TIMELINE
      *** BY INDIVIDUAL CREWMAN ***
    11 - TABULATE SCHEDULE FOR A CREWMAN
    12 - PLOT LOCATION TIMELINE FOR A CREWMAN
    13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A
      CREWMAN
      *** INPUT FILE SETUP ***
    14 - INPUT NAME-DIRECTED FILE  CURRENTLY
    15 - INPUT LIST-DIRECTED FILE  CURRENTLY
    16 - INPUT ON/OFF FILE         CURRENTLY
  
```

**B. COMPUTER CONFIGURATION**

```

LANGUAGE      : FORTRAN
CORE REQUIREMENTS : 31.63 K
INPUT FILES   : NAME-DIRECTED FILE CONTAINING MISSION
                DEPENDENT DATA AND TAE MODELS
                LIST-DIRECTED FILE CONTAINING SCHEDULE
                TIME, RESOURCE AND TRAVEL COST/TIME DATA
                ON/OFF FILE CONTAINING CREW ACTIVITIES
RESTRICTIONS  : PLOTS REQUIRE A 19 INCH TEXTRONIX
  
```

**\*\*\* SUBROUTINES \*\*\***

INTERNAL NAME		EXTERNAL NAME
BCHART	- DISPLAYS BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS	• BCHART/PACTRG
BGRID	- DRAWS PLOTS	• BGRID /PACTRG
BLOCK-DATA	- INITIALIZES COMMON BLOCKS	• BLOCK-DATA/PACTRG
DATEG	- CONVERTS GREGORIAN DATE, WORKDAY OR CALENDAR DAY AND CHECKS FOR A HOLIDAY	• DATE /PACTS
DECDAT	- CHECKS DATE INPUT FOR MONTH/DAY/YEAR FORMAT	• DECDAT/PACTRG
DISJ	- DISPLAYS COMPOSITE SCHEDULE TABULATION	• DISJ /PACTRG
DISK	- DISPLAYS COMPOSITE SCHEDULE WITH COST AND DURATION	• DISK /PACTRG
DISL	- DISPLAYS BAR CHART OF SCHEDULE FOR ALL TAE GROUPS	• DISL /PACTRG
DISM	- DISPLAYS TABULATION OF SCHEDULE SUMMARY FOR ALL TAE GROUPS	• DISM /PACTRG

DISN	- DISPLAYS PLOT OF BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL TAE GROUPS	* DISN /PACTRG
DISO	- DISPLAYS PLOT OF UNSCHEDULED TIME FOR ALL CREWMEN	* DISO /PACTRG
DISP	- DISPLAYS TABULATION OF UNSCHEDULED TIME FOR ALL CREWMEN	* DISP /PACTRG
DISQ	- DISPLAYS COMPOSITE TRAVEL SCHEDULE	* DISQ /PACTRG
DISR	- DISPLAYS PLOT OF TIMELINE OF LOCATIONS	* DISR /PACTRG
DISS	- DISPLAYS PLOT OF RESOURCE UTILIZATION	* DISS /PACTRG
DIST	- DISPLAYS SCHEDULE FOR AN INDIVIDUAL CREWMAN	* DIST /PACTRG
DISU	- DISPLAYS PLOT OF LOCATION TIMELINE FOR AN INDIVIDUAL CREWMAN	* DISU /PACTRG
DISV	- DISPLAYS TABULATION OF UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN	* DISV /PACTRG
FILEL	- REQUESTS LIST-DIRECTED FILE NAME FROM USER, CHECK IF FILE IS READY, IF REQUIRED TYPE AND RECORD SIZE	* FILEL /PACTRG
FILEN	- REQUESTS NAME-DIRECTED FILE NAME FROM USER, CHECKS IF FILE IS READY AND REQUIRED TYPE (N-D)	* FILEN /PACTRG
FILEO	- REQUESTS ON/OFF FILE NAME FROM USER, CHECKS IF FILE IS READY AND CORRECT TYPE	* FILEO /PACTRG
GRDATA	- LOADS GROUP DATA INTO CORE FROM N-D FILE	* GRDATA/PACTRG
LCHART	- DISPLAYS BAR CHART OF SCHEDULE FOR ALL TAE GROUPS	* LCHART/PACTRG
LEDGEN	- REQUESTS LEGEND TO BE USED WITH DISPLAYS	* LEDGEN/PACTRG
LOADCR	- LOADS CREW DATA FROM ON/OFF FILE	* LOADCR/PACTRG
LOADGR	- LOA'S GROUP LIST FROM N-D FILE INTO CORE	* LOADGR/PACTRG
LOADHM	- LOADS CREW AND INITIAL LOCATIONS FROM N-D FILE INTO CORE	* LOADHM/PACTRG
LOADLN	- LOADS LIST OF HOME AND WORK LOCATIONS FROM N-D FILE INTO CORE	* LOADLN/PACTRG
LOADPY	- LOADS CREW ID'S FROM N-D FILE INTO CORE	* LOADPY/PACTRG
LOADRS	- LOADS RESOURCE DATA FROM N-D FILE INTO CORE	* LOADRS/PACTRG
LOADT	- LOADS THE DATA INTO CORE FROM N-D FILE	* LOADT /PACTRG
LOADTY	- LOADS TDY DATA INTO CORE FROM N-D FILE	* TOY /PACTRG
MAIN	- MAIN PROGRAM CONTROL	* MAIN /PACTRG
MENU	- MAIN DRIVER FOR TEKTRONIX DISPLAY OPTIONS	* MENU /PACTRG
OCHART	- DISPLAYS PLOT OF UNSCHEDULED TIME FOR ALL CREWMEN	* OCHART/PACTRG
PMENU	- MAIN DRIVER FOR PRINT OPTIONS	* PMENU /PACTRG
PRINT	- PRINTS ALL TABLES FROM PRINT MENU	* PRINT /PACTRG
PRTJ	- PRINTS COMPOSITE SCHEDULE ON PRINT FILE	* PRTJ /PACTRG
PRTK	- PRINTS COMPOSITE SCHEDULE WITH COST AND DURATION ON PRINT FILE	* PRTK /PACTRG
PRTM	- PRINTS SCHEDULE SUMMARY FOR ALL TAE GROUPS	* PRTM /PACTRG
PRTP	- PRINTS UNSCHEDULED TIME FOR ALL CREWMEN ON PRINT FILE	* PRTP /PACTRG
PRTO	- PRINTS TRAVEL SCHEDULE ON PRINT FILE	* PRTO /PACTRG
PRTT	- PRINTS SCHEDULE FOR AN INDIVIDUAL CREWMAN	* PRTT /PACTRG

PRTV	- PRINTS UNSCHEDULED TIME AND LOCATIONS FOR AN INDIVIDUAL CREWMAN	• PRTV /PACTRG
RCHART	- PLOTS TIMELINE FOR LOCATIONS	• RCHART/PACTRG
RDOPT	- READS AND INTERPRETS COMMANDS USED FOR CONTROL AFTER DISPLAYS	• RDOPT /PACTGB
SCHART	- PLOTS RESOURCE UTILIZATION	• SCHART/PACTRG
SLOAT	- QUERIES USER FOR START AND END TIMES FOR TABLES	• SLOAT /PACT
SLEL	- QUERIES USER FOR START AND DELTA TIMES FOR USE IN PLOTS	• SLEL /PACTRG
SLNIS	- ASKS USER FOR MISSION(S) DESIRED IN DISPLAYS	• SLNIS /PACTRG
SLPYL	- ASKS USER TO SPECIFY CREWMAN TO USE IN DISPLAY	• SLPYL /PACTRG
UCHART	- PLOTS LOCATION TIMELINE FOR A CREWMAN	• UCHART/PACTRG
UNIONT	- TAKES THE UNION OF THE GROUP AVAILABILITY WINDOWS AND SUBTRACTS THE AVOIDANCE WINDOWS FOR PLOT OF SCHEDULING OPPORTUNITIES FOR ALL GROUPS	• UNIONT/PACTRG

C. CREATION OF ABSOLUTE ELEMENT

```

BPAP,IL RG-MAP,RG-GO
LID MIPS,ILIG,SYSS,MSFCs
SEG MAIN
  IN MAIN,BLOCK-DATA
  SEG A*(MAIN)
  IN USAGE,RDOPT,MENU
  SEG A1A*(A)
  IN DISJ
  SEG A1B*(A)
  IN DISK
  SEG A1C*(A)
  IN DISM
  SEG A1D*(A)
  IN DISP
  SEG A1E*(A)
  IN DISQ
  SEG A1F*(A)
  IN DIST
  SEG A1G*(A)
  IN DISV
  SEG A2*(A)
  IN SLEL,DECDAT
  IN BSRIC,LEDGEN
  SEG A2A*(A2)
  IN DISL,LCHART
  SEG A2B*(A2)
  IN DISN,UNIONT,RCHART
  SEG A2C*(A2)
  IN DISO,OCHART
  SEG A2D*(A2)
  IN DISR,RCHART
  SEG A2E*(A2)
  IN DISS,SCHART
  SEG A2F*(A2)
  IN DISU,UCHART
  SEG B*(MAIN)
  IN PMENU:PRINT
  SEG B1A*(B)
  IN PRTJ
  SEG B1B*(B)
  IN PRTK
  SEG B1C*(B)
  IN PRTM

```

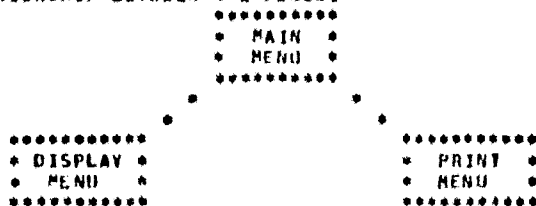
```

SEG 910*(B)
IN PRTP
SEG 911*(B)
IN PRTO
SEG 912*(B)
IN PRTV
SEG 913*(B)
IN PRTV
END

```

PACTRS USER'S INFORMATION

THE PACTRS MODULE HAS THREE MENUS. BELOW IS A DIAGRAM SHOWING THE RELATIONSHIP BETWEEN THE MENUS.



EACH MENU IS SHOWN BELOW WITH AN ACCOMPANYING EXPLANATION WHERE NEEDED. IN THE MAIN MENU ONLY ONE OPTION MAY BE SELECTED AT ONE TIME. IN BOTH THE DISPLAY AND PRINT MENUS AS MANY AS TEN OPTIONS MAY BE SELECTED AT ONE TIME.

```

.....
: PACTRS MAIN MENU
: 0 - TERMINATE
: 1 - DISPLAY USAGE INFORMATION (HELP)
: 2 - DISPLAY PLOTS ON TEKTRONIX AND TABLES ON TEKTRONIX
: AND PRINT FILE
: 3 - DISPLAY TABLES ON PRINT FILE
: .....
```

NOTE : \*OPTIONS 2 AND 3 DISPLAY SUBMENUS

MULTIPLE SELECTIONS WILL BE PROCESSED FROM THE FOLLOWING MENUS.

```

.....
: SELECT DISPLAY OPTION(S) DESIRED
: 0 - RETURN TO MAIN MENU
: *** SUMMARY ***
: 1 - TABULATE COMPOSITE SCHEDULE
: 2 - TABULATE COMPOSITE SCHEDULE WITH COST AND DURATION
: 3 - PLOT BAR GRAPH OF SCHEDULE FOR ALL GROUPS
: 4 - TABULATE SCHEDULE SUMMARY FOR ALL THE GROUPS
: 5 - PLOT BAR GRAPH OF SCHEDULING OPPORTUNITIES FOR ALL
: GROUPS
: 6 - PLOT UNSCHEDULED TIME FOR ALL CREWMEN
: 7 - TABULATE UNSCHEDULED TIME FOR ALL CREWMEN
: 8 - TABULATE TRAVEL SCHEDULE
: 9 - PLOT TIMELINE OF LOCATIONS
: 10 - PLOT RESOURCE UTILIZATION TIMELINE
: *** BY INDIVIDUAL CREWMAN ***
: 11 - TABULATE SCHEDULE FOR A CREWMAN
: 12 - PLOT LOCATION TIMELINE FOR A CREWMAN
: 13 - TABULATE UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
: *** INPUT FILE SETUP ***
: .....
```

ORIGINAL PAGE 1  
POOR QUALITY

```

: 14 - INPUT NAME-DIRECTED FILE   CURRENTLY
: 15 - INPUT LIST-DIRECTED FILE   CURRENTLY
: 16 - INPUT ON/OFF FILE          CURRENTLY
: .....

```

NOTES :

```

*OPTIONS 1, 2, 7, 8, 11, AND 13 ASK USER TO INPUT
  START AND END TIMES FOR DISPLAY (MUST BE IN
  MONTH/DAY/YEAR FORMAT).
*OPTIONS 3, 5, 6, 9, 10, AND 12 REQUEST INPUT OF START
  AND DELTA TIMES TO BE USED IN PLOTS (START IS IN
  MONTH/DAY/YEAR FORMAT AND DELTA IS IN WEEKS).
*OPTIONS 3, 4, 5, 10 AND 12 ASK FOR MISSION(S) TO USE
  FOR DISPLAYS.
*OPTIONS 11, 12 AND 13 ASK USER TO SPECIFY CREW
*OPTIONS 3, 5, 6, 9, 10 AND 12 ASK FOR LEGEND TO
  LABEL PLOT DISPLAYS WITH.
*IN EACH DISPLAY IF REQUIRED FILES HAVE NOT BEEN
  ATTACHED THE USER IS ASKED FOR FILE NAME. ALSO, FILES
  MAY BE ATTACHED VIA OPTIONS 14, 15 AND 16.

```

```

: .....
: SELECT PRINT OPTION(S) DESIRED
: 0 - RETURN TO MAIN MENU
: 1 - PRINT ALL TABLES
:   *** SUMMARY ***
: 2 - PRINT COMPOSITE SCHEDULE
: 3 - PRINT COMPOSITE SCHEDULE WITH COST AND DURATION
: 4 - PRINT SCHEDULE SUMMARY FOR ALL TAE GROUPS
: 5 - PRINT UNSCHEDULED TIME FOR ALL CREWMEN
: 6 - PRINT TRAVEL SCHEDULE
:   *** BY INDIVIDUAL CREWMAN ***
: 7 - PRINT SCHEDULE FOR A CREWMAN
: 8 - PRINT UNSCHEDULED TIME AND LOCATIONS FOR A CREWMAN
:   *** INPUT FILE SETUP ***
: 9 - INPUT NAME-DIRECTED FILE   CURRENTLY
: 10 - INPUT LIST-DIRECTED FILE  CURRENTLY
: 11 - INPUT ON/OFF FILE         CURRENTLY
: .....

```

NOTES :

```

*ALL OPTIONS EXCEPT FOR FILE SETUP ASK USER TO INPUT
  START AND END TIMES (IN MONTH/DAY/ YEAR)
*OPTION 4 ASKS FOR MISSION(S) TO BE USED
*IF REQUIRED FILES HAVE NOT BEEN ATTACHED, THEN THE
  SELECTED OPTION WILL ASK FOR INPUT OF REQUIRED FILE
  NAME. FILES MAY ALSO BE ATTACHED WITH OPTIONS 9, 10
  AND 11.


```

## APPROVAL

### PAYLOAD CREW TRAINING SCHEDULER (PACTS) USER'S MANUAL

By David L. Shipman

The information in this report has been reviewed for technical content. Review of any information concerning Department of Defense or nuclear energy activities or programs has been made by the MSFC Security Classification Officer. This report, in its entirety, has been determined to be unclassified.



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THOMAS P. ISBELL

Director, Systems Analysis and Integration Laboratory