

MPE DUMP ANALYSIS GUIDE & CASES

Part Number HP32033-93001

Printed in U.S.A. 10/82

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COMPUTER SYSTEMS DIVISION

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PREFACE

This publication represents the culmination of CSY efforts to arrive at a methodology of dump reading. As such it consists of 2 parts:

- 1) **MPE Dump Analysis Guide** - an introduction into the why's & how's of MPE memory dump analysis. This publication is particularly helpful in terms of the flowcharts which are provided for the analysis of the different kinds of system interruptions. The guide also contains appendices which address such topics as the compilation of MPE modules, decoding system halts, & the bit definitions for the hardware status registers on all HP3000 CPU's.

- 2) **MPE Dump Analysis Cases** - a set of cases which consist of selected pages from actual memory dumps and have a solution which is derivable through the application of the flowcharts in the MPE Dump Analysis Guide. These cases start with relatively simple cases which can be solved without reference to source code listings and progress through system hangs & failures that require code correlation in order to determine the cause of the system interruption. All cases are self-contained and include all necessary pages from the formatted memory dump, source code listings, & manual excerpts. At the beginning of every case is a scenario which sets the stage for the case and in a separate section at the end of the publication is a solution which uses the memory dump analysis guide to arrive at the solution. Every page of every case is annotated with the number of that case in order to clearly identify which pages belong to which pages. This initial publication of the MPE Dump Analysis Guide &

Cases contains cases 1 thru 6 and cases 8 thru 10.

Prior to their publication, the MPE Dump Analysis Guide & Cases were tested extensively in MPE internals classes and underwent numerous modifications in order to ensure their completeness and relevance.

MPE DUMP ANALYSIS GUIDE

COMPUTER SYSTEMS DIVISION

November, 1982

***** OBJECTIVES OF THE DUMP ANALYSIS GUIDE *****

To provide a structured methodology for analyzing memory dumps of MPE-based systems with the purpose of determining the cause of a system failure or system interruption.

Specifically, the dump analysis guide should help a field person diagnose the type of system interruption and courses of analysis to follow in each situation.

***** ABSTRACT OF THE DUMP ANALYSIS GUIDE *****

The dump analysis guide helps a field person to identify the following 5 types of system interruptions and gives hints and strategy to follow in each case.

- 1) System failure - trace through markers, correlate with code.
- 2) System hang - trace family tree, identify deadlocks and system bottlenecks.
- 3) System loop - identify process and cause of loop.
- 4) Lockout - decode DIT, identify process and cause of loop.
- 5) System halt - decode micro-code status.

***** AUDIENCE OF THE DUMP ANALYSIS GUIDE *****

Field SE's and CE's who need a dump reference guide. This guide is designed for those field personnel who need to screen memory dumps before passing the memory dumps to a TSE.

***** LEVEL OF KNOWLEDGE THAT IS ASSUMED *****

Introduction to MPE Internals.

***** WHAT THE GUIDE DOES NOT DO *****

The dump analysis guide is not a replacement for the MPE Tables Manual, MPE source code compilations, or a basic understanding of how MPE operates. It is to be used in conjunction with all of these things.

***** HOW TO USE THE GUIDE *****

After some familiarization with the use of the guide, it should be possible to analyze a formatted memory dump primarily by referring to the flow charts. For this purpose the flow charts for analyzing the type of system interruption and the particular system interruptions are located on contiguous pages.

DEFINITION OF A SYSTEM INTERRUPTION

A system interruption on an MPE-based system has 3 main classifications:

- 1) System failure - System software has determined that a catastrophic hardware or software error has occurred and has called the system procedure SUDDEDEATH to print a system failure message on the system console and execute a HALT 17 macro-instruction.
- 2) System hang; macro-code and micro-code are still running but the user cannot get any response from the system:
 - a) System Pause - Pause instruction in the CIR (030020). All processes are waiting for a resource (impeded) or waiting for an event or the dispatcher is not functioning properly.
 - b) Loop - Some process is in an infinite loop. This can happen in the following ways:
 - 1) A system process disabled the dispatcher and then went into an infinite loop.
 - 2) Privileged user code disabled the dispatcher and then went into an infinite loop.
 - 3) A system or privileged user process running in the linear queue is in an infinite loop (the dispatcher continually schedules this process).
 - 4) An interrupt handling procedure is in a loop due to either software or hardware problems.
 - c) Lockout - User(s) or device(s) not running. This problem is similar to a system-wide hang except that it is specific to 1 user or 1 device.
- 3) System Halt - Microcode detected a serious condition and halted. Halt light is lit and there is no system failure message on the system console. A system halt usually signifies hardware problems. It may also indicate that an ICS overflow has occurred. ICS overflow, while not a hardware problem strictly speaking, does result in a system halt.

DUMP ANALYSIS PRELIMINARIES

- 1) Make sure that you know the version of MPE and the type of hardware (Series II/III, Series 30,33,44) that was involved. The version of MPE appears at the top of every page of the dump in a format similar to the following: "B.00.01".
- 3) Read the SR to get a general idea of what went wrong and check the Software Status Bulletin for similar known problems.
- 3) Check any additional information submitted with the dump.
- 4) Make sure that a loadmap is supplied with the dump or that the segment names appear in the formatted CST table. (In a pinch you may be able to use the segment lengths in the formatted CST to determine what CST is what segment.)
- 5) Make sure that an I/O configuration map is supplied with the dump.

***** QUESTIONS TO ASK THE CUSTOMER *****

- 1) What was running when the system interruption occurred?
 - a) Applications.
 - b) Development work.
 - c) Experimental software.
 - d) Privileged programs.
- 2) When was the last time a system interruption occurred? Describe the circumstances.
- 3) Has the I/O configuration for the system been changed recently? If so, how?
- 4) What subsystems were being used?
 - a) IMAGE.
 - b) KSAM.
- 5) Was a particular device/session/job not functioning? This question is very important for the analysis of a lockout.

***** GETTING STARTED ON THE DUMP *****

Analysis of an MPE memory dump must begin with an examination of the contents of the registers at the time the dump was taken. The registers contain clues as to the state of the system.

Note: The register and bits indicating whether the dispatcher is

running and whether the currently executing code is using the ICS differ from system to system. See appendix C for the proper registers and bit settings on the different systems.

It is also worth checking the formatted register dump to see if S bank is different from DB bank. If they are different and the DB register contains %1000 and the DB bank register is 0, it is a good indication that system code (either a process or an intrinsic) was executing.

***** CHECKING FOR INTERNAL PARITY ERRORS *****

Check the register used for hardware status for the following conditions:

- 1) System parity error.
- 2) Address parity error.
- 3) Data parity error.

If any of the corresponding bits are set then the system failure was probably caused by hardware problems (See Appendix B for the bit assignments for the pertinent register in different systems).

***** ANALYZING A SYSTEM FAILURE *****

If a system failure occurred, ie, a system failure message appeared on the system console and in the dump under the formatted register dump, then we need to determine what the current process was doing.

Note: Descriptions of system failure code are given in the Console Operator Reference Manual.

If we were on the ICS but not in the dispatcher, then we were processing an external or internal interrupt on the ICS. Locate the ICS and trace through the stack markers until you find one laid down by an interrupt handling procedure (GIP, GIP'HPIB, or TIP in segment HARDRES or a procedure in segment ININ (Internal Interrupt Handler, always segment #1)). Determine the interrupting DRT (this information is located at Q:3 in the interrupt stack marker laid down by micro-code when the interrupt is recognized). Go through the related DIT's and decode status information (The DRT contains a pointer to the ILT which in turn contains a pointer to the DIT (the DIT is part of the ILT)). For non-terminal devices (discs & LP's), (DFLAG), STATUS1 & STATUS2 of the DIT (STATUS1 & STATUS2 are device-dependent and require a CE handbook for decoding). For terminals, look at the following:

- 1) DFLAG - device state.
- 2) DMODEM - modem state (if a modem is involved).
- 3) DHEAD - pointer to the head of the terminal buffer list for this terminal.

If we were not in the dispatcher and not on the ICS, locate the stack of the currently executing process and trace through its stack markers. (The current process is marked with an asterisk in the formatted PCB.) Correlate the stack markers with the code.

***** LOOP *****

If system panel shows activity but no response can be gotten from the system, then the system is in an infinite loop. The method of detecting activity varies from system to system. On Series II/III systems the CIR on the front panel is brightly lit. On Series 30/33 systems, the CPU utilization display on the system console indicates activity. On Series 44 systems, the activity light indicates both I/O and CPU activity (consequently, a brightly lit activity light indicates high CPU utilization only if there is no I/O activity (check activity lights on the disc drives)). instruction other than a PAUSE or HALT in the CIR in the dump may also indicate a loop.

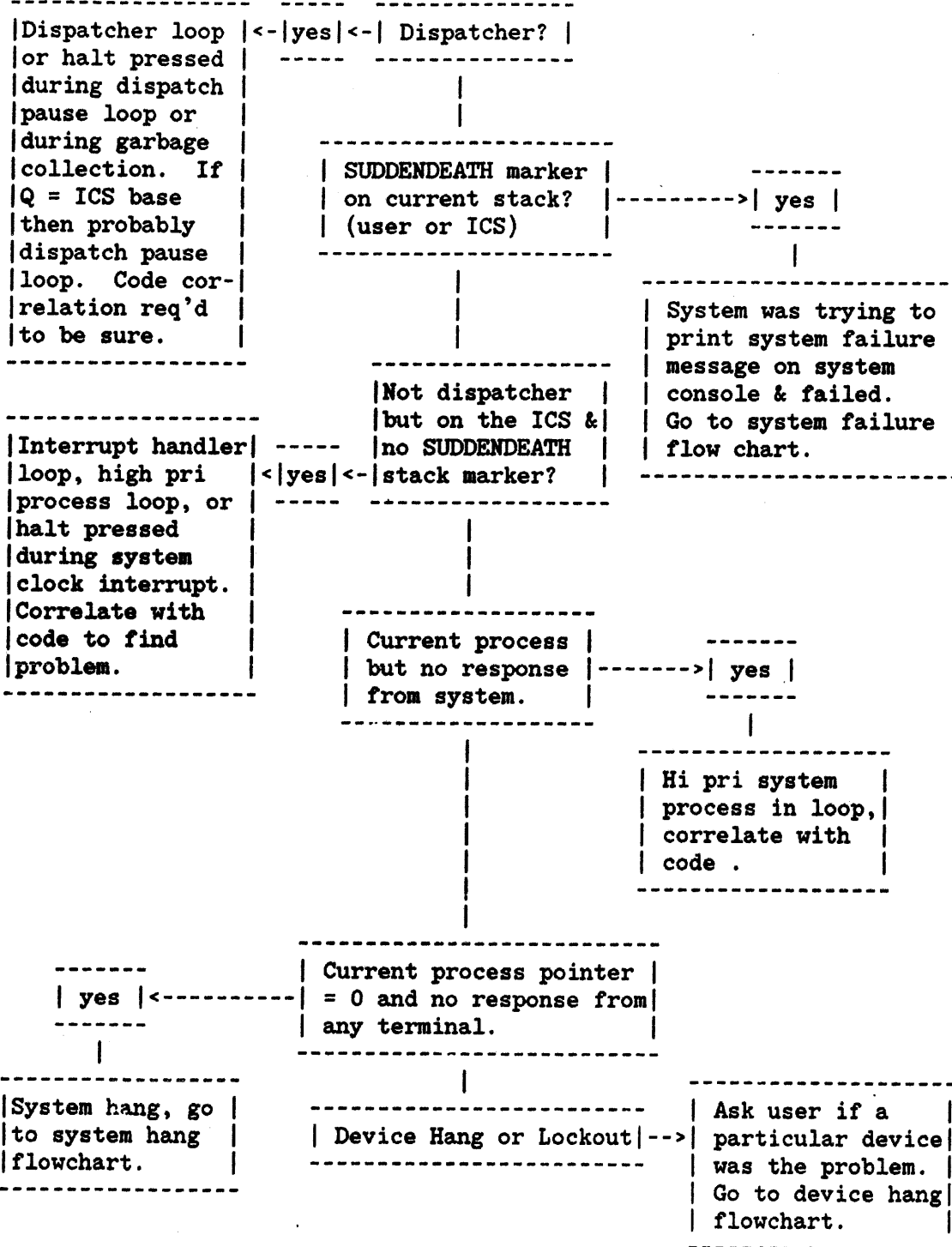
Check the register dump to see who was executing when the dump was taken. There are several possibilities:

If the dispatcher was running, determining the cause of the loop would require correlation with dispatcher code.

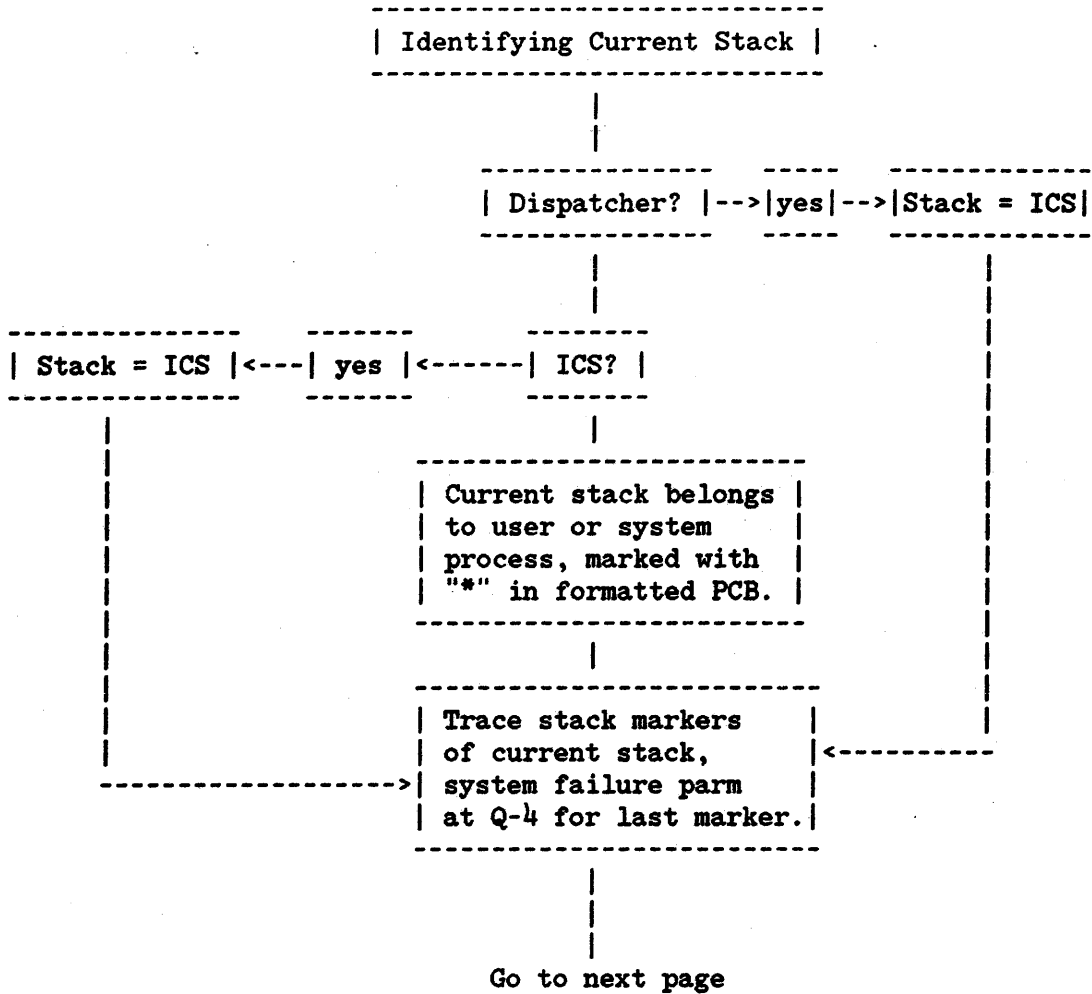
If we were running on the ICS but were not executing in the dispatcher, then we were processing some kind of interrupt. Trace through the stack markers on the ICS and find the number of the interrupting DRT (Q+3 in the stack marker laid down by micro-code). Check the DIT and the IOQ's/DRQ's of that DRT for unusual conditions (The DIT for a device contains a pointer to the head of the IOQ or DRQ list for that device).

If we were not in the dispatcher and not running on the ICS, identify the currently executing process. This can be either a system process or user process. If the process is a user process check to see if the process is running in privileged mode (Status Register.(0:1) = 1) and if the dispatcher is disabled. The dispatcher is disabled if QI-18 is greater than zero (QI is the base of the ICS). If so, suspect a user code problem or a faulty MPE intrinsic. If the process is a system process, try to correlate the stack with the code. Compiling MPE modules and correlating stack markers with MPE code is outlined in appendix D.

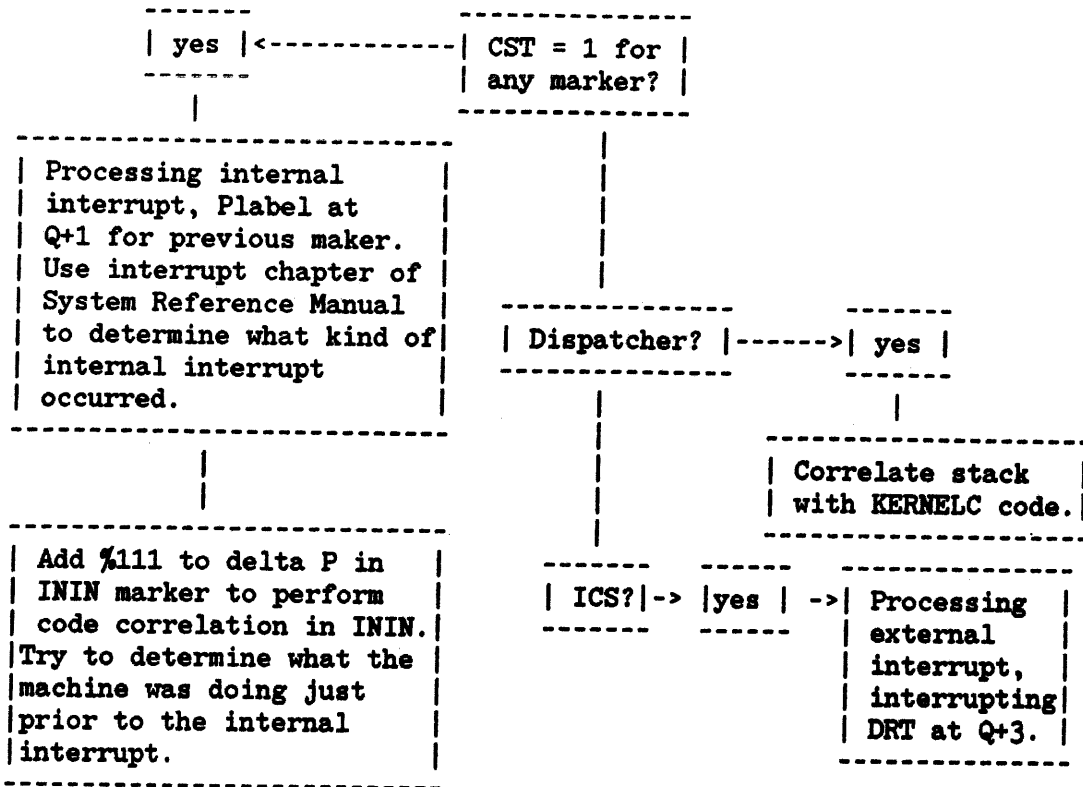
cont'd



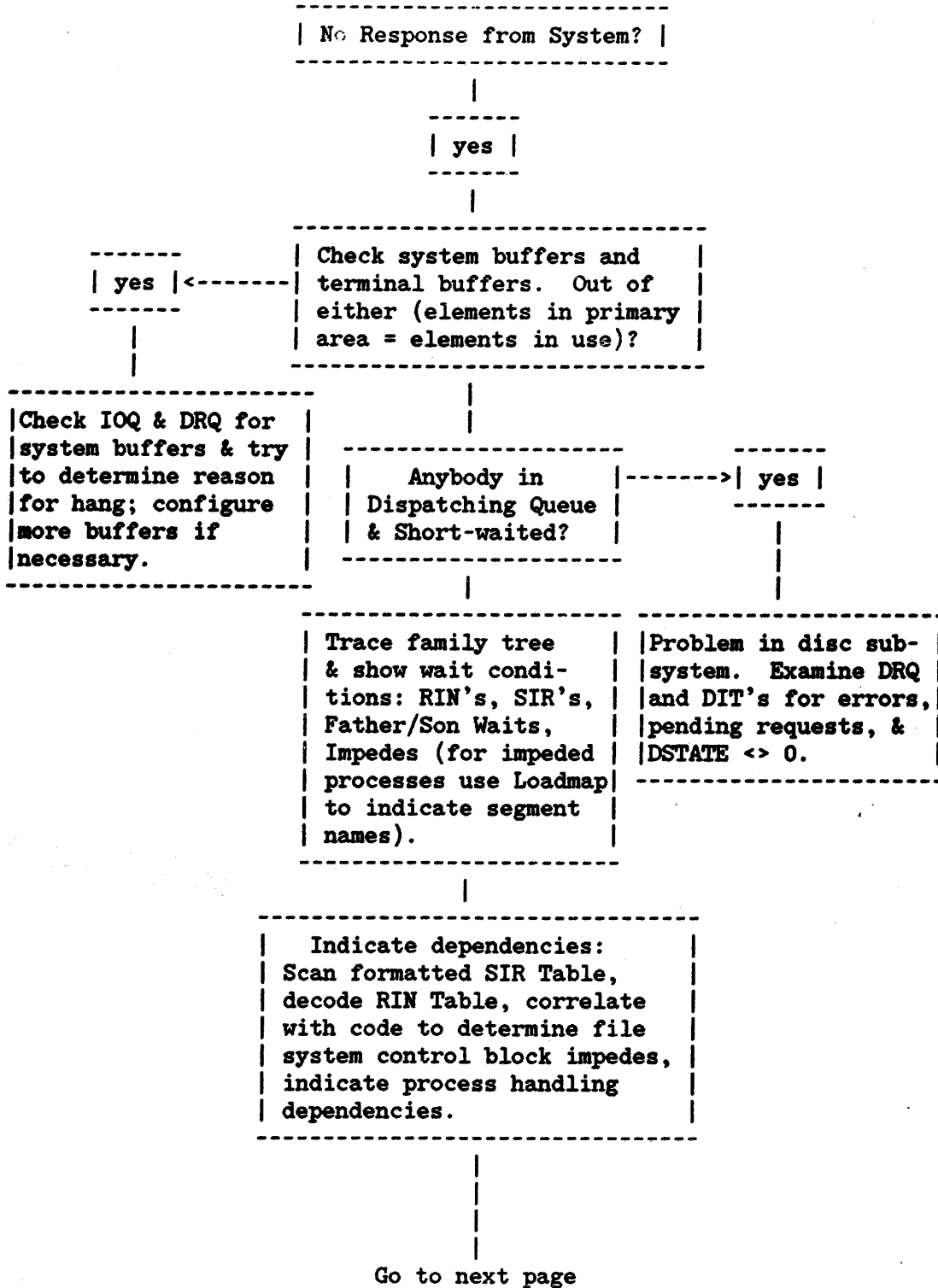
ANALYZING A SYSTEM FAILURE



cont'd



ANALYZING A SYSTEM HANG



cont'd

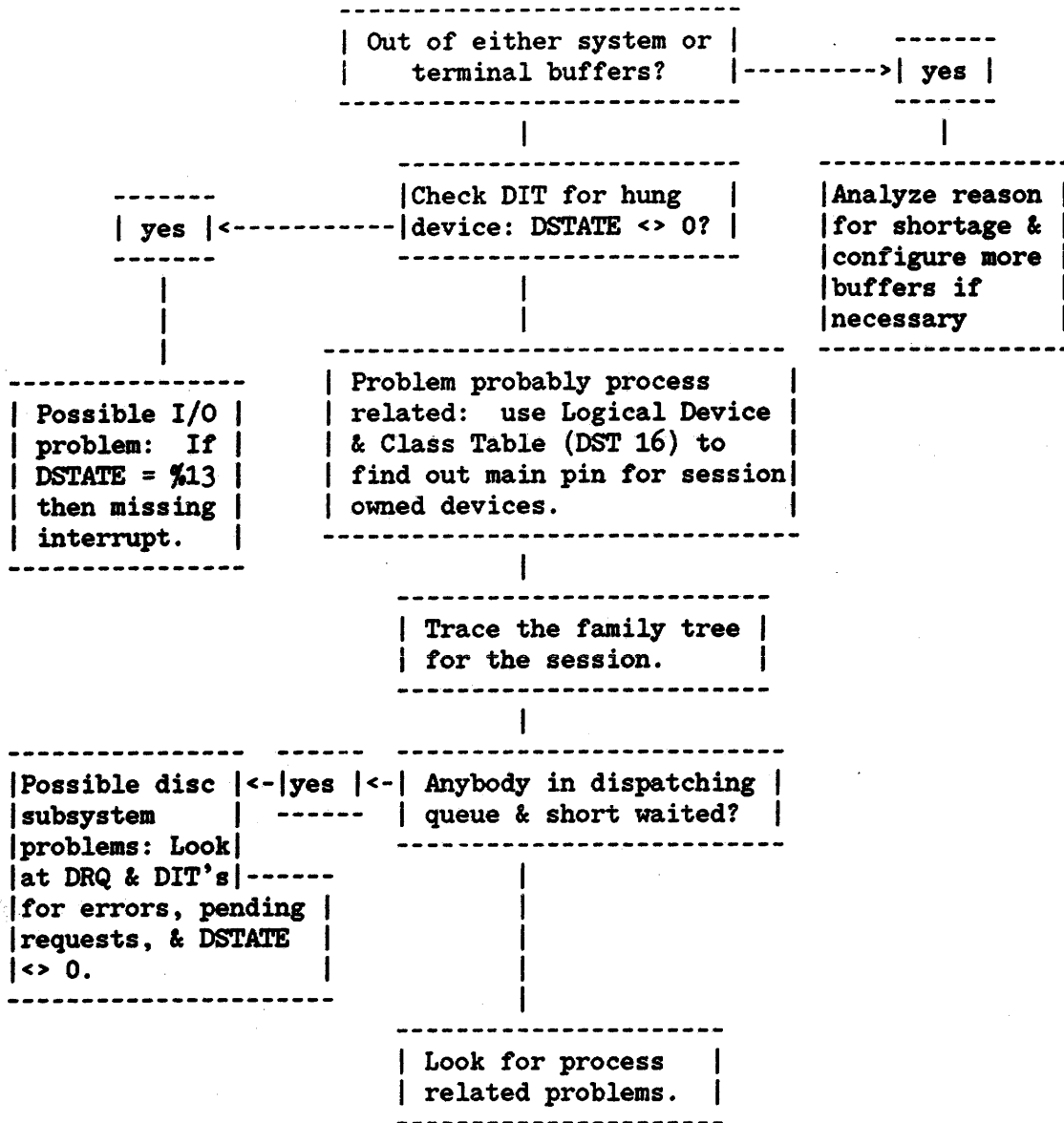
```
-----  
| Deadlock involving |  
| Rin's, father/son |----->| yes |  
| waits, impedes? |  
-----
```

```
-----  
| Possible MPE |<--|yes|<--| Deadlock involving | | Possible user |  
| problem | ----- | SIR's or file system | | misunderstanding|  
-----  
| control blocks? |  
-----
```

```
-----  
| Find out why this | ----- | Many processes waited | | |
| process is waited |<|yes|<| on a process which is |  
| and the blocking | ----- | itself waited? |  
| PIN (Do code |  
| correlation). |  
-----
```

```
-----  
| Can'd find answer?|->|yes|->|Maybe system |  
-----  
| not hung, go |  
| back to system|  
| interruption |  
| flowchart & |  
| analyze like |  
| halt or |  
| failure. |  
-----
```

ANALYZING A DEVICE LOCKOUT



***** ANALYZING A SYSTEM HANG *****

A system hang may result from several types of situations:

- 1) Resource deadlock.
- 2) Out of system buffers, terminal buffers, IOQ's or DRQ's.
- 3) Timer request list contains abnormally long time-out intervals.
- 4) Disc I/O subsystem is malfunctioning.
- 5) System code is looping.

System hang may be caused by some kind of resource deadlock in the system. There are several possibilities for a resource deadlock:

- 1) Deadlock caused by SIR's.
- 2) Deadlock caused by file control blocks.
- 3) Deadlock caused by RIN's.
- 4) Deadlock caused by process handling.
- 5) Combination of the above.
- 6) Out of system or terminal buffers.

If there were processes on the system and the CIR contains the pause instruction, then all processes were waited or impeded for some reason. Look in the wakemask of each PCB to see why the process was waited or impeded. Investigate the following:

Draw the family tree and annotate the various reasons why processes are waiting according to the information in the WAKEMASK. Try to indicate a relationship where processes are waiting for a resource held by another process. (These relationships are often key to identifying a system hang.)

If processes were all impeded or waited for similar reasons this may indicate a problem in that area. For example, a number of processes waiting for I/O to complete from the same terminal may indicate a problem with that terminal.

Investigate the SIR table and see if there is a SIR deadlock.

Decode the RIN Table to find out what processes are using local, global, and file rins (file rins are allocated by use of the FLOCK & FUNLOCK intrinsics). The RIN Table (DST 26) consists of 2-word entries. Bits 0 & 1 of the 1st word indicate the type of rin and the 2nd word contains the holder of the rin (right byte) and the head of the list of processes waiting for the rin (left byte).

If any processes are impeded, annotate the markers for that process with the segment names in the loadmap. If the process was executing in the file system prior to waiting in KERNELC, check to see if the process impeded on a file system control block. If so, investigate for a deadlock between FCB's or between SIR's and FCB's. The easiest way to determine why a process is impeded is to trace through the stack markers and correlate with code. If the stack

markers indicate that the process was in the file system just before it got impeded, consider the possibility that the bank and address of the control block that the process was trying to lock is on the top of the stack. If the address on the top of the stack does not make any sense, it is necessary to go thru the PACBV's & LACBV's in the AFT of the PCBX to check out the file control blocks. Remember that a file control block which does not reside in a user stack has 5 words of overhead information followed by 4-word vector entries followed by control blocks.

If any processes are waiting on related processes (father or son) investigate the family tree to see if processes are deadlocked waiting for each other.

Look at the dispatcher queue. If no process is ready to run, try to validate the reason why each process is impeded or waited. Processes which are ready to run (are in the dispatching queue) are flagged with a "D" in the DISPQ field in the 2nd half of the formatted PCB.

Check to see if there are any free system buffers. A system hang may result if there are no free system buffers. The availability of system buffers may be checked by looking at the formatted system buffer analysis area of the dump. If the number of elements in the primary area equals the number of elements in use, then there are no free system buffers.

Note: The number of buffers in the primary area is always 2 less than the number of buffers configured because the system reserves 2 buffers for itself.

Check to see if there were any free terminal buffers. A system hang may result if there are no free terminal buffers. The availability of terminal buffers may be checked by looking at the formatted analysis of terminal buffers and making sure that the number of elements in the primary area is greater than the number of elements in use.

Check the timer request list to see if there are abnormally long waits (except for the normally long wait for MEMLOG).

Are there any pending pseudointerrupts? If there are, try to determine why these have not been serviced. It may be because a user is critical (has a SIR or FCB locked) and is trying to obtain another system resource that someone else has locked.

Check the IOQ and DRQ for I/O requests that were awaiting completion. If there were any I/O requests awaiting completion, then go through the LPDT and check the status in the associated DIT's. For SIODM devices (lineprinters, tape drives, disc drives), a code of %13 in the DSTATE field of the DIT indicates a

wait for the interrupt that occurs at the end of a physical I/O transfer. If the status in the DIT is %13 then look into the ILT to find out what the SIO or channel program is doing. It is possible that we are waiting for an interrupt that will never occur.

Check the monitor table to what kind of events occurred prior to the system hang (in MPE IV, the most recent event appears in the upper left-hand corner of the dump).

If the CIR does not contain the pause instruction, then suspect that the system is looping. Find the stack of the current process and correlate with code to find the cause of the loop.

***** ANALYZING A USER OR DEVICE LOCKOUT *****

A user or device lockout occurs when only a subset of users or devices on a system fails to respond or function.

For a device lockout, use the following steps:

- 1) Find the DIT for the hung device. This may be done by scanning through the formatted DIT's or through the LPDT. Scan the DIT for unusual conditions.
- 2) If the answer is not found in the DIT, go to the Logical Device Table (LDT is DST %16) and determine the main PIN for the device. Trace the family tree for that PIN and look for resource or process handling deadlocks. If the process is impeded, correlate the stack with system code to find out why the process is impeded.

***** ANALYZING A SYSTEM HALT *****

A system halt occurs when the micro-code discovers a serious problem in the functioning of the hardware. A system halt is signified by the halt light on the front panel display.

Decode the instruction in the CIR (Micro-code may have found a problem while executing this instruction. If the system is a Series II/III and CPX2.(14:1) = 1 then decode the micro-code status. In Series II/III systems this information is found in the SP1 and SP2 registers (the SP1 and SP2 registers are only valid before a memory dump is taken and hence must be interrogated using the externally attached maintenance panel). In HP-IB systems (30/33/44) this information is found in the NIR in the formatted register dump. Decoding a system micro-code halt is covered in Appendix A.

***** SOLVING PROBLEMS INVOLVING FLYING BYTES *****

Problems involving flying bytes are difficult to solve and usually involve correlating between several memory dumps. When correlating between memory dumps some basic questions can be asked:

- 1) Does the problem appear to involve the same absolute location every time?
- 2) If words have been overwritten, have they been overwritten with the same thing every time?
- 3) Is there any correlation between the things which were being run on the system.
- 4) Is there any correlation between the events which were logged in the monitor table?
- 5) Was any user running in privileged mode?

***** IF ALL ELSE FAILS *****

If none of the above supplies enough information to determine what caused the failure, then investigate the following.

Scan through the monitor table (this is in the formatted portion of the dump). The monitor provides a trace of all recent events on the system.

Check all of the DIT's for I/O errors.

Check the IOQ free list for recent I/O errors.

If we were running on the ICS look at the process that was interrupted on the chance that they are related to the failure.

Scan through the terminal buffers to get a feel for what kind of activity was occurring on the system. In particular, look for a privileged mode debug welcome message or debug "?" prompts. Look for user programs running in privileged mode (if you find any suspects make sure that they are not MPE utilities, datacomm monitors, or system processes).

In all cases, the only MPE procedure that should execute the HALT instruction is SUDDENDEATH (HALT 17). If a HALT was executed and it was not a HALT 17 executed by SUDDENDEATH, you will have to find the process that executed the HALT instruction and correlate the stack with the code to determine why the HALT instruction was executed. Consider the possibility that system code was unintentionally overlaid or altered (Verification of this problem requires the dump tape and a compilation listing of the suspect code.

APPENDIX A DECODING A SYSTEM HALT (MICROCODE HALT)

FOR SERIES II/III

SP1	SP2	CIR	SYSTEM HALT NUMBER
0	%120001		6
<>0	%120001		1
0	%117401		7
<>0	%117401		3
	1		2
	0	%020360	4
	3	%030063	5
	5	%020361	8
	6	%020361	9

Key to System Halts

- 1 - Absence or trace bit = 1 for segment #1.
- 2 - CST length = 0 entries.
- 3 - Absence bit = 1 in referenced CST while running on ICS.
- 4 - Unable to reset interrupt line of interrupting device during IXIT from internal interrupt routine.
- 5 - QI-18 = 0 when executing PSEB instruction.
- 6 - STT violation.
- 7 - Stack overflow while on the ICS.
- 8&9 - External interrupts enabled while executing lock.

FOR SERIES 30/33/44

For Series 30/33 the NIR contains the halt number.
 For Series 44 the SP0 register contains the halt number (located in location %1421 in bank 0 of the dump).

- 0 - Normal halt or reset.
- 1 - STT violation with segment number less than 2.
- 2 - Absence trap while running on the ICS.
- 3 - Trace or absence trap with segment number less than 2.
- 4 - Stack overflow while running on the ICS.
- 5 - CST length = 0 entries
- 6 - Load/Start/Dump channel program timeout.
- 7 - Load/Start/Dump bootstrap checksum error.
- 8 - Load/Start/Dump bootstrap abort.
- 9 - QI-18 = 0 when executing PSEB instruction.

APPENDIX B **HARDWARE STATUS REGISTERS**

For the Series 30/33 systems, the interrupt status register (ISR) indicates the state of the hardware.

Bit	Meaning
0	I/O request interrupt.
1	CSRQ, channel service request.
2	Non-responding device timeout.
3	Parity error.
4	Power fail.
5	Power on.
6	SRST, system reset.
7	CPU done, IMB flipflop.
8	Halt flipflop.
9	Disable attn flag.
10	Stack overflow indicator.
11	Overflow/underflow.
12:2	Bounds violation:
	00 - no violation.
	01 - STCK stack error.
	02 - DRCK/SRCK data error.
	03 - PRCK program error.
14	Dispatcher flag.
15	ICS flag.

For Series 44 systems, the SIR indicates the state of the hardware (This register may be labeled as the ISR in the formatted register dump).

Bit	Meaning
0	System reset.
1	System clock.
2	Channel service request (CSRQ).
3	External interrupt.
4	Power on.
5	Power fail warning.
6	Integer overflow.
7	Memory parity error.
8	Non-responding device.
9	Run/halt for Control Maintenance Processor.
10	Disable attn flag.
11	Data not valid on IMB.
12	Not Dispatcher flag.
13	Not ICS flag.
14	Split stack mode (S Bank <> DB Bank).
15	Run/halt flip flop.

For series II/III, the CPX1 register indicates the state of the hardware.

Bit	Meaning
0	- Integer overflow.
1	- Bounds violation.
2	- Illegal address.
3	- CPU timer.
4	- System parity error.
5	- Address parity error.
6	- Data parity error.
7	- Module interrupt.
8	- External interrupt.
9	- Power fail interrupt.
10	- 0
11	- ICS flag.
12	- Dispatcher flag.
13	- Emulator.
14	- I/O timer.
15	- Option present.

For Series 64 systems, the CPX1 and CPX2 registers indicate the state of the hardware:

CPX1

Bit	Meaning
0	- undefined.
1	- overflow.
2	- bounds violation.
3	- WCS parity error.
4	- Run/Halt Switch.
5	- LUT parity error.
6	- System clock interrupt.
7	- CPU clock interrupt.
8	- DCU interrupt.
9	- MSG interrupt.
10	- CBI interrupt.
11	- Breakpoint interrupt.
12	- Power fail warning.
13	- not used.
14	- not used.
15	- not used.

CPX2

Bit	Meaning
0	- Power on.
1	- not used.
2	- Pause.
3	- ICS.
4	- Diagnostic micro-instruction.
5	- not used.
6	- Run mode interrupts enabled.
7	- Dispatcher.
8	- Virtual page fault flag.
9	- Cache error.
10	- Run mode interrupts disabled.
11	- Flush cache back to memory.
12	- Used in cache diagnostics.
13	- not used.
14	- Power fail disable.
15	- Deferred interrupt.

APPENDIX C COMPILING MPE MODULES

Analyzing MPE memory dumps often requires correlating a stack with code. To determine which system segment you are interested in you must know the CST of that segment and have a valid loadmap for that system. If you are interested in the currently executing segment, the CST is found in Status Register.(8:8) in the formatted register dump. If you are interested in the segment/procedure that called the currently executing segment, the CST is found in Q-1.(8:8), and so on.

How To Correlate A CST Number With A Module Number

Match the extracted CST number with the numbers to the left of the segment names in the load map. Note the name of the segment.

Restore the following files from the master maintenance tape:

```
A00A002@.HP32002.SUPPORT
A01A002@.HP32002.SUPPORT
A00A033@.HP32033.SUPPORT
A01A033@.HP32033.SUPPORT
```

These files enable you to correlate a segment name with a module number (the module number is required to identify the proper source, maintenance, and stream files). The text in these files associates every segment name with a USL file name. The module number is the 2nd and 3rd character of the USL file name.

If you are working with a dump from an HPIB-based system (Series 30/33/44), start by searching the files in group HP32033 and then search the files in HP32002 if you do not find the segment you are looking for. If you are looking at a dump from a Series II/III system, you need only scan the files in group HP32002. (Modules common to all MPE-based systems and specific to Series II/III's are found in group HP32002. Modules specific to HPIB-based systems are found in group HP32033.)

How To Compile MPE Modules

Compiling a module of MPE requires at least 3 files:

- 1) source file (from source tape).
- 2) maintenance file (from master maintenance tape).
- 3) compilation job (from master maintenance tape).

In addition, for MPE IV compiles, INCLUDE files may also be needed. To get all include files, do a restore with the generic file names PA@.HP32002.SUPPORT and PB@.HP32002.SUPPORT.

If you want to compile a module of MPE, perform the following actions:

- 1) Get the module by following the procedure outlined above.
- 2) Restore the following files from the source tape:
`SnnS@.HP320@.SUPPORT`
where nn is the number of the module
- 3) Restore the following files from the master maintenance tape:
`JnnJ@.HP320@.SUPPORT` (compilation stream)
`MnnM@.HP320@.SUPPORT` (maintenance file)
where nn is the number of the module.
- 4) Stream the "J" file to produce the listing. (The "J" file references `CROSSREF.PUB.SYS` or `CROSSREF.PUB.SUPPORT` to produce the cross reference listing; the job aborts if `CROSSREF` is not on your system).

APPENDIX D How To Correlate Stack Markers With MPE Code

- 1) Trace through the stack markers in the stack and extract the segment number (Q-1.(8:8)) and the PB relative displacement (Q-2).
- 2) Correlate the segment number with the absolute segment number in the load map at the front of the formatted dump. The absolute segment number is the number to the left of the module name.
- 3) Go to the PMAP for that module and, using the value of P, find the name of the procedure that made the PCAL. Subtract the start of code for that procedure from the value of P and then find the procedure in the listing. Using the procedure relative value of P gotten by subtracting the start of code from the PB relative P, find the point where the procedure made the PCAL. Look at the code and try to determine what it was trying to do.

Note: If the code you are dealing with is in CST #1 (always ININ, the internal interrupt handler), add %111 to the P-PB value in the stack marker before going to the PMAP.

- 4) Repeat the procedure outlined in step 3 for every procedure in the stack (start from the top of the stack) until you have found the immediate cause of the problem.

LAB #1

Hardware Environment: Series II

Software Environment: C Mit

External Symptoms: Ldev 35 hung.

This dump case includes the following components:

- 1) Selected excerpts from a formatted Series II memory dump.
- 2) PMAP for segment HARDRES.

FILE UNNUMBERED

1			
2			
3			
4			
5	MPE IV C.00.00		
6	1 ININ	62 UDC (62)	144 MRJEMISC2 (162)
7	2 FILESYS1 (0)	63 USER (63)	145 MRJESLCP (163)
8	3 FILESYS4 (1)	64 HELPUER (64)	146 BSCSLCP1 (164)
9	4 FILESYS5 (2)	65 OPLW (65)	147 MPMONCMD (165)
10	5 FILESYS6 (3)	66 OPHED (66)	150 IMAGE01 (214)
11	6 FILESYS6A (4)	67 OPHI (67)	151 IMAGE02 (215)
12	7 FILESYS7 (5)	70 LABSEG (70)	152 IOMONITOR3270 (231)
13	10 CIALTORG (8)	71 SDISC (71)	153 TRACE0' (232)
14	11 CICOMSYS (7)	72 LOGSEG0 (73)	154 TRACE1' (233)
15	12 CIERR (10)	73 LOGSEG1 (74)	155 IOMDISC1
16	13 CIFILEB (11)	74 KERNELC (75)	156 IOTAPE0
17	14 CIFILEM (12)	75 KERNELD (76)	157 IOTERMO
18	15 CIINIT (13)	76 MISCSEGC (77)	160 IOLPRTO
19	16 CILISTF (14)	77 FILESYS1A (101)	
20	17 CIMISC (15)	100 FILESYS2 (102)	
21	20 CIORGMAN (16)	101 FILESYS3 (103)	
22	21 CIPREPRUN (17)	102 DEBUGUTL (104)	
23	22 CISUBS (20)	103 SEGUTIL (105)	
24	23 CISYSMGR (21)	104 KSAM01 (106)	
25	24 CIUSERUTIL (22)	105 KSAM02 (107)	
26	25 CXSTOREST (23)	106 KSAM03 (110)	
27	26 RESTORE (24)	107 KSAM04 (111)	
28	27 STORE (25)	110 KSAM05 (112)	
29	30 DIRC (26)	111 FIRMWARESIM1 (52)	
30	31 ALLOCATE (27)	112 FIRMWARESIM2 (53)	
31	32 ALLOCUTIL (30)	113 KSAM06 (113)	
32	33 HARDRES (31)	114 KSAM07 (114)	
33	34 ABORTDUMP (32)	115 COMSYS1 (116)	
34	35 MESSAGE (33)	116 COMSYS3 (120)	
35	36 PROCSEG (34)	117 COMSYS4 (121)	
36	37 NRIO (35)	120 COMSYS5 (122)	
37	40 PCREATE (36)	121 CSUTILTY (123)	
38	41 MORGUE (37)	122 COMSYS2 (117)	
39	42 BIPC (40)	123 BSCLCM (124)	
40	43 IPC (41)	124 BSCSLCP0 (125)	
41	44 CHECKER (42)	125 DVRSSLC (126)	
42	45 UTILITY1 (43)	126 DVRHSI (127)	
43	46 UTILITY2 (44)	127 DSSEG1 (151)	
44	47 LOADER1 (45)	130 DSSEG2 (152)	
45	50 RINS (46)	131 DSSEG4 (154)	
46	51 JOBTABLE (47)	132 DSMISC (156)	
47	52 DEBUG (50)	133 DSIOM (157)	
48	53 NURSERY (51)	134 DSSEG3 (153)	
49	54 SPOOLING (54)	135 DSSEG5 (155)	
50	55 SPOOLCOMS1 (55)	136 CLIB'01 (204)	
51	56 SPOOLCOMS2 (56)	137 CLIB'03 (206)	
52	57 PVCOMSEG (57)	140 CLIB'04 (207)	
53	60 PVSYS0 (60)	141 CLIB'05 (210)	
54	61 PVSYSM (61)	142 DSRTECALLS (160)	
		143 MRJEMISC1 (161)	

***** REGISTERS *****

DATA SEGMENT	CODE SEGMENT	MISCELLANEOUS	STATUS = 100033	CPX2 = 040001	MICRO REGS
DB BANK = 0	PB = 032444	X = 000001	MODE = PRIV	RUN/HALT = RUN	EXEC SW = OFF
DB = 001000	P = 036366	CIR = 057408	INTERRUPTS = OFF	SYS DUMP = ON	INC ADDR = OFF
S BANK = 1	PL = 055703	CPX1 = 000001	TRAPS = OFF	COLD LOAD = ON	DEC ADDR = OFF
DL = 131087	PBBANK = 0	MSIZE = 2	STACK OP = LEFT	LOAD REG = OFF	INHIBIT AUTO RES = OFF
Q = 143664	(P-PB) = 003722		OVERFLOW = OFF	LOAD ADDR = OFF	
S = 143674			CARRY = OFF	LOAD MEM = OFF	
Z = 151131			COND CODE = CCG	DISP MEM = OFF	
Z BANK = 1			SEGMENT # = 33	SNGL INST = OFF	

***** FIXED LOW MEMORY *****

CODE SEGMENT TABLE POINTER	006170
EXTENDED CODE SEGMENT TABLE POINTER	007734
DATA SEGMENT TABLE POINTER	004530
PROCESS CONTROL BLOCK BASE	011230
CURRENT PCB POINTER	011630
INTERRUPT STACK BASE	012730
INTERRUPT STACK LIMIT	013726
INTERRUPT MASK	000000

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK /LDEV	DISC ADDRESS	D C V	R O I	I K D	S M O	W I P	F S S	R G S S	W D	VM ALLOC
1	(CODE SEGMENT TABLE)	OFF	1400	006170	0								S	C	0
2	(DATA SEGMENT TABLE)	OFF	1440	004530	0								S	C	0
3	(PROCESS CONTROL BLOCK)	OFF	1400	011230	0								S	C	0
4	(CST EXTENSION)	OFF	1440	007570	0								S	C	0
5	(SYSTEM GLOBAL AREA)	OFF	640	001000	0								S	C	0
6	(FIXED LOW CORE)	ON	1000	000000	0								S	C	0
7	(INTERRUPT CONTROL STACK)	OFF	1100	012630	0								S	C	0
10	(SYSTEM BUFFERS)	ON	2020	021054	0								S	C	0
11	(UCOP REQUEST QUEUE)	OFF	104		1	3370	D						S	C	1
12	(PROCESS-PROCESS COMMUNICATION TABLE)	OFF	140		1	3374	D						S	C	1
13	(I/O QUEUE)	OFF	1030	013730	0								S	C	0
14	(TERMINAL BUFFERS)	OFF	1410	001640	0								S	C	0
15	(LOGICAL-PHYSICAL DEVICE TABLE)	ON	130	030120	0								S	C	0
16	(LOGICAL DEVICE AND CLASS TABLE)	ON	734	104623	1								S	C	1
17	(DRIVER LINKAGE TABLE)	OFF	40	000134	0								S	C	0
20	(I/O RESOURCE TABLES)	OFF	20	000174	0								S	C	0
21	(DISK FREE SPACE)	ON	20000	121423	0								S	C	21
22	(LOADER SEGMENT TABLE)	OFF	2644		1	5110	D						S	C	14
23	(TIMER REQUEST LIST)	OFF	204	000444	0								S	C	0
24	(DIRECTORY)	OFF	2000	111623	0								S	C	3
25	(DIRECTORY SPACE)	ON	800	153423	0								S	C	1
26	(RIN TABLE)	OFF	1304		1	3136	D						S	C	0
27	(SWAPTABLE)	OFF	2260	023074	0								S	C	0
30	(JOB PROCESS COUNT)	ON	20	000650	0								S	C	0
31	(JOB MASTER TABLE)	OFF	400		1	3414	D						S	C	14
32	(TAPE LABEL TABLE)	OFF	1750		1	4144	D						S	C	2
33	(LOG TABLE)	OFF	170		1	3146	D						S	C	0
34	(REPLY INFORMATION TABLE)	OFF	2000		1	3354	D						S	C	3
35	(VOLUME TABLE)	OFF	34	177423	1		D	R					S	C	1
36	(BREAKPOINT TABLE)	OFF	674		1	4234	D						S	C	1
37	(LOG BUFFER 1)	OFF	400		1	4240	D						S	C	1
40	(LOG BUFFER 2)	OFF	400		1	4244	D						S	C	1
41	(LOG ID TABLE)	OFF	150		1	3144	D						S	C	0
42	(ASSOCIATION TABLE)	OFF	460		1	4164	D						S	C	1
43	(CST BLOCK)	OFF	44	000214	0								S	C	0
44	(JOB CUTOFF TABLE)	OFF	74	000670	0								S	C	0
45	(SYSTEM JIT)	OFF	100		1	3404	D						S	C	1
46	(SPECIAL REQUEST TABLE)	OFF	144	025354	0								S	C	0
47	(VIRTUAL DISK SPACE TABLE)	OFF	184	025730	0								S	C	0
51	(ARSBM TABLE)	OFF	44	000400	0								S	C	0
52	(ILT)	OFF	754	020100	0								S	C	0
53	(SIR TABLE)	OFF	170	030250	0								S	C	0
54	(FILE MULTI-ACCESS VECTOR)	OFF	200		1	3674	D						S	C	2
55	(INPUT DEVICE DIRECTORY)	OFF	2000		1	3474	D						S	C	40
56	(OUTPUT DEVICE DIRECTORY)	OFF	2000		1	3714	D						S	C	40
57	(WELCOME MESSAGE 81)	OFF	1750		1	4114	D						S	C	2

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK /LDEV	DISC ADDRESS	D C V	R C O	I M T	S O K	M D	F P	W S	S S	C R E W	VM ALLOC
60	(WELCOME MESSAGE #2)															
61	(CS SYSTEM SEGMENT)	OFF	174													
62	(JOB-PROCESS CROSS REFERENCE)	OFF	1220			3704	D						S			2
63	(SYSTEM JDT)	OFF	60			3240										2
64	(COMMAND INTERPRETER LOG-ON DST)	OFF	34			3400	D									1
65	(MOUNTED VOLUME TAB.)	OFF	1000			3410	D									1
66	(PRI. VOL. USER TABLE)	OFF	520			4124	D									1
67	(AVAILABLE REGION LIST)	OFF	200			4170	D									4
70	(DISC REQUEST TABLE)	OFF	2004			4174	D									1
71	(MSG HBR TABLE)	OFF	3120	028114	0											10
72	(PRIMARY MSG TABLE)	OFF	10	014760	0											0
73	(MEASUREMENT INFO TABLE)	OFF	200	025520	0											0
75		OFF	120	025530	0											0
76		OFF	3244	000260	0											0
77		OFF	3244		1	3150	D			S						0
100		OFF	3244		1	3204	D			S						7
101		OFF	3604		1	4250	D			S						7
102		OFF	13144		1	4304	D			S						7
103		OFF	2554		1	4374	D			S						16
104		OFF	2310		1	4424	D			S						8
105		OFF	2260		1	4454	D			S						8
108		OFF	4764		1	4504	D			S						8
107		OFF	5364		1	4560	D			S						13
110		OFF	4720		1	4774	D			S						43
111		OFF	100		1	5174	D			S						17
112		OFF	204		1	5174	D			S						1
113		OFF	1470	071623	1	5204	D			S						1
114		OFF	1404	045623	1											12
115		OFF	4324		1											2
116		OFF	10174		1	5400	D			S						22
117		OFF	104		1	5510	D			S						27
120		OFF	50		1	5170	D									1
121		OFF	104		1	5644	D									5
122		OFF	6774		1	5200	D									1
123		OFF	50		1	5670	D			S						27
124		OFF	100	050023	1	5270	D									5
125		OFF	1110		1					R						1
126		OFF	4774		1	5354	D									2
127		JFF	104	172423	0	6024	D			S						27
128		ON	200	177423	0											1
130		OFF	1324		1											5
131		OFF	1110		1	6160	D									12
132		ON	21314	130023	1	5364	D									2
133		OFF	460		1					S						100
134		OFF	7640		1	5374	D									1
135		ON	4774	022223	1	6230	D									10
136		OFF	104	177623	1					S						27
138		OFF	50	177223	0		D	R								1

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LOEV	DISC ADDRESS	D C V	R O I	I K	S D	M P	W S	F I Y	C R E W	VN ALLOC
137		OFF	1324		1	6454	D								12
140		OFF	1110	123023	1										2
141		OFF	1110	171223	0										2
142		OFF	324		1	5320	D								1
143		OFF	2520		1	7144	D								3
144		OFF	4304		1	7160	D			S					10
145		OFF	310		1	7220	D								1
146		OFF	3270		1	7224	D			S					10
147		OFF	310	177023	1		D	R							1

***** PRESENT STACKS *****

***** PCBX AND STACK MARKERS FOR DST 131 (PCB 20) *****
 **** CURRENT PROCESS ****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT NO	INTERACT NO	INIT Q	JCUT INDEX
001044	003200	3	4	3	2	128	125	8J1			007034	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
143664	1	000001	000328	140032	000031	32						
143633	1	000000	002337	140032	000177	32						
143434	1	000044	004771	143005	000028	5						
143408	1	000002	008250	141008	001037	6						
142347	1	000005	001817	042338	000052	338 USER SEGMENT						
142275	1	000008	000380	040338	000008	338 USER SEGMENT						
142267	1	000000	000252	040338	000004	338 USER SEGMENT						
142263	1	000000	000000	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 131 (PCB 20) *****
**** CURRENT PROCESS ****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT NO	INTERACT NO	INIT Q	JCUT INDEX
001044	003200	3	4	3	2	126	125	#J1			007034	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
143884	1	000001	000328	140032	000031	32						
143833	1	000000	002337	140032	000177	32						
143434	1	000044	004771	143005	000028	5						
143408	1	000002	006250	141008	001037	8						
142347	1	000005	001817	042338	000052	338	USER SEGMENT					
142275	1	000008	000380	040338	000006	338	USER SEGMENT					
142287	1	000000	000252	040338	000004	338	USER SEGMENT					
142263	1	000000	000000	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 134 (PCB 21) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT NO	INTERACT NO	INIT Q	JCUT INDEX
000644	000644	4	5	5	4	136	135	#J2			000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
024563	1	177758	017571	103074	000011	74						
024552	1	010830	016401	100074	000030	74						
024522	1	000000	000088	142032	000020	32						
024502	1	000000	004084	142032	000027	32						
024453	1	000044	004035	140407	000502	7						
023751	1	000000	002404	140014	000045	14						
023704	1	000000	003038	142415	000107	15						
023575	1	000000	000000	140041	000004	41						

***** SIR TABLE *****

SIR # 12 LOCKED BY PIN # 20
 NO IMPEDED PROCESSES

LDT

SIR # 14 LOCKED BY PIN # 20
 IMPEDED PROCESSES
 PIN 21

DISC FREE SPACE TABLE

SIR # 20 LOCKED BY PIN # 21
 NO IMPEDED PROCESSES

FMAVT

***** MONITOR TABLE *****

LOCATION	PIN	EVENT			
32425	0	SIOOMEXIT	001000	060000	132027
32411	0	QUIESCE	022702	004000	110310
32375	20	SPECIALRQ	000021	000000	000001
32361	0	INTERRUPT	001134	000000	161754
32345	0	SEGIO	000021	015320	000001
32331	0	DEALLOC	000101	000000	135423
32315	0	ALLOCMEM	000001	000000	172423
32301	0	DEALLOC	000101	000000	121423
32265	0	SWAPIN	000020	100007	000000
32251	21	SIOOMEXIT	001000	060000	001645
32235	0	INTERRUPT	001132	000000	161640
32221	0	SWAPIN	000020	100007	000000
32205	0	SIOOMEXIT	001260	060413	001621
32171	0	FETCHSEG	000025	000021	000003
32155	0	SIOOMEXIT	001000	060000	131613
32141	0	DEALLOC	000000	000000	172423
32125	0	FETCHSEG	000021	000020	000003
32111	21	SPECIALRQ	000024	000020	000001
32075	0	INTERRUPT	001132	000000	161557
32061	0	QUIESCE	022423	004000	110312
32045	0	SIOOMEXIT	001000	060000	131537
32031	0	DEALLOC	000000	000000	172223
32015	0	SPECIALRQ	000024	002240	000001
32001	0	SWAPIN	000020	100007	000000
31765	0	SIOOMEXIT	001760	060413	131505
31751	0	SIOOMEXIT	001500	060413	131455
31735	0	INTERRUPT	001132	000000	161452
31721	0	SWAPIN	000020	100007	000000
31705	0	SIOOMEXIT	001360	060413	131455
31671	0	SIOOMEXIT	001200	060413	131455
31655	0	INTERRUPT	001132	000000	161377
31641	0	SWAPIN	000020	100007	000000
31625	0	SIOOMEXIT	001400	060413	131353
31611	0	SIOOMEXIT	001020	060413	131313
31575	0	INTERRUPT	001132	000000	161311

PIN	EVENT				
0	SPECIALRQ	000021	000023	000000	
20	SIOOMEXIT	001400	060413	131762	
0	SIOOMEXIT	001000	060000	131756	
0	SWAPIN	000020	100000	177777	
0	DEALLOC	000000	000000	141623	
0	MAKEOC	040015	000000	000000	
0	DEALLOC	000101	000000	130623	
0	MAKEOC	040051	000000	000000	
0	FETCHSEG	000021	000020	000003	
0	SIOOMEXIT	001000	060000	131642	
0	DEALLOC	000000	000000	172223	
0	FETCHSEG	000021	000020	000003	
0	SEGIO	000025	015240	000001	
0	QUIESCE	022423	000001	110312	
0	SPECIALRQ	000024	000023	000000	
0	DEALLOC	000000	000000	172223	
0	QUIESCE	022423	004000	110312	
0	SIOOMEXIT	001000	060000	131560	
0	SWAPIN	000020	100007	000000	
21	SIOOMEXIT	001060	060413	001543	
0	SPECIALRQ	000024	000023	000000	
0	DEALLOC	000000	000000	172423	
0	SIOODONE	000135	014740	100000	
0	FETCHSEG	000021	000020	000003	
0	SPECIALRQ	000024	000023	000000	
0	SPECIALRQ	000024	002240	000001	
0	DEALLOC	000000	000000	172423	
0	FETCHSEG	000021	000020	000003	
0	SPECIALRQ	000024	000023	000000	
0	SPECIALRQ	000024	002240	000001	
0	DEALLOC	000000	000000	172223	
0	FETCHSEG	000021	000020	000003	
0	SPECIALRQ	000024	000023	000000	
0	SPECIALRQ	000024	002240	000001	
0	DEALLOC	000000	000000	172423	
0	QUIESCE	022423	004000	110312	
0	INTERRUPT	001132	000000	161502	
0	SIOODONE	000035	014340	100000	
0	DEALLOC	000000	000000	172223	
0	QUIESCE	022423	004000	110312	
0	INTERRUPT	001132	000000	161424	
0	SIOODONE	000147	014360	100000	
0	DEALLOC	000000	000000	172423	
0	QUIESCE	022423	004000	110312	
0	INTERRUPT	001132	000000	161350	
0	SIOODONE	000136	014320	100000	
0	DEALLOC	000000	000000	172223	

PIN	EVENT				
0	INTERRUPT	001134	000000	162025	
20	SIOOMEXIT	001400	060413	001761	
0	SIOODONE	000021	015320	000000	
0	SIOOMEXIT	001340	060413	001667	
0	ALLOCMEM	000101	000000	121423	
0	CGARBAGE	000000	130400	000001	
0	MAKEOC	040045	000000	000000	
0	FETCHSEG	000021	000020	000003	
0	QUIESCE	022423	000004	110311	
0	SIOODONE	000025	015240	000000	
0	DEALLOC	000000	000000	172423	
0	SWAPIN	000021	100000	000000	
0	ALLOCMEM	000004	000000	153423	
21	QONSEG	000025	022423	000006	
0	INTERRUPT	001132	000000	161611	
0	SWAPIN	000020	100007	000000	
21	SIOOMEXIT	001600	060413	001564	
0	SPECIALRQ	000024	000023	000000	
0	FETCHSEG	000021	000020	000003	
21	SPECIALRQ	000024	000000	000001	
0	INTERRUPT	001132	000000	161535	
0	SIOOMEXIT	001420	060413	131517	
0	INTERRUPT	001132	000000	161514	
0	QUIESCE	022423	004000	110312	
0	INTERRUPT	001132	000000	161502	
0	SIOODONE	000035	014340	100000	
0	DEALLOC	000000	000000	172223	
0	QUIESCE	022423	004000	110312	
0	INTERRUPT	001132	000000	161424	
0	SIOODONE	000147	014360	100000	
0	DEALLOC	000000	000000	172423	
0	QUIESCE	022423	004000	110312	
0	INTERRUPT	001132	000000	161350	
0	SIOODONE	000136	014320	100000	
0	DEALLOC	000000	000000	172223	

***** DEVICE INFORMATION TABLE *****

DRT NO 4 (SYSTEM DISK) CONTROLLER ERROR STATUS = 000000

UNIT 0 LOGICAL DEV 1 FLAGS = 040000 NEXT DIT = 000000 DLTP = 177134 ILTP = 017100 IOQP = 000000

2250	040000	000000	000000	000001	177134	017100	100000	000000
2260	000000	000000	000000	000038	000000	000038	121423	020000
2270	020000	000000	000000	000000	000000	000000	000000	000000
2300	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 3 LOGICAL DEV 2 FLAGS = 141415 NEXT DIT = 045003 DLTP = 055003 ILTP = 131604 IOQP = 051403

100000	141415	045003	051403	041402	055003	131604	041403	055001
100010	040004	055000	140030	001133	100000	045004	051401	041402
100020	055004	041401	000657	141507	041402	055003	131604	000600
100030	055001	140011	041605	041401	006043	041402	055001	131600

DRT NO 6 (MAGNETIC TAPE UNIT) CONTROLLER ERROR STATUS = 000000

UNIT 0 LOGICAL DEV 7 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2310	002000	000000	000000	000007	177144	017565	000000	000000
2320	000000	000000	000000	000000				

UNIT 1 LOGICAL DEV 8 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2324	002000	000000	000000	000410	177144	017565	000000	000000
2334	000000	000000	000000	000000				

UNIT 2 LOGICAL DEV 9 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2340	002000	000000	000000	001011	177144	017565	000000	000000
2350	000000	000000	000000	000000				

UNIT 3 LOGICAL DEV 10 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2354	002000	000000	000000	001412	177144	017565	000000	000000
2364	000000	000000	000000	000000				

DRT NO 7 (TERMINAL)

UNIT 0 LOGICAL DEV 20 FLAGS = 140602 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 013363

2370	140602	000000	013363	000024	177154	017657	000000	005224
2400	000400	010121	000662	000415	000000	001000	000000	000000
2410	000000	000000	177777	000000	001610	177777	000000	012000
2420	000000	000000	000000	000000	000000	000054	000000	000000

2430 000000 040000 000000 000000 000000

UNIT 1 LOGICAL DEV 21 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

2435 102400 000000 000000 000425 177154 017857 000000 001220
2445 000000 014000 001602 000000 000000 000000 000000 000000
2455 000000 000000 000000 000000 000000 000000 000000 012000
2465 000000 000000 000000 000000 000000 000000 000000 000000
2475 000000 000000 000000 000000 000000

UNIT 2 LOGICAL DEV 22 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

2502 102400 000000 000000 001028 177154 017857 000000 001220
2512 000000 014000 002602 000000 000000 000000 000000 000000
2522 000000 000000 000000 000000 000000 000000 000000 012000
2532 000000 000000 000000 000000 000000 000000 000000 000000
2542 000000 000000 000000 000000 000000

UNIT 3 LOGICAL DEV 23 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

2547 102400 000000 000000 001427 177154 017857 000000 001220
2557 000000 014000 003602 000000 000000 000000 000000 000000
2567 000000 000000 000000 000000 000000 000000 000000 012000
2577 000000 000000 000000 000000 000000 000000 000000 000000
2607 000000 000000 000000 000000 000000

UNIT 4 LOGICAL DEV 24 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

2614 102400 000000 000000 002030 177154 017857 000000 001220
2624 000000 014000 004602 000000 000000 000000 000000 000000
2634 000000 000000 000000 000000 000000 000000 000000 012000
2644 000000 000000 000000 000000 000000 000000 000000 000000
2654 000000 000000 000000 000000 000000

UNIT 5 LOGICAL DEV 25 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

2661 102400 000000 000000 002431 177154 017857 000000 001220
2671 000000 014000 005602 000000 000000 000000 000000 000000
2701 000000 000000 000000 000000 000000 000000 000000 012000
2711 000000 000000 000000 000000 000000 000000 000000 000000
2721 000000 000000 000000 000000 000000

UNIT 6 LOGICAL DEV 26 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

2726 102400 000000 000000 003032 177154 017857 000000 001220
2736 000000 014000 006602 000000 000000 000000 000000 000000
2746 000000 000000 000000 000000 000000 000000 000000 012000
2756 000000 000000 000000 000000 000000 000000 000000 000000
2766 000000 000000 000000 000000 000000

UNIT 7 LOGICAL DEV 27 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

2773 102400 000000 000000 003433 177154 017657 000000 001220
3003 000000 014000 007602 000000 000000 000000 000000 000000
3013 000000 000000 000000 000000 000000 000000 000000 012000
3023 000000 000000 000000 000000 000000 000000 000000 000000
3033 000000 000000 000000 000000 000000

UNIT 8 LOGICAL DEV 28 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3040 102400 000000 000000 004034 177154 017657 000000 001220
3050 000000 014000 010602 000000 000000 000000 000000 000000
3060 000000 000000 000000 000000 000000 000000 000000 012000
3070 000000 000000 000000 000000 000000 000000 000000 000000
3100 000000 000000 000000 000000 000000

UNIT 9 LOGICAL DEV 29 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3105 102400 000000 000000 004435 177154 017657 000000 001220
3115 000000 014000 011802 000000 000000 000000 000000 000000
3125 000000 000000 000000 000000 000000 000000 000000 012000
3135 000000 000000 000000 000000 000000 000000 000000 000000
3145 000000 000000 000000 000000 000000

UNIT 10 LOGICAL DEV 30 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3152 102400 000000 000000 005036 177154 017657 000000 001220
3162 000000 014000 012602 000000 000000 000000 000000 000000
3172 000000 000000 000000 000000 000000 000000 000000 012000
3202 000000 000000 000000 000000 000000 000000 000000 000000
3212 000000 000000 000000 000000 000000

UNIT 11 LOGICAL DEV 31 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3217 102400 000000 000000 005437 177154 017657 000000 001220
3227 000000 014000 013602 000000 000000 000000 000000 000000
3237 000000 000000 000000 000000 000000 000000 000000 012000
3247 000000 000000 000000 000000 000000 000000 000000 000000
3257 000000 000000 000000 000000 000000

UNIT 12 LOGICAL DEV 32 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3264 102400 000000 000000 006040 177154 017657 000000 001220
3274 000000 014000 014802 000000 000000 000000 000000 000000
3304 000000 000000 000000 000000 000000 000000 000000 012000
3314 000000 000000 000000 000000 000000 000000 000000 000000
3324 000000 000000 000000 000000 000000

UNIT 13 LOGICAL DEV 33 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3331	102400	000000	000000	006441	177154	017857	000000	001220
3341	000000	014000	015602	000000	000000	000000	000000	000000
3351	000000	000000	000000	000000	000000	000000	000000	000000
3361	000000	000000	000000	000000	000000	000000	000000	012000
3371	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 14. LOGICAL DEV 34 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

3376	102400	000000	000000	007042	177154	017857	000000	001220
3406	000000	014000	016602	000000	000000	000000	000000	000000
3416	000000	000000	000000	000000	000000	000000	000000	000000
3426	000000	000000	000000	000000	000000	000000	000000	012000
3438	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 15 LOGICAL DEV 35 FLAGS = 140800 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

3443	140800	000000	000000	007443	177154	017857	000000	005220
3453	000400	010121	017802	000000	000000	001000	000000	000000
3463	000003	000000	177777	000000	000850	000001	000000	012000
3473	000000	000000	000000	000000	000000	000014	000000	000000
3503	000000	040000	000000	000000	000000	000000	000000	000000

DRT NO 14 (LINE PRINTER)

UNIT 0 LOGICAL DEV 6 FLAGS = 000000 NEXT DIT = 000000 DLTP = 177164 ILTP = 017725 IOQP = 000000

3510	000000	000000	000000	000006	177164	017725	000000	000000
3520	000000	000000	000000	020000	000102	000000	000000	000000

(1)

HP3000 III MEMORY DUMPC.00.00 OF SYS VER 0 UPDATE 00 FIX 01 DUMP TIME 11/01/72. 12:00AM
(C) HEWLETT-PACKARD CO. 1980

***** SYSTEM BUFFER ANALYSIS *****

ELEMENTS IN TABLE	8	MAXIMUM NUMBER OF ELEMENTS IN USE	1
ELEMENTS IN PRIMARY AREA	0	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	120	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	1015	TOTAL REQUEST	14
INDEX TO LAST FREE ELEMENT	814		

***** TERMINAL BUFFERS *****

ELEMENTS IN TABLE	48	MAXIMUM NUMBER OF ELEMENTS IN USE	5
ELEMENTS IN PRIMARY AREA	42	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	16	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	30	TOTAL REQUEST	01
INDEX TO LAST FREE ELEMENT	10		

FREE LIST

TABLE INDEX	LINK	TERMINAL BUFFER
10	0	..ATE (M/D/Y)?.....
1370	10	#10.....
1350	1370	,FIELD.SUPPORT,HP32002 ON LDEV
1330	1350	0:00/#J2/17/LOGON FOR: LOADER1
1310	1330	run fatherp2.....
1270	1310	:
1250	1270	.....
1230	1250	#J2
1210	1230	#10.....
1170	1210	FIELD.SUPPORT,HP32002 ON LDEV
1150	1170	0:00/#J1/15/LOGON FOR: FILEIO,
1130	1150	stream jon72.pub.support.....
1110	1130	:
1070	1110	.....
1050	1070	#J1
1030	1050	stream jon97.pub.support.....
1010	1030	:
770	1010	streams105.....
750	770	M LDEV 20 TO LDEV 35
730	750	CONSOLE HAS BEEN S.WITCHED FRO
710	730	:

073363(001540): 020340 051402 041401 021405 047604 071402 161606 031401 050062
073374(001551): 031120 000007 100000 000007

073363: S.C.O.s...3.P2
073374:2P.....

073400: 100000 000026 000000 110001 014020 100000 010020 000000 073410: 000000 000026 100000 000000 040036 000000 000000 000400
073420: 017534 000000 000000

\$\$\$\$\$\$\$\$ CST 39 \$\$\$\$\$\$\$\$
**** (73423 TO 100773 NOT PRINTED) ****
100774: 031401 000026 100000 000026

101000: 020000 000017 000600 000000 000000 000000 000000 000000 101010: 152604 000002 000000 000600 000000 177604 171402 031010
101020: 004000 141525 000600

\$\$\$\$\$\$\$\$ AVAILABLE AREA \$\$\$\$\$\$\$\$
**** (101023 TO 104573 NOT PRINTED) ****
104574: 000000 000004 020000 000017

104600: 100000 000004 000000 000000 000000 000000 000001 176423 104610: 000000 000004 000000 000000 000016 000000 000000 000400
104620: 004154 000000 000000

\$\$\$\$\$\$\$\$ DST	16 (LOGICAL DEVICE AND CLASS TABLE)	\$\$\$\$\$\$\$\$																		
104623(000000):	025C05	000327	000006	000055	000012	000032	009400	100000	020000	000000	000003	007400	104623:	.	.	.	.	.	.	.
104637(000014):	041040	120000	000002	000002	007400	100030	060404	000006	000001	010400	041040	120000	104637:	B	.	.	.	.	.	B
104653(000030):	000002	000001	010400	100030	060404	000006	000001	006000	041040	120000	000427	000000	104653:	.	.	.	.	.	.	B
104667(000044):	000000	100030	020000	000003	000000	000000	100030	020000	000004	000000	000000	100030	104667:	.	.	.	.	.	.	B
104703(000060):	020000	000005	000000	000000	100030	020404	000006	000000	000000	000000	000000	000000	104703:	.	.	.	.	.	.	B
104717(000074):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	104717:	.	.	.	.	.	.	B
LINES 104733 -	104762 SAME AS ABOVE																			
104763(000140):	000000	000000	000000	000000	000002	006400	024020	020024	012007	000000	000000	024020	104763:	.	.	.	.	.	.	(
104777(000154):	020025	012010	000000	000000	024020	020026	012011	000000	000000	024020	020027	012012	104777:	.	.	.	.	.	.	(
105013(000170):	000000	000000	024020	020030	012013	000000	000000	024020	020031	012014	000000	000000	105013:	.	.	.	.	.	.	(
105027(000204):	024020	020032	012015	000000	000000	024020	020033	012016	000000	000000	024020	020034	105027:	.	.	.	.	.	.	(
105043(000220):	012017	000000	000000	024020	020035	012020	000000	000000	024020	020036	012021	000000	105043:	.	.	.	.	.	.	(
105057(000234):	000000	024020	020037	012022	000000	000000	024020	020040	012023	000000	000000	024020	105057:	.	.	.	.	.	.	(
105073(000250):	020041	012024	000000	000000	024020	020042	012025	000006	007000	024020	020043	012026	105073:	.	.	.	.	.	.	(
105107(000264):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	105107:	.	.	.	.	.	.	(
LINES 105123 -	105136 SAME AS ABOVE																			
105137(000314):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	052101	105137:	.	.	.	.	.	.	TA
105153(000330):	050105	020040	020040	000430	001407	004011	045117	041124	040520	042440	000430	000412	105153:	PE	.	.	.	.	.	JOBTAPE
105167(000344):	052105	051115	020040	020040	000520	010024	012426	013430	014432	015434	016436	017440	105167:	TERM	.	.	.	.	.	P
105203(000360):	020442	021400	046120	020040	020040	020040	000440	000406	042111	051503	020040	020040	105203:	LP	.	.	.	.	.	DISC
105217(000374):	000400	000401	051520	047517	046040	020040	000400	000401	025005	000000	000000	000000	105217:	SPOOL	.	.	.	.	.	"
105233(000410):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	105233:	.	.	.	.	.	.	"
LINES 105247 -	105502 SAME AS ABOVE																			
105503(000660):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000416	015710	000001	105503:	.	.	.	.	.	.	h
105517(000674):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	046510	105517:	.	.	.	.	.	.	MW78
105533(000710):	031085	052460	000000	000000	000000	000000	000000	000000	003150	000000	012000	000410	105533:	25UO	.	.	.	.	.	h
105547(000724):	030370	030370	030370	030370	030370	030370	030370	030370	030370	030370	030370	030370	105547:	0.0.0.0.0.0.0.0.2	.	.	.	.	.	@.e
105563(000740):	053605	035001	000600	041401	021013	031035	140012	001212	040011				105563:	W	.	.	.	.	.	@.e
105574(000751):	004500	000004	100000	000004									105574:	@	.	.	.	.	.	@.e



***** DUMP INDEX *****

NAME	PAGE # FORMATTED	PAGE # OCTAL DUMP
CODE SEGMENT TABLE	2	57
DATA SEGMENT TABLE	8	55
PROCESS CONTROL BLOCK	11	59
CST EXTENSION	5	58
SYSTEM GLOBAL AREA		52
FIXED LOW CORE		51
INTERRUPT CONTROL STACK		60
SYSTEM BUFFERS	44	64
UCOP REQUEST QUEUE		
PROCESS-PROCESS COMMUNICATION TABLE		
I/O QUEUE	42	60
TERMINAL BUFFERS	45	53
DEVICE INFORMATION TABLE (DIT)	34	54
LOGICAL-PHYSICAL DEVICE TABLE	33	67
LOGICAL DEVICE AND CLASS TABLE		60
DRIVER LINKAGE TABLE		51
I/O RESOURCE TABLES		51
DISK FREE SPACE		71
LOADER SEGMENT TABLE		
TIMER REQUEST LIST	48	52
DIRECTORY		70
DIRECTORY SPACE		77
RIN TABLE		
SWAP TABLE		65
JOB PROCESS COUNT		52
JOB MASTER TABLE		
TAPE LABEL TABLE		
LOG TABLE		
REPLY INFORMATION TABLE		100
VOLUME TABLE		
BREAKPOINT TABLE		
LOG BUFFER 1		
LOG BUFFER 2		
LOG ID TABLE		
CST BLOCK		51
JOB CUTOFF TABLE		52
SYSTEM JIT		
SPECIAL REQUEST TABLE		66
VIRTUAL DISK SPACE TABLE	26	67
ARSBM TABLE		51
ILT	28	63
SIR TABLE	15	68
FILE MULTI-ACCESS VECTOR		
INPUT DEVICE DIRECTORY		
OUTPUT DEVICE DIRECTORY		
WELCOME MESSAGE #1		
WELCOME MESSAGE #2		
CS SYSTEM SEGMENT		
JOB-PROCESS CROSS REFERENCE		
SYSTEM JDT		
COMMAND INTERPRETER LOG-ON DST		
MOUNTED VOLUME TABLE		

①

PRI. VOL. USER TABLE		
AVAILABLE REGION LIST	17	67
DISC REQUEST TABLE	38	61
MSG HBR TABLE		68
PRIMARY MSG TABLE		67
MEASUREMENT INFO TABLE		51
SECONDARY MSG TABLE		
CURRENT PROCESS STACK	13	92

PROGRAM FILE PSSP002C.WP32002.SUPPORT

NAME	STT	CODE	ENTRY	SEG
HARDRES	1	0	0	
TERMINATE	2			?
SEGMENT LENGTH		4		
HARDRES	1			
NAME	STT	CODE	ENTRY	SEG
SIODM	1	0	113	
MPSTAT	115			?
IOUNFREEZE	116			?
IDFREEZE	117			?
FLAGPROCABSENT	120			?
FETCHIOSEG	121			?
SEGWRITE COMPLETE	122			?
SEGREADCOMPLETE	123			?
ADJUSTLOCALITY	124			?
WRITE	125			?
WAITFORIO	2	2730	2740	
QUEUEONSEGMENT	126			?
ADDTLOCALITY	127			?
WAIT	130			?
WAITFORIOX	3	2730	2746	
IOSTATUS	4	3244	3244	
IOSTATUSX	5	3244	3246	
ATTACHIO	6	3323	3323	
SETSYSDB	131			?
SDISCIO	132			?
SETCRITICAL	133			?
CLEARJMS	134			?
RESETCRITICAL	135			?
RESETDB	136			?
CLEARWAKE	7	4340	4340	
SETWAKE	10	4340	4342	
RETURNBUF	11	4404	4404	
RETURNDISCREQ	12	4404	4514	
RETURNIOQ	13	4404	4460	
RETURNSBUF	14	4404	4455	
GETBUF	15	4572	4572	
GETDISCREQ	16	4572	4602	
GETIOQ	17	4572	4600	
GETSBUF	20	4572	4575	
DISCOMANAGER	21	4702	4702	
QUEUEDISCREQ	22	5030	5076	
STORE IOQ	23	5232	5232	
DEQUEUEDISCREQ	24	5333	5333	
HELP	25	5425	7314	
TICK	26	10000	10000	
OLDTICK	27	10356	10370	
UNIMPEDE	137			?
SYSPROC	140			?
STARTCLOCK	30	10656	10656	
CHEKTRFREE	31	10732	10732	
TIMREQ	32	10743	10743	
ABORTTIMREQ	33	11142	11142	
TIMER	34	11260	11260	
TIPX	35	11355	11732	
TIP	36	11355	11742	

SENDSYNC	37	15711	15711	
DSET2	40	15736	15736	
DSET1	41	16071	16071	
BREAKSERVICE	42	16265	16265	
BREAKOK	43	16311	16311	
SSBREAKOK	44	16311	16313	
SETREADERROR	45	16362	16362	
CHECKTQUEUE	46	16375	16375	
STARTTIMEOUT	47	16506	16517	
STOPTIMEOUT	50	16617	16630	
DSETCONTROL	51	16664	16676	
MPXCONTROL	52	16776	17006	
MPXWRITE	53	17065	17065	
RETURNBUFS	54	17147	17163	
PTrip	55	17342	17342	
LDEVNOTRDY	56	17710	17747	
IOMESSAGE	57	20044	20044	
LOGERPOP	60	20125	20125	
RETURNSYSBUF	61	20171	20171	
IOUNIMPEDE	62	20260	20260	
IOIMPEDE	63	20315	20315	
IMPEDE	141			?
GIP	64	20364	20364	
CHKCHANNELQUE	65	20522	20522	
EOPCHECK	66	20627	20627	
STARTIO	67	21225	21225	
SYSIOPROC	70	21322	21322	
REQSTATUS	71	21347	21347	
DMONITOR	72	21443	21443	
CHECKINDEX	73	21660	21660	
ALWAYSTERMINAL	74	21743	21743	
ALWAYEIO	75	21771	21771	
SUDDENDERTH	76	22060	22107	
MASTERCLEAR	77	22157	22157	
DOCIO	100	22243	22243	
IOFAILURE	101	22270	22312	
DONVERT	102	22362	22362	
BONVERT	103	22425	22425	
WRITE2	104	22442	22442	
WRITECHAP	105	22456	22456	
LDEVTDFT	106	22556	22556	
LDEVTDSTYPE	107	22624	22624	
LDEVTDTYPE	110	22633	22633	
EXCHANGEDB	142			?
CHECKLDEV	111	22700	22700	
REQUEUE	112	22732	22732	
ADDDHEAD	113	22750	22750	
ADDTAIL	114	22767	22767	
SEGMENT LENGTH		23160		

*** WARNING ***
 ERROR 648 CODE SEGMENT MAY BE TOO LARGE

PRIMARY DB	0	INITIAL STACK	2260	CAPABILITY	700
SECONDARY DB	0	INITIAL DL	0	TOTAL CODE	23164
TOTAL DE	0	MAXIMUM DATA	7	TOTAL RECORDS	122
ELAPSED TIME	00:00:34.247			PROCESSOR TIME	00:03:097

LAB #2

Hardware Environment: Series II

External Symptoms: No response from any terminal.

This dump case contains the following components:

- 1) Excerpted pages from a formatted Series II memory dump.
- 2) Excerpted pages from a Series II CE Handbook.

Rev date: 2/20/79

5955-1727

2

FILE UNNUMBERED

1
2
3
4
5 MPE IV C.00.00
6 1 ININ
7 2 FILESYS1 (0)
8 3 FILESYS4 (1)
9 4 FILESYS5 (2)
10 5 FILESYS8 (3)
11 6 FILESYS6A (4)
12 7 FILESYS7 (5)
13 10 CIALTORG (6)
14 11 CIGOMSYS (7)
15 12 CIERR (10)
16 13 CIFILEB (11)
17 14 CIFILEM (12)
18 15 CIINIT (13)
19 16 CILISTF (14)
20 17 CIMISC (15)
21 20 CIORGMAN (16)
22 21 CIPREPRUN (17)
23 22 CISUBS (20)
24 23 CISYSMGR (21)
25 24 CIUSERUTIL (22)
26 25 CXSTOREST (23)
27 26 RESTORE (24)
28 27 STORE (25)
29 30 DIRC (28)
30 31 ALLOCATE (27)
31 32 ALLOCUTIL (30)
32 33 HARDRES (31)
33 34 ABORTDUMP (32)
34 35 MESSAGE (33)
35 36 PROCSEG (34)
36 37 NRIO (35)
37 40 PCREATE (36)
38 41 MORGUE (37)
39 42 BIPC (40)
40 43 IPC (41)
41 44 CHECKER (42)
42 45 UTILITY1 (43)
43 46 UTILITY2 (44)
44 47 LOADER1 (45)
45 50 RINS (48)
46 51 JOBTABLE (47)
47 52 DEBUG (50)
48 53 NURSERY (51)
49 54 SPOOLING (54)
50 55 SPOOLCOMS1 (55)
51 56 SPOOLCOMS2 (56)
52 57 PVCOMSEG (57)
53 60 PVSYS (60)
54 61 PVSYSM (61)

62 UDC (62)
63 USER (63)
64 HELPUER (64)
65 OPLW (65)
66 OPMED (66)
67 OPHI (67)
70 LABSEG (70)
71 SDISC (71)
72 LOGSEG0 (73)
73 LOGSEG1 (74)
74 KERNELC (75)
75 KERNELD (76)
76 MISCSEGC (77)
77 FILESYS1A (101)
100 FILESYS2 (102)
101 FILESYS3 (103)
102 DEBUGUTL (104)
103 SEGUTIL (105)
104 KSAM01 (106)
105 KSAM02 (107)
106 KSAM03 (110)
107 KSAM04 (111)
110 KSAM05 (112)
111 FIRMWARESIM1 (52)
112 FIRMWARESIM2 (53)
113 KSAM06 (113)
114 KSAM07 (114)
115 COMSYS1 (116)
116 COMSYS3 (120)
117 COMSYS4 (121)
120 COMSYS5 (122)
121 CSUTILITY (123)
122 COMSYS2 (117)
123 BSCLCM (124)
124 BSCSLCPO (125)
125 DVRSSLC (126)
126 DVRHSI (127)
127 DSSEG1 (151)
130 DSSEG2 (152)
131 DSSEG4 (154)
132 DSMISC (156)
133 DSICM (157)
134 DSSEG3 (153)
135 DSSEG5 (155)
136 CLIB'01 (204)
137 CLIB'03 (206)
140 CLIB'04 (207)
141 CLIB'05 (210)
142 DSRTECALLS (160)
143 MRJEMISC1 (161)

144 MRJEMISC2 (162)
145 MRJESLCP (163)
146 BSCSLCP1 (164)
147 MPMONCMD (165)
150 IMAGE01 (214)
151 IMAGE02 (215)
152 IOMONITOR3270 (231)
153 TRACE0 (232)
154 TRACE1 (233)
155 IOMDISC1
156 IOTAPEO
157 IOTERMO
160 IOLPRTO

***** REGISTERS *****

DATA SEGMENT	CODE SEGMENT	MISCELLANEOUS	STATUS = 141074	CPX2 = 040001	MICRO REGS
DB BANK = 0	PB = 055704	X = 177758	MODE = PRIV	RUN/HALT = RUN	EXEC SW = OFF
DB = 001000	P = 060574	CIR = 030020	INTERRUPTS = ON	SYS DUMP = ON	INC ADDR = OFF
S BANK = 0	PL = 101647	CPX1 = 000030	TRAPS = OFF	COLD LOAD = ON	DEC ADDR = OFF
DL = 177777	PBBANK = 0	MSIZE = 2	STACK OP = LEFT	LOAD REG = OFF	INHIBIT AUTO RES = OFF
Q = 012730	(P-PB) = 002670		OVERFLOW = OFF	LOAD ADDR = OFF	
S = 013012			CARRY = OFF	LOAD MEM = OFF	
Z = 013728			COND CODE = CCE	DISP MEM = OFF	
Z BANK = 0			SEGMENT # = 74	SNGL INST = OFF	
					0 = 020617
					1 = 132033
					2 = 020565
					3 = 000000
					4 = 000000
					5 = 117033
					6 = 020657
					7 = 000000

PAUSE INSTRUCTION IN CIR

***** FIXED LOW MEMORY *****

CODE SEGMENT TABLE POINTER	006170
EXTENDED CODE SEGMENT TABLE POINTER	007674
DATA SEGMENT TABLE POINTER	004530
PROCESS CONTROL BLOCK BASE	011230
CURRENT PCB POINTER	000000
INTERRUPT STACK BASE	012730
INTERRUPT STACK LIMIT	013728
INTERRUPT MASK	000000

(2)

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK /LDEV	DISC ADDRESS	D V	R C	I I	S S	M M	T T	O O	F F	W W	S S	R R	E E	S S	W W	VM ALLOC
1	(CODE SEGMENT TABLE)	OFF	1400	006170	0																0
2	(DATA SEGMENT TABLE)	OFF	1440	004530	0																0
3	(PROCESS CONTROL BLOCK)	OFF	1400	011230	0																0
4	(CST EXTENSION)	OFF	1440	007570	0																0
5	(SYSTEM GLOBAL AREA)	OFF	640	001000	0																0
6	(FIXED LOW CORE)	ON	1000	000000	0																0
7	(INTERRUPT CONTROL STACK)	OFF	1100	012630	0																0
10	(SYSTEM BUFFERS)	ON	2020	021054	0																0
11	(UCOP REQUEST QUEUE)	OFF	104		1	3370	D														1
12	(PROCESS-PROCESS COMMUNICATION TABLE)	OFF	140		1	3374	D														1
13	(I/O QUEUE)	OFF	1030	013730	0																0
14	(TERMINAL BUFFERS)	OFF	1410	001640	0																0
15	(LOGICAL-PHYSICAL DEVICE TABLE)	ON	130	030120	0																0
16	(LOGICAL DEVICE AND CLASS TABLE)	OFF	734		1	4154	D														1
17	(DRIVER LINKAGE TABLE)	OFF	40	000134	0																0
20	(I/O RESOURCE TABLES)	OFF	20	000174	0																0
21	(DISK FREE SPACE)	OFF	20000		1	3250	D														21
22	(LOADER SEGMENT TABLE)	OFF	2644		1	5110															14
23	(TIMER REQUEST LIST)	OFF	204	000444	0																0
24	(DIRECTORY)	OFF	2000		1	5070	D														3
25	(DIRECTORY SPACE)	OFF	600		1	5104	D														1
26	(RIN TABLE)	OFF	1304		1	3136	D														0
27	(SWAPTABLE)	OFF	2260	023074	0																0
30	(JOB PROCESS COUNT)	ON	20	000650	0																0
31	(JOB MASTER TABLE)	OFF	400		1	3414	D														14
32	(TAPE LABEL TABLE)	OFF	1750		1	4144	D														2
33	(LOG TABLE)	OFF	170		1	3146	D														0
34	(REPLY INFORMATION TABLE)	OFF	2000		1	3354	D														3
35	(VOLUME TABLE)	OFF	34		1	4160	D														1
36	(BREAKPOINT TABLE)	OFF	674		1	4234	D														1
37	(LOG BUFFER 1)	OFF	400		1	4240	D														1
40	(LOG BUFFER 2)	OFF	400		1	4244	D														1
41	(LOG ID TABLE)	OFF	150		1	3144	D														0
42	(ASSOCIATION TABLE)	OFF	460		1	4164	D														1
43	(CST BLOCK)	OFF	44	000214	0																0
44	(JOB CUTOFF TABLE)	OFF	74	000670	0																0
45	(SYSTEM JIT)	OFF	100		1	3404	D														1
46	(SPECIAL REQUEST TABLE)	OFF	144	025354	0																0
47	(VIRTUAL DISK SPACE TABLE)	OFF	164	025730	0																0
51	(ARSBM TABLE)	OFF	44	000400	0																0
52	(ILT)	OFF	754	020100	0																0
53	(SIR TABLE)	OFF	170	030250	0																0
54	(FILE MULTI-ACCESS VECTOR)	OFF	200	177423	1																2
55	(INPUT DEVICE DIRECTORY)	OFF	2000	011223	1																40
56	(OUTPUT DEVICE DIRECTORY)	OFF	2000		1	3714	D														40
57	(WELCOME MESSAGE #1)	OFF	1750		1	4114	D														2

2

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	D V	R C	I O	S I	M K	F D	S P	W S	C S	R S	E S	S S	D D	VM ALLOC
60	(WELCOME MESSAGE #2)	OFF	174		1	3704	D								S					2
61	(CS SYSTEM SEGMENT)	OFF	1220		1	3240	D								S					2
62	(JOB-PROCESS CROSS REFERENCE)	OFF	60		1	3400	D								S					1
63	(SYSTEM JDT)	OFF	34		1	3410	D								S					1
64	(COMMAND INTERPRETER LOG-ON DST)	OFF	1000		1	4124	D								S					4
65	(MOUNTED VOLUME TAB.)	OFF	520		1	4170	D								S					1
66	(PRI. VOL. USER TABLE)	OFF	200		1	4174	D								S					10
67	(AVAILABLE REGION LIST)	OFF	2004	026114	0										S					0
70	(DISC REQUEST TABLE)	OFF	3120	014760	0										S			C		0
71	(MSG HBR TABLE)	OFF	10	025520	0										S			C		0
72	(PRIMARY MSG TABLE)	OFF	200	025530	0										S			C		0
73	(MEASUREMENT INFO TABLE)	OFF	120	000260	0										S			C		0
75		OFF	3244	173423	0										S					7
76		OFF	3244		1	3204	D			S					S					7
77		OFF	3604		1	4250	D			S					S					7
100		OFF	13144		1	4304	D			S					S					16
101		OFF	2554		1	4374	D			S					S					6
102		OFF	2310		1	4424	D			S					S					6
103		OFF	2260		1	4454	D			S					S					6
104		OFF	4764	141423	0		D		I	S					S					13
105		OFF	6364		1	4560	D			S					S					43
106		OFF	4720		1	4774	D			S					S					17
107		OFF	100		1	5174	D													1
110		OFF	204		1	5204	D													1
111		OFF	1410		1	5210	D													12
112		OFF	1404		1	5260	D													2
113		OFF	4324		1	5400	D			S										22
114		OFF	10174		1	5510	D			S										27
115		OFF	104		1	5170	D													1
116		OFF	50		1	5644	D													5
117		OFF	104		1	5200	D													1
120		OFF	4574		1	5670	D			S										27
121		OFF	50		1	5270	D													5
122		OFF	100		1	5314	D													1
123		OFF	460		1	5320	D													1
124		OFF	7640		1	5324	D													10
125		OFF	13730		1	6024	D			S										25
126		OFF	6774		1	6150	D			S										27
127		OFF	104		1	5364	D													1
130		OFF	50		1	6304	D													5
131		OFF	100		1	5370	D													1
132		OFF	17140		1	6330	D			S										100
133		OFF	1110		1	7164	D													2
134		OFF	4774		1	6730	D			S										27
135		OFF	104		1	7064	D													1
136		OFF	200		1	7070	D													5

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	D C V	R C I	I K	S T O	M O I D	F W I P	S Y E S	C R E W S D	VH ALLOC
137		OFF	1324		1	7114	D								12
140		OFF	1110		1	7174	D								2
141		ON	55514	051023	1				S						100
142		ON	324	177023	0										1
143		OFF	2520		1	7804	D								3
144		ON	310	102423	1										1
145		OFF	310		1	7824	D								1
146		OFF	310	170823	1										1
147		OFF	2520		1	7834	D								3
150		OFF	2520		1	7850	D								3
151		OFF	10174		1	7864	D		S						27
152		OFF	104	177223	1			R							1
153		OFF	50		1	10024	D								5
154		ON	100	177823	0										1
155		ON	10070	127423	1				S						100
156		OFF	500		1	10080	D								1
157		OFF	204		1	10064	D								1

***** PROCESS CONTROL BLOCK (2ND HALF) *****

----- SCHEDULING INFORMATION -----														---RESOURCES---				LIFE/DEATH		----- MISCELLANEOUS -----				
PIN	NQPIN	POPIN	D I S P L C Q Q Q	C D E E R R	I N O R R R	H U I S P E T R D R	S L M P C P I	I H P S P S S R A O I R V	C H R S I I T R	P R E V I M P D P I N	N E X T I M P D P I N	S C	L D I E F V A A E D C	BMS	PPC	PCST	PBXPTR	SLLPTR	BPT LNK	SYSTEM PROC NAME				
1			L			81							L	SNF	NUL	CTX	10.001	10	22233	PROGEN				
2			L			62							L	SNF	NUL	CST	41		22101	SYSIO				
3			L			175		S					L	SNF	NUL				22113	IOMESS				
4			L			62							L	SNF	NUL			1	22125	LOG				
5			L			175						C	L	SNF	NUL			2	22137	MEMLOG				
6			L			175							L	SNF	NUL	CTX	3.001	3	22151					
7			L			175							L	SNF	NUL	CTX	4.001	4	22163	UCOP				
10			L			12		S					L	SNF	NUL			5	22175	PFAIL				
11	23		D			175		S					L	SNF	NUL	CTX	6.001	6	22207	DEVREC				
12			L			216							L	SNF	NUL			7	22221	LOAD				
14			L			230							L	SNF	NUL	CST	54		23015					
15					I	230		T				C	L	SNF	NUL	CST	77		23250					
16			C		I	230							L	SNF	NUL	CST	22		24152					
17			C		I	230		T				C	L	SNF	NUL	CST	77	11	22555					
20			C		I	230		T				C	L	SNF	NUL	CST	77		23325					
21			C		I	230							L	SNF	NUL	CST	77	12	23351					
22						312							L	SNF	NUL	CST	22		23010					
23	11	D		D		358		S					L	SNF	NUL			13	24210					
24			C		I	230						C	L	SNF	NUL	CST	22		23433					
25			C		I	230		T				C	L	SNF	NUL	CST	77	14	22574					

60 ENTRYS
 33 UNASSIGNED ENTRYS
 25 ASSIGNED ENTRYS

2

***** PRESENT STACKS *****

***** PCBX AND STACK MARKERS FOR DST 75 (PCB 2) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000000	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
174114	0	177756	017571	101074	000011	74						
174103	0	177777	021345	100433	000010	33						
174073	0	000000	000000	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 141 (PCB 23) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
001244	037400	4	5	3	2	136	135	#J1	NO	NO	007034	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
120347	1	177756	017571	103074	000011	74						
120336	1	177757	015141	140074	000010	74						
120326	1	012717	001246	140401	000021	1						
120305	1	000004	000167	042302	000007	302	USER SEGMENT					
120276	1	000006	000500	041336	000007	336	USER SEGMENT					
120267	1	000000	000252	040336	000004	336	USER SEGMENT					
120263	1	000000	000000	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 155 (PCB 25) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	004400	5	6	35	35	153	152	#S4	YES	YES	001005	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
135474	1	177756	017571	101074	000011	74						
135463	1	001053	004270	101033	000017	33						
135444	1	000204	005224	140077	000115	77						
135327	1	000000	002146	140477	000112	77						
135215	1	000253	003552	060717	000014	317	USER SEGMENT					
135201	1	000253	000315	060317	000015	317	USER SEGMENT					
135164	1	000000	001423	060330	000124	330	USER SEGMENT					
135040	1	000000	000361	060330	000004	330	USER SEGMENT					
135034	1	000000	000000	140041	000004	41						

***** SIR TABLE *****

NO LOCKED SIRS

***** MONITOR TABLE *****

LOCATION	PIN	EVENT			
30715	0	SWAPIN	000011	140000	000000
30701	0	ALLOCMEM	000025	000000	141423
30685	0	DEALLOC	000025	000000	114623
30651	0	ALLOCMEM	000012	000000	111623
30635	0	MAKEOC	000022	000000	000000
30621	0	MAKEOC	000054	000000	000000
30605	0	MAKEOC	000152	000000	000000
30571	0	INTERRUPT	007010	000000	123361
30555	0	SIODMEXIT	001540	060413	133304
30541	0	SEGIO	105402	016520	000001
30525	0	SIODMEXIT	001600	060413	133241
30511	0	SWAPIN	000023	100000	000000
30475	0	SEGIO	000016	014560	100001
30451	0	QUIESCE	024210	000001	110356
30445	23	SPECIALRQ	000144	000000	000001
32425	0	INTERRUPT	001132	000000	013211
32411	23	SPECIALRQ	000144	000000	000001
32375	0	INTERRUPT	001132	000000	013185
32361	23	SPECIALRQ	000144	000000	000001
32345	0	INTERRUPT	001132	000000	013137
32331	23	SPECIALRQ	000144	000000	000001
32315	0	INTERRUPT	001132	000000	013075
32301	0	INTERRUPT	001132	000000	013030
32285	0	SPECIALRQ	000142	000023	000000
32251	0	SEGIO	000144	015720	000001
32235	0	FETCHSEG	000144	000023	000003
32221	0	SIODMEXIT	001340	060413	132757
32205	0	INTERRUPT	001132	000000	012753
32171	0	SPECIALRQ	000142	002240	000001
32155	0	QUIESCE	024210	002000	110356
32141	0	SPECIALRQ	000142	000003	000000
32125	0	SIODMEXIT	001240	060413	132653
32111	0	INTERRUPT	001132	000000	012647
32075	0	SPECIALRQ	000142	002240	000001
32061	0	QUIESCE	024210	002000	110356
32045	0	SPECIALRQ	000142	000003	000000
32031	0	SIODMEXIT	001040	060413	132547
32015	0	INTERRUPT	001132	000000	012544
32001	0	SPECIALRQ	000142	002240	000001
31765	0	QUIESCE	024210	002000	110356
31751	0	SPECIALRQ	000142	000003	000000
31735	0	SIODMEXIT	001540	060413	132443
31721	0	INTERRUPT	001132	000000	012440
31705	0	SPECIALRQ	000142	002240	000001

PIN	EVENT				
0	SEGIO	000104	014400	000001	
0	DEALLOC	000025	000000	141423	
0	MAKEOC	040041	000000	000000	
0	DEALLOC	000012	000000	111623	
0	DEALLOC	000012	000001	177423	
0	DEALLOC	000012	000001	177223	
0	FETCHSEG	103001	000011	000003	
0	SIODMEXIT	001540	060010	133430	
0	INTERRUPT	001126	000000	013303	
0	SIODONE	000016	014560	100000	
0	SPECIALRQ	000144	000023	000000	
0	ALLOCMEM	000008	000001	163023	
0	MAKEOC	000016	000000	000000	
23	QONSEQ	105402	024210	000007	
0	SIODMEXIT	001000	060000	133213	
0	QUIESCE	024210	002000	110356	
0	SIODMEXIT	001000	060000	133167	
0	QUIESCE	024210	002000	110356	
0	SIODMEXIT	001000	060000	133140	
0	QUIESCE	024210	002000	110356	
0	SIODMEXIT	001000	060000	133077	
0	SIODMEXIT	001740	060413	133033	
0	SIODMEXIT	001160	060413	133005	
0	INTERRUPT	001132	000000	013002	
0	DEALLOC	000000	000001	163023	
0	QUIESCE	024210	000001	110356	
0	SPECIALRQ	000142	002240	000001	
0	QUIESCE	024210	002000	110356	
0	SPECIALRQ	000142	000003	000000	
0	SIODMEXIT	001400	060413	132702	
0	INTERRUPT	001132	000000	012676	
0	SPECIALRQ	000142	002240	000001	
0	QUIESCE	024210	002000	110356	
0	SPECIALRQ	000142	000003	000000	
0	SIODMEXIT	001440	060413	132576	
0	INTERRUPT	001132	000000	012572	
0	SPECIALRQ	000142	002240	000001	
0	QUIESCE	024210	002000	110356	
0	SPECIALRQ	000142	000003	000000	
0	SIODMEXIT	001100	060413	132472	
0	INTERRUPT	001132	000000	012467	
0	SPECIALRQ	000142	002240	000001	
0	QUIESCE	024210	002000	110356	
0	SPECIALRQ	000142	000003	000000	

PIN	EVENT				
0	DEALLOC	000000	000000	146623	
0	MAKEOC	040006	000000	000000	
0	FETCHSEG	000104	000011	000003	
0	SEGIO	000022	015020	100001	
0	SEGIO	000054	016660	100001	
0	SEGIO	000152	015000	100001	
0	SIODMEXIT	007000	022000	063362	
0	INTERRUPT	001210	000000	013304	
0	SIODMEXIT	001540	060413	133271	
0	INTERRUPT	001132	000000	013266	
0	INTERRUPT	001132	000000	013237	
0	DEALLOC	000006	000001	163423	
0	FETCHSEG	105402	000023	000003	
23	SIODMEXIT	001100	060413	003220	
0	SPECIALRQ	000144	000003	000000	
23	SIODMEXIT	001300	060413	003174	
0	SPECIALRQ	000144	000003	000000	
23	SIODMEXIT	001720	060413	003146	
0	SPECIALRQ	000144	000003	000000	
23	SIODMEXIT	001160	060413	003105	
0	SIODONE	000144	015720	000000	
0	SPECIALRQ	000142	000023	000000	
0	SPECIALRQ	000142	002240	000001	
0	SWAPIN	000023	100000	000000	
0	ALLOCMEM	000002	000001	162423	
23	QONSEQ	000144	024210	000022	
0	SPECIALRQ	000142	000003	000000	
0	SIODMEXIT	001700	060413	132730	
0	INTERRUPT	001132	000000	012725	
0	SPECIALRQ	000142	002240	000001	
0	QUIESCE	024210	002000	110356	
0	SPECIALRQ	000142	000003	000000	
0	SIODMEXIT	001300	060413	132624	
0	INTERRUPT	001132	000000	012621	
0	SPECIALRQ	000142	002240	000001	
0	QUIESCE	024210	002000	110356	
0	SPECIALRQ	000142	000003	000000	
0	SIODMEXIT	001560	060413	132520	
0	INTERRUPT	001132	000000	012515	
0	SPECIALRQ	000142	002240	000001	
0	QUIESCE	024210	002000	110356	
0	SPECIALRQ	000142	000003	000000	
0	SIODMEXIT	001260	060413	132415	
0	INTERRUPT	001132	000000	012411	

***** LOGICAL PHYSICAL - DEVICE TABLE *****

LOGICAL DEV NO	SYSDB REL DIT POINTER	DEVICE SUBTYPE	EOF CONDITION	BREAK	CNTRL Y	DUPLIC	INTERACT	ACCEPT JOBS/SESS	ACCEPT DATA	DEVICE RECOGNIT STATE	LOGOFF
1	002250	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
2	140272	2	NO EOF			NO	NO	NO	NO	OWNED	NO
3	100266	0	NO EOF	DETECTED		NO	NO	YES	YES	OWNED	NO
6	003510	2	NO EOF			NO	NO	NO	NO	OWNED	NO
7	002310	0	NO EOF			NO	NO	NO	NO	SERV REQ	NO
8	002324	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
9	002340	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
10	002354	0	NO EOF			NO	NO	YES	YES	NOT OWNED	NO
20	002370	0	NO EOF	DETECTED		YES	YES	YES	YES	OWNED	NO
21	002435	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
22	002502	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
23	002547	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
24	002614	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
25	002661	0	NO EOF	DETECTED		YES	YES	YES	YES	OWNED	NO
26	002726	0	NO EOF	DETECTED		YES	YES	YES	YES	OWNED	NO
27	002773	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
28	003040	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
29	003105	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
30	003152	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
31	003217	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
32	003264	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
33	003331	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
34	003376	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
35	003443	0	NO EOF	DETECTED		YES	YES	YES	YES	OWNED	NO

***** DEVICE INFORMATION TABLE *****

DRT NO 4 (SYSTEM DISK) CONTROLLER ERROR STATUS = 002422

UNIT 0 LOGICAL DEV 1 FLAGS = 040010 NEXT DIT = 000000 DLTP = 177134 ILTP = 017100 IOQP = 016520

2250	040010	000000	016520	000001	177134	017100	101000	002422
2260	015020	016660	000000	154437	000140	002037	163023	001350
2270	001350	000000	011400	103043	000140	002036	000000	000000
2300	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 3 LOGICAL DEV 2 FLAGS = 141415 NEXT DIT = 045003 DLTP = 055003 ILTP = 131604 IOQP = 051403

100000	141415	045003	051403	041402	055003	131604	041403	055001
100010	040004	055000	140030	001133	100000	045004	051401	041402
100020	055004	041401	000657	141507	041402	055003	131604	000600
100030	055001	140011	041605	041401	006043	041402	055001	131604

DRT NO 6 (MAGNETIC TAPE UNIT) CONTROLLER ERROR STATUS = 000000

UNIT 0 LOGICAL DEV 7 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2310	002000	000000	000000	000007	177144	017565	100700	000000
2320	000000	000001	000000	000000				

UNIT 1 LOGICAL DEV 8 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2324	002000	000000	000000	000410	177144	017565	000000	000000
2334	000000	000000	000000	000000				

UNIT 2 LOGICAL DEV 9 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2340	002000	000000	000000	001011	177144	017565	000000	000000
2350	000000	000000	000000	000000				

UNIT 3 LOGICAL DEV 10 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2354	002000	000000	000000	001412	177144	017565	000000	000000
2364	000000	000000	000000	000000				

DRT NO 7 (SYSTEM CONSOLE/TERMINAL)

UNIT 0 LOGICAL DEV 20 FLAGS = 140602 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 013322

2370	140602	000000	013322	000024	177154	017657	000000	005224
2400	000400	010121	000662	000415	000000	001000	000000	000000
2410	000000	000000	177777	000000	002170	177777	000000	012000
2420	000000	000000	000000	000000	000000	000012	000000	000000

2430 000000 040000 000000 000000 000000

UNIT 1 LOGICAL DEV 21 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

2435 102400 000000 000000 000425 177154 017657 000000 001220
2445 000000 014000 001602 000000 000000 000000 000000 000000
2455 000000 000000 000000 000000 000000 000000 000000 012000
2465 000000 000000 000000 000000 000000 000000 000000 000000
2475 000000 000000 000000 000000 000000

UNIT 2 LOGICAL DEV 22 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

2502 102400 000000 000000 001026 177154 017657 000000 001220
2512 000000 014000 002602 000000 000000 000000 000000 000000
2522 000000 000000 000000 000000 000000 000000 000000 012000
2532 000000 000000 000000 000000 000000 000000 000000 000000
2542 000000 000000 000000 000000 000000

UNIT 3 LOGICAL DEV 23 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

2547 102400 000000 000000 001427 177154 017657 000000 001220
2557 000000 014000 003602 000000 000000 000000 000000 000000
2567 000000 000000 000000 000000 000000 000000 000000 012000
2577 000000 000000 000000 000000 000000 000000 000000 000000
2607 000000 000000 000000 000000 000000

UNIT 4 LOGICAL DEV 24 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

2614 102400 000000 000000 002030 177154 017657 000000 001220
2624 000000 014000 004602 000000 000000 000000 000000 000000
2634 000000 000000 000000 000000 000000 000000 000000 012000
2644 000000 000000 000000 000000 000000 000000 000000 000000
2654 000000 000000 000000 000000 000000

UNIT 5 LOGICAL DEV 25 FLAGS = 140402 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 013055

2661 140402 000000 013055 002431 177154 017657 000000 005224
2671 000410 012121 005702 000415 000000 021000 000000 000000
2701 000000 000000 177777 000000 001550 177777 000000 012000
2711 000000 000000 000000 000000 000000 000103 000000 000000
2721 000000 040000 000000 000000 000000

UNIT 6 LOGICAL DEV 26 FLAGS = 140402 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 013144

2726 140402 000000 013144 003032 177154 017657 000000 005224
2736 000400 012121 006602 000400 000000 001000 000000 000000
2746 000000 000000 177777 000000 002150 177777 000000 012000
2756 000000 000000 000000 000000 000000 000112 000000 000000
2766 000000 040000 000000 000000 000000

UNIT 7 LOGICAL DEV 27 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

2773	102400	000000	000000	003433	177154	017657	000000	001220
3003	000000	014000	007602	000000	000000	000000	000000	000000
3013	000000	000000	000000	000000	000000	000000	000000	012000
3023	000000	000000	000000	000000	000000	000000	000000	000000
3033	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 8 LOGICAL DEV 28 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3040	102400	000000	000000	004034	177154	017657	000000	001220
3050	000000	014000	010602	000000	000000	000000	000000	000000
3060	000000	000000	000000	000000	000000	000000	000000	012000
3070	000000	000000	000000	000000	000000	000000	000000	000000
3100	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 9 LOGICAL DEV 29 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3105	102400	000000	000000	004435	177154	017657	000000	001220
3115	000000	014000	011602	000000	000000	000000	000000	000000
3125	000000	000000	000000	000000	000000	000000	000000	012000
3135	000000	000000	000000	000000	000000	000000	000000	000000
3145	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 10 LOGICAL DEV 30 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3152	102400	000000	000000	005036	177154	017657	000000	001220
3162	000000	014000	012602	000000	000000	000000	000000	000000
3172	000000	000000	000000	000000	000000	000000	000000	012000
3202	000000	000000	000000	000000	000000	000000	000000	000000
3212	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 11 LOGICAL DEV 31 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3217	102400	000000	000000	005437	177154	017657	000000	001220
3227	000000	014000	013602	000000	000000	000000	000000	000000
3237	000000	000000	000000	000000	000000	000000	000000	012000
3247	000000	000000	000000	000000	000000	000000	000000	000000
3257	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 12 LOGICAL DEV 32 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3284	102400	000000	000000	006040	177154	017657	000000	001220
3274	000000	014000	014602	000000	000000	000000	000000	000000
3304	000000	000000	000000	000000	000000	000000	000000	012000
3314	000000	000000	000000	000000	000000	000000	000000	000000
3324	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 13 LOGICAL DEV 33 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3331	102400	000000	000000	006441	177154	017657	000000	001220
3341	000000	014000	015602	000000	000000	000000	000000	000000
3351	000000	000000	000000	000000	000000	000000	000000	012000
3361	000000	000000	000000	000000	000000	000000	000000	000000
3371	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 14 LOGICAL DEV 34 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3376	102400	000000	000000	007042	177154	017657	000000	001220
3408	000000	014000	016602	000000	000000	000000	000000	000000
3416	000000	000000	000000	000000	000000	000000	000000	012000
3428	000000	000000	000000	000000	000000	000000	000000	000000
3438	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 15 LOGICAL DEV 35 FLAGS = 140402 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 013732

3443	140402	000000	013732	007443	177154	017657	000000	005224
3453	000400	012121	017602	000204	000000	001000	000000	000000
3463	000000	000000	177777	000000	001030	177777	000000	012000
3473	000000	000000	000000	000000	000000	000025	000000	000000
3503	000000	040000	000000	000000	000000	000000	000000	000000

DRT NO 14 (LINE PRINTER)

UNIT 0 LOGICAL DEV 6 FLAGS = 000000 NEXT DIT = 000000 DLTP = 177164 ILTP = 017725 IOQP = 000000

3510	000000	000000	000000	000006	177164	017725	000000	000000
3520	000000	000000	000000	020000	000102	000000	000000	000000

***** DISC REQUEST TABLE ***** (SUMMARY INFO)

TOTAL ENTRIES IN TABLE: 144
 ENTRY SIZE: 20
 ENTRIES IN PRIMARY AREA: 125
 IMPEDED PROCESS PCB:
 TABLE INDEX OF FIRST AVAIL ENTRY: 2520
 TABLE INDEX OF LAST AVAIL ENTRY: 800
 MAXIMUM NUMBER OF ENTRIES IN USE: 20
 CURRENT NUMBER OF ENTRIES IN USE: 15
 OVERFLOWS:
 TOTAL REQUESTS: 11211
 SYSBASE INDEX OF DISABLED Q HEAD:
 SYSBASE INDEX OF DISABLED Q TAIL:

***** DISC REQUEST TABLE ***** (ACTIVE LISTS)

LDEV 1

STATUS: 0.XX -> PENDING
 1.XX -> SUCCESSFUL
 2.XX -> END OF FILE
 3.XX -> UNUSUAL CONDITION
 4.XX -> IRRECOVERABLE ERROR

TABLE INDEX	LDEV	UNIT	PCB	S S	DST/BANK	OFFSET/ ADDRESS	XFER CNT	PARM1	PARM2	MISC	SEG IDENT	SEG DSP	URGCLS	- F L A G S -		STATUS		
														MAIN	AUX			
002540*	1	0	23		1	163023	READ	1350	000000	154437	020000	CTX	13.002	0	356	040010	003570	0. 1
001040	1	0	23		0	111623	WRITE	2844	000000	005110	000000	DST	22	0	12	040100	002070	1. 0
000420	1	0	23		0	141423	READ	4764	000000	004504	000000	DST	104	0	175	040100	001450	0. 0
001020	1	0	23		1	177223	WRITE	104	000000	010020	000000	DST	152	0	377	040100	002050	1. 0
002700	1	0	23		1	177423	WRITE	200	000000	003674	000000	DST	54	0	377	040100	003730	1. 0

***** DISC REQUEST TABLE ***** (DISABLED LIST)

***** NO DISABLED QUEUE ELEMENTS *****

***** DISC REQUEST TABLE ***** (AVAILABLE LIST)

STATUS: 0.XX -> PENDING
1.XX -> SUCCESSFUL
2.XX -> END OF FILE
3.XX -> UNUSUAL CONDITION
4.XX -> IRRECOVERABLE ERROR

TABLE INDEX	LDEV	UNIT	PCB	S	DST/BANK	OFFSET/ ADDRESS	FUNC	XFER CNT	PARM1	PARM2	MISC	SEG IDENT	SEGDSP	NXTAVL	- F L A G S -		STATUS	
															MAIN	AUX		
000800	1	0	25		1	163423	WRITE	734	000000	004154	000000	DST	16	0	0	041010	001830	1. 0
000300	1	0	23		144	000104	WRITE	200	000000	036561	000000				600	005110	001330	1. 0
002720	1	0	23		144	000104	WRITE	200	000000	036570	000000				300	005110	003750	1. 0
000160	1	0	23		144	000104	WRITE	200	000000	036587	000000				2720	005110	001210	1. 0
001740	1	0	23		1	162423	READ	310	000000	007620	000000	DST	144	0	160	041010	002770	1. 0
001700	1	0	23		142	000104	WRITE	102	000002	125054	000000				1740	005010	002730	1. 0
002400	1	0	23		142	000216	WRITE	102	000002	125053	000000				1700	005010	003430	1. 0
002240	1	0	23		142	000104	WRITE	102	000002	125052	000000				2400	005010	003270	1. 0
001300	1	0	23		142	000216	WRITE	102	000002	125051	000000				2240	005010	002330	1. 0
002440	1	0	23		142	000104	WRITE	102	000002	125050	000000				1300	005010	003470	1. 0
003040	1	0	23		142	000216	WRITE	102	000002	125047	000000				2440	005010	004070	1. 0
001560	1	0	23		142	000104	WRITE	102	000002	125046	000000				3040	005010	002610	1. 0
002100	1	0	23		142	000216	WRITE	102	000002	125045	000000				1560	005010	003130	1. 0
001540	1	0	23		142	000104	WRITE	102	000002	125044	000000				2100	005010	002570	1. 0
002260	1	0	23		142	000216	WRITE	102	000002	125043	000000				1540	005010	003310	1. 0
002760	1	0	23		142	000104	WRITE	102	000002	125042	000000				2260	005010	004010	1. 0
000440	1	0	23		142	000216	WRITE	102	000002	125041	000000				2760	005010	001470	1. 0
002620	1	0	23		142	000104	WRITE	102	000002	125040	000000				440	005110	003850	1. 0
000360	1	0	23		142	000216	WRITE	102	000002	125037	000000				2620	001010	001410	1. 0
002140	1	0	23		146	000104	WRITE	200	000003	000266	000000				360	001110	003170	1. 0
001200	1	0	23		142	000104	WRITE	102	000002	125036	000000				2140	001010	002230	1. 0
001000	1	0	23		1	172423	READ	460	000000	154703	000000	CTX	13.021	0	1200	041010	002030	1. 0
002000	1	0	23		142	000216	WRITE	102	000002	125035	000000				1000	005010	003030	1. 0
001320	1	0	23		142	000104	WRITE	102	000002	125034	000000				2000	005010	002350	1. 0
001360	1	0	23		142	000216	WRITE	102	000002	125033	000000				1320	005010	002410	1. 0
000500	1	0	23		142	000104	WRITE	102	000002	125032	000000				1360	005010	001530	1. 0
003060	1	0	23		142	000216	WRITE	102	000002	125031	000000				500	005010	004110	1. 0
002060	1	0	23		142	000104	WRITE	102	000002	125030	000000				3060	005010	003110	1. 0
000120	1	0	23		142	000216	WRITE	102	000002	125027	000000				2060	005010	001150	1. 0
003020	1	0	23		142	000104	WRITE	102	000002	125026	000000				120	005110	004050	1. 0
002040	1	0	23		142	000216	WRITE	102	000002	125025	000000				3020	001010	003070	1. 0
001060	1	0	23		142	000104	WRITE	102	000002	125024	000000				2040	001010	002110	1. 0

2

***** SYSTEM BUFFER ANALYSIS *****

ELEMENTS IN TABLE	8	MAXIMUM NUMBER OF ELEMENTS IN USE	2
ELEMENTS IN PRIMARY AREA	8	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	129	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	1216	TOTAL REQUEST	25
INDEX TO LAST FREE ELEMENT	1015		



HP3000 III MEMORY DUMPC.00.00 OF SYS VER C UPDATE 00 FIX 01 DUMP TIME 11/01/72, 12:13AM
(C) HEWLETT-PACKARD CO. 1980

***** TERMINAL BUFFERS *****

ELEMENTS IN TABLE	48	MAXIMUM NUMBER OF ELEMENTS IN USE	8
ELEMENTS IN PRIMARY AREA	42	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	16	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	210	TOTAL REQUEST	150
INDEX TO LAST FREE ELEMENT	170		

FREE LIST

TABLE INDEX	LINK	TERMINAL BUFFER
170	0	>>32212A.3.13 FILE COPIER (C)
150	170	)HEWLETT-PACKARD CO 1979..RATO
130	150	HP32101B.00.14(4WD) BASIC (C
110	130	..ELLO OPERATOR..SYS:HIPRI....
70	110	basic.ME^
50	70	: EXIDOR IS ON MPE .IV *****
30	50	..OV 1, 1972, 12:10 AM..*****
1370	30	EXIDOR IS ON MPE .IV *****
10	1370	NOV 1, 1972, 12:12 AM..*****
1350	10	HP3000 / MPE IV C.00.01. WED.
1330	1350	PP,PUB ON LDEV 035..PUB.....
1310	1330	0:12/054/20/LOGON FOR: KEN.KNE
1270	1310	hello ken.knepp.. 19.80.....
1250	1270	: V 1, 1972, 12:10 AM..(C) HE
1230	1250	1437)..A.7.09 EDIT/3000 WED.
1210	1230	NON-EXISTENT ACCOUNT. (CIERR
1170	1210	NEP. " ON LDEV "35"...
1150	1170	0:12/9/MISSING ACCT FOR "KEN.K
1130	1150	HELLO KEN.KNEP.....
1110	1130	hello ken.knep.....
1070	1110	: EXIDOR IS ON MPE .IV *****

1050	1070	: OV 1, 1972, 12:10 AM.*****
1010	1050	: S,PUB ON LDEV #26.....
1030	1010	...000 / MPE IV C.00.01. WED,
770	1030	#10..S2/14/LOGON FOR: J.ON.DA
750	770	,FIELD.SUPPORT,HP32002 ON LDEV
730	750	0:11/#J1/18/LOGON FOR: FI.LEIO
710	730	:
670	710	.....
650	670	#J1
630	650	STREAM JON97.....
610	630	:
570	610	LDEV 25 TO LDEV 20 ...RR 1402
550	570	CONSOLE HAS BEEN SWITCHED FROM
530	550	CONSOLE20
510	530	:
470	510	STREAMS105.....
450	470	LDEV 20 TO LDEV 25
430	450	CONSOLE HAS BEEN SWITCHED FROM
410	430	:
370	410	CONSOLE 25.....
350	370	: A CHARACTER. (CIE.RR 1906).
330	350	SEE OPERATOR. (CIERR 82).. AL
310	330	STREAM FACILITY NOT ENABLED:
270	310	STREAM JON97.....
250	270	: EXID.OR IS ON MPE IV *****
230	250	> OV 1, 1972, 12:00 AM.*****
210	230	HEWLETT-PACKARD CO. 1980...ED,

2

***** DUMP INDEX *****		
NAME	PAGE # FORMATTED	PAGE # OCTAL DUMP
CODE SEGMENT TABLE	2	58
DATA SEGMENT TABLE	0	57
PROCESS CONTROL BLOCK	12	61
CST EXTENSION	5	60
SYSTEM GLOBAL AREA		54
FIXED LOW CORE		53
INTERRUPT CONTROL STACK		62
SYSTEM BUFFERS	46	66
UCOP REQUEST QUEUE		
PROCESS-PROCESS COMMUNICATION TABLE		
I/O QUEUE	44	62
TERMINAL BUFFERS	47	55
DEVICE INFORMATION TABLE (DIT)	36	56
LOGICAL-PHYSICAL DEVICE TABLE	35	69
LOGICAL DEVICE AND CLASS TABLE		
DRIVER LINKAGE TABLE		53
I/O RESOURCE TABLES		53
DISK FREE SPACE		
LOADER SEGMENT TABLE	50	54
TIMER REQUEST LIST		
DIRECTORY		
DIRECTORY SPACE		
RIN TABLE		67
SWAP TABLE		54
JOB PROCESS COUNT		
JOB MASTER TABLE		
TAPE LABEL TABLE		
LOG TABLE		
REPLY INFORMATION TABLE		
VOLUME TABLE		
BREAKPOINT TABLE		
LOG BUFFER 1		
LOG BUFFER 2		
LOG ID TABLE		53
CST BLOCK		54
JOB CUTOFF TABLE		
SYSTEM JIT		68
SPECIAL REQUEST TABLE		69
VIRTUAL DISK SPACE TABLE	28	53
ARSBM TABLE		65
ILT	30	70
SIR TABLE	16	77
FILE MULTI-ACCESS VECTOR		120
INPUT DEVICE DIRECTORY		
OUTPUT DEVICE DIRECTORY		
WELCOME MESSAGE #1		
WELCOME MESSAGE #2		
CS SYSTEM SEGMENT		
JOB-PROCESS CROSS REFERENCE		
SYSTEM JDT		
COMMAND INTERPRETER LOG-ON DST		
MOUNTED VOLUME TABLE		

2

PRI. VOL. USER TABLE	18	88
AVAILABLE REGION LIST		83
DISC REQUEST TABLE	40	89
MSG HBR TABLE		88
PRIMARY MSG TABLE		53
MEASUREMENT INFO TABLE		
SECONDARY MSG TABLE		
CURRENT PROCESS STACK		



HP 3000 Series II CE HANDBOOK

GENERAL SYSTEMS DIVISION
8800 STEVENS CREEK BLVD.
SANTA CLARA, CALIFORNIA 95050

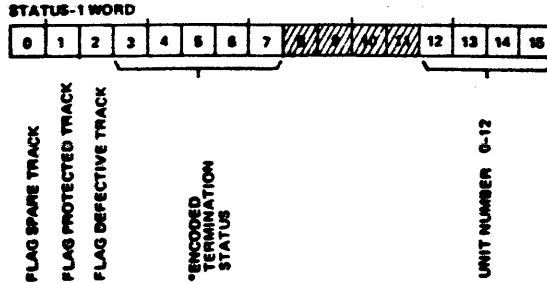
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Table of Contents (Continued)

	Page

2893A Card Reader	8-37
Subsystem Connections	8-38
Interface PCA Jumper Locations	8-39
Control Word Format	8-40
Status Word Format	8-40
Column Binary Coding Example	8-41
2894A Card Reader/Punch	8-43
Subsystem Connections	8-44
Interface PCA Jumper Locations	8-45
Control Word Formats	8-46
Control Word (16-Bit)	8-46
Control Word (5-Bit)	8-47
Status Word Formats	8-48
Interrupt Status Word	8-48
Device Status Word	8-48
Status Word (6-Bit)	8-49
Data Word Formats	8-50
Data Word (Read)	8-50
Data Word (Write)	8-50
Connections Between Card Reader/Punch and Interface PCA	8-51
2895A Paper Tape Punch	8-53
Subsystem Connections	8-54
Interface PCA Jumper Locations	8-55
Control Word Format	8-56
Status Word Formats	8-57
Interrupt Status Word	8-57
Device Status Word	8-57
7900A Cartridge Disc	8-59
Subsystem Connections	8-60
Interface PCA Jumper Locations	8-61
Cartridge Disc Word Formats	8-62
Control Word (P CONT STB)	8-62
Control Word (P CMD 1)	8-62
Status Word	8-63
7905/7920 Disc Drives	8-65
Subsystem Connections	8-66
Interface PCA Jumper Locations	8-67
7905 Drive Fault Indicators	8-68
Drive Fault Indications	8-69
Subtype List	8-70
Subtype Parameters	8-70
Control Word Format	8-71
Status Word Format	8-71
Status-1 Word Format	8-72
Status-2 Word Format	8-72
Command Descriptions	8-73

7905/7920 Disc Drives



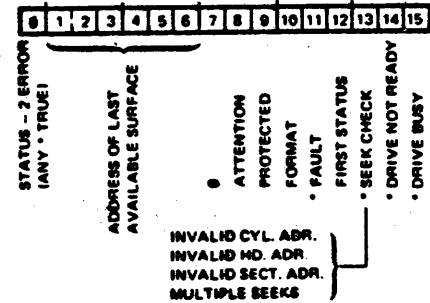
*ENCODED TERMINATION STATUS

3	4	5	6	7	
0	0	0	0	0	NORMAL COMPLETION
0	0	0	0	1	ILLEGAL OPCODE (< \$26)
0	0	0	1	0	SET WAKEUP
0	0	1	1	1	CYLINDER COMPARE ERROR
0	1	0	0	0	UNCORRECTABLE DATA ERROR
0	1	0	0	1	HEAD-SECTOR COMPARE ERROR
0	1	0	1	0	I/O PROGRAM ERROR
0	1	1	0	0	END OF CYLINDER
0	1	1	1	0	OVERRUN (TRANSFER ERROR)
0	1	1	1	1	POSSIBLY CORRECTABLE DATA ERROR
1	0	0	0	0	ILLEGAL ACCESS TO SPARE TRACK
1	0	0	0	1	DEFECTIVE TRACK
1	0	0	1	0	ACCESS NOT READY DURING DATA OPERATION (HEADS STILL MOVING)
1	0	0	1	1	STATUS-2 ERROR
1	0	1	1	0	WRITE ATTEMPT TO PROTECTED OR DEFECTIVE TRACK
1	0	1	1	1	UNIT UNAVAILABLE
1	1	1	1	1	DRIVE ATTENTION (SEEK COMPLETE)

TRACK SPECIFIC ERRORS (bits 3-7)

STATUS-1 WORD FORMAT

STATUS - 2 WORD (REQUEST STATUS)
 (STATUS - 1 WORD IS SAME AS STATUS WORD BITS 3-15)



STATUS-2 WORD FORMAT

LAB #3

Hardware Environment: Series II

External Symptoms: No response from any terminal.

This dump case includes the following components:

- 1) Excerpted pages from a formatted Series II memory dump.

***** REGISTERS *****

DATA SEGMENT	CODE SEGMENT	MISCELLANEOUS	STATUS = 141074	CPX2 = 040001	MICRO REGS
DB BANK = 0	PB = 055704	X = 177758	MODE = PRIV	RUN/HALT = RUN	EXEC SW = OFF
DB = 001000	P = 060574	CIR = 030020	INTERRUPTS = ON	SYS DUMP = ON	INC ADDR = OFF
S BANK = 0	PL = 101647	CPX1 = 000030	TRAPS = OFF	COLD LOAD = ON	DEC ADDR = OFF
DL = 177777	PBBANK = 0	MSIZE = 2	STACK OP = LEFT	LOAD REG = OFF	INHIBIT AUTO RES = OFF
Q = 012730	(P-PB) = 002670		OVERFLOW = OFF	LOAD ADDR = OFF	0 = 020817
S = 013012			CARRY = OFF	LOAD MEM = OFF	1 = 132033
Z = 013728			COND CODE = CCE	DISP MEM = OFF	2 = 020585
Z BANK = 0			SEGMENT 0 = 74	SNGL INST = OFF	3 = 000000
					4 = 000000
					5 = 117033
					6 = 020857
					7 = 000000

PAUSE INSTRUCTION IN CIR

***** FIXED LOW MEMORY *****

CODE SEGMENT TABLE POINTER	006170
EXTENDED CODE SEGMENT TABLE POINTER	007644
DATA SEGMENT TABLE POINTER	004530
PROCESS CONTROL BLOCK BASE	011230
CURRENT PCB POINTER	000000
INTERRUPT STACK BASE	012730
INTERRUPT STACK LIMIT	013728
INTERRUPT MASK	000000

***** PROCESS CONTROL BLOCK (2ND HALF) *****

----- SCHEDULE INFORMATION -----														---RESOURCES---				LIFE/DEATH		----- MISCELLANEOUS -----								
PIN	NQPIN	PQPIN	D I S P Q	L C Q	C D Q	E E Q	I N O R R	P R I	H I P R I	U S E R Q	T S W	S L M P C	P X P I	I H S P S O V	C H R I T	P R E V I M P D	N E X T I M P D	S C	L I V E D	D E A T H	BMS	PPC	PCST	PBXPTR	SLLPTR	BPT LNK	SYSTEM PROC NAME	
1			L					61		T	L				C				L	L	SNF	NUL			10	22233		PROGEN
2			L					62											L	L	SNF	NUL	CST	41		22101		SYSTO
3			L					175											L	L	SNF	NUL			1	22113		IOMESS
4			L					62											L	L	SNF	NUL			2	22125		LOG
5			L					175							C				L	L	SNF	NUL			3	22137		MEMLOG
6			L					175											L	L	SNF	NUL	CTX	3.001	4	22151		
7			L					175											L	L	SNF	NUL	CTX	4.001	5	22163		UCOP
10			L					12											L	L	SNF	NUL			6	22175		PFail
11			L					175						S					L	L	SNF	NUL	CTX	6.001	7	22207		DEVREC
12			L					216											L	L	SNF	NUL	CTX	7.001		22221		LOAD
14			L					230			L								L	L	SNF	NUL				23015		
15			C				I	230		T	L				C				L	L	SNF	NUL				23274		
23			C				I	230			L								L	L	SNF	NUL	CST	23		23546		
30			C				I	230		T	L				C				L	L	SNF	NUL			11	22757		
31			C				I	230			L								L	L	SNF	NUL	CST	77		23325		
34			C				I	232		U	L								L	L	SNF	NUL	CST	37		23755		

60 ENTRYS
 37 UNASSIGNED ENTRYS
 21 ASSIGNED ENTRYS

***** DEVICE INFORMATION TABLE *****

DRT NO 4 (SYSTEM DISK) CONTROLLER ERROR STATUS = 000000

UNIT 0 LOGICAL DEV 1 FLAGS = 040000 NEXT DIT = 000000 DLTP = 177134 ILTP = 017100 IOQP = 000000

2250	040000	000000	000000	000001	177134	017100	100000	000000
2260	000000	000000	000000	031650	000026	004050	123423	001200
2270	001200	000000	000000	000000	000000	000000	000000	000000
2300	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 3 LOGICAL DEV 2 FLAGS = 141415 NEXT DIT = 045003 DLTP = 055003 ILTP = 131604 IOQP = 051403

100000	141415	045003	051403	041402	055003	131604	041403	055001
100010	040004	055000	140030	001133	100000	045004	051401	041402
100020	055004	041401	000657	141507	041402	055003	131604	000600
100030	055001	140011	041605	041401	006043	041402	055001	131604

DRT NO 8 (MAGNETIC TAPE UNIT) CONTROLLER ERROR STATUS = 000000

UNIT 0 LOGICAL DEV 7 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2310	002000	000000	000000	000007	177144	017565	100700	000000
2320	000000	000001	000000	000000				

UNIT 1 LOGICAL DEV 8 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2324	002000	000000	000000	000410	177144	017565	000000	000000
2334	000000	000000	000000	000000				

UNIT 2 LOGICAL DEV 9 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2340	002000	000000	000000	001011	177144	017565	000000	000000
2350	000000	000000	000000	000000				

UNIT 3 LOGICAL DEV 10 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 017565 IOQP = 000000

2354	002000	000000	000000	001412	177144	017565	000000	000000
2364	000000	000000	000000	000000				

DRT NO 7 (SYSTEM CONSOLE/TERMINAL)

UNIT 0 LOGICAL DEV 20 FLAGS = 140402 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 013116

2370	140402	000000	013116	000024	177154	017657	000000	005224
2400	100424	010121	000662	000106	000000	001000	000000	000000
2410	000000	000000	177777	000000	001450	177777	000000	012000
2420	000000	000000	000000	000000	000000	000047	000000	000000

2430 000000 040000 000000 000000 000000

UNIT 1 LOGICAL DEV 21 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

2435 102400 000000 000000 000425 177154 017857 000000 001220
2445 000000 014000 001802 000000 000000 000000 000000 000000
2455 000000 000000 000000 000000 000000 000000 000000 012000
2465 000000 000000 000000 000000 000000 000000 000000 000000
2475 000000 000000 000000 000000 000000

UNIT 2 LOGICAL DEV 22 FLAGS = 140402 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 013378

2502 140402 000000 013378 001028 177154 017857 000000 005224
2512 000400 010121 002702 000110 000000 021000 000000 000000
2522 000000 000000 177777 000000 000730 177777 000000 012000
2532 000000 000000 000000 000000 000000 000084 000000 000000
2542 000000 040000 000000 000000 000000

UNIT 3 LOGICAL DEV 23 FLAGS = 100800 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

2547 100800 000000 000000 001427 177154 017857 000000 005220
2557 000000 014000 003802 000384 000000 000000 000000 000000
2567 000000 000000 000000 000000 001410 003024 000000 012000
2577 000000 000000 000000 000000 000000 000120 000000 000000
2607 000000 000000 000000 000000 000000

UNIT 4 LOGICAL DEV 24 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

2614 102400 000000 000000 002030 177154 017857 000000 001220
2624 000000 014000 004802 000000 000000 000000 000000 000000
2634 000000 000000 000000 000000 000000 000000 000000 012000
2644 000000 000000 000000 000000 000000 000000 000000 000000
2654 000000 000000 000000 000000 000000

UNIT 5 LOGICAL DEV 25 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 000000

2661 102400 000000 000000 002431 177154 017857 000000 001220
2671 000000 014000 005802 000000 000000 000000 000000 000000
2701 000000 000000 000000 000000 000000 000000 000000 012000
2711 000000 000000 000000 000000 000000 000000 000000 000000
2721 000000 000000 000000 000000 000000

UNIT 6 LOGICAL DEV 26 FLAGS = 140402 NEXT DIT = 000000 DLTP = 177154 ILTP = 017857 IOQP = 013528

2728 140402 000000 013528 003032 177154 017857 000000 005224
2738 000400 010121 006802 000415 000000 001000 000000 000000
2748 000000 000017 177777 000000 001430 177777 000000 012000
2758 000000 000000 000000 000000 000000 000104 000000 000000
2788 000000 040000 000000 000000 000000

UNIT 7 LOGICAL DEV 27 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

2773	102400	000000	000000	003433	177154	017657	000000	001220
3003	000000	014000	007802	000000	000000	000000	000000	000000
3013	000000	000000	000000	000000	000000	000000	000000	012000
3023	000000	000000	000000	000000	000000	000000	000000	000000
3033	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 8 LOGICAL DEV 28 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3040	102400	000000	000000	004034	177154	017657	000000	001220
3050	000000	014000	010802	000000	000000	000000	000000	000000
3060	000000	000000	000000	000000	000000	000000	000000	012000
3070	000000	000000	000000	000000	000000	000000	000000	000000
3100	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 9 LOGICAL DEV 29 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3105	102400	000000	000000	004435	177154	017657	000000	001220
3115	000000	014000	011602	000000	000000	000000	000000	000000
3125	000000	000000	000000	000000	000000	000000	000000	012000
3135	000000	000000	000000	000000	000000	000000	000000	000000
3145	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 10 LOGICAL DEV 30 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3152	102400	000000	000000	005036	177154	017657	000000	001220
3162	000000	014000	012602	000000	000000	000000	000000	000000
3172	000000	000000	000000	000000	000000	000000	000000	012000
3202	000000	000000	000000	000000	000000	000000	000000	000000
3212	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 11 LOGICAL DEV 31 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3217	102400	000000	000000	005437	177154	017657	000000	001220
3227	000000	014000	013802	000000	000000	000000	000000	000000
3237	000000	000000	000000	000000	000000	000000	000000	012000
3247	000000	000000	000000	000000	000000	000000	000000	000000
3257	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 12 LOGICAL DEV 32 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3264	102400	000000	000000	006040	177154	017657	000000	001220
3274	000000	014000	014802	000000	000000	000000	000000	000000
3304	000000	000000	000000	000000	000000	000000	000000	012000
3314	000000	000000	000000	000000	000000	000000	000000	000000
3324	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 13 LOGICAL DEV 33 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3331	102400	000000	000000	006441	177154	017657	000000	00122
3341	000000	014000	015602	000000	000000	000000	000000	000000
3351	000000	000000	000000	000000	000000	000000	000000	012000
3361	000000	000000	000000	000000	000000	000000	000000	000000
3371	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 14 LOGICAL DEV 34 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3376	102400	000000	000000	007042	177154	017657	000000	001220
3406	000000	014000	016602	000000	000000	000000	000000	000000
3416	000000	000000	000000	000000	000000	000000	000000	012000
3426	000000	000000	000000	000000	000000	000000	000000	000000
3436	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 15 LOGICAL DEV 35 FLAGS = 140600 NEXT DIT = 000000 DLTP = 177154 ILTP = 017657 IOQP = 000000

3443	140600	000000	000000	007443	177154	017657	000000	005220
3453	000400	010101	017702	000055	000000	001000	000000	000000
3463	000003	000017	177777	000000	001370	000001	000000	012000
3473	000000	000000	000000	000000	000000	000036	000000	000000
3503	000000	040000	000000	000000	000000	000000	000000	000000

DRT NO 14 (LINE PRINTER)

UNIT 0 LOGICAL DEV 6 FLAGS = 000000 NEXT DIT = 000000 DLTP = 177164 ILTP = 017725 IOQP = 000000

3510	000000	000000	000000	000006	177164	017725	160004	000000
3520	100000	000004	000061	020100	000102	000000	000020	

3

HP3000 III MEMORY DUMPC.00.00 OF SYS VER C UPDATE 00 FIX 01 DUMP TIME 11/01/72, 12:43AM
(C) HEWLETT-PACKARD CO. 1980

PAGE 38

***** DISC REQUEST TABLE ***** (SUMMARY INFO)

TOTAL ENTRIES IN TABLE:	144
ENTRY SIZE:	20
ENTRIES IN PRIMARY AREA:	125
IMPEDED PROCESS.PCB:	
TABLE INDEX OF FIRST AVAIL ENTRY:	2020
TABLE INDEX OF LAST AVAIL ENTRY:	1720
MAXIMUM NUMBER OF ENTRIES IN USE:	12
CURRENT NUMBER OF ENTRIES IN USE:	
OVERFLOWS:	
TOTAL REQUESTS:	11704
SYSBASE INDEX OF DISABLED Q HEAD:	
SYSBASE INDEX OF DISABLED Q TAIL:	

***** DISC REQUEST TABLE ***** (ACTIVE LISTS)

LDEV 1: NO CURRENT REQUEST.

***** I/O REQUEST TABLE (FREE LIST) *****

ELEMENTS IN TABLE 48 MAXIMUM NUMBER OF ELEMENTS IN USE 18
 ELEMENTS IN PRIMARY AREA 42 CURRENT NUMBER OF ELEMENTS IN USE 10
 SIZE OF EACH ELEMENT 11 OVERFLOWS 0
 INDEX OF FIRST FREE ELEMENT 824 TOTAL REQUEST 2033
 INDEX TO LAST FREE ELEMENT 357

TABLE INDEX	LOGICAL DEVICE	PCB	ADDR REL	DST	BUFFER ADDRESS	F	COUNT	PARM1	PARM2	MISC	FLAGS.....	STATUS DESCRIPTION	STATUS
357	35	34	+DB	125	748	WRITE	558	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
303	35	34	+DB	125	0	000012	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
270	35	34	+DB	125	0	WRITE	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
713	35	0	SBUF	10	0	000038	0W	000000	000000	000000	011000 SB CO	NORMAL COMPLETION	1
433	35	34	+DB	125	1	READ	0W	000003	000000	000043	007000 IW BL CO	:BYE END OF FILE	52
112	35	34	+DB	125	515	WRITE	1B	000320	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
700	35	34	+DB	125	0	000034	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
140	35	34	+DB	125	1	READ	0W	000003	000000	000043	007000 IW BL CO	NORMAL COMPLETION	1
255	35	34	+DB	125	515	WRITE	1B	000320	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
77	35	34	+DB	125	0	000034	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
10	35	34	+DB	125	0	WRITE	0W	000320	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
51	35	34	+DB	125	0	000034	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
64	35	34	SEG	60	3	WRITE	41B	000000	000004	000000	007000 IW BL CO	NORMAL COMPLETION	1
1002	35	34	+DB	125	1354	WRITE	65B	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
1015	35	0	SBUF	10	0	FOPEN	0W	000000	000000	000000	011000 SB CO	NORMAL COMPLETION	1
767	35	0	SBUF	10	0	FOPEN	0W	000000	000000	000000	011000 SB CO	NORMAL COMPLETION	1
754	35	34	+DB	125	0	000025	0W	000001	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
550	35	11	+DB	104	1433	READ	17B	000001	000000	000043	005000 IW CO	NORMAL COMPLETION	1
685	35	11	+DB	104	22	WRITE	1B	000320	000000	000000	005000 IW CO	NORMAL COMPLETION	1
652	35	11	+DB	104	1433	READ	0W	000001	000000	000043	005000 IW CO	NORMAL COMPLETION	1
535	35	11	+DB	104	22	WRITE	1B	000320	000000	000000	005000 IW CO	NORMAL COMPLETION	1
522	35	11	+DB	104	1433	READ	0W	000001	000000	000043	005000 IW CO	NORMAL COMPLETION	1
507	35	11	+DB	104	22	WRITE	1B	000320	000000	000000	005000 IW CO	NORMAL COMPLETION	1
583	35	11	+DB	104	0	WRITE	0W	000000	000000	000000	005000 IW CO	NORMAL COMPLETION	1
214	35	33	+DB	125	0	DCLOSE	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
227	35	0	SBUF	10	0	FCLOSE	0W	000000	000000	000000	011000 SB CO	NORMAL COMPLETION	1
242	35	0	SBUF	10	0	FCLOSE	0W	000000	000000	000000	011000 SB CO	NORMAL COMPLETION	1
331	35	33	+DB	125	748	WRITE	558	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
201	35	33	+DB	125	0	000012	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
741	35	33	+DB	125	0	WRITE	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
372	35	0	SBUF	10	0	000038	0W	000000	000000	000000	011000 SB CO	NORMAL COMPLETION	1
344	35	33	+DB	125	1	READ	0W	000003	000000	000043	007000 IW BL CO	:BYE END OF FILE	52
153	35	33	+DB	125	515	WRITE	1B	000320	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
728	35	33	+DB	125	0	000034	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
637	35	33	+DB	125	0	WRITE	0W	000320	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
405	35	33	+DB	125	0	000034	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
316	35	33	SEG	60	3	WRITE	41B	000000	000004	000000	007000 IW BL CO	NORMAL COMPLETION	1
624	35	33	+DB	125	1354	WRITE	65B	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1

***** I/O REQUEST TABLE (IN USE LIST) *****

TABLE INDEX	LOGICAL DEVICE	PCB	ADDR REL	DST	BUFFER ADDRESS	FUNC	COUNT	PARM1	PARM2	MISC	FLAGS.....	STATUS DESCRIPTION	STATUS
12753	20	15	+DB	114	1	READ	4158	000003	000000	000000	008000 IW BL	PENDING	0
12788	20	0	SBUF	10	413	WRITE	618	000000	000000	000000	010003 SB	PENDING	0
13055	20	0	SBUF	10	11	WRITE	718	000000	000000	000000	010003 SB	PENDING	0
13116	20	1	+DB	106	60	READ	1088	000005	000000	000002	008004 IW BL	PENDING	0
13350	20	0	SBUF	10	1417	WRITE	808	000000	000000	000000	010003 SB	PENDING	0
13376	22	30	+DB	135	12830	READ	1108	000001	000000	000002	008000 IW BL	PENDING	0
13411	20	0	SBUF	10	1015	WRITE	238	000000	000000	000000	010003 SB	PENDING	0
13424	20	0	SBUF	10	1620	WRITE	228	000000	000000	000000	010003 SB	PENDING	0
13528	28	31	+DB	117	1	READ	4158	000003	000000	000002	008000 IW BL	PENDING	0
13541	20	0	SBUF	10	1216	WRITE	618	000000	000000	000000	010003 SB	PENDING	0

***** SYSTEM BUFFER ANALYSIS *****

ELEMENTS IN TABLE	8	MAXIMUM NUMBER OF ELEMENTS IN USE	6
ELEMENTS IN PRIMARY AREA	6	CURRENT NUMBER OF ELEMENTS IN USE	6
SIZE OF EACH ELEMENT	129	OVERFLOWS	4
INDEX OF FIRST FREE ELEMENT	212	TOTAL REQUEST	150
INDEX TO LAST FREE ELEMENT	614		

***** TERMINAL BUFFERS *****

ELEMENTS IN TABLE	48	MAXIMUM NUMBER OF ELEMENTS IN USE	9
ELEMENTS IN PRIMARY AREA	42	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	18	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	550	TOTAL REQUEST	704
INDEX TO LAST FREE ELEMENT	530		

FREE LIST

TABLE INDEX	LINK	TERMINAL BUFFER
530	0	1972, 12:43 AM..:42 AM..*****
470	530	CPU=1. CONNECT=1. WED, NOV 1,
510	470	..3000 / MPE IV C.00.01. WED,
430	510	BYEU/0S8/25./LOGON FOR: JON.DA
350	430	: 110 jon.davis.ER LOGGING PRO
450	350	: 1972, 12:40 AM..24.12 ..? 0
410	450	..EV8 7..NNECT=10. WED, NOV 1
370	410	EXIDOR IS ON MPE .IV *****
310	370	NOV 1, 1972, 12:43 AM..*****
250	310	HP3000 / MPE IV C.00.01. WED,
270	250	HELLO JON.DAVIS.UB ON LDEV 035
230	270	: /LOGOFF...0:38/0S7/23/LOGON
210	230	: S,PUB ON LDEV 035..0:38/0S6/
170	210	: :38/0S6/22/LOGON FOR: JON.DA
150	170	...V 035..0:38/0S5/2.1/LOGOFF.
130	150	1972, 12:43 AM..DAVIS,PUB ON
110	130	CPU=1. CONNECT=1. WED, NOV 1,
70	110	..STEM ID = HP32002C.00.01.?TH
50	70	BYEUNAL BUFFERS = 48.? HAS BE
30	50	: Y CHANGES? .N MPE .IV *****
10	30	..OV 1, 1972, 12:38 AM..*****

1370	10	EXIDOR IS ON MPE .IV *****.
1350	1370	NOV 1, 1972, 12:43 AM.*****
1330	1350	HP3000 / MPE IV C.00.01. WED,
1310	1330	HELLO JON.DAVIS.PER USER REQUE
1270	1310	: 972, 12:38 AM..20 ...RED..
1250	1270	1437)..CONNECT=1. WED, NOV 1,
1230	1250	NON-EXISTENT ACCOUNT. (CIERR
1210	1230	HELLO JON.DAVIX..NGES? 4.? ED
1070	1210	HELLO JON.DAVIXNCHANGES? .WED,
1170	1070	..GMENT LIMIT CHANGES? .01.? 8
1150	1170	197.2, 12:43 AM..? RUNNING PR
1130	1150	CPU=1. CONNECT=1. WED, NOV 1,
1110	1130	..GGING CHANGES? .38 AM.. D
1050	1110	: LO JON.DAVIS.ES? NUM FNAME
1030	1050	FILE L;DEV=LP.. TIME LIMIT = 0
1010	1030	FILE T;DEV=TAPE..SPOOLFILE EXT
730	1010	..X 8 OF CONCURRENT RUNNING JO
710	730	EXIDOR IS ON MPE .IV *****.
770	710	NOV 1, 1972, 12:43 AM.*****
870	770	HP3000 / MPE IV C.00.01. WED,
750	870	HELLO KEN.KNEPP.N FOR: KEITH.J
850	750	: OF GLOBAL RINS USED = 2, MAX
830	850	...F RINS MIN = 5, MAX = 60.?
810	830	=.LETE . . . RIN? . AM.*****
570	810	: ST GLUBAL RINS? 00.01. WED,
330	570	..LLO JON.DAVIS.MPE .IV *****.
550	330	EXIDOR IS ON MPE .IV *****.

***** TIMER REQUEST LIST *****

FREE LIST POINTER 000020
 NUMBER OF ENTRIES 000040
 ENTRY SIZE 4
 TRACE WORD 020020
 QUANTUM/100MS 000000
 POINTER TO MOST ACTIVE REQ 000014
 DATE 11/01/72, 12:43AM

ENTRY	REQUEST STATUS	TYPE OF REQUEST	POINTER TO NEXT REQUEST	REQUEST POINTER	TIME TO SERVICE REQ IN FRONT (SEC/10)
14	ACTIVE	DELAY	0	PCBB IX = 000120	9740
20	INACTIVE	HANGUP	24	DITP = 003443	101
24	INACTIVE	HANGUP	30	DITP = 003443	100
30	INACTIVE	HANGUP	34	DITP = 000000	0
34	INACTIVE	HANGUP	40	DITP = 000000	0
40	INACTIVE	HANGUP	44	DITP = 000000	0
44	INACTIVE	HANGUP	50	DITP = 000000	0
50	INACTIVE	HANGUP	54	DITP = 000000	0
54	INACTIVE	HANGUP	60	DITP = 000000	0
60	INACTIVE	HANGUP	64	DITP = 000000	0
64	INACTIVE	HANGUP	70	DITP = 000000	0
70	INACTIVE	HANGUP	74	DITP = 000000	0
74	INACTIVE	HANGUP	100	DITP = 000000	0
100	INACTIVE	HANGUP	104	DITP = 000000	0
104	INACTIVE	HANGUP	110	DITP = 000000	0
110	INACTIVE	HANGUP	114	DITP = 000000	0
114	INACTIVE	HANGUP	120	DITP = 000000	0
120	INACTIVE	HANGUP	124	DITP = 000000	0
124	INACTIVE	HANGUP	130	DITP = 000000	0
130	INACTIVE	HANGUP	134	DITP = 000000	0
134	INACTIVE	HANGUP	140	DITP = 000000	0
140	INACTIVE	HANGUP	144	DITP = 000000	0
144	INACTIVE	HANGUP	150	DITP = 000000	0
150	INACTIVE	HANGUP	154	DITP = 000000	0
154	INACTIVE	HANGUP	160	DITP = 000000	0
160	INACTIVE	HANGUP	164	DITP = 000000	0
164	INACTIVE	HANGUP	170	DITP = 000000	0
170	INACTIVE	HANGUP	174	DITP = 000000	0
174	INACTIVE	HANGUP	200	DITP = 000000	0

3

***** DUMP INDEX *****		
NAME	PAGE # FORMATTED	PAGE # OCTAL DUMP
CODE SEGMENT TABLE	2	55
DATA SEGMENT TABLE	7	53
PROCESS CONTROL BLOCK	10	57
CST EXTENSION	5	56
SYSTEM GLOBAL AREA		50
FIXED LOW CORE		49
INTERRUPT CONTROL STACK		58
SYSTEM BUFFERS	42	62
UCOP REQUEST QUEUE		
PROCESS-PROCESS COMMUNICATION TABLE		
I/O QUEUE	40	58
TERMINAL BUFFERS	43	51
DEVICE INFORMATION TABLE (DIT)	32	52
LOGICAL-PHYSICAL DEVICE TABLE	31	65
LOGICAL DEVICE AND CLASS TABLE		84
DRIVER LINKAGE TABLE		48
I/O RESOURCE TABLES		48
DISK FREE SPACE		
LOADER SEGMENT TABLE		68
TIMER REQUEST LIST	46	50
DIRECTORY		
DIRECTORY SPACE		
RIN TABLE		77
SWAP TABLE		63
JOB PROCESS COUNT		50
JOB MASTER TABLE		80
TAPE LABEL TABLE		68
LOG TABLE		
REPLY INFORMATION TABLE		
VOLUME TABLE		
BREAKPOINT TABLE		
LOG BUFFER 1		
LOG BUFFER 2		
LOG ID TABLE		
CST BLOCK		48
JOB CUTOFF TABLE		50
SYSTEM JIT		
SPECIAL REQUEST TABLE		64
VIRTUAL DISK SPACE TABLE	24	65
ARSBM TABLE		48
ILI	26	61
SIR TABLE	13	66
FILE MULTI-ACCESS VECTOR		
INPUT DEVICE DIRECTORY		
OUTPUT DEVICE DIRECTORY		
WELCOME MESSAGE #1		
WELCOME MESSAGE #2		78
CS SYSTEM SEGMENT		
JOB-PROCESS CROSS REFERENCE		
SYSTEM JDT		
COMMAND INTERPRETER LOG-ON DST		
MOUNTED VOLUME TABLE		

HP3000 III MEMORY DUMPC.00.00 OF SYS VER C UPDATE 00 FIX 01 DUMP TIME 11/01/72, 12:43AM
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3

PAGE 87

PRI. VOL. USER TABLE		74
AVAILABLE REGION LIST		85
DISC REQUEST TABLE	15	59
MSG HBR TABLE	36	83
PRIMARY MSG TABLE		85
MEASUREMENT INFO TABLE		48
SECONDARY MSG TABLE		
CURRENT PROCESS STACK		

LAB #4

Hardware Environment: Series II

External Symptoms: Ldev 26 is hung.

This dump contains the following components:

- 1) Excerpted pages from a formatted Series II memory dump.
- 2) PMAPs from modules HARDRES & ININ.

FILE UNNUMBERED

1			
2			
3			
4			
5	MPE IV C.00.00		
6	1 ININ	62 UDC (62)	144 MRJEMISC2 (162)
7	2 FILESYS1 (0)	63 USER (63)	145 MRJESLCP (163)
8	3 FILESYS4 (1)	64 HELPUER (64)	146 BSCSLCP1 (164)
9	4 FILESYS5 (2)	65 OPLW (65)	147 MPMONCMD (165)
10	5 FILESYS6 (3)	66 OPMED (66)	150 IMAGE01 (214)
11	6 FILESYS6A (4)	67 OPHI (67)	151 IMAGE02 (215)
12	7 FILESYS7 (5)	70 LABSEG (70)	152 IOMONITOR3270 (231)
13	10 CIALTORG (6)	71 SDISC (71)	153 TRACE0 (232)
14	11 CICOMSYS (7)	72 LOGSEGO (73)	154 TRACE1 (233)
15	12 CIERR (10)	73 LOGSEG1 (74)	155 IOMDISC1
16	13 CIFILEB (11)	74 KERNELC (75)	156 IOTAPEO
17	14 CIFILEM (12)	75 KERNELD (76)	157 IOTERMO
18	15 CIINIT (13)	76 MISCSEGC (77)	160 IOLPRTO
19	16 CILISTF (14)	77 FILESYS1A (101)	
20	17 CIMISC (15)	100 FILESYS2 (102)	
21	20 CIORGAN (16)	101 FILESYS3 (103)	
22	21 CIPREPRUN (17)	102 DEBUGUTL (104)	
23	22 CISUBS (20)	103 SEGUTIL (105)	
24	23 CISYSMGR (21)	104 KSAM01 (106)	
25	24 CIUSERUTIL (22)	105 KSAM02 (107)	
26	25 CXSTOREST (23)	106 KSAM03 (110)	
27	26 RESTORE (24)	107 KSAM04 (111)	
28	27 STORE (25)	110 KSAM05 (112)	
29	30 DIRC (26)	111 FIRMWARESIM1 (52)	
30	31 ALLOCATE (27)	112 FIRMWARESIM2 (53)	
31	32 ALLOCUTIL (30)	113 KSAM06 (113)	
32	33 HARDRES (31)	114 KSAM07 (114)	
33	34 ABORTDUMP (32)	115 COMSYS1 (116)	
34	35 MESSAGE (33)	116 COMSYS3 (120)	
35	36 PROCSEG (34)	117 COMSYS4 (121)	
36	37 NRIO (35)	120 COMSYS5 (122)	
37	40 PCREATE (36)	121 CSUTILTY (123)	
38	41 MORGUE (37)	122 COMSYS2 (117)	
39	42 BIPC (40)	123 BSCLCM (124)	
40	43 IPC (41)	124 BSCSLCPO (125)	
41	44 CHECKER (42)	125 DVRSSLC (126)	
42	45 UTILITY1 (43)	126 DVRHSI (127)	
43	46 UTILITY2 (44)	127 DSSEG1 (151)	
44	47 LOADER1 (45)	130 DSSEG2 (152)	
45	50 RINS (46)	131 DSSEG4 (154)	
46	51 JOBTABLE (47)	132 DSMISC (156)	
47	52 DEBUG (50)	133 DS10M (157)	
48	53 NURSERY (51)	134 DSSEG3 (153)	
49	54 SPOOLING (54)	135 DSSEG5 (155)	
50	55 SPOOLCOMS1 (55)	136 CLIB'01 (204)	
51	56 SPOOLCOMS2 (56)	137 CLIB'03 (206)	
52	57 PVSYSSEG (57)	140 CLIB'04 (207)	
53	60 PVSYSO (60)	141 CLIB'05 (210)	
54	61 PVSYSM (61)	142 DSRTECALLS (160)	
		143 MRJEMISC1 (161)	

***** REGISTERS *****

DATA SEGMENT	CODE SEGMENT	MISCELLANEOUS	STATUS = 100001	CPX2 = 040001	MICRO REGS
DB BANK = 0	PB = 102674	X = 150001	MODE = PRIV	RUN/HALT = RUN	EXEC SW = OFF
DB = 001000	P = 105715	CIR = 150000	INTERRUPTS = OFF	SYS DUMP = ON	IPC ADDR = OFF
S BANK = 0	PL = 106563	CPX1 = 000021	TRAPS = OFF	COLD LOAD = ON	DEC ADDR = OFF
DL = 177777	PBBANK = 0	MSIZE = 4	STACK OP = LEFT	LOAD REG = OFF	INHIBIT AUTO RES = OFF
Q = 012730	(P-PB) = 003021		OVERFLOW = OFF	LOAD ADDR = OFF	
S = 012733			CARRY = OFF	LOAD MEM = OFF	
Z = 013726			COND CODE = CCG	DISP MEM = OFF	
Z BANK = 0			SEGMENT # = 1	SNGL INST = OFF	
					0 = 000037
					1 = 014000
					2 = 000000
					3 = 040000
					4 = 000004
					5 = 060000
					6 = 150000
					7 = 034000

***** FIXED LOW MEMORY *****

CODE SEGMENT TABLE POINTER	006170
EXTENDED CODE SEGMENT TABLE POINTER	007644
DATA SEGMENT TABLE POINTER	004530
PROCESS CONTROL BLOCK BASE	011230
CURRENT PCB POINTER	000000
INTERRUPT STACK BASE	012730
INTERRUPT STACK LIMIT	013726
INTERRUPT MASK	000000

4

***** CST TABLE *****

SEGMENT NUMBER	SEGMENT NAME	MODE	REFERENCE BIT	TRACE	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	R O M C I	S Y S C
1		PRIV	ON	OFF	3870	102874	0			
2		PRIV	ON	OFF	10774	040623	3			
3		PRIV	ON	OFF	3550	021423	3			
4		PRIV	ON	OFF	4234	171223	1			
5		PRIV	ON	OFF	5154	000023	1			
6		PRIV	ON	OFF	12170	156623	1			
7		PRIV	OFF	OFF	6220	110623	3			
10		PRIV	OFF	OFF	10224		1	16243		
11		PRIV	OFF	OFF	4220		1	16313		
12		PRIV	ON	OFF	2400	144423	2			
13		PRIV	OFF	OFF	7710		1	16364		
14		PRIV	OFF	OFF	3304		1	16431		
15		PRIV	ON	OFF	7244	130423	2			
16		PRIV	OFF	OFF	6404		1	16530		
17		PRIV	ON	OFF	4504	117023	1		I	
20		PRIV	OFF	OFF	6310		1	16620		
21		PRIV	OFF	OFF	5570	064423	2			
22		PRIV	OFF	OFF	3724	007423	3		R	
23		PRIV	OFF	OFF	7334		1	16737		
24		PRIV	OFF	OFF	4444	101423	2			
25		PRIV	OFF	OFF	5730		1	17031		
26		PRIV	OFF	OFF	5574		1	17064		
27		PRIV	OFF	OFF	10210		1	17121		
30		PRIV	ON	OFF	7444	166223	2			
31		PRIV	OFF	OFF	6130	160623	3			
32		PRIV	ON	OFF	7260	000023	3			
33		PRIV	ON	OFF	23240	032444	0			
34		PRIV	OFF	OFF	6514		1	17450		
35		PRIV	OFF	OFF	4230	140023	2			
36		PRIV	ON	OFF	5330	053423	3			
37		PRIV	OFF	OFF	2544	036023	3			
40		PRIV	OFF	OFF	10134	032623	2			
41		PRIV	OFF	OFF	4404		1	17650		
42		PRIV	OFF	OFF	3334		1	17700		
43		PRIV	OFF	OFF	11234		1	17720		
44		PRIV	ON	OFF	1764	166223	0			
45		PRIV	ON	OFF	4544	117223	3			
46		PRIV	OFF	OFF	6850		1	20031		
47		PRIV	OFF	OFF	6030		1	20067		
50		PRIV	OFF	OFF	3644	124023	3			
51		PRIV	ON	OFF	5114	170423	0			
52		PRIV	OFF	OFF	20550		1	20234		
53		PRIV	ON	OFF	7310	022623	1			
54		PRIV	ON	OFF	15660	053223	1			
55		PRIV	ON	OFF	6744	013623	1			
56		PRIV	OFF	OFF	12110	137623	1			
57		PRIV	OFF	OFF	3174		1	20644		
60		PRIV	OFF	OFF	5000		1	20663		

***** CST TABLE *****

SEGMENT NUMBER	SEGMENT NAME	MODE	REFERENCE BIT	TRACE	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK /LDEV	DISC ADDRESS	R I O M C I	S Y S C R S
61		PRIV	OFF	OFF	7200		1	20711		
62		USER	ON	OFF	7644	124023	1			
63		USER	ON	OFF	3330	106423	2			
64		USER	OFF	OFF	2410		1	21039		
65		PRIV	ON	OFF	14020	147423	0			
66		PRIV	OFF	OFF	13570		1	21134		
67		PRIV	OFF	OFF	11340	115223	2			
70		PRIV	ON	OFF	13254	134023	0			
71		PRIV	OFF	OFF	12000		1	21350		
72		PRIV	OFF	OFF	12314		1	21431		
73		PRIV	OFF	OFF	13554		1	21508		
74		PRIV	ON	OFF	23744	055704	0			
75		PRIV	ON	OFF	10360	025223	3			
76		PRIV	ON	OFF	1024	101650	0			
77		PRIV	ON	OFF	15014	071623	3			
100		PRIV	OFF	OFF	10030	106623	1			
101		PRIV	ON	OFF	10360	061023	3			
102		PRIV	OFF	OFF	4364		1	22233		
103		PRIV	OFF	OFF	4424		1	22258		
104		PRIV	OFF	OFF	6324		1	22302		
105		PRIV	OFF	OFF	11020		1	22337		
106		PRIV	OFF	OFF	7750		1	22406		
107		PRIV	OFF	OFF	7044		1	22450		
110		PRIV	OFF	OFF	3070		1	22507		
111		PRIV	OFF	OFF	5000		1	20174		
112		PRIV	OFF	OFF	6330		1	20403		
113		USER	OFF	OFF	2410		1	22526		
114		USER	OFF	OFF	5044		1	22544		
115		PRIV	OFF	OFF	10510		1	22612		
116		PRIV	OFF	OFF	7274		1	22724		
117		PRIV	OFF	OFF	7660		1	22766		
120		PRIV	OFF	OFF	7504		1	23031		
121		PRIV	OFF	OFF	12640		1	23076		
122		PRIV	OFF	OFF	10274		1	22657		
123		PRIV	OFF	OFF	4310		1	23155		
124		USER	OFF	OFF	1354		1	23202		
125		PRIV	OFF	OFF	10500		1	23212		
126		PRIV	OFF	OFF	2154		1	23260		
127		PRIV	OFF	OFF	4574		1	24174		
130		PRIV	OFF	OFF	11234		1	24223		
131		PRIV	OFF	OFF	7060		1	24326		
132		PRIV	OFF	OFF	6004		1	24451		
133		PRIV	OFF	OFF	1550		1	24506		
134		PRIV	OFF	OFF	5534		1	24274		
135		PRIV	OFF	OFF	12540		1	24371		
136		USER	OFF	OFF	6574		1	26167		
137		USER	OFF	OFF	7260	073423	1			
140		USER	OFF	OFF	6530		1	26314		

4

***** CST TABLE *****

SEGMENT NUMBER	SEGMENT NAME	MODE	REFERENCE BIT	TRACE	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK /LDEV	DISC ADDRESS	R I O M C I	S Y S T E M S
141		USER	OFF	OFF	5454		1	28351		
142		PRIV	OFF	OFF	7700		1	24522		
143		PRIV	OFF	OFF	10750		1	24564		S
144		PRIV	OFF	OFF	6110		1	24633		S
145		USER	OFF	OFF	574		1	24667		S
146		USER	OFF	OFF	1374		1	24674		S
147		PRIV	OFF	OFF	3470		1	24703		S
150		PRIV	OFF	OFF	8360		1	26510		
151		PRIV	OFF	OFF	8244		1	26545		
152		PRIV	OFF	OFF	7114		1	27355		S
153		USER	OFF	OFF	6330		1	27415		
154		USER	OFF	OFF	8444		1	435362		
155		PRIV	ON	OFF	2714	106584	0			S
156		PRIV	OFF	OFF	1620	130023	3			S
157		PRIV	ON	OFF	6050	005423	1			S
160		PRIV	OFF	OFF	2730		1	33551		S

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	D V	R C	I O	S I	M K	F D	W P	S S	S S	R E	W D	VM ALLOC
1	(CODE SEGMENT TABLE)	OFF	1400	006170	0													0
2	(DATA SEGMENT TABLE)	OFF	1440	004530	0													0
3	(PROCESS CONTROL BLOCK)	OFF	1400	011230	0													0
4	(CST EXTENSION)	OFF	1440	007570	0													0
5	(SYSTEM GLOBAL AREA)	OFF	640	001000	0													0
6	(FIXED LOW CORE)	ON	2000	000000	0													0
7	(INTERRUPT CONTROL STACK)	OFF	1100	012630	0													0
10	(SYSTEM BUFFERS)	ON	2020	021054	0													0
11	(UCOP REQUEST QUEUE)	OFF	104	130223	2													1
12	(PROCESS-PROCESS COMMUNICATION TABLE)	OFF	140	166023	0													1
13	(I/O QUEUE)	OFF	1030	013730	0													0
14	(TERMINAL BUFFERS)	OFF	1410	001640	0													0
15	(LOGICAL-PHYSICAL DEVICE TABLE)	ON	130	030120	0													0
16	(LOGICAL DEVICE AND CLASS TABLE)	ON	734	013623	3													1
17	(DRIVER LINKAGE TABLE)	OFF	40	000134	0													0
20	(I/O RESOURCE TABLES)	OFF	20	000174	0													0
21	(DISK FREE SPACE)	OFF	20000	136023	3													21
22	(LOADER SEGMENT TABLE)	OFF	2644	103023	1													14
23	(TIMER REQUEST LIST)	OFF	204	000444	0													0
24	(DIRECTORY)	ON	2000	017223	3													3
25	(DIRECTORY SPACE)	OFF	600		1	5104	D											1
26	(RIN TABLE)	ON	1304	175623	0													0
27	(SWAP TABLE)	OFF	2260	023074	0													0
30	(JOB PROCESS COUNT)	ON	20	000650	0													0
31	(JOB MASTER TABLE)	OFF	400	176423	2													14
32	(TAPE LABEL TABLE)	OFF	1750		1	4144	D											2
33	(LOG TABLE)	OFF	170		1	3146	D											0
34	(REPLY INFORMATION TABLE)	OFF	2000		1	3354	D											3
35	(VOLUME TABLE)	ON	34	032423	2													1
36	(BREAKPOINT TABLE)	OFF	674		1	4234	D											1
37	(LOG BUFFER 1)	OFF	400	127423	2													1
40	(LOG BUFFER 2)	OFF	400		1	4244	D											1
41	(LOG ID TABLE)	OFF	150		1	3144	D											0
42	(ASSOCIATION TABLE)	OFF	480	177223	2													1
43	(CST BLOCK)	OFF	44	000214	0													0
44	(JOB CUTOFF TABLE)	OFF	74	000670	0													0
45	(SYSTEM JIT)	OFF	100		1	3404	D											1
46	(SPECIAL REQUEST TABLE)	OFF	144	025354	0													0
47	(VIRTUAL DISK SPACE TABLE)	OFF	164	025730	0													0
51	(ARSBM TABLE)	OFF	44	000400	0													0
52	(ILT)	OFF	754	020100	0													0
53	(SIR TABLE)	OFF	170	030250	0													0
54	(FILE MULTI-ACCESS VECTOR)	OFF	200	147423	2													2
55	(INPUT DEVICE DIRECTORY)	ON	400	177223	0													40
56	(OUTPUT DEVICE DIRECTORY)	ON	400	133023	0													40
57	(WELCOME MESSAGE #1)	OFF	1750		1	4114	D											2

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	D V	R C	I O	S K	M D	F P	W I	S Y	S S	C S	R E	W D	VM ALLOC
80	(WELCOME MESSAGE #2)	OFF	174																
81	(CS SYSTEM SEGMENT)	OFF	1220	178023	2														2
82	(JOB-PROCESS CROSS REFERENCE)	OFF	60		1	3240	D								S			2	
83	(SYSTEM JDT)	OFF	34	132023	3										S			1	
84	(COMMAND INTERPRETER LOG-ON DST)	OFF	1000		1	3410	D								S			1	
85	(MOUNTED VOLUME TAB.)	OFF	520		1	4124	D								S			4	
88	(PRI. VOL. USER TABLE)	OFF	200		1	4170	D								S			1	
87	(AVAILABLE REGION LIST)	OFF	2004		1	4174	D								S			10	
70	(DISC REQUEST TABLE)	OFF	3120	026114	0										S			0	
71	(MSG HBR TABLE)	OFF	10	014780	0										S			0	
72	(PRIMARY MSG TABLE)	OFF	200	025520	0										S			0	
73	(MEASUREMENT INFO TABLE)	OFF	120	025530	0										S			0	
75		OFF	3244	000280	0										S			0	
76		OFF	3244	132223	3										S			0	
77		OFF	3244		1	3204	D	R		S					S			7	
100		OFF	3604		1	4250	D			S					S			7	
101		OFF	13144		1	4304	D			S					S			7	
102		OFF	2554		1	4374	D			S					S			18	
103		OFF	2310	163223	2					S					S			6	
104		OFF	2260		1	4454	D			S					S			6	
105		OFF	4764		1	4504	D			S					S			13	
106		OFF	5364	125223	0					S					S			43	
107		OFF	4720		1	4774	D			S					S			17	
110		OFF	100	147223	2					S					S			1	
111		OFF	204	173023	3					S					S			1	
112		ON	1324	052023	3					S					S			12	
113		OFF	1404	107023	3					S					S			2	
114		OFF	4324		1	5400	D			S					S			22	
115		ON	6774	000023	2					S					S			27	
116		OFF	104	135623	3					S					S			1	
117		OFF	64	177623	1					S					S			5	
120		OFF	460	108023	1					S					S			1	
121		OFF	7840	043223	1					S					S			10	
122		OFF	8574	072423	2					S					S			27	
123		OFF	5774	010023	2					S					S			27	
124		OFF	100	108223	2					S					S			1	
125		OFF	50	125023	0					S					S			5	
126		OFF	104	013423	3					S					S			5	
127		OFF	3574	167023	3					S					S			1	
130		OFF	104		1	6400	D			S					S			27	
131		OFF	50		1	6404	D			S					S			1	
132		OFF	100		1	6430	D			S					S			5	
133		OFF	104		1	5364	D			S					S			1	
134		OFF	130		1	6160	D			S					S			1	
135		OFF	100	133623	0					S					S			5	
136		OFF	21314	043023	2					S					S			1	
138		OFF	500		1	6204	D			S					S			100	

4

HP3000 III MEMORY DUMPC.00.00 OF SYS VER C UPDATE 00 FIX 01 DUMP TIME 6/26/81, 10:19AM
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PAGE 10

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ LDEV	DISC ADDRESS	D C V	R O I	I K	S D	M O I	W P	F S	S S	C R E W	VM ALLOC
137		OFF	404		1	6210	D									1
140		OFF	310	177223	1											1
141		ON	310	113223	2											1
142		OFF	310	158023	1											1
143		OFF	4324	158623	2											10
144		OFF	3304	027023	2											10
145		ON	1110	175623	1											2
148		ON	5774	111623	0											27
147		ON	104	033623	1											1
150		ON	50	113623	2											5
151		ON	1324	032223	1											12
152		ON	1110	173423	3											2
153		ON	500	114423	2											1
154		ON	500	007223	2											1
155		ON	404	126623	2											1

***** PROCESS CONTROL BLOCK (2ND HALF) *****

----- SCHEDULED SCHEDULING INFORMATION -----														---RESOURCES---				LIFE/DEATH	----- MISCELLANEOUS -----				
PIN	NQPIN	POPIN	DISP	LC	DE	IC	HU	IS	IP	HS	CH	PREV	NEXT	LD	BMS	PPC	PCST	PBXPTR	SLLPTR	BPT	SYSTEM		
---	---	---	Q	Q	Q	Q	Q	Q	Q	Q	TR	IMP	IMP	EA	---	---	---	---	---	LNK	NAME		
1			L				81							L	SNF	NUL			10	22233	PROGEN		
2			L				82							L	SNF	NUL					22101	SYSIO	
3			L				175							L	SNF	NUL					22113	IOMESS	
4			L				82			S				L	SNF	NUL			1	22125	LOG		
5			L				175				C			L	SNF	NUL			2	22137	MEMLOG		
6			L				175							L	SNF	NUL			3	22151			
7			L				175							L	SNF	NUL	CTX	4.001	4	22183	UCOP		
10			L				12			S				L	SNF	NUL			5	22175	PFAIL		
11			L				175							L	SNF	NUL			6	22207	DEVREC		
12			L				218							L	SNF	NUL			7	22221	LOAD		
14			L				230							L	SNF	NUL					22707		
23			C			I	230		T	L	C			L	SNF	NUL					23375		
30			C			I	230		T	L	C			L	SNF	NUL					24114		
35			C			I	230		T	L	C			L	SNF	NUL					23034		
38			C			I	230		T	L	C			L	SNF	NUL					22858		
37			C			I	230				C			L	SNF	NUL			11	23250			
40			C			I	230				H			L	SNF	NUL			12	23484			
41			C			I	230							L	SNF	NUL			13	23611			
42			D				314		S					L	SNF	NUL					24203		

80 ENTRYS
 34 UNASSIGNED ENTRYS
 24 ASSIGNED ENTRYS

4

***** PROCESS SEGMENT LOCALITY LISTS *****

PIN: 1 FIRST SLL: 23003 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 2 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
23003	DST 55	22240	0			
22240	DST 108	0	23003			STK

PIN: 2 FIRST SLL: 23200 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 3 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
23200	CST 41	24025	0			
24025	CST 37	22108	23200			
22108	DST 75	0	24025			STK

PIN: 3 FIRST SLL: 22120 CURR SLL: 0 MEM REQ SLL: 22120 SLL COUNT: 1 IOCNT: 0 SWREQ

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
22120	DST 78	0	0			

STK

PIN: 4 FIRST SLL: 22555 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 4 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
22555	DST 112	22550	0			
22550	DST 21	22543	22555			
22543	CTX 1.001	22132	22550			
22132	DST 77	0	22543			STK

PIN: 5 FIRST SLL: 22144 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 1 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
22144	DST 100	0	0			STK

PIN: 6 FIRST SLL: 22606 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 2 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
22606	CTX 3.001	22156	0			STK
22156	DST 101	0	22606			

PIN: 7 FIRST SLL: 23774 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 11 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
23774	DST 31	24006	0			
24006	CTX 4.001	24013	23774			
24013	DST 147	24133	24006			
24133	DST 146	24140	24013			
24140	DST 55	24145	24133			
24145	DST 58	24152	24140			
24152	DST 151	24157	24145			
24157	DST 11	22170	24152			
22170	DST 102	0	24157			STK

PIN: 10 FIRST SLL: 22202 CURR SLL: 0 MEM REQ SLL: 22202 SLL COUNT: 1 IOCNT: 0 SWREQ

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
22202	DST 103	0	0			STK

4

PIN: 11 FIRST SLL: 23661 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 5 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
23661	CST 35	23666	0			
23666	DST 112	23705	23661			
23705	CST 70	22632	23666			
22632	CST 63	22214	23705			
22214	DST 104	0	22632			

STK

PIN: 12 FIRST SLL: 22303 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 4 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
22303	DST 120	24347	0			
24347	DST 117	24342	22303			
24342	CTX 7.001	22226	24347			
22226	DST 105	0	24342			

STK

PIN: 14 FIRST SLL: 23072 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 4 IOCNT: 0 HASMEM

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
23072	DST 42	22757	0			
22757	DST 112	22740	23072			
22740	CST 54	22714	22757			
22714	DST 113	0	22740			

STK

PIN: 23 FIRST SLL: 24222 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 11 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
24222	CST 77	24227	0			
24227	CST 15	24253	24222			
24253	CST 3	23762	24227			
23762	CST 54	23767	24253			
23767	DST 31	24164	23762			
24164	DST 37	24171	23767			
24171	DST 145	23060	24164			
23060	CST 75	23402	24171			
23402	DST 114	0	23060			

STK

4

PIN: 30 FIRST SLL: 23743 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 2 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLIMI	DISCIO
23743	CST 77	24121	0							
24121	DST 126	0	23743							

PIN: 35 FIRST SLL: 23560 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 3 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLIMI	DISCIO
23560	CST 24	23534	0							
23534	DST 143	23027	23560							
23027	DST 121	0	23534							

PIN: 36 FIRST SLL: 23356 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 10 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLIMI	DISCIO
23356	CST 22	23325	0							
23325	CST 40	23255	23356							
23255	CST 3	23267	23325							
23267	CST 77	23274	23255							
23274	DST 135	23301	23267							
23301	DST 136	23046	23274							
23046	CST 17	22651	23301							
22651	DST 122	0	23046							

PIN: 37 FIRST SLL: 23433 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 6 IOCNT: 0 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLIMI	DISCIO
23433	CST 77	23440	0							
23440	CST 3	23445	23433							
23445	DST 142	23452	23440							
23452	DST 141	23457	23445							
23457	DST 140	23332	23452							
23332	DST 135	0	23457							

4

PIN: 40 FIRST SLL: 23830 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 5 IOCNT: 0 HASMEM

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLLIMI	DISCIO
23830	DST 144	23407	0							
23407	CTX 12.001	23414	23830							
23414	DST 56	23421	23407							
23421	DST 55	23428	23414							
23428	DST 143	0	23421							

STK

PIN: 41 FIRST SLL: 23585 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 4 IOCNT: 0 HASMEM

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLLIMI	DISCIO
23585	CTX 13.001	23572	0							
23572	DST 58	23577	23585							
23577	DST 55	23804	23572							
23804	DST 144	0	23577							

STK

PIN: 42 FIRST SLL: 22245 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 4 IOCNT: 1 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLLIMI	DISCIO
22245	CST 17	22341	0							
22341	DST 155	23217	22245						SLLIMI	
23217	DST 154	24020	22341							
24020	DST 148	0	23217							

STK

4

HP3000 III MEMORY DUMPC.00.00 OF SYS VER C UPDATE 00 FIX 01 DUMP TIME 6/26/81, 10:19AM
(C) HEWLETT-PACKARD CO. 1980

PAGE 30

***** D R T T A B L E *****

DEVICE NUMBER	ABS ADR	SIO	PGM LABEL	DBI
3	14:	000000	113033	000444 000000
4	20:	020257	132033	020100 000000
5	24:	000000	105401	001000 000000
6	30:	000037	014000	000000 040000
7	34:	000004	060000	150000 034000
8	40:	020556	014000	000000 040000
9	44:	000004	060000	034000 150001
10	50:	177777	000000	001000 012730
11	54:	012733	000000	013726 100001
12	60:	000000	102674	105715 106563
13	64:	010000	000021	040001 010000
14	70:	000004	132033	020725 000000
15	74:	000000	105401	001000 000000
16	100:	000000	105401	001000 000000
17	104:	000000	105401	001000 000000
18	110:	000000	105401	001000 000000
19	114:	000000	105401	001000 000000
20	120:	000000	105401	001000 000000
21	124:	000000	105401	001000 000000
22	130:	000000	105401	001000 000000

4

HP3000 III MEMORY DUMPC.00.00 OF SYS VER C UPDATE 00 FIX 01 DUMP TIME 6/26/81, 10:19AM
(C) HEWLETT-PACKARD CO. 1980

PAGE 32

DRT NO	SHARED SEL CHAN	CHANNEL QUEUE	CPVA	ILT SYS DB REL ADDR	WAIT PROG STATUS	SIOP SYS DB REL ADDR	SIOP SIZE	Q#	DITPO	UNIT EXTRCT INSTRUCTION	ABS ADDRESS	SIOP PROGRAM
											020261	034000 020000 END/INT
											020263	167600 021065 WRITE
											020265	167600 021065 WRITE
											020267	087600 021085 WRITE
											020271	004000 020237 JMP (COND)
											020273	034000 020000 END/INT
											020275	000000 000000 JUMP
											020277	000000 000000 JUMP
											020301	000000 000000 JUMP
											020303	000000 000000 JUMP
											020305	000000 000000 JUMP
											020307	000000 000000 JUMP
											020311	000000 000000 JUMP
											020313	040001 006400 CONTROL
											020315	077771 000000 READ
											020317	040001 000000 CONTROL
											020321	077776 000000 READ
											020323	040001 012000 CONTROL
											020325	077776 000000 READ
											020327	050000 177777 SENSE
											020331	040000 000000 CONTROL
											020333	034000 177777 END/INT
											020335	040000 000000 CONTROL
											020337	030000 177777 END NO INT
											020341	040000 012400 CONTROL
											020343	030000 177777 END NO INT
											020345	000000 000000 JUMP
											020347	000000 000000 JUMP
											020351	000000 000000 JUMP
											020353	040000 000000 CONTROL
											020355	087776 000010 WRITE
											020357	050000 177777 SENSE
											020361	040000 000000 CONTROL
											020363	087776 000010 WRITE
											020365	050000 177777 SENSE
											020367	040000 000000 CONTROL
											020371	087776 000010 WRITE
											020373	050000 177777 SENSE
											020375	040001 001407 CONTROL
											020377	077776 000010 READ
											020401	040001 001408 CONTROL
											020403	077776 000010 READ
											020405	040001 001405 CONTROL
											020407	077776 000010 READ
											020411	040001 001404 CONTROL
											020413	077776 000010 READ
											020415	040001 001403 CONTROL
											020417	077776 000010 READ
											020421	040001 001402 CONTROL
											020423	077776 000010 READ

4

DRT NO	SHARED SEL CHAN	CHANNEL QUEUE	CPVA	ILT SYS DB REL ADDR	WAIT PROG STATUS	SIOP SYS DB REL ADDR	SIOP SIZE	Q#	DITPO	UNIT EXTRACT INSTRUCTION	ABS ADDRESS	SIOP PROGRAM
											020425	040001 001401 CONTROL
											020427	077778 000010 READ
											020431	040001 001400 CONTROL
											020433	077778 000010 READ
											020435	040000 000000 CONTROL
											020437	014000 000000 SET BANK
											020441	040000 000000 CONTROL
											020443	087778 000000 WRITE
											020445	014000 000000 SET BANK
											020447	040000 000000 CONTROL
											020451	000000 000000 JUMP
											020453	000000 000000 JUMP
											020455	000000 000000 JUMP
											020457	000000 000000 JUMP
											020461	031004 031003 END NO INT
											020463	031003 000000 END NO INT
											020465	000000 000001 JUMP
											020467	031005 031006 END NO INT
											020471	021405 047604 INTERRUPT
											020473	021410 047401 INTERRUPT
											020475	021415 047401 INTERRUPT
											020477	037437 025001 END/INT
											020501	021010 003400 INTERRUPT
											020503	021050 022437 INTERRUPT
											020505	000600 120404 JUMP
											020507	041404 022007 CONTROL
											020511	141430 041404 CONTROL
											020513	081403 141411 WRITE
											020515	041404 022418 CONTROL
											020517	004300 047401 JMP (COND)
											020521	022000 141303 INTERRUPT
											020523	131404 017400 END NO INT
											020525	131405 177402 END NO INT
											020527	040011 002000 CONTROL
											020531	131406 057402 END NO INT
											020533	120405 041408 INTERRUPT
											020535	023004 051408 INTERRUPT
											020537	140431 001000 CONTROL
											020541	040401 021013 CONTROL
											020543	010201 004200 RTN RES
											020545	177402 002000 READ
											020547	023002 021051 INTERRUPT
											020551	023004 041701 INTERRUPT
											020553	003243 057402 JUMP
											020555	023002 033008 INTERRUPT
											020557	004500 057402 JMP (COND)
											020561	023002 033008 INTERRUPT
											020563	057402 041407 SENSE
14	NO		0 000000	17725		017744	106	0	003510	000000	020744	040000 040000 CONTROL

4

DRT NO	SHARED SEL	CHANNEL CHAN	CPVA	ILT SYS DB REL ADDR	WAIT PROG STATUS	SIOP SYS DB REL ADDR	SIOP SIZE	Q#	DITPO	UNIT EXTRCT INSTRUCTION	ABS ADDRESS	SIO PROGRAM
			000000								020746	040000 000002 CONTROL
			000000								020750	014000 000000 SET BANK
			000000								020752	000000 000000 JUMP
											020754	040000 000203 CONTROL
											020756	067777 000000 WRITE
											020760	000000 000000 JUMP
											020762	040000 000007 CONTROL
											020764	014000 000000 SET BANK
											020766	067777 000000 WRITE
											020770	034000 177777 END/INT
											020772	040000 000043 CONTROL
											020774	067777 004524 WRITE
											020776	034000 177777 END/INT
											021000	014000 000000 SET BANK
											021002	000000 000000 JUMP
											021004	040000 000003 CONTROL
											021006	067777 000000 WRITE
											021010	000000 000000 JUMP
											021012	040000 000007 CONTROL
											021014	067777 000000 WRITE
											021016	000000 000000 JUMP
											021020	014000 000000 SET BANK
											021022	040000 000003 CONTROL
											021024	067777 004522 WRITE
											021026	014000 000000 SET BANK
											021030	034000 177777 END/INT
											021032	040000 000043 CONTROL
											021034	067777 004523 WRITE
											021036	034000 177777 END/INT
											021040	040000 000503 CONTROL
											021042	067777 000000 WRITE
											021044	040000 000703 CONTROL
											021046	067777 000000 WRITE
											021050	034000 177777 END/INT

4

***** LOGICAL PHYSICAL - DEVICE TABLE *****

LOGICAL DEV NO	SYSDB REL DIT POINTER	DEVICE SUBTYPE	EOF CONDITION	BREAK	CNTRL Y	DUPLIC	INTERACT	ACCEPT JOBS/SESS	ACCEPT DATA	DEVICE RECOGNIT STATE	LOGOFF
1	002250	8	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
2	140330	2	NO EOF			NO	NO	NO	NO	OWNED	NO
3	100324	0	NO EOF	DETECTED		NO	NO	YES	NO	OWNED	NO
6	003510	2	NO EOF			NO	NO	NO	YES	OWNED	NO
7	002310	0	NO EOF			NO	NO	NO	NO	OWNED	NO
8	002324	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
9	002340	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
10	002354	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
20	002370	0	NO EOF	DETECTED		NO	NO	YES	NO	NOT OWNED	NO
21	002435	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
22	002502	0	NO EOF			YES	YES	YES	YES	OWNED	NO
23	002547	0	NO EOF	DETECTED		YES	YES	YES	YES	NOT OWNED	NO
24	002614	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
25	002661	0	NO EOF			YES	YES	YES	YES	OWNED	NO
26	002726	0	NO EOF	DETECTED		YES	YES	YES	YES	NOT OWNED	NO
27	002773	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
28	003040	0	NO EOF			YES	YES	YES	YES	OWNED	NO
29	003105	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
30	003152	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
31	003217	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
32	003264	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
33	003331	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
34	003378	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
35	003443	0	NO EOF	DETECTED		YES	YES	YES	YES	NOT OWNED	NO
						YES	YES	YES	YES	OWNED	NO

4

***** DEVICE INFORMATION TABLE *****

DRT NO 4 (SYSTEM DISK)

CONTROLLER ERROR STATUS = 000000

UNIT 0 LOGICAL DEV 1 FLAGS = 040413 NEXT DIT = 000000 DLTP = 177134 ILTP = 017100 IOQP = 014240

2250 040413 000000 014240 000001 177134 017100 100000 000000
2260 000000 000000 000000 016572 000015 000072 117023 004504
2270 004504 000000 000000 000000 000000 000000 000000 000000
2300 000000 000000 000000 000000 000000 000000 000000 000000

UNIT 0 LOGICAL DEV 1 FLAGS = 040413 NEXT DIT = 000000 DLTP = 177134 ILTP = 017100 IOQP = 014240

2250 040413 000000 014240 000001 177134 017100 100000 000000
2260 000000 000000 000000 016572 000015 000072 117023 004504
2270 004504 000000 000000 000000 000000 000000 000000 000000
2300 000000 000000 000000 000000 000000 000000 000000 000000

UNIT 3 LOGICAL DEV 2 FLAGS = 141415 NEXT DIT = 045003 DLTP = 055003 ILTP = 131604 IOQP = 051403

100000 141415 045003 051403 041402 055003 131604 041403 055001
100010 040004 055000 140030 001133 100000 045004 051401 041402
100020 055004 041401 000657 141507 041402 055003 131604 000600
100030 055001 140011 041605 041401 006043 041402 055001 131604

UNIT 3 LOGICAL DEV 2 FLAGS = 141415 NEXT DIT = 045003 DLTP = 055003 ILTP = 131604 IOQP = 051403

100000 141415 045003 051403 041402 055003 131604 041403 055001
100010 040004 055000 140030 001133 100000 045004 051401 041402
100020 055004 041401 000657 141507 041402 055003 131604 000600
100030 055001 140011 041605 041401 006043 041402 055001 131604

DRT NO 14 (LINE PRINTER)

UNIT 0 LOGICAL DEV 6 FLAGS = 000000 NEXT DIT = 000000 DLTP = 177164 ILTP = 017725 IOQP = 000000

3510 000000 000000 000000 000006 177164 017725 000000 000000
3520 000000 000000 000000 020000 000102 000000 000000

4

***** DISC REQUEST TABLE ***** (SUMMARY INFO)

TOTAL ENTRIES IN TABLE: 144
 ENTRY SIZE: 20
 ENTRIES IN PRIMARY AREA: 125
 IMPEDED PROCESS PCB: 220
 TABLE INDEX OF FIRST AVAIL ENTRY: 420
 TABLE INDEX OF LAST AVAIL ENTRY: 14
 MAXIMUM NUMBER OF ENTRIES IN USE: 2
 CURRENT NUMBER OF ENTRIES IN USE: 20621
 OVERFLOWS:
 TOTAL REQUESTS:
 SYSBASE INDEX OF DISABLED Q HEAD:
 SYSBASE INDEX OF DISABLED Q TAIL:

***** DISC REQUEST TABLE ***** (ACTIVE LISTS)

LDEV 1

STATUS: 0.XX -> PENDING
 1.XX -> SUCCESSFUL
 2.XX -> END OF FILE
 3.XX -> UNUSUAL CONDITION
 4.XX -> IRRECOVERABLE ERROR

TABLE INDEX	LDEV	UNIT	PCB	S		DST/BANK	OFFSET/ADDRESS	FUNC	XFER CNT	PARM1	PARM2	MISC	SEG IDENT	SEG DSP	URCL	- F L A G S -			STATUS
				S	S											MAIN	AUX		
000260*	1	0	42			1	117023	READ	4504	000000	018572	000000	CST	17	0	315	040110	001310	0.1

4

HP3000 III MEMORY DUMPC.00.00 OF SYS VER C UPDATE 00 FIX 01 DUMP TIME 6/26/81, 10:19AM
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PAGE 43

***** SYSTEM BUFFER ANALYSIS *****

ELEMENTS IN TABLE	8	MAXIMUM NUMBER OF ELEMENTS IN USE	1
ELEMENTS IN PRIMARY AREA	0	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	129	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	1015	TOTAL REQUEST	24
INDEX TO LAST FREE ELEMENT	014		

4

***** TERMINAL BUFFERS *****

ELEMENTS IN TABLE	48	MAXIMUM NUMBER OF ELEMENTS IN USE	9
ELEMENTS IN PRIMARY AREA	42	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	18	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	230	TOTAL REQUEST	1111
INDEX TO LAST FREE ELEMENT	210		

FREE LIST

TABLE INDEX	LINK	TERMINAL BUFFER
210	0	@10..SESSIONS.. 0. SUSP ..J
170	210	,FIELD.SUPPORT,HP32002 ON LDEV
150	170	10:19/8J1/34/LOGON FOR: FILEIO
130	150	: ORTJOB @S5...DAVIS....3 JOBS
110	130	..DOglafap 28 28 F
70	110	@J1 . MANAGER.SYS..@S5
50	70	STREAM JON87.PUB.SUPPORT
30	50	: DO.....34A MANAGER.SYS..@S4
10	30	STREAMS10NETT-PACKARD COMPANY
1370	10	: ORTJOB @S5..32100A.08.01 [4W
1350	1370	SEE OPERATOR. (CIERR 82)..LIS
1330	1350	STREAM FACILITY NOT ENABLED:
1310	1330	STREAM JON87.PUB.SUPPORT40 020
1270	1310	: SONU . ....P.SUPPORT..
1250	1270	= 18... SONS
1230	1250	OBFENCE= 0.; JLIMIT= 2; SLIMIT
1210	1230	NCL 4 SESSIONS.. 0 SUSP ..J
1170	1210	INCL 0 DEFERRED.. 4 EXEC; I
1150	1170	S:... 0 INTRO.. . 0 WAIT;
1110	1150	10:14A FIELD.SUPPORT....4 JOB
1130	1110	.EXEC 23 23 FRI

4

HP3000 III MEMORY DUMPC.00.00 OF SYS VER C UPDATE 00 FIX 01 DUMP TIME 6/26/81, 10:19AM
(C) HEWLETT-PACKARD CO. 1980

BANK 0 PAGE 53

002504(000644) :	044105	042040	043122	047515	000670	035040	042105	053040	031060	020005	052117	020114	002504:HED FROM... DEV 20 TO L
002520(000660) :	042105	053040	031465	020056	006412	020106	052516	041405	000710	051510	047527	045117	002520:DEV 35 FUNC... SHOWJO
002534(000674) :	041102	005117	047040	046104	042526	020043	031060	006412	040515	042440	020103	047504	002534:BB ON LDEV #20...AME COD
002550(000710) :	000730	006412	045117	041116	052515	020040	051524	040524	042440	044520	051111	020112	002550:...JOBNUM STATE IPRI J
002564(000724) :	044516	020040	045114	044523	000730	052040	020040	020111	047124	051117	042125	041505	002564:IN JLIS...T INTRODUCE
002600(000740) :	042040	020112	047502	020116	040515	042415	005012	021523	000770	031440	020040	020040	002600:D JOB NAME...#S...3
002614(000754) :	042530	042503	020040	020040	020040	020040	031465	002440	020063	032440	020040	020040	002614:EXEC...35...35
002630(000770) :	001010	020040	043122	044440	020040	035063	032101	020040	048501	047101	043505	051056	002630:...FRI 9:34A MANAGER.
002644(001004) :	051531	051415	005043	051464	001030	020040	020040	020105	054105	041440	020040	020040	002644:SYS...#S4... EXEC
002660(001020) :	020040	020062	030040	020062	030040	020040	020040	020040	001050	043122	044440	020071	002660:...20 20 (FRI 9
002674(001034) :	035063	033501	002440	020115	040516	040507	042522	027123	054523	006412	021523	032440	002674:...37A MANAGER.SYS...#S5
002710(001050) :	001070	020040	020040	042530	042503	020040	020040	020040	020040	031066	020040	031066	002710:...8 EXEC...26 26
002724(001064) :	020040	020040	020040	020106	001130	051111	020061	030072	030463	040440	020112	047516	002724:...F XRI 10:13A JON
002740(001100) :	027104	040526	044523	006412	021523	033040	020040	020040	001150	030460	035061	032101	002740:DAVIS...#S6...#10:14A
002754(001114) :	020040	043111	042514	042058	051525	050120	047522	052015	005015	005084	020112	047502	002754:FIELD SUPPORT...#4 JOB
002770(001130) :	001110	002505	054105	041440	020040	020040	020040	020062	031440	020062	031440	020040	002770:..H EXEC...23 23
003004(001144) :	020040	020040	043122	044440	001170	051472	006412	020040	020040	030040	044516	052122	003004:...FRI...#S:...0 INTR
003020(001160) :	047415	005040	020040	002440	030040	053501	044524	035440	001210	044516	041514	020060	003020:O...0 WAIT;...INCL 0
003034(001174) :	020104	042506	042522	051105	042015	005040	020040	020064	020105	054105	041473	020111	003034:DEFERRED...#4 EXEC; I
003050(001210) :	001230	047103	046040	032040	051505	051523	044517	047123	006412	020040	020040	030040	003050:...NCL 4 SESSIONS...0
003064(001224) :	051525	051520	020015	005112	001250	047502	043105	047103	042475	020080	002473	020112	003064:SUSP...J...OBFENCE= 0...J
003100(001240) :	046111	046511	052075	020062	035440	051514	044515	044524	001270	036440	030466	006412	003100:LIMIT= 2; SLIMIT...= 16..
003114(001254) :	005040	020067	020040	003440	020007	006412	020040	051517	047123	020040	020040	020040	003114:...SONS
003130(001270) :	001310	035040	051517	047125	020040	020040	002440	020040	020015	005015	005120	027123	003130:...SONU...P S
003144(001304) :	052520	050117	051124	006412	001330	051524	051105	040515	020112	047516	034467	027120	003144:UPPORT...STREAM JON97 P
003160(001320) :	052502	027123	052520	050117	051124	032060	020060	031060	001350	051524	051105	040515	003160:UB SUPPORT40 020...STREAM
003174(001334) :	020106	040503	044514	044524	054440	047117	052040	042516	040502	046105	042072	020040	003174:FACILITY NOT ENABLED;
003210(001350) :	001370	051505	042440	047520	042522	040524	047522	027040	020050	041511	042522	051040	003210:SEE OPERATOR... (CIERR
003224(001364) :	034062	024415	005114	044523	000010	035040	047522	052112	047502	020043	051465	006412	003224:(82) LIS...: ORTJOB #S5..
003240(001400) :	031462	030460	030101	027060	034056	030061	020133	032127					003240:32100A.08.01 (4W

\$\$\$\$\$\$\$\$ DEVICE INFORMATION TABLE (DIT) \$\$\$\$\$\$\$\$

003250(001410) :	040413	000000	014240	000001	177134	017100	100000	000000	000000	000000	000000	016572	003250:A.....\@.....z
003264(001424) :	000015	000072	117023	004504	004504	000000	000000	000000	000000	000000	000000	000000	003264:.....D.D.....
003300(001440) :	000000	000000	000000	000000	000000	000000	000000	000000	002000	000000	000000	000007	003300:.....
003314(001454) :	177144	017565	100700	000000	000000	000001	000000	000000	002000	000000	000000	000410	003314:du.....
003330(001470) :	177144	017565	000000	000000	000000	000000	000000	000000	002000	000000	000000	001011	003330:du.....
003344(001504) :	177144	017565	000000	000000	000000	000000	000000	000000	002000	000000	000000	001412	003344:du.....
003360(001520) :	177144	017565	000000	000000	000000	000000	000000	000000	140602	000000	013042	000024	003360:du.....
003374(001534) :	177154	017657	000000	005224	000400	010121	000662	000415	000000	001000	000000	000000	003374:l.....q.....
003410(001550) :	000000	000021	177777	000000	001510	177777	000000	012000	000000	000000	000000	000000	003410:.....H.....
003424(001564) :	000000	000101	000000	000000	000000	040000	000000	000000	000000	102400	000000	000000	003424:..A...@.....
003440(001600) :	000425	177154	017657	000000	001220	000000	014000	001602	000000	000000	000000	000000	003440:..l.....
003454(001614) :	000000	000000	000000	000000	000000	000000	000000	000000	012000	000000	000000	000000	003454:.....
003470(001630) :	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	102400	000000	003470:.....
003504(001644) :	000000	001026	177154	017657	000000	001220	000000	014000	002602	000000	000000	000000	003504:..i.....
003520(001660) :	000000	000000	000000	000000	000000	000000	000000	000000	000000	012000	000000	000000	003520:.....
003534(001674) :	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	140402	003534:.....
003550(001710) :	000000	013452	001427	177154	017657	000000	005224	000410	010121	003702	000415	000000	003550:..*...i.....q.....
003564(001724) :	021000	000000	000000	000000	000000	000000	000000	000000	000000	000000	012000	000000	003564:..@.....
003600(001740) :	000000	000000	000000	000000	000117	000000	000000	000000	040000	000000	000000	000000	003600:.....o.....@.....

003614(001754):	102400	000000	000000	002030	177154	017657	000000	001220	000000	014000	004602	000000	003614:	.....	i	.....
003630(001770):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	012000	003630:	.....		.....
003644(002004):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	003644:	.....		.....
003660(002020):	000000	102400	000000	000000	000000	002431	177154	017657	000000	001220	000000	014000	003660:	.....	i	.....
003674(002034):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	003674:	.....		.....
003710(002050):	012000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	003710:	.....		.....
003724(002064):	000000	000000	140600	000000	000000	003032	177154	017657	000000	005220	000400	010121	003724:	.....	i	.....
003740(002100):	006602	000000	000000	001000	000000	000000	000000	000000	000000	000000	001030	002066	003740:	.....		.....
003754(002114):	000000	012000	000000	000000	000000	000000	000000	000120	000000	000000	000000	040000	003754:	.....	P	.....
003770(002130):	000000	000000	000000	102400	000000	000000	003433	177154	017657	000000	001220	000000	003770:	.....	i	.....
004004(002144):	014000	007602	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	004004:	.....		.....
004020(002160):	000000	000000	012000	000000	000000	000000	000000	000000	000000	000000	000000	000000	004020:	.....		.....
004034(002174):	000000	000000	000000	000000	102400	000000	000000	004034	177154	017657	000000	001220	004034:	.....	i	.....
004050(002210):	000000	014000	010602	000000	000000	000000	000000	000000	000000	000000	000000	000000	004050:	.....		.....
004064(002224):	000000	000000	000000	012000	000000	000000	000000	000000	000000	000000	000000	000000	004064:	.....		.....
004100(002240):	000000	000000	000000	000000	000000	102400	000000	000000	004435	177154	017657	000000	004100:	.....	i	.....
004114(002254):	001220	000000	014000	011602	000000	000000	000000	000000	000000	000000	000000	000000	004114:	.....		.....
004130(002270):	000000	000000	000000	000000	012000	000000	000000	000000	000000	000000	000000	000000	004130:	.....		.....
004144(002304):	000000	000000	000000	000000	000000	102400	000000	000000	000000	005036	177154	017657	004144:	.....	i	.....
004160(002320):	000000	001220	000000	014000	012602	000000	000000	000000	000000	000000	000000	000000	004160:	.....		.....
004174(002334):	000000	000000	000000	000000	000000	012000	000000	000000	000000	000000	000000	000000	004174:	.....		.....
004210(002350):	000000	000000	000000	000000	000000	000000	000000	102400	000000	000000	005437	177154	004210:	.....	i	.....
004224(002364):	017657	000000	001220	000000	014000	013602	000000	000000	000000	000000	000000	000000	004224:	.....		.....
004240(002400):	000000	000000	000000	000000	000000	000000	012000	000000	000000	000000	000000	000000	004240:	.....		.....
004254(002414):	000000	000000	000000	000000	000000	000000	000000	000000	102400	000000	000000	006040	004254:	.....		.....
004270(002430):	177154	017657	000000	001220	000000	014000	014602	000000	000000	000000	000000	000000	004270:	.....	i	.....
004304(002444):	000000	000000	000000	000000	000000	000000	000000	012000	000000	000000	000000	000000	004304:	.....		.....
004320(002460):	000000	000000	000000	000000	000000	000000	000000	000000	000000	102400	000000	000000	004320:	.....		.....
004334(002474):	006441	177154	017657	000000	001220	000000	014000	015602	000000	000000	000000	000000	004334:	.....	i	.....
004350(002510):	000000	000000	000000	000000	000000	000000	000000	000000	012000	000000	000000	000000	004350:	.....		.....
004364(002524):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	102400	000000	004364:	.....		.....
004400(002540):	000000	007042	177154	017657	000000	001220	000000	014000	016602	000000	000000	000000	004400:	.....	i	.....
004414(002554):	000000	000000	000000	000000	000000	000000	000000	000000	000000	012000	000000	000000	004414:	.....		.....
004430(002570):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	140602	004430:	.....		.....
004444(002604):	000000	013383	007443	177154	017657	000000	005224	000400	010121	017702	000415	000000	004444:	.....	i	.....
004460(002620):	021000	000000	000000	000000	000000	177777	000000	001050	177777	000000	012000	000000	004460:	.....		.....
004474(002634):	000000	000000	000000	000000	000001	000000	000000	000000	040000	000000	000000	000000	004474:	.....	e	.....
004510(002650):	000000	000000	000000	000008	177164	017725	000000	000000	000000	000000	000000	020000	004510:	.....	t	.....
004524(002664):	000102	000000	000000	000000									004524:	.....	B	.....

\$\$\$\$\$ DST 2 (DATA SEGMENT TABLE)\$\$\$\$\$

004530:	000307	000004	000132	000670	000300	001400	000000	006170	004540:	000310	001400	000000	004530	000300	001400	000000	011230
004550:	000310	001400	000000	007570	000150	001400	000000	001000	004560:	020400	001400	000000	000000	000220	001400	000000	012630
004570:	020400	001400	000000	021054	000021	001001	000002	130223	004600:	000030	001001	000000	166023	000206	001400	000000	013730
004610:	000302	001400	000000	001640	020026	001400	000000	030120	004620:	020167	001001	000003	013623	000010	001400	000000	000134
004630:	000004	001400	000000	000174	004000	001021	000003	136023	004640:	000551	001014	000001	103023	000041	001400	000000	000444
004650:	020400	001003	000003	017223	100140	010001	000400	005104	004660:	020261	000000	000000	175623	000454	001400	000000	023074
004670:	020004	001400	000000	000650	000100	001014	000002	176423	004700:	100372	101002	000400	004144	100036	101000	000400	003146
004710:	100400	101003	000400	003354	020007	001001	000002	032423	004720:	100157	101001	000400	004234	000100	001001	000002	127423

4

012430:	100000	001220	001180	000000	000000	000000	000000	000000	012440:	000000	000000	000000	000000	000000	000000	000000	177777
012450:	100000	001240	001200	000000	000000	000000	000000	000000	012480:	000000	000000	000000	000000	000000	000000	000000	177777
012470:	100000	001260	001220	000000	000000	000000	000000	000000	012500:	000000	000000	000000	000000	000000	000000	000000	177777
012510:	100000	001300	001240	000000	000000	000000	000000	000000	012520:	000000	000000	000000	000000	000000	000000	000000	177777
012530:	100000	001320	001230	000000	000000	000000	000000	000000	012540:	000000	000000	000000	000000	000000	000000	000000	177777
012550:	100000	001340	001300	000000	000000	000000	000000	000000	012560:	000000	000000	000000	000000	000000	000000	000000	177777
012570:	100000	001360	001320	000000	000000	000000	000000	000000	012600:	000000	000000	000000	000000	000000	000000	000000	177777
012610:	100000	000260	001340	000000	000000	000000	000000	000000	012620:	000000	000000	000000	000000	000000	000000	000000	177777

\$\$\$\$\$ DST 7 (INTERRUPT CONTROL STACK) \$\$\$\$\$

012630:	000000	000000	000000	000000	000000	000000	000000	012640:	000000	000000	000000	000000	000000	000000	000000	000000	000042
012650:	000001	000000	000000	000000	001750	001750	000143	000144	012680:	000234	000454	000000	000380	000312	000230	000375	000356
012670:	000310	000000	000000	000000	000000	000000	000000	000000	012700:	000000	000000	000000	000000	000000	000000	000000	000000
012710:	000146	100078	000131	177777	000000	000670	001040	111623	012720:	005124	000000	075511	000000	112267	000000	001514	100074
012730:	000000	000000	001000	000000	011270	004360	000315	000350	012740:	011270	000000	011270	101033	000001	000002	013106	000000
012750:	000000	000000	111623	000150	000140	000640	000004	000000	012760:	000444	000000	040003	000400	000000	000000	000000	001067
012770:	042120	001067	037020	000000	000764	000314	177777	000000	013000:	000000	000001	000000	036432	000000	036433	000000	000576
013010:	102433	000031	000623	000000	011270	000000	011270	002277	013020:	140074	000071	040017	024203	000000	100000	022245	000000

013030:	000004	000310	000356	000375	000000	177777	000000	000010	013040:	000042	100000	000000	011270	005242	103074	000025	000000
013050:	141074	000010	000000	012052	000023	004504	004504	001534	013080:	005264	000400	016572	014240	007455	000315	000020	000042
013070:	000000	000000	000000	000000	000000	000000	000000	000000	013100:	000000	000001	117023	005264	006430	100474	000035	000000
013110:	014240	000023	040017	000023	110001	000044	100033	000001	013120:	117014	000001	117004	014240	002250	000002	013300	140074
013130:	000022	140074	000024	000000	000000	002250	000000	002250	013140:	000000	002250	005231	100033	000014	177134	000000	002250
013150:	000000	000001	002207	100433	000010	117000	000001	123623	013160:	000000	004777	011612	000000	177134	017100	000000	000013
013170:	014240	000001	124001	000001	124001	002404	000303	001260	013200:	060413	002247	000003	000576	102033	000031	000000	000000
013210:	000303	000000	012211	170000	117023	000000	000000	000001	013220:	000000	177777	000000	000043	000011	000000	000000	000000

013230:	017100	000000	002250	017125	177777	177775	002341	141155	013240:	000031	017100	000004	000004	020125	040000	000004	000007
013250:	021265	100033	000012	111623	000055	177777	013760	004616	013260:	140474	000066	000000	000000	000000	000007	000000	012266
013270:	000000	017100	017125	002250	100000	000004	002250	000000	013300:	000007	020520	142033	000020	177134	000000	002250	000000
013310:	000001	022057	140433	000010	000000	000012	000000	000027	013320:	000000	000002	000000	177134	017100	000000	000013	014500
013330:	000002	114023	000000	006177	002404	000303	001520	060413	013340:	137135	000003	000576	102433	000031	000000	000000	000303
013350:	000000	012350	160000	013423	013760	013761	000001	000040	013360:	177777	000004	000043	000011	000001	000000	000000	017100
013370:	000000	002250	017125	177777	177775	002341	141155	000031	013400:	017100	000004	000004	020125	040000	000004	000007	021265
013410:	100033	000012	000000	000000	000000	000000	000000	000000	013420:	000000	000000	000000	000000	000000	000000	000000	000000

013430: 000000 000000 000000 000000 000000 000000 000000 000000 013440: 000000 000000 000000 000000 000000 000000 000000 000000
 LINES 013450 - 013707 SAME AS ABOVE

013710: 000000 000000 000000 000000 000000 000000 000000 000000 013720: 000000 000000 000000 000000 000000 000000 000000 000000

\$\$\$\$\$ DST 13 (I/O QUEUE) \$\$\$\$\$

013730:	030052	000013	000507	000474	003003	000000	000000	001333	013740:	007000	000023	000043	000000	100114	001030	000001	177710
013750:	000000	000004	011401	007000	000036	000043	000000	100114	013760:	001030	000001	177710	000000	000004	011401	007000	000726
013770:	000043	000000	100114	001030	000001	177712	000000	000004	014000:	011401	007000	000535	000043	000000	100114	000645	000001
014010:	177776	000000	000004	011401	007000	000077	000043	000000	014020:	100114	001030	000001	000000	000000	000004	011401	007000
014030:	000713	000043	000000	100114	001030	000001	177711	000000	014040:	000004	011401	006000	000000	000024	000002	100126	000001
014050:	000000	177363	000003	000000	014000	007000	000166	000043	014060:	000000	100114	001030	000001	177765	000000	000004	011401

166163: 173623 041407 041402 101407 020063 041402 101407 021040 166173: 003243
166174: 166623 000001 100000 000001

166200: 100000 000011 000000 110001 014420 100000 011423 000000 166210: 000000 000011 100000 000000 040044 000000 000000 000400
166220: 017771 000000 000000

\$\$\$\$\$\$\$\$ CST 44 \$\$\$\$\$\$\$\$
**** (166223 TO 170373 NOT PRINTED) ****
170374: 035005 000011 100000 000011

170400: 100000 000025 000000 110001 014240 100000 000401 000000 170410: 000000 000025 100000 000000 040051 000000 000000 000400
170420: 020144 000000 000000

\$\$\$\$\$\$\$\$ CST 51 \$\$\$\$\$\$\$\$
**** (170423 TO 175573 NOT PRINTED) ****
175574: 100000 000025 100000 000025

175600: 100000 000006 000000 110001 014060 100000 002405 000000 175610: 000000 000006 100000 000000 000026 000000 000000 000400
175620: 003136 000000 000000

\$\$\$\$\$\$\$\$ DST 26 (RIN TABLE) \$\$\$\$\$\$\$\$
175623: 000014 000172 140000 000000 000176 020440 140000 000000 175633: 100212 020041 140000 000000 000016 000000 000020 000000
175643: 000022 000000 000024 000000 000026 000000 000030 000000 175653: 000032 000000 000034 000000 000036 000000 000040 000000
175663: 000042 000000 000044 000000 000046 000000 000050 000000 175673: 000052 000000 000054 000000 000056 000000 000060 000000
175703: 000062 000000 000064 000000 000066 000000 000070 000000 175713: 000072 000000 000074 000000 000076 000000 000100 000000
175723: 000102 000000 000104 000000 000106 000000 000110 000000 175733: 000112 000000 000114 000000 000116 000000 000120 000000
175743: 000122 000000 000124 000000 000126 000000 000130 000000 175753: 000132 000000 000134 000000 000136 000000 000140 000000
175763: 000142 000000 000144 000000 000146 000000 000150 000000 175773: 000152 000000 000154 000000 000156 000000 000160 000000
176003: 000162 000000 000164 000000 000166 000000 000170 000000 176013: 000000 000000 000226 000060 000056 000000 000101 051523

176023: 020040 020040 045117 047040 020040 020040 042101 053111 176033: 051440 020040 050101 051523 020040 020040 045117 047040
176043: 020040 020040 042101 053111 051440 020040 000242 000000 176053: 000000 000000 000000 000000 000000 000000 000000 000000
176063: 000000 000000 000256 000000 000000 000000 000000 000000 176073: 000000 000000 000000 000000 000000 000000 000272 000000
176103: 000000 000000 000000 000000 000000 000000 000000 000000 176113: 000000 000000 000306 000000 000000 000000 000000 000000
176123: 000000 000000 000000 000000 000000 000000 000322 000000 176133: 000000 000000 000000 000000 000000 000000 000000 000000
176143: 000000 000000 000336 000000 000000 000000 000000 000000 176153: 000000 000000 000000 000000 000000 000000 000352 000000
176163: 000000 000000 000000 000000 000000 000000 000000 000000 176173: 000000 000000 000366 000000 000000 000000 000000 000000
176203: 000000 000000 000000 000000 000000 000000 000402 000000 176213: 000000 000000 000000 000000 000000 000000 000000 000000

176223: 000000 000000 000416 000000 000000 000000 000000 000000 176233: 000000 000000 000000 000000 000000 000000 000432 000000
176243: 000000 000000 000000 000000 000000 000000 000000 000000 176253: 000000 000000 000446 000000 000000 000000 000000 000000
176263: 000000 000000 000000 000000 000000 000000 000462 000000 176273: 000000 000000 000000 000000 000000 000000 000000 000000
176303: 000000 000000 000476 000000 000000 000000 000000 000000 176313: 000000 000000 000000 000000 000000 000000 000512 000000
176323: 000000 000000 000000 000000 000000 000000 000000 000000 176333: 000000 000000 000526 000000 000000 000000 000000 000000
176343: 000000 000000 000000 000000 000000 000000 000542 000000 176353: 000000 000000 000000 000000 000000 000000 000000 000000
176363: 000000 000000 000556 000000 000000 000000 000000 000000 176373: 000000 000000 000000 000000 000000 000000 000572 000000
176403: 000000 000000 000000 000000 000000 000000 000000 000000 176413: 000000 000000 000606 000000 000000 000000 000000 000000

176423: 000000 000000 000000 000000 000000 000000 000622 000000 176433: 000000 000000 000000 000000 000000 000000 000000 000000
176443: 000000 000000 000636 000000 000000 000000 000000 000000 176453: 000000 000000 000000 000000 000000 000000 000652 000000

(4)

106573(000550): 030370
106574(000551): 030370 000003 100000 000003

106573:0.
106574:0.....

106600: 100000 000041 000000 000000 016140 100000 005012 000000 106610: 000000 000041 000000 000000 040100 000000 000000 000400
106620: 022116 000000 000000

\$\$\$\$\$\$\$\$ CST 100 \$\$\$\$\$\$\$\$
**** (106623 TO 123573 NOT PRINTED) ****
123574: 000000 000023 040000 000023

123650: 020000 000001 000000 000000 000001 177023 000000 000000 123610: 000000 000001 000000 000000 000000 000000 000000 020170
123620: 041401 037777 051401

\$\$\$\$\$\$\$\$ AVAILABLE AREA \$\$\$\$\$\$\$\$
**** (123623 TO 123773 NOT PRINTED) ****
123774: 117045 000001 020000 000001

124000: 100000 000040 000000 110001 014320 100000 021042 000000 124010: 000000 000040 100000 000000 040092 000000 000000 000400
124020: 020751 000000 000000

\$\$\$\$\$\$\$\$ CST 62 \$\$\$\$\$\$\$\$
**** (124023 TO 133773 NOT PRINTED) ****
133774: 032000 000040 100000 000040

134000: 020000 000017 000600 000000 000000 000000 000000 000000 134010: 021424 000017 000000 021425 000000 141604 041701 003400
134020: 057604 141330 040021

\$\$\$\$\$\$\$\$ AVAILABLE AREA \$\$\$\$\$\$\$\$
**** (134023 TO 137573 NOT PRINTED) ****
137574: 000000 000017 020000 000017

137600: 100000 000051 000000 110001 015460 100000 016435 000000 137610: 000000 000051 100000 000000 040056 000000 000000 000400
137620: 020571 000000 000000

\$\$\$\$\$\$\$\$ CST 56 \$\$\$\$\$\$\$\$
**** (137623 TO 151773 NOT PRINTED) ****
151774: 000036 000051 100000 000051

152000: 100000 000020 000000 110001 014540 100000 017437 000000 152010: 000000 000020 100000 000000 104427 000000 000000 000400
152020: 155005 000000 000000

\$\$\$\$\$\$\$\$ CST 327 CST BLOCK INDEX = 11 \$\$\$\$\$\$\$\$
**** (152023 TO 155773 NOT PRINTED) ****
155774: 000000 000020 100000 000020

000000: 100000 000036 000000 110001 014300 100000 000401 000000 000010: 000000 000036 100000 000000 040032 000000 000000 000400
000020: 017263 000000 000000

\$\$\$\$\$\$\$\$ CST 32 \$\$\$\$\$\$\$\$
**** (23 TO 7373 NOT PRINTED) ****
007374: 030370 000036 100000 000036

007400: 020000 000021 000000 000000 000000 000000 000000 000000 000000 007410: 000000 000020 000000 000000 040022 000000 000000 000400
007420: 016712 000000 000000

\$\$\$\$\$\$\$\$ CST 22 \$\$\$\$\$\$\$\$
007374: 030370 000036 100000 000036

007400: 020000 000021 000000 000000 000000 000000 000000 000000 000000 007410: 000000 000020 000000 000000 040022 000000 000000 000400
007420: 016712 000000 000000

\$\$\$\$\$\$\$\$ AVAILABLE AREA \$\$\$\$\$\$\$\$
**** (7423 TO 13373 NOT PRINTED) ****
013374: 025040 000020 020000 000020

013400: 020000 000001 000000 000000 014740 100000 003407 000000 013410: 000000 000001 000000 000000 000125 000000 000000 000400
013420: 005354 000000 000000

\$\$\$\$\$\$\$\$ DST 125 \$\$\$\$\$\$\$\$
013423(000000): 000000 014125 000010 000080 000073 000000 000000 000000 000007 040005 113035 000000 013423: . . . U . . . O
013437(000014): 000000 002525 020143 015008 042101 053111 051440 020040 050125 041040 020040 020040 013437: . . . U c . . DAVIS PUB
013453(000030): 050125 041040 020040 020040 045117 047040 020040 020040 000065 000067 000000 000000 013453: PUB JON . 5.7 . . .
013467(000044): 000000 000000 177807 000713 000000 000000 000000 000000 020040 020040 020040 020040 013467:
013503(000060): 000003 000002 000000 000000 000000 000000 001140 000000 001142 000000 000000 000001 013503: b
013517(000074): 000000 000053 000053 000053 000053 000053 000053 000053 088888 155555 133333 088888 013517: . . . + . . . + . . . + . . . + . . . m . . .
013533(000110): 000053 000053 000053 000053 013720 021002 041401 025401 047401 037777 002408 031021 013533: . . . + . . . + . . . + . . . C + O ? . . . 2 . . .
013547(000124): 141510 047401 037777 003300 010101 071401 051401 140427 121000 000700 031022 004000 013547: HO ? . . . A . . . S 2 . . .
013563(000140): 031402 024740 005640 005656 002000 004634 020340 000100 000121 013563: 3) @ . . . Q . . .
013574(000151): 022403 000001 020000 000021 013574: x

013600: 100000 000004 000000 110001 014320 100000 000401 000000 013610: 000000 000004 100000 000000 000016 000000 000000 000400
013620: 004154 000000 000000

\$\$\$\$\$\$\$\$ DST 16 (LOGICAL DEVICE AND CLASS TABLE) \$\$\$\$\$\$\$\$
013623(000000): 025005 000327 000008 000055 000012 000021 000400 100000 020000 000000 000001 021000 013623: *
013637(000014): 041040 120000 000002 000001 021000 100030 060404 000608 000000 000000 000000 000000 013637: B
013653(000030): 000000 000000 000000 000000 000000 000000 000000 000001 006000 041040 120000 000427 000000 013653: B
013667(000044): 000000 100030 020000 000003 000000 000000 100030 020000 000004 000000 000000 100030 013667:
013703(000060): 020000 000005 000000 000000 100030 020404 000006 000000 000000 000000 000000 000000 013703: !
013717(000074): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 013717:

4

***** DUMP INDEX *****

NAME	PAGE # FORMATTED	PAGE # OCTAL DUMP
CODE SEGMENT TABLE	2	58
DATA SEGMENT TABLE	8	54
PROCESS CONTROL BLOCK	11	58
CST EXTENSION	5	57
SYSTEM GLOBAL AREA		51
FIXED LOW CORE		50
INTERRUPT CONTROL STACK		58
SYSTEM BUFFERS	43	83
UCOP REQUEST QUEUE		127
PROCESS-PROCESS COMMUNICATION TABLE		79
I/O QUEUE	41	58
TERMINAL BUFFERS	44	52
DEVICE INFORMATION TABLE (DIT)	38	53
LOGICAL-PHYSICAL DEVICE TABLE	35	66
LOGICAL DEVICE AND CLASS TABLE		137
DRIVER LINKAGE TABLE		50
I/O RESOURCE TABLES		50
DISK FREE SPACE		145
LOADER SEGMENT TABLE		90
TIMER REQUEST LIST	47	51
DIRECTORY		138
DIRECTORY SPACE		80
RIN TABLE		84
SWAP TABLE		51
JOB PROCESS COUNT		134
JOB MASTER TABLE		
TAPE LABEL TABLE		
LOG TABLE		
REPLY INFORMATION TABLE		111
VOLUME TABLE		
BREAKPOINT TABLE		127
LOG BUFFER 1		
LOG BUFFER 2		
LOG ID TABLE		50
CST BLOCK		51
JOB CUTOFF TABLE		
SYSTEM JIT		65
SPECIAL REQUEST TABLE		66
VIRTUAL DISK SPACE TABLE	29	50
ARSBM TABLE		62
ILT	31	67
SIR TABLE	18	128
FILE MULTI-ACCESS VECTOR		81
INPUT DEVICE DIRECTORY		81
OUTPUT DEVICE DIRECTORY		78
WELCOME MESSAGE #1		134
WELCOME MESSAGE #2		
CS SYSTEM SEGMENT		143
JOB-PROCESS CROSS REFERENCE		
SYSTEM JD1		
COMMAND INTERPRETER LOG-ON DST		
MOUNTED VOLUME TABLE		

4

HP3000 III MEMORY DUMPC.00.00 OF SYS VER C UPDATE 00 FIX 01 DUMP TIME 6/26/81, 10:18AM
(C) HEWLETT-PACKARD CO. 1980

PAGE 157

PRI. VOL. USER TABLE	20	66
AVAILABLE REGION LIST	37	60
DISC REQUEST TABLE		66
MSG MBR TABLE		66
PRIMARY MSG TABLE		66
MEASUREMENT INFO TABLE		50
SECONDARY MSG TABLE		
CURRENT PROCESS STACK		

PROGRAM FILE PMSPO02C.MP3002.SUPPORT

NAME	BYT	CODE	ENTRY	DEC
MAIN	0			
NAME	1	0	0	0
HARDRES	1	0	0	0
TERMINATE	2			?
SEGMENT LENGTH	4			
HARDRES	1			
NAME	BYT	CODE	ENTRY	DEC
BIODM	1	0	113	
PRSTAT	116			
IOUNFREEZE	118			
IOFREEZE	117			
FLAGPROCASSENT	120			
PETCHIOSEG	121			
SEGWRITECOMPLETE	122			
SEGREADCOMPLETE	123			
ADJUSTLOCALITY	124			
WAKE	125			
WAITFORIO	2	2730	2740	
QUEUEONSEGMENT	126			
ADJUSTLOCALITY	127			
WAIT	130			
WAITFORIOX	3	2730	2748	
IOSTATUS	4	3244	3244	
IOSTATUSX	5	3244	3246	
ATTACHIO	6	3323	3323	
SETSYSDB	131			
DISCIO	132			
SETCRITICAL	133			
CLEARJWS	134			
RESETCRITICAL	135			
RESETDB	136			
CLEARWAKE	7	4340	4340	
SETWAKE	10	4340	4342	
RETURNBUF	11	4404	4404	
RETURNDISCREG	12	4404	4414	
RETURNIOG	13	4404	4480	
RETURNBUF	14	4404	4455	
GETTBUF	16	4572	4572	
GETDISCREG	16	4572	4802	
GETIOG	17	4572	4800	
GETSBUF	20	4572	4575	
DISCMANAGER	21	4702	4702	
QUEUEDISCREG	22	5030	5076	
STORE IOG	23	5232	5232	
DEQUEUEDISCREG	24	5333	5333	
HELP	25	5425	7314	
TICK	26	10000	10000	
OLDTICK	27	10366	10370	
UNIMPEDE	137			?
SYSPROC	140			?
STARTCLOCK	30	10856	10856	
CHEKTRFREE	31	10732	10732	
TIMEREG	32	10743	10743	
ABORTTIMEREG	33	11142	11142	
TIMER	34	11260	11260	
TIPX	35	11355	11332	
TIP	36	11355	11342	

BENDSYNC	37	15711	15711	
DSEI2	40	15736	15736	
DSEI1	41	16071	16071	
BREAKSERVICE	42	16265	16265	
BREAKOK	43	16311	16311	
SBREAKOK	44	16311	16313	
SETREADERROR	45	16362	16362	
CHECKQUEUE	46	16376	16376	
STARTTIMEOUT	47	16506	16517	
STOPTIMEOUT	50	16417	16630	
DSETCONTROL	51	16664	16676	
PPXCONTROL	52	16776	17006	
PPXWRITE	53	17065	17065	
RETURNBUFS	54	17147	17183	
PTPIP	55	17342	17342	
LDEVNTRDY	56	17710	17747	
IOMESSAGE	57	20044	20044	
LOGERROR	60	20125	20125	
RETURNSSYBUF	61	20171	20171	
IOUNIMPEDE	62	20260	20260	
IOIMPEDE	63	20315	20315	
IMPEDE	141			?
STP	64	20364	20364	
CHKCHANNELBUF	65	20522	20522	
EOPCHECK	66	20627	20627	
STARTIO	67	21226	21226	
SYSIOPROC	70	21322	21322	
REGSTATUS	71	21347	21347	
DMONITOR	72	21443	21443	
CHECKINDEX	73	21660	21660	
ALAKETERMINAL	74	21743	21743	
WAKEIO	75	21771	21771	
SUDDENDEATH	76	22060	22107	
MASTERCLEAR	77	22157	22157	
DOCIO	100	22243	22243	
IOFAILURE	101	22270	22312	
DONVERT	102	22362	22362	
BONVERT	103	22426	22426	
MPITEZ	104	22442	22442	
MPITECHAR	105	22450	22450	
LDEVTDPT	106	22558	22558	
LDEVTDSTYPE	107	22624	22624	
LDEVDTTYPE	110	22633	22633	
EXCHANGEDB	142			?
CHECKDEV	111	22700	22700	
DEQUEUE	112	22732	22732	
ADDHEAD	113	22750	22750	
ADDTAIL	114	22767	22767	
SEGMENT LENGTH		23160		

*** WARNING ***
ERROR 048 CODE SEGMENT MAY BE TOO LARGE

PRIMARY DB	0	INITIAL STACK	2260	CAPABILITY	700
SECONDARY DB	0	INITIAL DL	0	TOTAL CODE	23164
TOTAL DB	0	MAXIMUM DATA	7	TOTAL RECORDS	122
ELAPSED TIME	00:00:24.247			PROCESSOR TIME	00:03:067

4

SEG	NAME	STT	CODE	ENTRY	SEG
	IMIN	1		0	
	TERMINATE	33			?
	CALLHELP	2	111	111	?
	HELP	34			?
	POWERON	3	141	152	?
	MPXCONTROL	35			?
	WRITE2	36			?
	GET'DSDEVICE	37			?
	DEQUEUE	40			?
	IOFAILURE	41			?
	MASTERCLEAR	42			?
	CHECKLDEV	43			?
	ALWAKEIO	44			?
	ALWAKE	45			?
	DATABSENCE	4	445	445	?
	SUDDENDEATH	46			?
	ABDFT	47			?
	RECOVEROC	50			?
	QUEUEONSEGMENT	51			?
	STTUNCALLABLE	6	875	875	?
	TRACE	8	704	704	?
	CV	52			?
	CODESENCE	7	1046	1046	?
	BUILDSEGID	53			?
	CONVSEGIDTOSTIN	54			?
	USERTRAP	10	1561	1561	?
	PRIVILEGEDMODEV	11	1572	1572	?
	STACKUNDERFLOW	12	1801	1801	?
	STACKOVERFLOW	13	1810	1810	?
	MPSTAT	55			?
	GETDATABSENCE	56			?
	GENSPCREQ	57			?
	SENDMSG	60			?
	DSTVIOLATION	14	2514	2514	?
	CSTVIOLATION	15	2517	2517	?
	STVIOLATION	16	2526	2526	?
	UNIMPLEMENTEDIN	17	2535	2535	?
	EADD	81			?
	ESUB	82			?
	EMPY	83			?
	EDIV	84			?
	ENEG	85			?
	ECMP	86			?
	ORDD	87			?
	OSUB	70			?
	ORPY	71			?
	ODIV	72			?
	ONEG	73			?
	OCMP	74			?
	ORSR	75			?
	ORSL	76			?
	DIDIV	77			?
	DIMPY	100			?
	DMUL	101			?
	CVAD	102			?

CVDA	103				?
CVBD	104				?
CVDB	105				?
SLD	106				?
MSLD	107				?
SRD	110				?
AADD	111				?
CMPO	112				?
SUBD	113				?
MPYDSIM	114				?
SEG'ID'TYPE	115				?
TESTSTOP	116				?
DEBUG	117				?
POWERFAIL	20	3036	3036		?
EXTGHOST	21	3117	3117		?
GHOST	22	3132	3132		?
MODULEINTERRUPT	23	3135	3135		?
DATAPARITY	24	3140	3155		?
DCONVERT	120				?
BCONVERT	121				?
ADDRESSPARITY	25	3236	3236		?
SYSTEMPARITY	26	3241	3241		?
NONRESPONDINGMD	27	3244	3244		?
ILLEGALADDRESS	30	3255	3255		?
BOUNDVIOLATION	31	3267	3267		?
TESTCRUNCH	32	3362	3362		?
SEGMENT LENGTH		3670			?

PRIMARY DB	0	INITIAL STACK	2260	CAPABILITY	000
SECONDARY DB	0	INITIAL DL	0	TOTAL CODE	3670
TOTAL DB	0	MAXIMUM DATA	?	TOTAL RECORDS	28
ELAPSED TIME	00:00:10.114			PROCESSOR TIME	00:01.010

LAB #5

Hardware Environment: Series II

External Symptoms: System being coolstarted but hung prior to date
& time prompt.

This dump case contains the following components:

- 1) Excerpted pages from a formatted Series II memory dump.

***** REGISTERS *****

```

*****
* DATA SEGMENT * CODE SEGMENT * MISCELLANEOUS * STATUS = 141074 * CPX2 = 000001 *
*****
* DB BANK = 0 * PB = 060020 * X = 177756 * MODE = PRIV * RUN/HALT = RUN * EXEC SW = OFF *
* DB = 001000 * P = 062710 * CIR = 030020 * INTERRUPTS = ON * SYS DUMP = ON * INC ADDR = OFF *
* S BANK = 0 * PL = 103763 * CPX1 = 000030 * TRAPS = OFF * COLD LOAD = OFF * DEC ADDR = OFF *
* DL = 177777 * PBBANK = 0 * SP1 = 062707 * STACK OP = LEFT * LOAD REG = OFF * INHIBIT *
* Q = 014604 * (P-PB) = 002670 * SP2 = 001000 * OVERFLOW = OFF * LOAD ADDR = OFF * AUTO RES = OFF *
* S = 014666 * * * * * CARRY = OFF * LOAD MEM = OFF *
* Z = 015602 * * * * * COND CODE = CCE * DISP MEM = OFF *
* Z BANK = 0 * * * * * SEGMENT # = 74 * SNGL INST = OFF *
*****
    
```

PAUSE INSTRUCTION IN CIR

***** FIXED LOW MEMORY *****

```

CODE SEGMENT TABLE POINTER      010044
EXTENDED CODE SEGMENT TABLE POINTER 000000
DATA SEGMENT TABLE POINTER      006404
PROCESS CONTROL BLOCK BASE       013104
CURRENT PCB POINTER               000000
INTERRUPT STACK BASE             014604
INTERRUPT STACK LIMIT            015602
INTERRUPT MASK                   000000
    
```

***** CST TABLE *****

SEGMENT NUMBER	SEGMENT NAME	MODE	REFERENCE BIT	TRACE	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK /LDEV	DISC ADDRESS	R I O M C I	S Y S C R S
1	ININ	PRIV	OFF	OFF	3670	105010	0			
2	FILESYS1 (0)	PRIV	OFF	OFF	10774		1	15655		
3	FILESYS4 (1)	PRIV	OFF	OFF	3550		1	15735		
4	FILESYS5 (2)	PRIV	OFF	OFF	4234		1	15765		
5	FILESYS6 (3)	PRIV	OFF	OFF	5154		1	16014		
6	FILESYS6A (4)	PRIV	OFF	OFF	12170		1	16051		
7	FILESYS7 (5)	PRIV	OFF	OFF	6220		1	16135		
10	CIALTORG (6)	PRIV	OFF	OFF	10224		1	16203		
11	CICOMSYS (7)	PRIV	OFF	OFF	4220		1	16253		
12	CIERR (10)	PRIV	OFF	OFF	2400		1	16307		
13	CIFILEB (11)	PRIV	OFF	OFF	7710		1	16324		
14	CIFILEM (12)	PRIV	OFF	OFF	3304		1	16371		
15	CIINIT (13)	PRIV	OFF	OFF	7244		1	16413		
16	CILISTF (14)	PRIV	OFF	OFF	6404		1	16470		
17	CIMISC (15)	PRIV	OFF	OFF	4504		1	16532		
20	CIORGMAN (16)	PRIV	OFF	OFF	6310		1	16560		
21	CIPREPRUN (17)	PRIV	OFF	OFF	5570		1	16616		
22	CISUBS (20)	PRIV	OFF	OFF	3724		1	16652		
23	CISYSMGR (21)	PRIV	OFF	OFF	7334		1	16677		
24	CIUSERUTIL (22)	PRIV	OFF	OFF	4444		1	16744		
25	CXSTOREST (23)	PRIV	OFF	OFF	5730		1	16771		
26	RESTORE (24)	PRIV	OFF	OFF	5574		1	17024		
27	STORE (25)	PRIV	OFF	OFF	10210		1	17061		
30	DIRC (26)	PRIV	OFF	OFF	7444		1	17127		
31	ALLOCATE (27)	PRIV	OFF	OFF	6130		1	17167		
32	ALLOCUTIL (30)	PRIV	OFF	OFF	7260		1	17223		
33	HARDRES (31)	PRIV	ON	OFF	23240	034560	0			
34	ABORTDUMP (32)	PRIV	OFF	OFF	6514		1	17410		
35	MESSAGE (33)	PRIV	OFF	OFF	4230		1	17447		
36	PROCSEG (34)	PRIV	OFF	OFF	5330		1	17474		
37	NRIO (35)	PRIV	OFF	OFF	2544		1	17525		
40	PCREATE (36)	PRIV	OFF	OFF	10134		1	17542		
41	MORGUE (37)	PRIV	OFF	OFF	4404		1	17610		
42	BIPC (40)	PRIV	OFF	OFF	3334		1	17640		
43	IPC (41)	PRIV	OFF	OFF	11234		1	17660		
44	CHECKER (42)	PRIV	OFF	OFF	1764		1	17731		
45	UTILITY1 (43)	PRIV	OFF	OFF	4544		1	17743		
46	UTILITY2 (44)	PRIV	OFF	OFF	8850		1	17771		
47	LOADER1 (45)	PRIV	OFF	OFF	6030		1	20027		
50	RINS (46)	PRIV	OFF	OFF	3644		1	20063		
51	JOBTABLE (47)	PRIV	OFF	OFF	5114		1	20104		
52	DEBUG (50)	PRIV	OFF	OFF	20550		1	20174		
53	NURSERY (51)	PRIV	OFF	OFF	7310		1	20302		
54	SPOOLING (54)	PRIV	OFF	OFF	15660		1	20376		
55	SPOOLCOMS1 (55)	PRIV	OFF	OFF	6744		1	20471		
56	SPOOLCOMS2 (56)	PRIV	OFF	OFF	12110		1	20531		
57	PVCOMSEG (57)	PRIV	OFF	OFF	3174		1	20604		
60	PVSYS (80)	PRIV	OFF	OFF	5000		1	20623		

5

***** CST TABLE *****

SEGMENT NUMBER	SEGMENT NAME	MODE	REFERENCE BIT	TRACE	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK /LDEV	DISC ADDRESS	R I O M C I	S Y S C R E S S
61	PVSYSM (61)	PRIV	OFF	OFF	7200		1	20651		S
62	UDC (62)	USER	OFF	OFF	7644		1	20711		S
63	USER (63)	USER	OFF	OFF	3330		1	20753		S
64	HELPUER (64)	USER	OFF	OFF	2410		1	20773		S
65	OPLOW (65)	PRIV	OFF	OFF	14020		1	21007		S
66	OPMED (66)	PRIV	OFF	OFF	13570		1	21074		S
67	OPHI (67)	PRIV	OFF	OFF	11340		1	21157		S
70	LABSEG (70)	PRIV	OFF	OFF	13254		1	21230		S
71	SDISC (71)	PRIV	OFF	OFF	12000		1	21310		S
72	LOGSEGO (73)	PRIV	OFF	OFF	12314		1	21371		S
73	LOGSEG1 (74)	PRIV	OFF	OFF	13554		1	21446		S
74	KERNELC (75)	PRIV	ON	OFF	23744	060020	0			C
75	KERNELD (76)	PRIV	OFF	OFF	10360		1	21652		S
76	MISCSEGC (77)	PRIV	OFF	OFF	1024	103764	0			C
77	FILESYS1A (101)	PRIV	OFF	OFF	15014		1	21765		S
100	FILESYS2 (102)	PRIV	OFF	OFF	10030		1	22056		S
101	FILESYS3 (103)	PRIV	OFF	OFF	10360		1	22123		S
102	DEBUGUTL (104)	PRIV	OFF	OFF	4364		1	22173		S
103	SEGUTIL (105)	PRIV	OFF	OFF	4424		1	22216		S
104	KSAM01 (106)	PRIV	OFF	OFF	6324		1	22242		S
105	KSAM02 (107)	PRIV	OFF	OFF	11020		1	22277		S
106	KSAM03 (110)	PRIV	OFF	OFF	7750		1	22346		S
107	KSAM04 (111)	PRIV	OFF	OFF	7044		1	22410		S
110	KSAM05 (112)	PRIV	OFF	OFF	3070		1	22447		S
111	FIRMWARESIM1 (52)	PRIV	OFF	OFF	5000		1	20134		S
112	FIRMWARESIM2 (53)	PRIV	OFF	OFF	6330		1	20343		S
113	KSAM06 (113)	USER	OFF	OFF	2410		1	22466		S
114	KSAM07 (114)	USER	OFF	OFF	5044		1	22504		S
115	COMSYS1 (116)	PRIV	OFF	OFF	10510		1	22552		S
116	COMSYS3 (120)	PRIV	OFF	OFF	7274		1	22664		S
117	COMSYS4 (121)	PRIV	OFF	OFF	7660		1	22726		S
120	COMSYS5 (122)	PRIV	OFF	OFF	7504		1	22771		S
121	CSUTILITY (123)	PRIV	OFF	OFF	12640		1	23036		S
122	COMSYS2 (117)	PRIV	OFF	OFF	10274		1	22617		S
123	BSCSLCM (124)	PRIV	OFF	OFF	4310		1	23115		S
124	BSCSLCPO (125)	USER	OFF	OFF	1354		1	23142		S
125	DVRSSLC (126)	PRIV	OFF	OFF	10500		1	23152		S
126	DVRHSI (127)	PRIV	OFF	OFF	2154		1	23220		S
127	MRJEMISC1 (161)	PRIV	OFF	OFF	10750		1	24524		S
130	MRJEMISC2 (162)	PRIV	OFF	OFF	6110		1	24573		S
131	MRJESLCP (163)	USER	OFF	OFF	574		1	24627		S
132	BSCSLCP1 (164)	USER	OFF	OFF	1374		1	24634		S
133	MPMONCMD (165)	PRIV	OFF	OFF	3470		1	24643		S
134	IMAGE01 (214)	PRIV	OFF	OFF	6360		1	26450		S
135	IMAGE02 (215)	PRIV	OFF	OFF	6244		1	26505		S
136	IOMONITOR3270 (231)	PRIV	OFF	OFF	7114		1	27315		S
137	TRACEO (232)	USER	OFF	OFF	6330		1	27355		S
140	CLIB'01 (204)	USER	OFF	OFF	6574		1	26127		S

***** CST TABLE *****

SEGMENT NUMBER	SEGMENT NAME	MODE	REFERENCE BIT	TRACE	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	R I O M C I	C S R E S S S C
141	CLIB'03 (206)	USER	OFF	OFF	7260		1	26214		
142	CLIB'04 (207)	USER	OFF	OFF	6530		1	26254		
143	CLIB'05 (210)	USER	OFF	OFF	5454		1	26311		
144	TRACE1' (233)	USER	OFF	OFF	6444		1	27445		
145	DSSEG1 (250)	PRIV	OFF	OFF	4474		1	30117		S
146	DSSEG2 (251)	PRIV	OFF	OFF	11270		1	30145		S
147	DSSEG4 (253)	PRIV	OFF	OFF	7310		1	30250		S
150	DSMISC (255)	PRIV	OFF	OFF	6114		1	30372		S
151	DSIOM (258)	PRIV	OFF	OFF	1564		1	30426		S
152	DSSEG3 (252)	PRIV	OFF	OFF	5560		1	30216		S
153	DSSEG5 (254)	PRIV	OFF	OFF	12534		1	30313		S
154	DSRTECALLS (257)	PRIV	OFF	OFF	7700		1	30437		S
155	IOMDISC1	PRIV	ON	OFF	2714	110700	0			S
156	CSDUMMY	PRIV	OFF	OFF	70	113614	0			S
157	IOTAPEO	PRIV	OFF	OFF	1620		1	35775		S
160	IOTERMO	PRIV	OFF	OFF	6050		1	36033		S
161	IOLPRTO	PRIV	OFF	OFF	2730		1	36012		S
162	CSSBSCO	PRIV	OFF	OFF	50		1	36504		S
163	CSSMRJEO	PRIV	OFF	OFF	50		1	36514		S
164	CSSBSC1	USER	OFF	OFF	50		1	36524		S
165	IODSO	PRIV	OFF	OFF	1704		1	35737		S
166	IODSTRMO	PRIV	OFF	OFF	2760		1	36532		S

***** EXTENDED CST TABLE *****
 ***** NO CST BLOCK IS CURRENTLY IN USE *****

SEGMENT NUMBER	CSTBLK/PROCESS INDX	MODE	REFERENCE BIT	TRACE	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	R I O M C I	C S R E S S
301	1	PRIV	OFF	OFF	1614		1	32200	-	S
301	2	PRIV	OFF	OFF	1604		1	34073	-	S
301	3	PRIV	OFF	OFF	3080		1	35715	-	S
301	4	PRIV	OFF	OFF	2264		1	32302	-	S
301	5	PRIV	OFF	OFF	1104		1	32324	-	S

SEGMENT NUMBER	CSTBLK/PROCESS INDX	MODE	REFERENCE BIT	TRACE	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/LDEV	DISC ADDRESS	R I O M C I	S R E S S
301	6	PRIV	OFF	OFF	2350		1	32225		S
301	7	PRIV	OFF	OFF	7054		1	32462		S
301	10	PRIV	OFF	OFF	5134		1	32246		S

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/LDEV	DISC ADDRESS	D C V	R C I	I C I	S I K	M O D	T O P	F I P	W I S	S I S	C R E S S	R E S S	W I D	VM ALLOC
1	(CODE SEGMENT TABLE)	OFF	1400	010044	0														0
2	(DATA SEGMENT TABLE)	OFF	1440	008404	0														0
3	(PROCESS CONTROL BLOCK)	OFF	1400	013104	0														0
4	(CST EXTENSION)	OFF	1440	011444	0														0
5	(SYSTEM GLOBAL AREA)	OFF	640	001000	0														0
8	(FIXED LOW CORE)	OFF	10000	000000	0														0
7	(INTERRUPT CONTROL STACK)	OFF	1100	014504	0														0
10	(SYSTEM BUFFERS)	OFF	2020	022764	0														0
11	(UCOP REQUEST QUEUE)	OFF	104		1	3334	D												1
12	(PROCESS-PROCESS COMMUNICATION TABLE)	OFF	140		1	3340	D												1
13	(I/O QUEUE)	OFF	1030	015604	0														0
14	(TERMINAL BUFFERS)	OFF	1410	001840	0														0
15	(LOGICAL-PHYSICAL DEVICE TABLE)	OFF	240	032030	0														0
16	(LOGICAL DEVICE AND CLASS TABLE)	OFF	1600		1	4120	D												2
17	(DRIVER LINKAGE TABLE)	OFF	120	000134	0														0
20	(I/O RESOURCE TABLES)	OFF	20	000254	0														0
21	(DISK FREE SPACE)	OFF	20000		1	3214	D												0
22	(LOADER SEGMENT TABLE)	OFF	2644		1	5064	D												21
23	(TIMER REQUEST LIST)	OFF	204	000524	0														14
24	(DIRECTORY)	OFF	2000		1	5044	D												0
25	(DIRECTORY SPACE)	OFF	600		1	5060	D												3
28	(RIN TABLE)	OFF	1304		1	3076	D												1
27	(SWAPTABLE)	OFF	2260	025004	0														0
30	(JOB PROCESS COUNT)	OFF	20	000730	0														0
31	(JOB MASTER TABLE)	OFF	400		1	3380	D												14
32	(TAPE LABEL TABLE)	OFF	1750		1	4110	D												2
33	(LOG TABLE)	OFF	170		1	3108	D												0
34	(REPLY INFORMATION TABLE)	OFF	2000		1	3320	D												3
35	(VOLUME TABLE)	OFF	34		1	4130	D												1
38	(BREAKPOINT TABLE)	OFF	674		1	4210	D												1
37	(LOG BUFFER 1)	OFF	400		1	4214	D												1
40	(LOG BUFFER 2)	OFF	400		1	4220	D												1
41	(LOG ID TABLE)	OFF	150		1	3104	D												1
42	(ASSOCIATION TABLE)	OFF	1060		1	4134	D												2
43	(CST BLOCK)	OFF	44	000274	0														0
44	(JOB CUTOFF TABLE)	OFF	74	032270	0														0
45	(SYSTEM JIT)	OFF	100		1	3350	D												1
46	(SPECIAL REQUEST TABLE)	OFF	144	027264	0														0
47	(VIRTUAL DISK SPACE TABLE)	OFF	164	027640	0														0
51	(ARSBM TABLE)	OFF	44	000460	0														0
52	(ILT)	OFF	1010	021754	0														0
53	(SIR TABLE)	OFF	170	032364	0														0
54	(FILE MULTI-ACCESS VECTOR)	OFF	200		1	4040	D												2
55	(INPUT DEVICE DIRECTORY)	OFF	2000		1	3440	D												40
56	(OUTPUT DEVICE DIRECTORY)	OFF	2000		1	3640	D												40
57	(WELCOME MESSAGE #1)	OFF	174		1	4050	D												2

5

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK /LDEV	DISC ADDRESS	D C V	R C I	I T K	S O D	M T P	F W I D	Y S S	C R S S	W D	VM ALLDC
60	(WELCOME MESSAGE #2)	OFF	1750		1	4060	D									2
61	(CS SYSTEM SEGMENT)	OFF	2064		1	3200	D						S			1
62	(JOB-PROCESS CROSS REFERENCE)	OFF	60		1	3344	D						S			3
63	(SYSTEM JDT)	OFF	34		1	3354	D						S			1
64	(COMMAND INTERPRETER LOG-ON DST)	OFF	1000		1	4070	D						S			1
65	(MOUNTED VOLUME TAB.)	OFF	520		1	4144	D						S			4
66	(PRI. VOL. USER TABLE)	OFF	200		1	4150	D						S			1
67	(AVAILABLE REGION LIST)	OFF	2004	030024	0								S			10
70	(DISC REQUEST TABLE)	OFF	3120	016634	0								S			0
71	(MSG HBR TABLE)	OFF	10	027430	0								S			0
72	(PRIMARY MSG TABLE)	OFF	200	027440	0								S			0
73	(MEASUREMENT INFO TABLE)	OFF	120	000340	0								S			0
75		OFF	3244		1	3110	D						S			0
76		OFF	3244		1	3144	D						S			7
77		OFF	3180		1	4224	D						S			7
100		OFF	12720		1	4260	D						S			16
101		OFF	2554		1	4350	D						S			6
102		OFF	2310		1	4400	D						S			6
103		OFF	2260		1	4430	D						S			6
104		OFF	4764		1	4460	D						S			13
105		OFF	5364		1	4534	D						S			43
106		OFF	4720	114023	0		D	I	S				S			17

***** LINKED MEMORY BEGINS AT 114023

***** AVAILABLE REGION SIZE BIT MAP *****

SIZE AVAIL	SIZE AVAIL	SIZE AVAIL	SIZE AVAIL	SIZE AVAIL	SIZE AVAIL	SIZE AVAIL	SIZE AVAIL	SIZE AVAIL							
0	NO	200	NO	400	NO	600	NO	1000	NO	1200	NO	1400	NO	1600	NO
2000	NO	2200	NO	2400	NO	2600	NO	3000	NO	3200	NO	3400	NO	3600	NO
4000	NO	4200	NO	4400	NO	4600	NO	5000	NO	5200	NO	5400	NO	5600	NO
6000	NO	6200	NO	6400	NO	6600	NO	7000	NO	7200	NO	7400	NO	7600	NO
10000	NO	10200	NO	10400	NO	10600	NO	11000	NO	11200	NO	11400	NO	11600	NO
12000	NO	12200	NO	12400	NO	12600	NO	13000	NO	13200	NO	13400	NO	13600	NO
14000	NO	14200	NO	14400	NO	14600	NO	15000	NO	15200	NO	15400	NO	15600	NO
16000	NO	16200	NO	16400	NO	16600	NO	17000	NO	17200	NO	17400	NO	17600	NO
20000	NO	20200	NO	20400	NO	20600	NO	21000	NO	21200	NO	21400	NO	21600	NO
22000	NO	22200	NO	22400	NO	22600	NO	23000	NO	23200	NO	23400	NO	23600	NO
24000	NO	24200	NO	24400	NO	24600	NO	25000	NO	25200	NO	25400	NO	25600	NO
26000	NO	26200	NO	26400	NO	26600	NO	27000	NO	27200	NO	27400	NO	27600	NO
30000	NO	30200	NO	30400	NO	30600	NO	31000	NO	31200	NO	31400	NO	31600	NO
32000	NO	32200	NO	32400	NO	32600	NO	33000	NO	33200	NO	33400	NO	33600	NO
34000	NO	34200	NO	34400	NO	34600	NO	35000	NO	35200	NO	35400	NO	35600	NO
36000	NO	36200	NO	36400	NO	36600	NO	37000	NO	37200	NO	37400	NO	37600	NO
40000	NO	40200	NO	40400	NO	40600	NO	41000	NO	41200	NO	41400	NO	41600	NO
42000	NO	42200	NO	42400	NO	42600	NO	43000	NO	43200	NO	43400	NO	43600	NO
44000	NO	44200	NO	44400	NO	44600	NO	45000	NO	45200	NO	45400	NO	45600	NO
46000	NO	46200	NO	46400	NO	46600	NO	47000	NO	47200	NO	47400	NO	47600	NO
50000	NO	50200	NO	50400	NO	50600	NO	51000	NO	51200	NO	51400	NO	51600	NO
52000	NO	52200	NO	52400	NO	52600	NO	53000	NO	53200	NO	53400	NO	53600	NO
54000	NO	54200	NO	54400	NO	54600	NO	55000	NO	55200	NO	55400	NO	55600	NO
56000	NO	56200	NO	56400	NO	56600	NO	57000	YES	57200	NO	57400	NO	57600	NO
60000	NO	60200	NO	60400	NO	60600	NO	61000	NO	61200	NO	61400	NO	61600	NO
62000	NO	62200	NO	62400	NO	62600	NO	63000	NO	63200	NO	63400	NO	63600	NO
64000	NO	64200	NO	64400	NO	64600	NO	65000	NO	65200	NO	65400	NO	65600	NO
66000	NO	66200	NO	66400	NO	66600	NO	67000	NO	67200	NO	67400	NO	67600	NO
70000	NO	70200	NO	70400	NO	70600	NO	71000	NO	71200	NO	71400	NO	71600	NO
72000	NO	72200	NO	72400	NO	72600	NO	73000	NO	73200	NO	73400	NO	73600	NO
74000	NO	74200	NO	74400	NO	74600	NO	75000	NO	75200	NO	75400	NO	75600	NO
77000	NO	76200	NO	76400	NO	76600	NO	77000	NO	77200	NO	77400	NO	77600	NO
100000	NO	100200	NO	100400	NO	100600	NO	101000	NO	101200	NO	101400	NO	101600	NO
102000	NO	102200	NO	102400	NO	102600	NO	103000	NO	103200	NO	103400	NO	103600	NO
104000	NO	104200	NO	104400	NO	104600	NO	105000	NO	105200	NO	105400	NO	105600	NO
106000	NO	106200	NO	106400	NO	106600	NO	107000	NO	107200	NO	107400	NO	107600	NO
110000	NO	110200	NO	110400	NO	110600	NO	111000	NO	111200	NO	111400	NO	111600	NO
112000	NO	112200	NO	112400	NO	112600	NO	113000	NO	113200	NO	113400	NO	113600	NO
114000	NO	114200	NO	114400	NO	114600	NO	115000	NO	115200	NO	115400	NO	115600	NO
118000	NO	118200	NO	118400	NO	118600	NO	119000	NO	119200	NO	119400	NO	119600	NO
120000	NO	120200	NO	120400	NO	120600	NO	121000	NO	121200	NO	121400	NO	121600	NO

122000	NO	122200	NO	122400	NO	122600	NO	123000	NO	123200	NO	123400	NO	123600	NO
124000	NO	124200	NO	124400	NO	124600	NO	125000	NO	125200	NO	125400	NO	125600	NO
126000	NO	126200	NO	126400	NO	126600	NO	127000	NO	127200	NO	127400	NO	127600	NO
130000	NO	130200	NO	130400	NO	130600	NO	131000	NO	131200	NO	131400	NO	131600	NO
132000	NO	132200	NO	132400	NO	132600	NO	133000	NO	133200	NO	133400	NO	133600	NO
134000	NO	134200	NO	134400	NO	134600	NO	135000	NO	135200	NO	135400	NO	135600	NO
136000	NO	136200	NO	136400	NO	136600	NO	137000	NO	137200	NO	137400	NO	137600	NO
140000	NO	140200	NO	140400	NO	140600	NO	141000	NO	141200	NO	141400	NO	141600	NO
142000	NO	142200	NO	142400	NO	142600	NO	143000	NO	143200	NO	143400	NO	143600	NO
144000	NO	144200	NO	144400	NO	144600	NO	145000	NO	145200	NO	145400	NO	145600	NO
146000	NO	146200	NO	146400	NO	146600	NO	147000	NO	147200	NO	147400	NO	147600	NO
150000	NO	150200	NO	150400	NO	150600	NO	151000	NO	151200	NO	151400	NO	151600	NO
152000	NO	152200	NO	152400	NO	152600	NO	153000	NO	153200	NO	153400	NO	153600	NO
154000	NO	154200	NO	154400	NO	154600	NO	155000	NO	155200	NO	155400	NO	155600	NO
156000	NO	156200	NO	156400	NO	156600	NO	157000	NO	157200	NO	157400	NO	157600	NO
160000	NO	160200	NO	160400	NO	160600	NO	161000	NO	161200	NO	161400	NO	161600	NO
162000	NO	162200	NO	162400	NO	162600	NO	163000	NO	163200	NO	163400	NO	163600	NO
164000	NO	164200	NO	164400	NO	164600	NO	165000	NO	165200	NO	165400	NO	165600	NO
166000	NO	166200	NO	166400	NO	166600	NO	167000	NO	167200	NO	167400	NO	167600	NO
170000	NO	170200	NO	170400	NO	170600	NO	171000	NO	171200	NO	171400	NO	171600	NO
172000	NO	172200	NO	172400	NO	172600	NO	173000	NO	173200	NO	173400	NO	173600	NO
174000	NO	174200	NO	174400	NO	174600	NO	175000	NO	175200	NO	175400	NO	175600	NO
176000	NO	176200	NO	176400	NO	176600	NO	177000	NO	177200	NO	177400	NO	177600	NO
200000	YES														

***** AVAILABLE REGION SIZE LIST POINTERS *****

SIZE	BANK	ADDR	SIZE	BANK	ADDR	SIZE	BANK	ADDR	SIZE	BANK	ADDR	SIZE	BANK	ADDR	SIZE	BANK	ADDR
0	0	000000	200	0	000000	400	0	000000	800	0	000000	1000	0	000000	1200	0	000000
1400	0	000000	1600	0	000000	2000	0	000000	2200	0	000000	2400	0	000000	2600	0	000000
3000	0	000000	3200	0	000000	3400	0	000000	3800	0	000000	4000	0	000000	4200	0	000000
4400	0	000000	4600	0	000000	5000	0	000000	5200	0	000000	5400	0	000000	5600	0	000000
6000	0	000000	6200	0	000000	6400	0	000000	6800	0	000000	7000	0	000000	7200	0	000000
7400	0	000000	7600	0	000000	10000	0	000000	10200	0	000000	10400	0	000000	10600	0	000000
11000	0	000000	11200	0	000000	11400	0	000000	11600	0	000000	12000	0	000000	12200	0	000000
12400	0	000000	12600	0	000000	13000	0	000000	13200	0	000000	13400	0	000000	13600	0	000000
14000	0	000000	14200	0	000000	14400	0	000000	14800	0	000000	15000	0	000000	15200	0	000000
15400	0	000000	15600	0	000000	16000	0	000000	16200	0	000000	16400	0	000000	16600	0	000000
17000	0	000000	17200	0	000000	17400	0	000000	17800	0	000000	20000	0	000000	20200	0	000000
20400	0	000000	20600	0	000000	21000	0	000000	21200	0	000000	21400	0	000000	21600	0	000000
22000	0	000000	22200	0	000000	22400	0	000000	22800	0	000000	23000	0	000000	23200	0	000000
23400	0	000000	23600	0	000000	24000	0	000000	24200	0	000000	24400	0	000000	24600	0	000000
25000	0	000000	25200	0	000000	25400	0	000000	25600	0	000000	26000	0	000000	26200	0	000000
26400	0	000000	26600	0	000000	27000	0	000000	27200	0	000000	27400	0	000000	27600	0	000000
30000	0	000000	30200	0	000000	30400	0	000000	30600	0	000000	31000	0	000000	31200	0	000000
31400	0	000000	31600	0	000000	32000	0	000000	32200	0	000000	32400	0	000000	32600	0	000000
33000	0	000000	33200	0	000000	33400	0	000000	33800	0	000000	34000	0	000000	34200	0	000000
34400	0	000000	34600	0	000000	35000	0	000000	35200	0	000000	35400	0	000000	35600	0	000000
36000	0	000000	36200	0	000000	36400	0	000000	36800	0	000000	37000	0	000000	37200	0	000000
37400	0	000000	37600	0	000000	40000	0	000000	40200	0	000000	40400	0	000000	40600	0	000000
41000	0	000000	41200	0	000000	41400	0	000000	41600	0	000000	42000	0	000000	42200	0	000000
42400	0	000000	42600	0	000000	43000	0	000000	43200	0	000000	43400	0	000000	43600	0	000000
44000	0	000000	44200	0	000000	44400	0	000000	44800	0	000000	45000	0	000000	45200	0	000000
45400	0	000000	45600	0	000000	46000	0	000000	46200	0	000000	46400	0	000000	46600	0	000000
47000	0	000000	47200	0	000000	47400	0	000000	47800	0	000000	50000	0	000000	50200	0	000000
50400	0	000000	50600	0	000000	51000	0	000000	51200	0	000000	51400	0	000000	51600	0	000000
52000	0	000000	52200	0	000000	52400	0	000000	52800	0	000000	53000	0	000000	53200	0	000000
53400	0	000000	53600	0	000000	54000	0	000000	54200	0	000000	54400	0	000000	54600	0	000000
55000	0	000000	55200	0	000000	55400	0	000000	55800	0	000000	56000	0	000000	56200	0	000000
56400	0	000000	56600	0	000000	57000	0	121023	57200	0	000000	57400	0	000000	57600	0	000000
60000	0	000000	60200	0	000000	60400	0	000000	60600	0	000000	61000	0	000000	61200	0	000000
61400	0	000000	61600	0	000000	62000	0	000000	62200	0	000000	62400	0	000000	62600	0	000000
63000	0	000000	63200	0	000000	63400	0	000000	63800	0	000000	64000	0	000000	64200	0	000000
64400	0	000000	64600	0	000000	65000	0	000000	65200	0	000000	65400	0	000000	65600	0	000000
66000	0	000000	66200	0	000000	66400	0	000000	66600	0	000000	67000	0	000000	67200	0	000000
67400	0	000000	67600	0	000000	70000	0	000000	70200	0	000000	70400	0	000000	70600	0	000000
71000	0	000000	71200	0	000000	71400	0	000000	71600	0	000000	72000	0	000000	72200	0	000000
72400	0	000000	72600	0	000000	73000	0	000000	73200	0	000000	73400	0	000000	73600	0	000000
74000	0	000000	74200	0	000000	74400	0	000000	74600	0	000000	75000	0	000000	75200	0	000000
75400	0	000000	75600	0	000000	76000	0	000000	76200	0	000000	76400	0	000000	76600	0	000000
77000	0	000000	77200	0	000000	77400	0	000000	77600	0	000000	100000	0	000000	100200	0	000000
100400	0	000000	100600	0	000000	101000	0	000000	101200	0	000000	101400	0	000000	101600	0	000000
102000	0	000000	102200	0	000000	102400	0	000000	102600	0	000000	103000	0	000000	103200	0	000000
103400	0	000000	103600	0	000000	104000	0	000000	104200	0	000000	104400	0	000000	104600	0	000000
105000	0	000000	105200	0	000000	105400	0	000000	105600	0	000000	106000	0	000000	106200	0	000000
106400	0	000000	106600	0	000000	107000	0	000000	107200	0	000000	107400	0	000000	107600	0	000000
110000	0	000000	110200	0	000000	110400	0	000000	110600	0	000000	111000	0	000000	111200	0	000000
111400	0	000000	111600	0	000000	112000	0	000000	112200	0	000000	112400	0	000000	112600	0	000000
113000	0	000000	113200	0	000000	113400	0	000000	113600	0	000000	114000	0	000000	114200	0	000000
114400	0	000000	114600	0	000000	115000	0	000000	115200	0	000000	115400	0	000000	115600	0	000000

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116000	0 000000	116200	0 000000	116400	0 000000	116600	0 000000	117000	0 000000	117200	0 000000
117400	0 000000	117600	0 000000	120000	0 000000	120200	0 000000	120400	0 000000	120600	0 000000
121000	0 000000	121200	0 000000	121400	0 000000	121600	0 000000	122000	0 000000	122200	0 000000
122400	0 000000	122600	0 000000	123000	0 000000	123200	0 000000	123400	0 000000	123600	0 000000
124000	0 000000	124200	0 000000	124400	0 000000	124600	0 000000	125000	0 000000	125200	0 000000
125400	0 000000	125600	0 000000	126000	0 000000	126200	0 000000	126400	0 000000	126600	0 000000
127000	0 000000	127200	0 000000	127400	0 000000	127600	0 000000	130000	0 000000	130200	0 000000
130400	0 000000	130600	0 000000	131000	0 000000	131200	0 000000	131400	0 000000	131600	0 000000
132000	0 000000	132200	0 000000	132400	0 000000	132800	0 000000	133000	0 000000	133200	0 000000
133400	0 000000	133600	0 000000	134000	0 000000	134200	0 000000	134400	0 000000	134600	0 000000
135000	0 000000	135200	0 000000	135400	0 000000	135600	0 000000	136000	0 000000	136200	0 000000
136400	0 000000	136600	0 000000	137000	0 000000	137200	0 000000	137400	0 000000	137600	0 000000
140000	0 000000	140200	0 000000	140400	0 000000	140600	0 000000	141000	0 000000	141200	0 000000
141400	0 000000	141600	0 000000	142000	0 000000	142200	0 000000	142400	0 000000	142600	0 000000
143000	0 000000	143200	0 000000	143400	0 000000	143600	0 000000	144000	0 000000	144200	0 000000
144400	0 000000	144600	0 000000	145000	0 000000	145200	0 000000	145400	0 000000	145600	0 000000
146000	0 000000	146200	0 000000	146400	0 000000	146600	0 000000	147000	0 000000	147200	0 000000
147400	0 000000	147600	0 000000	150000	0 000000	150200	0 000000	150400	0 000000	150600	0 000000
151000	0 000000	151200	0 000000	151400	0 000000	151600	0 000000	152000	0 000000	152200	0 000000
152400	0 000000	152600	0 000000	153000	0 000000	153200	0 000000	153400	0 000000	153600	0 000000
154000	0 000000	154200	0 000000	154400	0 000000	154600	0 000000	155000	0 000000	155200	0 000000
155400	0 000000	155600	0 000000	156000	0 000000	156200	0 000000	156400	0 000000	156600	0 000000
157000	0 000000	157200	0 000000	157400	0 000000	157600	0 000000	160000	0 000000	160200	0 000000
160400	0 000000	160600	0 000000	161000	0 000000	161200	0 000000	161400	0 000000	161600	0 000000
162000	0 000000	162200	0 000000	162400	0 000000	162600	0 000000	163000	0 000000	163200	0 000000
163400	0 000000	163600	0 000000	164000	0 000000	164200	0 000000	164400	0 000000	164600	0 000000
165000	0 000000	165200	0 000000	165400	0 000000	165600	0 000000	166000	0 000000	166200	0 000000
166400	0 000000	166600	0 000000	167000	0 000000	167200	0 000000	167400	0 000000	167600	0 000000
170000	0 000000	170200	0 000000	170400	0 000000	170600	0 000000	171000	0 000000	171200	0 000000
171400	0 000000	171600	0 000000	172000	0 000000	172200	0 000000	172400	0 000000	172600	0 000000
173000	0 000000	173200	0 000000	173400	0 000000	173600	0 000000	174000	0 000000	174200	0 000000
174400	0 000000	174600	0 000000	175000	0 000000	175200	0 000000	175400	0 000000	175600	0 000000
176000	0 000000	176200	0 000000	176400	0 000000	176600	0 000000	177000	0 000000	177200	0 000000
177400	0 000000	177600	0 000000	200000	17 000023						0 000000

***** PROCESS SEGMENT LOCALITY LISTS *****

PIN: 1 FIRST SLL: 24150 CURR SLL: 0 MEM REQ SLL: 0 SLL COUNT: 1 IOCNT: 1 HASMEM INTLC

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
24150	DST 106	0	0			STK SLLIMI

PIN: 2 FIRST SLL: 24016 CURR SLL: 0 MEM REQ SLL: 24016 SLL COUNT: 1 IOCNT: 0 SWREQ

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
24016	DST 75	0	0			STK

PIN: 3 FIRST SLL: 24030 CURR SLL: 0 MEM REQ SLL: 24030 SLL COUNT: 1 IOCNT: 0 SWREQ

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
24030	DST 76	0	0			STK

PIN: 4 FIRST SLL: 24042 CURR SLL: 0 MEM REQ SLL: 24042 SLL COUNT: 1 IOCNT: 0 SWREQ

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
24042	DST 77	0	0			STK

PIN: 5 FIRST SLL: 24054 CURR SLL: 0 MEM REQ SLL: 24054 SLL COUNT: 1 IOCNT: 0 SWREQ

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS FZREQ LKREQ SLLIMI DISCIO
24054	DST 100	0	0			STK

PIN: 6 FIRST SLL: 24066 CURR SLL: 0 MEM REQ SLL: 24066 SLL COUNT: 1 IOCNT: 0 SWREQ

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLLIMI	DISCIO
24066	DST 101	0	0			STK				

PIN: 7 FIRST SLL: 24100 CURR SLL: 0 MEM REQ SLL: 24100 SLL COUNT: 1 IOCNT: 0 SWREQ

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLLIMI	DISCIO
24100	DST 102	0	0			STK				

PIN: 10 FIRST SLL: 24112 CURR SLL: 0 MEM REQ SLL: 24112 SLL COUNT: 1 IOCNT: 0 SWREQ

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLLIMI	DISCIO
24112	DST 103	0	0			STK				

PIN: 11 FIRST SLL: 24124 CURR SLL: 0 MEM REQ SLL: 24124 SLL COUNT: 1 IOCNT: 0 SWREQ

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLLIMI	DISCIO
24124	DST 104	0	0			STK				

PIN: 12 FIRST SLL: 24136 CURR SLL: 0 MEM REQ SLL: 24136 SLL COUNT: 1 IOCNT: 0 SWREQ

ENTRY INDEX	SEGMENT IDENTIFIER	NEXT ENTRY INDEX	PREV ENTRY INDEX	NEXT MAKE PRSNT DFRD QUEUE PIN	PREV MAKE PRSNT DFRD QUEUE PIN	STK TOSS	FZREQ	LKREQ	SLLIMI	DISCIO
24136	DST 105	0	0			STK				

***** VIRTUAL DISC SPACE MANAGEMENT TABLES *****

NUMBER OF VMS VOLUMES: 000001
 VM PAGE SIZE: 001000
 SECTORS PER VM PAGE: 000004
 TOTAL VM PAGES AVAIL: 001771
 LEAST PAGES EVER AVAIL: 001771

TABLE INDEX	LDEV	STARTING SECTOR	TOTAL SECTOR COUNT	TOTAL PAGES	PAGES AVAIL	SMALLEST RECENT MISS	LEAST PAGES EVER AVAIL.
000020	000001	3110	12000	002400	001771	002400	001771

-- BIT MAP --

000000: 000000 000000 000000 000000 000000 000000 000000 000000 000010: 000000 000000 000000 000000 000000 000000 000000 000000
 000020: 000777 177777 177777 177777 177777 177777 177777 177777 000030: 177777 177777 177777 177777 177777 177777 177777 177777
 000040: 177777 177777 177777 177777 177777 177777 177777 177777 000050: 177777 177777 177777 177777 177777 177777 177777 177777
 LINES 000060 - 000117 SAME AS ABOVE
 000120: 000000

***** D R T T A B L E *****

DEVICE NUMBER	ABS ADR	SIO	PGM LABEL	D8I
3	14:	000000	113033	000524 000000
4	20:	022001	132033	021734 000000
5	24:	000000	105401	001000 000000
6	30:	000000	132033	022441 000000
7	34:	000000	117033	022533 000000
8	40:	000000	120433	022533 000000
9	44:	000000	120033	022533 000000
10	50:	000000	105401	001000 000000
11	54:	000000	105401	001000 000000
12	60:	000000	105401	001000 000000
13	64:	000000	105401	001000 000000
14	70:	000000	105401	001000 000000
15	74:	000000	132033	022601 000000
16	100:	000000	105401	001000 000000
17	104:	000000	105401	001000 000000
18	110:	000000	101525	022726 000000
19	114:	000000	101525	022745 000000
20	120:	000000	105401	001000 000000
21	124:	000000	105401	001000 000000
22	130:	000000	105401	001000 000000

DRT NO	SHARED SEL CHAN	CHANNEL QUEUE	CPVA	ILT SYS DB REL ADDR	WAIT PROG STATUS	SIOP SYS DB REL ADDR	SIOP SIZE	Q#	DITPO	UNIT EXTRCT INSTRUCTION	ABS ADDRESS	SIOP PROGRAM	
											022135	000000	000000 JUMP
											022137	000000	000000 JUMP
											022141	000000	000000 JUMP
											022143	000000	000000 JUMP
											022145	000000	000000 JUMP
											022147	000000	000000 JUMP
											022151	000000	000000 JUMP
											022153	000000	000000 JUMP
											022155	000000	000000 JUMP
											022157	000000	000000 JUMP
											022161	000000	000000 JUMP
											022163	000000	000000 JUMP
											022165	000000	000000 JUMP
											022167	040001	006400 CONTROL
											022171	077771	000000 READ
											022173	040001	000000 CONTROL
											022175	077776	000000 READ
											022177	040001	012000 CONTROL
											022201	077776	000000 READ
											022203	050000	177777 SENSE
											022205	040000	000000 CONTROL
											022207	034000	177777 END/INT
											022211	040000	000000 CONTROL
											022213	030000	177777 END NO INT
											022215	040000	012400 CONTROL
											022217	030000	177777 END NO INT
											022221	000000	000000 JUMP
											022223	000000	000000 JUMP
											022225	000000	000000 JUMP
											022227	040000	000000 CONTROL
											022231	067776	000010 WRITE
											022233	050000	177777 SENSE
											022235	040000	000000 CONTROL
											022237	067776	000010 WRITE
											022241	050000	177777 SENSE
											022243	040000	000000 CONTROL
											022245	067776	000010 WRITE
											022247	050000	177777 SENSE
											022251	040001	001407 CONTROL
											022253	077776	000010 READ
											022255	040001	001406 CONTROL
											022257	077776	000010 READ
											022261	040001	001405 CONTROL
											022263	077776	000010 READ
											022265	040001	001404 CONTROL
											022267	077776	000010 READ
											022271	040001	001403 CONTROL
											022273	077776	000010 READ
											022275	040001	001402 CONTROL
											022277	077776	000010 READ

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DRT NO	SHARED SEL CHAN	CHANNEL QUEUE	CPVA	ILT SYS DB REL ADDR	WAIT PROG STATUS	SIOP SYS DB REL ADDR	SIOP SIZE	Q#	DITPO	UNIT EXTRCT INSTRUCTION	ABS ADDRESS	SIO PROGRAM				
										022301	040001	001401 CONTROL				
										022303	077778	000010 READ				
										022305	040001	001400 CONTROL				
										022307	077778	000010 READ				
										022311	040000	000000 CONTROL				
										022313	014000	000000 SET BANK				
										022315	040000	000000 CONTROL				
										022317	067778	000000 WRITE				
										022321	014000	000000 SET BANK				
										022323	040000	000000 CONTROL				
										022325	000000	000000 JUMP				
										022327	000000	000000 JUMP				
										022331	000000	000000 JUMP				
										022333	000000	000000 JUMP				
										022335	031004	031003 END NO INT				
										022337	031003	000000 END NO INT				
										022341	000000	000001 JUMP				
										022343	031005	031006 END NO INT				
										022345	021405	047604 INTERRUPT				
										022347	021410	047401 INTERRUPT				
										022351	021415	047401 INTERRUPT				
										022353	037437	025001 END/INT				
										022355	021010	003400 INTERRUPT				
										022357	021050	022437 INTERRUPT				
										022361	000600	120404 JUMP				
										022363	041404	022007 CONTROL				
										022365	141430	041404 CONTROL				
										022367	061403	141411 WRITE				
										022371	041404	022416 CONTROL				
										022373	004300	047401 JMP (COND)				
										022375	022000	141303 INTERRUPT				
										022377	131404	017400 END NO INT				
										022401	131405	177402 END NO INT				
										022403	040011	002000 CONTROL				
										022405	131406	057402 END NO INT				
										022407	120405	041408 INTERRUPT				
										022411	023004	051406 INTERRUPT				
										022413	140431	001000 CONTROL				
										022415	040401	021013 CONTROL				
										022417	010201	004300 RTN RES				
										022421	177402	002000 READ				
										022423	023002	021051 INTERRUPT				
										022425	023004	041701 INTERRUPT				
										022427	003243	057402 JUMP				
										022431	023002	033006 INTERRUPT				
										022433	004500	057402 JMP (COND)				
										022435	023002	033006 INTERRUPT				
										022437	057402	041407 SENSE				
8	NO		0	000000		21441		021463	50	3	002310	026462	022463	014000	000000	SET BANK

DRT NO	SHARED SEL CHAN	CHANNEL QUEUE	CPVA	ILT SYS DB REL ADDR	WAIT PROG STATUS	SIOP SYS DB REL ADDR	SIOP SIZE	Q#	DITPO	UNIT EXTRCT INSTRUCTION	ABS ADDRESS	SIO PROGRAM
											022702	014000 000000 SET BANK
											022704	034000 177777 END/INT
											022706	040000 000043 CONTROL
											022710	067777 000000 WRITE
											022712	034000 177777 END/INT
											022714	040000 000503 CONTROL
											022716	067777 000000 WRITE
											022720	040000 000703 CONTROL
											022722	067777 000000 WRITE
											022724	034000 177777 END/INT
18	NO	0	000000	21726		003652	0	0	003527	000000	004652	000000 000000 JUMP
18	NO	0	000000	21745		004450	0	0	004325	000000	005450	000000 000000 JUMP

5

***** LOGICAL PHYSICAL - DEVICE TABLE *****

LOGICAL DEV NO	SYSDB REL DIT POINTER	DEVICE SUBTYPE	EOF CONDITION	BREAK	CNTRL Y	DUPLIC	INTERACT	ACCEPT JOBS/SESS	ACCEPT DATA	DEVICE RECOGNIT STATE	LOGOFF
1	002250	8	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
6	003510	4	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
7	002310	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
8	002324	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
9	002340	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
10	002354	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
15	003527	0	NO EOF			NO	NO	YES	YES	NOT OWNED	NO
16	004325	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
20	002370	0	NO EOF			NO	NO	NO	NO	NOT OWNED	NO
21	002435	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
22	002502	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
23	002547	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
24	002614	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
25	002661	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
26	002726	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
27	002773	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
28	003040	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
29	003105	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
30	003152	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
31	003217	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
32	003264	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
33	003331	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
34	003376	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
35	003443	1	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
55	005123	1	NO EOF			NO	YES	NO	NO	NOT OWNED	NO
56	005152	1	NO EOF			NO	YES	NO	NO	NOT OWNED	NO
69	005201	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
70	005216	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
71	005233	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
72	005250	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
73	005265	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
75	005302	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
76	005317	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
77	005334	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
78	005351	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO
79	005366	0	NO EOF			YES	YES	YES	YES	NOT OWNED	NO

5

***** DEVICE INFORMATION TABLE *****

DRT NO 4 (SYSTEM DISK) CONTROLLER ERROR STATUS = 000000

UNIT 0 LOGICAL DEV 1 FLAGS = 040413 NEXT DIT = 000000 DLTP = 177134 ILTP = 020754 IOQP = 015654

2250	040413	000000	015654	000001	177134	020754	000000	000000
2260	000000	000000	000000	004750	000012	001050	114023	004720
2270	004720	000000	000000	000000	000000	000000	000000	000000
2300	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 0 LOGICAL DEV 1 FLAGS = 040413 NEXT DIT = 000000 DLTP = 177134 ILTP = 020754 IOQP = 015654

2250	040413	000000	015654	000001	177134	020754	000000	000000
2260	000000	000000	000000	004750	000012	001050	114023	004720
2270	004720	000000	000000	000000	000000	000000	000000	000000
2300	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 14 LOGICAL DEV 8 FLAGS = 041402 NEXT DIT = 026410 DLTP = 051402 ILTP = 140011 IOQP = 003400

100000	041402	026410	003400	027010	051402	140011	001136	000041
100010	041402	041402	037777	003400	027210	051402	041402	020341
100020	041402	026410	022000	141503	041401	013607	041402	037777
100030	022000	141517	041401	013615	025015	002000	020340	041401

UNIT 14 LOGICAL DEV 8 FLAGS = 041402 NEXT DIT = 026410 DLTP = 051402 ILTP = 140011 IOQP = 003400

100000	041402	026410	003400	027010	051402	140011	001136	000041
100010	041402	041402	037777	003400	027210	051402	041402	020341
100020	041402	026410	022000	141503	041401	013607	041402	037777
100030	022000	141517	041401	013615	025015	002000	020340	041401

DRT NO 6 (MAGNETIC TAPE UNIT) CONTROLLER ERROR STATUS = 000000

UNIT 0 LOGICAL DEV 7 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 021441 IOQP = 000000

2310	002000	000000	000000	000007	177144	021441	000000	000000
2320	000000	000000	000000	000000				

UNIT 1 LOGICAL DEV 8 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 021441 IOQP = 000000

2324	002000	000000	000000	000410	177144	021441	000000	000000
2334	000000	000000	000000	000000				

UNIT 2 LOGICAL DEV 9 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 021441 IOQP = 000000

2340	002000	000000	000000	001011	177144	021441	000000	000000
2350	000000	000000	000000	000000				

UNIT 3 LOGICAL DEV 10 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177144 ILTP = 021441 IOQP = 000000
 2354 002000 000000 000000 001412 177144 021441 000000 000000
 2364 000000 000000 000000 000000

DRT NO 7 (TERMINAL)

UNIT 0 LOGICAL DEV 20 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000
 2370 102400 000000 000000 000024 177154 021533 000000 000020
 2400 000000 014000 000002 000000 000000 000000 000000 000000
 2410 000000 000000 000000 000000 000000 000000 000000 012000
 2420 000000 000000 000000 000000 000000 000000 000000 000000
 2430 000000 000000 000000 000000 000000

UNIT 1 LOGICAL DEV 21 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000
 2435 102400 000000 000000 000425 177154 021533 000000 000020
 2445 000000 014000 000002 000000 000000 000000 000000 000000
 2455 000000 000000 000000 000000 000000 000000 000000 012000
 2465 000000 000000 000000 000000 000000 000000 000000 000000
 2475 000000 000000 000000 000000 000000

UNIT 2 LOGICAL DEV 22 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000
 2502 102400 000000 000000 001026 177154 021533 000000 000020
 2512 000000 014000 000002 000000 000000 000000 000000 000000
 2522 000000 000000 000000 000000 000000 000000 000000 012000
 2532 000000 000000 000000 000000 000000 000000 000000 000000
 2542 000000 000000 000000 000000 000000

UNIT 3 LOGICAL DEV 23 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000
 2547 102400 000000 000000 001427 177154 021533 000000 000020
 2557 000000 014000 000002 000000 000000 000000 000000 000000
 2567 000000 000000 000000 000000 000000 000000 000000 012000
 2577 000000 000000 000000 000000 000000 000000 000000 000000
 2607 000000 000000 000000 000000 000000

UNIT 4 LOGICAL DEV 24 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000
 2614 102400 000000 000000 002030 177154 021533 000000 000020
 2624 000000 014000 000002 000000 000000 000000 000000 000000
 2634 000000 000000 000000 000000 000000 000000 000000 012000
 2644 000000 000000 000000 000000 000000 000000 000000 000000
 2654 000000 000000 000000 000000 000000

UNIT 5 LOGICAL DEV 25 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000

2661	102400	000000	000000	002431	177154	021533	000000	000020
2671	000000	014000	000602	000000	000000	000000	000000	000000
2701	000000	000000	000000	000000	000000	000000	000000	012000
2711	000000	000000	000000	000000	000000	000000	000000	000000
2721	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 8 LOGICAL DEV 26 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000

2728	102400	000000	000000	003032	177154	021533	000000	000020
2738	000000	014000	000602	000000	000000	000000	000000	000000
2748	000000	000000	000000	000000	000000	000000	000000	012000
2758	000000	000000	000000	000000	000000	000000	000000	000000
2768	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 7 LOGICAL DEV 27 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000

2773	102400	000000	000000	003433	177154	021533	000000	000020
3003	000000	014000	000602	000000	000000	000000	000000	000000
3013	000000	000000	000000	000000	000000	000000	000000	012000
3023	000000	000000	000000	000000	000000	000000	000000	000000
3033	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 8 LOGICAL DEV 28 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000

3040	102400	000000	000000	004034	177154	021533	000000	000020
3050	000000	014000	000602	000000	000000	000000	000000	000000
3060	000000	000000	000000	000000	000000	000000	000000	012000
3070	000000	000000	000000	000000	000000	000000	000000	000000
3100	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 9 LOGICAL DEV 29 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000

3105	102400	000000	000000	004435	177154	021533	000000	000020
3115	000000	014000	000602	000000	000000	000000	000000	000000
3125	000000	000000	000000	000000	000000	000000	000000	012000
3135	000000	000000	000000	000000	000000	000000	000000	000000
3145	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 10 LOGICAL DEV 30 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000

3152	102400	000000	000000	005036	177154	021533	000000	000020
3162	000000	014000	000602	000000	000000	000000	000000	000000
3172	000000	000000	000000	000000	000000	000000	000000	012000
3202	000000	000000	000000	000000	000000	000000	000000	000000
3212	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 11 LOGICAL DEV 31 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000

3217	102400	000000	000000	005437	177154	021533	000000	000020
------	--------	--------	--------	--------	--------	--------	--------	--------

3227	000000	014000	000602	000000	000000	000000	000000	000000
3237	000000	000000	000000	000000	000000	000000	000000	012000
3247	000000	000000	000000	000000	000000	000000	000000	000000
3257	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 12 LOGICAL DEV 32 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000

3264	102400	000000	000000	006040	177154	021533	000000	000020
3274	000000	014000	000602	000000	000000	000000	000000	000000
3304	000000	000000	000000	000000	000000	000000	000000	012000
3314	000000	000000	000000	000000	000000	000000	000000	000000
3324	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 13 LOGICAL DEV 33 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000

3331	102400	000000	000000	006441	177154	021533	000000	000020
3341	000000	014000	000602	000000	000000	000000	000000	000000
3351	000000	000000	000000	000000	000000	000000	000000	012000
3361	000000	000000	000000	000000	000000	000000	000000	000000
3371	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 14 LOGICAL DEV 34 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000

3376	102400	000000	000000	007042	177154	021533	000000	000020
3406	000000	014000	000602	000000	000000	000000	000000	000000
3416	000000	000000	000000	000000	000000	000000	000000	012000
3426	000000	000000	000000	000000	000000	000000	000000	000000
3436	000000	000000	000000	000000	000000	000000	000000	000000

UNIT 15 LOGICAL DEV 35 FLAGS = 102400 NEXT DIT = 000000 DLTP = 177154 ILTP = 021533 IOQP = 000000

3443	102400	000000	000000	007443	177154	021533	000000	000020
3453	000000	014000	000602	000000	000000	000000	000000	000000
3463	000000	000000	000000	000000	000000	000000	000000	000000
3473	000000	000000	000000	000000	000000	000000	000000	000000
3503	000000	000000	000000	000000	000000	000000	000000	000000

DRT NO 15 (LINE PRINTER)

UNIT 0 LOGICAL DEV 6 FLAGS = 000000 NEXT DIT = 000000 DLTP = 177164 ILTP = 021601 IOQP = 000000

3510	000000	000000	000000	000006	177164	021601	000000	000000
3520	000000	000000	000000	000000	000000	000000	000000	000000

DRT NO 18 (SYNC. SINGLE LINE CNTRL)

UNIT 0 LOGICAL DEV 15 FLAGS = 000000 DLTP = 177174 ILTP = 021726 IOQP = 000000

3527	000000	000000	000000	000017	177174	021726	000000	000000
3537	000000	000000	003652	003652	003652	000000	000000	002201

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3547	000000	000000	000000	000101	000400	000000	000005	000000
3557	000024	000074	000454	000000	011300	000000	011300	000000
3567	000000	000000	000000	000000	000000	000000	000000	000000
3577	000000	000000	000000	000000	000000	000000	000000	000000
3607	000000	000000	000000	000000	000000	000000	000000	000000
3617	000000	000000	000000	000000	000000	000000	000000	000000
3627	000000	000000	000000	000000	000000	000000	000000	000000
3637	000000	000000	000000	000000	000000	000000	000000	000000
3647	000000	000000	000000	000000	000000	000000	000000	000000
3657	000000	000000	000000	000000	000000	000000	000000	000000
3667	000000	000000	000000	000000	000000	000000	000000	000000
3677	000000	000000	000000	000000	000000	000000	000000	000000
3707	000000	000000	000000	000000	000000	000000	000000	000000
3717	000000	000000	000000	000000	000000	000000	000000	000000

DRT NO 18 (SYNC. SINGLE LINE CNTRL)

UNIT 0 LOGICAL DEV 16 FLAGS = 000000

DLTP = 177174 ILTP = 021745 IOQP = 000000

4325	000000	000000	000000	000020	177174	021745	000000	000000
4335	000000	000000	004450	004450	004450	000000	000000	002201
4345	000000	000000	000000	000101	000400	000000	000005	000000
4355	000024	000074	000454	000000	004540	000000	004540	000000
4365	000000	000000	000000	000000	000000	000000	000000	000000
4375	000000	000000	000000	000000	000000	000000	000000	000000
4405	000000	000000	000000	000000	000000	000000	000000	000000
4415	000000	000000	000000	000000	000000	000000	000000	000000
4425	000000	000000	000000	000000	000000	000000	000000	000000
4435	000000	000000	000000	000000	000000	000000	000000	000000
4445	000000	000000	000000	000000	000000	000000	000000	000000
4455	000000	000000	000000	000000	000000	000000	000000	000000
4465	000000	000000	000000	000000	000000	000000	000000	000000
4475	000000	000000	000000	000000	000000	000000	000000	000000
4505	000000	000000	000000	000000	000000	000000	000000	000000
4515	000000	000000	000000	000000	000000	000000	000000	000000

***** DISC REQUEST TABLE ***** (SUMMARY INFO)

TOTAL ENTRIES IN TABLE: 144
 ENTRY SIZE: 20
 ENTRIES IN PRIMARY AREA: 125
 IMPEDED PROCESS PCB:
 TABLE INDEX OF FIRST AVAIL ENTRY: 40
 TABLE INDEX OF LAST AVAIL ENTRY: 3100
 MAXIMUM NUMBER OF ENTRIES IN USE: 1
 CURRENT NUMBER OF ENTRIES IN USE: 1
 OVERFLOWS:
 TOTAL REQUESTS: 1
 SYSBASE INDEX OF DISABLED Q HEAD:
 SYSBASE INDEX OF DISABLED Q TAIL:

***** DISC REQUEST TABLE ***** (ACTIVE LISTS)

LDEV 1

STATUS: 0.XX -> PENDING
 1.XX -> SUCCESSFUL
 2.XX -> END OF FILE
 3.XX -> UNUSUAL CONDITION
 4.XX -> IRRECOVERABLE ERROR

TABLE INDEX	LDEV	UNIT	PCB	S	DST/ BANK	OFFSET/ ADDRESS	FUNC	XFER CNT	PARM1	PARM2	MISC	SEG IDENT	SEG DSP	URGCLS	- F L A G S -		STATUS	
															MAIN	AUX		
000020*	1	0	0		0	114023	READ	4720	000000	004750	000000	DST	108	0	61	040110	000000	0. 1

***** DISC REQUEST TABLE ***** (DISABLED LIST)

***** NO DISABLED QUEUE ELEMENTS *****

***** DISC REQUEST TABLE ***** (AVAILABLE LIST)

STATUS: 0.XX -> PENDING
 1.XX -> SUCCESSFUL
 2.XX -> END OF FILE
 3.XX -> UNUSUAL CONDITION
 4.XX -> IRRECOVERABLE ERROR

TABLE INDEX	LDEV	UNIT	PCB	S	DST/BANK	OFFSET/ADDRESS	FUNC	XFER CNT	PARM1	PARM2	MISC	SEG IDENT	SEG DSP	NXTAVL	- F L A G S -		STATUS
															MAIN	AUX	
003100	0	0	0	0	0	000000	READ	0	000000	000000	000000			0	000000	000000	0.0
003060	0	0	0	0	0	000000	READ	0	000000	000000	000000			3100	000000	000000	0.0
003040	0	0	0	0	0	000000	READ	0	000000	000000	000000			3060	000000	000000	0.0
003020	0	0	0	0	0	000000	READ	0	000000	000000	000000			3040	000000	000000	0.0
003000	0	0	0	0	0	000000	READ	0	000000	000000	000000			3020	000000	000000	0.0
002760	0	0	0	0	0	000000	READ	0	000000	000000	000000			3000	000000	000000	0.0
002740	0	0	0	0	0	000000	READ	0	000000	000000	000000			2760	000000	000000	0.0
002720	0	0	0	0	0	000000	READ	0	000000	000000	000000			2740	000000	000000	0.0
002700	0	0	0	0	0	000000	READ	0	000000	000000	000000			2720	000000	000000	0.0
002660	0	0	0	0	0	000000	READ	0	000000	000000	000000			2700	000000	000000	0.0
002640	0	0	0	0	0	000000	READ	0	000000	000000	000000			2660	000000	000000	0.0
002620	0	0	0	0	0	000000	READ	0	000000	000000	000000			2640	000000	000000	0.0
002600	0	0	0	0	0	000000	READ	0	000000	000000	000000			2620	000000	000000	0.0
002560	0	0	0	0	0	000000	READ	0	000000	000000	000000			2600	000000	000000	0.0
002540	0	0	0	0	0	000000	READ	0	000000	000000	000000			2560	000000	000000	0.0
002520	0	0	0	0	0	000000	READ	0	000000	000000	000000			2540	000000	000000	0.0
002500	0	0	0	0	0	000000	READ	0	000000	000000	000000			2520	000000	000000	0.0
002460	0	0	0	0	0	000000	READ	0	000000	000000	000000			2500	000000	000000	0.0
002440	0	0	0	0	0	000000	READ	0	000000	000000	000000			2460	000000	000000	0.0
002420	0	0	0	0	0	000000	READ	0	000000	000000	000000			2440	000000	000000	0.0
002400	0	0	0	0	0	000000	READ	0	000000	000000	000000			2420	000000	000000	0.0
002360	0	0	0	0	0	000000	READ	0	000000	000000	000000			2400	000000	000000	0.0
002340	0	0	0	0	0	000000	READ	0	000000	000000	000000			2360	000000	000000	0.0
002320	0	0	0	0	0	000000	READ	0	000000	000000	000000			2340	000000	000000	0.0
002300	0	0	0	0	0	000000	READ	0	000000	000000	000000			2320	000000	000000	0.0
002260	0	0	0	0	0	000000	READ	0	000000	000000	000000			2300	000000	000000	0.0
002240	0	0	0	0	0	000000	READ	0	000000	000000	000000			2260	000000	000000	0.0
002220	0	0	0	0	0	000000	READ	0	000000	000000	000000			2240	000000	000000	0.0
002200	0	0	0	0	0	000000	READ	0	000000	000000	000000			2220	000000	000000	0.0
002160	0	0	0	0	0	000000	READ	0	000000	000000	000000			2200	000000	000000	0.0
002140	0	0	0	0	0	000000	READ	0	000000	000000	000000			2160	000000	000000	0.0
002120	0	0	0	0	0	000000	READ	0	000000	000000	000000			2140	000000	000000	0.0

***** DISC REQUEST TABLE ***** (AVAILABLE LIST)

STATUS: 0.XX -> PENDING
 1.XX -> SUCCESSFUL
 2.XX -> END OF FILE
 3.XX -> UNUSUAL CONDITION
 4.XX -> IRRECOVERABLE ERROR

TABLE INDEX	LDEV	UNIT	PCB	S	DST/ BANK	OFFSET/ ADDRESS	FUNC	XFER CNT	PARM1	PARM2	MISC	SEG IDENT	SEGDSP	NXTAVL	- F L A G S -		STATUS
															MAIN	AUX	
002100	0	0	0	0	0	000000	READ	0	000000	000000	000000			2120	000000	000000	0. 0
002080	0	0	0	0	0	000000	READ	0	000000	000000	000000			2100	000000	000000	0. 0
002040	0	0	0	0	0	000000	READ	0	000000	000000	000000			2080	000000	000000	0. 0
002020	0	0	0	0	0	000000	READ	0	000000	000000	000000			2040	000000	000000	0. 0
002000	0	0	0	0	0	000000	READ	0	000000	000000	000000			2020	000000	000000	0. 0
001760	0	0	0	0	0	000000	READ	0	000000	000000	000000			2000	000000	000000	0. 0
001740	0	0	0	0	0	000000	READ	0	000000	000000	000000			1780	000000	000000	0. 0
001720	0	0	0	0	0	000000	READ	0	000000	000000	000000			1740	000000	000000	0. 0
001700	0	0	0	0	0	000000	READ	0	000000	000000	000000			1720	000000	000000	0. 0
001660	0	0	0	0	0	000000	READ	0	000000	000000	000000			1700	000000	000000	0. 0
001640	0	0	0	0	0	000000	READ	0	000000	000000	000000			1680	000000	000000	0. 0
001620	0	0	0	0	0	000000	READ	0	000000	000000	000000			1640	000000	000000	0. 0
001600	0	0	0	0	0	000000	READ	0	000000	000000	000000			1620	000000	000000	0. 0
001560	0	0	0	0	0	000000	READ	0	000000	000000	000000			1600	000000	000000	0. 0
001540	0	0	0	0	0	000000	READ	0	000000	000000	000000			1560	000000	000000	0. 0
001520	0	0	0	0	0	000000	READ	0	000000	000000	000000			1540	000000	000000	0. 0
001500	0	0	0	0	0	000000	READ	0	000000	000000	000000			1520	000000	000000	0. 0
001460	0	0	0	0	0	000000	READ	0	000000	000000	000000			1500	000000	000000	0. 0
001440	0	0	0	0	0	000000	READ	0	000000	000000	000000			1480	000000	000000	0. 0
001420	0	0	0	0	0	000000	READ	0	000000	000000	000000			1440	000000	000000	0. 0
001400	0	0	0	0	0	000000	READ	0	000000	000000	000000			1420	000000	000000	0. 0
001360	0	0	0	0	0	000000	READ	0	000000	000000	000000			1400	000000	000000	0. 0
001340	0	0	0	0	0	000000	READ	0	000000	000000	000000			1360	000000	000000	0. 0
001320	0	0	0	0	0	000000	READ	0	000000	000000	000000			1340	000000	000000	0. 0
001300	0	0	0	0	0	000000	READ	0	000000	000000	000000			1320	000000	000000	0. 0
001260	0	0	0	0	0	000000	READ	0	000000	000000	000000			1300	000000	000000	0. 0
001240	0	0	0	0	0	000000	READ	0	000000	000000	000000			1260	000000	000000	0. 0
001220	0	0	0	0	0	000000	READ	0	000000	000000	000000			1240	000000	000000	0. 0
001200	0	0	0	0	0	000000	READ	0	000000	000000	000000			1220	000000	000000	0. 0
001160	0	0	0	0	0	000000	READ	0	000000	000000	000000			1200	000000	000000	0. 0
001140	0	0	0	0	0	000000	READ	0	000000	000000	000000			1160	000000	000000	0. 0
001120	0	0	0	0	0	000000	READ	0	000000	000000	000000			1140	000000	000000	0. 0
001100	0	0	0	0	0	000000	READ	0	000000	000000	000000			1120	000000	000000	0. 0
001060	0	0	0	0	0	000000	READ	0	000000	000000	000000			1100	000000	000000	0. 0
001040	0	0	0	0	0	000000	READ	0	000000	000000	000000			1060	000000	000000	0. 0
001020	0	0	0	0	0	000000	READ	0	000000	000000	000000			1040	000000	000000	0. 0
001000	0	0	0	0	0	000000	READ	0	000000	000000	000000			1020	000000	000000	0. 0
000780	0	0	0	0	0	000000	READ	0	000000	000000	000000			1000	000000	000000	0. 0

5

***** DISC REQUEST TABLE ***** (AVAILABLE LIST)

STATUS: 0.XX -> PENDING
 1.XX -> SUCCESSFUL
 2.XX -> END OF FILE
 3.XX -> UNUSUAL CONDITION
 4.XX -> IRRECOVERABLE ERROR

TABLE INDEX	LDEV	UNIT	PCB	S	DST/BANK	OFFSET/ADDRESS	FUNC	XFER CNT	PARM1	PARM2	MISC	SEG IDENT	SEGDSP	NX,AVL	- F L A G S -		STATUS
															MAIN	AUX	
000740	0	0	0	0	0	000000	READ	0	000000	000000	000000			760	000000	000000	0. 0
000720	0	0	0	0	0	000000	READ	0	000000	000000	000000			740	000000	000000	0. 0
000700	0	0	0	0	0	000000	READ	0	000000	000000	000000			720	000000	000000	0. 0
000680	0	0	0	0	0	000000	READ	0	000000	000000	000000			700	000000	000000	0. 0
000660	0	0	0	0	0	000000	READ	0	000000	000000	000000			660	000000	000000	0. 0
000640	0	0	0	0	0	000000	READ	0	000000	000000	000000			640	000000	000000	0. 0
000620	0	0	0	0	0	000000	READ	0	000000	000000	000000			620	000000	000000	0. 0
000600	0	0	0	0	0	000000	READ	0	000000	000000	000000			600	000000	000000	0. 0
000580	0	0	0	0	0	000000	READ	0	000000	000000	000000			580	000000	000000	0. 0
000560	0	0	0	0	0	000000	READ	0	000000	000000	000000			560	000000	000000	0. 0
000540	0	0	0	0	0	000000	READ	0	000000	000000	000000			540	000000	000000	0. 0
000520	0	0	0	0	0	000000	READ	0	000000	000000	000000			520	000000	000000	0. 0
000500	0	0	0	0	0	000000	READ	0	000000	000000	000000			500	000000	000000	0. 0
000480	0	0	0	0	0	000000	READ	0	000000	000000	000000			480	000000	000000	0. 0
000460	0	0	0	0	0	000000	READ	0	000000	000000	000000			460	000000	000000	0. 0
000440	0	0	0	0	0	000000	READ	0	000000	000000	000000			440	000000	000000	0. 0
000420	0	0	0	0	0	000000	READ	0	000000	000000	000000			420	000000	000000	0. 0
000400	0	0	0	0	0	000000	READ	0	000000	000000	000000			400	000000	000000	0. 0
000380	0	0	0	0	0	000000	READ	0	000000	000000	000000			380	000000	000000	0. 0
000360	0	0	0	0	0	000000	READ	0	000000	000000	000000			360	000000	000000	0. 0
000340	0	0	0	0	0	000000	READ	0	000000	000000	000000			340	000000	000000	0. 0
000320	0	0	0	0	0	000000	READ	0	000000	000000	000000			320	000000	000000	0. 0
000300	0	0	0	0	0	000000	READ	0	000000	000000	000000			300	000000	000000	0. 0
000280	0	0	0	0	0	000000	READ	0	000000	000000	000000			280	000000	000000	0. 0
000260	0	0	0	0	0	000000	READ	0	000000	000000	000000			260	000000	000000	0. 0
000240	0	0	0	0	0	000000	READ	0	000000	000000	000000			240	000000	000000	0. 0
000220	0	0	0	0	0	000000	READ	0	000000	000000	000000			220	000000	000000	0. 0
000200	0	0	0	0	0	000000	READ	0	000000	000000	000000			200	000000	000000	0. 0
000180	0	0	0	0	0	000000	READ	0	000000	000000	000000			180	000000	000000	0. 0
000160	0	0	0	0	0	000000	READ	0	000000	000000	000000			160	000000	000000	0. 0
000140	0	0	0	0	0	000000	READ	0	000000	000000	000000			140	000000	000000	0. 0
000120	0	0	0	0	0	000000	READ	0	000000	000000	000000			120	000000	000000	0. 0
000100	0	0	0	0	0	000000	READ	0	000000	000000	000000			100	000000	000000	0. 0
000080	0	0	0	0	0	000000	READ	0	000000	000000	000000			80	000000	000000	0. 0
000040	0	0	0	0	0	000000	READ	0	000000	000000	000000			80	000000	000000	0. 0

5

***** I/O REQUEST TABLE (FREE LIST) *****

ELEMENTS IN TABLE	48	MAXIMUM NUMBER OF ELEMENTS IN USE	0
ELEMENTS IN PRIMARY AREA	42	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	11	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	10	TOTAL REQUEST	0
INDEX TO LAST FREE ELEMENT	1015		

TABLE INDEX	LOGICAL DEVICE	PCB	ADDR REL	DST	BUFFER ADDRESS	FUNC	COUNT	PARM1	PARM2	MISC	FLAGS.....	STATUS DESCRIPTION	STATUS
1015	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
1002	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
767	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
754	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
741	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
728	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
713	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
700	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
665	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
652	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
637	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
624	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
611	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
576	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
563	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
550	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
535	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
522	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
507	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
474	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
461	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
446	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
433	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
420	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
405	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
372	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
357	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
344	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
331	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
316	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
303	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
270	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
255	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
242	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
227	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
214	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
201	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
166	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
153	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
140	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
125	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
112	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0

TABLE INDEX	LOGICAL DEVICE	PCB	ADDR REL	DST	BUFFER ADDRESS	FUNC	COUNT	PARM1	PARM2	MISC	FLAGS.....	STATUS DESCRIPTION	STATUS
77	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
64	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
51	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
36	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
23	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0
10	0	0	SEG	0	0	READ	0W	000000	000000	000000	000000	PENDING	0

***** I/O REQUEST TABLE (IN USE LIST) *****

TABLE INDEX	LOGICAL DEVICE	PCB	ADDR REL	DST	BUFFER ADDRESS	FUNC	COUNT	PARM1	PARM2	MISC	FLAGS.....	STATUS DESCRIPTION	STATUS
-------------	----------------	-----	----------	-----	----------------	------	-------	-------	-------	------	------------	--------------------	--------

***** SYSTEM BUFFER ANALYSIS *****

ELEMENTS IN TABLE	8	MAXIMUM NUMBER OF ELEMENTS IN USE	0
ELEMENTS IN PRIMARY AREA	8	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	129	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	11	TOTAL REQUEST	0
INDEX TO LAST FREE ELEMENT	1620		

5

51

***** TERMINAL BUFFERS *****

ELEMENTS IN TABLE	48	MAXIMUM NUMBER OF ELEMENTS IN USE	0
ELEMENTS IN PRIMARY AREA	42	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	16	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	10	TOTAL REQUEST	0
INDEX TO LAST FREE ELEMENT	1370		

FREE LIST

TABLE INDEX	LINK	TERMINAL BUFFER
1370	0	.....
1350	1370	.....
1330	1350	.....
1310	1330	.....
1270	1310	.....
1250	1270	.....
1230	1250	.....
1210	1230	.....
1170	1210	.....
1150	1170	.....
1130	1150	.....
1110	1130	.....
1070	1110	.....
1050	1070	.....
1030	1050	.....
1010	1030	.....
770	1010	.....
750	770	.....
730	750	.....
710	730	.....
670	710	.....

5

***** TERMINAL BUFFERS *****

IN USE LIST

TABLE
INDEX LINK

TERMINAL BUFFER

***** TIMER REQUEST LIST *****

J

FREE LIST POINTER 000014
 NUMBER OF ENTRIES 000040
 ENTRY SIZE 4
 TRACE WORD 000000
 QUANTUM/100MS 000000
 POINTER TO MOST ACTIVE REQ 000000
 DATE / / . : AM

ENTRY	REQUEST STATUS	TYPE OF REQUEST	POINTER TO NEXT REQUEST	REQUEST POINTER	TIME TO SERVICE REQ IN FRONT (SEC/10)
14	INACTIVE	HANGUP	20	DITP = 000000	0
20	INACTIVE	HANGUP	24	DITP = 000000	0
24	INACTIVE	HANGUP	30	DITP = 000000	0
30	INACTIVE	HANGUP	34	DITP = 000000	0
34	INACTIVE	HANGUP	40	DITP = 000000	0
40	INACTIVE	HANGUP	44	DITP = 000000	0
44	INACTIVE	HANGUP	50	DITP = 000000	0
50	INACTIVE	HANGUP	54	DITP = 000000	0
54	INACTIVE	HANGUP	60	DITP = 000000	0
60	INACTIVE	HANGUP	64	DITP = 000000	0
64	INACTIVE	HANGUP	70	DITP = 000000	0
70	INACTIVE	HANGUP	74	DITP = 000000	0
74	INACTIVE	HANGUP	100	DITP = 000000	0
100	INACTIVE	HANGUP	104	DITP = 000000	0
104	INACTIVE	HANGUP	110	DITP = 000000	0
110	INACTIVE	HANGUP	114	DITP = 000000	0
114	INACTIVE	HANGUP	120	DITP = 000000	0
120	INACTIVE	HANGUP	124	DITP = 000000	0
124	INACTIVE	HANGUP	130	DITP = 000000	0
130	INACTIVE	HANGUP	134	DITP = 000000	0
134	INACTIVE	HANGUP	140	DITP = 000000	0
140	INACTIVE	HANGUP	144	DITP = 000000	0
144	INACTIVE	HANGUP	150	DITP = 000000	0
150	INACTIVE	HANGUP	154	DITP = 000000	0
154	INACTIVE	HANGUP	160	DITP = 000000	0
160	INACTIVE	HANGUP	164	DITP = 000000	0
164	INACTIVE	HANGUP	170	DITP = 000000	0
170	INACTIVE	HANGUP	174	DITP = 000000	0
174	INACTIVE	HANGUP	200	DITP = 000000	0

***** SORTED MEMORY SEGMENTS *****

CORE RES	LOCK	FRZN	I/O FRZN	SYS/ USER	SEGMENT TYPE	MEMORY ADDRESS	SEGMENT LENGTH	DESCRIPTION
RES				SYS	FIXED LOW CORE	0 000000	14	
RES				USER	DST 6	0 000000	10000	(FIXED LOW CORE)
RES				SYS	PROCESS CST	0 000000		
RES				SYS	DRT	0 000014	120	
RES				USER	DST 17	0 000134	120	(DRIVER LINKAGE TABLE)
RES				USER	DST 20	0 000254	20	(I/O RESOURCE TABLES)
RES				USER	DST 43	0 000274	44	(CST BLOCK)
RES				USER	DST 73	0 000340	120	(MEASUREMENT INFO TABLE)
RES				USER	DST 51	0 000460	44	(ARSBM TABLE)
RES				USER	DST 23	0 000524	204	(TIMER REQUEST LIST)
RES				USER	DST 30	0 000730	20	(JOB PROCESS COUNT)
RES				USER	DST 5	0 001000	640	(SYSTEM GLOBAL AREA)
RES				SYS	SYSTEM GLOBAL	0 001000		
RES				USER	DST 14	0 001840	1410	(TERMINAL BUFFERS)
RES				SYS	DST TABLE	0 006404		
RES				USER	DST 2	0 006404	1440	(DATA SEGMENT TABLE)
RES				SYS	CST TABLE	0 010044		
RES				USER	DST 1	0 010044	1400	(CODE SEGMENT TABLE)
RES				USER	DST 4	0 011444	1440	(CST EXTENSION)
RES				USER	DST 3	0 013104	1400	(PROCESS CONTROL BLOCK)
RES				USER	DST 7	0 014504	1100	(INTERRUPT CONTROL STACK)
RES				USER	DST 13	0 015604	1030	(I/O QUEUE)
RES				USER	DST 70	0 016634	3120	(DISC REQUEST TABLE)
RES				USER	DST 52	0 021754	1010	(ILT)
RES				USER	DST 10	0 022764	2020	(SYSTEM BUFFERS)
RES				USER	DST 27	0 025004	2260	(SWAPTABLE)
RES				USER	DST 46	0 027264	144	(SPECIAL REQUEST TABLE)
RES				USER	DST 71	0 027430	10	(MSG HBR TABLE)
RES				USER	DST 72	0 027440	200	(PRIMARY MSG TABLE)
RES				USER	DST 47	0 027640	164	(VIRTUAL DISK SPACE TABLE)
RES				USER	DST 67	0 030024	2004	(AVAILABLE REGION LIST)
RES				USER	DST 15	0 032030	240	(LOGICAL-PHYSICAL DEVICE TABLE)
RES				USER	DST 44	0 032270	74	(JOB CUTOFF TABLE)
RES				USER	DST 53	0 032364	170	(SIR TABLE)
RES				USER	CST 33	0 034560	23240	HARDRES (31)
RES				USER	CST 74	0 060020	23744	KERNELC (75)
RES				USER	CST 70	0 103764	1024	MISCSEGC (77)
RES				USER	CST 1	0 105010	3670	ININ
RES				USER	CST 155	0 110700	2714	IONDISC1
RES				USER	CST 156	0 113614	70	CSDUMMY

***** LINKED MEMORY BEGINS AT 114023

SYS AVAILABLE AREA 0 121023 57000

LAB #6

Hardware Environment: Series 44

External Symptoms: System stopped working.

This dump case includes the following components:

- 1) Selected excerpts from a formatted Series 44 memory dump.
- 2) A listing of file A00A033C.HP32033.SUPPORT from the MMT for this version of MPE.
- 3) A PMAP for segment HARDRES for this version of MPE.
- 4) A listing of procedure START'HPIB.
- 5) Excerpts from appendix C (System Failure List) of the Console Operator's Guide.
- 6) Excerpts from chapter 6 of the System Reference Manual (INTERRUPT SYSTEM).
- 7) Excerpts from chapter 2 of the Machine Instruction Set Reference Manual.

LUG DEV #	DRT #	U N I T	C H A P T E R	T Y P E	SUB TYPE	TERM TYPE	SPEED	REC WIDTH	OUTPUT DEV	MODE	DRIVER NAME	DEVICE CLASSES
1	82	0	0	0	A			128	0		H10MDSC1	SYSDISC SPOOL DISC
6	90	0	0	32	4			66	0	A S	H10LPRT0	LP
7	73	0	0	24	0			128	0		H10TAPE0	TAPE DDUMP
8	73	1	0	24	0			128	0		H10TAPE0	TAPE
9	73	2	0	24	0			128	0		H10TAPE0	TAPE
10	73	3	0	24	0			128	LP	JA	H10TAPE0	CARD JOBTAPE
20	8	0	0	16	0	10	240	40	20	JAID	H10TERMO	CONSOLE
21	9	0	0	16	0	10	240	40	21	JAID	H10TERMO	TERM
22	10	0	0	16	0	10	240	40	22	JAID	H10TERMO	TERM
23	11	0	0	16	0	10	240	40	23	JAID	H10TERMO	TERM

⑥

1			
2			
3			
4			
5	MPE TV C.00.00	62 UDC (62)	144 MRJEM
6	1 INTN	63 USER (63)	145 MPMU
7	2 FILESYS1 (0)	64 HELPUSE (64)	146 IMAGE
8	3 FILESYS4 (1)	65 OPLW (65)	147 IMAGE
9	4 FILESYS5 (2)	66 OPMD (66)	150 IOMU
10	5 FILESYS6 (3)	67 OPH1 (67)	151 HIOM
11	6 FILESYS6A (4)	70 LABSEG (70)	152 HIOTF
12	7 FILESYS7 (5)	71 SDISC (71)	153 HIOTA
13	10 CIALTORG (6)	72 LOGSEG0 (73)	154 HIOLF
14	11 CICOMSYS (7)	73 LOGSFG1 (74)	
15	12 CIERR (10)	74 KERNELC (75)	
16	13 CIFILER (11)	75 KERNELD (76)	
17	14 CIFILEM (12)	76 MISCSEGC (77)	
18	15 CIINIT (13)	77 FILESYS1A (101)	
19	16 CILISTF (14)	100 FILESYS2 (102)	
20	17 CIMISC (15)	101 FILESYS3 (103)	
21	20 CIORGMAN (16)	102 DEBUGUTL (104)	
22	21 CIPREPRUN (17)	103 SEGUTIL (105)	
23	22 CISURS (20)	104 KSAM01 (106)	
24	23 CISYSMGR (21)	105 KSAM02 (107)	
25	24 CIUSERUTIL (22)	106 KSAM03 (110)	
26	25 CXSTOREST (23)	107 KSAM04 (111)	
27	26 RESTORE (24)	110 KSAM05 (112)	
28	27 STORE (25)	111 FIRMWARESIM1 (52)	
29	30 DIRC (26)	112 FIRMWARESIM2 (53)	
0	31 ALLOCATE (27)	113 KSAM06 (113)	
31	32 ALLOCUTIL (30)	114 KSAM07 (114)	
32	33 HARDRES (31)	115 COMSYS1 (135)	
33	34 ABORTDUMP (32)	116 COMSYS3 (137)	
34	35 MESSAGE (33)	117 COMSYS4 (140)	
35	36 PROCSEG (34)	120 COMSYS5 (141)	
36	37 NRIO (35)	121 CSUTILITY (142)	
37	40 PCREATE (36)	122 COMSYS2 (136)	
38	41 MORGUE (37)	123 BSCLCM (143)	
39	42 RIPC (40)	124 BSCSLCPO (144)	
0	43 IPC (41)	125 DVRSSLC (145)	
41	44 CHECKER (42)	126 DVRHSI (146)	
42	45 UTILITY1 (43)	127 DSSEG1 (147)	
43	46 UTILITY2 (44)	130 DSSEG2 (150)	
44	47 LOADER1 (45)	131 DSSEG4 (152)	
45	50 RINS (46)	132 DSMISC (154)	
46	51 JORTABLE (47)	133 DSIOM (155)	
47	52 DEBUG (50)	134 DSSEG3 (151)	
48	53 NURSERY (51)	135 DSSEG5 (153)	
49	54 SPOOLING (54)	136 CLIB'01 (200)	
50	55 SPOOLCOMS1 (55)	137 CLIB'03 (202)	
51	56 SPOOLCOMS2 (56)	140 CLIB'04 (203)	
52	57 PVCOMSEG (57)	141 CLIB'05 (204)	
53	60 PVSYSO (60)	142 DSRTECALLS (156)	
54	61 PVSYSM (61)	143 MRJEMISC1 (157)	

6

***** REGISTERS *****

DATA SEGMENT	CODE SEGMENT	MISCELLANEOUS	STATUS = 102033	ISR = 140015
DB BANK = 000000	PB = 108030	X = 001271	MODE = PRIV	RUN/HALT = HALT
DB = 001000	P = 141870	CIR = 031001	INTERRUPTS = OFF	IRQ = OFF TIMEOUT = OFF
S BANK = 000004	PL = 142753	NIR = 000377	TRAPS = OFF	CSRQ = OFF NOT SS = OFF
DL = 150467	PBBANK = 000000		STACK OP = LEFT	PARITY = OFF DISABLE ATN = OFF
Q = 153700	(P-PB) = 033840		OVERFLOW = OFF	POWERFAIL = OFF
S = 153702			CARRY = ON	POWERON = OFF
Z = 155007			COND CODE = CCG	NOT DISP = ON
			SEGMENT # = 33	NOT ICS = ON

***** FIXED LOW MEMORY *****

CODE SEGMENT TABLE POINTER	032454
EXTENDED CODE SEGMENT TABLE POINTER	022453
DATA SEGMENT TABLE POINTER	022454
PROCESS CONTROL BLOCK BASE	044054
CURRENT PCB POINTER	044354
INTERRUPT STACK BASE	050154
INTERRUPT STACK LIMIT	051152
INTERRUPT MASK	040180

6

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	D C V	R O I	I K	S D	M O	W I	F P	S S	C S	R S	W D	VM ALLOC
60	{WELCOME MESSAGE #2}	OFF	1750		1	4045	D							S				2
61	{CS SYSTEM SEGMENT}	OFF	10		1	3175	D							S				1
62	{JOB-PROCESS CROSS REFERENCE}	ON	200	040023	6									S				1
63	{SYSTEM JDT}	ON	34	177023	0									S				1
64	{COMMAND INTERPRETER LOG-ON DST}	OFF	1000		1	4055	D							S				10
65	{MOUNTED VOLUME TAB.}	OFF	520		1	4141	D							S				1
66	{PRI. VOL. USER TABLE}	ON	200	041023	6									S				10
67	{AVAILABLE REGION LIST}	OFF	2004	101060	0									S				0
70	{DISC REQUEST TABLE}	OFF	3120	052410	0									S				0
71	{MSG HBR TABLE}	OFF	10	077464	0									S				0
72	{PRIMARY MSG TABLE}	OFF	200	077474	0									S				0
73	{MEASUREMENT INFO TABLE}	OFF	120	077674	0									S				0
75		ON	3244	144023	5									S				7
76		ON	3244	164623	4									S				7
77		ON	3604	063623	6									S				7
100		ON	13144	067623	6									S				16
101		ON	2554	107023	6									S				6
102		ON	2310	115223	6									S				6
103		OFF	2260		1	4425	D							S				6
104		OFF	4764		1	4455	D							S				13
105		ON	5364	006023	4									S				43
106		ON	5720	170623	6									S				17
107		ON	10174	162223	5									S				27
110		ON	204	177423	0									S				1
111		ON	1324	154623	7									S				12
112		ON	1404	174423	7									S				2
113		ON	5324	150023	4									S				22
114		ON	104	004623	7									S				1
115		ON	50	180423	6									S				5
116		ON	100	161223	6									S				1
117		ON	460	034223	5									S				1
118		ON	1110	035023	5									S				2
120		ON	204	130423	5									S				1
121		ON	7640	023023	4									S				10
122		ON		115423	4									S				10
123		ON	32154											S				100

6

***** PROCESS CONTROL BLOCK (2ND HALF) *****

----- S C H E D U L I N G I N F O R M A T I O N -----														---RESOURCES---			LIFE/ DEATH	----- MISCELLANEOUS -----										
PIN	NQPIN	PPIN	D S P L C Q	Q	D E Q	I C T R E R	E E R	PRI	H U I S P R O D T I Q	W	W	W	P C	I H P S E P S S	R S	PREV IMP	NEXT IMP	S	L D I E F V A A	E D C	BMS	PPC	PCST	PBXPTR	SLLPTR	BPT LNK	SYSTEM PROC NAME	
---	-----	-----	-	-	-	-	-	---	-	-	-	-	-	-	-	---	---	---	-	-	-	---	---	---	---	---	---	---

200 ENTRYS
 162 UNASSIGNED ENTRYS
 16 ASSIGNED ENTRYS

6

***** PRESENT STACKS *****

***** PCBX AND STACK MARKERS FOR DST 113 (PCB 14) *****
 **** CURRENT PROCESS ****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000122	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
153700	4	141532	003253	100001	000007	1						
153671	4	000007	025244	101033	000007	33						
153662	4	000112	000633	102554	000020	154						
153642	4	000002	026833	100433	000033	33						
153607	4	000001	033543	140433	000010	33						
153577	4	000002	031470	142433	000017	33						
153580	4	000036	013322	140054	001204	54						
152354	4	000000	004557	140054	000017	54						
152335	4	000002	004303	142054	001520	54						
150615	4	000000	001015	140041	000004	41						

5

HP3000 III MEMORY DUMPC.00.00 OF SYS VER C UPDATE 00 FIX 00 DUMP TIME 11/01/72, 12:01AM
(C) HEWLETT-PACKARD CO. 1980

BANK 4

PAGE 137

146632(030207):	000000	000078	000001	177777	177747	000000	000001	001777	000004	118423	000000	000000	146632:...	>	.....	S.S.	PS.
146648(030223):	177777	000007	032041	140033	000015	000000	000017	051410	051411	002540	002520	051410	146648:...	41	.....	S.S.	PS.
146662(030237):	000004	032245	102033	000057	000030	000003	000000	000002	000000	000000	177777	000000	146662:...	4	.....	/	.....
146676(030253):	000123	031203	000006	055547	000024	000000	177777	000000	000000	054838	000012	000000	146676:...	S2	.....	Y	.....
146712(030267):	000003	000007	000010	021078	021077	021100	021101	021102	021103	021104	021110	021117	146712:...	>	.....	A-B-C-D-H-O	.....
146726(030303):	021131	015152	014623	014551	014117	012380	012124	012071	000001	012032	050724	002222	146726:...	Y	.....	I-O-T-Q	.....
146742(030317):	000731	140152	000117	050154	050155	000550	000540	050154	000004	032245	102033	000011	146742:...	OP1Pm.h	.....	Pl.4	.....
146756(030333):	000013	000001	032351	100033	000011	000040	000001	000647	140045	000178	021407	000007	146756:...	4	.....	X-0	.....
146772(030347):	025217	103033	000010	000000	000000	000000	000000	000000	000000	000000	000000	000000	146772:...	a	.....	.....	.....
147006(030363):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	147006:...	.....	.....	.....	.....
LINES 147022 - 147571	SAME AS ABOVE																
147572(031147):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	147572:.....	.....	.....	.....	.....

147577: 000151	020000	000141	030360	000000	000000	000000	000000	147607: 000000	030360	000001	100151	000000	000000	030360	030360
147617: 030360	030360	030360	030360	030360	030360	030360	030360	147627: 030360	030360	030360	030360	030360	030360	030360	030360
LINES 147637 - 147756 SAME AS ABOVE															

147757: 030360	030360	030360	030360	030360	030360	030360	030360	147767: 030360	030360	030360	030360	030360	030360	030360	000152	100000
147777: 000152	100400	000026	000000	110001	052610	140000	006014	150007: 000000	000000	000026	100000	000000	000113	000000	000001	
150017: 000400	005241	000000	000000													

***** PCBX AND STACK MARKERS FOR DST 113 (PCB 14) *****
 **** CURRENT PROCESS ****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000122	0

ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT
153700	4	141532	003253	100001	000007	1
153671	4	000007	025244	101033	000007	33
153662	4	000112	000633	102554	000020	154
153642	4	000002	026633	100433	000033	33
153607	4	000001	033543	140433	000010	33
153577	4	000002	031470	142433	000017	33
153560	4	000036	013322	140054	001204	54
152354	4	000000	004557	140054	000017	54
152335	4	000002	004303	142054	001520	54
150815	4	000000	001015	140041	000004	41

\$\$\$\$\$\$ DST 113 \$\$\$\$\$\$
 ***** PCBX: *****
 ***PXGLOBAL:
 150023: 000444 000444 177777 000024 000024 000063 008045 000000
 ***PXFIXED:
 150033: 000120 002621 004320 000122 000000 000713 000000 000004 150043: 000000 000000 000000 000000 000054 018400 000000 000000
 150053: 000000 000000 000000 000000 022000 000000 000000 003320 150063: 000000 000063 000000 000110 000000 000000 000000 000000
 150073: 000000 000000 000000 000000 000000 000000 000000 000000 150103: 000000 000000 000000 000000 000000 000000 000000 000000
 LINES 150113 - 150132 SAME AS ABOVE

6

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150133: 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000
***PXFILE: (ZERO TABLE ENTRIES ARE NOT PRINTED)
150153: 000310 000000 000000 000000 000000 000000 000004 000000 000000 150163: 000000 000000 000000 000000 000000 000000 000000 000000
150173: 000234 000113 000100 000000 000000
----- FILE VECTOR TABLE:
150200: 000108 000000 000000 000000 000000 0 108 0 0
150204: 000168 000000 000000 000000 000000 1 168 0 0
----- CONTROL BLOCKS:
150300(000105): 000001 100060 000001 020040 020040 020040 020040 000705 000520 002000 001000 000000 150300: ... 0 ... P
150314(000121): 000000 004100 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 150314: ... @
150330(000135): 000000 177777 177777 002113 000000 000000 000000 000001 000000 000000 000000 000000 150330: ... K
150344(000151): 000000 000001 001400 054401 010000 000000 000000 000000 100116 000000 000000 000000 150344: ... Y
150360(000165): 000000 040046 000000 000705 177772 000010 000001 000113 000000 177777 000000 000000 150360: ... @L Y ... K
150374(000201): 000002 000000 000000 000000 000002 001033 000040 000404 016000 000040 000001 050125 150374: ... PU
150410(000215): 041040 020040 020040 051531 051440 020040 020040 000000 000000 000000 000000 000000 150410: B SYS
150424(000231): 000000 000401 057711
150427: 000000 000000 000000 000000 000000 000000 000000 000000 000000 150437: 000000 000000 000000 000000 000000 000000 000000
150447: 000000 000000 000000 000000 000000 000000 000000 000000
----- AVAILABLE FILE TABLE:
150457: 000000 000113 000000 000000 FNUM FTYPE $NULL PACB V LACB V IOQX
1  FILE 0 113 0 0
**PXPOINTERS:
150463: 000000 000314 000434 000444
****DL REGISTER:
****DB REGISTER:
150467(000000): 000060 000003 000000 000000 000000 000000 000030 000000 000000 000001 177777 000040 000000 150467: 0
150503(000014): 000400 000000 000000 000000 000000 000000 000102 000102 000141 000141 000000 000000 000000 150503: ... B B a a
150517(000030): 000000 000000 000241 000000 000000 000000 000136 000116 100116 000036 000054 000010 150517: ... N M
150533(000044): 000002 040001 000000 000000 000000 000000 177770 000000 000000 000000 000000 000000 150533: ... @
150547(000060): 000000 000000 000000 000000 177777 177777 000000 000000 000000 041007 173220 150547: ... B
150563(000074): 000000 001442 001432 001432 001242 000004 000000 041007 140002 000012 051066 000000 150563: ... B R8
150577(000110): 000000 031143 041142 013704 140002 000002 030376 140530 000000 000000 000000 150577: ... 2cBb ... 0 X
-----
150612(MARKER): 000000 001015 140041 000004
150616(000127): 000014 004031 000013 000002 000100 003000 000676 000002 000010 000011 000000 000000 150616: ... @
150632(000143): 000014 004161 000000 000020 043354 000000 000000 000007 000000 041040 000000 000413 150632: ... q F B
150646(000157): 141054 033040 000000 020040 020040 020040 000000 000000 000015 011270 000000 000030 150646: ... 6 I
150662(000173): 000024 000000 000000 000007 047514 000000 000000 020040 020040 020040 000000 021374 150662: ... OL
150676(000207): 140004 041040 000000 000413 031403 000000 000000 020040 000011 000000 000000 004360 150676: ... B 3
150712(000223): 141032 000031 000000 000033 177777 000002 000000 000014 000300 000000 000000 020040 150712: ... 7
150726(000237): 000000 000207 177777 000006 154467 000040 000000 001000 040000 000000 043234 016352 150726: ... 7 @ F
150742(000253): 140074 000030 000006 154467 047514 000000 001000 177756 017542 103074 000011 000006 150742: ... 7 " B4 " 2 " 2W " b <
150756(000267): 154467 004300 004400 000600 021006 031137 013702 031127 021001 020104 000001 041013 150756: ... 7 " " " 2 " 2 > B " 0 " ?
150772(000303): 022003 141533 021002 041064 173201 021054 031053 031076 041004 021060 006000 037777 150772: ... $ [ " B4 " 2 " 2 > B " 0 " ?
151006(000317): 021413 166171 173171 025015 021320 031140 173201 025056 021201 031140 041142 013705 151006: ... $ " y " y " 2 " 2 " Bb
151022(000333): 140003 000003 000002 030371 021100 006700 141502 120014 004002 041014 022000 141231 151022: ... " 0 " @ " B " B $
151036(000347): 021000 051014 031076 021002 041064 173216 021072 031053 041004 021060 006000 037777 151036: ... " R 2 > " B4 " 2 > B " 0 " ?
151052(000363): 021413 166216 173216 025071 021201 031140 041142 013705 140003 000003 000002 030372 151052: ... " " " 2 " Bb " 0
151066(000377): 140563 140625 031400 021000 051014 041146 013602 031143 040011 051007 025001 051017 151066: ... $ 3 " R Bf " 2cR " R
151102(000413): 120017 041017 022002 145603 140003 125252 000353 000600 041017 013704 140002 000002 151102: ... B $
151116(000427): 006400 051006 151105 151117 001200 161127 151127 151117 001146 161127 151101 001000 151116: ... R E O " W W O f W A
151132(000443): 145612 151127 161073 151073 177777 000366 000001 000335 000006 040054 000000 151132: ... W " " @
151146(000457): 000000 001000 000516 000400 000162 000024 000001 000010 001454 141035 000311 000000 151146: ... N " F
151162(000473): 000000 000000 000020 000000 000000 000000 000024 022070 000012 000000 001216 000000 151162: ... " $
151176(000507): 000000 000001 000520 000527 000000 000036 000173 000247 001342 000000 000000 000000 151176: ... P W " ( " $
151212(000523): 000000 000000 000000 000000 000000 000001 001777 000006 154467 000007 151111 001100 151212: ... 7 " I @

```


152545(002056) :	013704	140002	000002	006400	051068	041004	005114	002450	037777	025040	000002	000000	152545:.....R6B..L(7.*
152561(002072) :	000000	002501	000000	000000	000000	000000	000530	000001	025044	031052	041142	013704	152561:.....A.....X..\$2*Bb..
152575(002106) :	140002	000002	030363	041402	022000	141223	021000	051402	031078	021002	041001	173205	152575:.....O.C.\$.....S.2>..E..
152611(002122) :	021016	031053	173205	025073	021201	031140	041142	013705	140003	000003	000002	030364	152611:.....2+.....2..Bb.....O..
152625(002136) :	041403	022000	141231	021000	051403	020040	020040	020040	020040	050125	041040	020040	152625:.....C.S.....S.....PUB
152641(002152) :	020040	051531	051440	020040	020040	020040	020040	020040	020040	051520	047517	046040	152641:.....SYS.....SPOOL
152655(002166) :	000003	000002	030365	120001	004002	041008	010501	004500	051008	140635	021000	051008	152655:.....O.....B..A..@R.....R
152671(002202) :	031110	140707	040003	051030	140002	007700	004000	025001	051017	120017	041017	022002	152671:2H..@R.....@R.....B.S
152705(002216) :	145614	021025	051001	021100	051008	041001	022017	145308	131001	047072	051084	140003	152705:.....R..@R.B.S.....N:R4
152721(002232) :	000252	000245	151075	151073	000800	041017	013704	140002	000002	006400	151075	041008	152721:.....B.....-B
152735(002248) :	041017	013708	140002	000004	006400	041030	006700	021004	002020	020302	000007	004002	152735:.....B.....B4
152751(002262) :	020341	000200	020302	000007	004002	151073	020340	004500	051085	000800	041017	013704	152751:.....@R5..B
152765(002276) :	140002	000002	006400	001700	141202	120404	041031	006700	041084	010211	002000	020302	152765:.....B.....B
153001(002312) :	000007	004300	004445	021200	041404	022000	145227	021000	051404	000001	041001	000200	153001:.....X..C.\$.....S..B
153015(002326) :	051007	177772	000000	000400	021070	000020	000400	100000	020000	000000	000000	166208	153015:.....R.....8
153031(002342) :	173208	025101	021201	031140	140002	000017	000800	041017	013704	140002	000002	006400	153031:.....A..2.....B
153045(002356) :	051088	025044	031052	041142	013704	140002	000002	030368	006700	141502	120405	004000	153045:R6*\$2*Bb.....O..B
153061(002372) :	021040	006700	141502	120408	004002	041001	023020	051007	041405	022000	141227	021000	153061:.....B.....B..R.C.\$
153075(002408) :	051405	031078	021001	041007	173207	021035	031053	173171	025015	021320	031140	173207	153075:.....S.2>..B.....2+..y..2
153111(002422) :	025074	021201	031140	041142	013705	140003	000003	000002	030367	041408	022000	141234	153111:.....<..2..Bb.....O.C.\$
153125(002436) :	021000	051406	031078	000000	021472	186203	000000	021060	006000	037777	021413	186203	153125:.....S.2>..B.....O..?..8
153141(002452) :	021001	041007	173203	031053	173203	025074	021201	031140	041142	013705	140003		153141:.....B.....2+..<..2..Bb
153155(002466) :	000003	000002	030370	041008	010201	051008	041001	023001	051001	140654	021000	051008	153155:.....O..B.....R..B..R
153171(002502) :	031110	140670	151075	020302	000007	004002	142002	031400	177134	002000	035003	171403	153171:2H.....B..S.C.....S.C
153205(002516) :	170403	021001	020003	041035	023001	051401	041401	028001	145334	021000	051402	041402	153205:.....B..S.C.....P2Ks..C
153221(002532) :	061403	141813	000800	041401	041402	000800	012120	031113	022000	141503	120402	140414	153221:.....C..C.....C
153235(002548) :	041402	081403	141220	041401	000001	000000	000000	000017	000000	000000	000004	011770	153235:.....C..C.....C
153251(002562) :	141008	000863	000000	031417	000000	000000	000870	000014	177777	021407	000001	177830	153251:.....3.....8
153265(002578) :	052770	000000	000113	177777	000007	032041	140033	000015	000000	000017	051410	051411	153265:U.....K.....41.....S.S
153301(002612) :	001360	001340	051410	000004	032245	102033	000011	000020	000001	000000	000000	177777	153301:.....S..4.....
153315(002626) :	002687	003035	003035	000001	002604	000000	000000	000017	002041	177775	100118	000001	153315:.....S.2>.....I..N
153331(002642) :	000001	057711	145205	021000	051401	031078	140002	000038	000800	041017	013704	000000	153331:.....P..S.2>.....B
153345(002656) :	177772	000000	000400	050002	000020	000400	100000	020000	000000	000000	000000	000705	153345:.....S.....
153361(002672) :	177772	000010	000000	000000	000000	000000	000000	000000	000002	000000	000000	000000	153361:.....PUB..SY
153375(002708) :	000002	001033	000040	000404	018000	000040	000000	050125	041040	020040	020040	051531	153375:.....S
153411(002722) :	051440	020040	020040	000000	000000	000000	000000	000000	000000	000401	057711	000000	153411:.....S
153425(002738) :	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	153425:.....S
LINES 153441 -	153520 SAME AS ABOVE												
153521(003032) :	000000	041402	001777	020040	020040	020040	020040	050125	041040	020040	020040	051531	153521:.....C.....PUB..SY
153535(003048) :	051440	020040	020040	047520	042522	000000	000000	000008	000000	100113	002007	000001	153535:.....S.....OPER.....K
153551(003062) :	000042	000201	000000	000000									153551:.....
153555(MARKER) :	000038	013322	140054	001204									-----
153581(003072) :	000014	177777	021374	000000	177820	050403	177777	000113	000000	021374	011304		153581:.....Q.....K
153574(MARKER) :	000002	031470	142433	000017									-----
153600(003111) :	177820	000000	021374	011304									153600:.....
153604(MARKER) :	000001	033543	140433	000010									-----
153610(003121) :	000154	000001	035133	150467	000000	000000	000000	177820	057805	000000	000002	050403	153610:.....{.7.....Q
153624(003135) :	000000	000000	000000	000000	000002	050403	021374	000004	152478	057824	000122		153624:.....Q.....>..R
153637(MARKER) :	000002	028833	100433	000033									-----
153643(003154) :	057805	057885	000104	000201	000001	000001	057715	057843	008400	021374	057824	177777	153643:.....D.....
153657(MARKER) :	000112	000833	102554	000020									-----

6

153663(003174): 057605 000122 000000
153666(MARKER): 000007 025244 101033 000007
153672(003203): 101401 000003 000017

153663: . . . R . . .

153672:

153675(MARKER): 141532 003253 100001 000007

Table with columns for address, hex values, and character data. Includes 'S REGISTER' header and lines 154371-155344.

Table with columns for address and hex values. Includes lines 155345(004856) through 155727.

Table with columns for address and hex values. Includes lines 155357 through 155737.

6

***** DUMP INDEX *****

NAME	PAGE # FORMATTED	PAGE # OCTAL DUMP
CODE SEGMENT TABLE	2	85
DATA SEGMENT TABLE	7	79
PROCESS CONTROL BLOCK	9	91
CST EXTENSION	5	86
SYSTEM GLOBAL AREA		88
FIXED LOW CORE		85
INTERRUPT CONTROL STACK		94
SYSTEM BUFFERS	52	100
UCOP REQUEST QUEUE		200
PROCESS-PROCESS COMMUNICATION TABLE		154
I/O QUEUE	50	94
TERMINAL BUFFERS	53	86
DEVICE INFORMATION TABLE (DIT)	44	79
LOGICAL-PHYSICAL DEVICE TABLE	43	109
LOGICAL DEVICE AND CLASS TABLE		194
DRIVER LINKAGE TABLE		65
I/O RESOURCE TABLES		85
DISK FREE SPACE		166
LOADER SEGMENT TABLE		149
TIMER REQUEST LIST	63	109
DIRECTORY		195
DIRECTORY SPACE		200
RIN TABLE		101
SWAP TABLE		109
JOB PROCESS COUNT		191
JOB MASTER TABLE		151
TAPE LABEL TABLE		166
LOG TABLE		162
REPLY INFORMATION TABLE		112
VOLUME TABLE		199
BREAKPOINT TABLE		
LOG BUFFER 1		
LOG BUFFER 2		
LOG ID TABLE		
CST BLOCK		85
JOB CUTOFF TABLE		109
SYSTEM JIT		111
SPECIAL REQUEST TABLE		107
VIRTUAL DISK SPACE TABLE	22	108
ARSBM TABLE		65
ILT	25	97
SIR TABLE	18	109
FILE MULTI-ACCESS VECTOR		185
INPUT DEVICE DIRECTORY		150
OUTPUT DEVICE DIRECTORY		153
WELCOME MESSAGE #1		186
WELCOME MESSAGE #2		
CS SYSTEM SEGMENT		
JOB-PROCESS CROSS REFERENCE		185
SYSTEM JDT		112
COMMAND INTERPRETER LOG-ON DST		
MOUNTED VOLUME TABLE		

6

PRI. VOL. USER TABLE		168
AVAILABLE REGION LIST	18	108
DISC REQUEST TABLE	48	95
MSG HBR TABLE		107
PRIMARY MSG TABLE		108
MEASUREMENT INFO TABLE		108
SECONDARY MSG TABLE		
CURRENT PROCESS STACK	11	137

1	FILESYS1	,U50L002C.HP32002.SUPPORT,S,32
2	FILESYS4	,U50L002C.HP32002.SUPPORT,S,32
3	FILESYS5	,U50L002C.HP32002.SUPPORT,S,32
4	FILESYS6	,U50L002C.HP32002.SUPPORT,S,32
5	FILESYS7	,U50L002C.HP32002.SUPPORT,S,32
6	FIIFSYS7	,U50U002C.HP32002.SUPPORT,S,32
7	CIALTORG	,U51U002C.HP32002.SUPPORT,S,32
8	CICOMSYS	,U51U002C.HP32002.SUPPORT,S,32
9	CIERR	,U51U002C.HP32002.SUPPORT,S,32
10	CIFILEB	,U51L002C.HP32002.SUPPORT,S,32
11	CIFILEM	,U51U002C.HP32002.SUPPORT,S,32
12	CIINIT	,U51L002C.HP32002.SUPPORT,S,32
13	CILISTF	,U51L002C.HP32002.SUPPORT,S,32
14	CIMISC	,U51L002C.HP32002.SUPPORT,S,32
15	CIOREMAN	,U51L002C.HP32002.SUPPORT,S,32
16	CIPREPRN	,U51U002C.HP32002.SUPPORT,S,32
17	CISUBS	,U51U002C.HP32002.SUPPORT,S,32
18	CISYSMER	,U51L002C.HP32002.SUPPORT,S,32
19	CIUSERUTIL	,U51U002C.HP32002.SUPPORT,S,32
20	CXSTOREST	,U52L002C.HP32002.SUPPORT,S,32
21	RESTORE	,U52L002C.HP32002.SUPPORT,S,32
22	SIGRE	,U52L002C.HP32002.SUPPORT,S,32
23	DIRC	,U53L002C.HP32002.SUPPORT,S,32
24	ALLOCATE	,U54L002C.HP32002.SUPPORT,S,32
25	ALLOCUTIL	,U54L002C.HP32002.SUPPORT,S,32
26	HARDRES	,U55L033C.HP32033.SUPPORT,C,65
27	ABORTDUMP	,U58L002C.HP32002.SUPPORT,S,32
28	MESSAGE	,U59L002C.HP32002.SUPPORT,S,32
29	PROCSEG	,U60L002C.HP32002.SUPPORT,S,32
30	NFI0	,U62L033C.HP32033.SUPPORT,S,32
31	PCREATE	,U63L002C.HP32002.SUPPORT,S,32
32	MCRGUE	,U64L002C.HP32002.SUPPORT,S,32
33	BIFC	,U65L002C.HP32002.SUPPORT,S,32
34	IFC	,U66L002C.HP32002.SUPPORT,S,32
35	CHECKER	,U69L002C.HP32002.SUPPORT,S,32
36	UTILITY1	,U70U002C.HP32002.SUPPORT,S,32
37	UTILITY2	,U70L002C.HP32002.SUPPORT,S,32
38	LOADER1	,U72U002C.HP32002.SUPPORT,S,32
39	RINS	,U73L002C.HP32002.SUPPORT,S,32
40	JOBTABLE	,U74U002C.HP32002.SUPPORT,S,32
41	DEBUG	,U75L002C.HP32002.SUPPORT,S,32
42	NLRSEFY	,U76L002C.HP32002.SUPPORT,S,32
43	FIRMWARESIM1	,U78L002C.HP32002.SUPPORT,S,32
44	FIRMWARESIM2	,U78U002C.HP32002.SUPPORT,S,32
45	SFOOLING	,U79L002C.HP32002.SUPPORT,S,32
46	SFOOLCCMS1	,U80L002C.HP32002.SUPPORT,S,32
47	SFOOLCCMS2	,U80L002C.HP32002.SUPPORT,S,32
48	PACOMSEG	,U81U002C.HP32002.SUPPORT,S,32
49	PVSYS0	,U81L002C.HP32002.SUPPORT,S,32
50	PVSYSM	,U81L002C.HP32002.SUPPORT,S,32
51	UCC	,U82L002C.HP32002.SUPPORT,S,32
52	USER	,U83U002C.HP32002.SUPPORT,S,32
53	HELPUSE	,U84L002C.HP32002.SUPPORT,P,32
54	OFL0W	,U85L002C.HP32002.SUPPORT,S,32
55	OFMED	,U85L002C.HP32002.SUPPORT,S,32
56	OPHI	,U85U002C.HP32002.SUPPORT,S,32
57	LABSEG	,U86L002C.HP32002.SUPPORT,S,32

58	SDISC	,U87L002C.HP32002.SUPPORT,S,32
59	MIU*SEGMENT	,U88L003C.HP32033.SUPPORT, ,32
60	LOGSEG0	,U90U002C.HP32002.SUPPORT,S,32
61	LOGSEG1	,U91L002C.HP32002.SUPPORT,S,32
62	KERNELC	,U92L002C.HP32002.SUPPORT,C,32
63	KERNFLD	,U93U002C.HP32002.SUPPORT,S,32
64	MJSCSEGC	,U95L002C.HP32002.SUPPORT,C,32
65	MEASSEG	,U96U002C.HP32002.SUPPORT, ,32
66	FILESYS1A	,U97L002C.HP32002.SUPPORT,S,32
67	FILESYS2	,U97U002C.HP32002.SUPPORT,S,32
68	FILESYS3	,U97L002C.HP32002.SUPPORT,S,32
69	DE9UGUTL	,U98U002C.HP32002.SUPPORT,S,32

6

(6)

PROGRAM FILE P55P033C.HP32033.SUPPORT

MAIN	0	STT	CODE	ENTRY	SEG
NAME					
HARDRES	1		0	0	
TERMINATE	2				?
SEGMENT LENGTH			4		
HARDRES	1	STT	CODE	ENTRY	SEG
NAME					
HELP	1		0	1676	
READCHAR	2		2343	2421	
PRINTCHAR	3		2615	2627	
TICK	4		3002	3002	
OLDTICK	5		3444	3456	
UNIMPEDE	126				?
SYSPROC	127				?
AWAKE	130				?
STARTCLOCK	6		3744	3744	
CHEKTRLFREE	7		4035	4035	
TIMEREQ	10		4046	4046	
ABORTTIMEREQ	11		4245	4245	
TIMER	12		4363	4363	
TIP	13		4501	20520	
STATREQUEST	14		21327	21331	
IDLEWAIT	15		21551	21551	
SENDRLF	16		22015	22015	
DOCRLFSYNC	17		22201	22201	
BREAKSERVICE	20		22447	22447	
BREAKOK	21		22473	22473	
SSBREAKOK	22		22473	22475	
SETREADERROR	23		22544	22544	
PRINTPFMSG	24		22564	22564	
CHECKTQUEUE	25		22702	22702	
STARTTIMEOUT	26		22703	22714	
STOPTIMEOUT	27		23014	23025	
MODCONTROL	30		23064	23076	
DSETCONTROL	31		23334	23334	
MPXCONTROL	32		23335	23335	
MPXWRITE	33		23336	23336	
INITIO	34		23337	23407	
SETSYSDB	131				?
RESETDB	132				?
LDEVNOTRDY	35		23531	23544	
IOMESSAGE	36		23731	23731	
LOGERROR	37		24012	24012	
RETURNSYSBUF	40		24056	24056	
IOUNIMPEDE	41		24145	24145	
IOIMPEDE	42		24202	24202	
IMPEDE	133				?
GIP'HPIB	43		24251	24270	
MSTAT	134				?
GIP	44		24251	24270	
CHKCHANNELQUE	45		24456	24456	
EOFCHECK	46		24563	24563	
START'HPIB	47		25161	25161	
STARTIO	50		25161	25161	
HALT'HPIB	51		25322	25322	
HALTIO	52		25322	25322	
SYSIOPROC	53		25351	25351	

6

WAIT	135			?
REQSTATUS	54	25376	25376	
SIODM	55	25472	25805	
IOUNFREEZE'	136			?
IOFREEZE'	137			?
FLAGPROCABSENT	140			?
FETCHIOSEG	141			?
SEGWRITECOMPLET	142			?
SEGREADCOMPLET	143			?
ADJUSTLOCALITY	144			?
WAITFORIO	56	30433	30443	
QUEUEONSEGMENT	145			?
ADDTOLOCALITY	146			?
WAITFORIOX	57	30433	30451	
IOSTATUS	60	30747	30747	
IOSTATUSX	61	30747	30751	
ATTACHIO	62	31026	31026	
SDISCIO	147			?
SETCRITICAL	150			?
CLEARWWS	151			?
RESETCRITICAL	152			?
CLEARWAKE	63	32043	32043	
SETWAKE	64	32043	32045	
RETURNBUF	65	32107	32107	
RETURNDISCREQ	66	32107	32217	
RETURNIOQ	67	32107	32163	
RETURNSBUF	70	32107	32160	
GETTBUF	71	32275	32275	
GETDISCREQ	72	32275	32305	
GETIOQ	73	32275	32303	
GETSBUF	74	32275	32300	
DISCOMANAGER	75	32405	32405	
QUEUEDISCREQ	76	32533	32601	
STORE'IOQ	77	32735	32735	
DEQUEUEDISCREQ	100	33036	33036	
DMONITOR	101	33130	33130	
CHECKINDEX	102	33345	33345	
AWAKE TERMINAL	103	33430	33430	
AWAKE IO	104	33456	33456	
SUDDENDEATH	105	33545	33574	
MASTERCLEARHPIB	106	33644	33644	
MASTERCLEAR	107	33644	33644	
WIOC'HPIB	110	33737	33737	
RIOC'HPIB	111	33756	33756	
INIT'HPIB	112	33776	33776	
LDEVTODRT	113	34014	34014	
LDEVTOSUBTYPE	114	34062	34062	
LDEVTOTYPE	115	34071	34071	
EXCHANGEDB	153			?
IOFAILURE	116	34136	34160	
DCONVERT	117	34230	34230	
BCONVERT	120	34271	34271	
WRITE2	121	34306	34306	
CHECKLDEV	122	34314	34314	
DEQUEUE	123	34346	34346	
ADDHEAD	124	34364	34364	
ADDTAIL	125	34403	34403	
SEGMENT LENGTH		34610		

PRIMARY DB 0 INITIAL STACK 3290 CAPABILITY 700

6

```

07950000 00000 1
07952000 00000 1  PROCEDURE START'HPIB(DITP,SIOP,QUEUE);
07954000 00000 1  VALUE QUEUE;
07956000 00000 1  INTEGER ARRAY DITP,SIOP;
07958000 00000 1  LOGICAL QUEUE;
07960000 00000 1  OPTION PRIVILEGED,UNCALLABLE;
07962000 00000 1  BEGIN
07964000 00000 2  INTEGER POINTER
07966000 00000 2  ILTP
07968000 00000 2  INTEGER          = Q+1;
07970000 00000 2  CONTROL          = ILTP+1,
07972000 00000 2  CHANNEL          = CONTROL+1;
07974000 00000 2  ENTRY STARTIO;  << FOR COMPATABILITY REASONS >>
07976000 00000 2
07978000 00000 2
07980000 00000 2
07982000 00000 2  STARTIO:
07984000 00002 2  TOS := DITP(DILTP);  << ILTP >>
07986000 00004 2  TOS := ILTP(ICNTRL); << CONTROL >>
07988000 00006 2  TOS := SO.CHANQUE;  << CHANNEL >>
07990000 00010 2  IF QUEUE THEN << NORMAL PROGRAM START >>
07992000 00013 2  IF LOGICAL(CONTROL)&CSL(1) THEN
07994000 00013 3  BEGIN << MULTI-CONTROLLER CHANNEL RESOURCE >>
07996000 00014 3  DISABLE;
07998000 00020 3  IF BUSY(CHANNEL) <> 0 THEN
08000000 00020 4  BEGIN
08002000 00024 4  ADDTAIL(DITP,DLINK,CHANNEL);
08004000 00025 4  ENABLE;
08006000 00026 4  TOS := CCL;
08008000 00027 4  GO OUT;
08010000 00027 3  END;
08012000 00032 3  BUSY(CHANNEL) := @DITP;
08014000 00033 3  ENABLE;
08016000 00033 2  END;
08018000 00034 2  DISABLE;
08020000 00036 2  HALT'HPIB(DITP); << HALT CURRENT PROGRAM >>
08022000 00037 2  IF > THEN
08024000 00037 3  BEGIN
08026000 00041 3  TOS := CONTROL.(8:8);
08028000 00050 3  DO UNTIL ABS(SO&LSL(2)+DRT3)=0;
08030000 00051 3  DEL;
08032000 00051 2  END;
08034000 00052 2  ENABLE;
08036000 00052 2  << NEED TO CHECK RESULTS AFTER TIMEOUT >>
08038000 00053 2  TOS := CONTROL; << DRT NUMBER >>
08040000 00055 2  TOS := @SIOP + SYSDB;
08042000 00056 2  DISABLE;
08044000 00061 2  DITP.IAK := 0; << RESET INTERRUPT ACKNOWLEDGE >>
08046000 00063 2  STARTIO; << START I/O INSTRUCTION >>
08048000 00064 2  IF = THEN
08050000 00064 3  BEGIN << PROGRAM STARTED >>
08052000 00066 3  IF QUEUE THEN
08054000 00066 4  BEGIN
08056000 00071 4  DITP.IOPROG := 1; << SET I/O PROGRAM IN PROGRESS >>
08058000 00075 4  ILTP(IFLAG).WAITPROG := 0; << CLEAR WAIT PROG FLAG >>
08060000 00076 4  TOS := @DITP;
08062000 00100 3  END ELSE

```

⑥

```

08064000 00100 4      ILTP(IFLAG).WAITPROG := 1; << WAIT PROGRAM STARTED >> <<00.TP>>
08066000 00104 4      TOS := 0; <<00.TP>>
08068000 00105 4      END; <<00.TP>>
08070000 00105 3      ILTP(ICDP) := TOS; << SET CURRENT DIT POINTER IN ILT >> <<00.TP>>
08072000 00107 3      TOS := CCE; <<00.TP>>
08074000 00110 3      OUT:
08076000 00110 3      RSTATUS.CC := TOS;
08078000 00114 3      RETURN;
08080000 00115 3      END;
08082000 00115 2      IF < THEN <<TP.CR>>
08084000 00115 2      BEGIN << BAD DRT. RETURN I/O FAILURE >> <<TP.CR>>
08086000 00116 2      X := CONTROL.(8:8)&LSL(2)+DRT3; <<TP.CR>>
08088000 00116 3      ABS(X) := 0; << CLEAR LAST WORD OF DRT >> <<TP.CR>>
08090000 00123 3      TOS := CCG; <<TP.CR>>
08092000 00124 3      GO OUT; <<TP.CR>>
08094000 00125 3      END; <<TP.CR>>
08096000 00126 3      IF QUEUE AND LOGICAL(CONTROL)&CSL(1) THEN <<00.TP>>
08098000 00126 2      CHKCHANNELQUE(CONTROL,DITP); <<00.TP>>
08100000 00126 2      TOS := CCG;
08102000 00133 2      GO TO OUT;
08104000 00136 2      END;
08106000 00137 2
08108000 00140 2

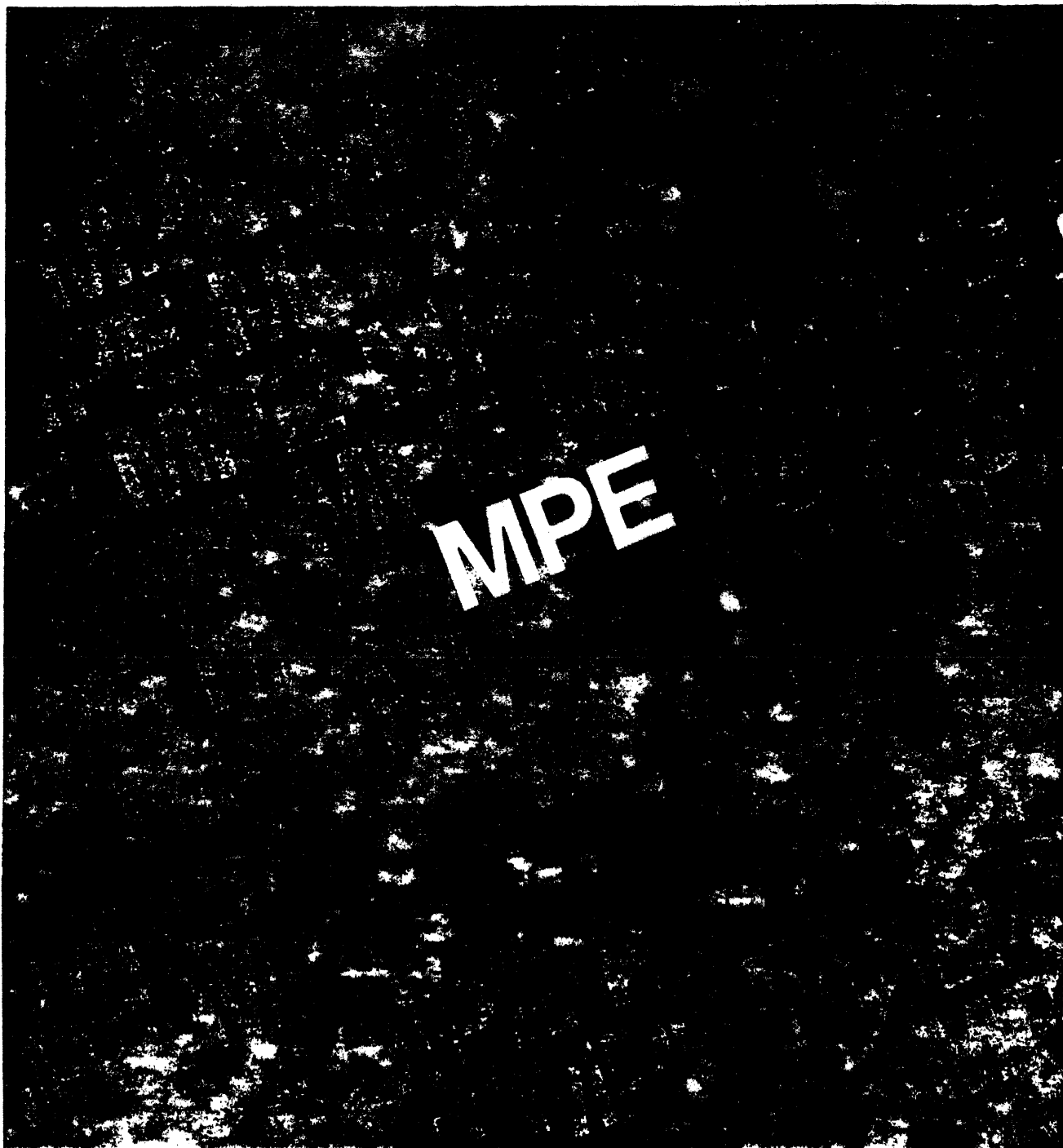
```

IDENTIFIER	CLASS	TYPE	ADDRESS
CHANNEL	SIMP. VAR.	INTEGER	Q +003
CONTROL	SIMP. VAR.	INTEGER	Q +002
DITP	ARRAY (R)	INTEGER	Q -006
ILTP	POINTER	INTEGER	Q +001
OUT	LABEL		PB+110
QUEUE	SIMP. VAR.	LOGICAL	Q -004
SIOP	ARRAY (R)	INTEGER	Q -005
STARTIO	ENTRY		PB+000

00000	021405	047808	021407	047401	004500	026426	041604	013724	00010	041402	010401	013721	030040	131403	047055	022000	141210
00020	041606	021001	041403	000000	030041	021901	140062	041606	00030	131403	057055	030041	030040	041606	000000	141313	041402
00040	037777	004500	010202	022403	004300	020320	022000	141548	00050	004000	030041	041402	040024	071605	030040	043606	013310
00060	053606	020302	000000	141532	041604	013713	043606	013407	00070	053606	021415	047401	013301	057401	041606	140007	001000
00100	021415	047801	013401	057401	000800	021413	057401	021002	00110	041601	003200	027142	051601	031403	141611	041402	037777
00120	010202	022403	004306	020321	000800	140415	041304	013707	00130	041402	010401	013704	041402	041606	000000	000600	140427
00140	031403																

6

Series 44 Console Operator's Guide



6

Table C-1. System Failure List (System Internals)

SF#	MODULE/PROCEDURE	CAUSE	ACTION
1	CHECKER/REQUOP	UCOP request list full	Enlarge the UCOP table (See your System Manager).
2	HARDRES/TIMER	I/O failure to clock	Hardware problem, run diagnostic.
3	HARDRES/TIMEREQ	Timer request list full	Enlarge the table (See your System Manager).
4	SOFTRES/PSEUDOINT	Illegal pseudo interrupt	Perform a soft dump.
5	SOFTRES/RESETDB	Absolute DB=0	Perform a soft dump.
6	SOFTRES/EXCHANGEDB	Called with absolute DB	Perform a soft dump.
7	HARDRES/TICK	I/O failure to clock	Hardware problem, run diagnostic.
8	ININ/TESTCRUNCH	Non-responding module when MPE code executing	Perform a soft dump. See note ②
9	ININ/TESTCRUNCH	Illegal address in MPE	Perform a soft dump. See note ②
10	ININ/TESTCRUNCH	Bounds violation, illegal address, non-responding module in MPE	Perform a soft dump. See note ②
11	ININ/SYSTEMPARITY	System parity error	Hardware problem, run diagnostic.
12	ININ/ADDRESSPARITY	Address parity error	Hardware problem, run diagnostic.
13	ININ/DATAPARITY	Data parity error	Hardware problem, run diagnostic. See note ①
14	ININ/MODULEINTERRUPT	Module interrupt	Hardware problem, run diagnostic.
15	ININ/GHOST	Interrupt from unconfigured device, or undefined internal interrupt	Hardware problem, run diagnostic.
16	ININ/DSTVIOLATION	DST violation internal interrupt	Perform a soft dump.
17	ININ/STACKOVERFLOW	Second overflow while interrupts off and pseudo disabled	Perform a soft dump.
19	ININ/AWAKE	Attempt to wake process with invalid PCB pointer	Perform a soft dump.
21	SOFTRES/PUT'LIST	PCB pointer invalid, or unassigned pin	Perform a soft dump.
22	SOFTRES/PUT'LIST	PCB pointer to invalid entry	Perform a soft dump.
23	ININ/STACKOVERFLOW	I/O failure on clock	Hardware problem, run diagnostic.
24	HARDRES/ABORTTIMEREQ	Invalid timer request list index	Perform a soft dump. (See your System Manager). Enlarge table - See note ③
25	HARDRES/TIMEREQ	Free list invalid	Perform a soft dump. (See your System Manager). Enlarge table - See note ③

HP 3000 Series II/III Computer System

System Reference Manual



INTERRUPT SYSTEM

SECTION

VI

6

6-1. INTERRUPT SYSTEM OVERVIEW

The interrupt system conforms to the basic architectural scheme of the HP 3000 Series II and III Computer Systems. Thus, interrupt routines are called and exited in a manner resembling the way that procedures are called and exited. An interrupt is therefore an implicit PCAL (vs. an explicit PCAL instruction). Also, code and data domains are kept separate.

The primary differences are that the calling operations are performed by a microprogrammed *Interrupt Handler* rather than the PCAL instruction and, in some cases, the IXIT (Interrupt Exit) instruction is used for exiting the interrupt code instead of EXIT.

Code segment number 1 contains all internal interrupt procedures. Interrupt procedures for I/O devices may be in any segment other than segment number 1.

Table 6-1 lists the internal interrupts and traps with their corresponding entry numbers in the Segment Transfer Table (STT) of the internal interrupt code segment. The *parameter* is a value that is derived by the Interrupt Handler and which passes relevant information about the interrupt to the interrupt routine.

The Device Reference Table (DRT) contains a label for each entry, pointing to the interrupt procedure for each device. Bit 8 of the CPX1 register indicates an external interrupt. The *parameter* value for an external interrupt is the device number.

Before discussing the various interrupt types, the Interrupt Control Stack will be defined, since it will be referred to frequently throughout the succeeding descriptions.

Table 6-1. Interrupt Types

EXT. PROG. LABEL (%)	STT NO. (%)	INTERRUPT TYPE	PARAMETER*	EXECUTING STACK**
100401	1	Bounds Violation		
101001	2	Illegal Memory Address		
101401	3	Non-Responding Module		
102001	4	System Parity Error		ICS
102401	5	Address Parity Error		ICS
103001	6	Data Parity Error		ICS
103401	7	Module Interrupt	Module No.	ICS
104001	10	(Unused)		
104401	11	Power Fail		ICS
105001	12	(Unused)		
105401	13	(Unused)		
106001	14	(Unused)		
106401	15	(Unused)		
107001	16	(Unused)		
107401	17	(Unused)		
110001	20	Unimplemented Instruction		
110401	21	STT Violation		
111001	22	CST Violation		

Table 6-1. Interrupt Types (Continued)

EXT. PROG. LABEL (%)	STT NO. (%)	INTERRUPT TYPE	PARAMETER*	EXECUTING STACK**
111401	23	DST Violation		ICS
112001	24	Stack Underflow		
112401	25	Privileged Mode Violation		
113001	26	(Unused)		
113401	27	(Unused)		
114001	30	Stack Overflow		
114401	31	User Traps		
		a. Integer Overflow	%000001	
		b. Floating-Point Over.	%000002	
		c. Floating-Point Under	%000003	
		d. Integer Divide by 0	%000004	
		e. Floating-Point Divide by 0	%000005	
		f. Ext. Prec. Floating-Point Overflow	%000010	
		g. Ext. Prec. Floating-Point Underflow	%000011	
		h. Ext. Prec. Floating-Point Divide by 0	%000012	
		i. Decimal Overflow	%000013	
		j. Invalid ASCII digit	%000014	
		k. Invalid Dec. digit	%000015	
		l. Invalid Source Word Count	%000016	
		m. Result Word Count Overflow	%000017	
		n. Decimal Divide by 0	%000020	
115001	32	(Unused)		
115401	33	(Unused)		
116001	34	(Unused)		
116401	35	(Unused)		
117001	36	(Unused)		
117401	37	Absent Code Segment		
		a. On PCAL	P-Label	
		b. On EXIT	N	
		c. On IXIT	0	
120001	40	Trace		
		a. On PCAL	P-Label	
		b. On EXIT	N	
		c. On IXIT	0	
120401	41	STT Entry Uncallable	P-Label	
121001	42	Absent Data Segment	DST No.	
121401	43	Power On		ICS
122001	44	Cold Load		ICS
		a. System I/O (SIO)	0	
		b. Direct I/O (DIO)	Label	

*Unless noted, the parameter is the External Program Label.

**Unless noted, interrupts are serviced on the User Stack.

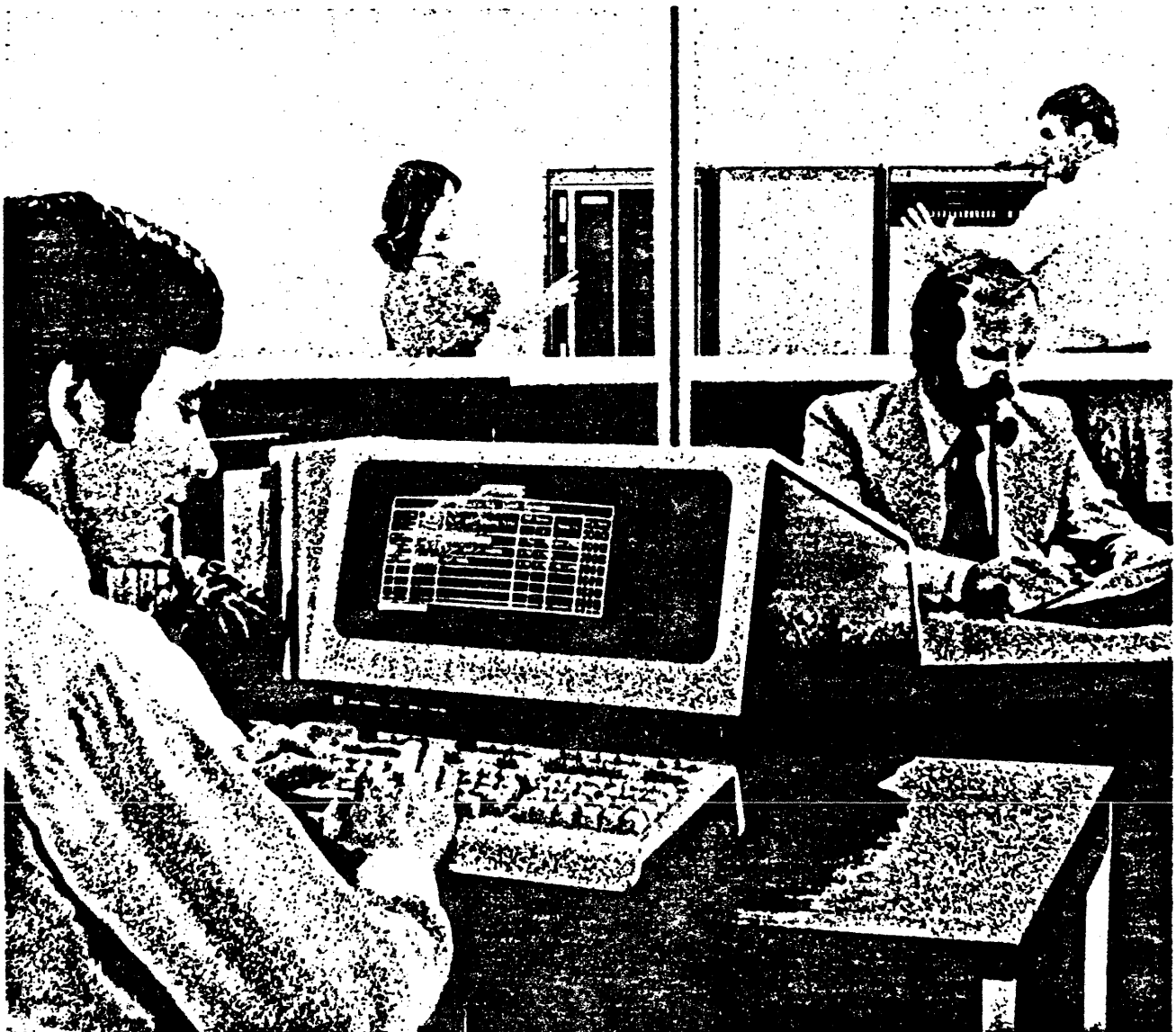
All User Traps (STT No. %31) are enabled by the User Traps bit in the Status register.

6-2. INTERRUPT CONTROL STACK (ICS)

The Interrupt Control Stack (ICS) is a single stack, unique to the CPU, which is used in common by all external interrupts and some of the internal interrupts (ICS type). When only minimal data is to be handled by an interrupt routine, the data is processed on the ICS. Otherwise, the separate data area defined in the DRT (Device Reference Table) must be used for data. The use of a common stack also permits efficient nesting of interrupt routines by using *stack markers*.

HP 3000 Series II Computer System

Machine Instruction Set



(6)

SIOP** Start I/O program. This instruction expects a channel program pointer in (S) and channel/device number in (S-1). The third word of the device DRT entry (DRT3) is read with a semaphore read. This delays execution of the instruction by a possible independent program channel until all the information is in place. If bit 2 of DRT3 (the abort bit) is 1, the instruction is aborted and CCL is set. If the channel program is halted (if bits 0,1 of DRT3 are both 0), or if an HIOP instruction has been issued but not yet serviced and the channel is in a wait instruction state (bits 0,1 of DRT3 are 0 and 1 and bit 15 of DRT3 is a 1), then the channel program pointer in (S) is placed in DRT0 of that device, bits 0,1 of DRT3 are set to 1,1 (SIO starting state), an SIO command is sent to the channel and CCE is set. Otherwise if the above conditions are not met then CCG is set.

Opcode 00
 Indicators Condition Code
 Traps Stack Underflow; Non-responding device

This is a privileged instruction.

INIT** Initialize I/O channel. The INIT instruction initializes the channel designated by bits 9-12 in the TOS by
 Terminating operations in progress on the channel;
 Clearing the channels interrupt enable bit;
 Setting channel registers to defined initial values;
 Setting the channel HP-IB bus to the idle state;
 Clearing the 4th word of every DRT entry for this channel;

Clearing the mask bit for that channel in mem loc. 7.
 Devices controlled by I/O software can be cleared only by being issued a DCL or SDC Interface Command (refer to HP Interface Bus Standards).

Opcode 06
 Indicators: If not system controller then CCG, else CCE
 Traps: Stack Underflow; Non-responding device
 This is a privileged instruction

MCS** Read memory controller. An IMB "MCRS" operation is done. Address lines are set from (S-1), (S). If address bit 13 is 0, the returned data word is pushed on the stack; otherwise the data word is put in TOSA and (S) is incremented but is actually not written to memory. (Note: this means that if the returned word is to be saved or used, it must be recovered from TOSA using a "STAX" instruction (or something similar)). The actual functions performed by the MCRS instruction are dependent upon the particular memory controller used in the system.

Opcode 07
 Traps Stack Underflow; Non-responding device

WORD 1

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

WORD 2

WORD 1

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0

WORD 2

WORD 1

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1

WORD 2

**Series 30/33 Computer Systems only.

LAB #8

Hardware Environment: Series 44

Software Environment: C Mit.

External Symptoms: No response from any terminal.

Note: This is the first case to introduce the notion of impeded processes. To explain the the process of determining why a process impeded, the instructor may use PIN 34 which is impeded but is not part of the system hang.

This dump case includes the following components:

- 1) Selected excerpts from Series 44 dump.
- 2) Pmap for MPE module 97 which includes the following segments:

FILESYS2 FILESYS3 FILESYS1A

- 3) Listing for procedure LOCK'CB.
- 4) Pmap for MPE module 73 which includes the following segments:

RINS

- 5) Listing for procedure RLOCK.
- 6) Pmap for MPE module 50 which includes the following segments:

FILESYS6A FILESYS6 FILESYS7 FILESYS1 FILESYS5
FILESYS4

- 7) Listing for procedure LOCACB.

LOG DEV #	DRT #	U N I T	C F A I F N E	T Y P E	SUB TYPE	TERM TYPE	SPEED	RFC WIDTH	CUTPUT DEV	MODE	DRIVER NAME	DEVICE CLASSES
1	89	0	0	0	3			128	0		HIOMDSC1	SYSDISC SPCOL DISC
2	90	0	0	0	9			128	0		HIOMDSC1	SPCOL DISC DISC
3	90	1	0	0	9			128	0		HIOMDSC1	SPCOL DISC DISC
5	82	0	0	32	4			64	0	S	HIOLPRT0	LP LPCB
7	73	0	0	24	0			128	0		HIOTAPE0	TAPE DDUMP
8	73	1	0	24	0			128	0		HIOTAPE0	TAPE
9	73	2	0	24	0			128	0		HIOTAPE0	TAPE
10	73	3	0	24	0			128	LP	JA	HIOTAPE0	CARD JOBTAPE
11	81	0	0	32	2			64	0	S	HIOLPRT2	FASTLP
20	8	0	0	16	0	10	240	40	20	JAID	HIOTERM0	CONSOLE
21	9	0	0	16	4	10	960	40	21	JAID	HIOTERM0	TERM
22	10	0	0	16	0	10	240	40	22	JAID	HIOTERM0	TERM
23	11	0	0	16	0	10	240	40	23	JAID	HIOTERM0	TERM
24	12	0	0	16	0	10	240	40	24	JAID	HIOTERM0	TERM
25	13	0	0	16	0	10	240	40	25	JAID	HIOTERM0	TERM
26	14	0	0	16	0	10	240	40	26	JAID	HIOTERM0	TERM
27	15	0	0	16	4	10	960	40	27	JAID	HIOTERM0	TERM
28	16	0	0	16	4	10	960	40	28	JAID	HIOTERM0	TERM
29	17	0	0	16	0	10	240	40	29	JAID	HIOTERM0	TERM
30	18	0	0	16	4	10	960	40	30	JAID	HIOTERM0	TERM
31	19	0	0	16	0	10	240	40	31	JAID	HIOTERM0	TERM
32	20	0	0	16	4	10	960	40	32	JAID	HIOTERM0	TERM
33	21	0	0	16	0	10	240	40	33	JAID	HIOTERM0	TERM
34	22	0	0	16	4	10	960	40	34	JAID	HIOTERM0	TERM
35	23	0	0	16	0	10	240	40	35	JAID	HIOTERM0	TERM
36	24	0	0	16	0	10	240	40	36	JAID	HIOTERM0	TERM
37	25	0	0	16	4	10	960	40	37	JAID	HIOTERM0	TERM
38	26	0	0	16	0	10	240	40	38	JAID	HIOTERM0	TERM
39	27	0	0	16	0	10	240	40	39	JAID	HIOTERM0	TERM
40	28	0	0	16	4	10	960	40	40	JAID	HIOTERM0	TERM
41	29	0	0	16	4	10	960	40	41	JAID	HIOTERM0	TERM
42	30	0	0	16	4	10	960	40	42	JAID	HIOTERM0	TERM
43	31	0	0	16	0	10	240	40	43	JAID	HIOTERM0	TERM
44	32	0	0	16	0	10	240	40	44	JAID	HIOTERM0	TERM
45	33	0	0	16	0	10	240	40	45	JAID	HIOTERM0	TERM
46	34	0	0	16	4	10	960	40	46	JAID	HIOTERM0	TERM
47	35	0	0	16	0	10	240	40	47	JAID	HIOTERM0	TERM
48	36	0	0	16	4	10	960	40	48	JAID	HIOTERM0	TERM
49	37	0	0	16	0	10	240	40	49	JAID	HIOTERM0	TERM
50	38	0	0	16	0	10	240	40	50	JAID	HIOTERM0	TERM
51	39	0	0	16	0	10	240	40	51	JAID	HIOTERM0	TERM
52	40	0	0	16	0	10	240	40	52	JAID	HIOTERM0	TERM
53	41	0	0	16	0	10	240	40	53	JAID	HIOTERM0	TERM
54	42	0	0	16	0	10	240	40	54	JAID	HIOTERM0	TERM
55	43	0	0	16	4	10	960	40	55	JAID	HIOTERM0	TERM
56	44	0	0	16	0	10	240	40	56	JAID	HIOTERM0	TERM
57	45	0	0	16	4	10	960	40	57	JAID	HIOTERM0	TERM

58	46	0	0	16	0	10	240	40	58	JAID	HIOTERMO	TERM
59	47	0	0	16	0	10	240	40	59	JAID	HIOTERMO	TERM
60	48	0	0	16	4	10	960	40	60	JAID	HIOTERMO	TERM
61	49	0	0	16	0	10	240	40	61	JAID	HIOTERMO	TERM
62	50	0	0	16	0	10	240	40	62	JAID	HIOTERMO	TERM
63	51	0	0	16	0	10	240	40	63	JAID	HIOTERMO	TERM
64	52	0	0	16	4	10	960	40	64	JAID	HIOTERMO	TERM
65	53	0	0	16	0	10	240	40	65	JAID	HIOTERMO	TERM
66	54	0	0	16	0	10	240	40	66	JAID	HIOTERMO	TERM
67	55	0	0	16	0	10	240	40	67	JAID	HIOTERMO	TERM
68	56	0	0	16	0	10	240	40	68	JAID	HIOTERMO	TERM
69	57	0	0	16	0	10	240	40	69	JAID	HIOTERMO	TERM
70	58	0	0	16	0	10	240	40	70	JAID	HIOTERMO	TERM
71	59	0	0	16	0	10	240	40	71	JAID	HIOTERMO	TERM
72	60	0	0	16	0	10	240	40	72	JAID	HIOTERMO	TERM
73	61	0	0	16	0	10	240	40	73	JAID	HIOTERMO	TERM
74	62	0	0	16	1	10	240	40	74	JAID	HIOTERMO	MODEM
75	63	0	0	16	1	10	240	40	75	JAID	HIOTERMO	MODEM

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NPE IV C.00.01
 1 ININ
 2 FILESYS1 (0)
 3 FILESYS4 (1)
 4 FILESYS5 (2)
 5 FILESYS6 (3)
 6 FILESYS6A (4)
 7 FILESYS7 (5)
 10 CIALTORG (6)
 11 CICOMSYS (7)
 12 CIERR (10)
 13 CIFILEB (11)
 14 CIFILEM (12)
 15 CIINIT (13)
 16 CILISTF (14)
 17 CIMISC (15)
 20 CIORGMAN (18)
 21 CIPREPRUN (17)
 22 CISUBS (20)
 23 CISYSMGR (21)
 24 CIUSERUTIL (22)
 25 CXSTOREST (23)
 26 RESTORE (24)
 27 STORE (25)
 30 DINC (28)
 31 ALLOCATE (27)
 32 ALLOCUTIL (30)
 33 HARDRES (31)
 34 ABORTDUMP (32)
 35 MESSAGE (33)
 36 PROCSEQ (34)
 37 NRIO (35)
 40 PCREATE (36)
 41 MORGUE (37)
 42 BIPC (40)
 43 IPC (41)
 44 CHECKER (42)
 45 UTILITY1 (43)
 46 UTILITY2 (44)
 47 LOADER1 (45)
 50 RINS (46)
 51 JOBTABLE (47)
 52 DEBUG (50)
 53 NURSERY (51)
 54 SPOOLING (54)
 55 SPOOLCOMS1 (55)
 56 SPOOLCOMS2 (56)
 57 PVSOMSEG (57)
 60 PVSYSO (60)
 61 PVSYSM (61)

62 UDC (62)
 63 USER (63)
 64 HELPUSER (64)
 65 OPLow (65)
 66 OPMED (66)
 67 OPHI (67)
 70 LABSEG (70)
 71 SDISC (71)
 72 LOGSEGO (73)
 73 LOGSEG1 (74)
 74 KERNELC (75)
 75 KERNELD (76)
 76 MISCSEGC (77)
 77 FILESYS1A (101)
 100 FILESYS2 (102)
 101 FILESYS3 (103)
 102 DEBUGUTL (104)
 103 SEGUTIL (105)
 104 KSAM01 (106)
 105 KSAM02 (107)
 106 KSAM03 (110)
 107 KSAM04 (111)
 110 KSAM05 (112)
 111 FIRMWARESIM1 (52)
 112 FIRMWARESIM2 (53)
 113 KSAM06 (113)
 114 KSAM07 (114)
 115 COMSYS1 (116)
 116 COMSYS3 (120)
 117 COMSYS4 (121)
 120 COMSYS5 (122)
 121 CSUTILTY (123)
 122 COMSYS2 (117)
 123 BSCLCH (124)
 124 BSCSLCPO (125)
 125 DVRSSLC (126)
 126 DVRHSI (127)
 127 DSSEG1 (151)
 130 DSSEG2 (152)
 131 DSSEG4 (154)
 132 DSMISC (156)
 133 DSIOM (157)
 134 DSSEG3 (153)
 135 DSSEG5 (155)
 136 CLIB'01 (204)
 137 CLIB'03 (206)
 140 CLIB'04 (207)
 141 CLIB'05 (210)
 142 DSRTTECALLS (160)
 143 MRJEMISC1 (161)

144 MRJEMISC2 (162)
 145 MRJESLCP (163)
 146 BSCSLCP1 (164)
 147 MPMONCMD (165)
 150 IMAGE01 (214)
 151 IMAGE02 (215)
 152 IOMONITOR3270 (231)
 153 TRACE0' (232)
 154 TRACE1' (233)
 155 IOMDISC1
 156 CSDUMMY
 157 IOTAPEO
 160 IOTERMO
 161 IOLPRTO
 162 CSHBSCO
 163 CSSBSCO
 164 IOINPO
 165 CSSMRJEO
 166 CSSBSCI
 167 IODSO
 170 IODSTRMO
 171 IOMRJEO
 172 IOMRJE1
 173 IOMCONSO
 174 IOMPNLPO
 175 IOMRORO

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***** REGISTERS *****

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*****
* DATA SEGMENT * CODE SEGMENT * MISCELLANEOUS * STATUS = 141074 * ISR = 140003
*****
* DB BANK = 000000 * PB = 151320 * X = 001271 * MODE = PRIV * RUN/HALT = HALT
* DB = 001000 * P = 154183 * CIR = 140407 * INTERRUPTS = ON * IRQ = OFF * TIMEOUT = OFF
* S BANK = 000000 * PL = 175233 * NIR = 000000 * TRAPS = OFF * CSRQ = OFF * NOT SS = ON
* DL = 177777 * PBBANK = 000000 * STACK OP = LEFT * PARITY = OFF * DISABLE ATN = OFF
* Q = 054104 * (P-PB) = 002843 * OVERFLOW = OFF * POWERFAIL = OFF
* S = 054188 * * CARRY = OFF * POWERON = OFF
* Z = 055102 * * COND CODE = CCE * NOT DISP = OFF
* * * * * SEGMENT # = 74 * NOT ICS = OFF
*****
    
```

***** FIXED LOW MEMORY *****

CODE SEGMENT TABLE POINTER	038404
EXTENDED CODE SEGMENT TABLE POINTER	040110
DATA SEGMENT TABLE POINTER	028404
PROCESS CONTROL BLOCK BASE	050004
CURRENT PCB POINTER	000000
INTERRUPT STACK BASE	054104
INTERRUPT STACK LIMIT	055102
INTERRUPT MASK	077580

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***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	D C V	R C I	S M T	M O D	F I P	S S S	C R E W D	VM ALLOC
60	(WELCOME MESSAGE #2)	ON	174	103223	38									2
61	(CS SYSTEM SEGMENT)	OFF	10		1	3175	D					S		1
62	(JOB-PROCESS CROSS REFERENCE)	ON	200	170223	37							S		1
63	(SYSTEM JDT)	ON	34	176823	0							S		1
64	(COMMAND INTERPRETER LOG-ON DST)	OFF	1000		1	4055	D					S		10
65	(MOUNTED VOLUME TAB.)	OFF	520		1	4151	D					S		10
66	(PRI. VOL. USER TABLE)	ON	200	111223	38							S		10
67	(AVAILABLE REGION LIST)	OFF	2004	144174	0							S	C	0
70	(DISC REQUEST TABLE)	OFF	3120	056340	0							S	C	0
71	(MSG HBR TABLE)	OFF	10	141620	0							S	C	0
72	(PRIMARY MSG TABLE)	OFF	200	141630	0							S	C	0
73	(MEASUREMENT INFO TABLE)	OFF	120	142030	0							S	C	0
75		ON	3244	021623	35						S			7
76		ON	3244	173423	35						S			7
77		ON	3604	131623	37						S			7
100		ON	13144	135823	37						S			16
101		ON	2554	155023	37						S			8
102		ON	2310	163223	37						S			8
103		OFF	2280		1	4435	D					S		8
104		ON	4764	145823	35							S		13
105		ON	5364	044223	34							S		43
106		ON	5720	037623	36							S		17
107		ON	5524	108223	35						S			22
110		ON	204	177223	0							S		1
111		ON	1324	021623	37							S		12
112		ON	1404	056623	37							S		22
113		ON	5524	151023	34						S			22
114		ON	10174	035223	35							S		27
115		ON	104	038623	36							S		1
116		ON	50	177623	34							S		5
117		ON	100	037423	36							S		1
120		ON	480	008223	35							S		1
121		ON	500	007023	35							S		1
122		ON	3370	032423	36							S		10
123		ON	7640	123223	35							S		10
124		ON	10174	158823	34							S		27
125		ON	100	144623	36							S		1
126		ON	50	103623	36							S		5
127		ON	104	177623	36							S		1
130		ON	6174	167223	34							S		27
131		ON	500	177023	35							S		1
132		ON	204	140623	36							S		1
133		ON	104	038423	36							S		1
134		ON	50	177623	35							S		5
135		ON	100	145023	36							S		1
136		ON	204	007623	35							S		1

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***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	D C V	R C I	I K	S M T O D	F W I P	S Y E S	R E W	C S S D	VM ALLOC
137		ON	500	141223	38										1
140		ON	10174	028223	34					S					27
141		ON	520	011423	35										1
142		ON	3334	012223	34					S					10
143		ON	7174	015823	34					S					27
144		ON	104	185423	35										1
145		ON	50	038223	38										5
148		ON	100	050423	1										1
147		ON	204	142023	38										1
150		ON	500	143223	38										1
151		ON	204	010223	35										1
152		ON	104	142423	38										1
153		ON	50	142623	38										5
154		ON	100	143023	38										1
155		ON	13730	052023	34					S					25
156		ON	500	038623	34										1
157		ON	204	037423	34										1
161		ON	3334	108623	34					S					10

(8)

***** PRESENT STACKS *****

***** PCBX AND STACK MARKERS FOR DST 108 (PCB 1) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000453	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
040765	38	177758	017542	103074	000011	74						
040754	38	001074	001427	140301	000008	301	USER SEGMENT					
040748	38	000000	001015	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 75 (PCB 2) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000000	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
022314	35	177758	017542	101074	000011	74						
022303	35	177777	025374	100433	000010	33						
022273	35	000000	001015	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 76 (PCB 3) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000000	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
174114	35	177758	017542	101074	000011	74						
174103	35	000001	008011	140437	000010	37						
174073	35	000000	001015	140041	000004	41						

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***** PCBX AND STACK MARKERS FOR DST 77 (PCB 4) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT YES	INTERACT YES	INIT Q	JCUT INDEX
000644	000644	0	0	20	20	83	45	UNDEF	YES	YES	000252	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
133001	37	177758	017542	103074	000011	74						
132770	37	047024	017114	100074	000014	74						
132754	37	001141	001302	141301	000007	301	USER SEGMENT					
132745	37	000000	001015	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 100 (PCB 5) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT YES	INTERACT YES	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	83	45	UNDEF	YES	YES	010053	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
146403	37	177758	017542	101074	000011	74						
146372	37	000003	016707	103074	000008	74						
146384	37	000003	016544	102074	000010	74						
146354	37	001141	000448	140301	000008	301	USER SEGMENT					
146348	37	000000	001015	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 101 (PCB 6) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT YES	INTERACT YES	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	83	45	UNDEF	YES	YES	000305	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
156034	37	177758	017542	103074	000011	74						
156023	37	047024	017114	100074	000014	74						
156007	37	001141	000271	141301	000007	301	USER SEGMENT					
156000	37	000000	001015	140041	000004	41						

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***** PCBX AND STACK MARKERS FOR DST 102 (PCB 7) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000044	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
164000	37	177758	017542	101074	000011	74						
163767	37	001121	000437	140701	000030	301	USER SEGMENT					
163737	37	000000	001015	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 104 (PCB 11) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	002080	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
151400	35	177758	017542	103074	000011	74						
151387	35	047744	016352	100074	000030	74						
151337	35	000008	004115	142030	000007	30						
151330	35	000008	003153	142030	000015	30						
151313	35	000008	001642	142053	000448	53						
150845	35	000028	002032	142301	000272	301	USER SEGMENT					
150353	35	000000	001015	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 105 (PCB 12) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	001444	0	0	20	20	63	45	UNDEF	YES	YES	001145	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
047074	34	177758	017542	103074	000011	74						
047063	34	047884	017114	100074	000014	74						
047047	34	000013	000787	141301	000007	301	USER SEGMENT					
047040	34	000000	001015	140041	000004	41						

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***** PCBX AND STACK MARKERS FOR DST 113 (PCB 14) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000844	000844	0	0	20	20	63	45	UNDEF	YES	YES	000122	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
153574	34	177758	017542	103074	000011	74						
153583	34	000001	005701	140054	000025	54						
153538	34	000002	004301	142054	001521	54						
152015	34	000000	001015	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 107 (PCB 15) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000844	000844	0	0	20	20	63	45	UNDEF	YES	YES	000122	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
110772	35	177758	017542	103074	000011	74						
110781	35	000031	005701	140054	000024	54						
110735	35	000002	004301	142054	001520	54						
107215	35	000000	001015	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 124 (PCB 24) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	2	3	67	67	126	127	6S2	YES	YES	000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
182134	34	177758	017542	103074	000011	74						
182123	34	047604	017114	100074	000014	74						
182107	34	000003	005213	141021	002003	21						
180104	34	177404	003038	140415	000107	15						
157775	34	000000	001015	140041	000004	41						

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***** PCBX AND STACK MARKERS FOR DST 114 (PCB 26) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	1	2	20	20	116	115	8S4	YES	YES	000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
040534	35	177756	017542	103074	000011	74						
040523	35	047564	017114	100074	000014	74						
040507	35	000003	005213	141021	002003	21						
036504	35	177404	003038	140415	000107	15						
036375	35	000000	001015	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 122 (PCB 27) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000600	1	2	20	20	116	115	8S4	YES	YES	000103	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
033654	36	177756	017542	101074	000011	74						
033643	36	000003	016707	141074	000006	74						
033635	36	000003	007334	141002	000035	2						
033600	36	177775	000668	140007	000201	7						
033377	36	000005	005287	142007	000014	7						
033363	36	000004	001322	143041	000031	41						
033332	36	000000	001065	141041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 142 (PCB 30) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000600	2	3	67	67	126	127	8S2	YES	YES	000051	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
013246	34	177756	017542	103074	000011	74						
013235	34	001262	003355	140050	000016	50						
013217	34	000000	001070	142501	000111	101						
013106	34	000000	000030	060701	000006	301	USER SEGMENT					
013100	34	000000	001015	140041	000004	41						

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***** PCBX AND STACK MARKERS FOR DST 143 (PCB 31) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE #S5	DUPLICAT YES	INTERACT YES	INIT Q	JCUT INDEX
000444	000444	4	5	51	51	145	144				000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
023770	34	177758	017542	103074	000011	74						
023757	34	047744	018352	100074	000031	74						
023728	34	000030	004115	142030	000007	30						
023717	34	000030	003153	142030	000015	30						
023702	34	000030	004710	142008	000872	8						
023010	34	177342	003581	140047	000081	47						
022727	34	177777	002520	141040	000440	40						
022287	34	000003	005134	141021	002008	21						
020281	34	177404	003038	140415	000107	15						
020152	34	000021	005047	140082	000281	82						
017871	34	000000	000555	140082	000585	82						
017104	34	000000	002738	142015	000107	15						
018775	34	000000	001015	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 130 (PCB 32) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE #S8	DUPLICAT YES	INTERACT YES	INIT Q	JCUT INDEX
000444	000444	3	4	53	53	134	133				000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
172347	34	177758	017542	103074	000011	74						
172338	34	047744	018352	100074	000030	74						
172308	34	000014	004115	140030	000007	30						
172277	34	000014	000482	140030	000018	30						
172281	34	000014	000857	140018	000185	18						
172074	34	000000	003038	143015	000107	15						
171785	34	050844	000522	140078	000022	78						
171743	34	177758	017542	103074	000011	74						
171732	34	047704	017114	100074	000014	74						
171718	34	003345	003581	141022	000035	22						
171881	34	177404	003038	140415	000107	15						
171552	34	000000	005047	140082	000281	82						
171271	34	000000	000555	140082	000585	82						
170504	34	000000	002738	142015	000107	15						
170375	34	000000	001015	140041	000004	41						

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***** PCBX AND STACK MARKERS FOR DST 140 (PCB 33) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	5	6	54	54	153	152	0S7	YES	YES	000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
031534	34	177758	017542	103074	000011	74						
031523	34	047744	017114	100074	000014	74						
031507	34	000003	005213	141021	002003	21						
027504	34	177404	003038	140415	000107	15						
027375	34	000000	001015	140041	000004	41						

***** PCBX AND STACK MARKERS FOR DST 155 (PCB 34) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000600	3	4	53	53	134	133	0S8	YES	YES	001736	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
055185	34	177758	017542	101074	000011	74						
055154	34	050714	016707	141074	000008	74						
055148	34	050714	014563	140077	000014	77						
055132	34	177573	013733	140077	000022	77						
055110	34	000036	005413	140477	000106	77						
055002	34	000000	002144	140477	000112	77						
054670	34	000001	003545	040714	000016	314	USER SEGMENT					
054652	34	000000	001517	040314	000014	314	USER SEGMENT					
054636	34	000000	003265	040710	000036	310	USER SEGMENT					
054600	34	000000	000030	040710	000013	310	USER SEGMENT					
054585	34	000000	001015	140041	000004	41						

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***** PCBX AND STACK MARKERS FOR DST 161 (PCB 36) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000600	5	8	54	34	153	152	8S7	YES	YES	000052	0

ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT
107585	34	177758	017542	103074	000011	74
107554	34	001262	003355	140050	000018	50
107538	34	000003	001513	140450	000028	50
107510	34	000000	000020	180301	000007	301 USER SEGMENT
107501	34	000000	001015	140041	000004	41

(8)

***** SIR TABLE *****

SIR # 10 LOCKED BY PIN # 30
 IMPEDED PROCESSES
 PIN 11
 PIN 32
 PIN 31

SYSTEM DIRECTORY

***** MONITOR TABLE *****

LOCATION	PIN	EVENT			
147705	0	QUIESCE	126461	000400	140062
147671	0	QUIESCE	126461	000400	140062
147655	0	QUIESCE	126461	000400	140062
147641	0	QUIESCE	126461	000400	140062
147625	0	QUIESCE	126567	002400	140175
147611	31	SPECIALRQ	000143	000017	005514
147575	31	SPECIALRQ	000143	000018	003142
147561	0	INTERRUPT	003166	000000	127265
147545	31	SPECIALRQ	000150	000000	000001
147531	0	SIODMEXIT	001000	060000	133572
147515	0	QUIESCE	131011	004000	122230
147501	0	SIODMEXIT	001000	060000	133550
147465	0	QUIESCE	131011	004000	122230
147451	0	SIODMEXIT	001000	060000	133531
147435	0	QUIESCE	131011	004000	122230
147421	0	SIODMEXIT	001000	060000	133513
147405	0	QUIESCE	131011	004000	122230
147371	0	SIODMEXIT	001000	060000	133486
147355	0	QUIESCE	131011	004000	122230
147341	0	SIODMEXIT	001000	060000	133434
147325	0	QUIESCE	131011	004000	122230
151305	0	SIODMEXIT	001000	060000	133407
151271	0	QUIESCE	131011	004000	122230
151255	0	SIODMEXIT	001000	060000	133354
151241	0	QUIESCE	131011	004000	122230
151225	0	SIODMEXIT	001000	060000	133335
151211	0	QUIESCE	131011	004000	122230
151175	0	SIODMEXIT	001000	060000	133316
151161	0	QUIESCE	131011	004000	122230
151145	0	SIODMEXIT	001000	060000	133274
151131	0	QUIESCE	131011	004000	122230
151115	0	SIODMEXIT	001000	060000	133255
151101	0	QUIESCE	131011	004000	122230
151085	31	SPECIALRQ	000112	000000	000001
151051	31	123	000034	072823	000000
151035	0	QUIESCE	131321	004000	122230
151021	0	QUIESCE	131011	004000	122230
151005	0	QUIESCE	131321	004000	122230
150771	0	QUIESCE	131256	000010	122230

PIN	EVENT			
0	QUIESCE	126461	000400	140062
0	QUIESCE	126461	000400	140062
0	QUIESCE	126461	000400	140062
0	QUIESCE	126567	000004	140175
0	QUIESCE	126461	000400	140062
31	SPECIALRQ	000143	000017	004514
0	SIODMEXIT	003000	062000	137267
0	QUIESCE	131011	002000	122230
0	QUIESCE	131011	004000	122230
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001060	060413	003554
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001040	060413	003535
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001020	060413	003517
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001000	060413	003472
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001760	060413	003440
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001740	060413	003413
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001720	060413	003361
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001700	060413	003340
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001660	060413	003321
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001640	060413	003277
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001620	060413	003260
0	SPECIALRQ	000112	000003	000000
31	SIODMEXIT	001600	060413	133174
0	DEALLOC	000000	000034	072623
0	QUIESCE	131321	000040	122230
0	QUIESCE	131321	000000	122230
0	QUIESCE	131321	000010	122230
0	QUIESCE	131011	100000	122230
0	QUIESCE	131011	000010	122230
0	QUIESCE	131073	004000	122230
0	QUIESCE	131073	000010	122230

PIN	EVENT			
0	QUIESCE	126461	000400	140062
0	QUIESCE	126461	000400	140062
0	QUIESCE	126461	000400	140062
0	QUIESCE	126461	000400	140062
0	QUIESCE	131011	000004	122230
31	SPECIALRQ	000143	000017	003514
0	SPECIALRQ	000150	000003	000000
31	SIODMEXIT	003100	062413	007244
0	QUIESCE	131011	004000	122230
0	INTERRUPT	001166	000000	113571
31	SPECIALRQ	000112	000020	000001
0	INTERRUPT	001166	000000	113546
31	SPECIALRQ	000112	000020	000001
0	INTERRUPT	001166	000000	113527
31	SPECIALRQ	000112	000020	000001
0	INTERRUPT	001166	000000	113511
31	SPECIALRQ	000112	000020	000001
0	INTERRUPT	001166	000000	113464
31	SPECIALRQ	000112	000020	000001
0	INTERRUPT	001166	000000	113432
31	SPECIALRQ	000112	000020	000001
0	INTERRUPT	001166	000000	113405
31	SPECIALRQ	000112	000020	000001
0	INTERRUPT	001166	000000	113353
31	SPECIALRQ	000112	000020	000001
0	INTERRUPT	001166	000000	113333
31	SPECIALRQ	000112	000020	000001
0	INTERRUPT	001166	000000	113314
31	SPECIALRQ	000112	000020	000001
0	INTERRUPT	001166	000000	113272
31	SPECIALRQ	000112	123300	000001
0	INTERRUPT	001166	000000	113253
31	SIODMEXIT	001600	060413	003173
0	QUIESCE	131011	000000	122230
0	QUIESCE	126461	000400	140062
0	QUIESCE	131011	100000	122230
0	QUIESCE	131011	000010	122230
0	QUIESCE	131073	004000	122230
0	QUIESCE	131256	004000	122230

8

150755	0 QUIESCE	131250	004000	122230	0 QUIESCE	131352	040000	122230	0 QUIESCE	131352	004000	122230
150741	38 SPECIALRQ	105401	000020	000000	0 SWAPIN	000038	100000	000000	0 SPECIALRQ	105401	100001	000400
150725	0 FETCHSEG	105401	004038	000000	0 QUIESCE	131352	000001	122230	0 QUIESCE	131352	004000	122230
150711	0 QUIESCE	131352	004000	122230	0 QUIESCE	131352	004000	122230	38 SPECIALRQ	105401	000020	000000
150675	0 SIODMEXIT	002000	062000	133740	0 SIODONE	105401	056120	000000	0 INTERRUPT	002168	000000	033736
150661	0 SWAPIN	000038	100000	000000	0 SPECIALRQ	105401	100001	000400	0 SIODMEXIT	002560	062413	003733
150645	0 SEGIO	105401	056120	000002	0 ALLOCMEM	000001	000034	044023	0 FETCHSEG	105401	004038	000003
150631	0 QUIESCE	131352	000001	122228	0 QUIESCE	131187	000040	122230	0 QUIESCE	131352	000020	122230
150615	0 SIODMEXIT	001000	060000	133711	0 SPECIALRQ	000056	000003	000000	0 INTERRUPT	001188	000000	033707
150601	0 QUIESCE	131352	004000	122230	38 SIODMEXIT	001540	060413	003870	38 SPECIALRQ	000058	002300	000001
150585	0 SIODMEXIT	001000	060000	133858	0 SPECIALRQ	000055	000003	000000	0 INTERRUPT	001188	000000	033854
150551	0 QUIESCE	131352	004000	122225	38 SIODMEXIT	001500	060413	133825	38 SIODMEXIT	001500	060413	003825
150535	38 SPECIALRQ	000055	000030	000001	0 SWAPIN	000038	100000	000000	0 FETCHSEG	000181	000038	000000
150521	0 QUIESCE	131187	000440	122230	33 SIODMEXIT	002000	062000	003607	0 SIODMEXIT	002000	062000	133605
150505	0 SPECIALRQ	000140	000023	000000	0 INTERRUPT	002168	000000	033603	0 QUIESCE	131187	004000	122230
150471	33 SIODMEXIT	002460	062413	003587	33 SPECIALRQ	000140	000020	000001	0 SIODMEXIT	002000	062000	133580
150455	0 SPECIALRQ	000140	000023	000000	0 INTERRUPT	002168	000000	033558	0 QUIESCE	131187	004000	122230
150441	33 SIODMEXIT	002440	062413	003538	33 SPECIALRQ	000140	032240	000001	0 SIODMEXIT	002000	062000	133532
150425	0 SPECIALRQ	000181	000023	000000	0 INTERRUPT	002168	000000	033530	0 QUIESCE	131187	004000	122230
150411	33 SIODMEXIT	002420	062413	133501	33 SIODMEXIT	002420	062413	003500	33 SPECIALRQ	000181	000020	000001
150375	0 SIODMEXIT	001000	060000	133474	0 SIODONE	000161	055740	000000	0 INTERRUPT	001188	000000	033473
150361	0 SWAPIN	000033	100000	000000	0 SIODMEXIT	001400	060413	003415	0 SEGIO	000181	055740	000001
150345	0 DEALLOCM	000000	000034	112223	0 ALLOCMEM	000018	000034	106623	0 FETCHSEG	000181	000033	000003
150331	0 QUIESCE	131187	000001	122230	33 QONSEG	000181	131187	000044	0 QUIESCE	126601	000400	140218
150315	12 SIODMEXIT	002000	062000	003402	0 SIODMEXIT	002000	062000	133377	0 SPECIALRQ	000105	000023	000000
150301	0 INTERRUPT	002168	000000	033378	0 QUIESCE	126601	004000	140218	12 SIODMEXIT	002340	062413	003382
150285	12 SPECIALRQ	000105	000020	000001	0 SIODMEXIT	002000	062000	133352	0 SPECIALRQ	000105	000023	000000
150251	0 INTERRUPT	002168	000030	033351	0 QUIESCE	126601	004000	140218	12 SIODMEXIT	002320	062413	003342
150235	12 SPECIALRQ	000105	000040	000001	0 SIODMEXIT	002000	062000	133275	0 SPECIALRQ	000105	000023	000000
150221	0 INTERRUPT	002168	000000	033273	0 QUIESCE	126601	004000	140218	12 SIODMEXIT	002300	062413	003255
150205	12 SPECIALRQ	000105	000020	000001	0 SIODMEXIT	002000	062000	133247	0 SPECIALRQ	000105	000023	000000
150171	0 INTERRUPT	002168	000000	033248	0 QUIESCE	126601	004000	140218	12 SIODMEXIT	002280	062413	003228
150155	12 SPECIALRQ	000105	000000	000001	0 SIODMEXIT	002000	062000	133221	0 SPECIALRQ	000105	000023	000000
150141	0 INTERRUPT	002168	000000	033220	0 QUIESCE	126601	004000	140218	12 SIODMEXIT	002240	062413	003202
150125	12 SPECIALRQ	000105	000000	000001	0 SIODMEXIT	002000	062000	133174	0 SPECIALRQ	000105	000023	000000
150111	0 INTERRUPT	002188	000000	033172	0 QUIESCE	126601	004000	140218	12 SIODMEXIT	002220	062413	003151
150075	12 SPECIALRQ	000105	000000	000001	0 SIODMEXIT	002000	062000	133144	0 SPECIALRQ	000105	000023	000000
150061	0 INTERRUPT	002188	000000	033143	0 QUIESCE	126601	004000	140218	12 SIODMEXIT	002200	062413	003127
150045	12 SPECIALRQ	000105	000000	000001	0 SIODMEXIT	001000	060000	133044	0 SPECIALRQ	000105	000023	000000
150031	0 INTERRUPT	001188	000000	033043	0 QUIESCE	126601	004000	140218	12 SIODMEXIT	001188	060413	003011
150015	12 SPECIALRQ	000105	000020	000001	0 SIODMEXIT	001000	050000	133004	0 SPECIALRQ	000105	000023	000000
150001	0 INTERRUPT	001188	000000	033002	0 QUIESCE	126601	004000	140218	12 SIODMEXIT	001140	060413	002758
147785	12 SPECIALRQ	000105	037420	000001	0 SIODMEXIT	001000	060000	132740	0 SPECIALRQ	000105	000023	000000
147751	0 INTERRUPT	001188	000000	032738	0 QUIESCE	126601	004000	140218	12 SIODMEXIT	001120	060413	002873
147735	12 SPECIALRQ	000105	000020	000001	0 SIODMEXIT	002000	062000	132664	0 SPECIALRQ	000105	000023	000000
147721	0 INTERRUPT	002188	000000	032663	0 QUIESCE	126601	004000	140218	12 SIODMEXIT	002100	062413	002640

8

***** SYSTEM BUFFER ANALYSIS *****

ELEMENTS IN TABLE	18	MAXIMUM NUMBER OF ELEMENTS IN USE	1
ELEMENTS IN PRIMARY AREA	14	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	129	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	3630	TOTAL REQUEST	37
INDEX TO LAST FREE ELEMENT	3427		

***** TERMINAL BUFFERS *****

ELEMENTS IN TABLE	255	MAXIMUM NUMBER OF ELEMENTS IN USE	9
ELEMENTS IN PRIMARY AREA	224	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	32	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	1510	TOTAL REQUEST	1030
INDEX TO LAST FREE ELEMENT	1410		

FREE LIST

TABLE INDEX	LINK	TERMINAL BUFFER
1410	0	..
1450	1410	..HELLO JON.DAVIS.NAME. (CIERR 975)..D CO. 1980
1350	1450	...: N DPAN4.PUB.SYS
1310	1350	....OWOUTJOB=@.....
1150	1310	..REPORT ON ENTIRE ACCOUNT REQUIRES ACCOUNT MANAGER CAPABILITY
1250	1150	..fc.....
1210	1250	...: (CIERR. 705).....
1110	1210	..PROGRAM ABORTED PER USER REQUEST. (CIERR 989).....
1010	1110	....:04/13/LDEV 11 REQUEST ABORTED EXTERNALLY . I/O STATUS X 3
1050	1010	..REPORT @.DAVIS.....
750	1050	..abortR.....
710	750	...: *****
17310	710	.....
17410	17310	..
850	17410	..ABORTIO 11.***** YODA ..*****
810	850	..LISTFR / MPE IV C.00.00. MON, JUL 20, 1981, 8:47 PM.. ..**
550	810	...: :47/8S1/14/LOGON FOR: OPERATOR.SYS,PUB ON. LDEV 820.....
450	550	.. ..SPOOL.ED OUT.....
510	450	..THE SPOOLER PROCESS IS BUSY, TRY AGAIN. (CIERR 3226).....
350	510	../TELCOME*
17050	350	.....

(8)

HP3000 III MEMORY DUMPC.00.01 OF SYS VER C UPDATE 00 FIX 00 DUMP TIME 7/20/81, 9:21PM
(C) HEWLETT-PACKARD CO. 1980

BANK 0 PAGE 277

053544: 100000 003560 003520 000000 000000 000000 000000 000000 000000	053554: 000000 000000 000000 000000 000000 000000 000000 000000
053564: 100000 003600 003540 000000 000000 000000 000000 000000	053574: 000000 000000 000000 000000 000000 000000 000000 000000
053604: 100000 003620 003560 000000 000000 000000 000000 000000	053614: 000000 000000 000000 000000 000000 000000 000000 000000
053624: 100000 003640 003600 000000 000000 000000 000000 000000	053634: 000000 000000 000000 000000 000000 000000 000000 000000
053644: 100000 003660 003620 000000 000000 000000 000000 000000	053654: 000000 000000 000000 000000 000000 000000 000000 000000
053664: 100000 003700 003640 000000 000000 000000 000000 000000	053674: 000000 000000 000000 000000 000000 000000 000000 000000
053704: 100000 003720 003660 000000 000000 000000 000000 000000	053714: 000000 000000 000000 000000 000000 000000 000000 000000
053724: 100000 003740 003700 000000 000000 000000 000000 000000	053734: 000000 000000 000000 000000 000000 000000 000000 000000
053744: 100000 003760 003720 000000 000000 000000 000000 000000	053754: 000000 000000 000000 000000 000000 000000 000000 000000
053764: 100000 000260 003740 000000 000000 000000 000000 000000	053774: 000000 000000 000000 000000 000000 000000 000000 000000

\$\$\$\$\$\$\$ DST 7 (INTERRUPT CONTROL STACK) \$\$\$\$\$\$\$

054004: 000000 000000 000000 000000 000000 000000 000000 000000	054014: 000000 000000 000000 000000 000000 000000 000000 000000
054024: 000001 000000 000000 000000 001750 001750 000143 000144	054034: 000203 000454 000000 000360 000312 000230 000375 000358
054044: 000310 000000 000000 000000 000000 000000 000000 000000	054054: 000000 000000 000000 000000 000000 000000 000000 000000
054064: 000075 100076 000131 177777 000000 146710 000040 021823	054074: 002357 000000 000027 000035 022267 000000 001514 100074
054104: 000000 000000 001000 000064 047044 025770 024240 024248	054114: 047044 000000 001012 003127 000000 000000 112068 000000
054124: 000000 000035 021823 000144 000000 113068 021057 000000	054134: 000444 000000 102033 000400 000000 000123 000000 002224
054144: 180474 000000 000000 000000 000764 000040 000001 000002	054154: 000000 000132 000000 031414 000000 031548 000000 000011
054164: 000000 000303 000000 177756 002643 141074 100068 000000	054174: 001000 000144 000000 000000 021104 000000 001000 000144

054204: 001012 003127 100001 000015 142120 177777 177777 000000	054214: 000144 000144 000001 177777 000000 002448 058000 000000
054224: 142128 003405 101033 000020 000000 033454 100033 000008	054234: 177600 000000 000040 000020 000000 000002 033513 101033
054244: 000011 047044 000400 000000 001000 047044 000001 000000	054254: 047044 017103 100074 000013 000000 000013 000082 000000
054264: 177777 000000 177777 000024 000000 000001 123122 122072	054274: 000024 025338 122122 000000 000001 002047 141151 000031
054304: 122072 000132 000000 025338 000007 025217 101033 000010	054314: 010000 000000 131352 014122 103074 000015 047744 000000
054324: 000000 001000 033543 100433 000010 000062 000025 000000	054334: 000034 108600 000034 000000 177840 122072 000004 000010
054344: 058120 000062 000062 000034 126576 002414 000303 002580	054354: 062413 003733 000003 026270 102033 000031 000000 000000
054364: 000303 000000 002223 033733 002223 033733 002448 058000	054374: 037435 123317 002223 033733 000000 000000 000000 123122

054404: 122072 000055 000000 025272 122122 177777 000001 002047	054414: 143151 000032 122072 000132 000000 025272 000007 025217
054424: 103033 000010 101033 000010 000015 142120 037435 123317	054434: 002185 000144 000144 000001 177777 000000 002448 058000
054444: 000000 142128 003405 101033 000020 000000 000000 000000	054454: 000000 000000 000000 000000 000000 000000 000000 000000
054464: 000000 000000 000000 000000 000000 000000 000000 000000	054474: 000000 000000 000000 000000 000000 000000 000000 000000

LINES 054504 - 055063 SAME AS ABOVE

055084: 000000 000000 000000 000000 000000 000000 000000 000000 055074: 000000 000000 000000 000000 000000 000000 000000 000000

\$\$\$\$\$\$\$ DST 13 (I/O QUEUE) \$\$\$\$\$\$\$

055104: 038068 000013 000112 000125 010400 000000 000000 006365	055114: 007000 000433 000085 000000 100155 002083 000001 177777
055124: 000320 000004 018001 007000 001043 000068 000000 100161	055134: 000211 000001 000010 000000 000000 017001 007000 000754
055144: 000088 000043 100161 000211 000000 000001 000005 000000	055154: 017001 007000 001145 000088 000043 100161 000211 000000
055164: 000001 000005 000000 017001 011803 000024 000083 000000	055174: 000010 000000 000003 000000 000000 000000 000000 000000
055204: 000125 000100 000000 100104 000022 000001 177777 000320	055214: 000000 003001 007000 000140 000085 000000 100155 002083
055224: 000001 177744 000040 000004 018001 005000 000000 000100	055234: 000043 100104 000233 000000 177761 000001 000000 004401
055244: 007000 000153 000085 000000 100155 006000 000015 000000	055254: 000000 000000 018001 007000 000227 000085 000000 100155
055264: 002083 000001 177777 000320 000004 018001 007000 000010	055274: 000065 000043 100155 000842 000000 177777 000000 000000

055304: 018001 007000 000316 000088 000043 100161 000211 000000 055314: 000001 000005 000000 017001 007000 000255 000083 000000

8

000000: 100000 000051 000000 110001 050700 100000 010020 000000 000010: 000000 000051 100000 000000 040050 000000 000000 000401
000020: 004003 000000 000000

***** CST 56 *****
**** (23 TO 12222 NOT PRINTED) ****

***** PCBX AND STACK MARKERS FOR DST 142 (PCB 30) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT YES	INTERACT YES	INIT Q	JCUT INDEX
000444	000600	2	3	07	07	126	127	052	YES	YES	000051	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
013240	34	177750	017542	103074	000011	74						
013235	34	001202	003355	140050	000010	50						
013217	34	000000	001070	142501	000111	101						
013100	34	000000	000030	000701	000000	301	USER SEGMENT					
013100	34	000000	001015	140041	000004	41						

***** DST 142 *****

*****PCBX: *****

***PXGLOBAL:
012223: 000444 000600 170003 001103 001503 000120 010127 000000

***PXFIXED:
012233: 000120 000225 002327 000051 000134 000710 000000 000004 012243: 000000 000000 000000 000000 000301 004727 000000 000000
012253: 000000 000000 000000 040002 010000 000000 000000 002463 012263: 000000 000131 000000 000040 000000 000000 000000 000000
012273: 000000 000000 000000 000001 000000 000000 000000 000000 012303: 000000 000000 000053 000053 000131 000000 000000 000000
012313: 000000 000000 000000 000000 000000 000000 000000 000000 012323: 000000 000000 000000 000000 000000 000000 000000
012333: 000000 000000 000000 000000 000000 000000 000000 000000 012343: 000000 000000 000000 000000 000000 000000 000000

***PXFILE: (ZERO TABLE ENTRIES ARE NOT PRINTED)
012353: 000310 000000 000000 000000 000000 000014 000000 000000 012363: 000000 000000 000000 000000 000000 000000 000000 000000
012373: 000100 000142 000100 000000 000000

----- FILE VECTOR TABLE: -----
ENTRY ADDRESS LOCK BRK LOCK COUNT/PIN HIPRI TAIL HIPRI HEAD LOPRI TAIL LOPRI HEAD
012400: 000100 100430 000000 000000 0 100 LOCK 1 30
012404: 000120 100430 000000 000000 1 120 LOCK 1 30
012410: 000140 100430 000000 000000 2 140 LOCK 1 30

----- CONTROL BLOCKS: -----
012500(000105): 000001 140020 000001 022123 052104 044510 020040 002244 001700 000120 000050 000000 012500:.....\$STDINP.
012514(000121): 000000 000020 000000 000000 000000 140020 000002 022123 052104 040111 051524 002014 012514:.....\$STDLIST
012530(000135): 001701 000121 000051 000000 000000 000000 000000 000000 000000 140020 000003 040101 012530:.....Q.).....LA
012544(000151): 041070 043001 043040 002001 002344 000400 000200 000000 000000 000000 000000 000000 012544:BF1F.....
012560(000165): 000000 012560:.....
012581: 000000 000000 000000 000000 000000 000000 000000 000000 012571: 000000 000000 000000 000000 000000 000000 000000 000000

LINES 012601 - 012640 SAME AS ABOVE

012641: 000000 000000 000000 000000 000000 000000

8

----- AVAILABLE FILE TABLE:-----															
	FNUM	FTYPE	SNULL	PACB V	LACB V	IOQX									
012647:	000000	000141	004142	000000	3	FILE	0	141	2	142					
012653:	000000	000125	002142	000000	2	FILE	0	125	1	142					
012657:	000000	000125	000142	000000	1	FILE	0	125	0	142					
**PXPOINTERS:															
012663:	000000	000314	000434	000444											
****DL REGISTER:-----															
012667(177844):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	012667:.....	
LINES 012703 - 013012 SAME AS ABOVE															
013013(177770):	100701	000000	177777	000000	000000	177777	000000	177777						013013:.....	
****DB REGISTER:-----															
013023(000000):	000040	000052	000000	000024	000005	000003	000001	000002	177777	000000	177777	000002	013023:.....	a	
013037(000014):	002344	000005	000000	000000	050101	051523	020000	000000	000000	046101	041070	043061	013037:.....	PASS	
013053(000030):	043073	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	013053:F:.....	LAB8F1	
013067(000044):	000000	000000	000000	000000	000000	000000							013067:.....		

013075(MARKER):	000000	001015	140041	000004											
013101(000056):	000003	177777												013101:.....	

013103(MARKER):	000000	000030	080701	000008											
013107(000084):	000000	000000	000002	000000	000000	001777	000000	000141	004142	000000	140020	000003	013107:.....	a.b	
013123(000100):	046101	041070	043061	043040	002001	002344	000400	000200	000000	000000	000000	000000	013123:LAB8F1F		
013137(000114):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	177777	177777	013137:.....		
013153(000130):	002111	000000	000002	000000	000001	000001	000000	000210	000000	000020	000003	001000	013153:I		
013167(000144):	037403	000000	000000	000000	000000	000000	000000	000000	000000	000000	000141	000014	013167:?	a	
013203(000160):	000142	000316	000676	000600	000150	000005	000000	000002	177777					013203:b	h

013214(MARKER):	000000	001070	142501	000111											
013220(000175):	000030	000000	000000	000142	000600	177777	002000	000004	002000	000000				013220:.....	b

013232(MARKER):	001262	003355	140050	000016											
013236(000213):	000037	106623	000600	000000	001000								013236:.....		

013243(MARKER):	177756	017542	103074	000011											
****S REGISTER:-----															
013247(000224):	000037	106623	001017	000141	000006	000142	020040	020040	000000	000001	000000	000000	013247:.....	a..b	
013263(000240):	000000	000000	000000	020040	020040	020040	020040	020040	020040	020040	020040	020040	013263:.....		
013277(000254):	020040	020040	020040	020040	020040	020040	020040	020040	020040	001516	000651	000000	013277:.....	N	
013313(000270):	025040	000002	000000	000000	000702	000000	000000	000000	000000	002344	000001	020040	013313:.....		
013327(000304):	020040	020040	020040	000000	000000	000000	000000	000000	000000	000000	000000	000000	013327:.....		
013343(000320):	000000	000000	000000	000000	000000	000000	000000	000001	013160	142052	000251	000000	013343:.....	p	
013357(000334):	000000	000000	000000	031400	000000	000143	000001	001613	046101	041070	043061	043040	013357:.....	3..c	
013373(000350):	050125	041040	020040	020040	042101	053111	051440	020040	020040	020040	020040	020040	013373:.....	PUB DAVIS	
013407(000364):	042111	051503	020104	054105	000624	000614	054104	000004	032245	000000	000011	000013	013407:.....	DISC DXE...XD..4	
013423(000400):	000001	000013	000001	000001	103074	000011	000034	013023	000013	177200	002316	000001	013423:.....		
013437(000414):	000005	000000	000000	000001	177777	177777	000000	000006	000000	000000	100442	000000	013437:.....		
013453(000430):	000000	000000	000001	000000	000002	000001	000003	000030	000002	000000	000000	177777	013453:.....		
013467(000444):	000000	000142	001175	000006	114656	000103	000000	177777	000000	000000	113745	000012	013467:.....	b..c	
013503(000460):	000000	000003	000007	000010	024411	024412	024413	024414	024415	024416	024417	024423	013503:.....)..)	
013517(000474):	024432	024444	015152	014623	014551	014117	012380	012124	012071	000001	012032	000600	013517:.....	)..\$..j..i..O..T..9
013533(000510):	000200	000000	000001	0000720	140152	000121	047604	040000	000000	001000	001120	014610	013533:.....	..}..OO..P	
013547(000524):	000001	001120	000200	032351	177771	000000	002000	000001	000006	000400	100000	020000	013547:.....	P..4	
013563(000540):	000000	000000	020040	020040	020040	020040	020040	020040	030066	033440	020040	020040	013563:.....	067	
013577(000554):	020040	020040	020040	020040	000000	020040	020040	020040	020040	020040	020040	030066	013577:.....		
013613(000570):	033440	020040	020040	020040	020040	020040	020040	020000	000000	000000	000000	000000	013613:7		
013627(000604):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	013627:.....		

050701(003012): 000010 000000 177570 000000 000000 000111 000472 000006 000000 000001 000000 000001 050701:.....X.....I.....
 050715(003026): 000000 000005 000000 000000 000000 000001 000000 000001 177777 000000 000111 000000 050715:.....I.....
 050731(003042): 000111 000015 177822 013348 140077 000200 000428 000000 000000 000000 000012 000150 050731:.....I.....?
 050745(003058): 000105 004513 000111 000016 000105 000003 000000 000000 000000 000000 000000 000000 050745:..E.K.I..E.M..
 050761(003072): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 050761:.....
 LINES 050775 - 051574 SAME AS ABOVE
 051575(003706): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 051575:.....
 051607: 000477 021474 177104 170003 010201 140012 048505 051523 051617: 040507 042440 041501 052101 046117 043525 042440 021021
 051627: 020043 142421 021474 177104 170003 010201 140003 051111 051637: 052040 021003 020043 142433 021474 177104 170003 010201
 051647: 140007 053117 048125 048505 020124 040502 048105 021014 051657: 020043 142451 021474 177104 170003 010201 140013 053505
 051667: 048103 047515 042440 048505 051523 040507 042440 051511 051677: 051040 021023 020043 142473 021474 177104 170003 010201
 051707: 140014 040523 051517 041511 040524 044517 047040 052101 051717: 041114 042440 051511 051040 021025 020043 142518 021474
 051727: 177104 170003 010201 140011 041523 020101 046114 047503 051737: 040524 042440 051511 051040 021017 020043 142538 021474
 051747: 177104 170003 010201 140010 046117 043507 044518 043440 051757: 041125 043108 042522 021018 020043 142555 021474 177104
 051767: 170003 010201 140012 050122 044528 040524 000027 100000 051777: 000027 100000 000060 000000 110001 057020 100000 015032
 052007: 000000 000000 000080 100000 000000 000155 000000 000000 052017: 000400 007031 000000 000000

***** PCBX AND STACK MARKERS FOR DST 155 (PCB 34) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000800	3	4	53	53	134	133	0S8	YES	YES	001738	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
055185	34	177756	017542	101074	000011	74						
055154	34	050714	018707	141074	000008	74						
055148	34	050714	014583	140077	000014	77						
055132	34	177573	013733	140077	000022	77						
055110	34	000036	005413	140477	000108	77						
055002	34	000000	002144	140477	000112	77						
054870	34	000001	003545	040714	000018	314	USER SEGMENT					
054852	34	000000	001517	040314	000014	314	USER SEGMENT					
054838	34	000000	003285	040710	000038	310	USER SEGMENT					
054800	34	000000	000030	040710	000013	310	USER SEGMENT					
054585	34	000000	001015	140041	000004	41						

\$\$\$\$\$ DST 155 \$\$\$\$\$\$

*****PCBX: *****
 ***PXGLOBAL:
 052023: 000444 000800 170003 001485 002085 000134 016133 000000
 ***PXFIXED:
 052033: 000120 002344 012724 001738 000134 000802 000000 000004 052043: 000000 000000 000000 000000 000310 021100 000000 000000
 052053: 000000 000000 108714 040008 025000 000000 000000 013088 052063: 000000 000160 000000 000124 000000 000000 000000 000000
 052073: 000000 000000 000000 000001 000000 000000 000000 000000 052103: 000000 000000 000002 000002 000160 000000 000000 000000
 052113: 000000 000000 000000 000000 000000 000000 000000 000000 052123: 000000 000000 000000 000000 000000 000000 000000 000000
 052133: 000000 000005 000000 000000 000000 000000 000000 000000 052143: 000000 000000 000000 000000 000000 000000 000000 000000
 ***PXFILE: (ZERO TABLE ENTRIES ARE NOT PRINTED)

052153: 000310 000000 000000 000000 000000 000020 000000 000000 052183: 000000 000000 000000 000000 000000 000000 000000 000000
052173: 000208 000155 000100 000000 000000
----- FILE VECTOR TABLE: ENTRY ADDRESS LOCK BRK LOCK COUNT/PIN HIPRI TAIL HIPRI HEAD LOPRI TAIL LOPRI HEAD
052200: 000108 100434 000000 000000 0 108 LOCK 1 34
052204: 000128 100434 000000 000000 1 128 LOCK 1 34
052210: 000148 100434 000000 000000 2 148 LOCK 1 34
052214: 000168 100434 000000 000000 3 168 LOCK 1 34
----- CONTROL BLOCKS:
052300(000105): 000001 140020 000001 022123 052104 044518 020040 002244 001700 000120 000050 000000 052300:SSTDINP{..
052314(000121): 000000 000020 000000 000000 000000 140020 000002 022123 052104 046111 051524 002814 052314:SSTDList:..
052330(000135): 001701 000121 000051 000000 000000 000000 000000 000000 000000 140020 000003 042504 052330:Q).....ED
052344(000151): 044524 047525 052040 000814 001401 000121 000051 000000 000320 000000 000000 000000 052344: ITOUTQ).....
052360(000165): 177777 140020 000004 042504 044524 044518 020040 000254 001400 000120 000050 000000 052360:EDITINP{..
052374(000201): 000431 000022 000000 000000 000000 000000 052374:
052401: 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 052411: 000000 000000 000000 000000 000000 000000 000000 000000
LINES 052421 - 052440 SAME AS ABOVE

052441: 000000 000000
----- AVAILABLE FILE TABLE: FNUM FTYPE \$NULL PACB V LACB V IOQX
052443: 000000 000135 006155 000000 4 FILE 0 135 3 155
052447: 000000 000135 004155 000000 3 FILE 0 135 2 155
052453: 000000 000135 002155 000000 2 FILE 0 135 1 155
052457: 000000 000135 000155 000000 1 FILE 0 135 0 155

**PXPOINTERS:

052463: 000000 000314 000434 000444
****DL REGISTER: *****
052467(177844): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 052467:
LINES 052503 - 052612 SAME AS ABOVE
052613(177770): 100710 000000 177777 000000 000000 177777 000000 177777 052613:
****DB REGISTER: *****
052623(000000): 000225 000000 000230 000480 000234 000470 000000 000000 000000 177777 000000 000000 052623:0...8.....
052637(000014): 000501 000500 177777 008400 000000 008440 000000 001750 000000 000000 000000 000000 052637:A.....
052653(000030): 000012 000000 000000 000000 000000 177777 000000 001750 000000 000000 000110 001102 052653:H.B
052667(000044): 000000 000000 000000 000000 000000 000000 000000 00642 001504 000004 100001 000000 000000 052667:D.....
052703(000080): 000000 000000 002108 002204 000000 000000 000000 000000 000000 000000 000000 000000 052703:F.....
052717(000074): 000000 000000 000000 000001 000003 000003 002765 160377 000017 041077 002785 160377 052717:BT.....
052733(000110): 000000 000001 000000 000001 000000 001750 000000 000144 000000 001750 000000 003720 052733:d.....
052747(000124): 000000 003720 000000 000000 000000 000000 000000 001141 002302 000003 000000 000000 052747:a.....
052763(000140): 002720 000000 000000 000000 000000 000000 000001 000000 000000 177777 000000 000000 052763:
052777(000154): 000000 000110 177777 000000 000000 000000 000000 000000 000000 000000 000000 000160 052777:H.....
053013(000170): 002746 000082 000000 000000 000000 000000 003044 000000 003142 000000 000000 001661 053013:2.....s.....b.....P
053027(000204): 004400 000000 001878 001710 000000 000000 000000 000000 000000 000000 000000 000074 053027:A.7.09DAVIS
053043(000220): 000000 000000 000000 000000 000000 040458 033458 030071 042101 053111 051440 020040 053043:A.7.09DAVIS
053057(000234): 050125 041040 020040 020040 008415 008415 008415 008415 008415 008415 008415 008415 053057: PUB
053073(000250): 008415 008415 008415 008415 008415 008415 008415 008415 008415 008415 008415 008415 053073:
LINES 053107 - 053282 SAME AS ABOVE
053283(000440): 008400 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 053283:
053277(000454): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 053277:
LINES 053313 - 053452 SAME AS ABOVE
053453(000830): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 027400 000000 053453:/
053467(000844): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 053467:
LINES 053503 - 053642 SAME AS ABOVE
053643(001020): 000000 000000 000000 000000 000000 040458 033458 030071 000000 000000 000000 000000 053643:A.7.09
053657(001034): 000000 000000 000000 000000 000000 000000 020040 020040 020040 020040 020040 020040 053657:
053673(001050): 020040 020040 020040 020040 020040 020040 020040 020040 020040 020040 020040 020040 053673:
LINES 053707 - 053752 SAME AS ABOVE

8

053753(001130):	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	027440	020040	020040	053753:
053787(001144):	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	053787:
LINES 054003 - 054158 SAME AS ABOVE														
054157(001334):	020040	020040	020040	020040	020040	000000	000000	000000	000000	000000	000000	000000	000000	054157:
054173(001350):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	054173:
054207(001364):	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	054207:
LINES 054223 - 054362 SAME AS ABOVE														
054383(001540):	020040	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	054383:
054377(001554):	000000	000000	000000	000000	000000	000000	000000	020040	020040	020040	020040	020040	020040	054377:
054413(001570):	020040	020040	020040	020040	020040	020040	020040	020040	020040	000000	000000	000000	000000	054413:
054427(001604):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	054427:
LINES 054443 - 054506 SAME AS ABOVE														
054507(001684):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	054507:
054523(001700):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	054523:
LINES 054537 - 054552 SAME AS ABOVE														
054553(001730):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	054553:

054562(MARKER):	000000	001015	140041	000004										054562:
054568(001743):	000014	000004	000500	100001	000031	000000	000000							054568: @

054575(MARKER):	000000	000030	040710	000013										054575:
054601(001758):	000000	000000	000000	003748	020000	031400	042504	044524	047525	052040	000022	100001		054601: .3.EDITOUT
054615(001772):	000004	000003	000031	000532	013110	000031	000000	000085	000085	000000	000014	000004		054615: .ZB.5.5
054631(002006):	000500	100001												054631: @

054633(MARKER):	000000	003285	040710	000036										054633:
054637(002014):	177777	037015	000009	000000	000014	002005	000500	002007						054637: > @

054647(MARKER):	000000	001517	040314	000011										054647:
054653(002030):	000000	000000	001504	001504	000001	000000	000000	000004	000642	177400				054653: .D.D.

054635(MARKER):	000001	003545	040714	000018										054635:
054671(002048):	000000	000000	000000	000003	000120	000000	000000	000135	008155	000000	140020	000004		054671: .P. .m.
054705(002082):	042504	044524	044518	020040	000254	001400	000120	000050	000000	000431	000022	000000		054705: .EDITIN .P. .m.
054721(002078):	000000	000000	000000	000021	000000	000000	000000	000021	000000	000021	177777	177777		054721: .m.
054735(002112):	000000	000000	001408	050173	010001	000000	000000	000000	000000	000014	000032	001400		054735: .P.
054751(002128):	037085	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000014		054751: .S.
054785(002142):	000155	000338	002880	000600	000150	000005	000000	000020	000642	177400				054785: .m. .h.

054777(MARKER):	000000	002144	140477	000112										054777:
055003(002180):	000113	000000	002757	000000	000135	008155	000000	000150	175441	177777	000155	002700		055003: .K. .m. .h. .l. .m.
055017(002174):	000135	000014	000409	000200	140077	000200	000400	000000	000000	000000	000034	000150		055017: .h.
055033(002210):	003001	035832	145000	000000	000000	000001	045117	000050	000000	020040	000000	000000		055033: .JO.
055047(002224):	000000	020040	000155	002780	000065	000001	000000	044524	044518	020040	005074	000000		055047: .m. .S. .ITIN .<
055063(002240):	045117	047040	020040	000050	000085	000087	020040	000000	000001	000000	000021	000000		055063: .JON .{.5.7 .
055077(002254):	000000	000000	000000	177573	000004	100000								055077: .

055105(MARKER):	000036	005413	140477	000108										055105:
055111(002288):	000188	000155	003085	000000	000135	008155	000000	000150	175333	000000	000155	177613		055111: .v.m.5. .m. .h. .m.
055125(002302):	000135	000005												055125: .]

055127(MARKER):	177573	013733	140077	000022										055127:
055133(002310):	000014	140432	000000	018034	000034	000150	003107	000000						055133: .h.G.

055143(MARKER):	050714	014583	140077	000014										055143:
055147(002324):	100000	000000												055147: .



055151(MARKER): 050714 016707 141074 000006
055155(002332): 000034 052623 047704 000000 001000

055155:..U.O.....

055162(MARKER): 177756 017542 101074 000011

S REGISTER:**													
055166(002343):	000034	052623	001701	000001	045117	047040	020040	020040	042101	053111	051440	020040	055166:..U.....JON DAVIS
055202(002357):	020040	020040	020040	020040	000000	000000	000000	000000	105007	000000	000000	177777	055202:..m.T...s.....
055216(002373):	001442	000155	003124	000008	104704	000085	000000	177777	000000	000000	000000	000000	055216:..m.T...s.....
055232(002407):	000000	000003	000007	000010	023403	023404	023405	023408	023407	023410	023411	023415	055232:..m.T...s.....
055246(002423):	023424	023438	015152	014823	014551	014300	000001	012802	054537	000000	000731	142152	055246:..m.T...s.....
055282(002437):	000114	054104	054105	000433	000423	054104	000004	032245	102033	000011	000013	000001	055282:..m.T...s.....
055278(002453):	047644	000001	000000	047644	017103	100074	000013	000000	000003	000230	000000	177777	055278:..m.T...s.....
055312(002487):	000000	000252	041314	000427	010001	010001	000000	000000	000000	000135	004155	000000	055312:..m.T...s.....
055326(002503):	140020	000003	042504	044524	047525	052040	000814	001401	000121	000051	000000	000320	055326:..m.T...s.....
055342(002517):	000000	000000	000000	177777	000000	000021	000000	000000	000000	000021	000000	000021	055342:..m.T...s.....
055356(002533):	177777	177777	000000	000000	001408	010001	010001	000000	000000	000000	000000	000014	055356:..m.T...s.....
055372(002547):	000032	001400	037085	000000	000000	000000	000000	000000	000000	000000	000000	000000	055372:..m.T...s.....
055406(002563):	0000135	000014	000155	000318	003303	000800	000150	000005	000000	000000	000004	000000	055406:..m.T...s.....
055422(002577):	000000	000002	001568	143077	000111	000000	000000	000000	000000	031404	000000	000000	055422:..m.T...s.....
055436(002613):	000010	000014	000000	000000	000000	000034	000150	000155	003413	000135	000008	000155	055436:..m.T...s.....
055452(002627):	003415	000003	000034	000150	003424	035832	145000	000155	000000	000000	000135	000051	055452:..m.T...s.....
055468(002643):	000000	000000	000000	000001	000000	000005	000155	003403	000085	000320	000004	000000	055468:..m.T...s.....
055502(002657):	000000	054218	000000	000155	000000	177777	000007	000051	002738	000018	020040	000000	055502:..m.T...s.....
055516(002673):	000001	000000	000021	000000	000000	000004	000000	000001	000085	000000	100155	002083	055516:..m.T...s.....
055532(002707):	000001	177777	000320	000004	000001	000001	008442	140077	000115	000034	177777	023375	055532:..m.T...s.....
055546(002723):	000001	177600	054114	177777	000155	000000	177777	000007	032041	142033	000018	000000	055546:..m.T...s.....
055562(002737):	000020	054104	054105	000010	000000	054104	000004	032245	102033	000011	000013	000001	055562:..m.T...s.....
055578(002753):	003502	000008	104704	000065	000000	177777	000000	000000	020146	000012	100000	100000	055578:..m.T...s.....
055612(002767):	000026	000000	000000	000002	007103	141101	000281	000000	000000	000000	000000	031428	055612:..m.T...s.....
055626(003003):	000000	000000	000000	000001	000001	000155	000034	000001	000000	000000	177777	000000	055626:..m.T...s.....
055642(003017):	000155	003547	000008	104704	000085	000000	177777	000000	000000	103773	000057	000000	055642:..m.T...s.....
055656(003033):	000003	000007	000010	023403	023404	023405	023406	023407	023410	023411	023415	023424	055656:..m.T...s.....
055672(003047):	023438	015152	014823	014551	014117	012380	012124	012071	000001	012032	000700	000200	055672:..m.T...s.....
055706(003063):	000000	000001	000720	140152	000121	047704	004000	000000	001000	001120	000350	000340	055706:..m.T...s.....
055722(003077):	001120	000350	032351	100033	000011	000040	000001	000002	000231	005356	000002	000006	055722:..m.T...s.....
055736(003113):	000000	177777	000000	000000	000000	000000	024400	000000	000014	000012	000000	000023	055736:..m.T...s.....
055752(003127):	003572	141031	000221	000024	000284	001000	003425	000036	000034	000700	001000	000001	055752:..m.T...s.....
055766(003143):	000000	000055	000000	000001	001000	000000	003425	000001	000284	020302	142074	000026	055766:..m.T...s.....
056002(003157):	000034	177777	025226	000001	177640	057240	000000	000000	177777	000007	000012	000000	056002:..m.T...s.....
056018(003173):	000000	000026	000000	000000	000002	007103	141101	000281	000000	000001	000001	000000	056018:..m.T...s.....
056034(003207):	031428	000000	000000	000000	000034	000150	000155	004008	000135	000006	000155	004010	056034:..m.T...s.....
056046(003223):	000003	100434	000000	000000	000034	000150	004022	000135	000008	000155	000000	000000	056046:..m.T...s.....
056062(003237):	000000	000000	002414	000303	001700	060413	000284	000003	026270	102033	000031	000034	056062:..m.T...s.....
056078(003253):	000000	000303	000000	002223	000284	002223	000284	002446	056000	037435	123317	002223	056078:..m.T...s.....
056112(003267):	000284	000001	000000	000000	122572	121543	000050	000000	025226	121572	177777	000001	056112:..m.T...s.....
056128(003303):	002047	103151	000032	121543	000131	000000	025226	000007	025217	103033	000010	000000	056128:..m.T...s.....
056142(003317):	000000	000000	000135	000014	000155	000256	004041	003375	000150	000005	000000	000000	056142:..m.T...s.....
056158(003333):	177777	003350	000000	000000	000000	031428	000000	000000	000034	000034	000150	000155	056158:..m.T...s.....
056172(003347):	003416	000135	000006	000155	004141	000003	100434	000000	000000	000034	000150	004153	056172:..m.T...s.....
056208(003363):	000135	000006	000155	000155	004157	000135	000006	002414	000303	001620	060413	000135	056208:..m.T...s.....
056222(003377):	000003	026270	102033	000031	000034	000000	000303	000000	002223	000135	002223	000135	056222:..m.T...s.....
056236(003413):	002446	056000	037435	123317	002223	000135	000001	000000	000010	010000	010000	000026	056236:..m.T...s.....
056252(003427):	000000	000000	000002	007103	141101	000281	000000	000002	000002	000000	031428	000000	056252:..m.T...s.....
056268(003443):	000000	000000	000034	000150	000155	004240	000135	000008	000155	004242	000003	101034	056268:..m.T...s.....
056302(003457):	000000	000000	000034	000150	004254	000135	000006	000155	004258	000155	004261	000135	056302:..m.T...s.....

8

***** PCBX AND STACK MARKERS FOR DST 181 (PCB 38) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000600	5	8	54	54	153	152	8S7	YES	YES	000052	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT						
107565	34	177758	017542	103074	000011	74						
107554	34	001282	003355	140050	000018	50						
107530	34	000003	001513	140450	000028	50						
107510	34	000000	000020	180301	000007	301	USER SEGMENT					
107501	34	000000	001015	140041	000004	41						

\$\$\$\$\$\$\$\$ DST 181 \$\$\$\$\$\$\$\$

*****PCBX:*****

***PXGLOBAL:

106623: 000444 000600 170003 002468 003088 000153 016152 000000

***PKFIXED:

106633: 000120 000144 002330 000052 000134 000710 000000 000004 106643: 000000 000000 000000 000000 000301 004730 000000 000000
 106653: 000000 000000 000000 040007 010000 000000 000000 002464 106663: 000000 000110 000000 000040 000000 000000 000000 000000
 106673: 000000 000000 000000 000001 000000 000000 000000 000000 106703: 000000 000000 000007 000007 000110 000000 000000 000000
 106713: 000000 000000 000000 000000 000000 000000 000000 000000 106723: 000000 000000 000000 000000 000000 000000 000000 000000
 106733: 000000 000000 000000 000000 000000 000000 000000 000000 106743: 000000 000000 000000 000000 000000 000000 000000 000000

***PXFILE: (ZERO TABLE ENTRIES ARE NOT PRINTED)

106753: 000310 000000 000000 000000 000000 000010 000000 000000 106763: 000000 000000 000000 000000 000000 000000 000000 000000
 106773: 000148 000181 000100 000000 000000

----- FILE VECTOR TABLE:

ENTRY	ADDRESS	LOCK	BRK	LOCK COUNT/PIN	HIPRI TAIL	HIPRI HEAD	LOPRI TAIL	LOPRI HEAD
0	108	LOCK		1 38				
1	126	LOCK		1 36				

----- CONTROL BLOCKS:

107100(000105): 000001 140020 000001 022123 052104 044516 020040 002244 001700 000120 000050 000000 107100:.....\$STDINP.(...
 107114(000121): 000000 000020 000000 000000 000000 140020 000002 022123 052104 046111 051524 002614 107114:.....\$STDLIST...
 107130(000135): 001701 000121 000051 000000 000000 000000 000000 000000 000000 107130:..Q.)
 107141: 000000 000000 000000 000000 000000 000000 000000 000000 107151: 000000 000000 000000 000000 000000 000000 000000 000000
 LINES 107161 - 107240 SAME AS ABOVE

107241: 000000 000000 000000 000000 000000 000000 000000 000000 107251: 000000 000000

----- AVAILABLE FILE TABLE:

FNUM	FTYPE	\$NULL	PACB V	LACB V	IOQX
2	FILE		0 154	1 181	
1	FILE		0 154	0 181	

***PXPOINTERS:

107263: 000000 000314 000434 000444

****DL REGISTER:*****

107267(177644): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 107267:.....
 LINES 107303 - 107412 SAME AS ABOVE

107413(177770): 100701 000000 177777 000000 000000 177777 000000 177777

****DB REGISTER:*****

107423(000000): 000042 000054 000000 000024 000005 000000 000000 000001 000002 177777 000000 177777 107423:.....
 107437(000014): 000002 002344 000005 000000 000000 050101 051523 020000 000000 000000 046101 041070 107437:.....PASSLAB8
 107453(000030): 043081 051473 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 107453: FIS:.....
 107467(000044): 000000 000000 000000 000000 000000 000000 000000 107467:.....

8

107478 (MARKER):	000000	001015	140041	000004											107502:.....						
107502 (000057):	000005	000011	000042																		
107505 (MARKER):	000000	000020	160301	000007																	
107511 (000066):	004203	000000	050101	051523	020040	020040	020066	000000	000000	000001	000000	000004	107511:....PASS	6.....							
107525 (000102):	000000	000000	000012	000004	000005	177777											107525:.....				
107533 (MARKER):	000003	001513	140450	000026																	
107537 (000114):	000036	000000	000003	000037	000740	177777	002000	000012	002000	000000											107537:.....
107551 (MARKER):	001262	003355	140050	000018																	
107555 (000132):	000037	106623	000740	000000	001000											107555:.....					
107562 (MARKER):	177756	017542	103074	000011																	
S REGISTER:	**																				
107566 (000143):	000037	106623	000000	000000	000161	177644	000056	000056	002330	000301	000006	000037	107566:.....q								
107602 (000157):	000000	000000	000000	000000	000000	000000	000000	000000	100000	000000	000000	000000	107602:.....								
107616 (000173):	000000	000000	000000	000000	000000	000000	000000	000000	000011	000000	000000	000000	107616:.....								
107632 (000207):	000000	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	107632:.....								
107646 (000223):	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	107646:.....								
LINES 107662 -	107711 SAME AS ABOVE																				
107712 (000267):	000001	000000	000000	000036	000000	000000	000000	000000	000000	000000	000000	000000	107712:.....								
107726 (000303):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	107726:.....								
107742 (000317):	000000	000000	000000	000000	000000	000033	014300	000000	000000	000001	013160	142052	107742:.....p								
107756 (000333):	000251	000000	000000	000000	000000	031400	000000	000143	000001	001813	142052	000264	107756:.....3								
107772 (000347):	000036	177777	023442	000001	177800	054476	177777	000161	000000	177777	000007	032041	107772:.....c								
110006 (000363):	142033	000016	000000	000020	054104	054105	000372	000362	054104	000004	032245	102033	110006:.....q								
110022 (000377):	000011	000013	000001	000002	000034	017542	103074	000011	000034	107423	000013	177200	110022:.....								
110036 (000413):	002727	000001	000005	000000	000000	000001	177777	177777	000000	000006	000000	000000	110036:.....								
110052 (000427):	100574	000000	000000	000000	000001	000002	000001	000003	000003	000036	000002	000000	110052:.....								
110066 (000443):	000000	177777	000000	000161	001176	000006	105347	000066	000000	177777	000000	000000	110066:.....								
110102 (000457):	104436	000012	000000	000003	000007	000010	023450	023451	023452	023453	023454	023455	110102:.....								
110116 (000473):	023456	023462	023471	023503	015152	014623	014551	014117	012360	012124	012071	000001	110116:.....								
110132 (000507):	012032	000740	000200	000000	000001	000720	140152	000121	047744	004000	000000	001000	110132:.....								
110146 (000523):	001120	000410	000400	001120	000410	032351	100033	000011	000040	000001	000011	000040	110146:.....								
110162 (000537):	000001	020040	020040	020040	020040	020040	020040	020040	020040	020040	030065	032040	110162:.....								
110176 (000553):	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	020040	110176:.....	054							
110212 (000567):	020040	030065	032040	020040	020040	020040	020040	020040	020040	020000	000000	000000	110212:.....	054							
110226 (000603):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	110226:.....								
110242 (000617):	010440	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	110242:.....								
110256 (000633):	000000	000000	000000	000000	000000	000000	010461	000000	000000	000000	000000	000000	110256:.....								
110272 (000647):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	010502	110272:.....								
110306 (000663):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	110306:.....								
110322 (000677):	000000	000000	000000	010523	000000	000000	000000	000000	000000	000000	000000	000000	110322:.....								
110336 (000713):	000004	000066	023442	073040	003004	015400	024020	020066	012051	000000	000051	000050	110336:.....								
110352 (000727):	000000	000000	177777	000006	000003	000066	023442	073040	000003	015400	024020	020066	110352:.....								
110366 (000743):	012051	010565	000000	000000	000000	000000	177777	000006	000000	000000	000000	000000	110366:.....								
110402 (000757):	000000	000000	000000	000000	000000	000000	010606	000000	000000	000000	000000	000000	110402:.....								
110416 (000773):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	110416:.....								
110432 (001007):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	110432:.....								
110446 (001023):	000000	000000	000000	000000	000000	010650	000000	000000	000000	000000	000000	000000	110446:.....								
110462 (001037):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	010671	000000	110462:.....								
110476 (001053):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	110476:.....								
110512 (001067):	000000	000000	010712	000000	000000	000000	000000	000000	000000	000000	000000	000000	110512:.....								
110526 (001103):	000000	000000	000000	000000	000000	000000	000000	000000	000000	010733	000000	000000	110526:.....								
110542 (001117):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	110542:.....								

8

***** PCBX AND STACK MARKERS FOR DST 122 (PCB 27) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT YES	INTERACT YES	INIT Q	JCUT INDEX
000444	000800	1	2	20	20	116	115	8S4			000103	0

ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT
033654	36	177756	017542	101074	000011	74
033643	36	000003	016707	141074	000008	74
033635	36	000003	007334	141002	000035	2
033600	36	177775	000666	140007	000201	7
033377	36	000005	005267	142007	000014	7
033363	36	000004	001322	143041	000031	41
033332	36	000000	001065	141041	000004	41

\$\$\$\$\$\$ DST 122 \$\$\$\$\$\$

```

*****PCBX:
***PXGLOBAL:
032423: 000444 000800 170003 000424 001024 000116 016115 000000
***PKFIXED:
032433: 000120 000433 002361 000103 000134 000710 000000 000004 032443: 000000 000000 000000 000000 000301 004761 000000 000000
032453: 000000 000000 000000 040004 010000 000000 000000 002515 032463: 000000 000154 000008 000048 000000 000000 000000 000000
032473: 000000 000000 000000 000001 000000 000000 000000 000000 032503: 000000 000000 000054 000054 000154 000000 000000 000000
032513: 000000 000000 000000 000000 000000 000000 000000 000000 032523: 000000 000000 000000 000000 000000 000000 000000 000000
032533: 000000 000005 000000 000000 000000 000000 000000 000000 032543: 000000 000000 000000 000000 000000 000000 000000 000000
***PXFILE: (ZERO TABLE ENTRIES ARE NOT PRINTED)
032553: 000310 000000 000000 000000 000000 000014 000000 000000 032563: 000000 000000 000000 000000 000000 000000 000000 000000
032573: 000166 000122 000100 000000 000000
----- FILE VECTOR TABLE:
ENTRY ADDRESS LOCK BRK LOCK COUNT/PIN HIPRI TAIL HIPRI HEAD LOPRI TAIL LOPRI HEAD
032610: 000146 100427 000000 000000 2 146 LOCK 1 27
----- CONTROL BLOCKS:
032700(000105): 000041 140020 000001 022123 052104 044516 020040 007244 001700 000120 000050 000000 032700: .I...$STDIN P
032714(000121): 000430 000020 000000 000000 000000 140020 000002 022123 052104 046111 051524 002614 032714: .....$STDLS
032730(000135): 001701 000121 000051 000000 000000 000000 000000 000000 000000 140020 000003 046101 032730: .Q.) .....LA
032744(000151): 041070 043061 043040 002001 002344 000400 000200 000000 000000 000000 000000 000000 032744: B8FIF .....
032760(000165): 000000
032761: 000000 000000 000000 000000 000000 000000 000000 000000 032771: 000000 000000 000000 000000 000000 000000 000000 000000
LINES 033001 - 033040 SAME AS ABOVE

033041: 000000 000000 000000 000000 000000 000000
----- AVAILABLE FILE TABLE:
FNUM FTYPE $NULL PACB V LACB V IOQX
033047: 000000 000141 004122 000000 3 FILE 0 141 2 122
***PXPOINTERS:
033063: 000000 000314 000434 000444
****DL REGISTER:
033067(177644): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 033067: .....
LINES 033103 - 033212 SAME AS ABOVE
033213(177770): 100701 000000 177777 000000 000000 177777 000000 177777 033213: .....
****DB REGISTER:
033223(000000): 000016 002344 000005 000003 000000 000031 177777 046101 041070 043061 043073 000000 033223: .....LAB8FIF:..
033237(000014): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 033237: .....
LINES 033253 - 033318 SAME AS ABOVE
    
```


8

\$\$\$\$\$\$ DST 26 (RIM TABLE) \$\$\$\$\$\$																	
106623:	000014	000142	140000	000000	140000	014027	140000	000000	106633:	100146	000000	100162	017030	000016	000000	000020	000000
106643:	000022	000000	000024	000000	000026	000000	000030	000000	106653:	000032	000000	000034	000000	000036	000000	000040	000000
106663:	000042	000000	000044	000000	000046	000000	000050	000000	106673:	000052	000000	000054	000000	000056	000000	000060	000000
106703:	000062	000000	000064	000000	000066	000000	000070	000000	106713:	000072	000000	000074	000000	000076	000000	000100	000000
106723:	000102	000000	000104	000000	000106	000000	000110	000000	106733:	000112	000000	000114	000000	000116	000000	000120	000000
106743:	000122	000000	000124	000000	000126	000000	000130	000000	106753:	000132	000000	000134	000000	000136	000000	000140	000000
106763:	000000	000000	000176	000020	000016	000000	050101	051523	106773:	020040	020040	045117	047040	020040	020040	042101	053111
107003:	051440	020040	050101	051523	020040	020040	045117	047040	107013:	020040	020040	042101	053111	051440	020040	020040	000212
107023:	000000	000000	000000	000000	000000	000000	000000	000000	107033:	000000	000000	000226	000000	000000	000000	000000	000000
107043:	000000	000000	000000	000000	000000	000000	000242	000000	107053:	000000	000000	000000	000000	000000	000000	000000	000000
107063:	000000	000000	000256	000000	000000	000000	000000	000000	107073:	000000	000000	000000	000000	000000	000000	000272	000000
107103:	000000	000000	000000	000000	000000	000000	000000	000000	107113:	000000	000000	000306	000000	000000	000000	000000	000000
107123:	000000	000000	000000	000000	000000	000000	000322	000000	107133:	000000	000000	000000	000000	000000	000000	000000	000000
107143:	000000	000000	000336	000000	000000	000000	000000	000000	107153:	000000	000000	000000	000000	000000	000000	000352	000000
107163:	000000	000000	000000	000000	000000	000000	000000	000000	107173:	000000	000000	000366	000000	000000	000000	000000	000000
107203:	000000	000000	000000	000000	000000	000000	000402	000000	107213:	000000	000000	000000	000000	000000	000000	000000	000000
107223:	000000	000000	000416	000000	000000	000000	000000	000000	107233:	000000	000000	000000	000000	000000	000000	000432	000000
107243:	000000	000000	000000	000000	000000	000000	000000	000000	107253:	000000	000000	000000	000000	000000	000000	000000	000000
107263:	000000	000000	000000	000000	000000	000000	000000	000000	107273:	000000	000000	000000	000000	051606	041607	022002	141511
107303:	041606	022411	004300	175400	173610	021004	020023	140072	107313:	041607	022001	141512	041606	022405	004300	175400	173610
107323:	021004	020023	140057	000056	021404	047610	026601	021001	107333:	005700	145546	041606	003343	175400	173610	021004	020023
107343:	000600	031027	041352	013705	041606	003343	175400	031025	107353:	000706	000600	041606	022411	004300	175400	041606	022405
107363:	004300	175400	041606	003343	175400	031013	141203	041147	107373:	031026	000200	000003	100000	000003	100000	000010	000000
107403:	110001	057340	100000	002004	000000	000000	000010	100000	107413:	000000	100401	000000	000000	000401	016233	000000	000000

\$\$\$\$\$\$ CST 301 CST BLOCK INDEX - 1 \$\$\$\$\$\$
 **** (107423 TO 111422 NOT PRINTED) ****

\$\$\$\$\$\$ DST 21 (DISK FREE SPACE) \$\$\$\$\$\$																	
111423:	001331	000100	000000	000136	000007	024677	000000	000000	111433:	000000	000230	000000	000001	000000	000302	000000	000001
111443:	000000	000335	000000	000001	000000	000653	000000	000002	111453:	000000	000762	000000	000001	000000	000774	000000	000002
111463:	000000	001016	000000	000001	000000	001161	000000	000001	111473:	000000	001242	000000	000001	000000	001464	000000	000001
111503:	000000	001553	000000	000001	000000	001643	000000	000002	111513:	000000	002660	000000	000001	000000	003314	000000	000002
111523:	000000	003761	000000	000001	000000	010470	000000	000002	111533:	000000	010606	000000	000001	000000	010617	000000	000002
111543:	000000	010623	000000	000001	000000	010650	000000	000002	111553:	000000	010775	000000	000001	000000	011157	000000	000002
111563:	000000	011176	000000	000001	000000	012615	000000	000001	111573:	000000	012620	000000	000001	000000	016141	000000	000001
111603:	000000	016327	000000	000001	000000	016371	000000	000001	111613:	000000	016460	000000	000001	000000	016576	000000	000002
111623:	000000	016603	000000	000001	000000	016716	000000	000001	111633:	000000	017132	000000	000001	000000	017571	000000	000001
111643:	000000	020067	000000	000001	000000	020161	000000	000001	111653:	000000	020355	000000	000001	000000	020420	000000	000001
111663:	000000	021240	000000	000001	000000	023455	000000	000001	111673:	000000	023471	000000	000002	000000	023501	000000	000001
111703:	000000	023504	000000	000001	000000	023606	000000	000001	111713:	000000	023671	000000	000001	000000	024230	000000	000001
111723:	000000	026356	000000	000001	000000	026432	000000	000002	111733:	000000	026452	000000	000001	000000	026566	000000	000002

8

***** DUMP INDEX *****		
NAME	PAGE # FORMATTED	PAGE # OCTAL DUMP
CODE SEGMENT TABLE	2	268
DATA SEGMENT TABLE	8	263
PROCESS CONTROL BLOCK	11	274
CST EXTENSION	5	269
SYSTEM GLOBAL AREA		246
FIXED LOW CORE		245
INTERRUPT CONTROL STACK		277
SYSTEM BUFFERS	232	302
UCOP REQUEST QUEUE		315
PROCESS-PROCESS COMMUNICATION TABLE		435
I/O QUEUE	230	277
TERMINAL BUFFERS	233	247
DEVICE INFORMATION TABLE (DIT)	221	259
LOGICAL-PHYSICAL DEVICE TABLE	218	312
LOGICAL DEVICE AND CLASS TABLE		319
DRIVER LINKAGE TABLE		245
I/O RESOURCE TABLES		245
DISK FREE SPACE		485
LOADER SEGMENT TABLE		470
TIMER REQUEST LIST	243	312
DIRECTORY		321
DIRECTORY SPACE		
RIN TABLE		485
SWAP TABLE		304
JOB PROCESS COUNT		312
JOB MASTER TABLE		460
TAPE LABEL TABLE		473
LOG TABLE		503
REPLY INFORMATION TABLE		452
VOLUME TABLE		315
BREAKPOINT TABLE		
LOG BUFFER 1		484
LOG BUFFER 2		
LOG ID TABLE		
CST BLOCK		246
JOB CUTOFF TABLE		312
SYSTEM JIT		314
SPECIAL REQUEST TABLE		310
VIRTUAL DISK SPACE TABLE	30	311
ARSBM TABLE		246
ILT	33	280
SIX TABLE	21	312
FILE MULTI-ACCESS VECTOR		485
INPUT DEVICE DIRECTORY		471
OUTPUT DEVICE DIRECTORY		478
WELCOME MESSAGE #1		
WELCOME MESSAGE #2		472
CS SYSTEM SEGMENT		
JOB-PROCESS CROSS REFERENCE		502
SYSTEM JDT		314
COMMAND INTERPRETER LOG-ON DST		
MOUNTED VOLUME TABLE		

(8)

HP3000 III MEMORY DUMPC.00.01 OF SYS VER C UPDATE 00 FIX 00 DUMP TIME 7/20/81, 8:21PM
(C) HEWLETT-PACKARD CO. 1980

PAGE 505

PRI. VOL. USER TABLE		472
AVAILABLE REGION LIST	23	311
DISC REQUEST TABLE	228	278
MSG HBR TABLE		311
PRIMARY MSG TABLE		311
MEASUREMENT INFO TABLE		311
SECONDARY MSG TABLE		311
CURRENT PROCESS STACK		

8

PROGRAM FILE P07P002C.HP32002.SUPPORT

FILESYS	0	STT	CODE	ENTRY	SEG
NAME					
FILEIO		1	0	247	
TERMINATE'		2			?
SEGMENT LENGTH			254		
FILESYS2	1	STT	CODE	ENTRY	SEG
NAME					
FRELATE		1	0	50	
LOC'ACB		17			3
UNLOC'ACB		20			3
ERRORON		21			?
SETCRITICAL		22			?
HELP		23			?
EXCHANGEDB		24			?
RESETCRITICAL		25			?
ERRorexIT		26			?
FSETMODE		2	207	207	
FTROUBLE		27			?
KSETMODE		30			?
FDEVICECONTROL		3	422	422	
FBNDVIOL		31			3
FCHECK		32			2
IOMOVE		33			3
FCONTROL		4	746	1115	
FLABIO		34			?
FLABIOERR		35			?
RELSIR		36			?
UNLOCK'CB		37			3
ATTACHIO		40			?
IOSTAT		41			?
FBNDCHK		42			2
DEVICESTATUS		43			?
FQUIESCE'IO		44			3
WRITETLAB1		45			?
WRITETLAB2		46			?
CHECKUL		47			?
CHECKI		50			?
GETSIR		51			?
LOCK'CB		52			3
WHO		53			?
ABORTIOX		54			?
KCONTROL		55			?
FCWRITEOF		56			?
FCABORTREQUESTS		57			?
FCCONTROL		60			?
FPOINT		5	3475	3475	
DISCSIZE		61			?
GETFCB'INFO		62			3
KPOINT		63			?
FSPACE		6	4044	4172	
REELSWITCH		64			?
KSPACE		65			?
FREADSEEK		7	4763	4763	
IOWAIT		10	5258	5573	
FCPORTENABLE		66			?
SETWAKE		67			?
FCPORTDISABLE		70			?

5

CLEARWAKE	71			?
WAIT	72			?
WAITFORIOX	73			?
CLEARWS	74			?
FCREAD	75			?
FCWRITE	76			?
AWAKE	77			?
MIODONTWAIT	11	5258	5813	
IODONTWAIT	12	5258	5605	
MIOWAIT	13	5258	5600	
FUPDATE	14	6485	6485	
FKSAMBNDVIOL	100			2
KUPDATE	101			?
FINDWAITINGIO	15	7117	7155	
GET 'CS' IOQINDIC	16	7561	7561	
SEGMENT LENGTH		7724		
FILESYS3	2			
NAME	STT	CODE	ENTRY	SEG
FALTSEC	1	0	35	
FLABIO	20			?
FLABIOERR	21			?
ERRORON	22			?
SETCRITICAL	23			?
LOC 'ACB	24			3
HELP	25			?
GETSIR	26			?
GETFCB 'INFO	27			3
CALENDAR	30			?
RELSIR	31			?
UNLOC 'ACB	32			3
EXCHANGEDB	33			?
RESETCRITICAL	34			?
ERROREXIT	35			?
FUNLOCK	2	524	524	
FQUIESCE 'IO	36			3
RUNLOCK	37			?
F TROUBLE	40			?
MRCAPOK	41			?
KUNLOCK	42			?
FLOCK	3	765	771	
RLOCK	43			?
KLOCK	44			?
KSLOCK	4	765	777	
FREADLABEL	5	1267	1308	
ATTACHIO	45			?
LOCK 'CB	46			3
UNLOCK 'CB	47			3
CHECKUL	50			?
DOULABEL	51			?
WRITETLAB1	52			?
WRITETLAB2	53			?
FBNDVIOL	54			3
KREADLABEL	55			?
KWRITELABEL	56			?
FWRITELABEL	6	1267	1314	
FFILEINFO	7	2277	2577	
LDEVTOTYPE	57			?
LDEVTOSUBTYPE	60			?
REQSTATUS	61			?
XDDSPPOOLINFO	62			?

FGETPVINFO	10	5112	5112	
FGETINFO	11	5202	5357	
LDEVTODRT	83			?
KGETINFO	84			?
FCRETURNINFO	85			?
DISCSIZE	86			?
FCHECK	12	7104	7104	
KCHECK	87			?
FDELETE	13	7522	7522	
IOMOVE	70			3
FKSAMBNDVIOL	14	7754	7754	
FACCESS	15	10003	10003	
FGETDISKADR	16	10080	10080	
FCONV'BLK	71			3
F8NDCHK	17	10131	10131	
SEGMENT LENGTH		10274		
FILESYSJA	3			
NAME	STT	CODE	ENTRY	SEG
FREADDIR	1	0	8	
ERRORON	24			?
SETCRITICAL	25			?
FTROUBLE	26			?
HELP	27			?
FKSAMBNDVIOL	30			2
KREADDIR	31			?
EXCHANGEDB	32			?
RESETCRITICAL	33			?
ERROREXIT	34			?
FWRITEDIR	2	0	14	
FWRITE	3	605	712	
CHECKUL	35			?
WRITETLAB1	36			?
WRITETLAB2	37			?
ATTACHIO	40			?
IOSTAT	41			?
REELSWITCH	42			?
KWRITE	43			?
FCWRITE	44			?
AWAKE	45			?
FREAD	4	1567	1630	
KREAD	46			?
FCREAD	47			?
FREADBACKWARD	5	1567	1636	
FREADX	6	1567	1646	
FRESETEOF	7	2462	2462	
FUNBREAK	10	2520	2520	
FBREAK	11	2605	2605	
FQUIESCE'IO	12	2643	2643	
WAITFORIO	50			?
IOMOVE	13	3207	4502	
DISCSIZE	51			?
FCHECKFILEND	52			?
FCHECKMSGBLOCK	53			?
FCUPDATEWRITE	54			?
FCLEAR	55			?
XDDSPoolINFO	58			?
FADJUSTCIRFILE	14	11610	11610	
FCONV'BLK	15	11721	12062	
FLABIO	57			?
FLABIOERR	60			?

RELSIR	61		?
DISKALLOC	62		?
DIRECADJUST	63		?
GETSIR	64		?
LDEVTOTAB	65		?
DISKDEALLOC	66		?
GETFCB INFO	16	13351	13351
FBNDVIOL	17	13402	13402
UNLOC ACB	20	13444	13444
LOC ACB	21	13517	13517
UNLOCK CB	22	14033	14033
QUEUEONSEGMENT	67		?
UNIMPEDE	70		?
LOCK CB	23	14313	14313
IMPEDE	71		?
SEGMENT LENGTH		14724	

PRIMARY DB	0	INITIAL STACK
SECONDARY DB	0	INITIAL DL
TOTAL DB	0	MAXIMUM DATA
ELAPSED TIME	00:00:13.945	

2280	CAPABILITY	700
0	TOTAL CODE	35420
?	TOTAL RECORDS	177
	PROCESSOR TIME	00:03.985

8

```

03610000 00000 1 $CONTROL SEGMENT = FILESYSIA << LOCK'CB, UNLOCK'CB >>
03612000 00000 1 PROCEDURE
03614000 00000 1   LOCK'CB(FLAGS,STACKDST,STK'TARGET,CBDST,CBOFST);
03616000 00000 1   VALUE  FLAGS,STACKDST,STK'TARGET,CBDST,CBOFST;
03618000 00000 1   INTEGER FLAGS,STACKDST,STK'TARGET,CBDST,CBOFST;
03620000 00000 1   OPTION PRIVILEGED,UNCALLABLE;
03622000 00000 1
03624000 00000 1 COMMENT This procedure locks a control block using MDS instructions.
03626000 00000 1 It returns four words (via partial cutback of the stack) suitable
03628000 00000 1 for a MDS to copy the CB into a buffer of the calling procedure. The
03630000 00000 1 top two words will be CBDST and CBOFST (address of start of control
03632000 00000 1 block data area) so TOS upon return must be incremented in order to
03634000 00000 1 start copying from the middle of the control block. A word count needs
03636000 00000 1 to be pushed upon return and a MDS executed to read the control block.
03638000 00000 1
03640000 00000 1 A special feature is the treatment used if FLAGS = 8. This is a request
03642000 00000 1 for a "quick mode" lock, which, if granted, will cause the procedure
03644000 00000 1 to return with the system P disabled. This will allow the calling
03646000 00000 1 procedure to copy in data without actually setting the locked state
03648000 00000 1 in the CB lock area. This saves both a MDS back of the 3 lock words
03650000 00000 1 as well as a call to UNLOCK'CB. This strategy is suitable if the
03652000 00000 1 control block needs to be locked for only a millisecond or so and there
03654000 00000 1 can be no absence traps (either code or data). In practice, this
03656000 00000 1 requires that this option (FLAG = 8) only be called from a procedure
03658000 00000 1 in the same segment as LOCK'CB. An example is updating EOF in the
03660000 00000 1 FCB. It is possible that such a request for quick mode cannot be
03662000 00000 1 satisfied (because the CB is locked and an IMPEDE was required).
03664000 00000 1 Therefore the value of the FLAG parameter upon return is used to
03666000 00000 1 inform the caller whether an UNLOCK'CB needs to be done ( FLAG-TRUE
03668000 00000 1 means need UNLOCK'CB ). The lowest parameter is used to pass back
03670000 00000 1 this information rather than the condition code since often
03672000 00000 1 several instructions need to be executed before testing whether
03674000 00000 1 to call UNLOCK'CB.
03676000 00000 1
03678000 00000 1 RESTRICTION: Control block must be in an extra data segment
03680000 00000 1 or in the caller's stack: routine fails if CB is in another
03682000 00000 1 process's stack. Thus, potentially sharable FCB's must be in
03684000 00000 1 an extra data segment, such as a system Shared FCB CBT.
03686000 00000 1
03688000 00000 1   Input variables, and output values:
03690000 00000 1
03692000 00000 1   FLAGS           = bit 14 -- create break mode [FBREAK]
03694000 00000 1                   bit 12 -- request for "quick mode"
03696000 00000 1   Returned TRUE if UNLOCK'CB is needed.
03698000 00000 1   STACKDST       = Ignored - DST of the stack returned.
03700000 00000 1   STK'TARGET     = Caller's Q-relative CB buffer address.
03702000 00000 1   Returned as stack-DST-relative address, for MDS.
03704000 00000 1   CBDST         = DST of control block. Returned as supplied.
03706000 00000 1   CBOFST        = CB-table-relative offset of lock words, i.e. VT addr.
03708000 00000 1   This does not include the PX'CBTAB adjustment needed
03710000 00000 1   if the CBT is in the stack.
03712000 00000 1   Returned: the DST-relative address of the control block, with
03714000 00000 1   the PX'CBTAB adjustment included if needed.
03716000 00000 1
03718000 00000 1

```

```

03722000 00000 1 BEGIN
03724000 00000 2 INTEGER VT'ADDR;    << These four words get the VT entry. >>
03726000 00000 2 LOGICAL CBL';
03728000 00000 2 DOUBLES EASY'CASE = CBL';
03730000 00000 2 INTEGER CBL'01;
03732000 00000 2 INTEGER CBL'QUEUE = CBL'01;
03734000 00000 2 INTEGER CBL'02;
03736000 00000 2 INTEGER CBL'SAVEDQUEUE = CBL'02;
03738000 00000 2 LOGICAL PIN;
03740000 00000 2 INTEGER PX'CBTAB;  << Stack-DST-relative addr of PXFILE CBTAB >>
03742000 00000 2 INTEGER Q'0'A;    << Stack-DST-rel. addr of Q+0 for this proc.>>
03744000 00000 2
03746000 00000 2 DEFINE CBL'BREAK = CBL'..{1:1}#;
03748000 00000 2 DEFINE CBL'COUNT = CBL'..{2:8}#;
03750000 00000 2 DEFINE CBL'PIN = CBL'..{8:8}#;
03752000 00000 2
03754000 00000 2
03756000 00000 2 << Make D. S. present, and copies the four word vector table
03758000 00000 2 entry into a local Q-rel buffer. >>
03760000 00000 2
03762000 00000 2 PIN := GETPROCNUM;
03764000 00010 2 TOS := STACKDST := PCB'STK;
03766000 00020 2 PUSH(DL,Q);
03768000 00021 2 ASMB(XCH,SUB);    << get DL-Q >>
03770000 00022 2 X := TOS;
03772000 00023 2 Q'0'A := AQM1(X)-X;    << (DL-a)-(DL-Q) >>
03774000 00026 2 << Uses pointers at DL-1 and DL-3 >>
03776000 00026 2 PX'CBTAB := AQM1(X)-AQM3(X)+PXFOVERHEAD;
03778000 00032 2 TOS := Q'0'A+1;    << @VT'ADDR >>
03780000 00034 2 TOS := CBDST;
03782000 00035 2 X := SO&LSL(2);    << DST# * 4 for DST table >>
03784000 00040 2 TOS := CBOFST;
03786000 00041 2 IF CBDST = STACKDST THEN
03788000 00044 2 TOS := TOS+PX'CBTAB;    << CBOFST is CBTAB-relative >>
03790000 00045 2 TOS := 4;    << word count for MDS >>
03792000 00046 2
03794000 00046 2 << Make sure the needed data segment is here before P-disable >>
03796000 00046 2
03798000 00046 2 AGAIN:
03800000 00046 2 DISABLE;
03802000 00047 2 TOS := DST'(X);
03804000 00050 2 IF TOS < 0 THEN
03806000 00052 2 BEGIN    << Not present. >>
03808000 00052 2 ENABLE;
03810000 00053 2 QUEUEONSEGMENT(CBDST);    <<01701>>
03812000 00055 2 GOTO AGAIN;    << Hope the damned thing stays put. >>
03814000 00056 2 END;
03816000 00056 2
03818000 00056 2 PSEUDODISABLE;    << Aha! Gotcha. >>
03820000 00057 2 ENABLE;
03822000 00060 2 MOVE'D$'1;    << get 4 control words to VTADDR-CBL02 >>
03824000 00061 2 TOS := TOS-3;    << fix CBOFST >>
03826000 00062 2 ASMB(DXCH);
03828000 00063 2 TOS := TOS-3;    << fix stack offset >>
03830000 00064 2 TOS := 3;    << new word count >>
03832000 00065 2 << Now TOS has the proper values for a MDS instruction
03834000 00065 2 to write back the three lock words. >>

```

8

```

03838000 00065 2
03838000 00065 2
03840000 00065 2
03842000 00073 2
03844000 00074 2
03846000 00075 2
03848000 00076 2
03850000 00076 3
03852000 00101 3
03854000 00101 4
03856000 00102 4
03858000 00102 3
03860000 00104 3
03862000 00104 4
03864000 00107 4
03866000 00110 4
03868000 00112 4
03870000 00113 4
03872000 00115 4
03874000 00115 3
03876000 00115 2
03878000 00116 2
03880000 00116 3
03882000 00117 3
03884000 00120 3
03886000 00124 3
03888000 00124 4
03890000 00133 4
03892000 00141 4
03894000 00144 4
03896000 00144 3
03898000 00145 3
03900000 00145 4
03902000 00150 4
03904000 00150 5
03906000 00153 5
03908000 00154 5
03910000 00154 6
03912000 00156 6
03914000 00156 6
03916000 00160 5
03918000 00160 4
03920000 00173 4
03922000 00173 4
03924000 00175 4
03926000 00176 4
03928000 00176 4
03930000 00177 4
03932000 00177 4
03934000 00202 4
03936000 00214 4
03938000 00214 4
03940000 00216 4
03942000 00216 4
03944000 00231 4
03946000 00231 4
03948000 00234 4

IF NOT (9 <= VT'ADDR <= FSEGMAX) THEN FTROUBLE(59);
TOS := EASY'CASE;      << test CBLCONTROL and CBLQUEUE >>
DDEL;
IF = THEN
  BEGIN                << CB wasn't locked - easy case >>
  IF FLAGS = 8 THEN
    BEGIN              << Short request. >>
    TOS := FALSE;      << Exit P-disabled; unlock not needed. >>
    END
  ELSE
    BEGIN
    IF FLAGS = 2 THEN
      TOS := X140400    << Lock, break, count=1 >>
    ELSE
      TOS := X100400;   << Lock; count=1 >>
    GO LW;
    END
  END                  << end of easy case >>
ELSE
  BEGIN                << Hard case >>
  TOS := CBL';         << control word >>
  IF < THEN            << already locked by someone. >>
    IF TOS.(8:8) = PIN THEN
      BEGIN            << Already locked by our process. >>
      CBL'COUNT := CBL'COUNT+1; << bump lock count >>
      IF CBL'COUNT=0 THEN FTROUBLE(457); << overflow >>
      GO LX;
      END
    ELSE
      BEGIN            << Locked by different process. >>
      IF FLAGS = 2 THEN
        BEGIN          << Create break queue >>
        CBL'BREAK := 1; << set Break mode bit >>
        IF = THEN
          BEGIN        << Was not in break mode. >>
          CBL'SAVEDQUEUE := CBL'QUEUE; << save impeded >>
          CBL'QUEUE := 0 << set impeded queue empty >>
          END;
        IF CBL'BREAK AND PCB'PTYPE = 0 THEN
          TOS := CBL'SAVEDQUEUE << low priority >>
        ELSE
          TOS := CBL'QUEUE; << high or regular priority >>
        IF = THEN
          TOS := TOS+PIN << Was empty. We're at head of queue >>
        ELSE
          PCB(SO.(0:8)*PCBSIZE+8).(8:8) := PIN;
          TOS.(0:8) := PIN; << Tail PIN >>
        IF CBL'BREAK AND PCB'PTYPE = 0 THEN
          CBL'SAVEDQUEUE := TOS << low pri >>
        ELSE CBL'QUEUE := TOS; << high/reg priority >>
      END;
  END;
  LI:

```

General Control Block Locking

(8)

```

03950000 00234 4      PCB'IOPTR := 0;          << my link >>
03952000 00245 4      MOVE'DS'5;          << post updated lock words >>
03954000 00246 4      IMPEDE(0);          << will return P-enabled >>
03956000 00250 4
03958000 00250 4      << Sleep, until our turn comes up. >>
03960000 00250 4      TOS := TRUE;          << really locked >>
03962000 00250 4      GO LZ;
03964000 00251 4      END          << different process >>
03966000 00252 4
03968000 00252 3      ELSE
03970000 00253 3          BEGIN          << Not locked >>
03972000 00253 4          IF LOGICAL(TOS.(1:1)) THEN
03974000 00255 4              BEGIN          << In Break mode >>
03976000 00255 5              IF PCB'PTYPE = 0 THEN GO LI;          << low pri >>
03978000 00265 5              TOS := X140400;          << Locked; count=1, break >>
03980000 00266 5              END
03982000 00266 4          ELSE
03984000 00270 4              TOS := X100400;          << Locked; count=1 >>
03986000 00271 4          LW: CBL' := TOS+PIN;          << update control word >>
03988000 00274 4          END;          << not locked >>
03990000 00274 3      LX:
03992000 00274 3          MOVE'DS'5;          << write back 3 lock words >>
03994000 00275 3          PSEUDOENABLE;
03996000 00276 3          TOS := TRUE;          << really locked >>
03998000 00277 3          END;          << end of hard case >>
04000000 00277 2      LZ:
04002000 00277 2          FLAGS := TOS;
04004000 00300 2          TOS := VT'ADDR;
04006000 00301 2          IF STACKDST = CBDST THEN
04008000 00304 2              TOS := TOS + PX'CBTAB;
04010000 00305 2          CBOFST := TOS;          << DST-rel CB address >>
04012000 00306 2          STK'TARGET := STK'TARGET+Q'0'A-DELTAQ; << make stk-DST rel.>>
04014000 00312 2          RETURN 0;          << pop marker only >>
04016000 00313 2
04018000 00313 2      END;          << procedure LOCK'CB >>

```

IDENTIFIER	CLASS	TYPE	ADDRESS
AGAIN	LABEL		PB+046
CBDST	SIMP. VAR.	INTEGER	Q -005
CBL'	SIMP. VAR.	LOGICAL	Q +002
CBL'01	SIMP. VAR.	INTEGER	Q +003
CBL'02	SIMP. VAR.	INTEGER	Q +004
CBL'BREAK	DEFINE		CBL'.(1:1)
CBL'COUNT	DEFINE		CBL'.(2:6)
CBL'PIN	DEFINE		CBL'.(8:8)
CBL'QUEUE	SIMP. VAR.	INTEGER	Q +003
CBL'SAVEDQUEUE	SIMP. VAR.	INTEGER	Q +004
CBOFST	SIMP. VAR.	INTEGER	Q -004
EASY'CASE	SIMP. VAR.	DOUBLE	Q +002
FLAGS	SIMP. VAR.	INTEGER	Q -010
LI	LABEL		PB+173
LW	LABEL		PB+271
LX	LABEL		PB+274
LZ	LABEL		PB+277
PIN	SIMP. VAR.	LOGICAL	Q +005

(f)

PX'CBTAB	SIMP. VAR.	INTEGER	Q +008
Q'O'A	SIMP. VAR.	INTEGER	Q +007
STACKDST	SIMP. VAR.	INTEGER	Q -007
STK'TARGET	SIMP. VAR.	INTEGER	Q -008
VT'ADDR	SIMP. VAR.	INTEGER	Q +001

00000	035007	021404	020320	021403	020320	002100	010304	051405	00010	021404	020320	022403	004300	020320	026432	004500	051607
00020	024442	003221	004300	045601	004421	051407	045601	105603	00030	022420	051408	041407	003300	041805	004500	010202	004300
00040	041604	041605	061607	141502	071406	021004	030040	030002	00050	022000	141605	030041	041605	000000	140407	030061	030041
00060	020151	023003	001600	023003	021003	021011	040015	131401	00070	012603	021073	000000	151402	000200	141521	041610	022010
00100	141504	000600	140013	012000	041610	022002	141504	040002	00110	140003	140400	040002	140156	100400	140162	041402	145623
00120	037777	041405	005700	141522	041402	041402	026446	021001	00130	008000	027046	051402	041402	026446	000657	141503	040004
00140	000046	140133	000111	000711	140106	041610	022002	141511	00150	041402	013401	051402	141505	041403	051404	000600	051403
00160	041402	026421	013713	021404	020320	022411	004300	020320	00170	026542	022000	141503	041404	140002	041403	141504	041405
00200	006000	140013	004500	026410	023420	022410	004543	030003	00210	041405	027210	003243	030323	041405	027010	041402	026421
00220	013713	021404	020320	022411	004300	020320	026542	022000	00230	141503	051404	140002	051403	021404	020320	022410	004543
00240	020320	000600	027210	003243	020321	020155	000600	000000	00250	025001	140026	140022	026421	013714	021404	020320	022411
00260	004300	020320	026542	022000	145203	040554	140003	177704	00270	040554	041405	008000	051402	020155	030063	025001	051610
00300	041401	041607	061605	141502	071408	051604	041606	071407	00310	101600	051608	031400	031405				

```

04020000 00000 1
04022000 00000 1
04024000 00000 1
04026000 00000 1
04028000 00000 1
04030000 00000 1
04032000 00000 1
04034000 00000 1
04036000 00000 1
04038000 00000 1
04040000 00000 1
04042000 00000 1
04044000 00000 1
04046000 00000 1
04048000 00000 1
04050000 00000 1
04052000 00000 1
04054000 00000 1
04056000 00000 1
04058000 00000 1
04060000 00000 2
04062000 00000 2
04064000 00000 2
04066000 00000 2
04068000 00000 2
04070000 00000 2
04072000 00000 2
04074000 00000 2
04076000 00000 2
04078000 00000 2
04080000 00000 2
04082000 00000 2
04084000 00000 2
04086000 00000 2
04088000 00000 2

```

```

PROCEDURE UNLOCK'CB(FLAGS,CBDST,CBOFST);
VALUE FLAGS,CBDST,CBOFST;
INTEGER FLAGS,CBDST,CBOFST;
OPTION PRIVILEGED,UNCALLABLE;

<< Unlocks the specified control block. If no one is queued
up waiting for it and we don't have to fiddle with break
queues, we can just clear the lockword and leave.

Input variables:
FLAGS = flag word
{13:1} = destroy Break queue [FUNBREAK]
{14:1} = create Break queue [OMOVE (terminal, NOBUF)]
CBDST = DST of control block.
CBOFST = CB-table-relative offset of lock words, i.e. VT addr.
>>

BEGIN
INTEGER VT'ADDR; << These four words get the VT entry. >>
LOGICAL CBL;
DOUBLE EASY'CASE = CBL';
INTEGER CBL'01;
INTEGER CBL'QUEUE = CBL'01;
INTEGER CBL'02;
INTEGER CBL'SAVEDQUEUE = CBL'02;
LOGICAL PIN;
INTEGER PX'CBTAB; << Stack-DST-relative addr of PXFILE CBTAB >>
INTEGER STACKDST;
INTEGER Q'O'A; << Stack-DST-rel. addr of Q+0 for this proc.>>

DEFINE CBL'BREAK = CBL'.(1:1)0;
DEFINE CBL'COUNT = CBL'.(2:6)0;
DEFINE CBL'PIN = CBL'.(8:8)0;

```

PROGRAM FILE P73P002C.HF32002.SUPPORT

8

MAIN		0	CODE	ENTRY	SEG
NAME	STT				
CR*	1	0	247		
TERMINATE*	2				?
SEGMENT LENGTH		254			
RINS		1	CODE	ENTRY	SEG
NAME	STT				
LOCR IN OWNER	1	0	21		
ERRORCN	20				?
CHEK	21				?
GETS IR	22				?
FATHER	23				?
RELSIR	24				?
EXCHANGEDB	25				?
ERROREXIT	26				?
UNLCKLOCR IN	2	154	154		
LOCKL ⁰ CRIN	3	206	206		
LOCKUNLOCKLOCRI	4	265	265		
GETLOCR IN	5	427	427		
SUDDENDEATH	27				?
FREELOCR IN	6	755	755		
UNLCKGLCRIN	7	1135	1135		
LOCKGLORIN	10	1204	1204		
DEALLORIN	11	1605	1605		
ALLORIN	12	2162	2162		
RUNLCK	13	2531	2542		
AWAKE	30				?
LRUNLCK	14	2531	2556		
GRUALCK	15	2531	2550		
RLOCK	16	3045	3045		
WAIT	31				?
MRCAPCK	17	3371	3371		
HELP	32				?
SEGMENT LENGTH		3570			

PRIMARY DB	C	INITIAL STACK
SECONDARY DB	0	INITIAL DL
TOTAL DB	C	MAXIMUM DATA
ELAPSED TIME	00:00:02.917	

2263	CAPABILITY	700
0	TOTAL CODE	4044
?	TOTAL RECORDS	24
	PROCESSOR TIME	00:00.624

```

00914000 00000 1  PROCEDURE BLOCK(RIN,UNCOND);
00916000 00000 1  VALUE RINX,UNCOND;
00914000 00000 1  INTEGER RINX;
00920000 00000 1  LOGICAL UNCOND;
00922000 00000 1  OPTION UNCALLABLE,PRIVILEGED;
00924000 00000 1
00926000 00000 1
00928000 00000 1  COMMENT: LOCKS THE SPECIFIED RIN.
00930000 00000 1  IF UNCOND=TRUE THEN UNCONDITIONALLY

```

<<01603>>
<<01603>>
<<01603>>



PAGE 0011 HEWLETT-PACKARD

```

00932000 00000 1  IF UNCOND=FALSE THEN ONLY IF NOT LOCKED
00934000 00000 1
00936000 00000 1  RETURNS
00938000 00000 1  CCE GRANTED
00940000 00000 1  CCG GRANTED BUT THE PROCESS ALREADY HAD IT
00942000 00000 1  CCL (ONLY IF UNCOND=FALSE) NOT GRANTED BECAUSE LOCKED
00944000 00000 1  CCX NOT ALLOCATED
00946000 00000 1
00948000 00000 1  IF BIT 0 OF "RINX" IS 1 THEN DB IS AREACY POINTING TO RIN TABLE
00950000 00000 1
00952000 00000 1
00954000 00000 1
00956000 00000 1
00958000 00000 1  BEGIN
00960000 00000 2  EQUATE CCG=0,CCL=1,CCE=2,CCX=3;
00962000 00000 2  EQUATE RINDST=22,RINSIR=30;
00964000 00000 2  EQUATE CPCB=4,PCB=3,PCBSIZE=16;
00966000 00000 2  INTEGER POINTER PCB = 3;
00968000 00000 2
00970000 00000 2  ARRAY RINSEG(*)=DB+0;
00972000 00000 2  INTEGER X=X,PIN,DB,SIR,CC,PINX;
00974000 00000 2  LOGICAL DBF:=FALSE;
00976000 00000 2  INTEGER STATUS=0-1,WAITF;
00978000 00000 2  INTEGER RINPTR;
00980000 00000 2
00982000 00000 2
00984000 00000 2
00986000 00010 2  PIN:=(PINX := ABSOLUTE(CPCB)-ABSOLUTE(PCB))/PCBSIZE;
00988000 00013 2
00990000 00013 2  IF RINX<0 THEN RINX.(0:1) := 0 ELSE
00992000 00022 2  BEGIN
00994000 00022 3  DBF:=TRUE;
00996000 00024 3  DB:=EXCHANGE00(RINDST);
00998000 00030 3  END;
01000000 00030 2
01002000 00030 2  SIR:=GETSIR(RINSIR);
01004000 00034 2
01006000 00034 2
01008000 00037 2  RINPTR := RINX+RINLENGTH;
01010000 00046 2  IF RIN#E*TYPE = 0 THEN
01012000 00046 3  BEGIN
01014000 00051 3  RELSIR(RINSIR,SIR);
01016000 00057 3  IF DBF THEN EXCHANGE00(DB);
01018000 00063 3  STATUS.(6:2) := CCX;
01020000 00064 3  RETURN;
END;

```

<<01603>>

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```

01022000 00044 2      IF RIN%TYPE = 1 THEN WAITF := $1000          <<01603>>
01024000 00074 2      ELSE WAITF := $2000!                <<01603>>
01026000 00101 2      IF RIN%HOLDER = PIN THEN    <<01603>>
01028000 00107 2      BEGIN                          <<01603>>
01030000 00107 3      RELSR(RINSIR,SIRF);          <<01603>>
01032000 00112 3      IF DBF THEN EXCHANGEDB(DB);  <<01603>>
01034000 00120 3      STATUS.(6:2) := CCG;        <<01603>>
01036000 00124 3      RETURN;                      <<01603>>
01038000 00126 3      END;                          <<01603>>
01040000 00126 2      IF RIN%HOLDER = 0 THEN      <<01603>>
01042000 00134 2      BEGIN << RIN FREE >>         <<01603>>
01044000 00134 3      RIN%HOLDER := PIN;         <<01603>>

```



PAGE 0012 HEMLETT-PACKARD

```

01046000 00144 3      RELSR(RINSIR,SIRF); << UNBLOCK RIN >> <<01603>>
01048000 00147 3      IF DBF THEN EXCHANGEDB(DB);  <<01603>>
01050000 00155 3      STATUS.(6:2) := CCE;        <<01603>>
01052000 00161 3      RETURN;                      <<01603>>
01054000 00162 3      END;                          <<01603>>
01056000 00162 2      <<AT THIS POINT THE RIN IS LOCKED BY ANOTHER PROCESS>>
01058000 00162 2
01060000 00162 2
01062000 00162 2      IF NOT(UNCOND) THEN          <<THE RIN ASKED CONDITIONALLY>>
01064000 00164 2      BEGIN
01066000 00164 3      RELSR(RINSIR,SIRF);          <<01603>>
01068000 00167 3      IF DBF THEN EXCHANGEDB(DB);  <<01603>>
01070000 00175 3      STATUS.(6:2) := CCL;        <<01603>>
01072000 00201 3      RETURN;                      <<01603>>
01074000 00202 3      END;
01076000 00202 2
01078000 00202 2      PCB(PIN+0).(0:0) := 0;
01080000 00212 2      IF RIN%HEAD0 = 0 THEN << NO PROCESS WAITING >> <<01603>>
01082000 00220 2      RIN%HEAD0 := PIN;           <<01603>>
01084000 00224 2      ELSE << PUT AT END OF LIST >> <<01603>>
01086000 00231 2      BEGIN
01088000 00231 3      TOS := RIN%HEAD0;           <<01603>>
01090000 00235 3      WHILE PCB(TOS+PCBSIZE+0).(0:0) <> 0 DO
01092000 00244 3      TOS := PCB(X).(0:0);
01094000 00247 3      PCB(X).(0:0) := PIN;
01096000 00253 3      END;
01098000 00253 2
01100000 00253 2      <<PROCESS GOES TO WAIT>>
01102000 00253 2      ASSEMBLE(PSDB);
01104000 00254 2      RELSR(RINSIR,SIRF.(19:1)); <<RELEASE RIN SIR>>
01106000 00260 2      IF GCLASSENABLEDMSK.CLASS15 THEN <<01014>>
01108000 00265 2      BEGIN <<PRCESS LEVEL RIN WAIT>> <<01014>>
01110000 00265 3      TOS:=MEASPROCKDMSK; <<01014>>
01112000 00270 3      TOS:=MEASPROCKDMSK+LOGICAL(PIN)+CLASS15*SUBOSIZE+ <<01014>>
01114000 00277 3      CP*STPRIN; <<01014>>
01116000 00301 3      ASSEMBLE(ELSE;INCAISSEA;ODEL); <<01014>>
01118000 00308 3      END; <<01014>>
01120000 00305 2      WAIT(WAITF,0);
01122000 00310 2
01124000 00310 2
01126000 00310 2      IF DBF THEN EXCHANGEDB(DB);  <<01603>>
01128000 00316 2      STATUS.(6:2) := CCF; <<01603>>

```

01130000 00322 2
 01132000 00322 2 END: << R L O C K >>

8

IDENTIFIER	CLASS	TYPE	ADDRESS	
CC	SIMP. VAR.	INTEGER	0 +004	
CCE	EQUATE			VALUE = X2
CC6	EQUATE			VALUE = X0
CCL	EQUATE			VALUE = X1
CCR	EQUATE			VALUE = X3
CPCB	EQUATE			VALUE = X4
DB	SIMP. VAR.	INTEGER	0 +002	
DBF	SIMP. VAR.	LOGICAL	0 +006	
PCB	POINTER	INTEGER	ST+003	

PAGE 0013 HEWLETT-PACKARD

PCBB	EQUATE			VALUE = X3
PCBSIZE	EQUATE			VALUE = X20
PIN	SIMP. VAR.	INTEGER	0 +001	
PINX	SIMP. VAR.	INTEGER	0 +005	
RINDST	EQUATE			VALUE = X26
RINPTR	SIMP. VAR.	INTEGER	0 +010	
RINSEG	ARRAY	LOGICAL	DB+000	
RINSIR	EQUATE			VALUE = X46
RINX	SIMP. VAR.	INTEGER	0 -009	
SINF	SIMP. VAR.	INTEGER	0 +003	
STATUS	SIMP. VAR.	INTEGER	0 -001	
UNCOND	SIMP. VAR.	LOGICAL	0 -004	
WAITP	SIMP. VAR.	INTEGER	0 +007	
Z	SIMP. VAR.	INTEGER	XREG	

00000	039005	000600	035002	021404	020320	021403	020320	002145	00010	051405	024020	051401	041405	022000	141405	041405	013300
00020	051405	140007	025001	051406	000600	021026	000000	051402	00030	000600	021046	000000	051403	041405	023402	051410	041410
00040	022400	004300	045000	026402	022000	141517	021346	041403	00050	000000	041406	013705	000600	041402	000027	004000	041601
00060	021003	027142	051401	031402	041410	022400	004300	045000	00070	026402	022001	141505	040003	051407	140004	001000	040026
00100	051407	041410	003343	045000	037777	061401	141520	021046	00110	041403	000041	041406	013705	000600	041402	000041	004000
00120	041401	000600	027142	051401	031402	002900	041410	003343	00130	045000	037777	022000	141527	041410	003343	004300	045000
00140	041401	027210	003243	055000	021046	041403	000035	041406	00150	013705	000600	041402	000035	004000	041401	021002	027142
00160	051401	031402	041404	013617	021046	041403	000020	041406	00170	013705	000600	041402	000020	004000	041401	021001	027142
00200	051401	031402	041405	022410	004943	030003	000600	027210	00210	003243	030323	041410	003343	045000	026410	022000	141512
00220	041410	003343	004300	045000	041401	027010	003243	055000	00230	140023	041410	003343	045000	026410	023420	022410	004300
00240	030003	037777	022000	141204	030003	037777	140411	030003	00250	041401	027210	030323	030061	021046	041403	037401	000071
00260	040043	004300	020320	037401	013721	021421	021261	030000	00270	021422	021261	030000	041401	021064	006201	006000	021031
00300	006000	020340	003300	020341	000200	041407	000600	000000	00310	041406	013705	000600	041402	000121	004000	041401	021002
00320	027142	051401	031402	001262													

01134000 00000 1
 01136000 00000 1
 01138000 00000 1
 01140000 00000 1
 01142000 00000 1
 01144000 00000 1
 01146000 00000 1

<<----->>

PMAP for PSOP002C

PROGRAM FILE INFLPASS.HPT002-SUPPORT

FILEACCESS		0			
NAME	STT	C-DF	ENTRY	STP	
FILEACCESS	1	0	247		
TERMINATE*	2				?
SEGMENT LENGTH			254		
FILESYSAA		1			
NAME	STT	C-DF	ENTRY	STP	
FOPEN	1	0	2153		
FFILEINFC	10				?
ASCII	11				?
LDEVTOTYPE	12				?
RENSTATUS	13				?
GETBLKSIZE	14				?
FLABID	15			6	
FLABIDERR	16			6	
LOCACB	17			4	
GETREC	20			4	
GET*DEV*PARM	21			2	
FREADLABEL	22			?	
FWRITELABEL	23			?	
EXCHANGEDB	24			?	
UNLOCACB	25			4	
PLOADENV	26			?	
ALLOCATE	27			?	
ERRORON	30			?	
SFTCRITICAL	31			?	
FINDANYAFTENT	32			5	
PARSE*DEV*PARMS	33			2	
FMLNAME	34			5	
FNFORMAT	35			5	
FILECONVALS	36			?	
PCHECKENV	37			?	
GETDEVINF*	40			?	
DIRECT*INC	41			?	
WHO	42			?	
MOUNT	43			?	
GETSIX	44			?	
RETJ*ENTRY	45			?	
DIRECT*INC*FILE	46			?	
F*TROUBLE	47			6	
LUN	50			6	
SCANF*AVT	51			5	
FGETC*	52			4	
FLOCKWORD	53			0	
ACCHECK	54			?	
FOPENA	55			2	
ATTACHID	56			?	
DEALLOCATE	57			?	
FCREATE	60			2	
V*TABINX	61			6	
CREATE*TLTENT	62			?	
S*DDEN*DEATH	63			?	
CLEAN*TLT	64			?	
CLEAN*DEV	65			?	
POSITION	66			?	
CHECK1	67			?	
CHECK2	70			?	

(8)

(8)

SETACH	71			5
PRIMEDEVIC	72			?
FCREATECB	73			5
FRELCB	74			4
LDEVTDVTA	75			6
CALENDAR	76			?
CLOCK	77			?
XDDSPDLINEF	100			?
IDSTAT	101			6
HELP	102			?
DELACH	103			3
FDELETECB	104			5
DISKDEALLOC	105			?
DISMOUNT	106			?
RELSIR	107			?
FGETINFO	110			?
KFCLOSE	111			3
KOPEN	112			?
RESETCRITICAL	113			?
ERROREXIT	114			?
MUSTOPEN	2	0	2235	
PVOPEN	3	0	2220	
KSOPEN	4	0	2205	
FJOPEN	5	?	2172	
FSOPEN	6	0	2113	
DFOPEN	7	0	2254	

SEGMENT LENGTH 12110

FILESYS6

NAME	SIT	CODE	ENTRY	SEG
FOPENDA	1	0	255	
FLABIO	10			6
FLABIDERR	11			?
HELP	12			?
SETCRITICAL	13			?
XDDSPDLINEF	14			?
FINDANYAFTENT	15			5
GETSIR	16			?
SCANFMAVT	17			5
GETDEVINFO	20			?
FGETCB	21			4
EXCHANGED3	22			?
VTABTULDEV	23			6
DISKALLOC	24			?
FTRouble	25			6
SETACH	26			5
FCREATECB	27			5
ALLORTN	30			?
UNLOCACB	31			4
CALENDAR	32			?
FRELCB	33			4
RELSIR	34			?
DELACH	35			3
FDELETECB	35			5
DISKDEALLOC	37			?
RESETCRITICAL	41			?
FILECMVALS	2	2762	2762	
XRETJENTRY	41			?
GETDEV*PARM	3	3517	3517	
PARSE*DEV*PARMS	4	3557	3677	
MYCOMMAND	42			?

SEARCH	43			?
GETBLKFACTOR	5	4243	4243	
GETBLKSIZE	6	4320	4320	
FCREATL	7	4377	4377	
SEGMENT LENGTH		5074		

(8)

FILESYS7				
NAME	STT	CODE	ENTRY	SEG
FERRMSG	1	0	?	?
ERRORON	15			?
FBNOCHK	16			?
FORMSG	17			?
ERROREXIT	20			?
FCLOSE	?	136	433	
FLABIO	21			6
FLABIJERR	22			6
DISKDEALLOC	23			?
FTROUBLE	24			6
FGETCB	25			4
EXCHANGEDB	26			?
DISMOUNT	27			?
SETCRITICAL	30			?
HELP	31			?
LOCACB	32			4
ABORTIOX	33			?
RELSIR	34			?
GETREC	35			4
FQUIFSCEID	36			5
GETSIR	37			?
XDDSPoolINFO	40			?
RENJENTRY	41			?
LDEVTOVTAR	42			6
DISKSPACE	43			?
DIRECADJUST	44			?
LUN	45			6
RUNLCK	46			?
MRCAPOK	47			?
DIRECINSERTFILE	50			?
DIPECFINCFILE	51			?
ADJENTRY	52			?
DIRECPURGEFILE	53			?
FCCLOSE	54			?
CALENDAR	55			?
WRITETLAE1	56			?
WRITETLAE2	57			?
CHECKUL	60			?
CLEANTLTF	61			?
CLEANTLT	62			?
CLEANLDEV	63			?
ATTACHIO	64			?
DEALLORIN	65			?
FDELETECE	66			5
DEALLOCATE	67			?
SKEMOVEKDD	70			?
LOGS	71			?
IOSTAT	72			6
FRELCH	73			4
UNLOCACB	74			4
FCPECK	75			?
KCLOSE	76			?
RESETCRITICAL	77			?

FCLOSEDA	3	136	514	
PVCLOSE	4	136	477	
KFCLOSE	5	136	440	
FJCLOSE	6	136	403	
FSCLOSE	7	136	440	
FPROCTERM	10	4760	4760	
SUPDENDATH	100			?
RELDATASEG	101			?
FRELSpace	11	5310	5350	
VTARTOLDEV	102			6
FCHECKEOF	12	5331	5531	
WAITFORIO	103			?
FSECTORS	13	5670	5670	
DLLACH	14	5720	5720	
SCANEMAVT	104			
SEGMENT LENGTH		5140		
FILESYS1	4			
NAME	STI	CODE	ENTRY	SEG
GETREC	1	0	645	
WAITFORIO	16			?
FTRouble	17			6
IOSTAT	20			6
ATTACHIO	21			?
REELSWITCH	22			?
EXCHANGEDH	23			?
HELP	24			?
FSETEOF	2	3647	3647	
XDCSPOOLINFO	25			?
SETART	3	3727	3727	
GETEOF	4	4017	4017	
FCLEAR	5	4053	4053	
FCNVOLK	6	4123	4400	
FLARTO	26			6
FLABIDERR	27			6
RELSIR	30			?
GETSIR	31			?
DISKDEALLOC	32			?
DISKALLOC	33			?
DIRECADJUST	34			?
LDEVTOTVAR	35			6
DISCSIZE	7	6001	6001	
LDEVTOTYPE	36			?
LDEVTOSUBTYPE	37			?
REGSTATUS	40			?
UNLOCACH	10	6257	6257	
STACKCHECK	41			?
LOCACH	11	6677	6677	
IMPEDE	42			?
FRELCB	12	7450	7450	
FSETCB	13	7660	7660	
FDELETECB	43			5
FUNLOCKCB	14	10257	10257	
UNIMPEDE	44			?
FLOCKCB	15	10430	10430	
SEGMENT LENGTH		10714		
FILESYS5	5			
NAME	STI	CODE	ENTRY	SEG
FMLNAME	1	0	3	
XRETJTENTRY	13			?
FNFORMAT	2	172	267	



FINDAFTENT	3	441	441	
FINDANYAFTENT	4	441	450	
FGLIESCEID	5	703	703	
WAITFORIO	14			?
FTRDUBLE	15			?
ATTACHIO	16			?
IOSTAT	17			?
SCANFMVIT	18	1251	1251	
ALTDSEGSIZE	20			?
EXCHANGEDB	21			?
SETACB	7	1506	1506	
GETSIR	22			?
FGETCR	23			?
FCINITACB	24			?
FCOPEN	25			?
DELACB	26			?
FRELCB	27			?
RELSIR	30			?
FDELETECB	10	2471	2471	
FLOCKCB	31			?
RELDATASEG	32			?
FUNLOCKCB	33			?
FCREATECB	11	2761	3076	
GETDATASEG	34			?
FALTPXFILE	12	4031	4031	
ALTPXFILESIZE	35			?
SEGMENT LENGTH		4154		
FILESYS4	5			
NAME	SYT	CODE	ENTRY	SEG
FRCNAME	1	0	220	
DIRECTINC	15			?
ERRORDR	16			?
SETCRITICAL	17			?
LOCACB	20			?
FGETCR	21			?
FNFORMAT	22			?
GETSIR	23			?
DIRECTPURGFILE	24			?
DIRECTINSRFILE	25			?
FSECTORS	26			?
DIRECTSETFILE	27			?
ADJUTENTRY	30			?
RMJUTENTRY	31			?
CALENDAR	32			?
HELP	33			?
EXCHANGEDB	34			?
FRELCB	35			?
UNLOCACB	36			?
RELSIR	37			?
FCHECK	40			?
RESETCRITICAL	41			?
ERRORDR	42			?
FREPLY	2	1554	1554	
ATTACHIO	43			?
FLABIOERR	3	2031	2031	
DIRECTSETFLAG	44			?
GENMSG	45			?
FLABIO	4	2317	2317	
FLOCKWORD	5	2472	2472	
FTITLE	6	2667	2667	

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8

FTROLBLE	7	2722	2722
SUDDENDEATH	46		
IOSTAT	10	2725	3167
LDFVTOVTAB	11	3204	3204
VSTARTOLDEV	12	3256	3256
VTABIN)	13	3315	3315
LUN	14	3357	3357
SEGMENT LENGTH		3470	

?

PRIMARY DB	0	INITIAL STACK	2200	CAPABILITY	630
SECONDARY DB	0	INITIAL DL	0	TOTAL CODE	46400
TOTAL DP	0	MAXIMUM DATA	?	TOTAL RECORDS	245
ELAPSED TIME	00:01:10.403			PROCESSOR TIME	00:04.645

```

3946 06750000 00000 1 PROCEDURE LOCACH(AFTE,DST,ACB,PACBV,LACBV,FILENUM,FLAGS,S1,01);<<01353>>
3947 06770000 00000 1 <<CHECKS FOR A VALID FILE NR., SFTS DR TO THE DATA SEGMENT
3948 06772000 00000 1 CONTAINING THE ACB, CHECKS FOR A PRIVILEGED FILE (NEGATIVE
3949 06774000 00000 1 FILE CODE) AND RETURNS THE CALLER'S DST NUMBER ALONG WITH A
3950 06776000 00000 1 POINTER TO THE ACB.
3951 06778000 00000 1
3952 06780000 00000 1 INPUT VARIABLES:
3953 06782000 00000 1 FILENUM - FILE NR.
3954 06784000 00000 1 FLAGS - FLAG WORD
3955 06786000 00000 1 (0:1) - USER'S MODF
3956 06788000 00000 1 (14:1) - CREATE BREAK QUEUE
3957 06790000 00000 1 S1,01 - PARAMETERS FOR CALL TO RELSIR 01393
3958 06792000 00000 1 (USED TO RELEASE SIRs, IF ANY) 01393
3959 06794000 00000 1
3960 06796000 00000 1 OUTPUT VARIABLES:
3961 06798000 00000 1 AFTE - WORD 0 OF AFT ENTRY DS.03
3962 06800000 00000 1 DST - DST NR. OF CALLER'S BUFFER 00822
3963 06802000 00000 1 ACB - ACB ADR.
3964 06804000 00000 1 PACBV - PHYSICAL ACB VECTOR
3965 06806000 00000 1 LACBV - LOGICAL ACB VECTOR
3966 06808000 00000 1
3967 06810000 00000 1 CONDITION CODE:
3968 06812000 00000 1 CCE - OK
3969 06814000 00000 1 CCG - SNULL FILE
3970 06816000 00000 1 CCL - INVALID FILE NUMBER
3971 06818000 00000 1
3972 06820000 00000 1 CARRY:
3973 06822000 00000 1 CARRY - NO-WAIT I/O PENDING
3974 06824000 00000 1 NOCARRY - NO NO-WAIT I/O PENDING
3975 06826000 00000 1
3976 06828000 00000 1 NOTE THAT THE OUTPUT VARIABLES ARE RETURNED BY A PARTIAL
3977 06830000 00000 1 CUTBACK OF THE STACK. IF AN ERROR IS DETECTED THEN DB
3978 06832000 00000 1 REMAINS UNCHANGED>>
3979 06834000 00000 1 VALUE AFTE,DST,ACB,PACBV,LACBV,FILENUM,FLAGS,S1,01; <<01393>>
3980 06836000 00000 1 LOGICAL DST,FLAGS;
3981 06838000 00000 1 INTEGER POINTER ACB;
3982 06840000 00000 1 INTEGER AFTE,PACBV,LACBV,FILENUM,S1,01; <<01393>>
3983 06842000 00000 1 OPTION PRIVILEGED,UNCALLABLE,VARIABLE; <<01353>>
3984 06844000 00000 1 BEGIN <<+1.C3>>
3985 06846000 00000 2 INTEGER PHAP=0-4; <<01353>>
3986 06848000 00000 2 DEFINE SIR1=PHAP.(14:2)=30, <<01393>>
3987 06850000 00000 2 CONDLCK=SIR1; <<SUPPLYING SIR PARMS IMPLIES CONDLCK>> <<01353>>
3988 06852000 00000 2 DOUBLE POINTER ACBDBL = ACB; <<+1.C3>>
3989 06854000 00000 2 INTEGER STACKDST = 0+1; <<STACK DST 0>><<+1.C3>>
3990 06856000 00000 2 INTEGER EXTRADST = 0+2; <<+1.C3>>
3991 06858000 00000 2 INTEGER POINTER PXFILE = 0+3; <<PXFILE POINTER>><<+1.C3>>
3992 06860000 00000 2 INTEGER POINTER AFT = 0+4; <<AFT ENTRY POINTER>><<+1.C3>>
3993 06862000 00000 2 INTEGER PACBDST = 0+5; <<+1.C3>>
3994 06864000 00000 2 INTEGER PACBOFFSET = 0+6; <<OFFSET FROM CBTAB>><<+1.C3>>
3995 06866000 00000 2 INTEGER POINTER CBTAB = 0+7; <<+1.C3>>
3996
3997 PAGE 0068 FILEACCESS MPE-IV FILE SYSTEM - ACCESS CONTROL BLOCK MAINTENANCE
3998
3999 06868000 00000 2 INTEGER POINTER VT = 0+8; <<+1.C3>>
4000 06870000 00000 2 INTEGER ARRAY LACH (+) = 0+9; <<LACB BUFFER>><<+1.C3>>
4001 06872000 00000 2
4002 06874000 00000 2 TOS := PCB*STK; <<GET PCB03.(1:10)>><<STACKDST -- 0+1>><<+1.C3>>

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4003 06876000 0000h 2 X := X - 1; <<POINT X TO PCB02>><<+1.C3>>
4004 06878000 00007 2 TOS := ABSOLUTE(X).(1:10); <<STACKDST -- 0+2>><<+1.C3>>
4005 06880000 00011 2 DST := IF = THEN 0 ELSE EXCHANGEDB(DST); <<SET DB TO OURSTACK>><<+1.C3>>
4006 068A2000 00017 2 PUSH(DL);ASSEMBL(DUP); <<+1.C3>>
4007 068A4000 00021 2 CONV'DLTOPXFILE; <<+1.C3>>
4008 068A6000 00023 2 ASSEMBLE(XCH); <<PUT DL AT TOS, PXFILE POINTER AT 0+3>><<+1.C3>>
4009 068A8000 00024 2 <<+1.C3>>
4010 06890000 00024 2 <<+1.C3>>
4011 06892000 00024 2 <<+1.C3>>
4012 06894000 00024 2 IF NOT ( 1 <= FILENUM <= <<+1.C3>>
4013 06896000 00025 2 PXFAFTSIZE DIV'DBY'AFTENTRY) THEN GO E1; <<+1.C3>>
4014 06898000 00034 2 IF (X <<FILENUM>> <= 2) AND INTEGER(FLAGS) >= 0 THEN GO E1; <<+1.C3>>
4015 06900000 00044 2 <<+1.C3>>
4016 06902000 00044 2 <<+1.C3>>
4017 06904000 00044 2 <<+1.C3>>
4018 06906000 00044 2 FAST'FINDAFT; <<TOS IS DLSDAFT -- 0+4>><<+1.C3>>
4019 06908000 00050 2 TOS := AFT; <<TOS := AFT(0)>><<+1.C3>>
4020 06910000 00051 2 AFTL := S01 << GET AFT WORD 0 >> <<DS.03>><<+1.C3>>
4021 06912000 00053 2 X := FTYPE'OF'TOS; <<X := TYPE>><<+1.C3>>
4022 06914000 00055 2 IF <> AND X <> MSG'TYPE AND X <> RF'TYPE <<HW.00>>
4023 06916000 00062 2 AND X <> KS'TYPE THEN GOTO E1; <<KS.00>><<+1.C3>>
4024 06918000 00071 2 IF LOGICAL(AFTNULL) THEN <<SNULL?>><<+1.C3>>
4025 06920000 00074 2 BEGIN <<+1.C3>>
4026 06922000 00074 3 TOS := CCB; <<+1.C3>>
4027 06924000 00075 3 GO GETOUT; <<+1.C3>>
4028 06926000 00100 3 END; <<+1.C3>>
4029 06928000 00100 2 TOS := AFTPACBV; <<+1.C3>>
4030 06930000 00102 2 IF = THEN GO E1; <<NOT FORNED?>><<+1.C3>>
4031 06932000 00103 2 ASSEMBLE(DUP,STRX); <<S0,S1,R ARE PACBV>><<+1.C3>>
4032 06934000 00104 2 PACBV := TOS; <<INIT. PACB VECTOR>><<+1.C3>>
4033 06936000 00105 2 TOS := TOS.(6:10); <<PACBDST -- 0+5>><<+1.C3>>
4034 06938000 00106 2 TOS := LOGICAL(X) MAKE'AN'OFFSET; <<PACBOFFSET, -- 0+6>><<+1.C3>>
4035 06940000 00111 2 TOS := AFTIOJX; <<+1.C3>>
4036 06942000 00113 2 IF <> THEN TOS := TOS LOR 1; <<NO-WAIT I/O PENDING?>><<+1.C3>>
4037 06944000 00115 2 CARRYCODE := TOS; <<SET CARRY>><<+1.C3>>
4038 06946000 00121 2 TOS := FTYPE; <<+1.C3>>
4039 06948000 00123 2 <<+1.C3>>
4040 06950000 00123 2 IF S0 <<TYPE>> = RF'TYPE THEN <<DS.00>><<+1.C3>>
4041 06952000 00126 2 BEGIN << REMOVE FILE - ALL DONE >> <<DS.00>><<+1.C3>>
4042 06954000 00126 3 LACBV := AFTLACBV; <<DS.00>><<+1.C3>>
4043 06956000 00131 3 PACBV := AFTPACBV; <<DS.00>><<+1.C3>>
4044 06958000 00134 3 DST := FXCHANGEDB(DST); <<DS.03>><<+1.C3>>
4045 06960000 00140 3 TOS := CCE; <<DS.00>><<+1.C3>>
4046 06962000 00141 3 GO GETOUT; <<DS.00>><<+1.C3>>
4047 06964000 00143 3 END; <<DS.00>><<+1.C3>>
4048 06966000 00143 2 <<+1.C3>>
4049 06968000 00143 2 IF TOS <<TYPE>> = KS'TYPE THEN <<KS.00>><<+1.C3>>
4050 06970000 00145 2 BEGIN <<KSAM FILE TYPE - ALL DONE>> <<KS.00>><<+1.C3>>
4051 06972000 00145 3 LACBV:=AFTLACBV; <<KS.00>><<+1.C3>>
4052 06974000 00150 3 PACBV:=AFTPACBV; <<KS.00>><<+1.C3>>
4053 06976000 00153 3 FXCHANGEDB(DST); <<SWITCH BACK TO CALLER DB>> <<KS.00>><<+1.C3>>
4054 06978000 00157 3 TOS:=CCE; <<KS.00>><<+1.C3>>
4055 06980000 00160 3 GO TO GETOUT; <<KS.00>><<+1.C3>>
4056
4057 PAGE 0069 FILEACCESS MPE-IV FILE SYSTEM - ACCESS CONTROL BLOCK MAINTENANCE
4058
4059 06982000 00161 3 END; <<KS.00>><<+1.C3>>

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4060 06984000 00161 2
4061 06986000 00161 2
4062 06988000 00161 2
4063 06990000 00161 2
4064 06992000 00162 2
4065 06994000 00165 2
4066 06996000 00166 2
4067 06998000 00166 3
4068 07000000 00167 3
4069 07002000 00173 3
4070 07004000 00173 4
4071 07006000 00174 4
4072 07008000 00177 4
4073 07010000 00202 4
4074 07012000 00203 4
4075 07014000 00205 4
4076 07016000 00216 4
4077 07018000 00207 4
4078 07020000 00210 4
4079 07022000 00210 3
4080 07024000 00212 3
4081 07026000 00212 4
4082 07028000 00213 4
4083 07030000 00215 4
4084 07032000 00222 4
4085 07034000 00223 4
4086 07036000 00224 4
4087 07038000 00225 4
4088 07040000 00226 4
4089 07042000 00227 4
4090 07044000 00230 4
4091 07046000 00230 3
4092 07048000 00230 2
4093 07050000 00230 2
4094 07052000 00230 2
4095 07054000 00230 2
4096 07056000 00231 2
4097 07058000 00234 2
4098 07060000 00234 3
4099 07062000 00237 3
4100 07064000 00242 3
4101 07066000 00242 4
4102 07068000 00243 4
4103 07070000 00246 4
4104 07072000 00247 4
4105 07074000 00247 3
4106 07076000 00247 2
4107 07078000 00250 2
4108 07080000 00253 2
4109 07082000 00253 2
4110 07084000 00253 2
4111 07086000 00253 2
4112 07088000 00254 2
4113 07090000 00260 2
4114 07092000 00263 2
4115 07094000 00265 2
4116

<< * * COPY LACB TO STACK * * >>
TOS := AD*FSCBTAB*AND*ZERO;
LACBV := AFTLACBV;
IF <> THEN
  BEGIN
    ASSEMBLE(ADDS SIZEACB);
    IF LACBV.(6:10) = STACKDST THEN
      BEGIN
        TOS := 8LACB;
        TOS := LOGICAL(LACBV) MAKE*AN*OFFSET;
        TOS := TOS + WPXFVT;
        TOS := PS0;
        TOS := 8PKFCBTAB;
        ASSEMBLE(ADD,DELB);
        TOS := SIZEACB;
        ASSEMBLE(MOVE);
      END;
    ELSE
      BEGIN
        TOS := 8LACB;
        TOS := LACBV.(6:10);
        TOS := (LOG(LACBV) MAKE*AN*OFFSET) + AD*FSVT;
        TOS := 1;
        ASSEMBLE(MFDS 2);
        ASSEMBLE(DECB);
        TOS := LACB;
        TOS := SIZEACB;
        ASSEMBLE(MFDS 4);
      END;
    END;
  END;

<< * * FIND CONTROL BLOCK TABLE * * >>
X := PACBOST;
IF X <> STACKDST THEN
  BEGIN
    EXCHANGEDB(X);
    IF STACKCHECK(X) THEN
      BEGIN
        DL*IN*HIS*STACK;
        CONV*DL*TO*CTAB;
        CBCTAB := TOS;
      END;
    END;
  ELSE
    CBCTAB := 8PKFCBTAB;
  END;

<< * * CHECK FOR EASY CASE * * >>
PSEUDODISABLE;
SVT := 8CRTVT + PACBOFFSET;
8ACB := 8CBTAB + VTADR;
TOS := CRTLOCK;
TOS := VTCONTROL;

```

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(8)

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4117 PAGE 0070 FILEACCESS MPE-IV FILE SYSTEM - ACCESS CONTROL BLOCK MAINTENANCE
4118
4119 07096000 00247 2 TOS := FLAGS LAND 6; <<FLAGS.(13:2)=CREATE/DESTROY BREAK 0>><<+1.C3>>
4120 07098000 00271 2 ASSEMBLE(OR,ORIDEL); <<+1.C3>>
4121 07100000 00273 2 IF = THEN; <<+1.C3>>
4122 07102000 00274 2 BEGIN << NO BQ; CBT AND CB AREN'T LOCKED - ALL OURS >> <<+1.C3>>
4123 07104000 00274 3 § IF X2 = ON <<+1.C3>>
4124 07106000 00274 3 IF CBTDSX <> PACROST <<+1.C3>>
4125 07108000 00276 3 OR NOT (0<=PACROFFSET<=CBTVTSIZE-VTENTRY) <<+1.C3>>
4126 07110000 00306 3 OR NOT (CBTOVERHEAD+CBTVTSIZE <= VTADR <= CBTSIZE) <<+1.C3>>
4127 07112000 00320 3 THEN <<+1.C3>>
4128 07114000 00320 3 BEGIN PSEUDOENABLE;FTROUBLE(452);END; <<+1.C3>><<KJ.03>>
4129 07116000 00324 3 § IF <<+1.C3>>
4130 07118000 00324 3 VCONTROL := GETPROCNUM+X100400; << LOCK PACB >> <<+1.C3>>
4131 07120000 00336 3 PSEUDOENABLE; <<+1.C3>>
4132 07122000 00337 3 END <<+1.C3>>
4133 07124000 00337 2 ELSE <<+1.C3>>
4134 07126000 00342 2 BEGIN << SOMEONE IS ALREADY THERE; QUEUE UP >> <<+1.C3>>
4135 07128000 00342 3 PSEUDOENABLE; <<+1.C3>>
4136 07130000 00343 3 FLOCKCB(CBTLOCK,0); <<LOCK TABLE>><<+1.C3>>
4137 07132000 00351 3 §ACB := §CBTAB + VTADR; <<SET ACB ADDRESS>><<+1.C3>>
4138 07134000 00354 3 § IF X2 = ON <<+1.C3>>
4139 07136000 00354 3 IF CBTDSX <> PACROST <<+1.C3>>
4140 07138000 00356 3 OR NOT (0<=PACROFFSET<=CBTVTSIZE-VTENTRY) <<+1.C3>>
4141 07140000 00366 3 OR NOT (CBTOVERHEAD+CBTVTSIZE <= VTADR <= CBTSIZE) <<+1.C3>>
4142 07142000 00377 3 THEN FTROUBLE(452); <<+1.C3>><<KJ.03>>
4143 07144000 00402 3 § IF <<+1.C3>>
4144 07146000 00402 3 IF CONDOLOCK THEN FLAGS.(1:1):=1; <<+1.C3>>
4145 07148000 00411 3 FLOCKCB(VTCONTROL,FLAGS,CBTLOCK);<<LOCK CB,UNLOCK TABLE>><<+1.C3>>
4146 07150000 00420 3 IF CARRY THEN << QUEUED FOR CB LOCK >><<+1.C3>>
4147 07152000 00421 3 BEGIN <<+1.C3>>
4148 07154000 00421 4 IF SIR1 AND 01<>-1 THEN RELSIR(S1,01);<<RELEASE SIR >><<+1.C3>>
4149 07156000 00433 4 IMPEDE(0); << WAIT FOR CB LOCK >><<+1.C3>>
4150 07158000 00435 4 IF SIR1 THEN 01:=GETSIR(S1); <<RE-ACQUIRE SIR >><<+1.C3>>
4151 07160000 00445 4 END; <<+1.C3>>
4152 07162000 00445 3 END; <<+1.C3>>
4153 07164000 00445 2 <<+1.C3>>
4154 07166000 00445 2 << * * COPY LACB INTO PACB * * >> <<+1.C3>>
4155 07168000 00445 2 <<+1.C3>>
4156 07170000 00445 2 IF LACBV <> 0 THEN <<LACB EXISTS>><<+1.C3>>
4157 07172000 00450 2 BEGIN <<+1.C3>>
4158 07174000 00450 3 ACBTLOG := TOS; << LACB(15) >> <<+1.C3>>
4159 07176000 00452 3 ACBERROR := TOS;
4160 07178000 00454 3 ACBNODM := TOS;
4161 07180000 00456 3 ACBLSTATE := TOS;
4162 07182000 00460 3 ACBCTL := TOS;
4163 07184000 00462 3 ACBDUM := TOS;
4164 07186000 00464 3 ACBRSIZE := TOS;
4165 07188000 00466 3 ACBRSIZE := TOS;
4166 07190000 00470 3 ACBAOPTIONS := TOS;
4167 07192000 00472 3 ACBFOPTIONS := TOS;
4168 07194000 00474 3 ACBNAME2 := TOS;
4169 07196000 00476 3 ACBNAME1 := TOS; << LACB(2 & 3) >>
4170 07198000 00500 3 ACBFRUM := TOS; << LACB(1) >>
4171 07200000 00504 3 END; <<+1.C3>>
4172 07202000 00504 2 <<+1.C3>>
4173 07204000 00504 2 << * * MAKE ADJUSTMENTS FOR BREAK * * >> <<+1.C3>>

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4174 07206000 00504 2                                <<<+1.C3>>
4175 07208000 00504 2      IF FLAGS&LSR(1) THEN      <<<BREAK MODE?>><<<+1.C3>>
4176
4177 PAGE 0071  FILEACCESS      MPE-IV FILE SYSTEM - ACCESS CONTROL BLOCK MAINTENANCE
4178
4179 07210000 00507 2      BEGIN                                * <<<+1.C3>>
4180 07212000 00507 3      ACBBREAK := 1;      <<<SET BREAK MODE>><<<+1.C3>>
4181 07214000 00513 3      IF = THEN ACBSAVEEOFS := ACBEOFS  <<<SAVE EOF FLAGS?>><<<+1.C3>>
4182 07216000 00516 3      END;                                <<<+1.C3>>
4183 07218000 00522 2                                <<<+1.C3>>
4184 07220000 00522 2      <<< * * CHECK FOR PRIVILEGED FILE * * >> <<<+1.C3>>
4185 07222000 00522 2                                <<<+1.C3>>
4186 07224000 00522 2      IF LOGICAL(ACBPRIV) AND INTEGER(FLAGS) >= 0 THEN <<<+1.C3>>
4187 07226000 00531 2      BEGIN                                <<<+1.C3>>
4188 07228000 00531 3      ACBERROR := PRIVVIOL; <<<+1.C3>>
4189 07230000 00534 3      E1: EXCHANGEDH(DST); <<<RESET DB TO ORIG. DST>><<<+1.C3>>
4190 07232000 00540 3      TOS := CCL; <<<+1.C3>>
4191 07234000 00541 3      GO GETOUT <<<+1.C3>>
4192 07236000 00542 3      END; <<<+1.C3>>
4193 07238000 00542 2      TOS := CCE; <<<+1.C3>>
4194 07240000 00543 2                                <<<+1.C3>>
4195 07242000 00543 2      GETOUT: <<<+1.C3>>
4196 07244000 00543 2      COND CODE := TOS; <<<STORE CONDITION CODE>><<<+1.C3>>
4197 07246000 00547 2      RETURN 5; <<<01393>>
4198 07248000 00550 2      END; << PROCEDURE LOCACH >> <<<+1.C3>>
4199

```

IDENTIFIER	CLASS	TYPE	ADDRESS
4200			
4201			
4202			
4203	ACB	POINTER	0 -013
4204	ACBOBL	POINTER	0 -013
4205	AFT	POINTER	0 +004
4206	AFTC	SIMP. VAR.	0 -015
4207	CBTAB	POINTER	0 +007
4208	CONDLOCK	DEFINE	
4209	DST	SIMP. VAR.	0 -014
4210	E1	LABEL	PB+534
4211	EXTRADST	SIMP. VAR.	0 +002
4212	FILENUM	SIMP. VAR.	0 -010
4213	FLAGS	SIMP. VAR.	0 -007
4214	GETOUT	LABEL	PB+543
4215	LACH	ARRAY	0 +011
4216	LACBV	SIMP. VAR.	0 -011
4217	O1	SIMP. VAR.	0 -005
4218	PACROST	SIMP. VAR.	0 +005
4219	PACBOFFSET	SIMP. VAR.	0 +006
4220	PACHV	SIMP. VAR.	0 -012
4221	PHAP	SIMP. VAR.	0 -004
4222	PKFILE	POINTER	0 +003
4223	S1	SIMP. VAR.	0 -006
4224	SIR1	DLF INE	
4225	STACKDST	SIMP. VAR.	0 +001
4226	VT	POINTER	0 +010
4227			
4228			
4229			

SIR1

PHAP.(14:2)=3



4231	00020	004500	025403	107700	003700	021001	021405	047403	010302	00030	131610	012603	142001	009501	004400	072002	141406
4232	00040	022000	141103	142001	000471	023004	004400	010202	007100	00050	043404	074500	051615	026404	004300	141214	004400
4233	00060	141211	004400	022001	141206	004400	022006	141213	142001	00070	000444	043404	026501	013705	000600	142001	000445
4234	00100	021401	047404	145243	004526	051512	024552	004400	010310	00110	037774	021403	047404	141202	036401	041601	003700
4235	00120	051601	041615	026404	004500	022101	141516	021407	047404	00130	051611	021401	047404	051612	000600	041614	000121

4237 PAGE 0072 FILEACCESS MPE-IV FILE SYSTEM - ACCESS CONTROL BLOCK MAINTENANCE

4238	00140	021002	142001	000401	022096	141515	021402	047404	051611	00150	021401	047404	051612	000600	041614	070017	004000
4239	00160	140363	000700	021402	047404	051511	145224	035020	041611	00170	026552	061401	141520	171411	041611	010310	037774
4240	00200	177403	002000	043700	021420	177403	002001	021020	020023	00210	140020	000017	171411	041611	026552	041611	010310
4241	00220	021005	006000	021001	020172	007400	041411	021020	070174	00230	131405	004400	061401	141215	000644	000060	004006
4242	00240	000000	013706	041000	025403	107700	022420	051407	140004	00250	021420	177403	051407	030061	021405	177407	071406
4243	00260	041407	073410	051613	021403	047407	021401	047410	041607	00270	037406	006565	004000	143515	021401	047407	061405
4244	00300	000600	021402	047407	026456	023004	131406	012603	140012	00310	000032	021402	047407	026456	022405	043407	043410
4245	00320	012604	030063	040016	000000	021404	020320	021403	020320	00330	002100	010304	040007	002000	021401	057410	030063
4246	00340	000704	100400	030063	021403	177407	000600	035001	021004	00350	000000	041407	073410	051613	021401	047407	061405
4247	00360	000600	021402	047407	026456	023004	131406	012602	140011	00370	021402	047407	026456	022405	043407	043410	004300
4248	00400	040440	000056	041604	037403	022003	141504	041607	013401	00410	051607	021401	177410	041607	021403	177407	021007
4249	00420	011525	041604	037403	022003	141507	041605	026001	141204	00430	041606	041605	000000	000600	000000	041604	037403
4250	00440	141505	000600	041606	000000	051605	041611	022000	141235	00450	021417	057613	021416	057613	021415	057613	021414
4251	00460	021413	057613	021412	057613	021411	057613	021410	057613	00470	021407	057613	021406	057613	021402	167613	021401
4252	00500	047613	003200	027210	057613	041607	010301	013714	021435	00510	047613	013401	057613	141507	021436	047613	047613
4253	00520	027102	057613	021437	047613	026401	013715	041607	022000	00530	141112	021055	021416	057613	000600	041614	000201
4254	00540	021001	140002	021002	041601	003200	027142	051601	031405	00550	031412						

07250000 00000 1 * CONTROL SEGMENT = FILESYS1
 07252000 00000 1 PROCEDURE UNLOCACB(AFTL,DST,ACB,PACRV,LACHV,FLAGS); <<DS.03>><<+1.C3>>

LAB #9

Hardware Environment: Series 44

Software Environment: C Mit

External Symptoms: System Stopped Working.

This dump case includes the following components:

- 1) Excerpted pages from a formatted Series 44 memory dump.**
- 2) PMAPS for segments HARDRES and KERNELC.**
- 3) Source code listing for KERNELC procedure RELEASEREGION.**

9

LOG DEV	DRT #	U N I T	C H A P T E R	T Y P E	SUB TYPE	TERM TYPE	SPEED	REC WIDTH	OUTPUT DEV	MODE	DRIVER NAME	DEVICE CLASSES
1	88	0	0	0	8			128	0		H10MDS1	SYSDISC SPOOL DISC
2	88	1	0	0	8			128	0		H10MDS1	SDISC PVOL
5	91	0	0	32	8			88	0	S	H10PPR10	EPOC
6	90	0	0	32	4			88	0	S	H10LP10	LP
7	73	0	0	24	0			128	0		H10TAPE0	TAPE DDUMP
8	73	1	0	24	0			128	0		H10TAPE0	TAPE
9	73	2	0	24	0			128	0		H10TAPE0	TAPE
10	73	3	0	24	0			128	LP	JA	H10TAPE0	CARD JOBTAPE
20	8	0	0	16	0	10	240	40	20	JAID	H10TERMO	CONSOLE
21	8	0	0	16	4	10	960	40	21	JAID	H10TERMO	TERM
22	10	0	0	16	0	10	240	40	22	JAID	H10TERMO	TERM
23	11	0	0	32	14	18	240	88	0		H10TERMO	HP2831B

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MPE IV C.00.01
1 ININ
2 FILESYS1 (0)
3 FILESYS4 (1)
4 FILESYS5 (2)
5 FILESYS8 (3)
6 FILESYS8A (4)
7 FILESYS7 (5)
10 CIALTORG (8)
11 CICOMSYS (7)
12 CIERR (10)
13 CIFILES (11)
14 CIFILEM (12)
15 CIINIT (13)
16 CILISTF (14)
17 CIMISC (15)
20 CIORGMAN (18)
21 CIPREPRUN (17)
22 CISUBS (20)
23 CISYSMGR (21)
24 CIUSERUTIL (22)
25 CXSTOREST (23)
26 RESTORE (24)
27 STORE (25)
30 DIRC (28)
31 ALLOCATE (27)
32 ALLOCUTIL (30)
33 HARDRES (31)
34 ABORTDUMP (32)
35 MESSAGE (33)
36 PROCSEG (34)
37 MRIO (35)
40 PCREATE (38)
41 MORGUE (37)
42 BIPC (40)
43 IPC (41)
44 CHECKER (42)
45 UTILITY1 (43)
46 UTILITY2 (44)
47 LOADER1 (45)
50 RINS (48)
51 JOBTABLE (47)
52 DEBUG (50)
53 NURSERY (51)
54 SPOOLING (54)
55 SPOOLCOMS1 (55)
56 SPOOLCOMS2 (56)
57 PVSOMSEG (57)
60 PVSYSO (60)
61 PVSYSM (61)

62 UDC (62)
63 USER (63)
64 HELPUER (64)
65 OPLW (65)
66 OPMED (66)
67 OPHI (67)
70 LABSEG (70)
71 SDISC (71)
72 LOGSEGO (73)
73 LOGSEG1 (74)
74 KERNELC (75)
75 KERNELD (76)
76 MISCSEGC (77)
77 FILESYS1A (101)
100 FILESYS2 (102)
101 FILESYS3 (103)
102 DEBUGUTL (104)
103 SEGUTIL (105)
104 KSAM01 (106)
105 KSAM02 (107)
106 KSAM03 (110)
107 KSAM04 (111)
110 KSAM05 (112)
111 FIRMWARESIM1 (52)
112 FIRMWARESIM2 (53)
113 KSAM06 (113)
114 KSAM07 (114)
115 COMSYS1 (135)
116 COMSYS3 (137)
117 COMSYS4 (140)
120 COMSYS5 (141)
121 CSUTILITY (142)
122 COMSYS2 (136)
123 BSCLCM (143)
124 BSCLCPO (144)
125 DVRSSLC (145)
126 DVRHSI (146)
127 DSSEG1 (147)
130 DSSEG2 (150)
131 DSSEG4 (152)
132 DSMISC (154)
133 DSIOM (155)
134 DSSEG3 (151)
135 DSSEG5 (153)
136 CLIB'01 (200)
137 CLIB'03 (202)
140 CLIB'04 (203)
141 CLIB'05 (204)
142 DSRTECALLS (158)
143 MRJEMISC1 (157)

144 MRJEMISC2 (160)
145 MPMONCMD (161)
146 IMAGE01 (210)
147 IMAGE02 (211)
150 IOMONITOR3270 (225)
151 HIOMDSC1
152 HIOTERMO
153 HIOTAPEO
154 HIOLPRTO
155 HIOPPRTO

***** SYSTEM TABLE DEFINITION ERRORS *****

DST	DST DEFINITION	(DST)	(SYS GLOB)	(LOW CORE)	(ASSUMED)	(DEFINITION)	SOURCE OF ERROR
2	(DATA SEGMENT TABLE)	0 022560	0 022560	0 022561	0 002120	0 022560	BAD VALUE FROM LOW CORE
3	(PROCESS CONTROL BLOCK)	0 044160	0 044160	0 041508		0 044160	BAD VALUE FROM SYS GLOBAL

***** REGISTERS *****

```

*****
* DATA SEGMENT * CODE SEGMENT * MISCELLANEOUS * STATUS = 102033 * ISR = 140003
*****
* DB BANK = 000000 * PB = 106320 * X = 001271 * MODE = PRIV * RUN/HALT = HALT
* DB = 001000 * P = 142151 * CIR = 031001 * INTERRUPTS = OFF * IRQ = OFF * TIMEOUT = OFF
* S BANK = 000000 * PL = 143173 * NIR = 000377 * TRAPS = OFF * CSRQ = OFF * NOT SS = ON
* DL = 177777 * PBBANK = 000000 * STACK OP = LEFT * PARITY = OFF * DISABLE ATN = OFF
* Q = 050411 * (P-PB) = 033631 * OVERFLOW = OFF * POWERFAIL = OFF
* S = 050413 * CARRY = ON * POWERON = OFF
* Z = 051258 * COND CODE = CCG * NOT DISP = OFF
* SEGMENT # = 33 * NOT ICS = OFF
*****
    
```

***** FIXED LOW MEMORY *****

```

CODE SEGMENT TABLE POINTER      032560
EXTENDED CODE SEGMENT TABLE POINTER 034324
DATA SEGMENT TABLE POINTER      022561
PROCESS CONTROL BLOCK BASE       041508
CURRENT PCB POINTER              000000
INTERRUPT STACK BASE             050260
INTERRUPT STACK LIMIT            051258
INTERRUPT MASK                   040120
    
```

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** WARNING! ADDRESS POINTERS DO NOT AGREE. ATTEMPTING TO CONTINUE****

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK /LDEV	DISC ADDRESS	D C V	R C I K	S C M T	M O I K	F W I P	S S S	C R E S S	W S D	VM ALLOC
1	{CODE SEGMENT TABLE}	OFF	1400	032580	0								S	C	0
2	{DATA SEGMENT TABLE}	OFF	10000	022580	0								S	C	0
3	{PROCESS CONTROL BLOCK}	ON	4000	044180	0								S	C	0
4	{CST EXTENSION}	OFF	10000	034180	0								S	C	0
5	{SYSTEM GLOBAL AREA}	OFF	1120	001000	0								S	C	0
6	{FIXED LOW CORE}	ON	4000	000000	0								S	C	0
7	{INTERRUPT CONTROL STACK}	OFF	1100	050180	0								S	C	0
10	{SYSTEM BUFFERS}	ON	4030	061484	0								S	C	0
11	{UCOP REQUEST QUEUE}	ON	104	177823	7								S	C	1
12	{PROCESS-PROCESS COMMUNICATION TABLE}	ON	400	051023	5								S	C	1
13	{I/O QUEUE}	OFF	1234	051280	0								S	C	0
14	{TERMINAL BUFFERS}	OFF	17750	002120	0								S	C	0
15	{LOGICAL-PHYSICAL DEVICE TABLE}	ON	734	102520	0								S	C	0
16	{LOGICAL DEVICE AND CLASS TABLE}	ON	4844	111423	7								S	C	5
17	{DRIVER LINKAGE TABLE}	OFF	50	000800	0								S	C	0
20	{I/O RESOURCE TABLES}	OFF	20	000850	0								S	C	0
21	{DISK FREE SPACE}	ON	20000	047423	8								S	C	21
22	{LOADER SEGMENT TABLE}	ON	2844	043823	5								S	C	14
23	{TIMER REQUEST LIST}	OFF	204	103454	0								S	C	0
24	{DIRECTORY}	ON	2000	126223	7								S	C	3
25	{DIRECTORY SPACE}	OFF	600		1	5111							S	C	1
26	{RIN TABLE}	ON	454	044023	8								S	C	0
27	{SWAPTABLE}	OFF	12000	085514	0								S	C	0
30	{JOB PROCESS COUNT}	ON	30	103860	0								S	C	0
31	{JOB MASTER TABLE}	ON	200	173423	8								S	C	14
32	{TAPE LABEL TABLE}	ON	1750	073823	5								S	C	2
33	{LOG TABLE}	ON	170	175423	8								S	C	0
34	{REPLY INFORMATION TABLE}	ON	2000	155223	5								S	C	3
35	{VOLUME TABLE}	ON	124	177823	0								S	C	1
36	{BREAKPOINT TABLE}	OFF	734		1	4241							S	C	1
37	{LOG BUFFER 1}	ON	400	177023	7								S	C	1
40	{LOG BUFFER 2}	OFF	400		1	4251							S	C	1
41	{LOG ID TABLE}	OFF	150		1	3101							S	C	0
42	{ASSOCIATION TABLE}	ON	3204	147423	5								S	C	4
43	{CST BLOCK}	OFF	44	000870	0								S	C	0
44	{JOB CUTOFF TABLE}	OFF	154	103710	0								S	C	0
45	{SYSTEM JIT}	ON	100	177223	0								S	C	0
46	{SPECIAL REQUEST TABLE}	OFF	144	077514	0								S	C	1
47	{VIRTUAL DISK SPACE TABLE}	OFF	304	100210	0								S	C	0
51	{ARSBM TABLE}	OFF	44	000734	0								S	C	0
52	{ILT}	OFF	3830	055834	0								S	C	0
53	{SIR TABLE}	OFF	230	104084	0								S	C	0
54	{FILE MULTI-ACCESS VECTOR}	ON	200	177223	8								S	C	2

9

***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK /LDEV	DISC ADDRESS	D C V	R O C	I Y I	S K D	M O P	F I P	W S S	S S S	C R E W D	VM ALLOC
55	{INPUT DEVICE DIRECTORY}	ON	200	048623	5										S	40
56	{OUTPUT DEVICE DIRECTORY}	ON	400	153023	5										S	40
57	{WELCOME MESSAGE #1}	OFF	1750		1	4035	D								S	2
60	{WELCOME MESSAGE #2}	OFF	1750		1	4045	D								S	2
61	{CS SYSTEM SEGMENT}	OFF	10		1	3175	D								S	1
62	{JOB-PROCESS CROSS REFERENCE}	ON	200	044623	6										S	1
63	{SYSTEM JDT}	ON	34	177423	0										S	1
64	{COMMAND INTERPRETER LOG-ON DST}	OFF	1000		1	4055	D								S	10
65	{MOUNTED VOLUME TAB.}	OFF	520		1	4175	D								S	1
66	{PRI. VOL. USER TABLE}	ON	200	176023	6										S	10
67	{AVAILABLE REGION LIST}	OFF	2004	100514	0										S	0
70	{DISC REQUEST TABLE}	OFF	3120	052514	0										S	0
71	{MSG HBR TABLE}	OFF	10	164000	0										S	0
72	{PRIMARY MSG TABLE}	OFF	4000		0	10									S	41
73	{MEASUREMENT INFO TABLE}	OFF	120	100070	0										S	0
75		ON	3244	167423	6					S					S	7
76		ON	3244	120623	4					S					S	7
77		ON	3604	067623	6					S					S	7
100		ON	13144	073623	6					S					S	16
101		ON	2554	113023	6					S					S	6
102		ON	2310	130623	6					S					S	6
103		OFF	2260		1	4461	D			S					S	6
104		ON	5764	034223	4					S					S	13
105		ON	5364	113023	4					S					S	43
106		ON	5720	006623	5					S					S	17
107		ON	4324	107223	5					S					S	22
110		ON	204	161023	7					S					S	1
111		ON	1324	161423	7					S					S	12
112		ON	1404	170423	7					S					S	2
113		ON	15430	161223	5					S					S	22
114		ON	6174	005023	1					S					S	27
115		ON	104	177623	5					S					S	1
116		ON	50	177623	6					S					S	5
117		ON	100	004623	7					S					S	1
120		ON	460	177023	5					S					S	1
121		ON	7640	060223	4					S					S	10
122		ON	6774	013423	1					S					S	27
123		ON	1324	140223	4					S					S	12
124		ON	50	157423	4					S					S	5
125		ON	104	045223	6					S					S	1
126		ON	1110	051623	5					S					S	2
127		ON	1110	174223	4					S					S	2
130		ON	3264	124223	4					S					S	10

***** PROCESS CONTROL BLOCK (2ND HALF) *****

----- S C H E D U L I N G I N F O R M A T I O N -----														---RESOURCES---				LIFE/DEATH		----- MISCELLANEOUS -----								
PIN	NQPIN	PQPIN	DISP	LC	DE	IC	NO	TR	HU	IS	IP	PS	SS	CH	RS	PREV	NEXT	LD	IE	FA	BMS	PPC	PCST	PBXPTR	SLLPTR	BPT	SYSTEM	
---	---	---	Q	Q	Q	R	R	PRI	I	Q	W	W	W	T	I	IMP	IMP	V	A	A	---	---	---	---	---	---	---	---
1			L					61										L						10	64653		PROGEN	
2			L					62										L							64521		SYSIO	
3			L					175										L							64533		IOMESS	
4			L					62										L						1	64545		LOG	
5			L					175						C				L						2	64557		MEMLOG	
6			L					175										L						3	64571			
7			L					175										L						4	64603		UCOP	
10			L					12										L						5	64615		PFAIL	
11			L					175										L						6	64627		DEVREC	
12			L					216										L						7	64641		LOAD	
14			L					230										L							65404			
15			L					230										L							65430			
21				C		I		230		T				C				L							66243			
22				D				312										L							66337			
23			D		D			312						C				L	F					11	66407			

200 ENTRYS
 160 UNASSIGNED ENTRYS
 20 ASSIGNED ENTRYS

***** PRESENT STACKS *****

***** PCBX AND STACK MARKERS FOR DST 106 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000453	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
007765	5	177756	017571	103074	000011	74 KERNELC (75)						
007754	5	001074	001427	140301	000006	301 USER SEGMENT						
007746	5	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 75 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000000	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
170114	6	177756	017571	101074	000011	74 KERNELC (75)						
170103	6	177777	025384	100433	000010	33 HARDRES (31)						
170073	6	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 76 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000000	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
121314	4	177756	017571	101074	000011	74 KERNELC (75)						
121303	4	000001	006011	140437	000010	37 NRIO (35)						
121273	4	000000	000000	140041	000004	41 MORGUE (37)						

9

***** PCBX AND STACK MARKERS FOR DST 77 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000644	000644	0	0	20	20	63	45	UNDEF	YES	YES	000252	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
071001	6	177756	017571	103074	000011	74 KERNELC (75)						
070770	6	043200	017143	100074	000014	74 KERNELC (75)						
070754	6	001141	001302	141301	000007	301 USER SEGMENT						
070745	6	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 100 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	010053	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
104403	6	177756	017571	101074	000011	74 KERNELC (75)						
104372	6	000003	016736	103074	000006	74 KERNELC (75)						
104364	6	000003	016573	102074	000010	74 KERNELC (75)						
104354	6	001141	000446	140301	000006	301 USER SEGMENT						
104346	6	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 101 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000305	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
114034	6	177756	017571	103074	000011	74 KERNELC (75)						
114023	6	043200	017143	100074	000014	74 KERNELC (75)						
114007	6	001141	000271	141301	000007	301 USER SEGMENT						
114000	6	000000	000000	140041	000004	41 MORGUE (37)						

9

***** PCBX AND STACK MARKERS FOR DST 102 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	83	45	UNDEF	YES	YES	000044	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
131400	8	177758	017571	101074	000011	74 KERNELC (75)						
131387	8	001121	000437	140701	000030	301 USER SEGMENT						
131337	8	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 104 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	83	45	UNDEF	YES	YES	002080	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
037725	4	177758	017571	101074	000011	74 KERNELC (75)						
037714	4	001300	001315	142701	000741	301 USER SEGMENT						
036753	4	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 105 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	001444	0	0	20	20	83	45	UNDEF	YES	YES	001145	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
115874	4	177758	017571	103074	000011	74 KERNELC (75)						
115883	4	043820	017143	100074	000014	74 KERNELC (75)						
115847	4	000013	000787	141301	000007	301 USER SEGMENT						
115840	4	000000	000000	140041	000004	41 MORGUE (37)						

9

***** PCBX AND STACK MARKERS FOR DST 113 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000122	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
172572	5	177758	017571	103074	000011	74 KERNELC (75)						
172581	5	000001	005701	140054	000024	54 SPOOLING (54)						
172535	5	000002	004301	142054	010520	54 SPOOLING (54)						
162015	5	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 107 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000122	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
111572	5	177758	017571	103074	000011	74 KERNELC (75)						
111581	5	000031	005701	140054	000024	54 SPOOLING (54)						
111535	5	000002	004301	142054	001520	54 SPOOLING (54)						
110015	5	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 114 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000644	000644	1	2	20	20	116	115	#S2	YES	YES	000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
006778	1	177758	017571	101074	000011	74 KERNELC (75)						
006765	1	001053	031783	101033	000017	33 HARDRES (31)						
006748	1	000415	005224	140077	000115	77 FILESYS1A (101)						
006631	1	000000	002146	142477	000112	77 FILESYS1A (101)						
006517	1	044811	002855	141045	000012	45 UTILITY1 (43)						
006505	1	000004	000543	140415	000110	15 CIINIT (13)						
006375	1	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 122 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT NO	INTERACT NO	INIT Q	JCUT INDEX
000444	000444	2	3	4	3	124	125	#J1	NO	NO	000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
016734	1	177756	017571	103074	000011	74 KERNELC (75)						
016723	1	043640	017143	100074	000014	74 KERNELC (75)						
016707	1	000003	005213	141021	002003	21 CIPREPRUN (17)						
014704	1	177404	003036	140415	000107	15 CIINIT (13)						
014575	1	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 130 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT NO	INTERACT NO	INIT Q	JCUT INDEX
000444	000600	2	3	4	3	124	125	#J1	NO	NO	000002	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
125175	4	177756	017571	101074	000011	74 KERNELC (75)						
125164	4	000003	016736	103074	000008	74 KERNELC (75)						
125156	4	000003	016573	102074	000010	74 KERNELC (75)						
125146	4	000000	001661	102036	000022	36 PROCSEG (34)						
125124	4	000000	000062	162301	000067	301 USER SEGMENT						
125035	4	000000	000002	160301	000004	301 USER SEGMENT						
125031	4	000000	000000	140041	000004	41 MORGUE (37)						

9

***** SIR TABLE *****

NO LOCKED SIRs

***** MONITOR TABLE *****

LOCATION	PIN	EVENT			
105221	0	DEALLOC	000000	000000	100000
105205	0	QUIESCE	066407	000010	110312
105171	0	QUIESCE	066407	000010	110312
105155	0	QUIESCE	066407	000010	110312
105141	0	QUIESCE	066407	000010	110312
105125	0	QUIESCE	066407	000010	110312
105111	0	SIODONE	104401	052654	000000
105075	0	SIODMEXIT	001140	062413	006571
105061	0	FETCHSEG	104401	000023	000003
105045	0	QUIESCE	066337	000040	110312
105031	0	SIODMEXIT	001000	062000	136555
105015	0	QUIESCE	066407	004000	110312
105001	0	SIODMEXIT	001000	062000	136535
104765	0	QUIESCE	066407	004000	110312
104751	0	SIODMEXIT	001000	062000	136454
104735	0	QUIESCE	066407	004000	110312
104721	23	SPECIALRQ	000056	000000	000001
104705	0	SPECIALRQ	000130	000023	000000
104671	23	SIODMEXIT	001000	062413	006401
104655	0	SPECIALRQ	000130	000023	000000
104641	23	SIODMEXIT	001760	062413	006324
104625	0	SPECIALRQ	000055	000003	000000
104611	23	SIODMEXIT	001740	062413	136243
104575	0	SWAPIN	000023	100000	000000
104561	22	SIODMEXIT	001000	062000	006225
104545	0	INTERRUPT	001166	000000	116221
104531	22	SPECIALRQ	000122	123300	000001
104515	0	INTERRUPT	001166	000000	116202
104501	22	SIODMEXIT	001860	062413	006127
104465	0	SIODMEXIT	001000	062000	136117
104451	0	SWAPIN	000022	100000	000000
104435	0	DEALLOC	000000	000004	127623
104421	0	QUIESCE	066337	000001	110312
104405	12	SIODMEXIT	001000	062000	006020
104371	0	INTERRUPT	001166	000000	116014
104355	12	SPECIALRQ	000105	000020	000001
104341	0	INTERRUPT	001166	000000	115774
104325	12	SPECIALRQ	000105	000040	000001
106305	0	INTERRUPT	001166	000000	115711
106271	12	SPECIALRQ	000105	000020	000001
106255	0	INTERRUPT	001166	000000	115672
106241	12	SPECIALRQ	000105	020040	000001
106225	0	INTERRUPT	001166	000000	115651
106211	12	SPECIALRQ	000105	000000	000001

PIN	EVENT			
0	QUIESCE	066407	000010	110312
0	QUIESCE	066407	000010	110312
0	QUIESCE	066407	000010	110312
0	QUIESCE	066407	000010	110312
0	QUIESCE	066407	000010	110312
0	QUIESCE	066407	000010	110312
0	QUIESCE	066407	000010	110312
0	INTERRUPT	001166	000000	116636
0	SEGIO	104401	052654	000001
0	QUIESCE	066407	000001	110310
0	QUIESCE	066407	000020	110312
0	SPECIALRQ	000130	000023	000000
23	SIODMEXIT	001100	062413	006550
0	SPECIALRQ	000130	000023	000000
23	SIODMEXIT	001060	062413	006462
0	SPECIALRQ	000056	000003	000000
23	SIODMEXIT	001040	062413	136417
23	SIODMEXIT	001000	062000	006411
0	INTERRUPT	001166	000000	116404
23	SPECIALRQ	000130	000000	000001
0	INTERRUPT	001166	000000	116365
23	SPECIALRQ	000130	000000	000001
0	INTERRUPT	001166	000000	116314
23	SIODMEXIT	001740	062413	006242
0	FETCHSEG	000130	000023	000000
0	SIODMEXIT	001000	062000	136223
0	QUIESCE	066337	004000	110312
0	SIODMEXIT	001000	062000	136203
0	QUIESCE	066337	004000	110312
22	SPECIALRQ	000122	032220	000001
0	SIODONE	000130	052334	000000
0	SIODMEXIT	001620	062413	006032
0	ALLOCMEM	000016	000004	124223
22	QONSEG	000130	066337	000044
0	SIODMEXIT	001000	062000	136016
0	QUIESCE	064641	004000	140216
0	SIODMEXIT	001000	062000	135776
0	QUIESCE	064641	004000	140216
0	SIODMEXIT	001000	062000	135713
0	QUIESCE	064641	004000	140216
0	SIODMEXIT	001000	062000	135673
0	QUIESCE	064641	004000	140216
0	SIODMEXIT	001000	062000	135652
0	QUIESCE	064641	004000	140216
0	SIODMEXIT	001000	062000	135633

PIN	EVENT			
0	QUIESCE	066407	000010	110312
0	QUIESCE	066407	000010	110312
0	QUIESCE	066407	000010	110312
0	QUIESCE	066407	000010	110312
0	QUIESCE	066407	000010	110312
0	SIODMEXIT	001000	062000	136637
0	SWAPIN	000023	100000	000000
0	ALLOCMEM	000001	000004	157623
23	QONSEG	104401	066407	000004
23	SIODMEXIT	001000	062000	006560
0	INTERRUPT	001166	000000	116553
23	SPECIALRQ	000130	000000	000001
0	INTERRUPT	001166	000000	116534
23	SPECIALRQ	000130	000000	000001
0	INTERRUPT	001166	000000	116453
23	SIODMEXIT	001040	062413	006416
0	SIODMEXIT	001000	062000	136406
0	QUIESCE	066407	004000	110312
0	SIODMEXIT	001000	062000	136366
0	QUIESCE	066407	004000	110312
0	SIODMEXIT	001000	062000	136316
0	QUIESCE	066407	004000	110307
23	SPECIALRQ	000055	000000	000001
0	QUIESCE	066337	000440	110312
0	SPECIALRQ	000122	000023	000000
22	SIODMEXIT	001700	062413	006212
0	SPECIALRQ	000122	000023	000000
22	SIODMEXIT	001860	062413	136130
22	SIODMEXIT	001000	062000	006123
0	INTERRUPT	001166	000000	116116
0	SEGIO	000130	052334	000001
0	FETCHSEG	000130	000022	000003
0	QUIESCE	064641	000400	140216
0	SPECIALRQ	000105	000023	000000
12	SIODMEXIT	001560	062413	006005
0	SPECIALRQ	000105	000023	000000
12	SIODMEXIT	001540	062413	005757
0	SPECIALRQ	000105	000023	000000
12	SIODMEXIT	001520	062413	005701
0	SPECIALRQ	000105	000023	000000
12	SIODMEXIT	001440	062413	005657
0	SPECIALRQ	000105	000023	000000
12	SIODMEXIT	001500	062413	005640
0	SPECIALRQ	000105	000023	000000

9

106175	0	INTERRUPT	001166	000000	115631	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001460	062413	005615
106161	12	SPECIALRQ	000105	000000	000001	0	SIODMEXIT	001000	062000	135611	0	SPECIALRQ	000105	000023	000000
106145	0	INTERRUPT	001166	000000	115607	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001400	062413	005541
106131	12	SPECIALRQ	000105	000000	000001	0	SIODMEXIT	001000	062000	135460	0	SPECIALRQ	000105	000023	000000
106115	0	INTERRUPT	001166	000000	115457	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001420	062413	005426
106101	12	SPECIALRQ	000105	000020	000001	0	SIODMEXIT	001000	062000	135421	0	SPECIALRQ	000105	000023	000000
106065	0	INTERRUPT	001166	000000	115420	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001360	062413	005367
106051	12	SPECIALRQ	000105	000020	000001	0	SIODMEXIT	001000	062000	135360	0	SPECIALRQ	000105	000023	000000
106035	0	INTERRUPT	001166	000000	115357	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001340	062413	005324
106021	12	SPECIALRQ	000105	000020	000001	0	SIODMEXIT	001000	062000	135317	0	SPECIALRQ	000105	000023	000000
106005	0	INTERRUPT	001166	000000	115316	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001320	062413	005277
105771	12	SPECIALRQ	000105	000020	000001	0	SIODMEXIT	001000	062000	135270	0	SPECIALRQ	000105	000023	000000
105755	0	INTERRUPT	001166	000000	115286	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001300	062413	005254
105741	12	SPECIALRQ	000105	000020	000001	0	SIODMEXIT	001000	062000	135247	0	SPECIALRQ	000105	000023	000000
105725	0	INTERRUPT	001166	000000	115245	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001280	062413	005215
105711	12	SPECIALRQ	000105	000020	000001	0	SIODMEXIT	001000	062000	135207	0	SPECIALRQ	000105	000023	000000
105675	0	INTERRUPT	001166	000000	115205	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001240	062413	005161
105661	12	SPECIALRQ	000105	000020	000001	0	SIODMEXIT	001000	062000	135154	0	SPECIALRQ	000105	000023	000000
105645	0	INTERRUPT	001166	000000	115152	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001200	062413	005134
105631	12	SPECIALRQ	000105	037420	000001	0	SIODMEXIT	001000	062000	135130	0	SPECIALRQ	000105	000023	000000
105615	0	INTERRUPT	001166	000000	115126	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001220	062413	005082
105601	12	SPECIALRQ	000105	000020	000001	0	SIODMEXIT	001000	062000	135054	0	SPECIALRQ	000105	000023	000000
105565	0	INTERRUPT	001166	000000	115053	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001160	062413	004771
105551	12	SPECIALRQ	000105	002000	000001	0	SIODMEXIT	001000	062000	134764	0	SPECIALRQ	000024	000023	000000
105535	0	INTERRUPT	001166	000000	114763	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001140	062413	004725
105521	12	SPECIALRQ	000024	000000	000001	0	SIODMEXIT	001000	062000	134723	0	SPECIALRQ	000024	000023	000000
105505	0	INTERRUPT	001166	000000	114721	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001120	062413	004704
105471	12	SPECIALRQ	000024	051600	000001	0	SIODMEXIT	001000	062000	134701	0	SPECIALRQ	000024	000023	000000
105455	0	INTERRUPT	001166	000000	114700	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001100	062413	004674
105441	12	SPECIALRQ	000024	000000	000001	0	SIODMEXIT	001000	062000	134671	0	SPECIALRQ	000024	000023	000000
105425	0	INTERRUPT	001166	000000	114667	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001060	062413	004612
105411	12	SPECIALRQ	000024	000000	000001	0	SIODMEXIT	001000	062000	134604	0	SPECIALRQ	000105	000023	000000
105375	0	INTERRUPT	001166	000000	114603	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001040	062413	004571
105361	12	SPECIALRQ	000105	000000	000001	0	SIODMEXIT	001000	062000	134564	0	SPECIALRQ	000105	000023	000000
105345	0	INTERRUPT	001166	000000	114563	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001020	062413	004550
105331	12	SPECIALRQ	000105	000000	000001	0	SIODMEXIT	001000	062000	134542	0	SPECIALRQ	000105	000023	000000
105315	0	INTERRUPT	001166	000000	114541	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001100	062413	004534
105301	12	SPECIALRQ	000105	000000	000001	0	SIODMEXIT	001000	062000	134522	0	SPECIALRQ	000105	000023	000000
105265	0	INTERRUPT	001166	000000	114521	0	QUIESCE	064641	004000	140216	12	SIODMEXIT	001060	062413	004476
105251	12	SPECIALRQ	000105	000000	000001	0	DEALLOC	000000	000004	112623	0	QUIESCE	064641	000000	140216
105235	12	SPECIALRQ	000105	000007	177000	12	123	000004	112623	000000	0	QUIESCE	066337	000400	110312

9

***** DEVICE INFORMATION TABLE *****

DRT NO 8 (SYSTEM CONSOLE/TERMINAL)

UNIT 0 LOGICAL DEV 20 FLAGS = 140402 NEXT DIT = 000000 DLTP = 177600 ILTP = 054634 IOQP = 050270

21070	140402	000000	050270	000024	177600	054634	000000	005225
21100	000400	010727	000000	000415	000000	021000	000000	000000
21110	000000	000017	000074	010070	010070	000000	000000	012007
21120	000000	000000	000000	000000	000000	000027	000000	000000
21130	000000	000000	040000	056147	010030			

DRT NO 9 (TERMINAL)

UNIT 0 LOGICAL DEV 21 FLAGS = 100400 NEXT DIT = 000000 DLTP = 177600 ILTP = 055702 IOQP = 000000

21135	100400	000000	000000	000025	177600	055702	000000	001220
21145	040000	011010	020000	000000	000000	000000	000000	000000
21155	000000	000000	000000	000000	000000	000000	000000	012010
21165	000000	000000	000000	000000	000000	000120	000000	000000
21175	000000	000000	000000	000000	000000			

DRT NO 10 (TERMINAL)

UNIT 0 LOGICAL DEV 22 FLAGS = 100400 NEXT DIT = 000000 DLTP = 177600 ILTP = 056345 IOQP = 000000

21202	100400	000000	000000	000026	177600	056345	000000	001220
21212	000000	010707	020000	000000	000000	000000	000000	000000
21222	000000	000000	000000	000000	000000	000000	000000	012007
21232	000000	000000	000000	000000	000000	000120	000000	000000
21242	000000	000000	000000	000000	000000			

DRT NO 11 (TERMINAL)

UNIT 0 LOGICAL DEV 23 FLAGS = 100400 NEXT DIT = 000000 DLTP = 177600 ILTP = 057010 IOQP = 000000

21247	100400	000000	000000	000027	177600	057010	000000	002320
21257	000000	010707	020000	000000	000000	000000	000000	000000
21267	000000	000000	000000	000000	000000	000000	000000	023007
21277	000000	000000	000000	000000	000000	000120	000000	000000
21307	000000	000000	000000	000000	000000			

DRT NO 73 (MAGNETIC TAPE UNIT)

CONTROLLER ERROR STATUS = 000000

UNIT 0 LOGICAL DEV 7 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177610 ILTP = 057453 IOQP = 000000

21314	002000	000000	000000	040007	177610	057453	000000	000000
21324	000000	000002	000000	000000				

9

UNIT 1 LOGICAL DEV 8 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177610 ILTP = 057453 IOQP = 000000
21330 002000 000000 000000 040410 177610 057453 000000 000000
21340 000000 000000 000000 000000

UNIT 2 LOGICAL DEV 9 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177610 ILTP = 057453 IOQP = 000000
21344 002000 000000 000000 041011 177610 057453 000000 000000
21354 000000 000000 000000 000000

UNIT 3 LOGICAL DEV 10 FLAGS = 002000 NEXT DIT = 000000 DLTP = 177610 ILTP = 057453 IOQP = 000000
21360 002000 000000 000000 041412 177610 057453 000000 000000
21370 000000 000000 000000 000000

DRT NO 89 (SYSTEM DISK)

CONTROLLER ERROR STATUS = 000000

UNIT 0 LOGICAL DEV 1 FLAGS = 042000 NEXT DIT = 000000 DLTP = 177620 ILTP = 057712 IOQP = 000000
21374 042000 000000 000000 040001 177620 057712 000000 000000
21404 000000 000000 000001 053753 000556 002013 157823 000100
21414 000100 000000 000000 000000 000000 000000 000000 000000
21424 000000 000000 000000 000000 000000 000000 000000 000000
21434 000000 017400 001040 000000

UNIT 1 LOGICAL DEV 2 FLAGS = 042000 NEXT DIT = 000000 DLTP = 177620 ILTP = 057712 IOQP = 000000
21440 042000 000000 000000 040402 177620 057712 000000 000000
21450 000000 000000 000000 000000 000000 000000 113560 000200
21460 000200 000000 000000 000000 000000 000000 000000 000000
21470 000000 000000 000000 000000 000000 000001 000000 000000
21500 000000 017401 001040 000000

DRT NO 90 (LINE PRINTER)

UNIT 0 LOGICAL DEV 6 FLAGS = 000000 NEXT DIT = 000000 DLTP = 177630 ILTP = 060242 IOQP = 000000
21504 000000 000000 000000 040006 177630 060242 000000 000000
21514 000000 000000 000000

DRT NO 91 (LINE PRINTER)

UNIT 0 LOGICAL DEV 5 FLAGS = 000000 NEXT DIT = 000000 DLTP = 177640 ILTP = 060375 IOQP = 000000
21517 000000 000000 000000 040005 177640 060375 000000 000000
21527 000000 000000 000000 000000 000000 000000 000000 000000
21537 000000 000000 000000 000000 000000 000000 000000 000000
21547 000000 000000 000000 000000 000000 000000 000000 000000
21557 000000

***** DISC REQUEST TABLE ***** (AVAILABLE LIST)

STATUS: 0.XX -> PENDING
 1.XX -> SUCCESSFUL
 2.XX -> END OF FILE
 3.XX -> UNUSUAL CONDITION
 4.XX -> IRRECOVERABLE ERROR

TABLE INDEX	LDEV	UNIT	PCB	S	DST/ BANK	OFFSET/ ADDRESS	FUNC	XFER CNT	PARM1	PARM2	MISC	SEG IDENT	SEGDSP	NXTAVL	- F L A G S -		STATUS
															MAIN	AUX	
000140	1	0	12		24	000311	READ	600	000000	002255	000000			180	007110	001374	1. 0
000120	1	0	12		24	001177	READ	600	000000	002250	000000			140	007110	001354	1. 0
000100	1	0	12		24	000311	READ	600	000000	000267	000000			120	007110	001334	1. 0
000060	1	0	12		24	001177	READ	600	000000	000101	000000			100	007110	001314	1. 0
000040	1	0	12	S	105	001462	READ	200	000001	053751	000000			60	007110	001274	1. 0
000020	1	0	12	SS	105	000171	READ	400	000001	053752	000000			40	007110	001254	1. 0
003100	1	0	12	S	105	001441	WRITE	200	000001	053751	000000			20	007110	004334	1. 0
003060	1	0	12	S	105	001441	READ	200	000001	053751	000000			3100	007110	004314	1. 0
003040	1	0	22		22	001131	READ	200	000001	053752	000000			3080	007110	004274	1. 0
003020	1	0	22	S	122	003631	READ	200	000001	053751	000000			3040	007110	004254	1. 0
003000	1	0	22	SS	122	000000	FOPEN	0	000000	000000	000000			3020	007110	004234	1. 0
002760	1	0	22	S	122	004501	WRITE	200	000001	053751	000000			3000	007110	004214	1. 0
002740	1	0	22	S	122	004501	READ	200	000001	053751	000000			2760	007110	004174	1. 0
002720	1	0	21		1	013423	READ	5774	000000	005735	000000	DST	122	2740	041010	004154	1. 0
002700	1	0	21		1	013423	WRITE	5774	000000	005735	000000	DST	122	2720	041110	004134	1. 0
002660	1	0	22	S	122	004216	READ	200	000001	053751	000000			2700	007110	004114	1. 0
002640	1	0	22		24	000311	READ	600	000000	000151	000000			2660	007110	004074	1. 0
002620	1	0	22		24	001177	READ	600	000000	002252	000000			2640	007110	004054	1. 0
002600	1	0	22		126	000104	READ	1000	000000	164214	000000			2620	005110	004034	1. 0
002560	1	0	0		10	000000	FCLOSE	0	000000	000000	000000			2600	011110	004014	1. 0
002540	1	0	22	S	122	001536	WRITE	200	000000	055005	000000			2560	007110	003774	1. 0
002520	1	0	22		122	001536	READ	200	000000	055005	000000			2540	007110	003754	1. 0
002500	1	0	22		24	000311	READ	600	000000	001007	000000			2520	007110	003734	1. 0
002460	1	0	22		24	000311	READ	600	000000	000267	000000			2500	007110	003714	1. 0
002440	1	0	22		24	001177	READ	600	000000	000101	000000			2460	007110	003674	1. 0
002420	1	0	22		112	000200	READ	1200	000000	047135	000000			2440	007110	003654	1. 0
002400	1	0	22		112	000200	READ	1200	000000	047130	000000			2420	007110	003634	1. 0
002360	1	0	22		112	000200	READ	1200	000000	047135	000000			2400	007110	003614	1. 0
002340	1	0	22		112	000200	READ	1200	000000	047142	000000			2360	007110	003574	1. 0
002320	1	0	22		112	000200	READ	1200	000000	047130	000000			2340	007110	003554	1. 0
002300	1	0	22		112	000200	READ	1200	000000	047147	000000			2320	007110	003534	1. 0
002260	1	0	22		112	000200	READ	1200	000000	047111	000000			2300	007110	003514	1. 0
002240	1	0	22		112	000200	READ	1200	000000	047212	000000			2260	007110	003474	1. 0
002220	1	0	22		112	000200	READ	1200	000000	047015	000000			2240	007110	003454	1. 0
002200	1	0	22		112	000200	READ	1200	000000	047407	000000			2220	007110	003434	1. 0
002160	1	0	22		130	000104	READ	24	000000	055010	000000			2200	005110	003414	1. 0
002140	1	0	22		130	000104	READ	24	000000	055007	000000			2160	005110	003374	1. 0
002120	1	0	22		24	000311	READ	600	000000	002257	000000			2140	007110	003354	1. 0

9

***** DISC REQUEST TABLE ***** (SUMMARY INFO)

TOTAL ENTRIES IN TABLE: 144
ENTRY SIZE: 20
ENTRIES IN PRIMARY AREA: 125
IMPEDED PROCESS PCB:
TABLE INDEX OF FIRST AVAIL ENTRY: 1160
TABLE INDEX OF LAST AVAIL ENTRY: 1140
MAXIMUM NUMBER OF ENTRIES IN USE: 4
CURRENT NUMBER OF ENTRIES IN USE:
OVERFLOWS:
TOTAL REQUESTS: 14302
SYSBASE INDEX OF DISABLED Q HEAD:
SYSBASE INDEX OF DISABLED Q TAIL:

***** DISC REQUEST TABLE ***** (ACTIVE LISTS)

LDEV 1: NO CURRENT REQUEST.

LDEV 2: NO CURRENT REQUEST.

9

***** DISC REQUEST TABLE ***** (DISABLED LIST)

***** NO DISABLED QUEUE ELEMENTS *****

***** DISC REQUEST TABLE ***** (AVAILABLE LIST)

STATUS: 0.XX -> PENDING
 1.XX -> SUCCESSFUL
 2.XX -> END OF FILE
 3.XX -> UNUSUAL CONDITION
 4.XX -> IRRECOVERABLE ERROR

TABLE INDEX	LDEV	UNIT	PCB	S	DST/BANK	OFFSET/ ADDRESS	FUNC	XFER CNT	PARM1	PARM2	MISC	SEG IDENT	SEGDSP	NXTAVL	- F L A G S -		STATUS
															MAIN	AUX	
001140	1	0	22		4	157623	READ	100	000001	053753	000000	CTX 11.001	0	0	041110	002374	1. 0
001120	1	0	23	S	130	000000	FOPEN	0	000000	000000	000000			1140	007110	002354	1. 0
001100	1	0	23	S	130	001346	WRITE	200	000000	164220	000000			1120	007110	002334	1. 0
001080	1	0	23	S	130	001346	READ	200	000000	164220	000000			1100	007110	002314	1. 0
001040	1	0	23		56	000000	WRITE	400	000000	003625	000000			1060	007110	002274	1. 0
001020	1	0	23	S	130	000000	FOPEN	0	000000	000000	000000			1040	007110	002254	1. 0
001000	1	0	23	S	130	001366	WRITE	200	000000	164210	000000			1020	007110	002234	1. 0
000780	1	0	23	S	130	001366	READ	200	000000	164210	000000			1000	007110	002214	1. 0
000740	1	0	23		55	000000	WRITE	200	000000	003425	000000			760	007110	002174	1. 0
000720	1	0	0		10	000000	FCLOSE	0	000000	000000	000000			740	011110	002154	1. 0
000700	1	0	22	S	122	003565	WRITE	200	000001	053751	000000			720	007110	002134	1. 0
000660	1	0	22	S	122	003565	READ	200	000001	053751	000000			700	007110	002114	1. 0
000640	1	0	22		130	000600	READ	0	000001	053753	000000			660	007110	002074	1. 0
000620	1	0	22		4	124223	READ	3264	000000	006211	000000	DST 130	0	640	041110	002054	1. 0
000600	1	0	0		10	000000	FCLOSE	0	000000	000000	000000			620	011110	002034	1. 0
000560	1	0	12	S	105	001421	WRITE	200	000001	053751	000000			600	007110	002014	1. 0
000540	1	0	12	S	105	001421	READ	200	000001	053751	000000			560	007110	001774	1. 0
000520	1	0	12	S	105	001375	WRITE	200	000001	053751	000000			540	007110	001754	1. 0
000440	1	0	12	S	105	001375	READ	200	000001	053751	000000			520	007110	001674	1. 0
000500	1	0	12	S	105	001610	WRITE	400	000001	053752	000000			440	007110	001734	1. 0
000460	1	0	12	S	105	001610	READ	400	000001	053752	000000			500	007110	001714	1. 0
000400	1	0	12	S	105	177730	WRITE	200	000001	053752	000000			460	007110	001634	1. 0
000420	1	0	12	S	105	000371	READ	200	000000	030133	000000			400	007110	001654	1. 0
000360	1	0	12	S	105	000371	READ	200	000000	036142	000000			420	007110	001614	1. 0
000340	1	0	12	S	105	000371	READ	200	000000	030304	000000			360	007110	001574	1. 0
000320	1	0	12	S	105	000371	READ	200	000000	037025	000000			340	007110	001554	1. 0
000300	1	0	12	S	105	000371	READ	200	000000	027762	000000			320	007110	001534	1. 0
000260	1	0	12	S	105	000371	READ	200	000000	035015	000000			300	007110	001514	1. 0
000240	1	0	12	S	105	000371	READ	200	000000	030201	000000			260	007110	001474	1. 0
000200	1	0	12	S	105	000371	READ	200	000000	041143	000000			240	007110	001434	1. 0
000220	1	0	12	S	105	000171	READ	400	000000	027631	000000			200	007110	001454	1. 0
000160	1	0	12	S	105	177000	READ	200	000001	053754	000000			220	007110	001414	1. 0

***** DISC REQUEST TABLE ***** (AVAILABLE LIST)

STATUS: 0.XX -> PENDING
 1.XX -> SUCCESSFUL
 2.XX -> END OF FILE
 3.XX -> UNUSUAL CONDITION
 4.XX -> IRRECOVERABLE ERROR

TABLE INDEX	LDEV	UNIT	PCB	S	DST/BANK	OFFSET/ADDRESS	FUNC	XFER CNT	PARM1	PARM2	MISC	SEG IDENT	SEGDSP	NXTAVL	- F L A G S -		STATUS	
															MAIN	AUX		
002100	1	0	22		24	001177	READ	600	000000	002251	000000			2120	007110	003334	1. 0	
002060	1	0	22		24	000311	READ	600	000000	000267	000000			2100	007110	003314	1. 0	
002040	1	0	22		24	001177	READ	600	000000	000101	000000			2080	007110	003274	1. 0	
002020	1	0	22	S	122	000000	FOPEN	0	000000	000000	000000			2040	007110	003254	1. 0	
002000	1	0	22	S	122	002418	WRITE	200	000000	055005	000000			2020	007110	003234	1. 0	
001760	1	0	21		4	042423	READ	170	000000	008211	000000	DST	130	0	2000	041110	003214	1. 0
001740	1	0	22	S	122	002418	READ	200	000000	055005	000000			1760	007110	003174	1. 0	
001720	1	0	22	S	122	002133	READ	200	000000	055005	000000			1740	007110	003154	1. 0	
001700	1	0	22		24	000311	READ	600	000000	000120	000000			1720	007110	003134	1. 0	
001660	1	0	22		24	001177	READ	600	000000	000111	000000			1700	007110	003114	1. 0	
001640	1	0	22		24	000311	READ	600	000000	001525	000000			1680	007110	003074	1. 0	
001620	1	0	22		24	001177	READ	600	000000	000104	000000			1640	007110	003054	1. 0	
001600	1	0	22		24	000311	READ	600	000000	001007	000000			1620	007110	003034	1. 0	
001560	1	0	22		24	001177	READ	600	000000	000101	000000			1600	007110	003014	1. 0	
001540	1	0	22		24	000311	READ	600	000000	001525	000000			1560	007110	002774	1. 0	
001520	1	0	22		24	001177	READ	600	000000	000104	000000			1540	007110	002754	1. 0	
001500	1	0	22		24	000311	READ	600	000000	001007	000000			1520	007110	002734	1. 0	
001460	1	0	22		24	001177	READ	600	000000	000101	000000			1500	007110	002714	1. 0	
001440	1	0	21		1	013423	READ	4574	000000	005735	000000	DST	122	0	1460	041010	002674	1. 0
001420	1	0	21		1	000023	WRITE	4574	000000	005735	000000	DST	122	0	1440	041110	002654	1. 0
001400	1	0	22		112	000200	READ	1200	000000	046315	000000			1420	007110	002634	1. 0	
001360	1	0	22		112	000200	READ	1200	000000	046322	000000			1400	007110	002614	1. 0	
001340	1	0	22		112	000200	READ	1200	000000	046315	000000			1380	007110	002574	1. 0	
001320	1	0	22		112	000200	READ	1200	000000	046322	000000			1340	007110	002554	1. 0	
001300	1	0	22		112	000200	READ	1200	000000	046315	000000			1320	007110	002534	1. 0	
001260	1	0	22		112	000200	READ	1200	000000	046322	000000			1300	007110	002514	1. 0	
001240	1	0	22		112	000200	READ	1200	000000	046315	000000			1260	007110	002474	1. 0	
001220	1	0	22		112	000200	READ	1200	000000	046322	000000			1240	007110	002454	1. 0	
001200	1	0	22		112	000200	READ	1200	000000	046315	000000			1220	007110	002434	1. 0	
001180	1	0	22		112	000200	READ	1200	000000	046322	000000			1200	007110	002414	1. 0	

9

***** I/O REQUEST TABLE (FREE LIST) *****

ELEMENTS IN TABLE 60 MAXIMUM NUMBER OF ELEMENTS IN USE 5
 ELEMENTS IN PRIMARY AREA 54 CURRENT NUMBER OF ELEMENTS IN USE 1
 SIZE OF EACH ELEMENT 11 OVERFLOWS 0
 INDEX OF FIRST FREE ELEMENT 23 TOTAL REQUEST 1605
 INDEX TO LAST FREE ELEMENT 1221

TABLE INDEX	LOGICAL DEVICE	PCB	ADDR REL	DST	BUFFER ADDRESS	FUNC	COUNT	PARM1	PARM2	MISC	FLAGS	STATUS	DESCRIPTION	STATUS
1221	20	21	+DB	114	515	WRITE	1B	000320	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
1206	20	21	+DB	114	0	000034	0W	000000	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
1173	20	21	+DB	114	645	WRITE	0W	000000	000004	000000	007000	IW BL CO	NORMAL COMPLETION	1
1160	20	0	\$BUF	10	0	FCLOSE	0W	000000	000000	000000	011000	SB CO	NORMAL COMPLETION	1
1145	20	0	\$BUF	10	1216	WRITE	64B	000000	000000	000000	011003	SB CO	NORMAL COMPLETION	1
1132	20	21	+DB	114	744	READ	1B	000001	000000	000043	007000	IW BL CO	NORMAL COMPLETION	1
1117	20	21	+DB	114	744	WRITE	1B	000320	000004	000000	007000	IW BL CO	NORMAL COMPLETION	1
1104	20	21	+DB	114	2164	WRITE	5W	000000	000004	000000	007000	IW BL CO	NORMAL COMPLETION	1
1071	20	21	+DB	114	744	READ	4B	000001	000000	000043	007000	IW BL CO	NORMAL COMPLETION	1
1056	20	21	+DB	114	744	WRITE	1B	000320	000004	000000	007000	IW BL CO	NORMAL COMPLETION	1
1043	20	21	+DB	114	744	READ	14B	000001	000000	000043	007000	IW BL CO	NORMAL COMPLETION	1
1030	20	21	+DB	114	744	WRITE	1B	000320	000004	000000	007000	IW BL CO	NORMAL COMPLETION	1
1015	20	21	+DB	114	744	READ	22B	000001	000000	000043	007000	IW BL CO	NORMAL COMPLETION	1
1002	20	21	+DB	114	744	WRITE	1B	000320	000004	000000	007000	IW BL CO	NORMAL COMPLETION	1
767	20	0	\$BUF	10	0	FOPEN	0W	000000	000000	000000	011000	SB CO	NORMAL COMPLETION	1
741	20	21	+DB	114	1	READ	6B	000003	000000	000043	007000	IW BL CO	NORMAL COMPLETION	1
754	20	21	+DB	114	515	WRITE	1B	000320	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
700	20	21	+DB	114	0	000034	0W	000000	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
726	20	21	+DB	114	1	READ	11B	000003	000000	000043	007000	IW BL CO	NORMAL COMPLETION	1
713	20	21	+DB	114	515	WRITE	1B	000320	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
665	20	21	+DB	114	0	000034	0W	000000	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
77	7	0	\$BUF	10	0	DCLOSE	0W	000000	000000	000000	011000	SB CO	NORMAL COMPLETION	1
64	7	0	\$BUF	10	0	FCLOSE	0W	000000	000003	000000	011000	SB CO	NORMAL COMPLETION	1
51	7	0	\$BUF	10	0	000005	0W	000000	000000	000000	011000	SB CO	NORMAL COMPLETION	1
652	20	21	+DB	114	1361	WRITE	101B	000000	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
637	20	21	+DB	114	1361	WRITE	76B	000000	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
624	20	21	+DB	114	1361	WRITE	73B	000000	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
611	20	21	+DB	114	0	WRITE	0W	000320	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
576	20	21	+DB	114	0	WRITE	0W	000320	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
563	20	21	+DB	114	0	000034	0W	000000	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
550	20	21	+DB	114	1354	WRITE	65B	000000	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
535	20	0	\$BUF	10	1015	WRITE	60B	000000	000000	000000	011003	SB CO	NORMAL COMPLETION	1
522	20	0	\$BUF	10	0	FOPEN	0W	000000	000000	000000	011000	SB CO	NORMAL COMPLETION	1
507	20	0	\$BUF	10	0	FOPEN	0W	000000	000000	000000	011000	SB CO	NORMAL COMPLETION	1
474	20	21	+DB	114	0	000025	0W	000001	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1
461	20	11	+DB	104	33	READ	17B	000001	000000	000000	005000	IW CO	NORMAL COMPLETION	1
446	20	11	+DB	104	22	WRITE	0W	000320	000000	000000	005000	IW CO	NORMAL COMPLETION	1
433	20	11	+DB	104	0	WRITE	0W	000000	000000	000000	005000	IW CO	NORMAL COMPLETION	1
420	20	0	\$BUF	10	0	FCLOSE	0W	000000	000000	000000	011000	SB CO	NORMAL COMPLETION	1
405	20	0	\$BUF	10	0	FCLOSE	0W	000000	000000	000000	011000	SB CO	NORMAL COMPLETION	1
372	20	0	\$BUF	10	614	WRITE	22B	000000	000000	000000	011003	SB CO	NORMAL COMPLETION	1
357	20	18	+DB	114	746	WRITE	57B	000000	000000	000000	007000	IW BL CO	NORMAL COMPLETION	1

9

HP3000 III MEMORY DUMPC.00.01 OF SYS VER C UPDATE 00 FIX 01 DUMP TIME 11/01/72, 12:07AM
(C) HEWLETT-PACKARD CO. 1980

TABLE INDEX	LOGICAL DEVICE	PCB	ADDR REL	DST	BUFFER ADDRESS	FUNC	COUNT	PARM1	PARM2	MISC	FLAGS.....	STATUS DESCRIPTION	STATUS
344	20	16	+DB	114	0	000012	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
331	20	16	+DB	114	0	WRITE	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
316	20	0	SBUF	10	0	000036	0W	000000	000000	000000	011000 SB CO	NORMAL COMPLETION	1
303	20	16	+DB	114	1	READ	0W	000003	000000	000043	007000 IW BL CO	:HELLO END OF FILE	42
270	20	16	+DB	114	515	WRITE	1B	000320	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
255	20	16	+DB	114	0	000034	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
242	20	16	+DB	114	2734	WRITE	16B	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
227	20	16	SBUF	10	0	000005	0W	000000	000000	000000	017000 SB IW BL	NORMAL COMPLETION	1
214	20	16	+DB	114	0	000013	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
201	20	16	+DB	114	0	WRITE	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
166	20	0	SBUF	10	0	FCLOSE	0W	000000	000000	000000	011000 SB CO	NORMAL COMPLETION	1
153	20	0	SBUF	10	0	FCLOSE	0W	000000	000000	000000	011000 SB CO	NORMAL COMPLETION	1
140	20	20	+DB	122	0	000014	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
125	20	20	+DB	122	1156	READ	4B	000001	000000	000043	007000 IW BL CO	NORMAL COMPLETION	1
112	20	20	+DB	122	1155	WRITE	1W	000320	000004	000000	007000 IW BL CO	NORMAL COMPLETION	1
36	7	20	+DB	122	0	000006	0W	000000	000000	000000	007000 IW BL CO	NORMAL COMPLETION	1
23	7	20	SBUF	10	0	000006	0W	000000	000000	000000	017000 SB IW BL	NORMAL COMPLETION	1

***** I/O REQUEST TABLE (IN USE LIST) *****

TABLE INDEX	LOGICAL DEVICE	PCB	ADDR REL	DST	BUFFER ADDRESS	FUNC	COUNT	PARM1	PARM2	MISC	FLAGS.....	STATUS DESCRIPTION	STATUS
50270	20	21	+DB	114	1	READ	415B	000003	000000	000002	006000 IW BL	PENDING	0

9

***** SYSTEM BUFFER ANALYSIS *****

ELEMENTS IN TABLE	16	MAXIMUM NUMBER OF ELEMENTS IN USE	1
ELEMENTS IN PRIMARY AREA	14	CURRENT NUMBER OF ELEMENTS IN USE	0
SIZE OF EACH ELEMENT	128	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	1417	TOTAL REQUEST	26
INDEX TO LAST FREE ELEMENT	1216		

9

***** TERMINAL BUFFERS *****

ELEMENTS IN TABLE	255	MAXIMUM NUMBER OF ELEMENTS IN USE	6
ELEMENTS IN PRIMARY AREA	224	CURRENT NUMBER OF ELEMENTS IN USE	2
SIZE OF EACH ELEMENT	32	OVERFLOWS	0
INDEX OF FIRST FREE ELEMENT	7010	TOTAL REQUEST	160
INDEX TO LAST FREE ELEMENT	6650		

FREE LIST

TABLE INDEX	LINK	TERMINAL BUFFER
6850	0	..:
6610	6650	.....
6550	6610	..0:07/0J1/18/LOGON FOR: JON, JON DAVIS, PUB ON LDEV #10.....
6450	6550	.....
6510	6450	..:
6410	6510	.. 0J1 ..>
6310	6410	.....
6350	6310	.. IEOJ.....
6250	6350	..>
6150	6250	.....

BROKEN TERMINAL BUFFER LINK

9

050140: 100000 000260 003740 000000 000000 000000 000000 000000 050150: 000000 000000 000000 000000 000000 000000 000000 177777

\$\$\$\$\$\$ DST 7 (INTERRUPT CONTROL STACK) \$\$\$\$\$\$

050160: 000000 000000 000000 000000 000000 000000 000000 000000 050170: 000000 000000 000000 000000 000000 000000 000000 000023
050200: 000001 000000 000000 000000 001750 001750 000143 000144 050210: 000426 000454 000000 000360 000312 000230 000375 000356
050220: 000310 000000 000000 000000 000000 000000 000000 000000 050230: 000000 000000 000000 000000 000000 000000 000001 000000
050240: 000130 100076 000131 177777 000000 103710 000460 124223 050250: 002260 177644 000154 000004 125023 000000 001514 100074
050260: 000000 000000 001000 000144 043640 022320 000312 000004 050270: 043640 000000 043640 003176 000000 000000 100160 000000
050300: 000000 000004 124223 000144 000001 177777 000000 000000 050310: 000800 043640 100166 000400 000000 000020 000000 000006
050320: 156743 000000 000000 000000 000764 000312 000001 000303 050330: 000000 000025 000000 066253 000000 066300 000000 000021
050340: 000000 000303 000000 000347 002057 100074 000066 000002 050350: 002002 140474 000072 000000 057712 000050 000000 000144

050360: 001012 003176 100001 000015 100160 000002 000000 100000 050370: 000000 000002 003220 141074 000026 000000 000000 000000
050400: 164000 000000 000010 000000 000000 001146 000067 011722 050410: 100074 000015 000000 001000 006412 000005 033627 102033
050420: 000007 006412 000005 034303 102033 000005 056277 000010 050430: 000012 021070 001000 000000 000006 160626 000006 160640
050440: 000007 002772 102433 000016 000000 000000 000000 002114 000006 050450: 160640 000006 160640 002448 056000 037435 123317 000006
050460: 160640 000006 160614 021374 000007 025207 101033 000010 050470: 010000 000000 066407 014147 103074 000015 043640 000001
050500: 000000 001000 033534 100433 000010 000004 124200 000004 050510: 127623 000000 003777 000000 177620 057712 000004 000013
050520: 052654 130176 000004 130201 000004 000245 000303 001140 050530: 062413 006571 000003 026260 102033 000003 000000 000000
050540: 000303 000000 000006 116571 000006 116571 002446 056000 050550: 037435 123317 000006 116571 000000 000000 000000 060742

050560: 057712 000050 000000 021374 057742 177777 000001 002047 050570: 143151 000032 057712 000131 000000 021374 000007 025207
050600: 103033 000010 000155 000002 000000 000111 000000 021314 050610: 000007 025207 101033 000010 000002 000000 000000 000000
050620: 000000 000000 000000 000000 000000 000000 000000 000000 050630: 000000 000000 000000 000000 000000 000000 000000 000000
LINES 050640 - 051237 SAME AS ABOVE

051240: 000000 000000 000000 000000 000000 000000 000000 000000 051250: 000000 000000 000000 000000 000000 000000 000000 000000

\$\$\$\$\$\$ DST 13 (I/O QUEUE) \$\$\$\$\$\$

051260: 036066 000013 000023 001221 002401 000000 000000 001605 051270: 006000 000000 000024 000002 100114 000001 000000 177363
051300: 000003 000000 010400 017000 000036 000007 000000 000010 051310: 000000 000006 000000 000000 000000 010001 007000 000112
051320: 000007 000000 100122 000000 000006 000000 000000 000000 051330: 010001 011000 000064 000007 000000 000010 000000 000005
051340: 000000 000000 000000 000001 011000 000077 000007 000000 051350: 000010 000000 000003 000000 000000 000000 000001 011000
051360: 000665 000007 000000 000010 000000 000004 000000 000000 051370: 000000 000001 007000 000125 000024 000000 100122 001155
051400: 000001 000001 000320 000004 010001 007000 000140 000024 051410: 000043 100122 001156 000000 177774 000001 000000 010001
051420: 007000 000153 000024 000000 100122 000000 000014 000000 051430: 000000 000000 010001 011000 000166 000024 000000 000010
051440: 000000 000003 000000 000000 000000 000001 011000 000201 051450: 000024 000000 000010 000000 000003 000000 000000 000000

051460: 000001 007000 000214 000024 000000 100114 000000 000001 051470: 000000 000000 000004 007001 007000 000227 000024 000000
051500: 100114 000000 000013 000000 000000 000000 007001 017000 051510: 000242 000024 000000 000010 000000 000005 000000 000000
051520: 000000 007001 007000 000255 000024 000000 100114 002734 051530: 000001 177762 000000 000000 007001 007000 000270 000024
051540: 000000 100114 000000 000034 000000 000000 000000 007001 051550: 007000 000303 000024 000000 100114 000515 000777
051560: 000320 000000 007001 007000 000316 000024 000043 100114 051570: 000001 000000 000000 000003 000000 007042 011000 000331
051600: 000024 000000 000010 000000 000036 000000 000000 000000 051610: 000001 007000 000344 000024 000000 100114 000000 000001
051620: 000000 000000 000000 007001 007000 000357 000024 000000 051630: 100114 000000 000012 000000 000000 000000 007001 007000
051640: 000372 000024 000000 100114 000746 000001 177721 000000 051650: 000000 007001 011003 000405 000024 000000 000010 000614

051660: 000001 177756 000000 000000 000001 011000 000420 000024 051670: 000000 000010 000000 000003 000000 000000 000000 000001
051700: 011000 000433 000024 000000 000010 000000 000003 000000 051710: 000000 000000 000001 005000 000446 000024 000000 100104
051720: 000000 000001 000000 000000 000000 004401 005000 000461 051730: 000024 000000 100104 000022 000001 000000 000320 000000

9

***** PCBX AND STACK MARKERS FOR DST 130 (PCB 0) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE #J1	DUPLICAT NO	INTERACT NO	INIT Q	JCUT INDEX
000444	000600	2	3	4	3	124	125				000002	0

ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT
125175	4	177756	017571	101074	000011	74 KERNELC (75)		
125184	4	000003	016736	103074	000006	74 KERNELC (75)		
125156	4	000003	016573	102074	000010	74 KERNELC (75)		
125146	4	000000	001661	102036	000022	36 PROCSEG (34)		
125124	4	000000	000062	162301	000067	301 USER SEGMENT		
125095	4	000000	000002	160301	000004	301 USER SEGMENT		
125031	4	000000	000000	140041	000004	41 MORGUE (37)		

\$\$\$\$\$\$\$\$ DST 130 \$\$\$\$\$\$\$\$
 *****PCBX:*****

***PXGLOBAL:
 124223: 000444 000600 170003 001004 001403 000124 020125 000000

***PXFIXED:
 124233: 000120 000154 002260 000002 000134 000710 000000 000004 124243: 000000 000000 000000 000000 000301 004660 000000 000000
 124253: 000000 000000 000000 100001 010000 000000 000000 002414 124263: 000000 000122 000000 000040 000000 000000 000000 000000
 124273: 000000 000000 000000 000001 000000 000000 000000 000000 124303: 000000 000000 000037 000122 000122 000000 000000 000000
 124313: 000000 000000 000000 000000 000000 000000 000000 000000 124323: 000000 000000 000000 000000 000000 000000 000000 000000
 124333: 000000 000005 000000 000000 000000 000000 000000 000000 124343: 000000 000000 000000 000000 000000 000000 000000 000000

***PXFILE: (ZERO TABLE ENTRIES ARE NOT PRINTED)
 124353: 000310 000000 000000 000000 000000 000010 000000 000000 124363: 000000 000000 000000 000000 000000 000000 000000 000000
 124373: 000146 000130 000100 000000 000000

----- FILE VECTOR TABLE: ENTRY ADDRESS LOCK BRK LOCK COUNT/PIN HIPRI TAIL HIPRI HEAD LOPRI TAIL LOPRI HEAD
 124400: 000106 100423 000000 000000 0 106 LOCK 1 23
 124404: 000126 100423 000000 000000 1 126 LOCK 1 23

----- CONTROL BLOCKS:
 124500(000105): 000001 140020 000001 022123 052104 044516 020040 000305 001300 002000 001000 000000 124500:.....\$STDIN
 124514(000121): 000000 000010 000000 000000 000000 140020 000002 022123 052104 046111 051524 000704 124514:.....\$STDLIST
 124530(000135): 001301 002000 001000 000000 000000 000100 000000 000000 000000 124530:.....
 124541: 000000 000000 000000 000000 000000 000000 000000 000000 124551: 000000 000000 000000 000000 000000 000000 000000 000000
 LINES 124561 - 124640 SAME AS ABOVE

124641: 000000 000000 000000 000000 000000 000000 000000 000000 124651: 000000 000000

----- AVAILABLE FILE TABLE: FNUM FTYPE \$NULL PACB V LACB V IOQX
 124653: 000000 000127 002130 000000 2 FILE 0 127 1 130
 124657: 000000 000126 000130 000000 1 FILE 0 126 0 130

***PXPOINTERS:
 124663: 000000 000314 000434 000444

****DL REGISTER: *****
 124667(177644): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 124667:.....
 LINES 124703 - 125012 SAME AS ABOVE

125013(177770): 100701 000000 177777 000000 000000 177777 000000 177777 125013:.....
 ****DB REGISTER: *****
 125023(000000): 000000 000000 000000 125023:.....

125026(MARKER): 000000 000000 140041 000004 MORGUE (37)

9

125032(MARKER)	: 000000 000002 180301 000004	-----
125036(000013)	: 000001 000001 158744 177777 000008 158744 040000 000000 000025 158744 048501 051524 125036: MAST	
125052(000027)	: 043111 048105 027120 052502 027123 054523 001000 010000 004000 177757 015141 140074 125052: FILE.PUB.SYS a <	
125066(000043)	: 000010 000004 125023 000023 000000 001000 177756 017571 103074 000011 000004 125023 125066: y <	
125102(000057)	: 000013 000000 001724 000000 000005 000000 000000 000000 000000 000000 000000 000000 125102:	
125116(000073)	: 000000 000000 000021	125116:
125121(MARKER)	: 000000 000062 182301 000067	-----
125125(000102)	: 000000 001750 000000 001750 000008 158744 000000 000000 000000 001750 000001 005501 125125: A	
125141(000116)	: 000000 001750	125141:
125143(MARKER)	: 000000 001861 102038 000022 PROCSEG (34)	-----
125147(000124)	: 000460 000000 000004 000000	125147: 0
125153(MARKER)	: 000003 018573 102074 000010 KERNELC (75)	-----
125157(000134)	: 100000 000000	125157:
125161(MARKER)	: 000003 016736 103074 000008 KERNELC (75)	-----
125165(000142)	: 000004 125023 043840 000000 001000	125165: G
125172(MARKER)	: 177756 017571 101074 000011 KERNELC (75)	-----
S REGISTER	: **	-----
125176(000153)	: 000004 125023 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 125176:	
125212(000167)	: 000000 000000 000485 007312 140040 000182 000000 000000 000000 000000 000000 031400 000000 125212: 5 3	
125226(000203)	: 000000 000011 000004 125023 000013 000000 000177 000312 000000 177777 000000 000000 125226:	
125242(000217)	: 000464 000460 001400 000000 000000 100001 006100 000465 001301 001010 000413 001026 125242: 4 0 @ 5	
125256(000233)	: 000454 000480 000484 000470 001180 001170 000505 001212 001488 000000 000003 000634 125256: 0 4 8 p x E 6	
125272(000247)	: 000001 000022 000000 000640 000474 000500 000000 000352 000031 000651 001522 000022 125272: @ R	
125308(000263)	: 000000 000000 002525 020143 015006 042101 053111 051440 020040 050125 041040 020040 125308: U c DAVIS PUB	
125322(000277)	: 020040 050125 041040 020040 020040 045117 047040 020040 020040 000065 000067 000000 125322: PUB JON 5 7	
125336(000313)	: 002152 000000 002154 177200 177330 000002 000000 020040 000000 000000 047040 020040 125336: j 1 N	
125352(000327)	: 020040 000040 000087 000000 002152 000000 002154 177200 177330 000001 000000 000000 125352: 7 j 1	
125366(000343)	: 000000 000001 177777 000000 000002 000000 000001 100184 000001 000000 184220 125366: t	
125402(000357)	: 000003 002614 001301 100204 000000 022123 052104 048111 051524 000002 000000 000001 125402: \$STDLIST	
125416(000373)	: 000112 000001 001738 000781 000031 025040 000002 000000 000000 001012 000000 000000 125416: J *	
125432(000407)	: 000000 000000 001301 000001 045117 047040 020040 020040 042101 053111 051440 020040 125432: JON DAVIS	
125446(000423)	: 045117 047040 020040 020040 022123 052104 048111 051524 045117 047040 020040 020040 125446: JON \$STDLISTJON	
125462(000437)	: 042101 053111 051440 020040 045117 047040 020040 020040 022123 052104 044518 020040 125462: DAVIS JON \$STDIN	
125478(000453)	: 000000 020040 020040 020040 020040 020040 050125 041040 020040 020040 042101 053111 051440 125478: PUB DAVIS	
125512(000467)	: 020040 020040 020040 020040 020040 051520 047517 048040 020040 020040 020040 020040 125512: SPOOL	
125528(000503)	: 020040 020101 053111 051440 020040 020040 020040 020040 020040 020040 051520 047517 048040 125528: AVIS SPOOL SPOOL	
125542(000517)	: 020040 020040 020040 020040 020040 020040 000000 000000 000000 000000 000000 000000 125542:	
125558(000533)	: 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 125558:	
125572(000572)	: 125651 SAME AS ABOVE	-----
125652(000627)	: 000000 000000 000000 000000 027040 000001 000102 000200 000002 177772 000000 000400 125652: B	
125668(000643)	: 000002 000014 000400 100000 020000 000003 000000 000000 000000 000000 000000 177777 000006 125668:	
125702(000657)	: 000002 177772 000000 000400 000002 000014 000400 100000 020000 000000 000000 000000 125702:	
125718(000673)	: 000000 000000 177777 000008 000000 000000 000000 000000 000000 000000 000000 000000 125718:	
125732(000707)	: 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 125732:	
125746(000753)	: 125775 SAME AS ABOVE	-----
126012(000767)	: 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000341 126012: SEG MASH'ME	
126028(001003)	: 048517 051123 100200 100207 000000 000000 000035 000064 000000 000000 000000 000000 126028: MORY 4	
126042(001017)	: 000000 000000 100004 000000 000000 000000 000301 000441 000301 000301 001442 000000 021517 126042: ! #0	
126058(001033)	: 041047 000207 100242 000000 000000 000154 000003 000000 000000 000000 000000 000000 126058: B 1	

9

126072(001047):	000001	000000	000000	000110	100003	000000	000000	000121	000441	000441	000441	000000	000000	126072:H.....Q.!.!.!.!		
126106(001063):	000001	000000	000000	000017	000000	000000	000000	000104	011770	143006	000663	000000	000001	126106:D.....		
126122(001077):	000001	000000	031417	000000	000000	021374	000001	177620	052634	000000	000130	177777	126122:	.....3.....U.....X.....		
126136(001113):	000007	032032	140033	000015	000000	000017	051514	051515	001120	001100	051514	000004	126136:	.....4.....SLSM.P@SL.....		
126152(001127):	032236	102033	000011	000020	000001	177620	000000	021374	000000	000001	033534	100433	126152:	.....4.....7\.....		
126166(001143):	000010	000000	000001	000036	000352	000001	100164	000000	177620	057712	000004	000000	126166:	.....t.....		
126202(001157):	000000	100204	000000	022123	052104	000460	000004	000303	001000	062000	006560	000003	126202:	.....\$STD.0.....d.p.....		
126216(001173):	026260	100033	000032	000023	000000	000303	000000	000006	116560	000006	116560	002446	126216:	.....p.....p.&.....		
126232(001207):	056000	037435	123317	000006	116560	000000	000000	060742	057712	000050	000600	000404	126232:	.....?.....p.....a.....(.....		
126246(001223):	016037	000600	000000	050125	041040	020040	020040	042101	053111	051440	020040	000000	126246:	.....PUB.....DAVIS.....		
126262(001237):	000000	000000	000000	000000	000000	000000	000400	164220	000000	000000	000000	000000	126262:	.....		
126276(001253):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	126276:	.....		
LINES 126312 - 126355 SAME AS ABOVE																	
126356(001333):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000400	001777	020040	126356:	.....		
126372(001347):	020040	020040	020040	050125	041040	020040	020040	042101	053111	051440	020040	045117	126372:	.....PUB.....DAVIS.....JO.....		
126406(001363):	047040	020040	020040	020040	020040	020040	020040	020202	004040	000001	110482	110482	126406:	N.....2.2.....			
126422(001377):	110462	000000	010111	000002	000033	000000	005771	000000	000000	165623	020561	000704	126422:	.....2.....I.....lq.....		
126436(001413):	176000	001000	016037	000600	000600	000000	000000	000400	164220	000000	000000	000000	126436:	.....		
126452(001427):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	126452:	.....		
LINES 126466 - 126531 SAME AS ABOVE																	
126532(001507):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000007	126532:	.....		
126548(001523):	005005	110462	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	126548:	.....2.....		
126562(001537):	000000	000000	000000	051520	047517	046040	000000	000127	000111	177632	000001	000000	126562:	.....SPOOL.....W.I.....		
126576(001553):	002760	140005	000452	000040	000020	000130	000111	000000	000023	000460	000000	000001	126576:	.....*.....X.I.....0.....		
126612(001567):	007656	141002	000013	043640	000000	000003	000007	000003	010175	141002	000014	140002	126612:	.....G.....U.....X.....4.....		
126626(001603):	000016	000023	021374	000001	177620	052614	000000	000130	177777	000007	032032	140033	126626:	.....SLSM.@.OSL.....4.....		
126642(001617):	000015	000000	000017	051514	051515	001100	001060	051514	000004	032236	102033	000011	126642:	.....7\.....U.....W\.....		
126656(001633):	000020	000001	177620	000000	021374	000000	000001	033534	100433	000010	000127	000534	126656:	.....@e-h.....h.&.....?		
126672(001647):	000004	177340	000000	177350	000000	177620	057712	000004	000013	052614	000000	000003	126672:	.....h.....h.....(.....?.....		
126706(001663):	003733	140404	002415	000303	001100	062413	006550	000003	026260	102033	000031	000023	126706:	.....h.....a.....Y.....?.....		
126722(001677):	000000	000303	000000	000006	116550	000006	116550	002446	056000	037435	123317	000006	126722:	.....h.....i.....Y.....?.....		
126736(001713):	116550	000001	000000	000000	060742	057712	000050	000000	021374	057742	177777	000001	126736:	.....i.....Y.....?.....		
126752(001727):	002047	143151	000032	057712	000131	000000	021374	000007	025207	103033	000010	000000	126752:	.....i.....Y.....?.....		
126766(001743):	021374	057742	177777	000001	002047	143151	000032	057712	000131	000000	021374	000007	126766:	.....i.....Y.....?.....		
127002(001757):	025207	103033	000010	000000	000000	000000	000000	000000	000000	000000	000000	000000	127002:	.....i.....Y.....?.....		
127016(001773):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	127016:	.....		
LINES 127032 - 127505 SAME AS ABOVE																	
27506(002463):	000000																
27507:	000000	000000	000000	000000	000000	000000	000000	000000	127517:	000000	000000	000000	000567	000000	000001	000000	164210
27527:	000000	002432	001075	000233	140005	000456	000000	000000	127537:	000001	000000	000000	002432	000000	000200	000000	164210
27547:	010001	001075	002404	140033	000017	001075	031021	140033	127557:	000004	035377	003574	004574	000024	005000	002724	000122
27567:	000444	023420	001000	000444	000020	000440	000016	100000	127577:	000016	020000	000002	124235	000000	000000	000000	000000
27607:	000000	124667	000002	000000	102001	000000	000000	077660	127617:	000000	077660	000000	077670				

\$\$\$\$\$\$ AVAILABLE AREA \$\$\$\$\$\$
*** (127623 TO 130222 NOT PRINTED) ****

\$\$\$\$\$\$ CST 62 UDC (62)
*** (130223 TO 140222 NOT PRINTED) ****

\$\$\$\$\$\$

MAIN	0	STT	CODE	ENTRY	SEC
NAME					
HARDRES	1		0	0	
TERMINATE	2				?
SEGMENT LENGTH			4		
HARDRES	1				
NAME		STT	CODE	ENTRY	SEC
HELP	1		0	1876	
READCHAR	2	2343		2421	
PRINTCHAR	3	2615		2827	
TICK	4	3002		3002	
OLDTICK	5	3444		3456	
UNIMPEDE	126				?
SYSPROC	127				?
AWAKE	130				?
STARTCLOCK	6	3744		3744	
CHEKTRFREE	7	4035		4035	
TIMERQ	10	4046		4046	
ABORTTIMERQ	11	4245		4245	
TIMER	12	4363		4363	
TIP	13	4501		20510	
STATREQUEST	14	21317		21321	
IDLEWAIT	15	21541		21541	
SENDCLRF	16	22005		22005	
DOCLFSYNC	17	22171		22171	
BREAKSERVICE	20	22437		22437	
BREAKOK	21	22463		22463	
SSBREAKOK	22	22463		22465	
SETREADERROR	23	22534		22534	
PRINTPFMSG	24	22554		22554	
CHECKQUEUE	25	22672		22672	
STARTTIMEOUT	26	22673		22704	
STOPTIMEOUT	27	23004		23015	
MODCONTROL	30	23054		23066	
DSETCONTROL	31	23324		23324	
HPXCONTROL	32	23325		23325	
HPXWRITE	33	23326		23326	
HPXWRITE	34	23327		23377	
INITIO	131				?
SETSDB	132				?
RESETDB	132				?
LDEVNDRDY	35	23521		23534	
IOMESSAGE	36	23721		23721	
LOGERROR	37	24002		24002	
RETURNSYSBUF	40	24046		24046	
IOUNIMPEDE	41	24135		24135	
IOIMPEDE	42	24172		24172	
IMPEDE	133				?
GIP'MPIB	43	24241		24260	
MPSTAT	134				?
GIP	44	24241		24260	
CHKCHANNELQUE	45	24446		24446	
EOFCHECK	46	24553		24553	
START'MPIB	47	25151		25151	
STARTIO	50	25151		25151	
HALT'MPIB	51	25312		25312	
HALTIO	52	25312		25312	
SYSIOPROC	53	25341		25341	

WAIT	135				?
REQSTATUS	54	25366		25366	?
SIODM	55	25462		25575	
IOUNFREEZE'	136				?
IOFREEZE'	137				?
FLAGPROCASSENT	140				?
FETCHIOSEC	141				?
SECWRITECOMPLETE	142				?
SECREADCOMPLETE	143				?
ADJUSTLOCALITY	144				?
WAITFORIO	56	30423		30433	
QUEUEONSEGMENT	145				?
ADDTLOCALITY	146				?
WAITFORIOX	57	30423		30441	
IOSTATUS	60	30737		30737	
IOSTATUSX	61	30737		30741	
ATTACHIO	62	31016		31016	
SDISCO	147				?
SETCRITICAL	150				?
CLEARLWS	151				?
RESETPCRITICAL	152				?
CLEARAWAKE	63	32033		32033	
SETAWAKE	64	32033		32035	
RETURNIBUF	65	32077		32077	
RETURNDISCREQ	66	32077		32207	
RETURNIOQ	67	32077		32153	
RETURNSBUF	70	32077		32150	
GETIBUF	71	32265		32265	
GETDISCREQ	72	32265		32275	
GETIOQ	73	32265		32270	
GETSBUF	74	32265		32270	
DISCMANAGER	75	32375		32375	
QUEUEDISCREQ	76	32523		32571	
STORE'IOQ	77	32725		32725	
DEQUEUE'DISCREQ	100	33026		33026	
DMONITOR	101	33120		33120	
CHECKINDEX	102	33335		33335	
AWAKE TERMINAL	103	33420		33420	
AWAKE IO	104	33446		33446	
SUDDENDEATH	105	33535		33564	
MASTERCLEARMPIB	106	33634		33634	
MASTERCLEAR	107	33634		33634	
WIOC'MPIB	110	33727		33727	
RIOC'MPIB	111	33746		33746	
INIT'MPIB	112	33766		33766	
LDEVTOOPT	113	34004		34004	
LDEVTOSUBTYPE	114	34052		34052	
LDEVTOTYPE	115	34061		34061	
EXCHANGEDB	153				?
IOFAILURE	116	34126		34150	
DONVERT	117	34220		34220	
BONVERT	120	34261		34261	
WRITE2	121	34276		34276	
CHEKLDDEV	122	34304		34304	
DEQUEUE	123	34336		34336	
ADDHEAD	124	34354		34354	
ADDTAIL	125	34373		34373	
SEGMENT LENGTH					
34600					

NAME	STT	CODE	ENTRY	SEG
0				
MAIN				
NAME	1	0		
KERNELC	1	0		
TERMINATE	2			?
SEGMENT LENGTH	4			
1				
KERNELC				
NAME	1	0	1514	
DSP	1	0	1514	
TIMER	123			?
SUDDENDEATH	124			?
INITIO	125			?
STARTCLOCK	126			?
HELP	127			?
PROCESSSCHDMSC	2	2674	2674	
COLLECTGARBAGE	3	3225	4512	
SLURPIN	4	4705	4705	
FETCHSEGMENT	5	5325	5351	
GETDISCREG	130			?
CREATELOCKSPACE	6	6857	6731	
MAKEROOM	7	7062	7217	
ADJUSTLOCALITY	10	7425	7456	
PUTDEVICESEGS	11	7705	7705	
PUTPROCONSEGSMP	12	10001	10001	
MAKEDC	13	10077	10077	
ADDTOLOCALITY	14	10213	10213	
RECOVEROC	15	10357	10357	
DISCMANAGER	131			?
RESERVEREGION	16	10733	10733	
CLEANREGION	17	11106	11134	
RELEASEREGION	20	11613	11651	
PUTDOWN	21	12206	12206	
TAKEOFFARL	22	12317	12317	
SEGREADCOMPLETO	23	12453	12453	
RETURNDISCREG	132			?
PROCESSCOMPIRG	24	12602	12643	
SECURITECOMPLET	25	12777	12777	
PROCESSINITMSG	26	13210	13210	
QUEUEDISCREG	133			?
STARTSECURITE	27	13440	13440	
CHECKFORPNDGDIS	30	13560	13560	
DEQUEUEDISCREG	134			?
FETCHIOSEG	31	13620	13620	
TESTIOFROZEN	32	13667	13667	
IOFREEZE	33	13726	13735	
IOUNFREEZE	34	13726	13745	
UNDEFERSEGSMPQ	35	14075	14075	
ALWAKEDEVICE	36	14236	14236	
ALWAKEIO	135			?
CLEARALLS	37	14324	14324	
GENSPCREG	40	14335	14335	
FLAGPROCABSENT	41	14376	14376	
GETDATASEGCHANG	42	14522	14522	
SETSEGSBKPTS	43	14625	14625	
CONVXTLABELTOO	44	14761	14761	
QUEUEONSEGMENT	45	15112	15112	
EXCHANG:DB	46	15147	15147	
RESETDB	47	15403	15403	

SETSYSDB	50	15466	15466	
RELSIR	51	15514	15514	
PSEUDOINT	136			?
GETSIF	52	15772	15772	
RESETCRITICAL	53	16403	16403	
CRASH	137			?
SETCRITICAL	54	16535	16535	
DELAY	55	16551	16551	
TIMER	140			?
ABORTIMEREQ	141			?
UNIMPEDE	56	16600	16600	
IMPAIRED	57	16606	16606	
BUMPQPRI	60	16621	16650	
IMPEDE	61	16730	16730	
ALWAKE	62	16750	16750	
WAIT	63	17331	17331	
RESETDISPQ	64	17640	17640	
QUEUEPROC	65	20000	20000	
CRASH	66	20217	20217	
ABORTPROCESS	67	20222	20222	
UPDATEDISCCOPY	70	20226	20232	
ATTACHIO	142			?
WRITEDSEG	71	20226	20236	
LOCKSEG	72	20341	20345	
IOUNFREEZE	73	20341	20460	
IOFREEZE	74	20341	20441	
UNLOCKSEG	75	20341	20422	
UNFREEZE	76	20341	20403	
FREEZE	77	20341	20364	
UNLOCKSEG'	100	20675	20701	
UNFREEZESEG'	101	20675	20717	
LOCKSEG'	102	21036	21042	
FREEZESEG'	103	21036	21050	
CHECKALIVE	104	21151	21151	
STACKCHECK	105	21186	21186	
SET'PSIF	106	21175	21200	
CLEAR'PSIF	107	21175	21314	
CONVSEGIOTOSTIN	110	21402	21402	
BUILDSEGIOT	111	21473	21473	
SYSPROC	112	21531	21531	
UPDATESTATISTIC	113	21545	21733	
FUPDATESTATISTI	114	21545	21740	
RECEIVMSG	115	22137	22137	
POSTSTATUS	116	22372	22372	
SENDMSG	117	22467	22604	
RELSYSTABENTRY	120	23043	23043	
GETSYSTABENTRY	121	23137	23137	
POSTAT	122	23230	23230	
SEGMENT LENGTH		23664		

*** WARNING ***
ERROR #48 CODE SEGMENT MAY BE TOO LARGE

PRIMARY DB	0	INITIAL STACK	2200	CAPABILITY	703
SECONDARY DB	0	INITIAL DL	0	TOTAL CODE	23676
TOTAL DB	0	MAXIMUM DATA	?	TOTAL RECORDS	125
ELAPSED TIME	00:00:27.445			PROCESSOR TIME	00:03.243

9

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11590000 00000 1 PROCEDURE RELEASEREGION(REGIONBASE,RECSIZE);
11590000 00000 1 VALUE REGIONBASE,RECSIZE;
11590000 00000 1 DOUBLE REGIONBASE;
11594000 00000 1 INTEGER RECSIZE;
11596000 00000 1 OPTION PRIVILEGED,UNCALLABLE;
11598000 00000 1
11600000 00000 1 COMMENT
11602000 00000 1
11604000 00000 1 THIS PROCEDURE COMBINES THE REGION BEGINNING AT
11606000 00000 1 REGIONBASE WITH NEIGHBORING AVAILABLE REGIONS AND LINKS
11608000 00000 1 THE RESULTANT INTO THE APPROPRIATE AVAILABLE REGION LIST.
11610000 00000 1
11612000 00000 1 ;
11614000 00000 1
11616000 00000 1 BEGIN
11618000 00000 1
11620000 00000 2 <<DB ASSUMED AT SYSDB ON ENTRY>>
11622000 00000 2
11624000 00000 2 INTEGER RSIZEINPAGES,
11626000 00000 2 TURNEDOFFSIZE:=0;
11628000 00000 2 DOUBLE TRAILERADDR,
11630000 00000 2 NEXTADDR;
11632000 00000 2
11634000 00000 2
11636000 00000 2 SUBROUTINE TURNOFFSDVALIDFLAGS;
11638000 00000 2
11640000 00000 2 COMMENT
11642000 00000 2
11644000 00000 2 TURNOFFSDVALIDFLAGS IS CALLED TO TURN OFF THE SUBREGION
11646000 00000 2 DISPLACEMENT VALID FLAGS FOR THE SUBREGIONS WHICH ARE PART
11648000 00000 2 OF A RESERVED REGION WHICH IS BEING RETURNED TO THE AVAILABLE
11650000 00000 2 REGION POOL. THE RESERVE ON THE REGION HAD BEEN ABORTED, AND
11652000 00000 2 THE SUBREGION DISPLACEMENTS AND INITIATION MESSAGE ARE NO LONGER
11654000 00000 2 VALID.
11656000 00000 2
11658000 00000 2 ;
11660000 00000 2
11662000 00000 2 BEGIN
11664000 00000 2 TOS:=REGIONBASE;
11666000 00000 3 TOS:=TOS+RBTORSDDISP;
11668000 00001 3 ASMB(LSEAR);
11670000 00003 3 RSIZEINPAGES:=TOS;
11672000 00004 3 TOS:=TOS+RSTOSSDDISP;
11674000 00005 3 DISABLE;
11676000 00006 3 WHILE TURNOFFSIZE < RSIZEINPAGES DO
11678000 00007 3 BEGIN
11680000 00012 3 TOS:=0;
11682000 00012 4 ASMB(SSEAR);
11684000 00013 4 TOS:=TOS+SOTOSSDDISP;
11686000 00014 4 ASMB(LSEAR);
11688000 00015 4 TURNOFFSIZE:=TURNOFFSIZE+S0;
11690000 00016 4 TOS:=TOS&LSL(PAGEPOWER);
11692000 00021 4 TOS:=TOS+SSTOSSDDISP;
11694000 00022 4 ASMB(LADD);
11696000 00023 4 IF CARRY AND TURNOFFSIZE<>RSIZEINPAGES <<01644>>
11698000 00024 4 THEN SUDDENDATH(614); <<OFF BANK>>
11700000 00026 4

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PAGE 0142 KERNEL MEMORY ALLOCATION PROCEDURES : RELEASE REGION

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11702000 00032 4 END;
11704000 00034 3 ASMB(DDEL);
11706000 00035 3 END <<TURNOFFSDVALIDFLAGS>>;
11708000 00036 2
11710000 00036 2 <<
11712000 00036 2 INVALIDATE CONTROL CELLS IN THE REGION
11714000 00036 2 >>
11716000 00036 2
11718000 00036 2 TOS := 13; <<01571>>
11720000 00042 2 TOS := RECSIZE; <<01571>>
11722000 00043 2 TOS := REGIONBASE; <<01571>>
11724000 00044 2 MSTAT(*,*,*,*); <<01571>>
11726000 00045 2 TOS:=REGIONBASE;
11728000 00046 2 TOS:=TOS+RBTORINITMSGDISP;
11730000 00050 2 TOS:=0;
11732000 00050 2 ASMB(SSEAR); <<ZERO OUT INIT MSG FOR CLEAN REGION>>
11734000 00051 2 TOS:=TOS+INITMSGTORASDISP;
11736000 00053 2 TOS:=REGAVAILABLECODE;
11738000 00054 2 ASMB(SSEAR);
11740000 00055 2 TOS:=TOS+RASTORSDDISP;
11742000 00056 2 ASMB(LSEAR);
11744000 00057 2 RSIZEINPAGES:=TOS;
11746000 00060 2 ASMB(DDEL);
11748000 00061 2 TURNOFFSDVALIDFLAGS;
11750000 00065 2
11752000 00065 2 IF BUGCATCH THEN
11754000 00067 2 BEGIN <<CHECK INTEGRITY>>
11756000 00067 3 TOS:=REGIONBASE;
11758000 00070 3 TOS:=TOS+RBTOSSDDISP;
11760000 00072 3 ASMB(LSEAR);
11762000 00073 3 X:=S0;
11764000 00074 3 TOS:=TOS&LSL(PAGEPOWER)+SSTORASDISP+RASTOPTSSDISP;
11766000 00101 3 ASMB(LADD,LSEAR);
11768000 00103 3 IF TOS<>X THEN SUDDENDATH(614); <<01644>>
11770000 00107 3 TOS:=X;
11772000 00110 3 ASMB(SSEAR,DDEL);
11774000 00112 3
11776000 00112 3 TOS:=REGIONBASE;
11778000 00113 3 ASMB(KCH,DEL);
11780000 00114 3 IF S0.(10:6) << HEADERLENGTH THEN SUDDENDATH(614); <<01644>>
11782000 00122 3 TOS:=TOS&LSR(PAGEPOWER);
11784000 00123 3 X:=TOS;
11786000 00124 3 IF RSIZEINPAGES=MAXHOLESIZE AND X<>0 <<01644>>
11788000 00131 3 THEN SUDDENDATH(614); <<01644>>
11790000 00135 3 IF RSIZEINPAGES*X>MAXHOLESIZE THEN SUDDENDATH(614); <<01644>>
11792000 00144 3 END;
11794000 00144 2
11796000 00144 2 <<
11798000 00144 2 TRY TO COMBINE WITH AVAILABLE REGION ABOVE
11800000 00144 2 >>
11802000 00144 2
11804000 00144 2 TOS:=REGIONBASE;
11806000 00145 2 TOS:=TOS+RBTORSDDISP;
11808000 00147 2 ASMB(LSEAR);
11810000 00150 2 TOS:=TOS&LSL(PAGEPOWER);<<REGION SIZE IN WORDS>>
11812000 00151 2 IF = THEN
11814000 00152 2 BEGIN <<A WHOLE BANK OR INVALID>>

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9

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11810000 00152 3 IF RSIZEINPAGES <= MAXHOLESIZE THEN SUDDEDEATH(614); <<01644>>
11810000 00160 3 SO := -1; <<FORCE A CARRY BELOW>>
11820000 00162 3 END;
11820000 00163 2 ASMB(ADD);
11824000 00163 2 IF CARRY THEN ASMB(DOEL) <<END OF BANK>> ELSE
11826000 00170 2 BEGIN
11828000 00170 3 <<CHECK IF PAST PARTIAL LAST BANK>>
11830000 00170 3 ASMB(DDUP, DDUP);
11832000 00171 3 NEXTADDR := TOS;
11834000 00172 3 IF LASTMEMORYADDRESS <= NEXTADDR THEN ASMB(DOEL) <<END MEM>> ELSE
11836000 00200 3 BEGIN <<THERE'S A REGION ABOVE>>
11838000 00200 4 TOS := TOS + RSTOPTASDISP;
11840000 00202 4 TOS := REGAVAILABLECODE;
11842000 00203 4 ASMB(SSEA); <<PART REG AVAILABLE IN TRAILER FOR RECOVEROC>>
11844000 00204 4 TOS := TOS + TRASTOTRSDISP;
11846000 00205 4 TOS := RSIZEINPAGES;
11848000 00206 4 ASMB(SSEA);
11850000 00207 4 TOS := TOS + PTRSTORASDISP;
11852000 00210 4 ASMB(LSEA);
11854000 00211 4 TOS.REGAVAILABLEFLAG := 0;
11856000 00212 4 ASMB(DEL);
11858000 00213 4 IF = THEN ASMB(DOEL) ELSE
11860000 00216 4 BEGIN <<FOLLOWING REGION IS AVAILABLE>>
11862000 00216 5 TOS := TOS + RASTORSDISP;
11864000 00217 5 ASMB(LSEA); <<NEXT REGION'S SIZE>>
11866000 00220 5 RSIZEINPAGES := RSIZEINPAGES + SO;
11868000 00223 5 S1 := S1 + RSTORBDISP;
11870000 00226 5 TAKEOFFARL(=, *);
11872000 00227 5 END;
11874000 00227 4 END;
11876000 00227 3 END;
11878000 00227 2 <<
11880000 00227 2 <<
11882000 00227 2 TRY TO COMBINE WITH PREVIOUS REGION
11884000 00227 2 >>
11886000 00227 2
11888000 00227 2 TOS := REGIONBASE;
11890000 00230 2 IF PTRSTORBDISP > LSO THEN ASMB(DOEL) ELSE
11892000 00236 2 BEGIN <<REGION BEING RELEASED IS NOT THE FIRST IN THE BANK>>
11894000 00236 3 IF BUGCATCH THEN
11896000 00240 3 BEGIN <<CHECK INTEGRITY>>
11898000 00240 4 TOS := REGIONBASE;
11900000 00241 4 TOS := TOS + RTOPTASDISP;
11902000 00243 4 ASMB(LSEA);
11904000 00244 4 X := TOS;
11906000 00245 4 TOS := TOS + PTRSTORSDISP;
11908000 00246 4 TOS := X + LSL(PAGEPOWER);
11910000 00250 4 ASMB(LSUB; LSEA);
11912000 00252 4 TOS := X;
11914000 00253 4 ASMB(CMP);
11916000 00254 4 IF <= AND S1 <= 0 THEN SUDDEDEATH(614); <<01644>>
11918000 00262 4 ASMB(DOEL);
11920000 00263 4 END;
11922000 00263 3 TOS := TOS + RTOPTASDISP;
11924000 00265 3 ASMB(LSEA);
11926000 00266 3 TOS.REGAVAILABLEFLAG := 0;
11928000 00267 3 ASMB(DEL);
    
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11930000 00270 3 IF = THEN ASMB(DOEL) ELSE
11932000 00273 3 BEGIN <<PREVIOUS REGION IS AVAILABLE>>
11934000 00273 4 TOS := TOS + TRASTOTRSDISP;
11936000 00274 4 ASMB(LSEA);
11938000 00275 4 RSIZEINPAGES := RSIZEINPAGES + SO;
11940000 00300 4 X := SO;
11942000 00301 4 TOS := TOS + LSL(PAGEPOWER);
11944000 00302 4 S1 := S1 + PTRSTORBDISP;
11946000 00305 4 ASMB(LSUB, DDUP); <<YIELDS REGION BASE OF PREV AVAILABLE REGION>>
11948000 00306 4 REGIONBASE := TOS; <<NEW BEGINNING OF AVAIL REG>> <<###>>
11950000 00307 4 TAKEOFFARL(=, X);
11952000 00311 4 END;
11954000 00311 3 END;
11956000 00311 2 <<
11958000 00311 2 <<
11960000 00311 2 FIX UP COMBINED REGION'S HEADER AND TRAILER
11962000 00311 2 >>
11964000 00311 2
11966000 00311 2 TOS := REGIONBASE;
11968000 00312 2 TOS := TOS + RSTORSDISP;
11970000 00314 2 TOS := RSIZEINPAGES;
11972000 00315 2 ASMB(SSEA); <<FIX UP NEW REGION HEADER>>
11974000 00316 2 TOS := TOS + RSTORSDISP;
11976000 00317 2 TOS := REGAVAILABLECODE;
11978000 00320 2 ASMB(SSEA);
11980000 00321 2 TOS := TOS + RASTOPTASDISP;
11982000 00323 2 TOS := RSIZEINPAGES + LSL(PAGEPOWER);
11984000 00325 2 IF <= THEN ASMB(ADD) ELSE
11986000 00329 2 BEGIN <<WHOLE BANK IS FREE>>
11988000 00330 3 IF RSIZEINPAGES <= MAXHOLESIZE THEN SUDDEDEATH(614); <<01644>>
11990000 00336 3 ASMB(DOEL);
11992000 00337 3 TOS := LASTTRASADDR;
11994000 00340 3 END;
11996000 00340 2 ASMB(DDUP);
11998000 00341 2 TRAILERADDR := TOS;
12000000 00342 2 <<ADDRESS OF NEW REGION'S TRAILER STATE CELL ON TOS>>
12002000 00342 2 TOS := REGAVAILABLECODE;
12004000 00343 2 ASMB(SSEA);
12006000 00344 2 TOS := TOS + TRASTOTRSDISP;
12008000 00345 2 TOS := RSIZEINPAGES;
12010000 00346 2 ASMB(SSEA);
12012000 00347 2 PUTONARL(REGIONBASE, RSIZEINPAGES, PUTATEND);
12014000 00353 2 IF REGSIZE > MAXAVAILREG THEN COLLECTGARBAGE(REGIONBASE);
12016000 00360 2 IF SCANPOINT > REGIONBASE AND SCANPOINT < TRAILERADDR
12018000 00365 2 THEN SCANPOINT := REGIONBASE;
12020000 00372 2 END <<RELEASEREGION>>;
    
```

IDENTIFIER	CLASS	TYPE	ADDRESS
NEXTADDR	SIMP. VAR.	DOUBLE	0 +005
REGIONBASE	SIMP. VAR.	DOUBLE	0 -006
REGSIZE	SIMP. VAR.	INTEGER	0 -004
RSIZEINPAGES	SIMP. VAR.	INTEGER	0 +001
TRAILERADDR	SIMP. VAR.	DOUBLE	0 +003
TURNCOFFSIZE	SIMP. VAR.	INTEGER	0 +002
TURNCOFFSVALIDF	SUBROUTINE		PB-000

LAB #10

Hardware Environment: Series 44

Software Environment: C Mit

External Symptoms: System Interruption

This dump case includes the following components:

- 1) Excerpted pages from a formatted Series 44 memory dump.
- 2) PMAPS for segments ININ, HARDRES, ABORTDUMP, PROCSEG, & KERNELC.

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1			
2			
3			
4			
5	MPE IV C.00.01	62 UDC (62)	144 MRJEMISC2 (160)
6	1 ININ	63 USER (63)	145 MPMONCMD (161)
7	2 FILESYS1 (0)	64 HELPUSER (64)	146 IMAGE01 (210)
8	3 FILESYS4 (1)	65 OPLW (65)	147 IMAGE02 (211)
9	4 FILESYS5 (2)	66 OPMED (66)	150 IOMONITOR3270 (225)
10	5 FILESYS6 (3)	67 OPHI (67)	151 HIOMDSCI
11	6 FILESYS6A (4)	70 LABSEG (70)	152 HIOTERMO
12	7 FILESYS7 (5)	71 SDISC (71)	153 HIOTAPEO
13	10 CIALTORQ (6)	72 LOGSEQ0 (73)	154 HIOLPRTO
14	11 CICOMSYS (7)	73 LOGSEQ1 (74)	155 HIOPRTO
15	12 CIERR (10)	74 KERNELC (75)	
16	13 CIFILEB (11)	75 KERNELD (76)	
17	14 CIFILEM (12)	76 MISCSEGC (77)	
18	15 CIINIT (13)	77 FILESYSIA (101)	
19	16 CILISTF (14)	100 FILESYS2 (102)	
20	17 CIMISC (15)	101 FILESYS3 (103)	
21	20 CIORGMAN (16)	102 DEBUGUTL (104)	
22	21 CIPREPRUM (17)	103 SEGUTIL (105)	
23	22 CISUBS (20)	104 KSAM01 (106)	
24	23 CISYSIMGR (21)	105 KSAM02 (107)	
25	24 CIUSERUTIL (22)	106 KSAM03 (110)	
26	25 CXSTOREST (23)	107 KSAM04 (111)	
27	26 RESTORE (24)	110 KSAM05 (112)	
28	27 STORE (25)	111 FIRMWARESIM1 (52)	
29	30 DIRC (26)	112 FIRMWARESIM2 (53)	
30	31 ALLOCATE (27)	113 KSAM06 (113)	
31	32 ALLOCUTIL (30)	114 KSAM07 (114)	
32	33 HARDRES (31)	115 COMSYS1 (135)	
33	34 ABORTDUMP (32)	116 COMSYS3 (137)	
34	35 MESSAGE (33)	117 COMSYS4 (140)	
35	36 PROCSEG (34)	120 COMSYS5 (141)	
36	37 MRIO (35)	121 CSUTILTY (142)	
37	40 PCREATE (36)	122 COMSYS2 (136)	
38	41 MORGUE (37)	123 BSCLCM (143)	
39	42 BIPC (40)	124 BSCLCP0 (144)	
40	43 IPC (41)	125 DVRSSLC (145)	
41	44 CHECKER (42)	126 DVRHSI (146)	
42	45 UTILITY1 (43)	127 DSSEG1 (147)	
43	46 UTILITY2 (44)	130 DSSEG2 (150)	
44	47 LOADER1 (45)	131 DSSEG4 (152)	
45	50 RINS (46)	132 DSMISC (154)	
46	51 JOBTABLE (47)	133 DSIOM (155)	
47	52 DEBUG (50)	134 DSSEG3 (151)	
48	53 NURSERY (51)	135 DSSEG5 (153)	
49	54 SPOOLING (54)	136 CLIB'01 (200)	
50	55 SPOOLCOMS1 (55)	137 CLIB'03 (202)	
51	56 SPOOLCOMS2 (56)	140 CLIB'04 (203)	
52	57 PVCOMSEG (57)	141 CLIB'05 (204)	
53	60 PVSYSO (60)	142 DSRTECALLS (156)	
54	61 PVSYSM (61)	143 MRJEMISC1 (157)	

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LOG DEV	DRT	U N I T	C H Y P E	T A P E	SUB TYPE	TERM TYPE	SPEED	REC WIDTH	OUTPUT DEV	MODE	DRIVER NAME	DEVICE CLASSES
1	88	0	0	0	8			128	0		H10MDSC1	SYSDISC SPOOL DISC
2	88	1	0	0	8			128	0		H10MDSC1	SDISC PVOL
5	81	0	0	32	8			88	0	S	H10PPRTO	EPOC
6	80	0	0	32	4			88	0	S	H10LPRT0	LP
7	73	0	0	24	0			128	0		H10TAPE0	TAPE DUMP
8	73	1	0	24	0			128	0		H10TAPE0	TAPE
9	73	2	0	24	0			128	0		H10TAPE0	TAPE
10	73	3	0	24	0			128	LP	JA	H10TAPE0	CARD JOBTAPE
20	8	0	0	16	0	10	240	40	20	JAID	H10TERMO	CONSOLE
21	8	0	0	16	4	10	960	40	21	JAID	H10TERMO	TERM
22	10	0	0	16	0	10	240	40	22	JAID	H10TERMO	TERM
23	11	0	0	32	14	18	240	88	0		H10TERMO	HP2831B

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***** REGISTERS *****

```

*****
* DATA SEGMENT * CODE SEGMENT * MISCELLANEOUS * STATUS = 102033 * ISR = 140015 *
*****
* DB BANK = 000000 * PB = 106320 * X = 001271 * MODE = PRIV * RUN/HALT = HALT *
* DB = 001000 * P = 111244 * CIR = 020320 * INTERRUPTS = OFF * IRQ = OFF * TIMEOUT = OFF *
* S BANK = 000004 * PL = 143173 * NIR = 000000 * TRAPS = OFF * CSRQ = OFF * NOT SS = OFF *
* DL = 135467 * PBBANK = 000000 * * STACK OP = LEFT * PARITY = OFF * DISABLE ATN = OFF *
* Q = 136157 * (P-PB) = 002724 * * OVERFLOW = OFF * POWERFAIL = OFF *
* S = 136157 * * * CARRY = ON * POWERON = OFF *
* Z = 140103 * * * COND CODE = CCG * NOT DISP = ON *
* * * * * SEGMENT # = 33 * NOT ICS = ON *
*****
    
```

***** FIXED LOW MEMORY *****

```

CODE SEGMENT TABLE POINTER      032580
EXTENDED CODE SEGMENT TABLE POINTER 034324
DATA SEGMENT TABLE POINTER      022580
PROCESS CONTROL BLOCK BASE       044160
CURRENT PCB POINTER              044640
INTERRUPT STACK BASE             050260
INTERRUPT STACK LIMIT            051256
INTERRUPT MASK                   040120
    
```

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***** CST TABLE *****

SEGMENT NUMBER	SEGMENT NAME	MODE	REFERENCE BIT	TRACE	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	R O M C I	S Y S C
1	ININ	PRIV	ON	OFF	4210	170164	0			
2	FILESYS1 (0)	PRIV	ON	OFF	10774	147623	7			
3	FILESYS4 (1)	PRIV	ON	OFF	3550	130423	7			
4	FILESYS5 (2)	PRIV	ON	OFF	4234	062623	7			
5	FILESYS6 (3)	PRIV	ON	OFF	5154	067223	7			
6	FILESYS6A (4)	PRIV	ON	OFF	12170	046023	7			
7	FILESYS7 (5)	PRIV	ON	OFF	6220	026023	6			
10	CIALTORG (6)	USER	OFF	OFF	10	164000	0			
11	CICOMSYS (7)	USER	OFF	OFF	4000		0	10		
12	CIERR (10)	PRIV	ON	OFF	2400	007423	4			
13	CIFILEB (11)	PRIV	ON	OFF	7710	101423	4			
14	CIFILEM (12)	PRIV	OFF	OFF	3304		1	30371		
15	CIINIT (13)	PRIV	ON	OFF	7244	000023	4			
16	CILISTF (14)	PRIV	ON	OFF	6404	010023	1			
17	CIMISC (15)	PRIV	OFF	OFF	4504		1	30532		
20	CIORGMAN (16)	PRIV	OFF	OFF	6310		1	30560		
21	CIPREPRUN (17)	PRIV	ON	OFF	5570	066423	4			
22	CISUBS (20)	PRIV	ON	OFF	3724	012223	4			
23	CISYSMGR (21)	PRIV	OFF	OFF	7334		1	30677		
24	CIUSERUTIL (22)	PRIV	ON	OFF	4444	074623	4			
25	CXSTOREST (23)	PRIV	OFF	OFF	5730		1	30771		
26	RESTORE (24)	PRIV	OFF	OFF	5574		1	31024		
27	STORE (25)	PRIV	OFF	OFF	10210		1	31061		
30	DIRC (26)	PRIV	ON	OFF	7444	116423	7			
31	ALLOCATE (27)	PRIV	ON	OFF	6130	141223	5			
32	ALLOCTIL (30)	PRIV	ON	OFF	7260	102023	7			
33	HARDRES (31)	PRIV	ON	OFF	34654	106320	0			
34	ABORTDUMP (32)	PRIV	ON	OFF	6514	000023	5			
35	MESSAGE (33)	PRIV	ON	OFF	4230	041423	7			
36	PROCSEG (34)	PRIV	ON	OFF	5330	163023	7			
37	NRIO (35)	PRIV	ON	OFF	7630	031423	7			
40	PCREATE (36)	PRIV	ON	OFF	10134	150223	6			
41	MORGUE (37)	PRIV	ON	OFF	4404	000023	7			
42	BIPC (40)	PRIV	OFF	OFF	3334		1	31733		
43	IPC (41)	PRIV	OFF	OFF	11234		1	31753		
44	CHECKER (42)	PRIV	ON	OFF	1764	060423	7			
45	UTILITY1 (43)	PRIV	ON	OFF	4544	172223	7			
46	UTILITY2 (44)	PRIV	OFF	OFF	6650		1	32064		
47	LOADER1 (45)	PRIV	ON	OFF	6030	035423	5			
50	RINS (46)	PRIV	ON	OFF	3644	107023	6			
51	JOBTABLE (47)	PRIV	ON	OFF	5114	074623	7			
52	DEBUG (50)	PRIV	ON	OFF	20550	014623	5			
53	NURSERY (51)	PRIV	ON	OFF	7310	131623	5			
54	SPOOLING (54)	PRIV	ON	OFF	15660	113623	5			
55	SPOOLCOMS1 (55)	PRIV	ON	OFF	6744	160423	6			
56	SPOOLCOMS2 (58)	PRIV	ON	OFF	12110	161423	4			
57	PVCOMSEG (57)	PRIV	OFF	OFF	3174		1	32702		
60	PVSYSD (60)	PRIV	ON	OFF	5000	053023	5			

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***** CST TABLE *****

SEGMENT NUMBER	SEGMENT NAME	MODE	REFERENCE BIT	TRACE	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK /LDEV	DISC ADDRESS	R I O M C I	S Y S C S
61	PVSYSM (61)	PRIV	ON	OFF	7200	121223	6			
62	UDC (62)	USER	ON	OFF	7644	000023	1			
63	USER (63)	USER	ON	OFF	3330	034423	6			
64	HELPUER (64)	USER	OFF	OFF	2410		1	33071		
65	OPLOW (65)	PRIV	ON	OFF	14020	111423	4			
66	OPMED (66)	PRIV	ON	OFF	13570	145423	4			
67	OPHI (67)	PRIV	ON	OFF	11340	075623	5			
70	LABSEG (70)	PRIV	ON	OFF	13254	060223	5			
71	SDISC (71)	PRIV	OFF	OFF	12000		1	33406		
72	LOGSEGO (73)	PRIV	ON	OFF	12314	135623	6			
73	LOGSEG1 (74)	PRIV	OFF	OFF	13554		1	33544		
74	KERNELC (75)	PRIV	ON	OFF	23744	143174	0			
75	KERNELD (76)	PRIV	ON	OFF	10360	134223	7			
76	MISCSEGC (77)	PRIV	ON	OFF	1024	167140	0			
77	FILESYS1A (101)	PRIV	ON	OFF	15014	010623	6			
100	FILESYS2 (102)	PRIV	ON	OFF	10030	050223	4			
101	FILESYS3 (103)	PRIV	ON	OFF	10360	000023	6			
102	DEBUGUTL (104)	PRIV	OFF	OFF	4364		1	34266		
103	SEGUTIL (105)	PRIV	OFF	OFF	4424		1	34311		
104	KSAM01 (106)	PRIV	OFF	OFF	6324		1	34335		
105	KSAM02 (107)	PRIV	OFF	OFF	11020		1	34372		
106	KSAM03 (110)	PRIV	OFF	OFF	7750		1	34441		
107	KSAM04 (111)	PRIV	OFF	OFF	7044		1	34537		
110	KSAM05 (112)	PRIV	OFF	OFF	3070		1	34504		
111	FIRMWARESIM1 (52)	PRIV	OFF	OFF	5000		1	32413		
112	FIRMWARESIM2 (53)	PRIV	OFF	OFF	6330		1	32441		
113	KSAM06 (113)	USER	OFF	OFF	2410		1	34576		
114	KSAM07 (114)	USER	OFF	OFF	5044		1	34612		
115	COMSYS1 (135)	PRIV	OFF	OFF	10510		1	35471		
116	COMSYS3 (137)	PRIV	OFF	OFF	7274		1	35604		
117	COMSYS4 (140)	PRIV	OFF	OFF	7660		1	35647		
120	COMSYS5 (141)	PRIV	OFF	OFF	7504		1	35715		
121	CSUTILTY (142)	PRIV	OFF	OFF	12640		1	35762		
122	COMSYS2 (136)	PRIV	OFF	OFF	10274		1	35536		
123	BSCLCM (143)	PRIV	OFF	OFF	4310		1	36040		
124	BSCSLCPO (144)	USER	OFF	OFF	1354		1	36066		
125	DVRSSLC (145)	PRIV	OFF	OFF	10500		1	36075		
126	DVRHSI (146)	PRIV	OFF	OFF	2154		1	36143		
127	DSSEG1 (147)	PRIV	OFF	OFF	4574		1	36156		
130	DSSEG2 (150)	PRIV	OFF	OFF	11234		1	36206		
131	DSSEG4 (152)	PRIV	OFF	OFF	7060		1	36310		
132	DSMISC (154)	PRIV	OFF	OFF	6004		1	36433		
133	DSIOM (155)	PRIV	ON	OFF	1550	173023	6			
134	DSSEG3 (151)	PRIV	OFF	OFF	5534		1	36257		
135	DSSEG5 (153)	PRIV	OFF	OFF	12540		1	36353		
136	CLIB'01 (200)	USER	OFF	OFF	6574		1	40127		
137	CLIB'03 (202)	USER	OFF	OFF	7260		1	40214		
140	CLIB'04 (203)	USER	OFF	OFF	6530		1	40256		

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***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/ /LDEV	DISC ADDRESS	D V	R C	I O	S M	T O	M I	W Y	F P	S S	R E	S S	W D	VM ALLOC
1	{CODE SEGMENT TABLE}	OFF	1400	032560	0											S	C		0
2	{DATA SEGMENT TABLE}	OFF	10000	022560	0											S	C		0
3	{PROCESS CONTROL BLOCK}	ON	4000	044160	0											S	C		0
4	{CST EXTENSION}	OFF	10000	034160	0											S	C		0
5	{SYSTEM GLOBAL AREA}	OFF	1120	001000	0											S	C		0
6	{FIXED LOW CORE}	ON	4000	000000	0											S	C		0
7	{INTERRUPT CONTROL STACK}	OFF	1100	050160	0											S	C		0
10	{SYSTEM BUFFERS}	ON	4030	061464	0											S	C		0
11	{UCOP REQUEST QUEUE}	ON	104	177623	7											S	C		1
12	{PROCESS-PROCESS COMMUNICATION TABLE}	ON	400	051023	5											S	C		1
13	{I/O QUEUE}	OFF	1234	051260	0											S	C		0
14	{TERMINAL BUFFERS}	OFF	17750	002120	0											S	C		0
15	{LOGICAL-PHYSICAL DEVICE TABLE}	ON	734	102520	0											S	C		0
16	{LOGICAL DEVICE AND CLASS TABLE}	ON	4644	111423	7											S	C		5
17	{DRIVER LINKAGE TABLE}	OFF	50	000600	0											S	C		0
20	{I/O RESOURCE TABLES}	OFF	20	000650	0											S	C		0
21	{DISK FREE SPACE}	ON	20000	047423	6											S	C		21
22	{LOADER SEGMENT TABLE}	ON	2644	043623	5											S	C		14
23	{TIMER REQUEST LIST}	OFF	204	103454	0											S	C		0
24	{DIRECTORY}	ON	2000	126223	7											S	C		3
25	{DIRECTORY SPACE}	ON	800	051623	5											S	C		1
26	{RIN TABLE}	ON	454	044023	6											S	C		0
27	{SWAPTABLE}	OFF	12000	065514	0											S	C		0
30	{JOB PROCESS COUNT}	ON	30	103660	0											S	C		0
31	{JOB MASTER TABLE}	ON	400	176423	6											S	C		14
32	{TAPE LABEL TABLE}	ON	1750	073623	5											S	C		2
33	{LOG TABLE}	ON	170	175423	6											S	C		0
34	{REPLY INFORMATION TABLE}	ON	2000	155223	5											S	C		3
35	{VOLUME TABLE}	ON	124	177623	0											S	C		1
36	{BREAKPOINT TABLE}	OFF	734		1	4241	D									S	C		1
37	{LOG BUFFER 1}	ON	400	177023	7											S	C		1
40	{LOG BUFFER 2}	OFF	400		1	4251	D									S	C		1
41	{LOG ID TABLE}	OFF	150		1	3101	D									S	C		0
42	{ASSOCIATION TABLE}	ON	3204	147423	5											S	C		4
43	{CST BLOCK}	OFF	44	000670	0											S	C		0
44	{JOB CUTOFF TABLE}	OFF	154	103710	0											S	C		0
45	{SYSTEM JIT}	ON	100	177223	0											S	C		1
46	{SPECIAL REQUEST TABLE}	OFF	144	077514	0											S	C		0
47	{VIRTUAL DISK SPACE TABLE}	OFF	304	100210	0											S	C		0
51	{ARSBM TABLE}	OFF	44	000734	0											S	C		0
52	{ILT}	OFF	3630	055634	0											S	C		0
53	{SIR TABLE}	OFF	230	104064	0											S	C		0
54	{FILE MULTI-ACCESS VECTOR}	ON	200	177223	6											S	C		2
55	{INPUT DEVICE DIRECTORY}	ON	200	046623	5											S	C		40
56	{OUTPUT DEVICE DIRECTORY}	ON	400	153023	5											S	C		40
57	{WELCOME MESSAGE #1}	OFF	1750		1	4035	D									S	C		2

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***** DST TABLE *****

SEGMENT NUMBER	SEGMENT DESCRIPTION	REFERENCE BIT	SEGMENT LENGTH	ABSOLUTE ADDRESS	BANK/LDEV	DISC ADDRESS	D C V	R O M	I C K	S T O	M O D	F I P	W I P	S S S	C R E W	VM ALLOC
60	(WELCOME MESSAGE #2)	OFF	1750		1	4045	D							S		2
61	(CS SYSTEM SEGMENT)	OFF	10		1	3175	D							S		1
62	(JOB-PROCESS CROSS REFERENCE)	ON	200	044623	0									S		1
63	(SYSTEM JDT)	ON	34	177423	0									S		1
64	(COMMAND INTERPRETER LOG-ON DST)	OFF	1000		1	4055	D							S		10
65	(MOUNTED VOLUME TAB.)	OFF	520		1	4175	D							S		1
66	(PRI. VOL. USER TABLE)	ON	200	176023	0									S		10
67	(AVAILABLE REGION LIST)	OFF	2004	100514	0									S		0
70	(DISC REQUEST TABLE)	OFF	3120	052514	0									S		0
71	(MSG HBR TABLE)	OFF	10	077660	0									S		0
72	(PRIMARY MSG TABLE)	OFF	200	077670	0									S		0
73	(MEASUREMENT INFO TABLE)	OFF	120	100070	0									S		0
75		ON	3244	167423	0									S		7
76		ON	3244	141023	4									S		7
77		ON	3804	067623	0									S		18
100		ON	13144	073623	0									S		6
101		ON	2554	113023	0									S		6
102		ON	2310	130623	0									S		6
103		OFF	2260		1	4461	D							S		6
104		OFF	4764		1	4511	D							S		13
105		ON	5564	060423	4									S		43
106		ON	5720	006623	5									S		17
107		ON	4324	107223	5									S		22
110		ON	204	161023	7									S		1
111		ON	1324	161423	7									S		12
112		ON	1404	170423	7									S		2
113		ON	15430	161223	5									S		22
114		ON	7174	016223	4									S		27
115		ON	104	045223	6									S		1
116		ON	64	004623	7									S		5
117		ON	100	177623	8									S		1
120		ON	460	177023	5									S		1
121		ON	7640	040223	4									S		10
122		ON	6774	125623	4									S		27
123		ON	1324	157423	5									S		12
124		ON	50	052623	5									S		5
125		ON	104	177623	5									S		1
126		ON	1110	173623	4									S		2
127		ON	1110	175023	4									S		2
130		ON	3264	135023	4									S		10
524		OFF	4000		0	10										0
1131		OFF	10	164000	0											0
1132		OFF	4000		0	10										0
1415		ON	20000		0	0	D							S		0
1416		OFF	40	000000	0									M F S		74

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***** PROCESS CONTROL BLOCK (2ND HALF) *****

----- SCHEDULING INFORMATION -----											---RESOURCES---				LIFE/DEATH	----- MISCELLANEOUS -----																					
PIN	NQPIN	PQPIN	DISP	LC	DC	DE	Q	IC	NOR	ERR	PRI	HIP	USE	DR	SL	MP	PC	IP	SP	SR	SO	CH	PREV	NEXT	SC	LED	FA	DC	BMS	PPC	PCST	PBXPTR	SLLPTR	BPT	SYSTEM		
			Q	Q	Q	Q	Q	R	R			I	Q	W	W	W	W	P	C	P	R	A	R	V	T	R	PIN	PIN	C	E	D	C				LNK	PROC
1			L								61															L			SNF	NUL			10	64653			PROGEN
2			L								62															L			SNF	NUL					64521		SYSIO
3			L								175														L			SNF	NUL					64533		IOMESS	
4			L								62														L			SNF	NUL					64545		LOG	
5			L								175														L			SNF	NUL					64557		MEMLOG	
6			L								175														L			SNF	NUL					64571			
7			L								175														L			SNF	NUL					64603		UCOP	
10			L								12														L			SNF	NUL					64615		PFAIL	
11			L								175														L			SNF	NUL					64627		DEVREC	
12			L								218														L			SNF	NUL					64641		LOAD	
13		***	L								230														L			SNF	NUL					360			
14			L								230														L			SNF	NUL					65404			
15			L								230														L			SNF	NUL					65430			
16			L								232														L			SNF	NUL					65524			
17		***									230														L			SNF	NUL					400			
20		***									310														L			SNF	NUL					420			
21		***									230														L			SNF	NUL					500			
22											312														L			SNF	NUL					66426			
23			D								312														L			SNF	NUL					66503			
24		***									230														L			SNF	NUL					12			
53		***									230														L			SNF	NUL					1300			
54		***									230														L			SNF	NUL					1320			
55		***									230														L			SNF	NUL					1340			
56		***									230														L			SNF	NUL					1360			
57		***									230														L			SNF	NUL					1400			
60		***									230														L			SNF	NUL					1420			
61		***									230														L			SNF	NUL					1440			
62		***									230														L			SNF	NUL					1460			
63		***									230														L			SNF	NUL					1500			
64		***									230														L			SNF	NUL					1520			
65		***									230														L			SNF	NUL					1540			
66		***									230														L			SNF	NUL					1560			
67		***									230														L			SNF	NUL					1600			
70		***									230														L			SNF	NUL					1620			
71		***									230														L			SNF	NUL					1640			
72		***									230														L			SNF	NUL					1660			
73		***									230														L			SNF	NUL					1700			
74		***									230														L			SNF	NUL					1720			
75		***									230														L			SNF	NUL					1740			
76		***									230														L			SNF	NUL					1760			
77		***									230														L			SNF	NUL					2000			
100		***									230														L			SNF	NUL					2020			
101		***									230														L			SNF	NUL					2040			

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***** PROCESS CONTROL BLOCK (2ND HALF) *****

----- SCHEDULING INFORMATION -----														---RESOURCES---				LIFE/DEATH	----- MISCELLANEOUS -----														
PIN	NQPIN	PQPIN	DISP	LC	DC	DE	IN	OR	PRI	HU	IP	SD	RT	SW	LM	PC	IP	HS	SA	SO	CH	PREV	NEXT	LD	BMS	PPC	PCST	PBXPTR	SLLPTR	BPT	SYSTEM		
---	---	---	Q	Q	Q	Q	R	R	---	I	Q	Q	W	W	W	W	P	P	R	R	R	IT	IMP	IMP	V	---	---	---	---	---	---	---	
102		***																							SNF	NUL						2080	
103		***																							SNF	NUL						2100	
104		***																							SNF	NUL						2120	
105		***																							SNF	NUL						2140	
106		***																							SNF	NUL						2160	
107		***																							SNF	NUL						2200	
110		***																							SNF	NUL						2220	
111		***																							SNF	NUL						2240	
112		***																							SNF	NUL						2260	
113		***																							SNF	NUL						2300	
114		***																							SNF	NUL						2320	
115		***																							SNF	NUL						2340	
116		***																							SNF	NUL						2360	
117		***																							SNF	NUL						2400	
120		***																							SNF	NUL						2420	
121		***																							SNF	NUL						2440	
122		***																							SNF	NUL						2460	
123		***																							SNF	NUL						2500	
124		***																							SNF	NUL						2520	
125		***																							SNF	NUL						2540	
126		***																							SNF	NUL						2560	
127		***																							SNF	NUL						2600	
130		***																							SNF	NUL						2620	
131		***																							SNF	NUL						2640	
132		***																							SNF	NUL						2660	
133		***																							SNF	NUL						2700	
134		***																							SNF	NUL						2720	
135		***																							SNF	NUL						2740	
136		***																							SNF	NUL						2760	
137		***																							SNF	NUL						3000	
140		***																							SNF	NUL						3020	
141		***																							SNF	NUL						3040	
142		***																							SNF	NUL						3060	
143		***																							SNF	NUL						3100	
144		***																							SNF	NUL						3120	
145		***																							SNF	NUL						3140	
146		***																							SNF	NUL						3160	
147		***																							SNF	NUL						3200	
150		***																							SNF	NUL						3220	
151		***																							SNF	NUL						3240	
152		***																							SNF	NUL						3260	
153		***																							SNF	NUL						3300	
154		***																							SNF	NUL						3320	

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***** PRESENT STACKS *****

***** PCBX AND STACK MARKERS FOR DST 130 (PCB 23) *****
 **** CURRENT PROCESS ****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE #J1	DUPLICAT NO	INTERACT NO	INIT Q 000002	JCUT INDEX 0
000444	000600	2	3	4	3	124	125					
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
136157	4	000000	034301	102033	000005	33 HARDRES (31)						
136152	4	000000	033802	102033	000011	33 HARDRES (31)						
136141	4	000471	004445	140034	000144	34 ABORTDUMP (32)						
135775	4	000202	001647	140001	000013	1 ININ						
135762	4	000003	016411	143074	000005	74 KERNELC (75)						
135755	4	000003	016577	143074	000007	74 KERNELC (75)						
135746	4	000000	001661	102036	000022	36 PROCSEG (34)						
135724	4	000000	000062	162301	000067	301 USER SEGMENT						
135635	4	000000	000002	160301	000004	301 USER SEGMENT						
135631	4	000000	000000	140041	000004	41 MORGUE (37)						

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***** PCBX AND STACK MARKERS FOR DST 106 (PCB 1) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000453	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
007765	5	177756	017571	103074	000011	74 KERNELC (75)						
007754	5	001074	001427	140301	000006	301 USER SEGMENT						
007746	5	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 75 (PCB 2) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000000	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
170114	6	177756	017571	101074	000011	74 KERNELC (75)						
170103	6	177777	025364	100439	000010	33 HARDRES (31)						
170073	6	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 76 (PCB 3) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000000	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
141514	4	177756	017571	101074	000011	74 KERNELC (75)						
141503	4	000002	006011	140437	000010	37 NRIO (35)						
141473	4	000000	000000	140041	000004	41 MORGUE (37)						

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***** PCBX AND STACK MARKERS FOR DST 77 (PCB 4) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000644	000644	0	0	20	20	63	45	UNDEF	YES	YES	000252	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
071001	6	177756	017571	103074	000011	74 KERNELC (75)						
070770	6	043200	017143	100074	000014	74 KERNELC (75)						
070754	6	001141	001302	141301	000007	301 USER SEGMENT						
070745	6	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 100 (PCB 5) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	010053	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
104403	6	177756	017571	101074	000011	74 KERNELC (75)						
104372	6	000003	016736	103074	000008	74 KERNELC (75)						
104364	6	000003	016573	102074	000010	74 KERNELC (75)						
104354	6	001141	000446	140301	000006	301 USER SEGMENT						
104346	6	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 101 (PCB 6) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000305	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
114034	6	177756	017571	103074	000011	74 KERNELC (75)						
114023	6	043200	017143	100074	000014	74 KERNELC (75)						
114007	6	001141	000271	141301	000007	301 USER SEGMENT						
114000	6	000000	000000	140041	000004	41 MORGUE (37)						

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***** PCBX AND STACK MARKERS FOR DST 102 (PCB 7) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000044	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
131400	6	177756	017571	101074	000011	74 KERNELC (75)						
131367	6	001121	000437	140701	000030	301 USER SEGMENT						
131337	6	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 105 (PCB 12) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	001644	0	0	20	20	63	45	UNDEF	YES	YES	001145	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
063474	4	177756	017571	103074	000011	74 KERNELC (75)						
063463	4	043520	017143	100074	000014	74 KERNELC (75)						
063447	4	000013	000767	141301	000007	301 USER SEGMENT						
063440	4	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 107 (PCB 13) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000122	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
111572	5	177756	017571	103074	000011	74 KERNELC (75)						
111561	5	000031	005701	140054	000024	54 SPOOLING (54)						
111535	5	000002	004301	142054	001520	54 SPOOLING (54)						
110015	5	000000	000000	140041	000004	41 MORGUE (37)						

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***** PCBX AND STACK MARKERS FOR DST 113 (PCB 14) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000122	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
172572	5	177756	017571	103074	000011	74 KERNELC (75)						
172561	5	000001	005701	140054	000024	54 SPOOLING (54)						
172535	5	000002	004301	142054	010520	54 SPOOLING (54)						
162015	5	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 107 (PCB 13) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000444	0	0	20	20	63	45	UNDEF	YES	YES	000122	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
111572	5	177756	017571	103074	000011	74 KERNELC (75)						
111581	5	000031	005701	140054	000024	54 SPOOLING (54)						
111535	5	000002	004301	142054	001520	54 SPOOLING (54)						
110015	5	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 114 (PCB 16) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
001044	001044	1	2	20	20	118	115	#S1	YES	YES	000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
020753	4	177756	017571	101074	000011	74 KERNELC (75)						
020742	4	177767	031763	180033	000017	33 HARDRES (31)						
020723	4	177772	006433	140077	000115	77 FILESYS1A (101)						
020606	4	000320	001131	142077	000110	77 FILESYS1A (101)						
020476	4	000022	003015	140016	000104	16 CILISTF (14)						
020372	4	000030	002246	142016	000011	16 CILISTF (14)						
020361	4	000000	000745	140430	000034	30 DIRC (26)						
020325	4	000002	001161	140430	000021	30 DIRC (26)						
020304	4	000014	000551	140430	000013	30 DIRC (26)						
020271	4	000014	000857	140016	000165	16 CILISTF (14)						
020104	4	000000	003036	143015	000107	15 CIINIT (13)						
017775	4	000000	000000	140041	000004	41 MORGUE (37)						

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***** PCBX AND STACK MARKERS FOR DST 122 (PCB 17) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT NO	INTERACT NO	INIT Q	JCUT INDEX
000444	000444	2	3	4	3	124	125	#J1	NO	NO	000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
131134	4	177756	017571	103074	000011	74 KERNELC (75)						
131123	4	043640	017143	100074	000014	74 KERNELC (75)						
131107	4	000003	005213	141021	002003	21 CIPREPRUN (17)						
127104	4	177404	003038	140415	000107	15 CIINIT (13)						
126775	4	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 122 (PCB 17) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT NO	INTERACT NO	INIT Q	JCUT INDEX
000444	000444	2	3	4	3	124	125	#J1	NO	NO	000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
131134	4	177756	017571	103074	000011	74 KERNELC (75)						
131123	4	043640	017143	100074	000014	74 KERNELC (75)						
131107	4	000003	005213	141021	002003	21 CIPREPRUN (17)						
127104	4	177404	003038	140415	000107	15 CIINIT (13)						
126775	4	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 122 (PCB 17) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT NO	INTERACT NO	INIT Q	JCUT INDEX
000444	000444	2	3	4	3	124	125	#J1	NO	NO	000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
131134	4	177756	017571	103074	000011	74 KERNELC (75)						
131123	4	043640	017143	100074	000014	74 KERNELC (75)						
131107	4	000003	005213	141021	002003	21 CIPREPRUN (17)						
127104	4	177404	003038	140415	000107	15 CIINIT (13)						
126775	4	000000	000000	140041	000004	41 MORGUE (37)						

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***** PCBX AND STACK MARKERS FOR DST 122 (PCB 17) *****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT NO	INTERACT NO	INIT Q	JCUT INDEX
000444	000444	2	3	4	3	124	125	#J1			000502	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
131134	4	177756	017571	103074	000011	74 KERNELC (75)						
131123	4	043640	017143	100074	000014	74 KERNELC (75)						
131107	4	000003	005213	141021	002003	21 CIPREPRUN (17)						
127104	4	177404	003036	140415	000107	15 CIINIT (13)						
126775	4	000000	000000	140041	000004	41 MORGUE (37)						

***** PCBX AND STACK MARKERS FOR DST 130 (PCB 23) *****
 **** CURRENT PROCESS ****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT NO	INTERACT NO	INIT Q	JCUT INDEX
000444	000600	2	3	4	3	124	125	#J1			000002	0
ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT				
136157	4	000000	034301	102033	000005	33 HARDRES (31)						
136152	4	000000	033802	102033	000011	33 HARDRES (31)						
136141	4	000471	004445	140034	000144	34 ABORTDUMP (32)						
135775	4	000202	001647	140001	000013	1 ININ						
135762	4	000003	016411	143074	000005	74 KERNELC (75)						
135755	4	000003	016577	143074	000007	74 KERNELC (75)						
135746	4	000000	001661	102036	000022	38 PROCSEQ (34)						
135724	4	000000	000062	162301	000067	301 USER SEGMENT						
135635	4	000000	000002	160301	000004	301 USER SEGMENT						
135631	4	000000	000000	140041	000004	41 MORGUE (37)						

047740:	100000	003600	003540	000000	000000	000000	000000	000000	000000	047750:	000000	000000	000000	000000	000000	000000	000000	177777
047760:	100000	003620	003580	000000	000000	000000	000000	000000	000000	047770:	000000	000000	000000	000000	000000	000000	000000	177777
050000:	100000	003640	003600	000000	000000	000000	000000	000000	000000	050010:	000000	000000	000000	000000	000000	000000	000000	177777
050020:	100000	003660	003620	000000	000000	000000	000000	000000	000000	050030:	000000	000000	000000	000000	000000	000000	000000	177777
050040:	100000	003700	003640	000000	000000	000000	000000	000000	000000	050050:	000000	000000	000000	000000	000000	000000	000000	177777
050060:	100000	003720	003680	000000	000000	000000	000000	000000	000000	050070:	000000	000000	000000	000000	000000	000000	000000	177777
050100:	100000	003740	003700	000000	000000	000000	000000	000000	000000	050110:	000000	000000	000000	000000	000000	000000	000000	177777
050120:	100000	003760	003720	000000	000000	000000	000000	000000	000000	050130:	000000	000000	000000	000000	000000	000000	000000	177777
050140:	100000	000260	003740	000000	000000	000000	000000	000000	000000	050150:	000000	000000	000000	000000	000000	000000	000000	177777

050160:	000000	000000	000000	000000	000000	000000	000000	000000	000000	050170:	000000	000000	000000	000000	000000	000000	000000	000023
050200:	000001	000000	000000	000000	001750	001750	000143	000144	000000	050210:	000421	000454	000000	000360	000312	000230	000375	000356
050220:	000310	000000	000000	000000	000000	000000	000000	000000	000000	050230:	000000	000000	000000	000000	000000	000000	000000	000000
050240:	000130	100076	000131	177777	000000	103710	000480	135023	000000	050250:	002260	177644	000154	000004	135623	000000	001514	100074
050260:	000000	000000	001000	000010	000000	022320	000312	021112	000000	050270:	043640	000000	054737	003176	000000	000000	054834	000000
050300:	000000	000004	135023	000144	000000	055634	021047	000000	000000	050310:	000600	043640	014341	000400	000000	000000	000000	012315
050320:	123567	000000	000000	000000	000764	000312	000000	022773	000000	050330:	100033	000015	000024	000020	000014	065370	000000	103454
050340:	043640	000001	000000	002205	000004	135776	100088	000000	000000	050350:	001000	000144	000000	000000	021104	000000	001000	000144

050360:	001012	003176	100001	000015	100160	000013	000512	000556	000000	050370:	000144	000144	000001	177777	000000	101000	000000	000000
050400:	100166	003405	101033	000020	000460	000005	000460	000002	000000	050410:	003532	100033	000007	000480	100000	000000	000002	016604
050420:	101074	000007	043640	000010	000000	103454	043640	000001	000000	050430:	000000	043640	017132	100074	000013	000000	002446	000312
050440:	000000	177777	000007	000601	000064	000000	000000	060742	000000	050450:	057712	000000	021374	057742	000000	000001	002047	141151
050460:	000031	057712	000131	000000	021374	000007	025207	101033	000000	050470:	000010	000000	065524	014147	103074	000015	043520	000001
050500:	000000	001000	003534	100433	000010	000000	000001	010023	000000	050510:	000001	010023	000033	000000	177620	057712	000004	000013
050520:	054454	000000	001000	000400	006251	002415	000303	001740	000000	050530:	062413	000101	000003	026260	102033	000031	000000	000000
050540:	000303	000000	000007	000101	000007	000101	002446	056000	000000	050550:	037435	123317	000007	000101	000000	000000	000000	060742

050560:	057712	000050	000000	021374	057742	177777	000001	002047	000000	050570:	143151	000032	057712	000131	000000	021374	000007	025207
050600:	103033	000010	002114	000000	127440	000000	127440	002446	000000	050610:	056000	037435	123317	000000	127440	000000	000000	000000
050620:	000000	000000	000000	000000	000000	000000	000000	000000	000000	050630:	000000	000000	000000	000000	000000	000000	000000	000000

050640 - 051237 SAME AS ABOVE

051240:	000000	000000	000000	000000	000000	000000	000000	000000	000000	051250:	000000	000000	000000	000000	000000	000000	000000	000000
---------	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------

051260:	036086	000013	000372	000344	004004	000000	000000	001627	000000	051270:	007000	000036	000024	000000	100114	001123	000001	000004
051300:	000000	000004	007001	007000	000010	000024	000000	100114	000000	051310:	001123	000001	000006	000320	000004	007001	007000	000051
051320:	000024	000000	100114	001123	000001	000006	000320	000004	000000	051330:	007001	007000	000077	000024	000000	100114	001123	000001
051340:	000006	000320	000004	007001	007000	000125	000024	000000	000000	051350:	100114	001123	000001	000006	000320	000004	007001	007000
051360:	000064	000024	000000	100114	001123	000001	000006	000320	000000	051370:	000004	007001	007000	000140	000024	000000	100114	001123
051400:	000001	000004	000000	000004	007001	007000	000112	000024	000000	051410:	000000	100114	001123	000001	000006	000320	000004	007001
051420:	007000	000153	000024	000000	100114	001123	000001	000006	000000	051430:	000320	000004	007001	007000	000166	000024	000000	100114
051440:	001123	000001	000006	000320	000004	007001	007000	000201	000000	051450:	000024	000000	100114	001123	000001	000006	000320	000004

051460:	007001	007000	000214	000024	000000	100114	001123	000001	000000	051470:	000006	000320	000004	007001	007000	000227	000024	000000
051500:	100114	001123	000001	000006	000320	000004	007001	007000	000000	051510:	000242	000024	000000	100114	001123	000001	000004	000000
051520:	000004	007001	007000	000255	000024	000000	100114	001123	000000	051530:	000001	000006	000320	000004	007001	007000	000270	000024

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```

134677: 173037 021020 020063 140204 020040 152214 022100 141522 134707: 000600 051063 041031 026402 000657 141511 021004 051053
134717: 173071 173037 021010 020063 021001 051063 021001 051002 134727: 140042 041214 041214 020214 004500 061214 141202 020234
134737: 101214 051002 004000 021001 021010 131002 012604 021042 134747: 051052 140140 173071 041214 041002 020063 041031 026402
134757: 000657 141511 041071 041037 021010 020263 141204 021043 134767: 051052 140120 041214 071002 051214 152214 000035 100000
134777: 000035 100000 000016 000000 110001 051734 100000 011022 135007: 000000 000000 000016 100000 000000 000130 000000 000000
135017: 000400 006211 000000 000000
    
```

***** PCBX AND STACK MARKERS FOR DST 130 (PCB 23) *****
 **** CURRENT PROCESS ****

SEG REL DL	SEG REL DB	JMAT INDEX	JPCNT INDEX	JOB INPUT LOG DEV #	JOB OUTPUT LOG DEV #	JDT DST INDEX	JIT DST INDEX	JOB TYPE	DUPLICAT	INTERACT	INIT Q	JCUT INDEX
000444	000600	2	3	4	3	124	125	#J1	NO	NO	000002	0

ADDRESS	BANK	X	DELTA P	STATUS	DELTA Q	SEGMENT	OFFSET/PROCEDURE	MOD/PRODUCT
136157	4	000000	034301	102033	000005	33 HARDRES (31)		
136152	4	000000	033602	102033	000011	33 HARDRES (31)		
136141	4	000471	004445	140034	000144	34 ABORTDUMP (32)		
135775	4	000202	001847	140001	000013	1 ININ		
135762	4	000003	018411	143074	000005	74 KERNELC (75)		
135755	4	000003	018577	143074	000007	74 KERNELC (75)		
135748	4	000000	001881	102036	000022	36 PROCSEG (34)		
135724	4	000000	000062	162301	000067	301 USER SEGMENT		
135835	4	000000	000002	160301	000004	301 USER SEGMENT		
135631	4	000000	000000	140041	000004	41 MORGUE (37)		

\$\$\$\$\$\$\$\$ DST 130 \$\$\$\$\$\$\$\$

*****PCBX: *****

***PXGLOBAL:

135023: 000444 000600 170003 001004 001403 000124 020125 000000

***PXFIXED:

```

135033: 000120 000154 002260 000002 000134 000710 000000 000004 135043: 000000 000000 000000 000000 000301 004660 000000 000000
135053: 000000 000000 000000 100001 010000 000000 000000 002414 135063: 000000 000305 000000 000040 000000 000000 000000 000000
135073: 000000 000000 000000 000001 000000 000000 000000 000000 135103: 000000 000000 000223 000305 000305 000000 000000 000000
135113: 000000 000000 000000 000000 000000 000000 000000 000000 135123: 000000 000000 000000 000000 000000 000000 000000 000000
135133: 000000 000000 000000 000000 000000 000000 000000 000000 135143: 000000 000000 000000 000000 000000 000000 000000 000000
    
```

***PXFILE: (ZERO TABLE ENTRIES ARE NOT PRINTED)

135153: 000310 000000 000000 000000 000000 000010 000000 000000 135163: 000000 000000 000000 000000 000000 000000 000000 000000

135173: 000146 000130 000100 000000 000000

----- FILE VECTOR TABLE:

ENTRY	ADDRESS	LOCK	BRK	LOCK COUNT/PIN	HIPRI TAIL	HIPRI HEAD	LOPRI TAIL	LOPRI HEAD
135200:	000106	100423	000000	000000	0	106	LOCK	1 23
135204:	000126	100423	000000	000000	1	126	LOCK	1 23

----- CONTROL BLOCKS:

```

135300(000105): 000001 140020 000001 022123 052104 044518 020040 000305 001300 002000 001000 000000 135300: .....$STDIN
135314(000121): 000000 000010 000000 000000 000000 140020 000002 022123 052104 046111 051524 000704 135314: .....$STDLIST
135330(000135): 001301 002000 001000 000000 000000 000100 000000 000000 000000 000000 000000 000000 135330: .....@
135341: 000000 000000 000000 000000 000000 000000 000000 000000 135351: 000000 000000 000000 000000 000000 000000 000000 000000
    
```

LINES 135361 - 135440 SAME AS ABOVE

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```
135441: 000000 000000 000000 000000 000000 000000 000000 000000 000000 135451: 000000 000000
----- AVAILABLE FILE TABLE: FNUM FTYPE $NULL PACB V LACB V IOQX
135453: 000000 000127 002130 000000 2 FILE 0 127 1 130
135457: 000000 000126 000130 000000 1 FILE 0 126 0 130
**PXPOINTERS:
135463: 000000 000314 000434 000444
****DL REGISTER:
135467(177644): 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 000000 135467:
LINES 135503 - 135612 SAME AS ABOVE
135613(177770): 100701 000000 177777 000000 000000 177777 000000 177777 135613:
****DB REGISTER:
135623(000000): 000000 000000 000000 135623:
135626(MARKER): 000000 000000 140041 000004 MORGUE (37) -----
135632(MARKER): 000000 000002 160301 000004 -----
135636(000013): 000001 000001 115424 177777 063576 115424 040000 000000 000025 115424 046501 051524 135636: g @ MAST
135652(000027): 043111 046105 027120 052502 027123 054523 001000 010000 004000 177757 015141 140074 135652: FILE.PUB.SYS a <
135668(000043): 000010 000004 135623 000023 000000 001000 177756 017571 103074 000011 000004 135623 135668: y <
135702(000057): 000013 000000 002020 000000 000005 000000 000000 000000 000000 000000 000000 000000 135702:
135716(000073): 000000 000000 000021 -----
135721(MARKER): 000000 000062 162301 000067 -----
135725(000102): 000000 001750 000000 001750 063576 115424 000000 000000 000000 001750 000001 005501 135725: g A
135741(000116): 000000 001750 -----
135743(MARKER): 000000 001661 102036 000022 PROCSEG (34) -----
135747(000124): 000460 000000 000000 135747: 0
135752(MARKER): 000003 016577 143074 000007 KERNELC (75) -----
135756(000133): 000010 -----
135757(MARKER): 000003 016411 143074 000005 KERNELC (75) -----
135763(000140): 000202 000006 000004 000003 000400 000035 000000 135763:
135772(MARKER): 000202 001647 140001 000013 ININ -----
135776(000153): 000004 135623 000000 000001 000000 000000 000000 000000 000000 000000 000000 000000 135776:
136012(000167): 000000 000000 000465 007312 140040 000162 000000 000000 000000 000000 031400 000000 136012: 5 r 3
136026(000203): 000460 000011 000004 135623 000013 000000 000177 000312 000000 177777 000000 000000 136026: 0
136042(000217): 000464 000460 001460 000000 000000 100001 006100 000465 001301 001010 000413 001026 136042: 4 0 5
136056(000233): 000454 000460 000464 000470 001160 001170 000505 001212 001466 000000 000003 000634 136056: 0 4 8 p x E 6
136072(000247): 000001 000022 000000 000640 000474 006500 000000 000352 000031 000651 001522 000022 136072: < @ R
136106(000263): 000000 000000 002525 020143 015006 042101 053111 051440 020040 050125 041040 020040 136106: U c DAVIS PUB
136122(000277): 020040 050125 041040 020040 020040 045117 047040 020040 020040 000065 000067 000467 136122: PUB JON 5.7.7
136136(MARKER): 000471 004445 140034 000144 ABORTDUMP (32) -----
136142(000317): 000004 135623 000001 000014 006412 136142:
136147(MARKER): 000000 033602 102033 000011 HARDRES (31) -----
136153(000330): 000015 136153:
136154(MARKER): 000000 034301 102033 000005 HARDRES (31) -----
***S REGISTER:
136160(000335): 002154 000010 177330 021070 001000 000000 000000 000001 177777 177777 000000 000002 136160: 1 "8
136174(000351): 000000 000001 100222 000001 000002 137434 000003 002614 001301 100204 000000 022123 136174: $$$
```

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136210(000365):	052104	046111	051524	000002	000000	000001	000112	000001	001736	000761	000031	025040	136210:TDLIST	J	J	*
136224(000401):	000002	000000	000000	001012	000000	000000	000000	000000	001301	000001	045117	047040	136224:			JON
136240(000415):	020040	020040	042101	053111	051440	020040	045117	047040	020040	020040	022123	052104	136240:	DAVIS	JON	\$STD
136254(000431):	046111	051524	045117	047040	020040	020040	042101	053111	051440	020040	045117	047040	136254:LISTJON	DAVIS	JON	
136270(000445):	020040	020040	022123	052104	044518	020040	000000	020040	020040	020040	020040	050125	136270:	\$STDIN		PU
136304(000461):	041040	020040	020040	042101	053111	051440	020040	020040	020040	020040	020040	051520	136304:B	DAVIS		SP
136320(000475):	047517	048040	020040	020040	020040	020040	020040	020101	053111	051440	020040	020040	136320:OOL		AVIS	
136334(000511):	020040	020040	020040	051520	047517	046040	020040	020040	020040	020040	020040	020000	136334:	SPOOL		
136350(000525):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	136350:			
LINES 136364 - 138443 SAME AS ABOVE																
136444(000621):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	027040	136444:			
136460(000635):	000102	000200	000002	177772	000000	000400	000002	000014	000400	100000	020000	000000	136460:B			
136474(000651):	000000	000000	000000	000000	177777	000000	000002	177772	000000	000400	000002	000014	136474:			
136510(000665):	000400	100000	020000	000000	000000	000000	000000	000000	000000	000000	000000	000000	136510:			
138524(000701):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	138524:			
LINES 138540 - 138603 SAME AS ABOVE																
138604(000761):	000000	000000	000000	000000	000000	000341	000000	002123	042507	000000	000000	000242	138604:			SEG
138620(000775):	000000	000000	005515	040523	044047	046505	046517	051131	100200	100207	000000	000000	138620:	MASH		MEMORY
138634(001011):	000035	000064	000000	000000	000000	000000	000000	000000	100004	000000	000002	000301	138634:			
138650(001025):	000441	000301	000301	001442	000000	021517	041047	000207	100242	000000	000000	000154	138650:		BOB	I
138664(001041):	000003	000000	000000	000000	000000	000000	000001	000000	000000	000017	000000	000000	138664:			H
136700(001055):	000121	000441	000441	000441	000000	000000	000001	000000	000000	000000	000000	000000	136700:	Q.I.I.I		
136714(001071):	000104	011770	143006	000663	000000	000001	000001	000000	031417	000000	000000	021374	136714:	D		3
136730(001105):	000001	177620	052154	000000	000130	177777	000007	032032	140033	000015	000000	000017	136730:	TL	X	4
136744(001121):	051514	051515	000440	000420	051514	000004	032236	102033	000011	000020	000001	177620	136744:SLSM	SL	4	
136760(001135):	000000	021374	000000	000001	033534	100433	000010	000000	000001	000036	000352	000001	136760:	7\		
136774(001151):	100222	000000	177620	057712	000004	000000	000000	100204	000000	022123	052104	000046	136774:			\$STD 0
137010(001165):	000004	000303	001000	062000	002251	000003	026260	100033	000032	000023	000000	000303	137010:			
137024(001201):	000000	000006	162251	000008	162251	002446	056000	037435	123317	000006	162251	000000	137024:		&\?	
137040(001215):	000000	060742	057712	000050	000600	000404	016037	000600	000000	050125	041040	020040	137040:			PUB
137054(001231):	020040	042101	053111	051440	020040	000000	000000	000000	000000	000000	000000	000402	137054:	DAVIS		
137070(001245):	137434	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	137070:			
137104(001261):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	137104:			
LINES 137120 - 137183 SAME AS ABOVE																
137164(001341):	000000	000000	000000	000400	001777	020040	020040	020040	020040	050125	041040	020040	137164:			PUB
137200(001355):	020040	042101	053111	051440	020040	045117	047040	020040	020040	020040	020040	020040	137200:	DAVIS	JON	
137214(001371):	020040	020202	004040	000001	110462	110462	110462	000000	010111	000002	000033	000000	137214:		2.2.2	I
137230(001405):	005771	000000	000000	125038	020555	000704	176000	001000	018037	000600	000600	000000	137230:		im	
137244(001421):	000000	000402	137434	000000	000000	000000	000000	000000	000000	000000	000000	000000	137244:			
137260(001435):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	137260:			
LINES 137274 - 137337 SAME AS ABOVE																
137340(001515):	000000	000000	000000	000000	000000	000007	016006	110462	000000	000000	000000	000000	137340:			2
137354(001531):	000000	000000	000000	000000	000000	000000	000000	000000	051520	047517	046040	000000	137354:			SPOOL
137370(001545):	000000	0000127	000111	177632	000001	000000	002780	140005	000452	000040	000020	000130	137370:	W.I		X
137404(001561):	000111	000000	000023	000460	000000	000001	007656	141002	000013	043640	000000	000003	137404:	I	0	G
137420(001575):	000007	000003	010175	141002	000014	140002	000016	000023	021374	000001	177620	052114	137420:			TL
137434(001611):	000000	000130	177777	000007	032032	140033	000015	000000	000017	051514	051515	000400	137434:	X	4	SLSM
137450(001625):	000360	051514	000004	032236	102033	000011	000020	000001	177620	000000	021374	000000	137450:	SL	4	
137464(001641):	000001	033534	100433	000010	000127	000534	000004	177340	000000	177350	000000	177620	137464:	7\	W\	
137500(001655):	057712	000004	000013	052114	000000	000003	003733	140404	002415	000303	001400	062413	137500:		TL	
137514(001671):	002241	000003	026260	102033	000031	000023	000000	000303	000000	000006	162241	000006	137514:			
137530(001705):	162241	002446	056000	037435	123317	000006	162241	000001	000000	000000	060742	057712	137530:	&\?		
137544(001721):	000050	000000	021374	057742	177777	000001	002047	143151	000032	057712	000131	000000	137544:			Y
137560(001735):	021374	000007	025207	103033	000010	000000	021374	057742	177777	000001	002047	143151	137560:			Y
137574(001751):	000032	057712	000131	000000	021374	000007	025207	103033	000010	000000	000000	000000	137574:		Y	
137610(001765):	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	137610:			

SEG'	STT	CODE	ENTRY	SEG
NAME	0			
ININ	1	0	0	
TERMINATE	47			?
CALLHELP	2	111	111	?
HELP	50			?
POWERON	3	141	141	?
GETDSDEVICE	61			?
DEQUEUE	62			?
BLAKE	63			?
MASTERCLEARHPIS	64			?
CHECKLDEV	65			?
BLAKEIO	66			?
DATABSENCE	4	450	450	?
SUDDENDERTH	67			?
ABORT	60			?
RECOVEROC	61			?
QUEUEONSEGMENT	62			?
STTUNCALLABLE	5	700	700	?
TRACE	8	707	707	?
CY	63			?
CODEABSENCE	7	1051	1051	?
BUILDSEGID	64			?
CONVSEGIDTOSTIN	65			?
USERTRAP	10	1584	1584	?
PRIVILEGEDMODEV	11	1842	1842	?
STACKUNDERFLOW	12	1851	1851	?
STUNSIM	86			?
STACKOVERFLOW	13	1782	1782	?
WSTAT	67			?
GETDASEGCHANG	70			?
GENSPECREQ	71			?
SENDMSG	72			?
OSTVIOLATION	14	2743	2743	?
CSTVIOLATION	15	2748	2748	?
STTVIOLATION	16	2755	2755	?
UNIMPLEMENTEDIN	17	2764	3000	?
EADD	73			?
ESUB	74			?
EMPTY	75			?
EDIV	76			?
ENEG	77			?
ECMP	100			?
QADD	101			?
QSUB	102			?
QMPY	103			?
QDIV	104			?
QNEG	105			?
QCMP	106			?
QASR	107			?
QASL	110			?
DIDIV	111			?
DIMPY	112			?
DMUL	113			?
CVAD	114			?
CVDA	115			?
CVBD	116			?

CVDB	117			?
SLD	120			?
MSLD	121			?
SRD	122			?
RADD	123			?
CRPD	124			?
SUBD	125			?
MPYDSIM	126			?
SEG'ID'TYPE	127			?
TESTSTOP	130			?
DEBUG	131			?
BREAKPOINT	20	3272	3272	?
SYSTEMCLOCK	21	3274	3274	?
TICK	132			?
POWERFAIL	22	3315	3315	?
EXTGHOST	23	3413	3413	?
GHOST	24	3418	3418	?
GHOST36	25	3418	3485	?
GHOST30	26	3418	3483	?
GHOST29	27	3418	3481	?
GHOST28	30	3418	3457	?
GHOST27	31	3418	3455	?
GHOST26	32	3418	3453	?
GHOST23	33	3418	3451	?
GHOST22	34	3418	3447	?
GHOST15	35	3418	3445	?
GHOST14	36	3418	3443	?
GHOST10	37	3418	3441	?
GHOST7	40	3418	3437	?
GHOST5	41	3418	3435	?
GHOST4	42	3418	3433	?
DATAPARITY	43	3470	3505	?
DCONVERT	133			?
BCONVERT	134			?
WRITE2	135			?
ILLEGALADDRESS	44	3588	3588	?
BOUNDVIOLATION	45	3600	3600	?
TESTCRUNCH	46	3612	3612	?
SEGMENT LENGTH		4210		?

PRIMARY DB	0	INITIAL STACK	2280	CAPABILITY	800
SECONDARY DB	0	INITIAL DL	0	TOTAL CODE	4518
TOTAL DB	0	MAXIMUM DATA	?	TOTAL RECORDS	27
ELAPSED TIME	00:00:10.026			PROCESSOR TIME	00:01:501

PROGRAM FILE P68P002C.HP32002.SUPPORT

NAME	STT	CODE	ENTRY	SEG
ABORTDUMP	1	0	247	?
TERMINATE	2			
SEGMENT LENGTH		254		
ABORTDUMP	1			
NAME	STT	CODE	ENTRY	SEG
STACKDUMP	1	0	1484	
FHECK	23			
PRINT	24			
WRITE	25			
ASCII	26			
MOVE	27			
EXCHANGEDB	30			
FOPEN	31			
ERRORON	32			
FGETINFO	33			
PNXSEG	34			
CHEK	35			
PCLOSE	36			
ERROREXIT	37			
STACKDUMP	2	0	1805	
MARKER	3	2371	2405	
LOGICALCST	40			?
REGIST	8	2652	2652	
DEC'SIM'TRAP'	9	2730	2730	
DEC'SIM'TRAP	8	2763	2763	
INIRETURN	7	3037	3037	
RESETCONTROL	10	3062	3061	
RESETBREAKBITS	41			?
ICONTROL	11	3176	3176	
IOCONTROL	42			?
MSYSTRAP	12	3337	3337	
MLISTRAP	13	3372	3372	
MRITRAP	14	3425	3425	
TRAPLABEL	15	3457	3457	
PHYSICALCST	43			
BUILDSEGID	44			
CONVSEGIDTOSTIN	45			
MRITRAP	16	3676	3676	
QUITPROG	17	3716	3716	
QUIT	20	3723	3723	
ABORT	21	3731	4414	
SET'PSIF	46			
SETCRITICAL	47			
SUDDENDEATH	50			
RESETDB	51			
CONVXTLABELTOO	52			
CLEAR'PSIF	53			
PROCFILE	54			
HELP	55			
SETJCL	56			
GENPSS	57			
RESETCRITICAL	60			
DEBUG	61			
SETSYSDB	62			
TERMINATE	63			

SYSTEM 22 6317 6317
 SEGMENT LENGTH 6434

PRIMARY DB 0 INITIAL STACK 2260 CAPABILITY 700
 SECONDARY DB 0 INITIAL DL 0 TOTAL CODE 6710
 TOTAL DB 0 MAXIMUM DATA 1 TOTAL RECORDS 42
 ELAPSED TIME 00:00:11.000 PROCESSOR TIME 00:01.362

NAME	STT	CODE	ENTRY	SEG
MAIN	0			
NAME	1	0	247	
PROCSEG	2			1
SHOWMG	3			?
TERMINATE	3			?
SEGMENT LENGTH		260		
PROCSEG	1			
NAME	1	0	0	
RECEIVMAIL	36			?
ERRORON	37			?
CHEK	40			?
SETCRITICAL	41			?
DMOVE	42			?
RESETCRITICAL	43			?
ERRDREXIT	44			?
HELP	2	212	212	
SENDMAIL	45			?
GETDATASEG	46			?
RELDATASEG	3	501	501	
MAIL	4	544	544	
ABORTMAIL	47			?
LOCKJIR	50			?
UNLOCKJIR	5	1017	1017	
ABORTMAILINFO	6	1034	1034	
SETMAILINFO	7	1043	1043	
GETMAILINFO	10	1052	1052	
SETMAILSTATUS	51			?
AWAKE	52			?
WAIT	11	1325	1325	
GETMAILSTATUS	12	1410	1410	
CHEKMAILPCB	13	1532	1532	
TESTALIVE	14	1560	1560	
PAUSE	53			?
CHEKTRLFREE	54			?
DELAY	55			?
TIMER	15	1710	1715	
CLOCK	16	1710	1721	
CALENDAR	17	2045	2051	
CAUSEBREAK	56			?
FAMILY	57			?
SET'PSIF	20	2045	2054	
CAUSEBREAK'	21	2212	2216	
BREAKJOB	22	2212	2223	
BREAKSS	23	2445	2445	
QUANTUM	24	2446	2446	
ABORTPROG	60			?
SUDDENDEATH	61			?
ABORTPROCIO	62			?
REHITENTRY'	63			?
BURRYPROC	64			?
CLEAR'PSIF	65			?
SETJCL	25	2546	2546	
ABORTJOB	26	2712	2712	
SHOWSQ	27	2714	2753	
SHOWMG	66			?
EXCHANGEDB	67			?
ASCII				

DASCII	70			?
PRINT	71			?
ZSIZE	72			?
SHOWPROC	30	3763	3763	
ACTIVATE	31	4107	4107	
FATHER	32	4321	4321	
SUSPEND	33	4357	4400	
RELSIR	73			?
GETSIR	74			?
GETPROCINFO	34	4760	4760	
CHEKALIVE	75			?
GETORIGIN	35	5141	5141	
SEGMENT LENGTH		5250		

PRIMARY DB 0 INITIAL STACK
 SECONDARY DB 0 INITIAL DL
 TOTAL DB 0 MAXIMUM DATA

2200 CAPABILITY 700
 0 TOTAL CODE 5530
 ? TOTAL RECORDS 34
 PROCESSOR TIME 00:01.611

ELAPSED TIME 00:00:11.049

10

NAME	STT	CODE	ENTRY	SEG
HARDRES	1	0	0	?
TERMINATE	2			?
SEGMENT LENGTH	4			
HARDRES	1			
NAME	STT	CODE	ENTRY	SEG
HELP	1	0	1876	
REARCHAR	2	2343	2421	
PRINTCHAR	3	2815	2827	
TICK	4	3002	3002	
OLDTICK	5	3444	3456	
UNITIMPEDE	128			?
SYSPROC	127			?
WAKE	130			?
STARTCLOCK	6	3744	3744	
CHEKTRFREE	7	4035	4035	
TIMEREQ	10	4046	4046	
ABORTTIMEREQ	11	4245	4245	
TIMER	12	4363	4363	
TIP	13	4501	20510	
STATREQUEST	14	21317	21321	
IDLEWAIT	15	21541	21541	
SENDCLRF	16	22005	22005	
DOCLRFSYNC	17	22171	22171	
BREAKSERVICE	20	22437	22437	
BREAKOK	21	22463	22463	
SSBREAKOK	22	22463	22465	
SETREADERROR	23	22534	22534	
PRINTPFMSG	24	22554	22554	
CHECKQUEUE	25	22672	22672	
STARTTIMEOUT	26	22673	22704	
STOPTIMEOUT	27	23004	23015	
DDOCONTROL	30	23054	23066	
DSETCONTROL	31	23324	23324	
MPKCONTROL	32	23325	23325	
MPALRITE	33	23326	23326	
INITIO	34	23327	23377	
GETSYSDB	131			?
RESETDB	132			?
LDEVNOTRDY	35	23621	23634	
IOMESSAGE	36	23721	23721	
LOGERROR	37	24002	24002	
RETURNSYSBUF	40	24046	24046	
IOINIMPEDE	41	24135	24135	
IOIMPEDE	42	24172	24172	
IMPEDE	133			?
GIP*MPIB	43	24241	24280	?
POSTAT	134			?
GIP	44	24241	24280	
CHKCHANNELQUE	45	24446	24446	
EOFCHECK	46	24563	24563	
START*MPIB	47	25151	25151	
STARTIO	50	25151	25151	
HALT*MPIB	51	25312	25312	
HALTIO	52	25312	25312	
SYSIOPROC	53	26341	26341	

WRIT	135			?
REGSTATUS	54	26366	26366	
BIDDM	55	26462	26576	
IOINIFREEZE	136			?
IOFREEZE	137			?
FLAGPROCASSENT	140			?
PETCHIDSEC	141			?
SECURITECOMPLET	142			?
SEGREADCOMPLETO	143			?
ADJUSTLOCALITY	144			?
WAITFORIO	56	30423	30433	
QUEUEONSEGMENT	145			?
ADDTLOCALITY	146			?
WAITFORIOX	57	30423	30441	
IOSTATUS	60	30737	30737	
IOSTATUSX	61	30737	30741	
ATTACHIO	62	31016	31016	
DISCIO	147			?
SETCRITICAL	150			?
CLEARLJS	151			?
RESETCRITICAL	152			?
CLEARWAKE	63	32033	32033	
SETWAKE	64	32033	32035	
RETURNBUF	65	32077	32077	
RETURNDISCREG	66	32077	32207	
RETURNIOQ	67	32077	32153	
RETURNBUF	70	32077	32150	
GETTBUF	71	32265	32265	
GETDISCREG	72	32265	32275	
GETIOQ	73	32265	32273	
GETSBUF	74	32265	32270	
DISCOMPANAGER	75	32375	32375	
QUEUEDISCREG	76	32523	32571	
STORE'IOQ	77	32725	32725	
DEQUEUEDISCREG	100	33026	33026	
DONITOR	101	33120	33120	
CHECKINDEX	102	33335	33335	
WAKE TERMINAL	103	33420	33420	
WAKEIO	104	33446	33446	
SUDDENDEATH	105	33535	33564	
MASTERCLEARMPIB	106	33634	33634	
MASTERCLEAR	107	33634	33634	
WIOC*MPIB	110	33727	33727	
RIOC*MPIB	111	33748	33748	
INIT*MPIB	112	33766	33766	
LDEVODRT	113	34004	34004	
LDEVDSUBTYPE	114	34052	34052	
LDEVDTYPE	115	34061	34061	
EXCHANGEDS	153			?
IOFAILURE	118	34126	34150	
DONVERT	117	34220	34220	
BONVERT	120	34261	34261	
WRITE2	121	34276	34276	
CHECKLDEV	122	34304	34304	
DEQUEUE	123	34336	34336	
ADDHEAD	124	34354	34354	
ADDTAIL	125	34373	34373	
SEGMENT LENGTH		34600		

*** WARNING ***
 ERROR 948 CODE SEGMENT MAY BE TOO LARGE

PROGRAM FILE P82POD2C.HP32002.SUPPORT

MAIN	NAME	STT	CODE	ENTRY	SEG
	KERNELC	1	0	0	
	TERMINATE	2			?
	SEGMENT LENGTH		4		
KERNELC	NAME	STT	CODE	ENTRY	SEG
	DSP	1	0	1514	
	TIMER	123			?
	SUDDENDEATH	124			?
	INITIO	125			?
	STARTCLOCK	126			?
	HELP	127			?
	PROCESSSCHDMSG	2	2674	2674	
	COLLECTGARBAGE	3	3325	4512	
	SWAPIN	4	4705	4705	
	FETCHSEGMENT	5	5325	5351	
	GETDISCREQ	130			?
	CREATELOCKSPACE	6	6857	6731	
	MAKEROOM	7	7062	7217	
	ADJUSTLOCALITY	10	7425	7456	
	PUTDEVICEONSEG	11	7705	7705	
	PUTPROCONSEGSMP	12	10001	10001	
	MAKEOC	13	10077	10077	
	ADDTOLocality	14	10213	10213	
	RECOVEROC	15	10357	10357	
	DISCOMANAGER	131			?
	RESERVEREGION	16	10733	10733	
	CLEANREGION	17	11106	11134	
	RELEASEREGION	20	11613	11651	
	PUTONARL	21	12208	12208	
	TAKEOFFARL	22	12317	12317	
	SEGREADCOMPLET	23	12453	12453	
	RETURNDISCREQ	132			?
	PROCESSCOMPMSG	24	12602	12643	
	SEGWRITECOMPLET	25	12777	12777	
	PROCESSINITMSG	26	13210	13210	
	QUEUEDISCREQ	133			?
	STARTSEGWRITE	27	13440	13440	
	CHECKFORPNDGDIS	30	13560	13560	
	DEQUEUEDISCREQ	134			?
	FETCHIOSEG	31	13620	13620	
	TESTIOFROZEN	32	13667	13667	
	IOFREEZE	33	13726	13735	
	IOUNFREEZE	34	13726	13745	
	UNDEFERSEGSMPO	35	14075	14075	
	AWAKEDEVICE	36	14236	14236	
	AWAKEIO	135			?
	CLEARWWS	37	14324	14324	
	GENSPECREQ	40	14335	14335	
	FLAGPROCABSENT	41	14376	14376	
	GETDATASEGCHANG	42	14522	14522	
	SETSEGSBKPTS	43	14625	14625	
	CONVEXTLABELTOD	44	14761	14761	
	QUEUEONSEGMENT	45	15112	15112	
	EXCHANGEDB	46	15147	15147	
	RESETDB	47	15403	15403	

MPE DUMP ANALYSIS CASE SOLUTIONS

LAB #1

Solution:

- 1) The first thing we need to do is determine what kind of system interruption this is. We start this process by looking for signs of a system failure. The CIR contains %57406 which is "STOR Q+6,I,X". This is not a HALT 17 so this problem may not be a system failure but we will have to do some more investigation to make sure. The status register indicates that we were executing in segment 33 which is HARDRES according to the loadmap. P-PB is 3722 which is ATTACHIO according to the PMAP of HARDRES. Hence, we can be fairly sure that this was not a system failure. Bits 11 & 12 of the CPX1 register are 0. Therefore we were not in the dispatcher or on the ICS. There is still a possibility that we have a system halt (problem found by micro-code) but there is no way to be sure without looking at the halt light on the system. Since we do not have access to the system we have to assume that the problem is not a system halt and continue the analysis. The current process pointer is non-zero, thus ruling out the possibility of a system hang. Since the user did indicate that just 1 device was not getting any response and there is nothing in the dump to contradict this, it would appear that the problem is a device or user lockout since all other possibilities have been eliminated.
- 2) We now need to determine why ldev 35 is hung. The first thing to do is check the DIT for ldev 35. If we check DSTATE in the DIT for ldev 35 (lower order 4 bits of the first word of the DIT), we see that there is no activity pending for this device. This is indicated by DSTATE being 0. Hence, we can say that the problem is not an I/O related problem but is more likely a process-related problem.
- 3) Since the device is not doing anything, hypothesize that the lockout may involve the processes that are in the session for that device. To find the main PIN for a device we must use the Logical Device and Class Table (DST 16). The Logical Device and Class Table is organized into 5 word entries and is indexed by logical device number. By doing some arithmetic ($\#35 * \%5 = \%257$) we find that the entry for ldev 35 starts at offset 257 in the table. The MPE Tables Manual tells us that the main PIN for a session-owned device is found in the upper byte of the 2nd word of the entry, hence, we want the upper byte of word 260 in the table. If we go to offset 260 in DST 16 we find 007000. If we shift right by 8 bits ($007000/400 = 16$) we find that the main device for ldev 35 is PIN 16. Next we will want to trace the family tree for PIN 16 and look for a process-related problem. The family tree shows us that PIN 16 has a son (PIN 22) who also has a son (PIN 23). If we examine the formatted PCB for PIN 23 we note that it is

waiting for its father. If we examine the formatted PCB for PIN 22 we find that it is waited on its son. Ergo, the hang of device 35 is caused by a classic father and son deadlock.

To avoid this type of deadlock the user should perform activates and suspends in 1 intrinsic call to ACTIVATE and not use separate calls to ACTIVATE and SUSPEND.

LAB #2

Solution:

- 1) The first thing we must do is determine what kind of system interruption this is. Looking at the formatted regdump page we note that the CIR contains the PAUSE instruction (030020). PAUSE is a privileged instruction and is executed only by the dispatcher when he has performed all the housekeeping tasks that he is able to and cannot find a process which is ready to execute. A system which is not giving any response and on which the CIR contains the PAUSE instruction is most certainly hung.
- 2) Checking both system and terminal buffers, we find that neither of these resources is the problem.
- 3) Next we check the dispatch queue in the 2nd half of the formatted PCB and find that we have short-waited processes on the dispatching queue (processes waiting for disc I/O to complete). This means that the problem is probably somewhere in the disc subsystem.

Since we believe the problem to lie in the area of disc I/O, we examine the DRQ to get an idea of what is going on. Note that there are 2 pending I/O requests to Ldev #1 for PIN 23. Looking at the DIT for ldev 1 we see that DSTATE = %10 which is defined as "wait for interrupt (operator intervention)". This tells us that the drive is not ready and the cause may involve operator intervention (such as taking the device offline). Further status can be found in the DIT status words STATUS1 & STATUS2. Decoding these words requires the use of a CE Handbook. Using a Series II CE Handbook we find that STATUS1.(3:5) tells us to look at STATUS2. STATUS2.(14:1) tells us that the drive is not ready and is a confirmation of the information that we found in DSTATE.

A variety of things can cause a drive to be not ready. In this case somebody bumped into the drive and knocked the switch to the offline position.

LAB #3

Solution:

- 1) The first step in analyzing any system interruption is determining the class of the system interruption. Examining the formatted regdump page we note that the CIR contains the PAUSE instruction (%030020). Assuming that the user was giving us accurate information when he said that there was no response from any terminal, we can safely conclude that this is a system hang.
- 2) Analysis of a system hang starts with a check of system buffers and terminal buffers. Looking at the system buffer analysis portion of the dump, we find that the number of elements in the primary area equals the number of elements in use. Hence, we have a system hang caused by a shortage of system buffers. The next step is trying to determine why there is a system buffer shortage. The number of system buffers is configured at 8 (number of elements in table) which is normal for a system. When examining system buffer analysis we need to remember that of all the system buffers configured for a system, 2 are reserved for the system and are not available for servicing user needs. Hence, in this case, if 6 system buffers are used up the system will hang on the 7th request for a system buffer until some of those 6 system buffers are freed up.
- 3) System buffers are buffers used for specialized I/O purposes (such as communicating with the system console). As such, when in use they appear in the IOQ or DRQ. If we examine the I/O Request Table, we will see that there are 6 requests pending to Ldev 20 (system console) and all 6 are using system buffers (denoted by "SBUF" under flags). There is I/O pending to the console but it seems to be bottlenecked for some reason. If we look at the DIT for ldev 20, we see that the head of the IOQ list for Ldev 20 has an address of 13116. If we look at this request in the I/O Request Table, we find that it is a read posted by PCB #1 (Progen). If we are sufficiently familiar with the internal operation of the system, we know that a CNTL A entered at the system console causes Progen to hang a read on the console. Until that read is satisfied, no other I/O can take place on the system console. The I/O that is blocked by the read includes log on and log off messages as well as TELLOP messages. These messages sent to the system console all require the use of system buffers. Hence, it is only a matter of time until all the system buffers are queued up with messages for the system console and the system hangs.

Note- A timeout on CNTL A's at the console has been implemented to prevent MPE from hanging as a result of a pending CNTL A at the console.

Solution:

- 1) The user has indicated that this is a device hang but we should step through the preliminaries just on the possibility that we might discover something significant. The CIR contains %150000 which is an "LDB DB+0" instruction. Hence, HALT was not the last instruction executed. The current segment was segment #1 (always ININ, the internal interrupt handler segment) and so we know that SUDDENDEATH (which resides in HARDRES) was not the last procedure executing on the system. Bit 12 of the CPX1 register is off, indicating that we were not in the dispatcher. Bit 11 of the CPX1 register is on, indicating that we were executing on the ICS. Turning to the ICS in the dump to format the markers and look for a SUDDENDEATH marker, we note that the Q register is equal to the base of the ICS (%12730). Hence, there are no markers to format. If we use the PMAP for ININ to correlate the P-PB on the regdump page (remembering to add %111 to the P-PB value before we correlate with the PMAP) we find that we were at offset %3132 which tells us we were executing the last instruction of the procedure EXTGHOST (remember P-PB points to next instruction, not the current.) in ININ. This is an interesting piece of information, but does not do us any good right now since we are really looking for evidence of a system failure.
- 2) Since it does not appear that this was a system failure we need to investigate other possibilities. The current process pointer is 0 which could be an indication of a system hang. However, the user indicated that this was a device hang and not a system-wide hang. To save ourselves the trouble of trying to find a non-existent system hang, it would be easiest to start with the device which the user said was hung.
- 5) Let's proceed on the assumption that the problem is a hang of Ldev 26 as the user indicated. For device hangs the first thing we do is check the DIT for the device. DPAN did not format the DIT for Ldev 26 properly so we have to go to the unformatted portion of the dump. Fortunately we have the LPDT (Logical to Physical Device Table) and can use this table to get the SYSDB relative pointer to the DIT for Ldev 26. This address is 2726 and we add 1000 to SYSDB relative addresses to get the absolute address (3726). Going to the unformatted portion of the dump and checking the 1st word of the DIT, we note that DSTATE is 0, thus indicating that no I/O activity is pending for this device.
- 6) Since it does not look like an I/O-related problem, the next avenue of investigation is into process-related problems. To pursue this investigation we need to find the main PIN for the session or job at this device. For a session or job owned device this information is available in the Logical Device

Class Table (DST 16). The LDCT is arranged in terms of 5 word entries. Doing the appropriate octal arithmetic ($5 * 26 = 203$) we find that the DST relative offset for Ldev 26 in the LDCT is 202. The MPE Tables Manual indicates that the main PIN for a session-owned device is in the upper byte of the 2nd word on the appropriate entry in the LDCT. Going to the DST-relative address of 203 in the dump we find 016400. Decoding the upper byte we find that the main PIN for Ldev 26 is 35.

- 7) Drawing the family tree for PIN 35 and looking at the WAKEMASK, we find that PIN's 40 and 41 in the tree are both waiting for a global RIN. Hence, we need to decode the RIN Table.

The RIN Table (DST 26) is composed of 2 words of overhead followed by 2-word rin entries. Bits 0 & 1 of the first word in each rin entry indicate the type of RIN and the 2nd word indicates the holder of the RIN (right byte) and the head of the queue of processes waiting for the RIN (left byte). By decoding the entries in the RIN Table we find that rin 3 (starts at word 4 in the RIN Table) is a global rin held by PIN 40 and is preventing PIN 41 from running. Rin 5 is a global rin held by PIN 41 and is preventing PIN 40 from running. Hence, we have a classic deadlock situation involving 2 processes and 2 resources.

The user has 2 choices. If his processes need only lock 1 RIN at a time, he should remove multiple RIN capability. Otherwise he should assign a priority scheme to the RIN's.

LAB #5

Solution:

- 1) Determining what kind of system interruption is fairly easy since the CIR contains the PAUSE instruction (%030020) and the current process pointer is 0.
- 2) Preliminary analysis of a system hang involves checking terminal & system buffers. Both system buffer analysis and terminal buffer analysis show plenty of unused buffers so this is not the source of our problems.
- 3) The next question we ask is whether there are any processes in the dispatching queue. Examining the 2nd half of the formatted PCB we see that the only process on the dispatching queue is PIN 1, also known as PROGEN. PROGEN is memory waited which means that it is waiting for a segment to come into memory before it can be launched. Being waited on memory means that a process is waiting for segments to come in from disc. To find the status of disc I/O we look in the DRQ. Looking in the DRQ we find that the only entry in the active list is a pending request for a read of DST 106 from Ldev 1.

If we go to the DIT's in the formatted portion of the dump, we will note that DSTATE in the DIT for Ldev 1 is %13 which indicates that the system is waiting for an interrupt from Ldev 1. Hence, the problem is a missing interrupt on Ldev 1.

LAB #6

Solution:

- 1) The first thing to note about this case is the absence of descriptive data as to how the system was being used when it was down. No data is included to indicate whether a system failure message appeared on the system console or what programs were currently in use.
- 2) Analysis of the dump requires that we first determine what kind of system interruption occurred. Looking at the register page of the dump, we note that the CIR contains 031001 (PCAL STT 1) but the status register indicates that we were in segment 33 (HARDRES) which indicates a possibility that procedure SUDDENDEATH may have been running. The P-PB address is 33640 and by examining the PMAP of HARDRES supplied in the dump case we see that the machine was executing in procedure SUDDENDEATH when it went down. Hence, we know that the cause of the system interruption was a system failure even though the CIR does not contain a HALT 17.
- 2) Since we know that the cause of the system interruption was a system failure, the next thing to determine is the type of system failure. To do this we must identify the executing stack. Examination of the formatted PCB indicates that PIN 14 was the current process when the system went down (this process is flagged by an "*"). Although there is a current process it is still possible that we were executing on the ICS as part of an interrupt routine when the system crashed. Examination of the System Interrupt Register (labeled the ISR in the register page) shows that bits 13 & 14 are on, thus indicating that we are neither in the dispatcher or on the ICS. This being the case we can now go to the stack of PIN 14 and find out the system failure number. The stack of PIN 14 is DST 113 and is located in bank 4 at offset 150023.
- 3) Looking at the topmost stack marker of DST 113 we see that the call to SUDDENDEATH was made by ININ, the internal interrupt handler. We know this by looking at the status register in the marker and noting that the CST is 1, which is always ININ. The system failure parameter number is located at Q-4 for this marker. Looking at this location (%153674) we see that the parameter passed to SUDDENDEATH was %17 or decimal 15. Hence, this was a system failure 15 which is documented in the Console Operator's Guide as an interrupt from an unconfigured device. This tells us the general nature of the problem but further analysis is possible.

By looking at the contents of Q+1 we can find the PLABEL used by the micro-code to trap into ININ code. Note that Q+1 is 101401. For internal interrupts the parameter at Q+1 is the label for the internal interrupt routine. Referring to page 6-1 of the System Reference Manual, we find that 101401 is the label for a non-responding module interrupt. It seems that we have a contradiction: the system failure number indicates that we had an interrupt from an unconfigured device and the analysis of the internal interrupt indicates a non-responding module. To clarify this seeming contradiction we need to perform code correlation. To do this we look at the marker laid down by micro-code to save our place while we process the interrupt. Looking at this marker we see that we were executing in CST 33 at offset 25244. The loadmap tells us that CST 33 is module HARDRES and a reference to file A00AC033C.HP32033.SUPPORT (from the MMT) tells us that HARDRES is module 55. Looking at the PMAP for module 55 we find that we were in procedure STARTIO. Looking at the code listing we see that STARTIO is actually an entry point into procedure START'HPIB. Doing the required octal arithmetic ($(25244 - 25161) = 63$) we get an offset of %63 into the procedure which puts us at a line of code which reads "STARTSIO;". There is no such instruction as STARTIO but the comment says that it is a "START I/O" instruction and so we can surmise that STARTIO is a define for an SIOP instruction. Referring to page 2-36 of the HP3000 Machine Instruction Set Manual, we see that the SIOP instruction expects a channel program pointer in S-0 and a channel/device (DRT) number in S-1. The traps that are supported on the SIOP instruction are stack underflow and non-responding device. We have no reason to suspect that the problem is a stack underflow but we do have reason to believe that a trap or internal interrupt caused by a non-responding device may have occurred since our problem seems to be in the area of I/O. The description of the SIOP instruction says that the DRT number is located at S-1 when the instruction is executed. Looking at the code we that a variable named CONTROL (and referred to as DRT NUMBER in the comment) is stacked prior to calling the SIOP instruction. By checking the symbol table at the end of the procedure we find that CONTROL is located at location Q+2. Checking Q+2 in the stack we find 122 which should be the DRT number. Converting 122 to decimal we get 82.

Looking at the I/O configuration supplied with the dump we see that DRT 82 is the system disc (Ldev 1) which is the non-responding module. Hence, this is a hardware problem involving the I/O system and Ldev 1. This problem was created by entering "LISTF @.@@" on the console and then switching the channel number on the GIC for the system disc as the output was appearing on the console. When the channel selector on the GIC was changed as the disc was processing I/O requests the GIC became a non-responding module which then

caused the internal interrupt and the consequent system failure. It appears as though the system failure message for this problem was somewhat misleading (the fact that the message was misleading was verified by talking to the MPE lab) and that analysis of the memory dump was necessary for identifying the true problem.

LAB #8

Solution:

- 1) We first need to determine what kind of system interruption this is. The CIR contains %140407 which is a "BR P-7" instruction and not a HALT 17. The current segment is 74 (KERNELC) and bits 12 & 13 of the SIR (labeled "ISR" in the formatted dump) are clear, thus indicating that we were in the dispatcher and on the ICS. Hence, this is not a system failure but might be a dispatcher loop. A dispatcher loop is possible but unlikely. More likely, the HALT button was pressed during dispatcher garbage collection. The fact that the base of the ICS is equal to to the value of the Q register (%54104) lends some credance to the notion that the dump was taken while the dispatcher was doing some garbage collection for the lack of anything better to do. Since this problem is not a system failure and does not look like a dispatcher loop (although this is still a possibility) the best guess is probably that the problem is a system hang. This guess is somewhat corroborated by the lack of a current process and the user's report of no response from the system.
- 2) The first question we must ask in analyzing a system hang is whether anybody was in the dispatching queue and short-waited. There is nobody in the dispatching queue & short-waited so we can conclude that the hang is not caused by a malfunction in the disc subsystem.
- 3) Since it does not look like the problem is in the disc subsystem, the next step is to trace the family tree and indicate dependencies. Tracing through the family tree we find the following structure:

```
1
:
2--3--4--5--6--7--10--11--14--15
      :
      24--26--31--32--33
      :   :   :   :
      30  27   34  36
```

- 4) Looking at user level processes (U MAIN processes & below), we see the following:
 - o PIN 31 - waiting for SIR.
 - o PIN 32 - waiting for SIR .
 - o PIN 27 - impeded from segment FILESYS1.
 - o PIN 30 - waiting for a global RIN.
 - o PIN 34 - impeded from segment FILESYS1A.
 - o PIN 36 - waiting for a global RIN.

Note- If we need to find what part of the system a process was in when it impeded, we look at the segment prior to the calls to IMPEDE & WAIT in KERNELC. In the case of pin 27 this segment is CST 2 (FILESYS1 from the LOADMAP). In the case of pin 34 this is CST 77 (FILESYS1A from the LOADMAP).

- 5) The next thing we want to do is check the SIR Table and decode the RIN Table. The formatted SIR Table indicates that SIR 10 is held by pin 36 and is blocking pins 31 & 32.

The RIN Table (DST 26) contains the following information:

RIN 1: file rin, not currently locked.
RIN 2: file rin, locked by pin 27, pin 30 at the head of the waiting list.
RIN 3: file rin, not currently locked.
RIN 4: global rin, not currently locked.
RIN 5: global rin, locked by pin 30, pin 36 at the head of the waiting list.

Having found some additional information, we can now update our scenario with the new information found in the SIR Table & the RIN Table:

- o PIN 31 - waiting for SIR #10 (SIR #10 locked by PIN 36).
- o PIN 32 - waiting for SIR #10.
- o PIN 27 - impeded in segment FILESYS1.
- o PIN 30 - waiting for pin 27.
- o PIN 34 - impeded from segment FILESYS1A.
- o PIN 36 - waiting for pin 30.

Summarizing the current situation, we find:

Pins 31 & 32: waiting for pin 36.
Pin 36: waiting for pin 30.
Pin 30: waiting for pin 27.
Pin 27: impeded in FILESYS1.
Pin 34: impeded in FILESYS1A.

By looking at the dependencies above, it is clear that the key to our mystery must lie with pin 27.

- 5) Since we know that pin 27 was impeded in the file system, we might suspect that a file control block is involved. If a process impedes on a file control block, there are several ways of trying to find the location of that control block:
 - 1) If the process is in split stack mode, check to see what the extra data segment is; it might be the DST containing the control block.
 - 2) Check the bank and offset on the top of the process

stack to see if they point to a DST. If DB for the process was pointing at the control block when the CPU was given up, the top of the stack may contain the bank & offset of the DST which contains the control block (assuming that the DST containing the control block has not moved since the process tried to lock it).

- 3) Correlate the stack with code to find the DST number or location of the control block.

- 6) In the case of pin 27, the formatted PCB indicates that the process was in split stack mode and that DB was pointing at DST 141. Checking the bank and offset on the top of DST 122 (the stack of pin 27) gives us an address of bank 35 & offset 11423. Using the code correlation method we find that the P-PB for the FILESYS1 marker puts us in procedure LOCACB. Referring to the listing for procedure LOCACB we note that a number of parameters are passed to this procedure. By examining the comments in the procedure declaration, we can see that the parameter PACBV is the vector for the PACB & LACBV is the vector for the LACB. In file system vectors, the lower 10 bits are used for the DST which contains the control block and the upper 6 bits are used for the control block vector index. We should also note that the procedure is declared option variable which means that the word at Q-4 in the stack marker is a parameter mask. Counting backwards in the procedure list starting with Q-5 we find that PACBV is located at Q-12 & LACBV is located at Q-11 relative to the marker previous to the LOCACB marker. Examining the stack we find that PACBV is 000141 & LACBV is 004122. The DST for the PACB is DST 141 & the DST for the LACB is 122 which is also the stack of the process. Using the DST Table, we find that the location of DST 141 is in bank 35 at offset 11423 which is also the address that we found on the top of the stack. Hence, it is a good bet that DST 141 contains the control block that pin 27 blocked on.

Going to DST 141 in the dump (bank 35 & offset 11423) and going to the vector entry indicated by the PACB vector (remember that a DST containing file system control blocks consists of 5 words of overhead followed by 4-word vector entries followed by control blocks) we find the vector entry 000014 100430 013427 00000. The pin of the process that has the control block locked is in the lower byte of the 2nd word and the head & tail of the impeded queue are kept in the 3rd word. Hence, the file associated with this control block is locked by pin 30 and pin 27 is waiting for the file. Pin 30, on the other hand, is waiting for pin 27.

- 7) It looks like we have enough data to determine the immediate cause of the system hang: a deadlock between pins 27 & 30. Pin 30 has a global file RIN which has blocked pin 36 which in turn has SIR #10 locked. SIR #10 is the directory SIR & as

soon as a process tries to access to directory it hangs, thus eventually hanging the entire system.

This system hang was produced intentionally by writing small programs which created the hang. Although the hang was produced artificially, the method of analysis is the same for any system hang.

LAB #9

Solution:

- 1) Beginning with the 1st page of the dump, we notice that DPAN found some serious inconsistencies in the memory dump; the pointers for the Data Segment Table and the Process Control Block Table are inconsistent. From this piece of information we can hypothesize that something in the system may have been overwriting portions of bank 0. This may indicate that there are "flying bytes" in the system, ie, stores are being done through invalid pointers. Assuming that the hardware is okay, we can figure that either a piece of system code is doing the damage or that a piece of privileged user code is the problem since non-privileged code would abort with a bounds violation if it tried to write outside of its stack.
- 2) Moving on to the formatted register dump, we note the following:
 - o The CIR does not contain a HALT 17; this may or may not be a system failure.
 - o Bits 12 & 13 of the ISR are clear, indicating that we were on the ICS and in the dispatcher.
 - o The current code segment is 33 (HARDRES) and P-PB is 33631. Looking at the PMAP for HARDRES, we see we were in procedure SUDDENDEATH, ie, the cause of the system interruption was a system failure even though the CIR does not contain a HALT 17.
- 3) We were on the ICS and in the dispatcher when the system went down. The next step is to format the stack markers on the ICS.
- 4) Going to the ICS and formatting the markers, we find the following:

Segment #	P-PB	Segment Name	Procedure
74	11722	KERNELC	RELEASEREGION
74	3220	KERNELC	PROCESSSCHDMSG
74	2057	KERNELC	DSP

Note: The procedure names can only be gotten by looking at PMAP's for the modules. Relating a segment name to a module name is covered in Appendix C of the Dump Analysis Guide.

Looking at Q-4 for the topmost marker, we find %1146. This is the system failure number that was passed to SUDDENDEATH and should have appeared in a message on the console. Converting to decimal we find that the number of the system failure was 614. Looking up system failure 614 in the console operator's guide, we find that the description of a system failure 614 is "Detection of integrity problem in region header or trailer". This is another indication that memory has been corrupted.

- 5) We were in KERNELC when SUDDENDEATH was called so we want to see what the system was doing in KERNELC. The topmost stack marker has a delta P of 11722. Correlating with the PMAP for KERNELC, we find that we were in procedure RELEASEREGION when SUDDENDEATH was called. RELEASEREGION starts at location 11613 and by performing the necessary octal arithmetic (11722 - 11613 = 107) we find that the call to SUDDENDEATH was made just prior to offset 107 in the procedure.

Correlating with the listing for KERNELC, we see that RELEASEREGION was in the process of checking the integrity of the header and trailer for a memory region. Checking the integrity of region headers and trailers is a way for the memory manager to ensure that memory has not been overwritten. When an inconsistency is found between a header and a trailer, the memory manager assumes that memory is corrupt and calls SUDDENDEATH, which is what happened in this case.

Assuming that there are no hardware problems, memory can only be corrupted by system code or by privileged user processes.

- 6) Now it is time to go to the formatted PCB and find out what was running on the system. Looking at the formatted PCB, we see that aside from system code, the only user processes running on the system are 2 user main processes (UCOP) and 1 user son of main process. We should look at the user son of main process just on the outside chance that he is privileged and hence a good candidate for being the cause of the crash.
- 7) The user son of main process is PIN 23 and his stack is DST 130. Looking at the formatted DST, we see that DST 130 is in bank 4 at location 124223. Looking at the user stack markers we see that bit 0 of the status register is set in all of the stack markers, including those markers which are from the user segments. Hence, we know that this user was running his program in privileged mode.

Since we have found a user process that was running in privileged mode, there are 3 possible causes of the system failure:

- o Hardware problem.

- o System code problem.
- o Privileged user process has corrupted memory.

To check on the reliability of the hardware we would want to run hardware diagnostics. To investigate the possibility of a system code problem, we would check the SSB. To see if the user code is the cause of the problem, we would interrogate the user as to what he is trying to accomplish and whether he really needs to be running in privileged mode. Even though the user may not be intentionally accessing memory outside of his stack, doing a store through an address that would normally cause a bounds violation is a good bet for causing a system failure sooner or later.

LAB #10

Solution:

- 1) To determine what kind of system interruption this is, we start with the formatted regdump page. The CIR contains %020320 which is a PLDA instruction and not a HALT instruction. The status register indicates that the system was in segment 33 (HARDRES) but was in procedure PRINTCHAR and not SUDDENDEATH. Bits 12 & 13 of the SIR (labeled as the ISR in the dump) are set, indicating that we were not in the dispatcher and not on the ICS. Hence, to determine what was going on, we need to look at the stack markers for the current process and try to determine what he was doing.
- 2) Since PIN 23 was executing when the system went down, we must format his stack markers and find out what he was doing. Looking at the stack markers for PIN 23 in the section of the dump which formats the markers of present stacks, we see the following markers:

Segment #	P-PB	Segment Name	Procedure
33	34301	HARDRES	WRITE2
33	33602	HARDRES	SUDDENDEATH
34	4445	ABORTDUMP	ABORT
1	1647	ININ	STACKUNDERFLOW
74	16411	KERNELC	RESETCRITICAL
74	16577	KERNELC	DELAY
36	1661	PROCSEG	PAUSE

Note: To get the names of the procedures requires the PMAP's for the different modules.

- 3) Looking at the procedures that were called, we can see that the process called the PAUSE intrinsic and then trapped into ININ (Internal Interrupt Handler) when a stack underflow occurred while in the procedure RESETCRITICAL. The stack underflow routine called the procedure ABORT to abort the process but since the process was still critical, ie, was modifying system tables when it experienced the stack underflow, ABORT called SUDDENDEATH to cause the system failure. SUDDENDEATH called WRITE2 to print the system failure message on the system console and WRITE2 called PRINTCHAR to output the system failure message 1 character at a time. When the CPU stopped executing macro-code, we were in the procedure PRINTCHAR.
- 4) RESETCRITICAL experienced a stackunderflow which should not happen under normal circumstances. It is possible that there is a bug in RESETCRITICAL which causes the problem and we could correlate with code to determine if this is the case.

It is also possible that system code has gotten corrupted. It is possible to check out this possibility by seeing if CST 74 (the code segment in which RESETCRITICAL resides) was in memory. Looking at the formatted CST Table, we note that KERNELC (CST 74) is memory resident and hence, certainly a candidate for being corrupted.

- 5) Since we have an idea that something in bank 0 may have been corrupted (code segment 74), we have essentially 3 possibilities to consider:
- o Possible hardware problem.
 - o Possible system software problem.
 - o Possibility of user code running in privileged mode.

A hardware problem is possible and may be investigated by running hardware diagnostics. A system software problem is possible and may be investigated by checking the SSB. In addition, we should also check for user code running in privileged mode.

- 6) We know that there was non-system code running in privileged mode since the current process was a user process which was running in privileged mode. (We know that the process was privileged because bit 0 of the status register was set in all of the stack markers.)

It is not possible to draw definitive conclusions from the dump since "flying bytes" are the likely culprits in this system failure. Solving this kind of system failure is going to involve correlation between several dumps.