**HP 3000 Computer Systems** 



#### **MICRO 3000/MICRO 3000XE**

System Support Log



8010 FOOTHILLS BLVD., ROSEVILLE, CA 95678

Part No. 30474-90009 E1086 Printed in U.S.A. 10/86

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#### **PRINTING HISTORY**

New editions are complete revisions of the manual. Update packages, which are issued between editions, contain additional and replacement pages to be merged into the manual by the customer. The dates on the title page change only when a new edition or a new update is published. No information is incorporated into a reprinting unless it appears as a prior update; the edition does not change when an update is incorporated.

#### LIST OF EFFECTIVE PAGES

The List of Effective Pages gives the date of the most recent version of each page in the manual. To verify that your manual contains the most current information, check the dates printed at the bottom of each page with those listed below. The date on the bottom of each page reflects the edition or subsequent update in which that page was printed.

Effective Pages	Date
all	 Oct 1986

## THIS SYSTEM SUPPORT LOG IS USED FOR THE FOLLOWING COMPUTER SYSTEM:

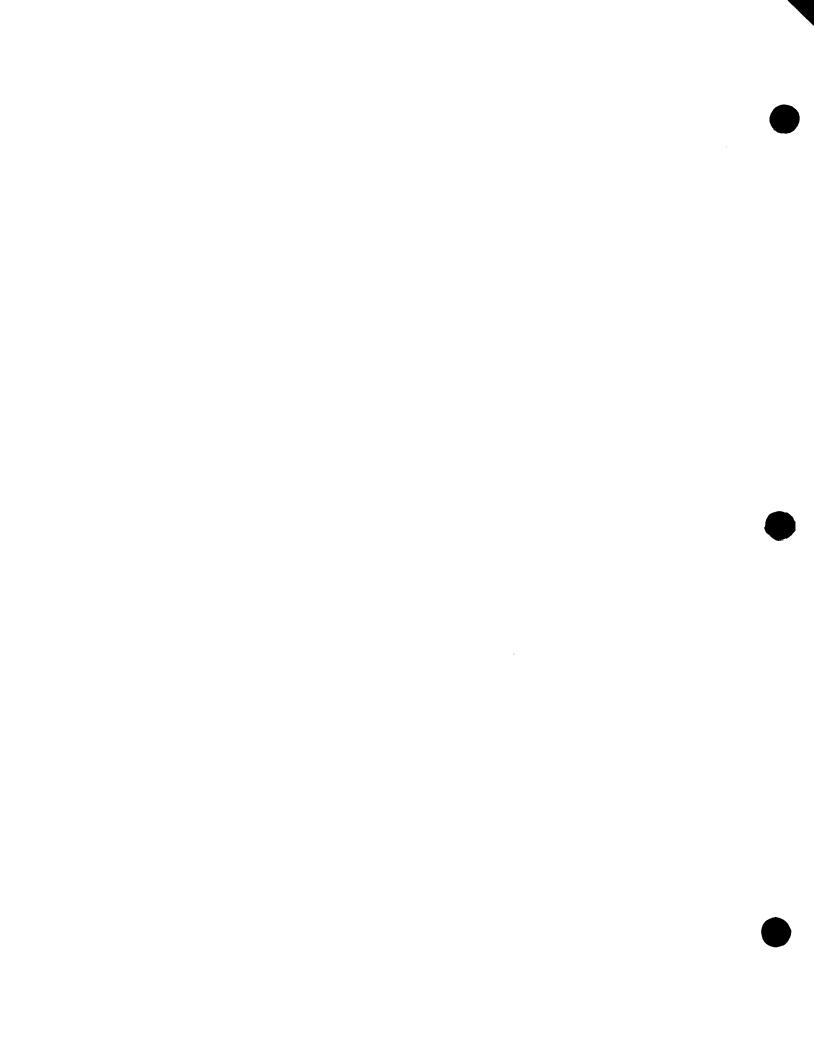
Model	Number	
Serial	Number	

This binder contains the necessary forms to record the complete history of the MICRO 3000 or MICRO 3000XE computer system. It is important to maintain these records. This binder is divided into sections described below:

- 1. The Installation Record section contains documents that define the parts and configuration of the entire system at the time it was shipped and installed.
- 2. The Available Services section provides a page for filing the business cards of local HP representatives. Instructions for placing a hardware service call are included. This section can be expanded to include any documents containing information about Hewlett-Packard field support capabilities.
- 3. The Preventive Maintenance section provides a convenient means to schedule and log preventive maintenance activities.
- 4. The Historical Records section contains System and Peripheral History Logs. These forms enable the computer system operator to communicate important information in writing to the Customer Engineer (CE). This section should provide a quick overview of the system's performance and service history.
- 5. A record of hardware and software revisions to the system is kept in the Change Records section. The hardware record is created and maintained by the customer and the CE. The Systems Engineer (SE) will create and maintain software records.
- 6. As remedial maintenance is performed on the system, copies of the Customer Service Orders are filed in the Customer Service Orders section. These forms are also known as Repair Orders (RO).
- 7. The Current System I/O Configuration section provides a location for the CE to keep a record of on-site configuration changes. System expansions and alterations should be recorded in this section.
- 8. A copy of the Current Customer Support Service Agreement is filed in the Current Customer Support Service Agreement section for both the customer's and CE's convenience.

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#### **INSTALLATION RECORD**

SECTION

1



#### INTRODUCTION

File documents defining the parts and configuration of the entire system at the time it was shipped and installed in this section. These documents include packing lists, hardware configuration records, and a software record. A System Installation Report form is provided for the CE to complete.

File all packing lists in this section as you receive each shipment.

After system hardware is installed, use the MPE I/O Configuration Map to fill in the hardware configuration forms.

Keep a record of the software installed at the time of system installation.

File the green copy of the System Installation Report for future reference.

NOTE

The Installation Record section is not intended to track hardware and software revisions made to the system after installation. The Change Records and Current System I/O Configuration sections serve that function.

#### HARDWARE CONFIGURATION RECORDS

Make a permanent record of hardware included in this MICRO 3000 or MICRO 3000XE computer system by completing the forms this section provides. THE FORMS ARE SEPARATED BY COMPUTER SYSTEM.

#### **MICRO 3000**

#### **Printed Circuit Assembly Locations**

Use this form to make a permanent record of the physical location of each Printed Circuit Assembly (PCA) installed in the System Processor Unit (SPU) of the MICRO 3000 computer system.

CHAN 4	Processor (CPU/Memory/HP-IB)	PROC
CHAN 3		OPT I/O
CHAN 2		OPT I/O
CHAN 1	Advanced Terminal Processor	ATP

#### **Peripheral Interface Controller**

Record information about the HP-IB devices connected to the Peripheral Interface Controller (PIC) PCA on the following form:

#### PERIPHERAL INTERFACE CONTROLLER (Channel # \_\_\_\_\_)

Device Address	Product Number	Description	LDEV# DRT#
		<del> </del>	

#### **Advanced Terminal Processor**

Record information about the RS-232C devices connected to the Advanced Terminal Processor on the following forms:

#### ADVANCED TERMINAL PROCESSOR (Channel #\_\_1\_)

Port/Unit #	Product #	Description	LDEV #	DRT #
0		console	20	8
1			21	8
2			22	8
3			23	8
4			24	8
5	-		25	8
6			26	8
7			27	8

#### ADVANCED TERMINAL PROCESSOR (Channel #\_\_\_\_\_)

DRT #	LDEV #	Description	Product #	Port/Unit #
				<del>-</del>
_				

#### Local Area Network Interface Controller

Record information about the devices connected to the Local Area Network Interface Controller (LANIC) on the following form:

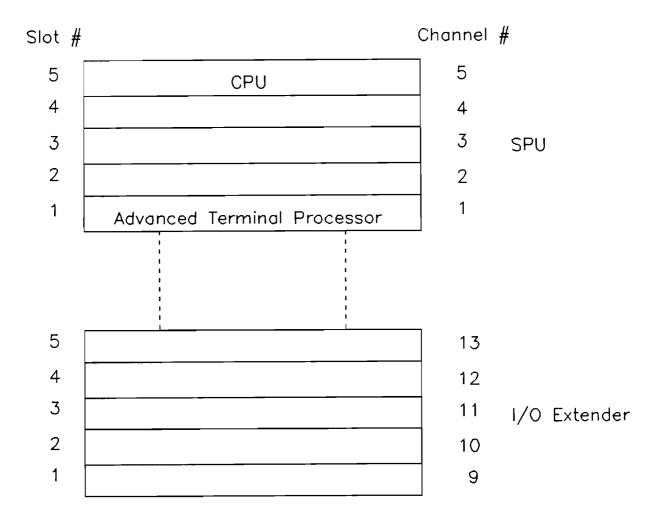
#### LOCAL AREA NETWORK INTERFACE CONTROLLER (Channel # \_\_\_\_\_)

Unit #	LDEV #	DRT #	Product #	Description

#### MICRO 3000XE

#### **Printed Circuit Assembly Locations**

Use the following form to record the physical location of each Printed Circuit Assembly (PCA) installed in the System Processor Unit (SPU) and I/O Extender of the MICRO 3000XE.



#### **Peripheral Interface Controller**

Record information about the HP-IB devices connected to the Peripheral Interface Controller (PIC) PCA(s) on the following forms:

NOTE

The MICRO 3000XE computer system supports one, two, or three PICs. Fill in the number of forms appropriate for your system.

#### PERIPHERAL INTERFACE CONTROLLER (Slot # \_\_\_\_\_)

Device Address	Product Number	Description	LDEV # DRT #

#### PERIPHERAL INTERFACE CONTROLLER (Slot # \_\_\_\_\_)

Device Address	Product Number	Description	LDEV #	DRT #

#### PERIPHERAL INTERFACE CONTROLLER (Slot # \_\_\_\_\_)

Device Address	Product Number	Description	LDEV# DRT#

#### **Advanced Terminal Processor**

Record information about the RS-232C devices connected to the Advanced Terminal Processors(s) on the following forms:

#### ADVANCED TERMINAL PROCESSOR (Slot #\_\_\_\_1\_\_\_)

Port/Unit #	Product #	Description	LDEV #	DRT#
0		console	20	8
1			21	8
2		-	22	8
3			23	8
4	-		24	8
5			25	8
6		-	26	8
7			27	8

#### ADVANCED TERMINAL PROCESSOR (Slot #\_\_\_\_\_)

Port/Unit #	Product #	Description	LDEV #	DRT #
		<del></del>		

#### ADVANCED TERMINAL PROCESSOR (Slot #\_\_\_\_\_)

Port/Unit #	Product #	Description	LDEV #	DRT #
	,			

#### ADVANCED TERMINAL PROCESSOR (Slot #\_\_\_\_\_)

Port/Unit #	Product #	Description	LDEV#	DRT #

#### ADVANCED TERMINAL PROCESSOR (Slot #\_\_\_\_\_)

Port/Unit #	Product #	Description	LDEV #	DRT#
-				
_				
_				
_				

#### ADVANCED TERMINAL PROCESSOR (Slot #\_\_\_\_\_)

Port/Unit #	Product #	Description	LDEV #	DRT#
			_	

#### ADVANCED TERMINAL PROCESSOR (Slot #\_\_\_\_\_)

Port/Unit #	Product #	Description	LDEV#	DRT #

#### Local Area Network Interface Controller

Record information about the devices connected to the Local Area Network Interface Controller (LANIC) on the following form:

#### LOCAL AREA NETWORK INTERFACE CONTROLLER (Slot # \_\_\_\_\_)

Unit #	LDEV#	DRT #	Product #	Description
				-



#### SYSTEM INSTALLATION REPORT

To better assist in insuring a quality product to our customer, we request that you complete this form and mail as soon as possible. Sales Order No.: Installed by: System Model: Tech No: System Serial No.: **WARRANTY START DATE:** Field Office: **WARRANTY PERIOD:** Installation Record Any NO Responses Should Be Explained in the Remarks YES NO (REMARKS) 1. WAS SITE ADEQUATELY PREPARED? \_\_\_\_\_ \_ 🗆 2. DID SHIPMENT ARRIVE WITHOUT SHIPPING DAMAGE? \_\_\_\_\_\_\_ 3. WAS SHIPMENT COMPLETE? \_\_\_\_\_\_ 4. PHYSICAL APPEARANCE OK? \_\_\_\_\_ 5. MECHANICAL CONDITION OK? \_\_\_\_\_ 6. ARE MANUALS ADEQUATE?\_\_\_\_\_  $\Box$ 9. IS CUSTOMER SATISFIED? \_\_\_\_\_\_\_ 10. INSTALLATION ADEQUATE TO START WARRANTY?  $\Box$ 11. WAS COORDINATED DELIVERY WINDOW MET? ----(If "NO" indicate Product(s) not deliverd in window) RATE HP OVERALL PERFORMANCE: HI LOW 10 REMARKS: (PLEASE BE SPECIFIC, USE ADDITIONAL SHEETS IF NECESSARY)

#### **AVAILABLE SERVICES**

SECTION

2

#### INTRODUCTION

This section provides a page to file the business cards of your current Hewlett-Packard representatives and to record service request telephone numbers. This section contains instructions for how to place a hardware service call. HP Service Request Forms for reporting software problems are included. Call Sheets are provided and must be completed prior to placing a Response Center call.



#### HOW TO PLACE A HARDWARE SERVICE CALL

1.	Call <u>772-5711</u> .*	Give the following information to the
	service dispatcher:	
	A. Your Customer Support Servi     B. Your company name and addr     C. Name and phone number of p	*

- E. Description of the malfunctioning equipment's symptoms (including any error message numbers displayed on the screen or equipment)
- 2. The service representative will return your call. Be prepared to answer questions concerning the problem.
  - A. Is this an initial or reoccurring problem with the equipment?

D. Model and serial number of malfunctioning equipment

- B. In what situation did the error occur?
- C. Is any non HP equipment used?
- D. Was a memory dump taken?
- 3. If necessary, the service representative will come to your site to perform the repair at a prearranged time. Please have the equipment available for servicing.

Depending on the kind of malfunction, you may be asked to do a system backup before the service representative arrives on site.

*YOUR CALL IN HOURS ARE FROM	то	AFTER HOURS CALLS ARE SUBJECT T
AN EXTENDED COVERAGE CHARGE.		

## CALL SHEET The Response Center Coordinator needs to know... System Handle:\_\_\_\_\_ Company Name: \_\_\_\_\_\_ R.C. Caller Name: \_\_\_\_\_ Brief Problem Description: You need to note... CALL ID Number: Priority: Priority: Call Placed - Date: \_\_\_\_\_ priorities - 1=system down Time: 2=system failure, but system running 3=time limited problem 4=standard call Call Back - Date:\_\_\_\_\_\_ Time:\_\_\_\_\_\_ R.C. Engineer:\_\_\_\_ Call Closed - Date:\_\_\_\_\_\_ SR Number:\_\_\_\_\_ Time:\_\_\_\_ The Response Center Engineer needs to know... O/S Version: \_\_\_\_\_ Application: \_\_\_\_ Application Module: Application Version:\_\_\_ Error Messages (number and description):\_\_\_\_\_\_ Describe the final solution:

S.O. 1	Ref.	#	
--------	------	---	--



### **HP** service request form

			SR #	(HP only)
Customer report no.		<u></u>	Dat	e
Submitted by				
Firm name		Division	_	
Street		System Mgr		
City, State, Zip		Phone no. ()		_ ext
Specific location of system	n in plant			
System model	(e.g., 3000/III)	Operating System	(e.g., AMIGO A.0	
Southarn Souist No.	, , ,	Dun du să Massa		·
System Serial No		Product Name	(e.g., BASIC A.00.05)	
Supportive documentation	n included with report.			
MEDIA	DESCRIPTION			
				· · · · · · · · · · · · · · · · · · ·

Rev date: 2/20/79

#### PREVENTIVE MAINTENANCE

SECTION

3



#### INTRODUCTION

This section includes preventive maintenance (PM) timetable worksheets, general customer preventive maintenance procedures, and general customer engineer (CE) preventive maintenance procedures.

The primary purpose of preventive maintenance is to keep unscheduled interruptions to a minimum. Following a sound PM program can help maintain a high level of computer system performance at minimum cost.

Customer preventive maintenance and customer engineer preventive maintenance are the two types of PM. PM consists of cleaning, lubricating, visually inspecting, replacing worn parts (for example, air filters), observing equipment operation, and running one pass of the selftest diagnostic. Only those adjustments known to require periodic attention should be checked.

#### **CUSTOMER PREVENTIVE MAINTENANCE**

IT IS IMPORTANT THE CUSTOMER PERFORMS PREVENTIVE MAINTENANCE ON A REGULAR BASIS. The customer should complete a preventive maintenance timetable worksheet when the computer system is installed. When creating the maintenance schedule, take the environment into consideration. For example, if the environment is extremely dusty, the peripherals will require frequent cleaning.

Specific PM procedures and schedules are provided in the owner's or operator's manual that accompanies each computer peripheral.

#### System Processor Unit (SPU)

The System Processor Unit (SPU) requires no PM.

#### **Terminals and Personal Computers**

Clean terminals and personal computers and replace batteries on a regular basis. If battery replacement is necessary, procedures and information are found in the terminal or personal computer user's manual.

#### **Printers**

It is especially important to keep printers clean.

#### **Tape Drives**

Clean the tape path at a regular interval to remove oxide build-up.

#### **Disc Drives**

There are no specific PM procedures for disc drives.

#### **Plotters**

Clean on a regular basis.

#### **CUSTOMER ENGINEER PREVENTIVE MAINTENANCE**

The computer system requires periodic PM by HP Customer Engineers. The CE should complete a preventive maintenance timetable worksheet after the computer system is installed. The CE determines if the conditions at a particular site affect the PM schedule and performs PM accordingly. Peripheral manuals provide specific procedures and maintenance schedules.

#### **General Procedures**

General preventive maintenance procedures to perform on every PM visit are listed below. Use this list as a guide only. The CE manuals for each device describe specific PM procedures.

Review and investigate any problems logged since the last PM visit.

Check all lamps, indicators, switches, controls, fans, blowers, and air filters.

Run the selftest diagnostics.

Clean device exterior surfaces.

#### Reference Material

For each device, refer to the training manual, installation manual, diagnostic manual(s), and Customer Engineer Handbook.

#### PREVENTIVE MAINTENANCE TIMETABLE WORK SHEET

PRODUCT	1	2	3	4	5	6	7	8	9	10	11	12
THODOGT												
			_									
							!					
<u> </u>												
<u>-</u>												
												<u> </u>
-												
	<del> </del>	<u> </u>	1									
	-		<u> </u>								-	
TOTAL REGIO HRS												
TOTAL REQ'D. HRS.		1										
SCHEDULED DATE												
SCHEDULED TIME	<u> </u>				-		<u> </u>	-				<del> </del>
CE OR CUSTOMER INITIAL					<u> </u>			<u> </u>				<u> </u>

#### PREVENTIVE MAINTENANCE TIMETABLE WORK SHEET

PRODUCT	1	2	3	4	5	6	7	В	9	10	11	12
							_					-
							ļ	_				
	-											
	-											
							-					
						_		_				
		-										
	-						-					
							-					
_												
							1					
TOTAL REQ'D. HRS.												
SCHEDULED DATE												
SCHEDULED TIME		_										
CE OR CUSTOMER INITIAL												

#### INTRODUCTION

File Historical Records in this section. Both the customer and HP's Customer Engineer (CE) complete the system history and peripheral logs. This section contains the Monthly Report of Hard System Failures and the Console Log which are additional forms used at HP's District Manager's option. The history logs allow the system user, the CE, and HP management to obtain vital operating information which is used to ensure the successful operation of the system.

#### SERVICE CALL ENTRIES

Upon arriving at a customer site to answer a service call, the CE enters time of arrival, system symptoms, and any other pertinent information into the history log(s). The CE reviews the history logs and informs the customer of the plan of action.

Before leaving, the CE completes all paper work and calculates elapsed maintenance time according to the formulas below. The formulas apply only the customer's principal period of maintenance (PPM). For example, given contract coverage from 8 to 5 (8 hours), a call for service at 4:00 P.M., and maintenance completion by 11:00 A.M. the next day, there would be 4 hours of elapsed maintenance time.

The CE explains to the customer what was found, what corrective action was taken, and the current status of the system. If further action is required, the customer is told the estimated completion date. Any commitments are recorded in the System History Log and the CE's schedule.

#### PREVENTIVE MAINTENANCE ENTRIES

When the CE performs preventive maintenance (PM) on a customer's system, the same procedure as with a service call is followed. In addition, the CE calculates System Performance (SP) and Contract-to-Date SP, and enters these values into the history log(s). A list of all items given PM is included. When all records are complete, the CE reviews with the customer all log entries made by the customer and CE since the previous PM.

#### TO CALCULATE SYSTEM PERFORMANCE (SP):

1. Determine PPM (Principal Period of Maintenance) per month:

ays or	coverage	rer week
5	6	7
173	208	242
346	416	485
520	624	728
	5 173 346	346 416

$$SP = \frac{PPM - Downtime}{PPM} \times 100$$

TO CALCULATE CONTRACT-TO-DATE SP:

AVERAGE SP = 
$$\frac{\text{No. prior periods} \times \text{prev. avg.} + \text{current avg.}}{\text{Total number of periods}}$$

#### **EXAMPLE:**

Assume monthly PM's for which records have been kept for 3 months on a 16-hour, 5-day week contract. Downtime is 16 hours in Month 1, 12 hours in Month 2, and 29 hours in Month 3.

Month 1 SP = 
$$\frac{346 - 16}{346}$$
 X 100 = 95%

AVERAGE SP = 
$$\frac{0 + 95}{1}$$
 = 95%

Month 2 SP = 
$$\frac{346 - 29}{346}$$
 X 100 = 95%

AVERAGE SP = 
$$\frac{1 \times 95 + 97}{2}$$
 + = 96% (at month 2)

Month 3 SP = 
$$\frac{346 - 29}{346}$$
 X 100 = 92%

AVERAGE SP = 
$$\frac{2 \times 96 + 92}{3}$$
 = 95% (at month 3)

#### **EXCEPTIONAL PROBLEMS**

Difficult, recurrent, or unusual system problems are reported by the CE to the HP manager and salesman. In these cases, a plan of action is created and the customer kept informed of the plan's status.

#### **OPTIONAL PERFORMANCE HISTORY LOG**

In addition to the mandatory System History Logs, this section contains the two logs that the District Manager may choose to use to provide a more detailed performance history. These logs, which are very useful for reliability engineering studies, are the Monthly Report of Hard System Failures and the Console Log.

The grid pattern of the Monthly Report of Hard System Failures allows fast identification of unusual performance trends, while the Console Log provides more detailed performance information. Examples of how both of these forms can be used are provided.

# **SYSTEM HISTORY LOG**

ТО	TO BE COMPLETED BY USER				TO BE	TO BE COMPLETED BY HP
Date of Entry	System Operator	HP Notified Date/Time	CE On Site Date/Time	Customer Service Order (RO) Number	Down Time	HP Customer Engineer
11/11/185				F8286-1		David Rosales
Malfunction Description:	ion:		Action Requ	Action Required and Comments:	ents:	
verify s	ith & exponent			Duspert	7 67	Duspush aPU Disa Dives
- <del> </del>	for Contract Coverage		treew Cige	elements retticadus ile free vo	e.s."	treavelement 2.5" 3" wold Cogaretticadus on top of equicaliunal Smoke fire voom tro bear titled for computer rosm
unit Amyoice	Physical indolestion		44 3	ermal to l	onser cat	Internal to lower colonet: Waden Work-7 ierry black smoky deposit at whother of disc drive
serial #	Jan 15, 1926		, P.O.	facenda:	Lookes 'L'il	foreactes tilk toner dost Dus Torre in Rear Left of drower vault. Dus q. 21.00
Malfunction Description:	on:		Action Requ	Action Required and Comments:	ents:	
			ં તે	Bad neception (personnel	safety)	1. Bud neceptude - No ground - Must be corrected (perconnel safety) 2. Bud neceptude - Switched Line & Newt-Must be corrected
			<i>ب</i> ع.	- Porety	medem PM syete	3 Foreign modern win CPU advind 4. Soot PM suptemaster contract starts
unit					<del>-</del>	
Idev			(			
serial # {(/_	11/21/65 Rosales	ales	(kz	elaca up R	randz	Piebed up Drandy monitor - will analiza

## HISTORY LOG

					Date of Entry	 
					Model # Serial #	
					Malfunction Description	TO BE COMPLETED BY USER
					HP Notified Date/Time	
					CE On Site Date/Time	
			-		Customer Service Order (RO) Number	
					Down Time	TO BE 0
					Action Required and Comments	TO BE COMPLETED BY HP

HISTORY LOG

		Date of Entry Serial #	1
			TO BE COMPLETED BY USER
		HP Notified Date/Time	Ĩ
		CE On Site Date/Time	
		Customer Service Order (RO) Number	
		Down Time	то вє
		Action Required and Comments	TO BE COMPLETED BY HP

# CONSOLE LOG

 	r	 1	 	 	-	 
						DATE
						TIME
						NAME
						SYSTEM CRASH
						SOFTWARE PROBLEM
				<u> </u>		PROBLEME
		_				MAINTENATIVE
						UPGRADE
_						REMEDIAL MAINTENANCE
						INANCE
				]		
						COMI
			1			COMMENTS

					_		_	<del></del>	 
									DATE
		-	-	-					TIME
									NAME
_									 SYSTEM CRASH
									PROBLEM
				_					HARDWARE PROBLEM  PREVENTATIVE MAINTENANCE
-						_			 UPGRADE
 									REMEDIAL MAINTENANCE
									Ç
									COMMENTS

# MONTHLY REPORT OF HARD SYSTEM FAILURES

For:

		24	23	22:	21:	20:	19:	18:	17:	16:	15:	14:	13:	12:	Maintenance 11:	Malfunctions/ 10:	<u>Due To</u> 09:00	Halts 08:00	<b>System</b> 07:00	PM Done:	Software Changes:	Hardware Changes:	MPE Version:	Environment — Changes		
		24:00	23:00	22:00	21:00	20:00	19:00	18:00	17:00	16:00	15:00	14:00	13:00	12:00	11:00	10:00	8	8	8	ne:	es:	es:	on:	ges		
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Date	16					<u> </u>		<del> </del>							<u> </u>								-	16	Date	
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	20		ļ		<u>                                     </u>												<del>                                     </del>	1					-	20		
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	31																			_				<u>\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ </u>		

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SEP mo.

For:

MONTHLY REPORT OF HARD SYSTEM FAILURES

Typical Information Coding:

System halt with console message — enter error number.

System halt without console message – enter contents of status register if available. Underline bits 8-15 (segment number).

System looping in run mode and no response — enter "L."

System down and not in operation mode – enter "D."

Exact details of error printouts and all system malfunctions, mainframe and peripheral, should be entered in the Console Log.

#### **CHANGE RECORDS**

SECTION

5



#### INTRODUCTION

This section consists of Product Record Sheets for documenting hardware and software product changes.

On the Hardware Product Record Sheet, record the history of each hardware product. These sheets reflect the beginning and continuing history of each product and will contain a complete configuration history. If a product installation causes a change in a system's I/O configuration, print a listing of the system's current configuration and file the listing in the the Current System I/O Configuration section.

On the Software Record Sheet, record the history of each software product. These sheets will contain a record of all installed changes (versions, updates, and fixes). The Systems Engineer (SE) may supply additional forms for documenting software product history.

#### HARDWARE PRODUCT RECORD SHEET

Product #	Serial #	Sales Order #	DRT #	Installed Date	Warranty End Date
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	_				<u> </u>
	_				
	_				
		_			
	_				
		-			
		_			
	_				

#### HARDWARE PRODUCT RECORD SHEET

Product #	Serial #	Sales Order #	DRT #	Installed Date	Warranty End Date
			_		
_					
		-			
					,

#### **CUSTOMER SERVICE ORDERS**

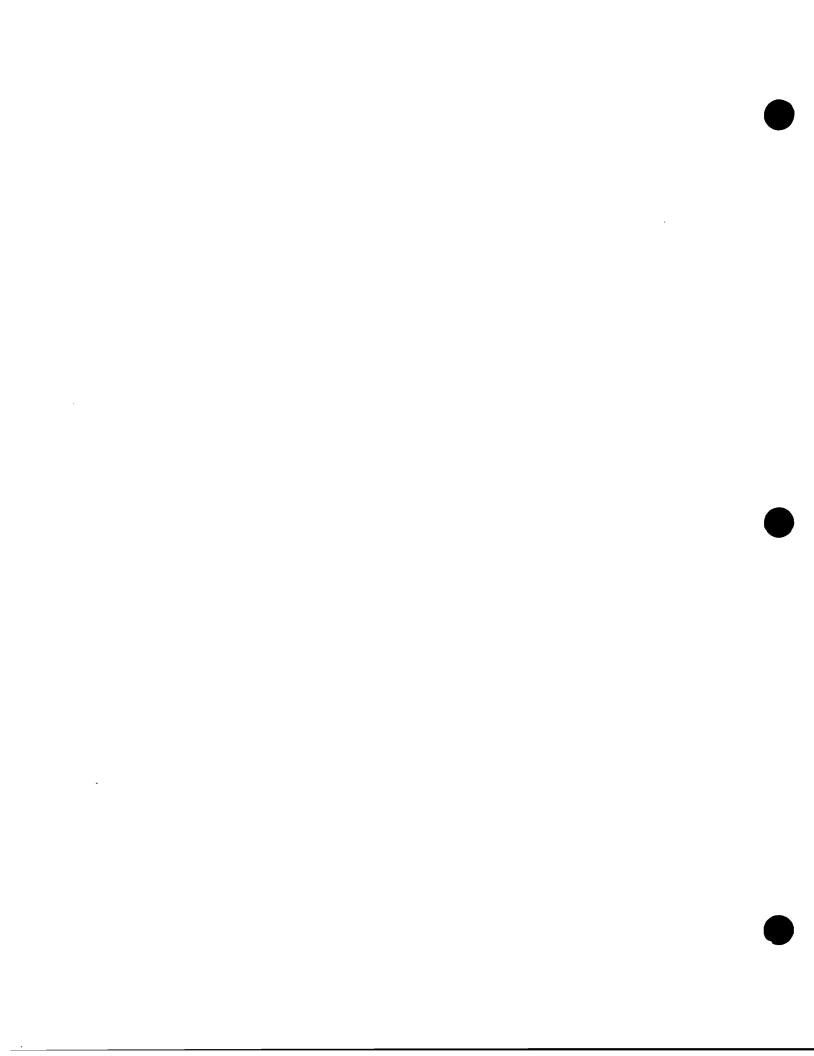
SECTION

6

#### INTRODUCTION



When remedial maintenance is performed on the system, file copies of the Customer Service Orders in this section.



### CURRENT SYSTEM I/O CONFIGURATION

SECTION

7

#### INTRODUCTION

This section provides a location for the CE to keep a record of the on-site configuration changes. As the system expands or changes, print a listing of the system's current I/O configuration and file the document in this section.

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## CURRENT CUSTOMER SUPPORT SERVICE AGREEMENT

SECTION

8

#### **INTRODUCTION**

File a copy of the Current Customer Support Service Agreement in this section.

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			_

#### READER COMMENT SHEET

HP 3000 Computer Systems MICRO 3000/MICRO 3000XE

System Support Log

30474-90009

October 1986

We welcome your evaluation of this manual. It is one of several that serve as a reference source for HP 3000 Computer Systems. Your comments and suggestions help us to improve our publications and will be reviewed by appropriate technical personnel. HP may make any use of the submitted suggestions and comments without obligation.

Is this manual tech	nically accurate?	Yes [] No []	(If no, explain under Comments, below.)
Are the concepts an understand?	nd wording easy to	Yes [] No []	(If no, explain under Comments, below.)
Is the format of the in size, arrangemen	is manual convenient nt and readability?	Yes [] No []	(If no, explain or suggest improvements under Comments, below.)
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