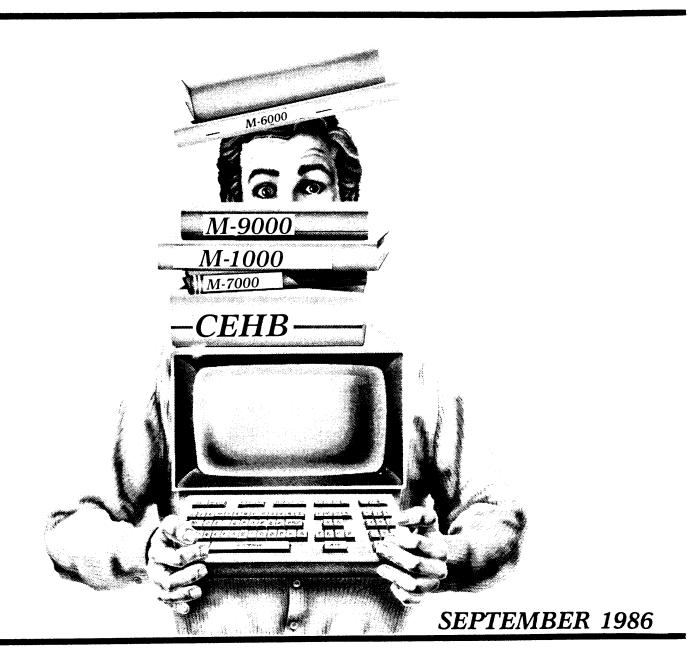
FIELD SERVICE

DOCUMENTATION CATALOG



MCDONNELL DOUGLAS FIELD SERVICE COMPANY

TABLE OF CONTENTS

	CONTENTS	PAGE
Additio	TION ution of Manuals nal Copies ution Lists	1 1 1
1096 1189 1271	SOVEREIGN Customer Engineer Handbook	3 3 4 4
1012B	OCUMENTATION 1600 Series Computers Operation and Maintenance Manual REALITY 8000 PEP Series Introductory Manual VMS 3200 Series SEQUEL Technical Manual Microdata 9000 System Technical Manual Microdata 9250 System Technical Manual Microdata 6000 System Technical Manual Microdata 1000 Workstation Technical Manual Microdata 1000 Workstation Technical Manual M-1000 Workstation Installation and Diagnostics Guide	7 7 8 8 8 9 9
SYSTEMS II 1066 1190 1159 1238	NSTALLATION AND PLANNING GUIDES REALITY Installation and Planning Guide SOVEREIGN Installation and Planning Guide SEQUEL Installation and Planning Guide 6000 System Installation and Planning Guide	11 11 12 12
COMMUNI 1326	CATIONS M-3110/3120 Statistical Multiplexor Operation and Maintenance Manual	13
DISC DRIV 1140A 1085 1091	ES 9000 Disc Operation and Maintenance Instructions REFLEX I Technical Manual REFLEX II Technical Manual	15 15 15
TAPE DRIV 10039 1107 1198	ES Microdata Magnetic Tape Manual 28000 Series MTU Technical Manual Series 29000 SMTU Technical Manual	17 17 17
TERMINAL 1106A 1197 1262	S PRISM II Terminal Technical Manual PRISM IV Terminal Technical Manual PRISM V Terminal Technical Manual	19 19 19
PRINTERS 1091 9001 9002 1315 1068 1270 9003 9004	Matrix Printer Technical Manual 538X Series Matrix Printer Technical Manual 5350 Matrix Terminal Technical Manual Microdata Line Printer Technical Manual 2230 Line Printer Technical Manual Letter Quality Printer Technical Manual BP1500 Line Printer Technical Manual MVP 150LPM Line Printer Technical Manual	21 21 21 22 22 22 22 23 23

TABLE OF CONTENTS (CONT'D)

	CONTENTS	PAGE
NPD-067 T	ymnet Engine Pocket Guide (Packet of 10)	35
	Engine Diagnostics Users Guide	35
	Engine Maintenance Manual	36
	Engine Site Preparation Guide	36
NPD-675 N	Multiple Extended Processor System Description	37
NPD-604-1 F	Family Maintenance Print Manual (Micro-Engine)	37
NPD-605 N	Mac Diagnostic - Version 4.0	37
	Synchronous/Asynchronous Diagnostic	38
NPD-607 E	Enhanced Synchronous Diagnostics - Version 2.0	38
NPD-236 E	ELF Operators Guide - Version 3.8	38
	Probe Reference Manual - Version 34	39
NPD-057 N	Network Products Concepts and Facilities	39
NPD-057-1 C	Concepts and Facilities - Update	39
TYMNET USER G	UIDE AND SOFTWARE MANUALS	
NPD-272 X	K.25/X.75 Capabilities	41
	K.25/X.75 Interface Reference Manual	41
	KOM Users Guide - Version 2	41
NPD-052 C	CMT/3270 Interface Reference Manual (Version 2.06)	42
NPD-538 3	270 Host Interface Reference Manual - Version 7.02	42
	3270 Terminal Interface Reference Manual - Terminal Version	42
	The 2780/3780/Hasp Interface Reference Manual	43
	Async Tymsat Reference Manual - Version 2	43
	OM Users Guide - Version 2.0	43
	Netval Users Guide - Version 2.0	44
	K.PC Protocol Specifications	44 44
NPD-271 T	lymnet X.25	44
USER DOCUMEN	TATION	45
	Tymnet Network Specifications Users Manual	45 45
	VT.100	45
	ADM-3A/Tymnet Model 430	45 45
	HP 2622A	45 46
	ADM 11/Tymnet 431	46 46
	ADM 12 Plus/Tymnet Model 426	
	IBM 3101	46 46
NUD-132	Televideo 970	46
	ECHNICAL DOCUMENTATION	45
Third Party Te	echnical Documenation List	47

DISTRIBUTION

DISTRIBUTION OF MANUALS

The major part of distribution of technical manuals is made to customer engineers at the time they attend formal classroom instruction in Irvine. Students are issued manuals for the equipment on which they are being trained. All customer engineers are issued a Customer Engineer Handbook when they first attend a formal training course.

Copies of each technical manual and handbook are also distributed to a "Service Center Library" list. This list includes each service center as well as regional and district technical support specialists. Each service center should have a complete library of technical manuals, CE Handbooks, technical bulletins, and field change notices under the care of the Engineer-in-Charge.

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Requests for additional or replacement manuals and handbooks will be honored when made in the form of a signed memorandum from the cognizant field manager. Such requests should be sent to:

McDonnell Douglas Field Service Company Technical Publications Department Distribution Center 2361 McGaw Avenue Irvine, CA 92714

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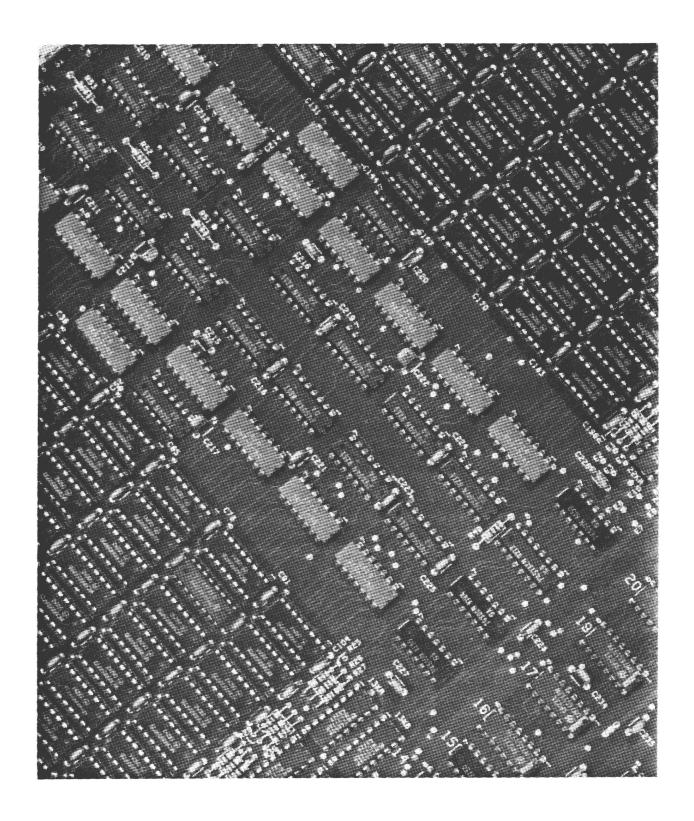
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NOTE:

Customer engineers who comprise a one-man service center, as well as regional and district technical support specialists, will often receive two copies of many documents. This is because one copy is addressed to the individual and one copy is addressed to the Service Center Library. The Service Center Library copies are to be maintained so that when the position is vacated, the library can be turned over, intact, to the person succeeding to that position.



CUSTOMER ENGINEER HANDBOOKS

TITLE:

PUBLICATION NUMBER:

REALITY CUSTOMER ENGINEER HANDBOOK

1096

DESCR: The Reality CE Handbook contains installation, configuration, preventive maintenance, and troubleshooting information for Reality (4000 Series) systems and peripheral equipment.

The handbook is a small notebook, divided into categories such as; System, Tape, Disc, Printers, Software, etc. Each category is further divided into sections, each section pertaining to a specific subject or peripheral equipment. Each section is tabulated and indexed for quick reference and contains information in modular article format.

Each peripheral equipment section contains installation and configuration information, switch settings, adjustments, and general maintenance and troubleshooting information.

Revisions and updates are in the form of "Change Packages" which are issued periodically. Each change package is numbered and dated.

DATE:

1984 (Reprinted Original and Updates through Change 8) Latest Revision: Change 1, February 1985.

TITLE:

SOVEREIGN CUSTOMER ENGINEER HANDBOOK

PUBLICATION NUMBER:

1189

DESCR: The Sovereign Customer Engineer Handbook contains installation, configuration, preventive maintenance, and troubleshooting information for Sovereign (7000 Series) systems and peripheral equipment.

The handbook is divided into sections, each section pertaining to a particular 7000 Series model or peripheral equipment, along with several special sections such as Error Codes, Cabling, etc. Each section is indexed for quick reference and contains information in modular article format.

Each model section contains detailed configuration information, backplane allocations, switch settings, PROM part numbers and placements, adjustments, and cabling.

Each peripheral equipment section contains installation and configuration infomation, switch settings, adjustments, and general maintenance and troubleshooting information.

Revisions and updates are in the form of "Change Packages" which are issued periodically. Each change package is numbered and dated.

DATE: 1983 Latest Revision: Change 3, September 1984.

TITLE:	PUBLICATION NUMBER:
SEQUEL CUSTOMER ENGINEER HANDBOOK	1271

DESCR: The Sequel Customer Engineer Handbook contains installation, configuration, troubleshooting and corrective maintenance information for Sequel (9000 Series) systems.

The handbook is divided into sections which are indexed for quick reference and contain information in modular article format. Each section pertains to a specific subject area such as: CPU, FD-260/130 Disc, General Data (contains the bulk of configuration information, startup and self-test procedures, etc.), Microdiagnostics, Diagnostics, Software, Preventive Maintenance, and Cabling.

The only peripheral equipment detailed in this handbook is the FD-260/130 Disc Drive. Other peripherals are covered in the Reality CE Handbook and the information therein on applicable peripherals is valid for 9000 systems as well.

The Sequel Customer Engineer Handbook is more system, firmware, and software oriented than the Reality handbook while the Reality handbook is more hardware oriented. This reflects the inherent design of the two systems rather than artistic license on the part of the Technical Publications Department.

Revisions and updates are in the form of "Change Packages" which are issued periodically. Each change package is numbered and dated.

DATE: 1984 Latest Revision: Change 2, April 1985.

A GENERAL DISCUSSION CONCERNING CE HANDBOOKS

During the last several years of production of CE Handbooks, we have confronted the problem of documenting information on peripheral equipments. When the Sovereign CE Handbook was added in 1983, much of the peripheral information contained in the original handbook was duplicated into the Sovereign book. When the Sequel handbook was being developed, the problem was further compounded. We decided then to not include all peripherals in the Sequel book as that information could be found in the Reality book, with the exception of the FD-260 Disc Drive. That was included in the Sequel book and then added to the Reality book in a change package.

With the advent of the 6000 System, we are confronted with the choice of yet another separate handbook and further duplication of effort, or taking a new approach to the entire CE Handbook concept. We have chosen the latter course.

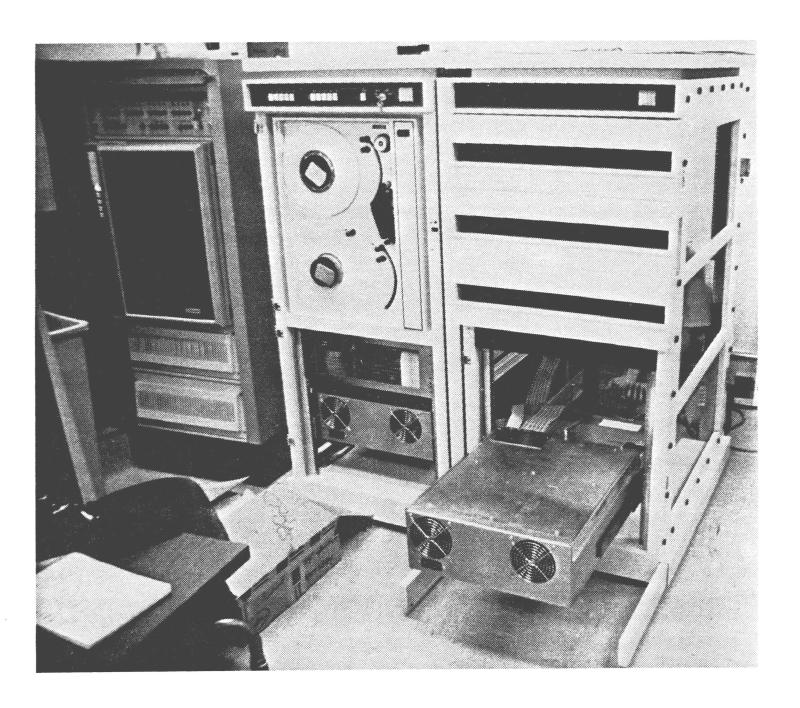
A major effort is now underway by Technical Support to supply information, glean the necessary from the nice-to-know, and provide the review process, and Technical Publications to write, format, edit, and produce a totally new CE Handbook. It's not just a matter of shuffling information to be printed and wrapped in a new binder, it's a completely new format, with revised content and purpose.

If you have noted a decrease in change packages for the existing handbooks during the last months of 1985, its because the personnel and material resources of Technical Publications that can be allocated to CE Handbook production have been totally devoted to the new book.

Most of the peripheral information is the same from system to system. The most efficient method of documenting this equipment is to place it in one handbook. This leaves the question of what to do with the systems. The answer is to place them in one handbook too. Therefore, the new CE Handbook will be one handbook consisting of two volumes. One volume will be devoted to systems and one to peripherals.

The system volume will be divided into sections, one for each system (4000, 9000, 7000, and 6000). Each section will be divided into tabulated subsections and the subdivision will be virtually the same for each system section. The format and type of information will be consistent from section to section.

The peripherals volume will be divided into sections (Tape, Disc, etc.) as the Reality handbook is now. Each section will be divided into tabulated subsections, with consistency in format, layout, and content from section to section. Also, the new handbook will incorporate color-coded pages within the peripheral section to draw attention to information specific to a particular system application.



SYSTEMS DOCUMENTATION

TITLE: PUBLICATION NUMBER: 1600 SERIES COMPUTERS OPERATION AND MAINTENANCE MANUAL 1012B

DESCR: The 1600 Series Computers Operation and Maintenance Manual contains operation and service instructions for the Microdata 1600 Computer System. Included are functional descriptions, detailed microcommand descriptions, CPU theory of operation, operator controls and indicators, troubleshooting, adjustments, and parts lists.

This manual was written as an OEM type of manual for what was, at that time, a predominately OEM product. As the 1600 Computer evolved into the REALITY system, the manual was still the authoritative source of information concerning the operation of the CPU. With the present Series 4000 systems, it cannot be considered completely authoritative. It is, nevertheless, a valid source of information regarding the operation of the CPU and especially register operation, microcommand sequences, and basic theory of operation of the CPU. As such, it remains a worthwhile training and reference document.

DATE: Original Printing: 1977

Reprinted: 1983

TITLE: PUBLICATION NUMBER: 9000

DESCR: The REALITY 8000 PEP Series Introductory Manual contains an introduction to the 8000 PEP (Performance Enahnced Processor) Series of REALITY systems. It provides a description of the new series, describes the differences between the 8000 PEP Series and the older Core and 6000 MOS systems.

Most of the information in this manual is valid for the current 4000 Series Systems.

DATE: 1980

TITLE:

VMS 3200 SERIES SEQUEL TECHNICAL MANUAL

PUBLICATION NUMBER:

1158

DESCR: The SEQUEL Technical Manual is a definitive technical manual for the SEQUEL Computer System. It contains general and functional descriptions, planning and interface requirements, installation, check-out and operation, a detailed theory of operations, preventive and corrective maintenance, parts lists, and troubleshooting.

While written to cover the original Sequel system (now known as 9000 Series, 1.X, it remains a valuable training and reference document for all 9000 Series Computer Systems. For 3.X and 5.X systems, it should be used in concert with the 9000 System Technical Manual (Publication Number 1298).

DATE: 1982

TITLE:

MICRODATA 9000 SYSTEM TECHNICAL MANUAL

PUBLICATION NUMBER:

1270

DESCR: The 9000 System Technical Manual contains installation, operation, and maintenance instructions for the 9100 (3.X) and 9208 (5.X) Models of 9000 Series Computer Systems.

No theory of operations or schematic diagrams are provided in this manual. Functional descriptions and block diagrams are provided as aids to troubleshooting.

This is a concise reference manual containing the essential information required to install and/or upgrade the system, power-up and operate the system, and to maintain and troubleshoot the system. The manual represents the trend in technical documentation of moving away from extraneous detail and more adequately providing the necessary information in a logical format, making maximum use of tabular and graphic formats and less use of flowery language.

DATE: 1985

TITLE:

MICRODATA 9250 SYSTEM TECHNICAL MANUAL

PUBLICATION NUMBER:

1325

DESCR: The 9250 System Technical Manual contains installation, operation, and maintenance instructions for the 9250 (5.X) Models of 9000 Series Computer Systems.

No theory of operations or schematic diagrams are provided in this manual. Functional descriptions and block diagrams are provided as aids to troubleshooting.

This is a concise reference manual containing the essential information required to install and/or upgrade the system, power-up and operate the system, and to maintain and troubleshoot the system.

DATE:

1986

TITLE: PUBLICATION NUMBER:

MICRODATA 6000 SYSTEM TECHNICAL MANUAL

1239

DESCR: The Microdata 6000 System Technical Manual is a definitive technical manual for the 6000 Series Computer Systems. It contains general and functional descriptions, planning and interface requirements, installation, check-out and operation, theory of operation, preventive and corrective maintenance, parts lists, and troubleshooting.

DATE: Available: 1986

TITLE: PUBLICATION NUMBER:

MICRODATA 1000 WORKSTATION TECHNICAL MANUAL

1232

DESCR: The Microdata 1000 Workstation Technical Manual is a very complete technical manual covering all aspects of maintenance and operation of the workstation. Included in the manual are: installation instructions, configuration information, switch settings, diagnostic procedures and interpretation, external interfaces and cabling (covering RS-232, RS-422, and X-Bus Interfaces), functional theory of operation, alignment procedures, on-line tests, diagnostic descriptions, the operating system, halts and error codes, and special functions.

Being such a complete technical manual, the M-1000 manual can stand alone as a training document or as a complete reference document for the Customer Engineer.

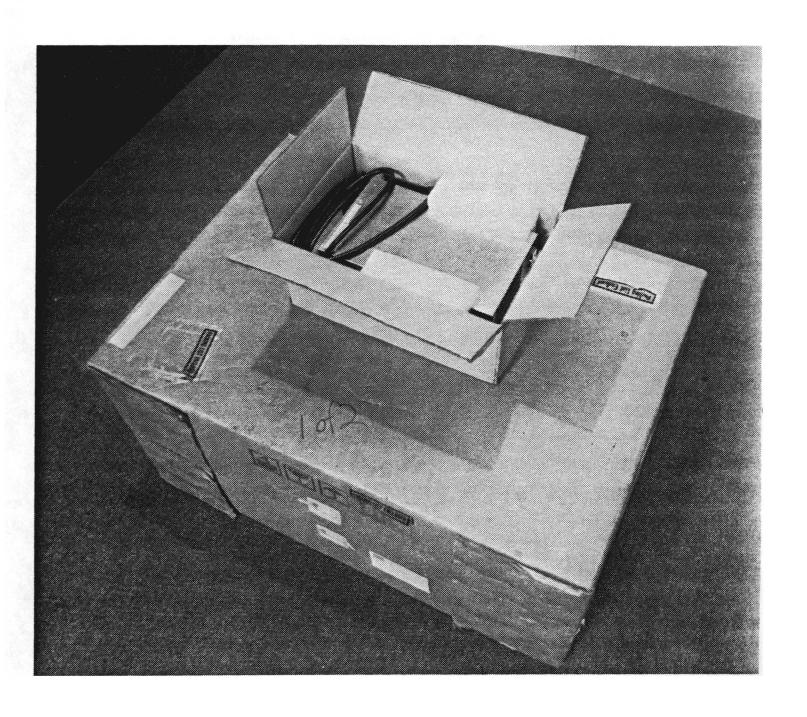
DATE: 1984

TITLE: PUBLICATION NUMBER: M-1000 WORKSTATION INSTALLATION AND DIAGNOSTICS GUIDE 1233

DESCR: The M-1000 Installation and Diagnostic Guide is intended primarily as an "end-user" document. The contents of this manual are the installation and diagnostic chapters extracted from the Technical Manual. The intent was to provide a manual for users without the detailed maintenance information.

This manual has proven to be a worthwhile reference document for the Customer Engineer as it provides useful information for field use while leaving the Technical Manual for more in-depth study and reference.

DATE: 1984



SYSTEM INSTALLATION AND PLANNING GUIDES

NOTE:

System Installation and Planning Guides are produced as "end user" documents. However, field personnel should be familiar with the contents of those documents and they should be readily available for reference and study by all field personnel.

TITLE:

REALITY INSTALLATION AND PLANNING GUIDE

PUBLICATION NUMBER:

1066

DESCR: The REALITY Installation and Planning Guide contains information covering system installation, site selection and layout, environmental controls, electrical and cabling requirements, equipment specifications, and health and safety considerations. All aspects of planning and preparation for a 4000 System installation are presented in detail.

> Information is complete both for the system and for all peripheral equipment that may be included in the installation.

DATE: 1983

TITLE:

SOVEREIGN INSTALLATION AND PLANNING GUIDE

PUBLICATION NUMBER:

DESCR: The SOVEREIGN Installation and Planning Guide contains information covering system installation, site selection and layout, environmental controls, electrical and cabling requirements, equipment specifications, and health and safety considerations. All aspects of planning and preparation for a 7000 System installation are presented in detail.

> Information is complete both for the system and for all peripheral equipment that may be included in the installation.

DATE:

1983

TITLE: PUBLICATION NUMBER: SEQUEL INSTALLATION AND PLANNING GUIDE 1159

DESCR: The SEQUEL Installation and Planning Guide contains information covering system installation, site selection and layout, environmental controls, electrical and cabling requirements, equipment specifications, and health and safety considerations. All aspects of planning and preparation for a 9000 System installation are presented in detail.

Information is complete both for the system and for all peripheral equipment that may be included in the installation.

DATE: 1982

TITLE: PUBLICATION NUMBER: 6000 SYSTEM INSTALLATION AND PLANNING GUIDE 1238

DESCR: The 6000 System Installation and Planning Guide contains information covering system installation, site selection and layout, environmental controls, electrical and cabling requirements, equipment specifications, and health and safety considerations. All aspects of planning and preparation for a 6000 System installation are presented in detail.

Information is complete both for the system and for all peripheral equipment that may be included in the installation.

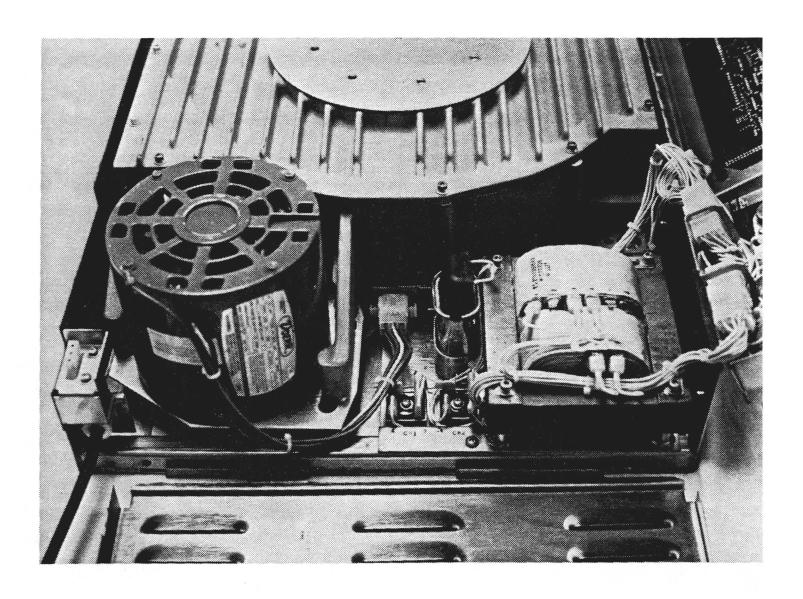
DATE: 1985

COMMUNICATIONS

TITLE: PUBLICATION NUMBER: M-3110/3120 STATISTICAL MULTIPLEXOR OPERATION AND MAINTENANCE MANUAL 1326

DESCR: The M-3110/3120 Statistical Multiplexor Operation and Maintenance Manual is both an ''end user'' and a service document. It contains information concerning the installation, configuration, operation, and maintenance of the Statistical Multiplexor.

DATE: Available Mar. 1986



DISC

TITLE: PUBLICATION NUMBER:

9000 DISC OPERATION AND MAINTENANCE INSTRUCTION

1140A

DESCR: The Operation and Maintenance Instruction Manual for the Series 9000 Disc Drive contains functional and physical descriptions, a very detailed section on interface connections, theory of operations, maintenance procedures, installation, and logic diagrams.

This manual was written in classic OEM style with greater detail than required for present maintenance philosophy. It remains a valuable training tool, but for current maintenance information, one should refer to the Customer Engineer Handbook.

DATE: 1975 (Reprinted 1977)

TITLE: PUBLICATION NUMBER: 1085

DESCR: The Reflex Service Manual is a complete technical manual covering the Reflex I Disc Drive. The manual contains description and specifications, installation instructions, interfacing, operating instructions, theory of operation, maintenance procedures, adjustments, parts list, and schematic diagrams.

DATE: 1979

TITLE: PUBLICATION NUMBER: 1091

DESCR: The Reflex II Technical Manual is a very complete and definitive technical manual covering the Reflex II Disc Drive.

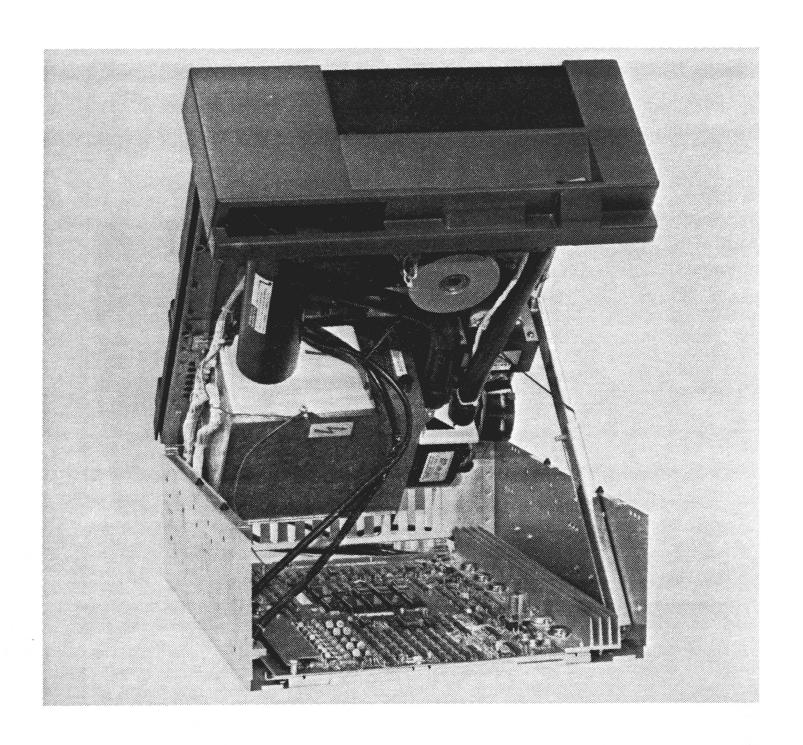
The manual includes general and functional descriptions, specifications, physical planning (site preparation), interface requirements, installation and operation instructions, theory of operation, preventive maintenance, troubleshooting, removal and replacement procedures, adjustments, testing, parts lists, and schematic diagrams.

Operation of the Mod III Exerciser is covered in an appendix to this manual.

Changes to this manual reflect maintenance procedures applicable to specific systems.

DATE: 1983

Change 1: April 1985



TAPE

TITLE:

PUBLICATION NUMBER:

MAGNETIC TAPE UNIT USER'S MANUAL

10039

DESCR: The MICRODATA Magnetic Tape Unit User's Manual was written as an operation and maintenance technical manual for the Series 6000 Magnetic Tape Unit.

The manual covers the general description, installation, operating procedures, theory of operation, and maintenance of Series 6000 Magnetic Tape Units.

DATE: 1975

TITLE:

28000 SERIES MTU TECHNICAL MANUAL

PUBLICATION NUMBER:

1107

DESCR: The 28000-Series MTU Technical Manual is a complete and comprehensive technical manual covering the 28000-Series Magnetic Tape Unit.

The manual provides general and functional descriptions, interface cabling and signalling, installation procedures, operation, theory of operation, preventive maintenance, troubleshooting, testing, adjustments, removal and replacement, parts lists, and schematic diagrams.

DATE: 1981

TITLE:

SERIES 29000 SMTU TECHNICAL MANUAL

PUBLICATION NUMBER:

1198

DESCR: The Series-29000 Streaming MTU Technical Manual is a detailed technical manual covering the Series-2900 Streaming Magnetic Tapes Unit.

The manual contains a general description, specifications, functional description, explanation of model number differences, site planning, interface cabling and signalling, installation instructions, and operation. The theory of operations is divided into two parts; a general theory followed by a more detailed circuit descriptions section.

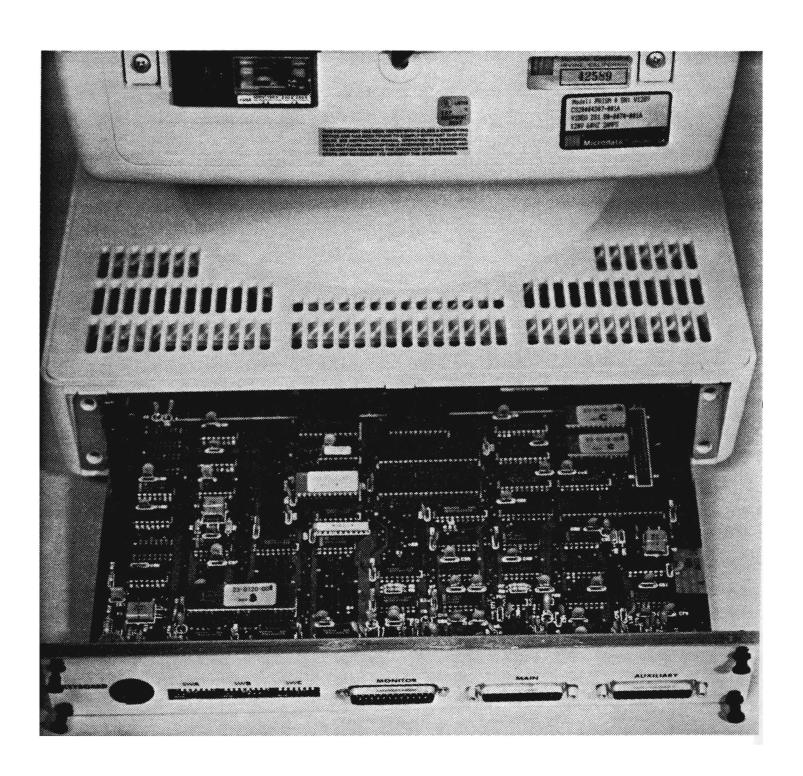
The maintenance section covers operator maintenance, preventive maintenance, testing, diagnostics, troubleshooting, removal and replacement, and adjustments.

An illustrated parts breakdown is provided, followed by schematic diagrams.

DATE:

1983

Change 1: November 1985



TERMINALS

TITLE:

PUBLICATION NUMBER:

1106A

PRISM II TERMINAL TECHNICAL MANUAL

DESCR: The PRISM II Technical Manual provides information concerning the PRISM II Video Display Terminal.

The manual provides general description, specifications, interfacing, installation, operation, theory of operation, and maintenance procedures.

DATE: 1981

TITLE:

PUBLICATION NUMBER:

1197

PRISM IV TERMINAL TECHNICAL MANUAL

DESCR: The PRISM IV Technical Manual provides information concerning the PRISM IV Video Display Terminal.

The manual provides general description, specifications, interfacing, installation, operation, theory of operation, preventive maintenance, troubleshooting, removal and replacement, and adjustments.

DATE: 1984

TITLE:

PUBLICATION NUMBER:

PRISM V TERMINAL TECHNICAL MANUAL

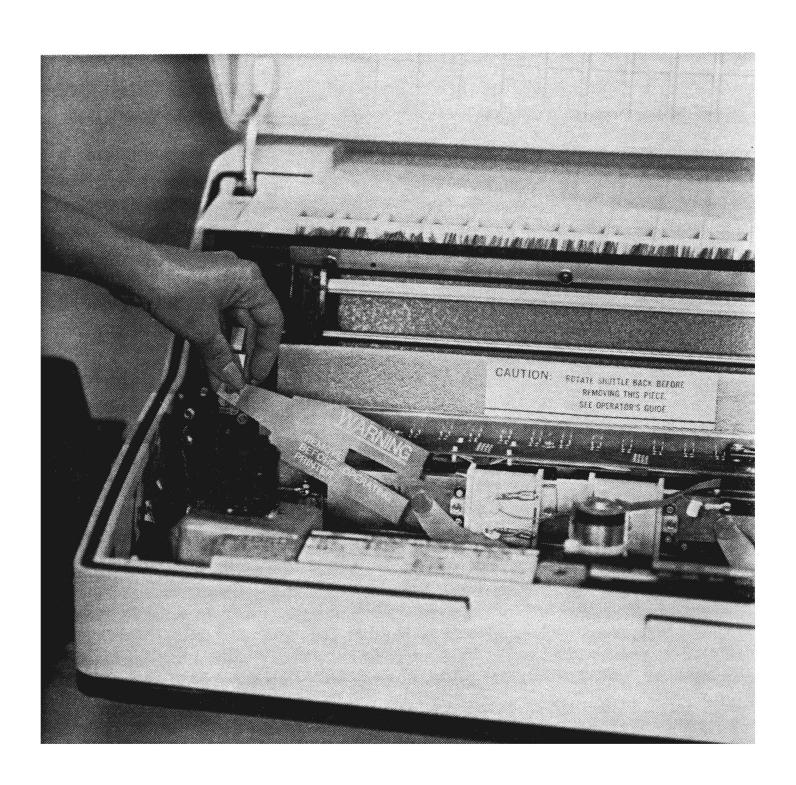
1262

DESCR: The PRISM V Technical Manual provides information concerning the PRISM V Video Display Terminal.

The manual provides general description, specifications, interfacing, installation, operation, theory of operation, preventive maintenance, troubleshooting, removal and replacement, and adjustments.

DATE: 1

1985



PRINTERS

TITLE:

PUBLICATION NUMBER:

MATRIX PRINTER TECHNICAL MANUAL

1091

DESCR: The Matrix Printer Technical Manual contains information concerning the MICRODATA Model 8702 Dot Matrix Printer.

The manual contains general information, installation instructions, operating instructions, and maintenance procedures.

DATE:

1983

TITLE:

PUBLICATION NUMBER:

538X SERIES MATRIX PRINTER TECHNICAL MANUAL

9001

DESCR: The 538X Series Matrix Printer Technical Manual provides information concerning Models 5381, 5383, and 5384 Matrix Printers.

The manual contains specifications, installation procedures, operating instructions, operator maintenance, programming, maintenance, troubleshooting, parts replacement, adjustments, and parts lists.

DATE:

1984

NOTE:

This manual is a reprint of an OEM manual and is for internal use only. It cannot be sold by McDonnell Douglas Field Service Company.

TITLE:

PUBLICATION NUMBER:

5350 MATRIX TERMINAL TECHNICAL MANUAL

9002

DESCR: The 5350 Matrix Printer Technical Manual provides information concerning the Model 5350 Matrix Terminal.

The manual contains specifications, installation procedures, operating instructions, operator maintenance, programming, maintenance, troubleshooting, parts replacement, adjustments, and parts lists.

DATE: 1984

NOTE:

This manual is a reprint of an OEM manual and is for internal use only. It cannot be sold by McDonnell Douglas Field Service Company.

TITLE:

MICRODATA LINE PRINTER TECHNICAL MANUAL

PUBLICATION NUMBER:

1315

DESCR: The MICRODATA Line Printer Technical Manual contains information concerning the P150, P300, P600, and PF600 Line Printers.

The manual contains specifications, general and functional descriptions, installation procedures, a limited theory of operation, and maintenance procedures. The maintenance procedures include: preventive maintenance, troubleshooting, tests and adjustments, and removal and replacement procedures.

DATE: Available — April 1986

TITLE:

PUBLICATION NUMBER:

2230 LINE PRINTER MAINTENANCE AND ADJUSTMENTS

1068

DESCR: This manual contains maintenance procedures for the Model 2230 Line Printer. It includes testing, adjustments, and removal and replacement sequences.

It is not a complete "technical manual" because it does not contain installation, operation, and theory of operation. At the time it was written, a complete technical manual consisted of the operations manual and the maintenance manual. The operations manual is no longer in print.

DATE:

1977

TITLE:

PUBLICATION NUMBER:

LETTER QUALITY PRINTER TECHNICAL MANUAL

1270

DESCR: This manual contains specifications, installation procedures, maitenance, and troublshooting information concerning the MICRODATA 35cps Letter Quality Printer.

DATE: 1985

TITLE: BP-1500	LINE PRINTER TECHNICAL MANUAL PUBLICATION NUMBER: 9003
DESCR	: Contains specifications, installation procedures and maintenance information, and illustrated parts breakdown for the BP-1500 Line Printer.
DATE:	1983
NOTE:	This manual is a reprint of an OEM manual and is for internal use only. It cannot be sold by McDonnell Douglas Field Service Company.

TITLE:	PUBLICATION NUMBER: MVP 150 LPM LINE PRINTER TECHNICAL MANUAL 9004
DESCR:	Contains specifications, installation procedures, and maintenance information for the MVP 150lpm Line Printer.
DATE:	1984
NOTE:	This manual is a reprint of an OEM manual and is for internal use only. It cannot be sold by McDonnell Douglas Field Service Company.

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TYMNET TECHNICAL DOCUMENTATION

TITLE: PUBLICATION NUMBER: TYMNET ENGINE POCKET GUIDE (PACKET OF 10) NPD-067

DESCR:

The Engine Pocket Guide for the Engine and Mini-Engine is described. The Engine Pocket Guide is intended to be used as a quick reference guide for Engine configuration. Included are details for instruction summary, instruction format, Program Status Word (PSW) description, code translation, console, operation, microcode failure indications, interrupts, device addresses, Memory Access Controller (MAC) register fields, MAC register dedicated locations, peripheral device status and command bytes, backplane, pin numbering scheme, memory configuration, Multiplexor (MUX) Input/Output (I/O) signals and Connector (CONN) 1 Direct Memory Access (DMA) ribbon cable signals.

DATE: \$7.50

TITLE: PUBLICATION NUMBER: ENGINE DIAGNOSTICS USERS GUIDE NPD-234

DESCR:

Engine Diagnostics are programs which verify the operating condition of the functional components of the TYMNET Engine, Mini-Engine, and Micro-Engine, and report any malfunctions through error codes.

The Engine Diagnostics Users Guide describes how to load and run diagnostics programs and how to interpret the results obtained. The introduction chapter contains procedures and other information common to all diagnostics. Subsequent chapters of the manual describe the specific test, operator controls and error messages of each diagnostic.

DATE: January 22, 1985 \$20.00

TITLE: ENGINE MAINTENANCE MANUAL

PUBLICATION NUMBER: NPD-282

DESCR:

The Engine is the communications computer produced by Tymnet to serve any of the various roles that nodes play in the Tymnet network. Although the physical size of the cabinets and cardcages differ, the necessary components of all Engines and Mini-Engines are the same. Additional circuit boards may be added to an Engine to increase its memory or input/output (I/O) capabilities, but the type of node that each Engine represents is ultimately controlled by the software installed when the node is placed in the network.

The Engine Maintenance Manual covers the installation and theory of operation of the Tymnet Engine. The manual is divided into the following sections:

- * Overview
- * Facilities Planning
- * Functional Descriptions
- Installation
- * Corrective Maintenance
- * Upgrade
- * Preventive Maintenance

The Functional Description section of this manual will be expanded as new circuit boards are developed for use in the Engine. If a copy of this manual is needed, examine the rest of this listing for additions to the manual.

DATE:

July 1, 1982

\$30.00

TITLE: ENGINE SITE PREPARATION GUIDE

PUBLICATION NUMBER:

NPD-356

DESCR:

The Engine Site Preparation Guide is a manual used to inform a customer of the products Tymnet markets and supports. It also informs the customer of equipment requirements, i.e., where to install it, and a timetable for a smooth installation.

The guide describes the equipment Tymnet markets, environmental requirements, power requirements, site requirements, and installation timetable. This manual should be inserted in the front of the Engine Maintenance manual.

DATE:

\$16.00

TITLE: PUBLICATION NUMBER: MULTIPLE EXTENDED PROCESSOR SYSTEM DESCRIPTION NPD-675

DESCR:

The basic concept of the structure and operation of the Multiple Extended Processor (MP) system is described in this document. The Internally Switched Interface System (ISIS) MP is a modified Engine/ISIS configuration providing increased network availability. Using the External Processor Interface (XPI) to distribute application functions among resources in a processor cluster, MP node capacity is improved by allocations of fewer functions to each processor.

Physically, MP consists of XPI boards mounted into Engines. The XPI boards perform the interprocess communications function. XPI supports this communication through an Ethernet Local Area Network (LAN) between multiple Engines configured in the cluster. This configuration is an interprocess message-transfer facility for a loosely coupled multiprocessor system. These processors appear to the network as a single node, with enhanced capability.

DATE: \$2.00

TITLE: PUBLICATION NUMBER: FAMILY MAINTENANCE PRINT MANUAL (MICRO-ENGINE) NPD-604-1

DESCR:

The Micro-Engine Maintenance Print Manual contains board and cable schematic drawings that are useful to the field engineer as an aid to troubleshooting hardware errors in the machine.

The Engine Family Maintenance Print Manual (Micro-Engine), dated November 1, 1985, lists all prints needed to service the Micro-Engine.

The Micro-Engine Maintenance Manual is a companion document.

DATE: \$15.50

TITLE: MAC DIAGNOSTIC - VERSION 4.0 PUBLICATION NUMBER: NPD-605

DESCR: The Memory Access Controller (MAC) Diagnostic, Version 2.1 for the Engine, Mini-Engine, and Micro-Engine is described. The MAC Diagnostic is intended to test the functionality of the MAC board or section of the Engine family of processors. Detailed instructions for configuration and operation are included.

\$4.50

TITLE: SYNCHRONOUS/ASYNCHRONOUS DIAGNOSTIC

PUBLICATION NUMBER: NPD-606

DESCR:

The Synchronous/Asynchronous Diagnostic is a manual used to test and aid in troubleshooting hardware problems in sync and async boards. The manual describes how to set up the hardware to be tested and how to perform the test.

Included in the manual are test iterations, benchmark criteria, set up procedures, and test control procedures. This manual should be inserted in the Engine Diagnostic User's Guide at the tab marked Sync/Async Diagnostic.

DATE:

\$3.00

TITLE: PUBLICATION NUMBER:

ENHANCED SYNCHRONOUS DIAGNOSTICS - VERSION 2.0

NPD-607

DESCR:

The Enhanced Synchronous (Sync) Diagnostic for the Engine, Mini-Engine, and Micro-Engine is described. The Enhanced Sync Diagnostic is intended to test the functionality of the Enhanced Sync hardware configuration. Detailed instructions for configuration and operation are included.

DATE:

\$20.00

TITLE: ELF OPERATORS GUIDE - VERSION 3.8

PUBLICATION NUMBER:

NPD-236

DESCR:

This guide describes the Engine Load Facility (ELF) program, which transfers and loads NAD Image Binary (NIB) code into Tymnet Engine nodes and slots. The manual is intended for operations personnel.

The ELF program runs in an ISIS (Internally Switched Interface System) job slot in the Tymnet Engine. Node code, slot code, or partial slot code, which is stored in a NIB file on a TYMCOM-X (PDP-10) in the Tymnet public network, is transmitted through one or more gateways to an ELF device in the operators network. From the ELF disk or tape unit the code is loaded into a target node or an ISIS slot.

This guide describes procedures for doing the following: logging in and logging out; using single or multiple gateways; creating; loading, and dumping code; restarting a node; and using the bootstrap program. Disk and tape procedures are presented, including a description of how to initialize an ELF disk.

A companion document, ELF Concepts and Facilities, provides an overview of the ELF product.

DATE:

\$5.50

TITLE:

PROBE REFERENCE MANUAL - VERSION 34

PUBLICATION NUMBER: NPD-534

DESCR:

PROBE is the network monitoring and control program that runs on each network supervisor. PROBE is used by network operations and systems programmers to monitor the status of nodes, hosts, and lines in the TYMNET network. PROBE is also used to alter the status of network components to maintain the quality of data transmission in the network.

The PROBE Reference Manual contains three major chapters and five appendices. The three chapters are; a program overview that explains the function and operation of PROBE; a list of the PROBE commands arranged alphabetically, and by message number. The five appendices include; Restricted Commands, Product Names, Crash Codes, System Messages, and Command Table.

DATE:

\$5.00

TITLE:

NETWORK PRODUCTS CONCEPTS AND FACILITIES

PUBLICATION NUMBER:

NPD-057

DESCR:

The Configuration Management Facility (CMF) Concepts and Facilities document provides an overview of the CMF, which is a tool for node specification and software generation, is currently in the development stage.

DATE: February 28, 1985

\$20.00

TITLE:

CONCEPTS AND FACILITIES - UPDATE

PUBLICATION NUMBER:

NPD-057-1

DESCR:

The Network Products Concepts and Facilities notebook contains an overview (the concepts and facilities) of the following Tymnet network products:

- **Communications Processors**
- * SNA

* ISIS

* PROBE

Supervisor

* TMCS

* TYMSAT

NETVAL

* ISIS TYMCOM

- * RAM
- 2780/3780/HASP Interface

* ELF

3270 Interface

This notebook will be continually updated to include the concepts and facilities of other TYMNET network products. Update packages for this notebook will be assigned sequential publication numbers, for example NPD-57-1, NPD-57-2, etc.

DATE:

\$2.00

TYMNET USER GUIDE AND SOFTWARE MANUALS

TITLE: X.25/X.75 CAPABILITIES

PUBLICATION NUMBER: NPD-272

DESCR:

The manual describes the capabilities of the TYMNET X.25/X.75 Interface, Version 3. It contains an overview of the interface services TYMNET currently supports, specifies how the parameters and attributes of interface procedures are configured in the network, and explains the TYMNET methods for handling error conditions and other situations not yet addressed by CCITT.

This manual was written for system programmers and network operators who support private networks. Readers should have a thorough grasp of CCITT interface recommendations.

DATE:

\$3.50

TITLE: X.25/X.75 INTERFACE REFERENCE MANUAL

PUBLICATION NUMBER:

NPD-399

DESCR:

This document describes the implementation characteristics of the Tymnet X.25 and X.75 interfaces. This version (2.02) contains extensive additions and changes to the last published version (1.15). This manual contains a general discussion of the new addressing standards used by Tymnet. The greater part of this document is devoted to an explanation of system generation statements, and the defaults and options for each statement.

Following the system generation statements are message texts and explanations for a variety of messages generated by the X.25 and X.75 interfaces; the cause and diagnostic values for calls that are cleared, reset, or restarted; and system generated warning and error messages. The manual also contains sample Tymfile, a discussion of BSC transmission, and a command table of the system generation statements.

DATE:

\$5.50

TITLE: XOM USERS GUIDE - VERSION 2

PUBLICATION NUMBER: NPD-595

DESCR:

The XOM Users Guide describes the X.25/X.75 Interface Operations Manager (XOM). It is a process that can monitor and manipulate various dynamic options of an X.25/X.75 interface while the interface is running in a slot under ISIS. The XOM enables an operator to determine the current configuration of an X.25 or X.75 interface using commands that query the interface. The XOM also generates diagnostic messages, and outputs them to a log which may be accessed using PROBE or TMCS.

DATE:

\$10.00

TITLE: PUBLICATION NUMBER: CMT/3270 INTERFACE REFERENCE MANUAL (VERSION 2.06) NPD-052

DESCR:

The CMT/3270 Interface Reference Manual describes the operating requirements for the TYMNET Character Mode Translator (CMT/3270). This document is intended for system programmers in a private network system.

ASCII character mode terminals may access 3270 protocol host computers through the CMT/3270 emulator and the TYMNET 3270 Host Interface operating in native mode.

This document describes CMT/3270 protocol, 3270 application support, and system operation. Tymfile definitions are also included.

DATE:

\$6.50

TITLE: PUBLICATION NUMBER: 3270 HOST INTERFACE REFERENCE MANUAL - VERSION 7.02 NPD-538

DESCR:

The TYMNET 3270 Host Interface provides the 3270 terminal user access to a 3270 host computer through a TYMNET network. The host interface also provides users of certain ASCII CRT terminals access to 3270 host computers and supports ASCII printers that function as 3270 printers.

The manual describes the operating requirements for the TYMNET 3270 Host Interface. It defines the TYMNET 3270 interface protocol and application supports; defines the host interface support capabilities and constraints and describes the system operation. It also defines the macros and parameters required to generate the interface Tymfile.

DATE:

\$3.00

TITLE: PUBLICATION NUMBER: 3270 TERMINAL INTERFACE REFERENCE MANUAL - TERMINAL VERSIONNPD-531

DESCR: The TYMNET 3270 Terminal Interface provides access to host computers with 3270 support and access to interactive ASCII host computers through a Tymnet network. The 3270 terminal is one of the primary means for accessing an X.25 host and IBM computer applications with remote multi-drop leased lines using a polled bisynchronous (BSC) protocol.

The 3270 Terminal Interface Reference Manual describes the operational requirements for the TYMNET 3270 Terminal Interface. It defines the TYMNET 3270 Interface protocol and application supports; defines the terminal interface support capabilities and constraints and describes system operation and defines the macros and parameters required to generate the interface Tymfile.

DATE:

\$3.00

TITLE: PUBLICATION NUMBER: THE 2780/3780/HASP INTERFACE REFERENCE MANUAL NPD-431

DESCR: The 2780/3780/HASP Reference Manual describes the technical details, operational procedures and application of support for this interface. The manual includes SIGNON and SIGNOFF procedures, system monitoring procedures system generation; parameter statements, a sample Tymfile and a sample Command file for assembly of the 2780/3780/HASP Interface, and site and error recovery messages generated by the Supervisor and the in-

terface.

DATE: \$4.00

TITLE: PUBLICATION NUMBER: ASYNC TYMSAT REFERENCE MANUAL - VERSION 2 NPD-533

DESCR: A TYMSAT is a terminal interface which initiates the interface between the user's terminal and the network by monitoring the login process.

The Async TYMSAT Reference Manual is designed to aid the user in tailoring a stand-alone TYMSAT or TYMSAT running under ISIS to meet the needs of his enviornment.

Covered in this document are an overview of the basic functions of a TYMSAT; the statements that define the stand-alone TYMSAT configuration; the statements that define a TYMSAT with Permanent Virtual Circuit (PVC) options; and error conditions and systems messages.

DATE: \$3.00

TITLE: PUBLICATION NUMBER: TOM USERS GUIDE - VERSION 2.0 PUBLICATION NUMBER: NPD-425

DESCR: The TYMCOM Operations Manager (TOM) is a process used to monitor and manipulate various options of the ISIS Asynchronous TYMCOM while it is running a job slot under ISIS. As TOM is used to monitor the Asynchronous TYMCOM, the TOM Users Guide is considered a companion document to the ISIS Asynchronous TYMCOM Reference Manual.

The TOM Users Guide covers the commands used to manipulate various TYMCOM options, the access levels, the diagnostic message the user may expect to see when monitoring the TYMCOM via the TOM process, and a summary of all the TOM commands that may be used.

DATE: \$2.75

TITLE: NETVAL USERS GUIDE - VERSION 2.0 PUBLICATION NUMBER:

NPD-533

DESCR:

NETVAL is a user validation program that allows multiple users to simultaneously update and maintain the validation data that controls user access to the network.

The NETVAL User's Guide describes user authorization levels, login data and procedures, validation procedures, and the use of NETVAL commands. This document also includes a sample NETVAL Tymfile and NETVAL system log message description.

A companion document, NETVAL Concepts and Facilities, provides an overview of the NETVAL product.

DATE:

\$5.50

TITLE:
X.PC PROTOCOL SPECIFICATIONS

PUBLICATION NUMBER: NPD-269

DESCR:

This specification is published by McDonnell Douglas as a proposal to designers and implementors of personal computer communications software and packet network systems.

It defines the formats and procedures at X.PC's packet and data line layers for Data Terminal Equipment (DTE) and Data Communications Equipment (DCE). Both switched virtual call and permanent virtual call modes of operation are defined.

This specification covers DTE and DCE operation when a packet switched network is accessed through a circuit switched or dedicated connection. It also includes the additional packet layer procedures necessary for two DTEs to communicate directly (i.e., without an intervening packet switched network) over dedicated or circuit switched connection.

DATE:

\$3.00

TITLE: TYMNET X.25 PUBLICATION NUMBER: NPD-271

DESCR:

This document presents the 1984 CCITT recommendations for X.25 optional user facilities and lists the CCITT facilities that TYMNET offers. The document is divided into two sections. There is a table which lists the CCITT recommendations and TYMNET's compliance with them. There is also a short discussion of each facility which explains the precise status within TYMNET of each CCITT facility.

DATE:

\$2.50

USER DOCUMENTATION

TITLE:
TYMNET NETWORK SPECIFICATIONS USERS MANUAL

DESCR: This manual provides a brief description of hardware and software products released as of May 1985; their functions and their interrelationships. It is intended for use by TYMNET private network users who may want to enhance their network, TYMNET public network users, and prospective TYMNET customers.

\$12.00

TITLE: VT.100	PUBLICATION NUMBER: NUD-101
DESCR:	This guide provides brief but specific instructions for getting up an asynchronous, ASCII, character mode terminal to mimic the functions of a 3270, EBCDIC block mode terminal. The asynchronous terminal can then use TYMNET Asynchronous-to-3270 software to access an IBM 370 or compatible host computer through the TYMNET network.
DATE:	\$1.30

TITLE: ADM-3A/	TYMNET MODEL 430	PUBLICATION NUMBER: NUD-102
DESCR:	character mode terminal to mimic the final. The asynchronous terminal can the	structions for getting up an asynchronous, ASCII, functions of a 3270, EBCDIC, block mode terminate use TYMNET Asynchronous-to-3270 software lost computer through the TYMNET network.
DATE:		\$1.30

TITLE: HP 2622	PUBLICATION NUMBER: NUD-103
DESCR:	This guide provides brief but specific instructions for getting up an asynchronous, ASCII, character mode terminal to mimic the functions of a 3270, EBCDIC, block mode terminal. The asynchronous terminal can then use TYMNET Asynchronous-to-3270 software to access an IBM 370 or compatible host computer through the TYMNET network.
DATE:	\$1.30

TITLE:
ADM 11/TYMNET 431

PUBLICATION NUMBER:
NUD-104

DESCR: This guide provides brief but specific instructions for getting up an asynchronous, ASCII, character mode terminal to mimic the functions of a 3270, EBCDIC, block mode terminal. The asynchronous terminal can then use TYMNET Asynchronous-to-3270 software to access an IBM 370 or compatible host computer through the TYMNET network.

DATE:

\$1.30

TITLE: ADM 12 PLUS/TYMNET MODEL 426

PUBLICATION NUMBER: NUD-109

DESCR: This guide provides brief but specific instructions for getting up an asynchronous, ASCII,

This guide provides brief but specific instructions for getting up an asynchronous, ASCII, character mode terminal to mimic the functions of a 3270, EBCDIC, block mode terminal. The asynchronous terminal can then use TYMNET Asynchronous-to-3270 software to access an IBM 370 or compatible host computer through the TYMNET network.

DATE: \$1.30

TITLE: IBM 3101

DESCR: This guide provides brief but specific instructions for getting up an asynchronous, ASCII, character mode terminal to mimic the functions of a 3270, EBCDIC, block mode terminal. The asynchronous terminal can then use TYMNET Asynchronous-to-3270 software to access an IBM 370 or compatible host computer through the TYMNET network.

DATE:

\$1.30

TITLE: PUBLICATION NUMBER: NUD-132

DESCR: This guide provides brief but specific instructions for getting up an asynchronous, ASCII, character mode terminal to mimic the functions of a 3270, EBCDIC, block mode terminal. The asynchronous terminal can then use TYMNET Asynchronous-to-3270 software to access an IBM 370 or compatible host computer through the TYMNET network.

DATE: \$1.30