SOLICITATION, OFFER AND AWARD OMB No. 0605-0010 Expiration Date: 2/28/95

1. This contract is a rated order under DPAS(15 CFR 350) RATING:

. CONTRACT NO. 3. SOLICITATION NO. 4. TYPE OF SOLICITATION 50-PAPT-6-00041 52-PAPT-5-00005 [X] NEGOTIATED (RFP) 5. DATE ISSUED 6.REQUISITION/PURCHASE REQ. NO. August 16, 1995 961P9605963 7. ISSUED BY CODE 8.ADDRESS OFFER TO (If other than Item U.S. Patent & Trademark Office Same as Block 7 Office of Procurement Box 6 Washington, DC 20231

NOTE: In sealed bid solicitations, "offer" and "offeror" mean "bid" and "bidder".

SOLICITATION

9. Sealed offers (see para. L.24.4 for # of copies) for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in Room 810, until 2:00 PM loca time on September 22, 1995. CAUTION-LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-10. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL: A. NAME: Sue Messina AX: (703) 305-8294 B. TEL.: (703) 305-8448 (No Collect Calls)

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SOLICITATION, OFFER AND AWARD OFFER (Must be fully completed by offeror)

52.214-16, MINIMUM BIG Accept	
above, to furnish any or all items u set opposite each item, delivered at specified in the schedule.	e undersigned agrees, if this offer is om the date for receipt of offers specified pon which prices are offered at the price the designated point(s), within the time
	S 30 Calendar days Calendar days %
cated:	fferors and related documents numbered and
AMENDMENT NO DATE	AMENDMENT NO DATE
15A. NAME AND ADDRESS OF OFFEROR Code: CMUW4 Facility: N/A Hugnes Data Systems 2362 McGaw LTVINE, CA 92714 15B. TEL NO. (with area code) 714-253 15C. [X] CHECK IF REMITTANCE ADDRESS FROM ABOVE-ENTER SUCH ADDRESS SCHEDULE	IS DIFFERENT
AWARD (To be	completed by Government)
19. ACCEPTED AS TO ITEMS NUMBERED 20	. AMOUNT 21. ACCOUNTING AND APPROPRIATION
22. AUTHORITY FOR USING OTHER THAN FOR [] 10 U.S.C. 2304(c)() [] 41 U	JLL AND OPEN COMPETITION J.S.C. 253(c)() N/A
23. SUBMIT INVOICES TO ADDRESS IN BLO	ock 25:(4 Copies)
24. ADMINISTERED BY CODE See Block 7	25. PAYMENT WILL BE MADE-BY CODE U.S. Patent & Trademark Office Crystal Park 1, Room 802 Office of Finance, Box 17 Washington, DC 20231
	nature Contracting Officer)
IMPORTANT - Award will be made on the authorized official write	s Form or on Standard Form 26, or by other cen notice.
EXCEPTION TO STANDARD FORM 33	00000
	Page 2 000002

PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 SUPPLIES AND/OR SERVICES AND PRICES/COSTS

CLIN	ITEM DESCRIPTION	MIN	MAX	UNIT PRICE
CLIN	TEM DESCRIPTION	IVIIIV	NIA.	UNIT PRICE
001	Desktop Workstation	300	4,533	
001AA	Level 1 Desktop Workstation			\$2,383.00
001AB	Level 2 Desktop Workstation			\$2,582.00
002	Video Monitor -17" and Accessories			
002AA	Video Monitor - 17"	213	4533	\$ 632.00
002AB	Graphics Display Adapter (1280 x 1024)	213	4533	\$ 262.00
003	Video Monitor - 21"	200	4533	\$1,603.00
004	Video Monitor - 24" dual page	1	3000	\$1,365.00
005	Video Accelerator Adapter - 1600 x 1200	200	4533	\$ 495.00
006	Internal Hard Disk Drive, IDE (500MB)	100	500	\$ 215.00
007	Internal Hard Disk Drive, Fast SCSI-2 (1GB)	357	2500	\$ 422.00
008	Internal Hard Disk Drive, Fast SCSI-2 (2GB)	357	1000	\$ 693.00
009	Removable Internal Storage Device	5	1000	\$ 340.00
010	CD-ROM Drive, Internal	400	4533	\$ 271.00
011	Tape Backup Kit, Internal	100	4533	\$ 754.00
012	Network Interface - Ethernet 10Mb/s	814	4533	\$ 113.00
013	Fast SCSI-2 Interface	714	3500	\$ 171.00
014	PCMCIA Adapter	5	1000	\$ 87.00
015	Memory Expansion	200	13000	

	TOTAL FOR BASE PERIOD:	SEE SEC	TION B.2	
024	Operating System - Multiprocessing	814	4533	\$ 108.00
023	Keyboard Wrist (rest) Pad	814	4533	\$ 3.00
022	Ergonomic Natural Keyboard	100	2000	\$ 90.00
021	Multimedia Kit	200	4533	\$ 84.00
020	FAX/Modem, Internal	200	4533	\$ 151.00
019	Bar Code Reader - Network Scanner	10	1500	\$1,199.00
018	Bar Code Reader - Scanner	200	3500	\$ 523.00
017	Local Laser Printer	285	3500	\$ 925.00
016AC	Network Interface for 016AA	40	1500	\$ 343.00
016AB	Additional RAM for 016AA	40	1500	\$ 496.00
016AA	Network Laser Printer	40	1500	\$3,582.00
016	Network Laser Printer and Accessories			
015AC	Memory Expansion - 32MB SIMMs			\$1,190.00
015AB	Memory Expansion - 16MB SIMMs			\$ 650.00
015AA	Memory Expansion - 8MB SIMMs			\$ 270.00

B.1.2 OPTION PERIOD 1 (If exercised, 13th Month through 24th Month) MIN MAX UNIT PRICE ITEM DESCRIPTION CLIN 4529 852 Desktop Workstation 001 \$1,680.00 Level 1 Desktop Workstation 001AA \$1,780.00 Level 2 Desktop Workstation 001AB Video Monitor - 17" and Accessories 002 4529 \$ 525.00 Video Monitor - 17" 200 002AA \$ 226.00 Graphics Display Adapter (1280 x 1024) 200 4529 002AB 4529 \$1,315.00 200 003 Video Monitor - 21" \$1,244.00 52 3000 Video Monitor - 24" dual page 004 200 4529 \$ 426.00 Video Accelerator Adapter - 1600 x 1200 005 \$ 129.00 500 1.00 Internal Hard Disk Drive, IDE (500MB) 006 \$ 274.00 Internal Hard Disk Drive, Fast SCSI-2 (1GB) 426 2500 007 \$ 450.00 Internal Hard Disk Drive, Fast SCSI-2 (2GB) 1000 426 800 1000 \$ 275.00 5 009 Removable Internal Storage Device 4529 \$ 222.00 400 CD-ROM Drive, Internal 010 \$ 689.00 4529 100 Tape Backup Kit, Internal 011 4529 \$ 102.00 Network Interface - Ethernet 10Mb/s 852 012 752 3500 \$ 153.00 013 Fast SCSI-2 Interface \$ 78.00 1000 5 PCMCIA Adapter 014 200 13000 015 Memory Expansion \$ 184.00 Memory Expansion - 8MB SIMMs 015AA \$ 411.00 015AB Memory Expansion - 16MB SIMMs

015AC	Memory Expansion - 32MB SIMMs			\$ 810.00
016	Network Laser Printer and Accessories			
016AA	Network Laser Printer	40	1550	\$3,234.00
016AB	Additional RAM for 016AA	40	1550	\$ 431.00
016AC	Network Interface for 016AA	40	1550	\$ 343.00
017	Local Laser Printer	170	3500	\$ 833.00
018	Bar Code Reader - Scanner	200	3500	\$ 480.00
019	Bar Code Reader - Network Scanner	10	1500	\$1,079.00
020	FAX/Modem, Internal	200	4529	\$ 136.00
021	Multimedia Kit	200	4529	\$ 75.00
022	Ergonomic Natural Keyboard	100	2000	\$ 86.00
023	Keyboard Wrist (rest) Pad	852	4529	\$ 3.00
024	Operating System - Multiprocessing	852	4529	\$ 108.00
	TOTAL FOR OPTION PERIOD	1: SEE SEC	CTION B.	2

CLIN	ITEM DESCRIPTION	MIN	MAX	UNIT PRICE
001	Desktop Workstation	872	4,816	
001AA	Level 1 Desktop Workstation			\$1,387.00
00144	Level 1 Desktop Workstation			
001AB	Level 2 Desktop Workstation			\$1,459.00
002	Video Monitor - 17" and Accessories			
002AA	Video Monitor - 17"	200	4816	\$ 475.00
002AB	Graphics Display Adapter (1280 x 1024)	200	4816	\$ 205.00
003	Video Monitor - 21"	200	4816	\$1,187.00
004	Video Monitor - 24" dual page	72	3000	\$1,190.00
005	Video Accelerator Adapter - 1600 x 1200	200	4816	\$ 392.00
006	Internal Hard Disk Drive, IDE (500MB)	100	600	\$ 111.00
007	Internal Hard Disk Drive, Fast SCSI-2 (1GB)	386	3000	\$ 232.00
800	Internal Hard Disk Drive, Fast SCSI-2 (2GB)	386	1500	\$ 381.00
009	Removable Internal Storage Device	5	1000	\$ 255.00
010	CD-ROM Drive, Internal	500	4816	\$ 213.00
011	Tape Backup Kit, Internal	100	4816	\$ 656.00
012	Network Interface - Ethernet 10Mb/s	872	4816	\$ 97.00
013	Fast SCSI-2 Interface	772	4000	\$ 144.00
014	PCMCIA Adapter	5	1000	\$ 74.00
015	Memory Expansion	200	13000	
015AA	Memory Expansion - 8MB SIMMs			\$ 130.00
015AB	Memory Expansion - 16MB SIMMs			\$ 290.00

015AC	Memory Expansion - 32MB SIMMs	T		\$ 571.00
016	Network Laser Printer and Accessories			
016AA	Network Laser Printer	40	1500	\$3,054.00
016AB	Additional RAM for 016AA	40	1500	\$ 377.00
016AC	Network Interface for 016AA	40	1500	\$ 343.00
017	Local Laser Printer	111	3500	\$ 786.00
018	Bar Code Reader - Scanner	200	3500	\$ 458.00
019	Bar Code Reader - Network Scanner	10	1500	\$1,020.00
020	FAX/Modem, Internal	200	4816	\$ 129.00
021	Multimedia Kit	200	4816	\$ 73.00
022	Ergonomic Natural Keyboard	100	2000	\$ 86.00
023	Keyboard Wrist (rest) Pad	872	4816	\$ 3.00
024	Operating System - Multiprocessing	872	4816	\$ 108.00
	TOTAL FOR OPTION 2: SI	EE SECTIO	N B.2	
Notes	 1 - The specific dates for each of the contra award. 2 - Forty percent (40%) of the maximum quithe U.S. Department of Commerce and oth 3 - For some CLINs, quantities were provided at the 	uantities is cor er agencies o ed at the SUE	itemplated f f the U.S. G	for procurement by covernment.
	maximum amount of flexibility in ordering.			
	4 - Any of the maximum quantities remaining carried over to the next contract period at the they will be purchased.	ng at the end he negotiated	of the contro prices for th	act period may be ne period in which

TOTAL CONTRACT PRICE

The minimum contract price is \$9,068,547, and the maximum contract price is \$171,484,701. The maximum contract price was calculated by applying the unit prices set forth above to the maximum quantities. For those CLINs with subCLINs (i.e. CLINs 001 and 015), the maximum quantities were applied to the unit prices for the CLINs with subcLine higher priced subCLIN.

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 SCOPE OF WORK

C.1.1 Introduction

A large number of Patent and Trademark Office (PTO) employees currently depend on desktop microcomputers to access major PTO automated information systems and to perform their day-to-day work using commercial software and Government-developed applications. These desktop computers are typically used in a networked office environment for a variety of functions, including text search of large data collections, access to mainframe-based information systems, word processing, spreadsheets, databases, project management, software development, network management and access to other Government automated systems.

PTO's desktop microcomputers and supporting peripheral equipment are at or near the end of their useful lives. In addition, mission-critical information systems currently under development will require robust hardware capabilities and will expand the need for desktop automated information processing capabilities to many more PTO employees. The requirement described in this solicitation represents a strategy that will allow PTO to remain technologically current into the next century in order to maintain economic viability and enhance service levels with its customers and Trilateral partners in other countries.

C.1.2 Objective

The objective of this solicitation is to position PTO to fully utilize technology and information systems advances over the next several years to benefit its core business mission, the examination and granting of patents and trademarks.

The requirement is for commercially available off-the-shelf (COTS) desktop microcomputers, peripherals and PTO-installable components (such as adapter cards and additional storage devices), along with contractor-provided warranty and life cycle support for the hardware and software. The requirement also includes provisions for technology enhancements to prevent acquisition of obsolescent items and to satisfy the increased requirements of new automated information systems under development at the PTO. Some of the microcomputer equipment may be acquired by certain other Government agencies in the Washington, D.C. area as discretionary users of the contract resulting from this solicitation. The actual quantity of equipment to be acquired cannot be precisely estimated and orders will fluctuate over time.

The required desktop microcomputers constitute two levels of workstations. A standard workstation (Level 1), based on a Pentium-class microprocessor operating at a minimum of 120MHz, is required to provide effective performance for typical office automation activities. An advanced workstation (Level 2), based on a Pentium-class microprocessor operating at a minimum of 133MHz, is required to provide the information processing capabilities needed by existing information systems critical to PTO's business mission. The requirement also includes a number of installable components and an operating system. All requirements are mandatory. There are no optional requirements.

The Contractor shall provide microcomputer equipment with warranty; operating system software, including software upgrades and updates; hardware and software manuals and publications; equipment quality assurance, including integration and burn-in; hardware familiarization overview; and technology enhancements of obsolete, obsolescent, or out-of-production items.

C.2 MANDATORY SPECIFICATIONS

All hardware, software, and firmware provided under this contract shall be commercially available, off-the-shelf (COTS), and in current production. This means that items offered by the Contractor have been: (1) formally announced for marketing purposes on or before the closing date of this solicitation, (2) may be demonstrated during evaluation of proposals to validate that the items meet the requirements of this specification, and (3) can be provided according to the delivery requirements of this solicitation and the resulting contract.

Two levels of Pentium-class workstations are required as follows:

Level 1 Intel Pentium, minimum 120MHz, or equivalent microprocessor. This line of desktop computers includes those components listed later in this specification in Table 2-2.

Level 2 Intel Pentium 133MHz minimum or equivalent microprocessor. This line of desktop computers includes those components listed later in this specification in Table 2-2.

All contract line items (CLINs), including the Level 1 and Level 2 workstations, are listed in Table 2-1 on the following page. Each Level 1 and Level 2 desktop workstation shall include certain line items from Table 2-1. The line items may also be ordered separately. Individual line items shall be compatible and interoperable with the Level 1 and Level 2 workstations and with one another to allow flexibility in configuring hardware and software products acquired under this contract, unless otherwise indicated.

Table 2-1 Contract Line Items (CLINs)

Contract Line Item Number (CLIN)	Contract Line Item
001AA	Desktop Workstation - Level 1
001AB	Desktop Workstation - Level 2
002AA	Video Monitor - 17"
002AB	Graphics Display Adapter - 1280 x 1024
003	Video Monitor - 21"
004	Video Monitor - 24" dual-page
005	Video Accelerator Adapter - 1600 x 1280
006	Internal Hard Disk Drive, IDE (500MB)
007	Internal Hard Disk Drive, Fast SCSI-2 (1GB)
008	Internal Hard Disk Drive, Fast SCSI-2 (2GB)
009	Removable Internal Storage Device
010	CD-ROM Drive, Internal
011	Tape Backup Kit, Internal
012	Network Interface - Ethernet 10Mb/s
013	Fast SCSI-2 Interface
014	PCMCIA Adapter
015AA	Memory Expansion - 8 MB SIMMs
015AB	Memory Expansion - 16MB SIMMs
015AC	Memory Expansion - 32MB SIMMs
016AA	Network laser printer
016AB	Additional RAM for Network laser printer
016AC	Network Interface for Network laser printer
017	Local laser printer
018	Bar Code Reader - Scanner
019	Bar Code Reader - Network Scanner
020	FAX/Modem, Internal
021	Multimedia Kit
022	Ergonomic Natural Keyboard
023	Keyboard wrist (rest) pad
024	Operating System - Multiprocessing

Some items have been specified as "Brand Name or Equivalent". This is intended to be descriptive only and is not restrictive. Contractors offering "equal" products will be considered for award if such products are clearly identified in the proposal and are determined by the PTO to fully meet the salient characteristics and requirements of the item as specified. If the Contractor proposes to furnish an "equal" product, the brand name, if any, of the product shall be clearly identified in the offer. Unless the Contractor clearly indicates that an "equal" product is being offered, the proposal shall be considered as offering the brand name product specified. The

evaluation of the Contractor's proposal and the determination of offered product equality will be the responsibility of the PTO. The PTO will base this determination on information furnished by the Contractor or identified in the offer as well as other information reasonably available to the PTO.

All hardware and software shall be compatible with the MS-DOS 6.22 operating system, MS Windows for Workgroups version 3.11, and MS Windows NT version 3.5.

All hardware and software shall support, without modification, fully compatible operation of the common COTS software packages used by PTO. These software packages are listed in Section J. If the COTS software used by PTO and listed in Section J does not run on the supplied hardware, the Contractor shall resolve the incompatibility by providing the necessary software corrections or patches for Contractor-provided items or replacing furnished hardware with hardware that properly supports PTO software. The Contractor shall resolve any such incompatibility at no cost and to the satisfaction of PTO within 14 calendar days of notice that the incompatibility exists.

Contractor shall provide all necessary hardware, software, firmware, interfaces, cabling, covers, diagnostics and operating instructions to permit all provided components and peripherals to operate as specified by the manufacturer. Items provided for field upgrade or replacement shall also include all appropriate installation instructions for removing or reinstalling standard component items if removal or modification is appropriate.

Contractor shall furnish any driver software required to operate equipment supplied. The PTO computing environment relies on the following operating systems: DOS 6.22, Windows for Workgroups 3.11, Windows NT 3.5, and SCO UNIX Version 5. All driver software shall be fully compatible with those operating systems. The Contractor shall provide full documentation of all Contractor changes or modifications made to the driver software to meet PTO requirements. The Contractor shall support the software, including any Contractor- or Original Equipment Manufacturer- (OEM-) sponsored modification or revisions, at no additional cost. The support shall consist of correction of errors, provision of modifications, improvements, and revisions.

All semiconductor components shall be operated at or below the OEM's rated/recommended speed. The Contractor shall not offer an item of equipment as meeting the requirements for a line item if the OEM's specification for the line item does not at least equal the requirements.

The Level 1 and Level 2 workstations and all peripherals shall be FCC Class B certified. All electronic components with external connections that may be added to the workstations or peripherals shall also be FCC Class B certified in order to maintain the integrity of certification. Certification is not required for electronic components that are wholly enclosed subsystems within the workstation chassis or inside peripherals. All offered items that include an integrated power supply shall be Underwriters' Laboratories listed.

All hardware CLINs, except cables and internal boards, shall include an externally visible, permanently affixed label indicating the model number, serial number and OEM's name. All internal components and boards shall be labeled with the OEM's name and model.

Any products bundled by an OEM or supplier and offered to the general public shall be offered to PTO in the same manner. This includes software products offered free of charge with the microcomputer, components, or adapters.

C.2.1 Workstation Requirements (CLIN 001AA and CLIN 001AB)

Level 1 and Level 2 workstations shall meet the EPA Energy Star Computer Program requirements. Both desktop microcomputers shall have a manufacturer's Mean Time Between Failure (MTBF) rating of at least 2,000 power-on hours. Level 1 and 2 workstations shall be configured as defined in Table 2-2 below and as further specified in subsequent subparagraphs.

Table 2-2 Level 1 and Level 2 Workstation Configurations

Level 1 Workstation (CLIN 001AA)	Level 2 Workstation (CLIN 001AB)	Further Specified in
Intel Pentium microprocessor, minimum 120MHz, or equivalent	Intel Pentium microprocessor, minimum 133MHz, or equivalent	C.2.1.1.1
PCI Rev. 2.0 or greater data bus operating at minimum 33MHz	PCI Rev. 2.0 or greater data bus operating at minimum 33MHz	C.2.1.1.2
Minimum 256K cache memory	Minimum 256K cache memory	C.2.1.1.3
Minimum 32MB RAM expandable to 128MB	Minimum 32MB RAM expandable to 128MB	C.2.1.1.3
Enhanced IDE interface	Enhanced IDE interface	C.2.1.1.4
Minimum four (4) accessible drive bays	Minimum four (4) accessible drive bays	C.2.1.2
Minimum two (2) internal drive bays	Minimum two (2) internal drive bays	C.2.1.2
Capability to support a minimum of 3 PCI and 3 ISA adapters	Capability to support a minimum of 3 PCI and 3 ISA adapters	C.2.1.1.5
One (1) parallel and two (2) serial ports	One (1) parallel and two (2) serial ports	C.2.1.1.6
3.5" high-density (1.44MB) floppy disk drive	3.5" high-density (1.44MB) floppy disk drive	C.2.1.4
Network interface adapter - Ethernet 10Mb/s	Network interface adapter - Ethernet 10Mb/s	C.2.1.5
Enhanced AT-class keyboard	Enhanced AT-class keyboard	C.2.1.6
Pointing device	Pointing device	C.2.1.7
Power supply	Power supply	C.2.1.8
Chassis/cabinet	Chassis/cabinet	C.2.1.9
Operating System	Operating System	C.2.1.10
Surge suppresser	Surge suppresser	C.2.1.11

C.2.1.1 Level 1 and Level 2 System Board

The motherboard for Level 1 & Level 2 workstations shall be configured as commercially available and shall include the components listed in Table 2-3 below and specified in subsequent subparagraphs.

Table 2-3 Level 1 and Level 2 System Board Components

Level 1 System board	Level 2 System board
Intel Pentium microprocessor, minimum 120MHz, or equivalent	Intel Pentium microprocessor, minimum 133MHz, or equivalent
PCI Rev. 2.0 or greater Bus architecture, minimum 33MHz	PCI Rev. 2.0 or greater Bus architecture, minimum 33MHz
Minimum 32MB 70ns or faster RAM expandable to 128MB	Minimum 32MB 70ns or faster RAM expandable to 128MB
Minimum 256K cache memory	Minimum 256K cache memory
Plug & Play capability	Plug & Play capability
Flash BIOS fully compatible with DOS 6.22, Windows for Workgroups 3.11, Windows NT 3.5, SCO UNIX and with TCP/IP, Novell, and Banyan Vines network protocols	Flash BIOS fully compatible with DOS 6.22, Windows for Workgroups 3.11, Windows NT 3.5, SCO UNIX and with TCP/IP, Novell, and Banyan Vines network protocols
Enhanced IDE Interface	Enhanced IDE interface
Support a minimum of 3 ISA and 3 PCI adapters	Support a minimum of 3 ISA and 3 PCI adapters
1 parallel and 2 serial ports	1 parallel and 2 serial ports
PS/2 style pointing device port	PS/2 style pointing device port
Battery back-up	Battery back-up

C.2.1.1.1 Microprocessor

The Level 1 workstation shall have a minimum 120MHz Pentium or equivalent microprocessor chip installed on the motherboard and the Level 2 workstation shall have a minimum 133MHz Pentium or equivalent microprocessor chip installed on the motherboard. These microprocessors shall be free of all manufacturer's defects and the Contractor shall certify that all Level 1 and Level 2 workstation microprocessors are of a manufacturing lot that incorporated the correction to the floating-point unit flaw. If future flaws are found in the microprocessor chip, the Contractor shall assist the PTO to arrange for replacements or OEM-provided patches at no cost to the Government.

C.2.1.1.2 System Bus

The Level 1 workstation and Level 2 workstation motherboards shall provide a Peripheral Component Interconnect (PCI) Revision 2.0 or greater data bus operating at a minimum speed of 33MHz.

C.2.1.1.3 Memory

The Level 1 and Level 2 workstation motherboards shall have a minimum of 32MB 70ns or faster installed RAM, expandable to 128 MB on the motherboard, and the ability to upgrade to 96 MB on the motherboard without removing the initial 32MB installed RAM. In the Level 1 and Level 2 workstations, cache memory shall be a minimum of 256K write-back cache integral to the motherboard.

C.2.1.1.4 Enhanced IDE Interface

The Level 1 and Level 2 workstation Enhanced IDE interface shall be PCI-based and integral to the motherboard, shall support data transfer at 10MB/s, and shall support at least four (4) devices.

C.2.1.1.5 Expansion Capabilities

The Level 1 and Level 2 workstation motherboards shall support a minimum of three (3) Industry Standard Architecture (ISA) adapters and three (3) Peripheral Component Interconnect (PCI) adapters.

C.2.1.1.6 Communication Ports

The Level 1 and Level 2 workstations shall have as a minimum the following:

Two (2) EIA-RS-232C serial ports available. One serial port shall have a DB-9 connector and one shall have a DB-25 connector. Both shall employ a 16550 or faster UART. Both ports shall be integral to the motherboard.

One (1) parallel port available through a DB-25 connector. The parallel port shall be IEEE 1284 compliant and shall be integral to the motherboard.

C.2.1.1.7 Pointing Device Port

The pointing device port for Level 1 and Level 2 workstations shall be a PS/2 style connector integral to the motherboard.

C.2.1.1.8 Battery Back-up

The Level 1 and Level 2 workstation shall incorporate a battery-backup integral to the motherboard to ensure system setup data integrity when the workstation is off. The battery shall have a rated minimum 3-year life and shall be replaceable by a qualified maintenance technician without special tools.

C.2.1.2 Drive Bays

The two (2) internal drive bays in Level 1 and Level 2 workstations shall support 3.5" devices. The four (4) accessible drive bays shall support half height devices in sizes as follows: three (3) 5.25" devices and one (1) 3.5" device.

C.2.1.3 RESERVED

C.2.1.4 3.5" Floppy Disk Drive

The Level 1 and Level 2 workstations shall have a half-height 3.5" 1.44MB high density floppy drive installed in the 3.5" accessible drive bay.

C.2.1.5 Network Interface (CLIN 012)

The network interface adapter for Level 1 and Level 2 workstations shall be an IEEE 802.3 industry standard, PCI-based, 10BaseT Ethernet operating at a minimum speed of 10 megabits per second. The adapter shall be equipped with LEDs to indicate link integrity/activity and shall include current ODI and NDIS drivers and a twenty five (25) foot 10BaseT twisted pair cable. The network interface adapter shall support firmware upgrades over the network, e.g., flash memory, and shall be accessible to Intel LANDESK via the network.

C.2.1.6 Keyboard

Level 1 and Level 2 workstations shall have a standard, alphanumeric, full size, enhanced AT-class 101 key keyboard with the standard 12 function keys. A minimum ten (10) foot overall cable length is required. An extension cable may be used with a standard-length keyboard cable to meet this requirement. The keyboard shall provide the following:

QWERTY layout with standard placement of shift and enter keys and a double- width carriage return key

Dedicated backspace, insert, delete, and print screen keys and a minimum of four (4) dedicated cursor positioning keys

An integral auxiliary numeric keypad, located on the same level and to the right of the main key set, with standard calculator layout and additional keys as commonly implemented on commercially available microcomputers

Display status for number lock, caps lock, and scroll lock

Tactile feedback when a key is depressed and an auto-repeat function for keys

An adjustable height/tilt feature

Full compatibility with the Level 1 and 2 workstation BIOS and physical interfaces

C.2.1.7 Pointing Device

The pointing device for Level 1 and Level 2 workstations shall be a Microsoft-compatible neutrally-oriented three button mouse fully compatible with Level 1 and 2 workstation PS/2 style pointing device port. A minimum overall cable length of eight (8) feet is required on the mouse. An extension cable may be used with a standard-length mouse cable to meet this requirement.

C.2.1.8 Power Supply

The Level 1 and Level 2 workstations require a power supply internal to the workstation chassis rated at 110 to 120 Volts AC, 47 to 66Hz, minimum 200 Watts, with a minimum of six (6) power connectors for I/O or storage devices. A standard six (6) foot power cable is also required.

C.2.1.9 Workstation Chassis

The Level 1 and Level 2 workstations shall be floor-standing units in order to meet the environmental considerations of user workspaces referred to in Paragraph C.3. The Level 1 and Level 2 workstation components shall be housed in a closed, vented cabinet with a tip-resistant base and maximum dimensions as follows: 18" high, 9" wide, 17.5" deep. An on/off power switch shall be located on the face of the cabinet.

C.2.1.10 Operating System

The Level 1 and Level 2 workstations shall be configured with the MS-DOS operating system Version 6.22 or the most current version and shall include installation and users manuals.

C.2.1.11 Power Strip/Surge Suppresser

The power strip shall be rated at a minimum of 330 Volts, UL 1449 listed, visual on/off indicator, 15 amp circuit breaker, MOV method of suppression, reaction time of 1 to 2 nanoseconds, and shall include a minimum of six (6) outlets in a single row and a six (6) foot power cord.

C.2.2 Video Display and Video Adapter Requirements

The video display subsystems for the Level 1 and Level 2 workstations shall be FCC Class B certified and Energy Star compliant, shall include necessary drivers to function with DOS 6.22, Windows for Workgroups 3.11, Windows NT, and SCO UNIX, or the most current versions; and shall support the following requirements:

Built-in anti-glare properties, or an anti-glare screen, designed to reduce screen glare in an office environment and where workstations may be located in proximity to windows

Free of perceptible bloom, jitter, flicker, swim, drift, and geometric distortion within the range of usable settings at room illumination levels of 20 and 40 foot-candles

Phosphor persistence sufficiently short that patterns scrolling at a rate of four (4) inches per second are free of perceptible ghost images

No perceptible color misconvergence at any point on the display screen and no perceptible color impurity when viewing screens composed of solid red, blue, and green fields

Brightness and contrast ratio that allows ready recognition of all video attributes, intensities, colors, and shades of grey in both color and monochrome modes, as appropriate.

Aspect ratio of 4:3

Maximum .26 millimeter dot pitch

Easily accessible on/off control on the front of the display and controls for adjustment of contrast, brightness, vertical and horizontal size and centering

VLF/ELF radiation control compliant with MPR II

One minimum six (6) foot power cable

One minimum ten (10) foot video cable

Built in tilt-rotational adjustable base

DB-15 SVGA Connector; adapter acceptable

A video extension cable may be used to meet the cable length requirement. All video display subsystems shall meet all specifications when using a video extension cable.

C.2.2.1 17-inch Video Monitor (CLIN 002AA)

The 17-inch video monitor shall be compatible with CLIN 005 and the CLIN 002AB graphics display adapter and shall provide the following:

Minimum 15.6 - inch viewable diagonal screen size

Minimum non-interlaced resolution of 1280 X 1024 and refresh rate of 75 Hz

C.2.2.2 Graphics Display Adapter - 1280 X 1024 (CLIN 002AB)

The Level 1 and Level 2 workstation graphic display support shall be PCI-based and shall provide a minimum of 1280 X 1024 resolution, support for a minimum of 258 colors, refresh or vertical scanning frequency of at least 75 Hz, and 2MB of VRAM.

C.2.2.3 21-inch Video Monitor (CLIN 003)

The 21-inch video monitor shall be compatible with CLIN 002AB and the CLIN 005 video accelerator adapter and shall provide the following:

Minimum 19-inch viewable diagonal screen size

Minimum non-interlaced resolution of 1600 X 1200 at 72 Hz

C.2.2.4 RESERVED

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C.2.2.5 24-inch Dual-Page Video Monitor (CLIN 004)

The 24-inch video monitor shall be compatible with the video accelerator adapter offered for CLIN 005 at the required resolution or another video adapter shall be bundled with the monitor. The offered monitor shall provide the following:

Minimum 22 - inch viewable diagonal screen

Minimum non-interlaced resolution of 1600 x 1200 at 72 Hz

Display modes shall include at least 16-level greyscale and monochrome

If the offered monitor is proposed for use with CLIN 005, it shall include all required cables and/or adapters as previously specified for video subsystems. If a separate graphics adapter is required, it shall use the PCI interface and shall meet the previously specified video subsystem requirements.

C.2.2.6 RESERVED

C.2.2.7 Video Accelerator Adapter - 1600 x 1200 (CLIN 005)

A video accelerator adapter for use with the Level 1 and Level 2 workstations shall support the following requirements:

32-bit PCI I/O interface

Minimum 64-bit data path on the adapter

Provide non-interlaced resolution of at least 1600 x 1200 with a refresh rate of 72 Hz with 16-bit color

Provide non-interlaced resolution of at least 1280 x 1024 with a refresh rrate of 75 Hz with 24-bit color

Minimum of 4MB of VRAM

Compatible with the CLIN 002AA and CLIN 003 video monitors

C.2.3 Storage Device Requirements

All storage devices shall be installable in the previously specified bays, unless otherwise specified, and shall connect to the Enhanced IDE interface unless otherwise specified below. All storage devices shall be provided complete with necessary connectors, terminators, cables and mounting hardware/brackets for Level 1 and Level 2 workstations; and drivers and utilities for DOS 6.22, Windows for Workgroups 3.11, and Windows NT, or the most current versions. Hard drives shall have an OEM minimum Mean Time Between Failure (MTBF) rating of 250,000 power-on hours.

C.2.3.1 500MB Internal Hard Drive - Enhanced IDE (CLIN 006)

A 500MB storage device for Level 1 and Level 2 workstations shall meet the following requirements:

Minimum 500 MB formatted capacity

10 ms or faster average seek time

10MB per second or faster data transfer rate

Maximum half-height 3. 5" in size for internal bay installation

C.2.3.2 1GB Internal Hard Drive - Fast SCSI-2 (CLIN 007)

A 1.2GB storage device for Level 1 and Level 2 workstations shall meet the following requirements:

Minimum 1GB formatted capacity

10 ms or faster average seek time

10MB per second or faster data transfer rate

Fast SCSI-2 Interface

Maximum half-height 3.5" in size for internal bay installation

C.2.3.3 2GB Internal Hard Drive - Fast SCSI-2 (CLIN 008)

A 2GB storage device for Level 1 and Level 2 workstations shall meet the following requirements:

Minimum 2GB formatted capacity

10 ms or faster average seek time

10MB per second or faster data transfer rate

Fast SCSI-2 Interface

Maximum half-height 3.5" in size for internal bay installation

C.2.3.4 Removable Internal Storage Device (CLIN 009)

A removable internal disk storage device for Level 1 and Level 2 workstations shall meet the following requirements:

Minimum formatted capacity of 100 MB

20 ms or faster average seek time

PC Card or PCMCIA version 2.1 compliant

Minimum sustained to/from host data transfer rate of 1.0 MB/second

Minimum burst to/from host data transfer rate of 5 MB/second

Sustainable operating mechanical shock 100 Gs on all axes; Shock measured on workstation holding device

Sustainable non-operating mechanical shock greater than 500 Gs all major axes; shock measured at drive mechanism case

Non-operating temperature storage range of -20 to 60 degrees Celsius

Minimum OEM MTBF rating of 150,000 power-on hours

Capable of operating with CLIN 014

C.2.3.5 Internal CD-ROM Drive (CLIN 010)

An internal CD-ROM drive for Level 1 and Level 2 workstations shall meet the following requirements:

Quad speed; minimum 600KB per second or faster data transfer rate

200 ms or faster access time

Fast SCSI-2 Interface

Minimum 256KB cache buffer

Compliant with MPC II, Quicktime, and Multisession Kodak Photo CD

Maximum 5.25° in size for accessible bay installation

Minimum OEM MTBF rating of 70,000 power-on hours

C.2.3.6 Tape Backup Kit (CLIN 011)

The tape drive offered for Level 1 and Level 2 workstations shall meet the following requirements:

4 mm DAT tape drive

Minimum uncompressed capacity of 2.0 GB/cartridge

Internal 5.25-inch half-height device

SCSI-2 Interface

Data read/write rate of at least 183 Kb/second

include five (5) 2 GB DAT cartridges

C.2.4 Interface Adapter Requirements

All interface adapters shall function with the Level 1 and Level 2 workstation motherboards and shall be provided complete with necessary cables, connectors, and mounting hardware for use with Level 1 and Level 2 workstations and drivers for DOS 6.22, Windows for Workgroups 3.11, and Windows NT 3.5, or the most current versions.

C.2.4.1 Fast SCSI-2 Interface (CLIN 013)

The Fast SCSI-2 (Small Computer System Interface) controller shall be PCI-based and shall support connection of at least 7 SCSI devices.

C.2.4.2 PCMCIA Adapter (CLIN 014)

The PCMCIA (Personal Computer Memory Card International Association) adapter shall provide an ISA interface and shall meet the following requirement:

Support I/O, memory, and disk drive devices that are compliant with the PCMCIA version 2.1 standard

Provide an ISA PC interface

Support at a minimum the following combinations: 1 Type III or 2 Type II devices or 1 Type II and 1 Type I device

Mount on a front panel of the workstation. The device mount may use a 3.5" or 5.25" drive port

C.2.5 Memory Expansion Requirements

Single In-Line Memory Modules (SIMMs) shall be installable in Level 1 and Level 2 motherboard memory slots and shall be fully compatible with initial installed memory.

C.2.5.1 Memory Expansion - 8MB SIMMs (CLIN 015AA)

The 8MB SIMM shall operate at 70ns or faster.

C.2.5.2 Memory Expansion - 16MB SIMMs (CLIN 015AB)

The 16MB SIMM shall operate at 70ns or faster.

C.2.5.3 Memory Expansion - 32MB SIMMs (CLIN 015AC)

The 32MB SIMM shall operate at 70ns or faster.

C.2.5.4 RESERVED

C.2.6 Peripheral Requirements

All peripherals shall be provided complete with necessary connectors, terminators, standard-length cables, and drivers for the Level 1 and Level 2 workstations and DOS 6.22, Windows for Workgroups 3.11, and Windows NT, or the most current versions.

C.2.6.1 Network Laser Printer (CLIN 016AA)

The laser printer for network workgroups shall meet the following requirements:

Minimum 600 x 600 dpi resolution

Minimum 16MB RAM expandable to 32MB without removing the initial 16MB installed RAM

Minimum 17 pages per minute output

Handle letter size (8.5" by 11"), A4 size (8.3" by 11.7"), and legal size (8.5" by 14") paper

Minimum input tray capacity 750 sheets

Minimum output tray capacity 500 sheets

Single-sheet paper feed

Minimum rated duty cycle of 50,000 sheets per month

Self-contained toner and drum unit compatible with Hewlett-Packard commercially-available cartridges and capable of being refilled or re-manufactured by commercial vendors

Minimum toner cartridge life 8,000 pages

One (1) toner cartridge

Support for user selection of portrait or landscape page orientation and normal mode (80 characters per line) or condensed mode (132 characters per line) printing

Support enhanced PCL5 and Adobe PostScript Level 2

Support a minimum of 26 fonts and have the capability to receive downloadable soft fonts

Maximum dimensions 22" wide, 24" deep, and 22" high

Maximum OEM's rated noise level of 58dBA

Parallel interface connection

Serial interface connection

Compatible with the network interface specified in CLIN 016AC

One minimum six (6) foot power cable (UL listed)

Energy Star Compliant

C.2.6.2 Local Laser Printer (CLIN 017)

The Local Laser printer for Level 1 & 2 workstations shall meet the following requirements:

Minimum 300 x 300 dpi resolution

Minimum 2MB RAM

Minimum 4 pages per minute output

Handle letter size (8.5" by 11"), A4 size (8.3" by 11.7"), and legal size (8.5" by 14") paper, envelopes and transparencies

Minimum input tray capacity 100 sheets

Minimum output tray capacity 50 sheets

Single-sheet paper feed

Minimum rated duty cycle of 8,000 sheets per month

Self-contained toner and drum unit compatible with Hewlett-Packard commercially-available cartridges and capable of being refilled or re-manufactured by commercial vendors

One (1) toner cartridge

Minimum toner cartridge life 3,000 pages

Support for user selection of portrait or landscape page orientation and normal mode (80 characters per line) or condensed mode (132 characters per line) printing

Support PCL4, enhanced PCL 5 and Adobe PostScript Level 2

Support a minimum of 26 fonts and have the capability to receive downloadable soft fonts

Maximum dimensions 16" wide, 18" deep, and 10" high

Maximum OEM's rated noise level of 55dBA

Parallel interface connection

One minimum six (6) foot power cable (UL listed)

Energy Star Compliant

C.2.6.3 Additional RAM for Network Laser Printer (CLIN 016AB)

Additional RAM for the network laser printer (CLIN 016AA) shall be available in minimum 4MB SIMMs and shall be fully compatible with the 16MB initial installed RAM.

C.2.6.4 Network Interface for Network Laser Printer (CLIN 016AC)

A multiprotocol network interface for the network laser printer (CLIN 016AA) shall meet or exceed the following requirements:

Support major network topologies, including 10BaseT Ethernet

Support major local area network protocols including IPX/SPX, TCP/IP, Apple EtherTalk

Support major network operating systems including Novel NetWare 2.x/3.x/4.x, Windows NTAS, UNIX; and includes necessary drivers

Provide automatic network/protocol switching support

Support firmware upgrades over the network; e.g., flash memory

Provide SNMP agents for support of network management applications; DMI enabled

Provide standalone software utilities for remote printer management; software utilities shall be available for Windows for Workgroups 3.11, Windows NT 3.5, UNIX

Provide native support for NetWare NDS

Under Novell NetWare provide the option for both remote printer and print server operation

Provide support for centralized management under PTO's existing LAN desk system

C.2.6.5 Bar Code Reader - Scanner (CLIN 018)

The bar code scanner shall meet the following requirements:

Suitable for hand-held non-contact operation

Consist of modular components; the hand-held scanning component shall be replaceable. The hand-held scanning component shall be interchangeable with the scanning device specified for CLIN 019.

Automatically sweep the laser beam across a field of view and read the bar code within the field of view

Capable of interpreting high and medium densities of Code 39 (aka Code 3 of 9) symbologies that meet the requirements of Mil Standard 1189B. The required accuracy is 99% when reading a 1 to 3.5 inch high density code with an x factor of .0075 inches at a distance from 0 to 7 inches while at skew angles of \pm 55 and pitch angles of \pm 65.

Support visible and audible indicators for system status and error conditions.

Support interface to an RS-232 serial port. The port connector configuration shall be female DB-9.

Include 8 foot (minimum) coiled cable between the hand-held scanning component and any associated electronic module. The cable shall include protective features at both ends to prevent accidental disconnection or damage to the cable.

Include all necessary accessories, i.e., power supply, cables.

C.2.6.6 Bar Code Reader - Network Scanner (CLIN 019)

The bar code scanner shall meet the following requirements:

Suitable for hand-held non-contact operation

Consist of modular components; the hand-held component shall be replaceable. The hand-held scanning component shall be interchangeable with that specified for CLIN 018.

Automatically sweep the laser beam across a field of view and read the bar code within the field of view

Capable of interpreting high and medium densities of Code 39 (aka Code 3 of 9) symbologies that meet the requirements of Mil Standard 1189B. The required accuracy is 99% when reading a 1 to 3.5 inch high density code with an \times factor of .0075 inches at a distance from 0 to 7 inches while at skew angles of \pm 55 and pitch angles of \pm 65.

Include an electronic 32 character (minimum) display capable of supporting the full 95 ASCII character subset as defined in FIPS Publication 15. The display shall support character masking and user notification of system status and error conditions under application control.

Support audible indicators for system status and error conditions. The device shall include volume control and be capable of generating single and multiple tone signals. The device shall support or shall be programmable to support automatic generation of a single short tone for an acceptable label read and automatic generation of multiple tone signals for other status and error conditions, e.g., unacceptable label read.

Support an integrated keypad with (minimum) numeric keys 0 through 9, alphabetic characters, A through Z, and four programmable function keys. The programmable function keys shall support generation of a unique 4 character transaction code. The keypad shall support CLEAR for allowing the user to reset the current display and BACKSPACE for editing a typed input sequence.

Support masking of displayed characters from a scanned label or keypad entry under application control.

Provide a mechanism for application differentiation of character strings which result from decoded label scans and those which are keypad entered.

Include an 80 character (minimum) data buffer. The 80 character buffer shall support internal construction of a custom character string. The character string shall consist of three sections. The initial section shall be a four character preamble input from either a scanned label, a programmed function key or keypad entry. Section two shall be a variable length string with a maximum of fifty characters. It shall consist of either scanned input, keypad entered data or a combination of both. The scanner shall disallow a section two string of exactly eight characters. Section three shall consist of an eight character string resulting only from a scanned label.

Support automatic output of the above custom character string upon input of section three. Disabling of manual output initiation shall be supported.

Support interface to an RS-232 serial port. The port connector configuration shall be female DB-9.

Include an 8 foot (minimum) coiled cable between the hand-held scanning component and any associated electronic module. The cable shall include protective features at both ends to prevent accidental disconnection or damage to the cable.

include all necessary accessories, i.e., power supply, cables.

C.2.7 Other Component Requirements

All components shall be fully compatible with the Level 1 and Level 2 workstation motherboard and bus architecture and shall be provided complete with necessary connectors, terminators, cables and mounting brackets for use with Level 1 and 2 workstations and drivers for DOS 6.22, Windows for Workgroups 3.11, and Windows NT 3.5, or the most current versions.

C.2.7.1 Internal FAX/Modem (CLIN 020)

The internal FAX/modem shall be supplied with an RJ-11 modular connector and shall meet the following requirements:

Minimum 28800 bits per second (bps) transmission speed

Compliant with CCITT V.34, V.32bis, V.32, V.22bis, V.21, Bell212A, 103, V.42bis, Group 3 FAX modes, V.17, V.29, V.27ter, Class 1 and Class 2, FCC Part 15 and Part 68 and Hayes compatible.

C.2.7.2 Multimedia Kit (CLIN 021)

The Multimedia Kit for Level 1 & 2 workstations shall meet following requirements:

Minimum sixteen (16) bit sound board with analog audio jacks for connections to the headset and microphone. The sound board shall be compatible with MIDI, Ad Lib, and Sound Blaster, with stereo line input and outputs.

Capability to disable any disk controller if included in the adapter

Stereo Speaker output minimum of 4 watts into 4 ohms

One pair of industry compatible external loudspeakers

One headset, microphone, drivers and utilities

C.2.7.3 Ergonomic Natural Keyboard (CLIN 022)

An ergonomic keyboard for Level 1 & 2 workstations shall have an alphanumeric, enhanced AT-class 104 key keyboard with the standard function keys. A minimum ten (10) foot overall cable length is required. An extension cable may be used with a standard-length keyboard cable to meet this requirement. The keyboard shall provide the following:

One-piece design split in the middle with each half slightly angled back. QWERTY layout with shift and enter keys and a double-width carriage return key

Dedicated backspace, insert, delete, and print screen keys and a minimum of four (4) dedicated cursor positioning keys

An integral auxiliary numeric keypad, located on the same level, split and rotated outward and to the right of the main key set, with standard calculator layout and additional keys as commonly implemented on commercially available microcomputers

Display status for number lock, caps lock, and scroll lock

Tactile feedback when a key is depressed and an auto-repeat function for keys

Built-in palm rest and wrist leveling rail

One application key and two Windows-specific keys

An adjustable height/tilt feature

Full compatibility with the Level 1 and 2 workstation BIOS and physical interfaces

C.2.7.4 Keyboard Wrist Pad (CLIN 023)

A keyboard wrist (rest) pad constructed of a foam material with a soft fabric covering is required. The wrist pad shall be compatible with the Level 1 and Level 2 workstation keyboard previously specified and shall have approximate dimensions of 19.25" in length, 2.5" in width, and .75" in height.

C.2.7.5 Operating System - Multitasking (CLIN 024)

The multitasking operating system shall include drivers and users manuals and shall have the following functionality:

Modular 32-bit operating capability

A windowing graphical user interface

Login, directory and file access security

Support for long (greater than 15 characters) file names

Provide multi-threaded preemptive multitasking

Support Microsoft Windows applications, including those utilizing the Win32 and Win32s APIs

Support DOS applications

Support client integration with Novell NetWare using the IPX/SPX protocol and Windows NT Advanced Server using TCP/IP

Provided network access with multiple protocols; supported protocols shall include IPX/SPX, TCP/IP, NetBios, DLC

Support symmatric multiple processors

Portable across multiple microprocessor architectures; e.g., PowerPC, Intel x86, MIPS, DEC Alpha

C.3 FACILITIES

Fully configured Level 1 and Level 2 workstations (i.e., containing the maximum component and adapter population) and peripherals shall be capable of normal operation under the following conditions:

Power requirement
Operating temperature
Storage temperature
Altitude
Humidity

15 to 35 degrees Centigrade (C) at cabinet air intake 0 to 40 degrees C 0 to 6000 feet above mean sea level 20% to 85% relative humidity (without condensation). This relative humidity applies over the operating

temperature range.

All equipment proposed shall conform to the National Electrical Code (ANSI/NFPA 70-1981), National Electrical Safety Code (C2-1981), and applicable OSHA standards.

110 to 120 volts AC, 4 amps or less

All hardware will be operating within one mile of the radar and radio transmitters at Washington National Airport. The Contractor shall determine whether offered equipment is sensitive to such radar and radio transmissions and indicate what measures will be taken to ensure proper equipment operation. The Contractor shall be aware that no shielding has been provided in spaces to be occupied by the equipment.

C.4 LIFECYCLE SUPPORT

The Contractor shall provide full lifecycle support for the hardware and operating system software. This shall include: integration and burn-in of original equipment and enhancements prior to delivery; warranty; updates and upgrades to the operating system software; technology enhancements for obsolete, obsolescent, or out-of-production components; manuals and publications for hardware and software delivered; hardware familiarization overview necessary to maintain provided hardware.

C.4.1 Integration and Delivery

The PTO will define individual workstation configurations (e.g., monitor, disk drive, other components) when orders are placed. The PTO may also order individual CLINs for use with previously delivered workstations. The PTO will issue the delivery orders for any equipment to be ordered by certain Government agencies under discretionary use of this contract. The PTO will identify in delivery orders the specific site to which delivery is to be made.

The Contractor shall deliver fully configured workstations with all internal components installed, storage devices formatted, and the DOS operating system loaded. The Contractor shall also perform any operational configuration or driver installation needed to support installed components under the Windows for Workgroups 3.11, or the most current version, operating system. Prior to shipment of workstations, the Contractor shall burnin the workstation (continuous operation for 24 hours) under Windows for Workgroups 3.11, or the most current version, and resolve any detected errors. For workstations ordered for PTO, the PTO will provide, as Government Furnished Property (see Section C.8), a number of operating system licenses that it deems sufficient for the Contractor to perform test and burn-in.

C.4.2 Warranty

The Contractor shall furnish, without additional charge to the PTO, a warranty on all offered hardware for a minimum of two (2) years beginning on equipment acceptance date.

The PTO will use its existing third-party maintenance contractor, which maintains all PTO microcomputer hardware, to perform the labor for warranty service. The PTO will request that the Contractor certify PTO's third-party maintenance contractor to perform the warranty labor. The PTO will expect the Contractor to work cooperatively with PTO's third-party maintenance contractor.

On hardware furnished to Government organizations other than PTO, the Contractor shall provide the standard, commercial warranty maintenance service.

The warranty program shall include the means to transport the systems if the program is mailback. Contractor shall bear transportation charges and responsibility for equipment while in transit to and from the Government.

In replacing failed or faulty components, the Contractor shall use new commercially available parts or parts equal in performance to new parts. Parts equal in performance to new parts may be used when approved by the Contracting Officer or his/her designee. Parts which have been installed under warranty shall become the property of the Government unless otherwise directed by the Contracting Officer or his/her designee. The Contractor shall provide a warranty on all replacement parts for a minimum of ninety calendar days after installation of the part.

The Contractor guarantees that replacement parts for equipment in this contract will be available for the contract period. The Contractor shall notify the Government 60 days before the end of the contract as to the continuing availability of replacement parts subsequent to contract expiration. If parts will not be available from the Contractor, the PTO may require the Contractor to furnish data that is available to assist the PTO to obtain replacement parts from another source.

For the full warranty term, the Contractor shall provide and maintain a toll-free "preferred customer" telephone line for technical support/problem diagnostics for the PTO. The Contractor shall additionally provide on-line diagnostic aids for its hardware. The PTO anticipates that approximately fifty (50) individuals who support workstation users will have access to these services.

The Contractor is relieved of this warranty obligation in the event Government fault or negligence caused damage to the equipment. However, warranty provisions shall not be voided by Government maintenance activity consisting of additional component installation performed by Contractor-trained or otherwise certified maintenance technicians.

C.4.3 Software Updates and Upgrades

Within the effective period of the contract, the Contractor shall provide, at no additional cost to previous purchasers of the software, any no-cost updates issued by the manufacturer to correct errors or otherwise modify the specified version of the operating system. These software updates shall be provided to the Government within 14 days following release by the manufacturer. This provision shall include any normal vendor-provided documentation or manual/publication revisions.

The Contractor shall provide upgrades (releases or versions) to the specified operating system software. In the case of new software releases or versions, the Government may elect to accept the later releases or versions of the software, and if accepted, software support shall be provided at no additional cost. If the Government elects not to accept later releases or versions, the Contractor shall continue to provide manufacturer corrections of any latent defects of any software provided. If the manufacturer's list price of a software release or version has changed, the unit cost for that item shall be renegotiated.

C.4.4 Technology Enhancements

PTO's requirement for microcomputers spans several years and may therefore exceed the technological life of the equipment specified. Several automated information systems currently under development at PTO will also require robust image display and processing capabilities which may not be attainable with the current technology specified earlier. To avoid getting locked into delivery of workstations or other components which may no longer effectively meet PTO information processing requirements or which may not be readily available or have permanently gone out of production, the PTO will require, at PTO's discretion, the Contractor to substitute equipment of a newer technology (e.g., the P6 and follow-on microprocessors). The Contractor may request a substitution of one or more contract line items. Such requests shall be made in writing to the Contracting Officer and the following conditions apply:

The substituted item(s) shall be fully compatible with the originally proposed item(s).

The substituted item(s) shall meet or exceed all specifications applicable to the original item(s).

The substituted item(s) shall meet all of the marketability requirements of the specification to ensure field-proven, COTS configurations.

The substituted item(s) may undergo benchmark and other specification validation testing similar to that described in Section L.

The fact that the Contractor requests a replacement shall not extend the required delivery dates of any items. Upon acceptance of a replacement, the PTO and Contractor may mutually agree to a reasonable extension.

After contract award, the PTO may solicit, and the Contractor is encouraged to propose independently, engineering changes to the equipment and software specifications, or other requirements of this contract. These changes may be proposed to save money, to improve performance, to save energy, or to satisfy increased information processing requirements at the PTO. If proposed changes to improve performance are necessary to meet increased PTO information processing requirements, the price for the proposed revised requirements shall not exceed the price of the current contract requirements by more than 25%.

C.4.5 Documentation

At workstation delivery, the Contractor shall furnish, at no additional cost, one copy per workstation of the most current version of user manuals, installation instructions, other publications for the operating system installed on the workstation, and any other applicable publications. The Contractor shall also furnish, if available, the electronic version of operating system documentation on magnetic or optical media compatible with Level 1 and Level 2 workstations.

Documentation shall be of professional print quality, bound or in a ring binder, or as provided by the manufacturer to retail customers of the product. The PTO does not desire and the Contractor shall not offer photocopies of documentation normally provided in print quality at no charge to customers of a product.

At time of delivery of workstations or other microcomputer equipment or components to the PTO, the Contractor shall furnish, at no additional cost, the following for PTO's desktop system configuration library:

For each batch of equipment delivered, a record of how each workstation or peripheral has been configured (e.g., devices, adapters, memory).

For each actual configuration or modification delivered, one complete set of set-up diskettes, drivers, and documentation on installation, configuration, error handling, and troubleshooting. For example, if fifty workstations are delivered, half are of one type of configuration and the other half are of another type of configuration, two sets of the above-listed materials shall be provided at time of delivery.

C.4.6 Hardware Familiarization Overview

The Contractor shall conduct, at a facility furnished by the Contractor within the Washington Metropolitan Area, a maximum eight-hour overview on furnished hardware for no more than 25 PTO support personnel or workstation maintenance contractors. The Contractor shall conduct this hardware familiarization overview, at no additional cost to the PTO, for hardware furnished, including, but not limited to, hardware furnished initially and when any significant hardware changes are made. The purpose of this overview shall be to familiarize PTO technical support and maintenance personnel with workstation diagnostics and troubleshooting, internal component installation and replacement, and preventive maintenance on Contractor's equipment. The Contractor shall furnish necessary reference materials for this hardware overview and PTO shall have limited data rights to reproduce those materials and handouts used in the overview. The PTO will expect the Contractor to certify its maintenance contractor following successful completion of this overview.

C.5 COMPLIANCE WITH FIP STANDARDS

All hardware and software shall be compatible with implementations of communications products conforming to Federal Information Processing Standards (FIPS) Publication 146, particularly Sections 4.2.1 and 4.2.2, and the appropriate subsection 3.0 of National Institute of Standards and Technology (NIST) Special Publication 500-183. A complete listing of FIP Standards applicable to this solicitation is included in Section J.

C.6 USED EQUIPMENT & MATERIALS

PTO does not desire nor will it accept used equipment. The Contractor shall not offer used equipment.

C.7 MANAGEMENT

The Contractor shall manage the full range of production and manufacturing efforts, integration, delivery, warranty and other lifecycle services necessary to fulfill the requirements specified herein.

The Contractor shall have the capability to produce and deliver ordered microcomputer equipment in a timely manner. The Contractor shall additionally have the ability to accommodate fluctuating ordering trends and to reprioritize orders based on PTO request.

The Contractor shall provide an order processing capability that will afford PTO the means to determine the status of orders. The Contractor shall also provide and maintain an electronic catalog of Contract Line Items (CLINs) and their current prices that PTO may use to facilitate preparing orders. The electronic catalog shall include an indication of which CLINs are dependent on other CLINs to operate (e.g. adapters).

C.8 GOVERNMENT FURNISHED PROPERTY

The PTO shall provide, for the Contractor's use in testing and burning in equipment, a number of operating system licenses that it deems sufficient.

SECTION D - PACKAGING AND MARKING

D.1 PACKAGE MARKING

All items are to be packed for domestic shipment to comply with standards and practices of the industry to ensure safe delivery without marks, scratches, dents or other damages. This packaging shall be such that shock and vibration incidental to shipping and handling will not affect the characteristics or factory settings of the components so as to ensure that field performance will be within specification tolerances after assembly and final adjustment. Shipping containers shall be plainly and substantially marked to show the contract number, a brief description of the contents, including stock number, serial number, Contractor's name, and the name of the Contracting Officer's Technical Representative.

D.2 PACKING FOR DOMESTIC SHIPMENT

Material shall be packed for shipment in such a manner that will ensure acceptance by common carriers and safe delivery at destination. Containers and closures shall comply with the Interstate Commerce Commission regulations. Uniform Freight Classification Rules, or regulations of other carriers as applicable to the mode of transportation.

D.3 LABELING

All hardware CLINs except cables and internal boards shall contain a permanently affixed serial number and manufacturer's name and model which shall be externally visible.

All delivery items for internal installation (e.g., boards and drives) shall be clearly marked with the manufacturer's name and model.

SECTION E - INSPECTION AND ACCEPTANCE

E.1 52.252-2 CLAUSES INCORPORATED BY REFERENCE (JUN 1988)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

NUMBER	TITLE	DATE
52.246-2 52.246-4 52.246-16	INSPECTION OF SUPPLIES - FIXED-PRICE INSPECTION OF SERVICES - FIXED PRICE RESPONSIBILITY FOR SUPPLIES	JUL 1985 FEB 1992 APR 1984

E.2 INSPECTION AND ACCEPTANCE

E.2.1 Application

Section E of this contract applies to all ADPR provided under this contract and its options, including all software, hardware, and firmware modifications, substitutions, additions, updates, replacements, improvements, revisions, from the date of contract award until the contract expires or is terminated. For orders specifying fully-configured workstations, the workstations shall not be considered delivered and the acceptance procedure shall not begin until each and every delivery line item comprising the ordered workstation has been delivered.

E.2.2 Acceptance

All ADPR supplies and services procured under this contract shall be subject to an Acceptance Period of up to a total of 45 calendar days before acceptance by the Government. The purpose of this Acceptance Period is to determine whether the supplies and services meet the specifications set forth in this contract and whether the supplies and services are available for an actual or simulated workload at the required availability level specified below. If the Contractor is unable to provide supplies and service that meet the specifications of the contract or if the supplies and services meet the specifications of the contract, but are not performing at the availability level specified, the Government shall not accept and may reject all noncompliant goods and services under this contract at no cost to the government.

Subparagraph (a)(6)(i) of the FAR clause 52.232-25, Prompt Payment (See Section I), is hereby modified to increase the constructive acceptance period to 45 days.

E.2.3 Rejection

The Government reserves the right to rerun the Benchmark Test or Operational Capabilities Demonstration (OCD) (see Paragraph E.3), or perform additional reasonable acceptance tests. The government may immediately reject the supplies and services solely based upon the failure of any of these required tests. The Government is not required to provide the Contractor the Acceptance Period upon the failure of any of these tests.

The date of acceptance shall be the last day of the successful Acceptance Period. The Contracting Officer shall notify the contractor of acceptance by written notice specifying the date of acceptance. If acceptance has not occured before the contract term expires, the Government may extend the term of the contract unilaterally for the period of time necessary to accomplish acceptance. The exercise date of any option shall be extended until 30 calendar days after the date of acceptance. No advance notice of the Government's intent to exercise the option is required under these circumstances.

E.3 RERUN OF BENCHMARK TEST OR OPERATIONAL CAPABILITIES DEMONSTRATION

The Government may require a rerun of the preaward Benchmark Test on the equipment and any augmentations installed pursuant to this contract. The time to perform the benchmark reruns shall not exceed the maximum benchmark times obtained under the preaward benchmark test for this configuration. The benchmark program files, input data, and processing procedures must be the same as those used in the preaward benchmark test.

SECTION F - DELIVERIES OR PERFORMANCE

F.1 52.252-2 CLAUSES INCORPORATED BY REFERENCE (JUN 1988)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

NUMBER	TITLE	DATE
52.211-17 52.242-15 52.247-35	DELIVERY OF EXCESS QUANTITIES STOP-WORK ORDER F.O.B. DESTINATION, WITHIN CONSIGNEE'S PREMISES	SEP 1989 AUG 1989 APR 1984

F.2 52.212-9 VARIATION IN QUANTITY (APR 1984)

- (a) A variation in the quantity of any item called for by this contract will not be accepted unless the variation has been caused by conditions of loading, shipping, or packing, or allowances in manufacturing processes, and then only to the extent, if any, specified below.
- (b) The permissible variation shall be limited to: 0 percent increase; 0 percent decrease. This increase or decrease shall apply to the total contract quantity.

F.3 DELIVERY

All equipment ordered under this contract shall be delivered within thirty (30) calendar days from issuance of the order by the Contracting Officer unless an extended delivery period is provided for in the order. The Contractor is obligated to make delivery F.O.B. destination within consignee's premises at the prices shown in Section B. Delivery locations shall be designated in individual delivery orders. The requested delivery locations will be limited to the Washington, DC, metropolitan area. Receiving hours for delivers are between 8:30 a.m. and 4:30 p.m., local time, Monday through Friday, excluding U.S. Government holidays.

The following Government holidays are observed by this agency:

New Year's Day
Martin Luther King's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day
Inauguration Day

January 1
Third Monday in January
Third Monday in February
Last Monday in May
July 4
First Monday in September
Second Monday in October
November 11
Fourth Thursday in November
December 25
January 20, 1997

F.4 RESERVED

F.5 EFFECTIVE PERIOD OF THE CONTRACT

The effective period of the contract is from (the effective date of the contract through 12 months thereafter (specific dates to be provided at time of contract award)).

F.6 REPORTS

In addition to the documentation requirement at Section C.4.5 of the Statement of Work, The Contractor shall provide reports as follows in hard copy and electronic format:

- a. On a monthly basis, due the first work day of the month following contract award, and thereafter on a calendar month basis, a <u>Delivery Report</u> shall be provided. The report shall include serial numbers and delivery dates of all equipment provided under each delivery order; and
- b. Due the first workday of the month following contract award, and thereafter on a bi-weekly basis, a <u>Delivery Order Report</u> shall be provided. The report shall include a list of each delivery order issued under the contract, date of the order, date Contractor acknowledged receipt, and a projected delivery date.

F.7 SUBCONTRACTING REPORTS - SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS CONCERNS - APPLICABLE TO LARGE BUSINESSES ONLY

The Contractor shall submit subcontracting reports on Standard Forms 294 and 295 in accordance with the General Instructions on the reverse side of the forms. Reports are due on the 30th day following the close of the reporting period.

These reports shall be delivered as follows:

FORM	FREQUENCY	DISTRIBUTION
SF 294	Semi-annual (covering periods of 10/1 - 3/31 and 4/1 - 9/30 of each year)	Original and 2 copies
SF 295	Annually (covering period 10/1 - 9/30)	Original and 2 copies

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 CONTRACT ADMINISTRATION

Notwithstanding the Contractor's responsibility for total management during the performance of this contract, the administration of the contract will require maximum coordination between the Government and the Contractor. The following individuals will be the Government points of contract during the performance of the contract.

(a) Contracting Officer's Technical Representative

A Contracting Officer's Technical Representative (COTR) will be designated on authority of the Contracting Officer to monitor all technical aspects and assist in administering the contract. The types of actions within the purview of the COTR's authority are to assure that the Contractor performs the technical requirements of the contract; to perform or cause to be performed inspections necessary in connection with performance of the contract; to maintain both written and oral communications with the Contractor concerning the aspects of the contract within his/her purview; to issue written interpretations of technical requirements of Government drawings, designs and specifications; to monitor the Contractor's performance under the contract and notify the Contractor and Contracting Officer of any deficiencies observed; and to coordinate Government-Furnished Property or Data availability and provide for site entry of Contractor personnel if required. A letter of designation will be issued to the COTR with a copy supplied to the Contractor, stating the responsibilities and limitations of the COTR. This letter will clarify to all parties to this contract the responsibilities of the COTR. At no time may the scope of work, price, delivery dates, or other mutually agreed upon terms or provisions of the contract be changed without being executed in writing by the Contracting Officer authorizing such changes.

(b) Contracting Officer

All contract administration will be effected by the Contracting Officer, address as shown on the face page of this contract. Communications pertaining to contract administration matters will be addressed to the Contracting Officer. No changes in or deviation from the scope of work shall be effected without a Supplemental Agreement executed by the Contracting Officer authorizing such changes.

G.2 CONTRACTING OFFICER'S AUTHORITY

The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract and notwithstanding any provisions contained elsewhere in this contract, the said authority remains solely in the Contracting Officer. In the event the Contractor makes any changes at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract price to cover any increase in costs incurred as a result thereof.

G.3 CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) — TECHNICAL DIRECTION

(a) The Contracting Officer hereby designates the individual named below as the Contracting Officer's Technical Representative.

NAME:

(to be designated at contract award)

ADDRESS:

U.S. Department of Commerce
Patent and Trademark Office
(to be designated at contract award)

PHONE NO: (to be designated at contract award)

The COTR may be changed at any time by the Government without prior notice to the contractor but notification of the change, including the name and address of the successor COTR, will be promptly provided to the Contractor by the Contracting Officer in writing.

- (b) The responsibilities and limitations of the COTR are as follows:
- (1) The Contracting Officer's Technical Representative is responsible for the technical aspects of the project and technical liaison with the Contractor. The COTR is also responsible for the final inspection and acceptance of all reports, and such other responsibilities as may be specified in the contract.
- (2) The COTR is not authorized to make any commitments or otherwise obligate the Government or authorize any changes which affect the contract price, terms or conditions. Any Contractor request for changes shall be referred to the Contracting Officer directly or through the COTR. No such changes shall be made without the expressed prior authorization of the Contracting Officer. The COTR may designate assistant COTR(s) to act for him by naming such assistant in writing and transmitting a copy of such designation through the Contracting Officer to the Contractor.

G.4 INVOICING AND PAYMENT INSTRUCTIONS

(a) For equipment delivered to the PTO, invoices shall be submitted in an original and two (2) copies to the following address:

U.S. Patent and Trademark Office Office of Finance, Box 17 2011 Crystal Drive, Suite 802B Washington, DC 20231

The address(es) for invoices on equipment delivered to agencies other than the PTO shall be designated in individual delivery orders.

- (b) A separate invoice shall be provided for each executed delivery order. To constitute a proper invoice, the invoice must include the following information or attached documentation:
 - (1) Name of Contractor, invoice number and invoice date;
 - (2) Contract number and delivery order number (one per invoice);
 - (3) Description, price, and quantity of each CLIN ordered under that specific delivery order,
 - (4) A copy of the Configuration Sheet provided with the original or modified delivery order,
 - (5) Payment terms;
 - (6) Name, title, phone number, and complete mailing address of responsible official to whom payment is to be sent; and
 - (7) The following statement shall be entered on the original of each invoice:

COTR's Certification

I certify to the best of my knowledge and belief that the services/supplies shown on this invoice have been performed/furnished and are accepted.

COTR 000037 Date

(c) If items are rejected for failure to conform to the contract requirements, the provisions in the Prompt Payment clause (FAR 52.232-25--see Section I) will apply to the new acceptance of replacement items.

G.5 INVOICING/PAYMENT FREQUENCY

The Contractor shall submit invoices on a monthly basis for delivery orders completed during the previous month.

G.6 ELECTRONIC PAYMENT INFORMATION

(a) The information required by the clause at FAR 52.232-28, Electronic Funds Transfer Payment Methods (see Section I), shall be forwarded by the Contractor to the below designated office no later than seven (7) days after contract award:

U.S. Patent and Trademark Office Office of Finance, Box 17 2011 Crystal Drive, Suite 802B Washington, DC 20231

(b) If requested, a form will be provided to the successful contractor for this purpose. In the event payment is assigned to a bank, thrift, or other financing institution pursuant to the clause FAR 52.232-23, Assignment of Claims, the Contractor should forward the form to the assignee for completion.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 TYPE OF CONTRACT

This is a Fixed-Price, Indefinite Delivery/Indefinite Quantity type contract.

H.2 ADVERTISING OF AWARD

The Contractor agrees not to refer to awards in commercial advertising in such a manner as to state or imply that the product or service provided is endorsed or preferred by the Federal Government, or is considered by the Government to be superior to other products or services. Advertisements, press releases and publicity of a contract by a supplier shall not be made without the prior express written permission of the Contracting Officer.

H.3 INTERPRETATION OF CONTRACT REQUIREMENTS

No interpretation of any provision of this contract, including interpretations of the specifications, shall be binding on the Government unless furnished or agreed to in writing by the Contracting Officer or his/her designated representative.

H.4 QUARTERLY PRICE ADJUSTMENT

The contract will require a quarterly review for prospective price redetermination which will allow the PTO to renegotiate prices to reflect the commercial marketplace. Any price adjustment will be mutually agreed upon by the parties and will provide, at a minimum, quarterly price evaluations to determine if contract prices of specific items are in alignment with established market prices. No later than fifteen calendar days before the end of the quarter, the Contractor will be required to submit a price proposal for the supplies to be delivered in the next quarter. Upon review of the Contractor's proposal and completion of a market and price analysis, the Contractor and the Government will enter into negotiations to redetermine fair and reasonable prices for supplies to be delivered in the next quarter.

H.5 DEPARTMENT OF COMMERCE AND OTHER FEDERAL AGENCY UTILIZATION

The Department of Commerce (DOC) and other Federal agencies shall be allowed to utilize the contract on a non-mandatory basis. The total DOC, including all it's bureaus, and other Federal agency requirements satisfied under this contract shall not exceed forty percent (40%) of the total estimated contract value over the life of the contract as determined at the time of contract award. Of this amount, twenty percent (20%) has been allocated for other Federal agencies.

Excluding DOC, the total use of the contract over its life by any individual agency shall not exceed two percent (2%) of the total estimated contract value. The maximum order limitation for an individual order by other Federal agencies shall be one million dollars (\$1,000,000).

H.6 REPLACEMENT PARTS AVAILABILITY

The Contractor guarantees that replacement parts for each machine in this contract will be available through the warranty period which is 24 months from the date of Government acceptance. If the parts will not be available from the Contractor beyond this period, the Contractor shall assist the Government in locating and obtaining such parts from another source.

H.7 ENGINEERING CHANGES

After contract award, the Government may solicit, and the Contractor is encouraged to propose, engineering changes to the equipment or other requirements of this contract. These changes may be proposed to save money, to improve performance, to save energy, or to satisfy increased data processing requirements. The Contractor is encouraged to submit such proposals to the Government for evaluation.

The Government shall not, however, be liable for any costs resulting from proposal preparation, evaluation, acceptance, or rejection.

H.8 OPTION TO EXTEND THE TERM OF THE CONTRACT - FIXED PRICE CONTRACT

- (a) This contract is renewable at the prices stated in Section B of the contract, at the option of the Government, by the Contracting Officer giving preliminary written notice of its intent to renew 30 days before the expiration date of the contract. Such a preliminary notice of intent to renew shall not be deemed to commit the Government to exercise the option. If less than 30 days exist between award and the end of the base contract period, the award shall be construed as to imply sufficient intent to exercise the first option to extend the term. If acceptance has not been completed before the end of the base contract period, then no preliminary notice is required of the government's intent to exercise the first option period. The exercise date of any option due to be exercised before acceptance has occurred shall be extended until 30 days after the date of acceptance.
- (b) If the Government exercises this option for renewal, the contract as renewed shall be deemed to include this option provision. The total duration of this contract, including the exercise of any options under this clause, shall not exceed 36 months.
- (c) Exercise of an option will result in the following contract modifications:

Paragraph F.5, "Effective Period of the Contract", will be modified as follows:

Period	Start Date	End Date
Option I	TBD*	TBD*

*TBD - To Be Determined at time of award

H.9 OPTION FOR INCREASED QUANTITY

The Government may increase the maximum quantities stated in Section B for any CLIN by up to 20% at the unit prices specified in Section B. The Contracting Officer may exercise this option at any time within the term of the contract by giving written notice to the Contractor. Delivery of items added by exercise of this option shall be in accordance with the delivery schedule set forth in Section F.

H.10 CONTRACTOR COMMITMENTS, WARRANTIES AND REPRESENTATIONS

Any written commitment by the Contractor within the scope of this contract shall be binding upon the Contractor. Failure of the Contractor to fulfill any such commitment shall render the Contractor liable for consideration due to the Government under the terms of this contract. For the purpose of this contract, a written commitment by the Contractor is limited to the proposal submitted by the Contractor, and to specific written modifications to the proposal. Written commitments by the Contractor are further defined as including (1) any warranty or representation made by the Contractor in a proposal as to hardware or software performance; total systems performance; other physical, design, or functioning characteristics of a machine, software package, or system; (2) any warranty or representation made by the Contractor concerning the characteristics or items described in

(1) above made in any publications, drawings, or specifications accompanying or referred to in a proposal; and (3) any modification of or affirmation or representation as to the above information and items which is made by the Contractor in or during the course of negotiations, whether or not incorporated into a formal amendment to the proposal in question.

H.11 RISK OF LOSS OR DAMAGE - PURCHASED ADPR

The Contractor shall be liable for all risks of loss or damage to the equipment, up to and including the date of acceptance unless the loss or damage is caused by (1) nuclear reaction, nuclear radiation, radioactive contamination, war, insurrection, civil strife, rebellion, weapons of war, or (2) negligence on the part of the Government or its agents, provided, however, that the Government shall be relieved of the liability for such risks or damage due to negligence if any commercial customer of the Contractor is relieved of such liability under like circumstances.

If the Government is liable for such loss or damage of the equipment, the Contractor shall have the option to restore the machine to its previous condition, in which event the Government shall pay the Contractor to perform such restoration at the Contractor's then-current prices, terms, and conditions. If the Contractor elects not to restore the machine, the Government may, at its own expense, restore the machine to its previous condition. If, however, the machine is lost or damaged beyond repair, the Government shall pay the Contractor the same price for the machine as the Government would have paid if it had purchased the machine on the day prior to the loss or damage under the provisions of this contract. This clause shall govern risk of loss or damage, notwithstanding any other provisions of this contract relating to title, payment, or ownership.

H.12 NO WAIVER OF DELIVERY SCHEDULE

- (a) None of the following shall be regarded as an extension, waiver, or abandonment of the delivery schedule or a waiver of the Government's right to terminate for default: (i) Delay by the Government in terminating for default; (ii) Acceptance of delinquent deliveries; and (iii) Acceptance or approval of samples submitted either after default in delivery or in sufficient time for the contractor to meet the delivery schedule.
- (b) Any assistance rendered to the contractor on this contract or acceptance by the Government of delinquent goods or services hereunder will be solely for the purpose of mitigating damages and is not to be construed as an intention on the part of the Government to condone any delinquency, or as a waiver of any rights the Government may have under subject contract.

H.13 ORGANIZATIONAL CONFLICT OF INTEREST

- (a) The Contractor warrants that, to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, or that the Contractor has disclosed all such relevant information.
- (b) The Contractor agrees that if an actual or potential organizational conflict of interest is discovered after award, the Contractor will make a full disclosure in writing to the Contracting Officer. This disclosure shall include a description of actions which the Contractor has taken or proposes to take, after consultation with the Contracting Officer, to avoid, mitigate, or neutralize the actual or potential conflict.
- (c) Remedies The Contracting Officer may terminate this contract for convenience, in whole or in part, if it deems such termination necessary to avoid an organizational conflict of interest. If the Contractor was aware of a potential organizational conflict of interest prior to award or discovered an actual or potential conflict after award and did not disclose or misrepresented relevant information to the Contracting Officer, the Government may terminate the contract for default, debar the Contractor from Government contracting, or pursue such other remedies as may be permitted by law or this contract.
- (d) The Contractor further agrees to insert provisions which shall conform substantially to the language of this clause, including this paragraph (d), in any subcontract or consultant agreement hereunder.

H.14 INSURANCE COVERAGE

Pursuant to the clause "Insurance - Work on a Government Installation (FAR 52.228-5)," the Contractor will be required to present evidence to show, as a minimum, the amounts of insurance coverage indicated below:

(a) Workers Compensation and Employer's Liability. The Contractor is required to comply with applicable Federal and State workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with a Contractor's commercial operations that it would not be practical to require this coverage. Employer's liability coverage of at least \$100,000 shall be required, except in States with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

(b) General Liability.

- (1) The Contractor shall have bodily injury liability insurance coverage written on the comprehensive form of policy of at least \$500,000 per occurrence.
 - (2) Property Damage liability insurance shall be required in the amount of \$100,000.
- (c) Automobile Liability. The Contractor shall have automobile liability insurance written on the comprehensive form of policy. The policy shall provide for bodily injury and property damage liability covering the operation of all automobiles used in connection with performing the contract. Policies covering automobiles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage.
- (d) Aircraft Public and Passenger Liability. When aircraft are used in connection with performing the contract, the Contractor shall have aircraft public and passenger liability insurance. Coverage shall be at least \$200,000 per person and \$500,000 per occurrence for bodily injury, other than passenger liability, and \$200,000 per occurrence for property damage. Coverage for passenger liability bodily injury shall be at least \$200,000 multiplied by the number of seats or passengers, whichever is greater.

H.15 ACCESS TO GOVERNMENT FACILITIES

During the life of the contract, the rights of ingress to and egress from the PTO facility for Contractor personnel shall be made available as required. During all operations on Government premises, Contractor personnel shall comply with the rules and regulations governing the conduct of personnel and the operation of the facility. The PTO reserves the right to require Contractor personnel to sign in upon ingress to and sign out upon egress from the PTO facility.

H.16 WARRANTY

For all hardware, software, and user-installed components, warranty service shall be provided in accordance with Section C.4.2 of the Statement of Work and the warranty plan described in the Contractor's technical proposal as incorporated in this contract by reference. In addition, the following shall apply:

- (1) Notwithstanding inspection and acceptance by the Government of items furnished under the contract or any condition of this contract concerning the conclusiveness thereof, the Contractor warrants that, at the time of delivery, all items:
 - Are of a quality to pass without objection in the trade under the contract description;
 - Are fit for the ordinary purposes for which the items are used;
 - Are within the variations permitted by the contract, if any, of an even kind, quality, and quantity
 within each unit and among all units;

- Are adequately contained, packaged, and marked as the contract may require;
- · Conform to the promises or affirmations of fact made on the container.
- (2) The rights and remedies of the Government provided in this clause are in addition to and do not limit any rights afforded to the Government by any other clause of the contract.
- (3) Warranty repairs shall be performed by Government personnel or the Government's third party maintenance agent who are properly trained to perform the level of work for any warranty repair.

H.17 TECHNOLOGICAL ADVANCES

- (a) If after award the Contractor or his supplier markets a new or updated model of a piece of equipment that was originally specified under this contract, the Government may elect to modify this contract and, at its option, may have the new model delivered in lieu of the originally specified equipment, provided that the new model meets all of the following conditions:
 - Has equal or superior performance capabilities.
 - 2. Does not require the replacement of any other piece of equipment in the configuration.
 - Prices for particular items shall not be in excess of GSA Automated equipment schedule price or the
 price charged to the Contractor's most favored commercial customer, whichever is less.
 Consideration will be given to any special warrranty terms and delivery, management and support
 requirements.
- (b) Delivery dates and prices, with adequate supporting documentation, for equipment provided as a result of these provisions shall be proposed by the Contractor. An agreement between the Contracting Officer and the Contractor shall be reached and the change shall be effected by a written, bilateral modification to the contract. In no event shall the prices for a particular upgraded item be in excess of the GSA automated equipment schedule price or the price charged to the Contractor's most favored commercial customer, whichever is less.
- (c) If this provision is exercised prior to the installation of any originally specified models, all terms and consitions of this contract shall apply just as if the originally specified models were being delivered, except for paragraph b, above.
- (d) The Government shall be provided with all Contractor changes and modifications to the hardware and full documentation on these changes and modifications.
- (e) The provisions of a through d above shall apply with equal force to the software to be acquired under this contract.
- (f) If the Contractor cannot continue to supply a hardware or software item, the Contractor shall offer a replacement which provides the same or better capabilities. Any such replacement does not negate the Government's rights under the provisions of the clauses in FAR 52.233-1 and FAR 52.249-8.

H.18 CONTRACT MINIMUM

During the effective contract period, the Government shall order at least the stated minimum quantity for the CLINs set forth in Section B.

H.19 CONTRACT MAXIMUM

The total amount of all orders placed under this contract shall not exceed the "maximum" quantities as set forth in Section B nor shall the Government be required or held liable to order the "maximum" quantities as set forth in Section B. As stated in Paragraph H.9, the Government may increase the maximum quantities stated in Section B for any CLIN by up to 20% at the unit prices specified in Section B. Furthermore, any of the maximum quantities remaining at the end of the contract period may be carried over to the next contract period at the negotiated prices for the period in which they will be purchased.

H.20 ORDERING AUTHORITY AND PROCEDURES

Orders under this contract shall be issued by warranted Contracting Officers of the Patent and Trademark Office. All orders will be placed in writing. As a minimum, each order will contain the following information: (1) contract and order numbers, (2) contract line item numbers, descriptions, contract unit prices and amounts, (3) required delivery date, (4) place of delivery, (5) accounting and appropriation data, if applicable, and (6) signature of an authorized ordering official.

H.21 DELIVERY ORDER GUIDELINE FOR OTHER AGENCIES

<u>Purpose:</u> This special provision provides information pertaining to ordering procedures and limitations for other agency use of the Patent and Trademark Office's (PTO) Desktop Computers Contract.

<u>Definition:</u> For purposes of this Contract, "other agency" or "agency" means the U.S. Department of Commerce and other agencies of the U.S. Government.

General: This indefinite delivery/indefinite quantity contract will be awarded using full and open competition procedures. Therefore, other agency delivery orders and intent to place delivery orders need not be synopsized in the Commerce Business Daily. Because a price reasonableness determination will be made prior to award and on a quarterly basis as set forth at Paragraph H.4, Quarterly Price Adjustment, no further price analysis is required. When the agency determines that its needs can be satisfied by this contract, resources can be obtained under this contract by using the ordering procedures outlined below.

Instructions for Use:

- (a) Other agencies should designate a contracting official as a central point of contact (POC) for issuing, coordinating, and managing orders. Other agencies should notify the PTO Contracting Officer of the POC's current address and telephone number.
- (b) The agency Contracting Officer is responsible for ensuring that orders placed under the contract represent valid agency requirements, are within the scope of the PTO contract, and are in compliance with the contract.
- (c) The agency and PTO will use the following procedures for ordering:
- (1) Tracking Order Numbers: Prior to submission of an order, the agency must contact the PTO Contract Administrator (to be named aftr contract award) to obtain a tracking order number. At the time of issuance of the tracking order number, the agency will provide PTO with information on the items to be procured under the delivery order.
- (2) Requirement Package: Other agencies shall submit a requirements package which should contain the following information:
 - Date of order
 - Contract number, order number, and the agency tracking order number to be assigned by the PTO for tracking purposes
 - CLIN/Sub-CLIN, description, quantity ordered, and contract price.

- The using activity's (agency) desired delivery date [Other agencies should review the contract for delivery terms]
- The using activity's (agency) required place(s) of delivery
- Special packaging, packing, and shipping instructions, if any
- Certified funding document(s) including the accounting and appropriation data [The PTO will not
 accept any package for processing that does not contain funding for the entire delivery order amount]
- A POC, including telephone number, at each delivery sit to coordinate delivery
- Invoicing instructions
- Any other pertinent information

Delivery Order Processing:

- (a) The PTO reserves to right not to process any requirement under \$25,000.
- (b) Requirements Packages which must be awarded prior to the end of the fiscal year must be received at the PTO before August 30th of that fiscal year. The Requirements Package must be clean and complete by the cutoff date in order to be accepted for processing.
- (c) The lead-time for processing a delivery order under this contract is thirty (30) calendar days.
- (d) A delivery order will be placed against the PTO contract directly with the contractor and mailed to the contractor's address. At this point, the contractor is authorized to begin work. The agency must notify the PTO Contract Administrator immediately if a modification to the delivery order is required.

Other Agency Responsibilities: Agencies are responsible for:

- (a) obtaining a copy of the contract;
- (b) reviewing the terms and conditions, especially for performance, inspection, deliveries, pricing provisions, or any other special contract requirement;
- (c) reviewing details of available resources;
- (d) ensuring that orders are correctly prepared;
- (e) ensuring that the contractor performs on ageny orders, or reporting to the PTO COTR and Contracting Officer when problems cannot be resolved;
- (f) ensuring that maximum ordering limitations are not exceeded; and
- (g) providing the PTO Contracting Officer an "items ordered" report which includes a table showing a running total of all CLINs ordered, the agency order number, the PTO tracking order number, and an "inspection and acceptance" report showing the acceptance dates for all items under each delivery order. The report shall be both in witten and electronic format. The electronic report shall be submitted on a 3.5" floppy diskette. The submission shall be prepared using Microsoft Excel (IBM compatible). The diskette shall be labeled to indicate the contract number and report number.
- H.22 SUBCONTRACTING PLAN FOR SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS APPLICABLE TO LARGE BUSINESSES ONLY

The Subcontracting Plan submitted by the Contractor and approved by the Contracting Officer for this requirement is incorporated herein as Attachment D.

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

1.1 52.252-2 CLAUSES INCORPORATED BY REFERENCE (JUN 1988)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

NUMBER	TITLE	DATE
52.202-1 52.203-3	DEFINITIONS GRATUITIES	OCT 1995 APR 1984
52.203-5	COVENANT AGAINST CONTINGENT FEES	APR 1984
52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	OCT 1995
52.203-7	ANTI-KICKBACK PROCEDURES	JUL 1995
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	SEP 1990
52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUB- CONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	JUL 1995
52.211-5	NEW MATERIAL	MAY 1995
52.211-6	OTHER THAN NEW MATERIAL, RESIDUAL INVENTORY, AND FORMER GOVERNMENT SURPLUS PROPERTY	MAY 1995
52.215-2	AUDIT - NEGOTIATION	OCT 1995
52.215-26	INTEGRITY OF UNIT PRICES	OCT 1995
52.215-33	ORDER OF PRECEDENCE	JAN 1986
52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS AND SMALL DISADVANTAGED BUSINESS CONCERNS	OCT 1995
52.219-9	SMALL BUSINESS AND SMALL DISADVANTAGED	FEB 1995
	BUSINESS SUBCONTRACTING PLAN	APR 1984
52.222-20	WALSH-HEALEY PUBLIC CONTRACTS ACT	APR 1984
52.222-26	EQUAL OPPORTUNITY	APR 1984
52.222-28	EQUAL OPPORTUNITY PREAWARD CLEARANCE OF SUBCONTRACTS	
52.222-35	AFFIRMATIVE ACTION FOR SPECIAL DISABLED AND VIETNAM ERA VETERANS	APR 1984
52,222-36	AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS	APR 1984
52.222-37	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA	JAN 1988
52.223-2	CLEAN AIR AND WATER	APR 1984
52.223-6	DRUG-FREE WORKPLACE	JUL 1990
52.225-11	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	MAY 1992
52.227-1	AUTHORIZATION AND CONSENT	JUL 1995
52.228-5	INSURANCE - WORK ON A GOVERNMENT INSTALLATION	SEP 1989
52.229-3	FEDERAL STATE, AND LOCAL TAXES	JAN 1991
52.229-5	TAXES - CONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO	APR 1984
52.232-1	PAYMENTS	APR 1984

NUMBER	TITLE	DATE
52.232-8	DISCOUNTS FOR PROMPT PAYMENT	APR 1989
52.232-11	EXTRAS	APR 1984
52.232-17	INTEREST	JAN 1991
52.232-23	ASSIGNMENT OF CLAIMS	JAN 1986
52.232-25	PROMPT PAYMENT	MAR 1994
52.232-28	ELECTRONIC FUNDS TRANSFER PAYMENT METHODS	APR 1989
52.233-1	DISPUTES	MAR 1994
52.233-3	PROTEST AFTER AWARD	AUG 1989
52.242-13	BANKRUPTCY	JUL 1995
52.243-1	CHANGES - FIXED-PRICE	AUG 1987
52.244-1	SUBCONTRACTS (FIXED-PRICE CONTRACTS)	FEB 1995
52.245-4	GOVERNMENT-FURNISHED PROPERTY (SHORT FORM)	APR 1984
52.249-2	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT	APR 1984
J2.2-7-5-2	(FIXED-PRICE)	
52.249-8	DEFAULT (FIXED-PRICE SUPPLY AND SERVICE)	APR 1984
52.253-1	COMPUTER GENERATED FORMS	JAN 1991

- 1.2 52.203-9 REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY-MODIFICATION (SEP 1995)
- (a) Definitions. The definitions set forth in FAR 3.104-4 are hereby incorporated in this clause.
- (b) The Contractor agrees that it will execute the certification set forth in paragraph (c) of this clause when requested by the Contracting Officer in connection with the execution of any modification of this contract.
- (c) Certification. As required in paragraph (b) of this clause, the officer or employee responsible for the modification proposal shall execute the following certification. The certification in paragraph (c)(2) of this clause is not required for a modification which procures commercial items.

CERTIFICATE OF PROCUREMENT INTEGRITY - MODIFICATION (SEP 1995)

- [Name of certifier], am the officer or employee responsible for the preparation of this modification proposal and hereby certify that, to the best of my knowledge and belief, with the exception of any information described in this certification, I have no information concerning a violation or possible violation of subsection 27(a), (b), (d), or (f) of the Office of Federal Procurement Policy Act, as amended " (41 U.S.C. 423), (hereinafter referred to as "the Act"), as implemented in the FAR, occurring during the conduct of this procurement (contract and modification number).
- As required by subsection 27(e)(1)(B) of the Act, I further certify that to the best of my knowledge and belief, each officer, employee, agent, representative, and consultant of [Name of Offeror] who has participated personally and substantially in the preparation or submission of this proposal has certified that he or she is familiar with, and will comply with, the requirements of subsection 27(a) of the Act, as implemented in the FAR, and will report immediately to me any information concerning a violation or possible violation of subsections 27(a), (b), (d), or (f) of the Act, as implemented in the FAR, pertaining to this procurement.
- (3) Violations or possible violations: [Continue on plain bond paper if necessary and label Certificate of Procurement Integrity - Modification (Continuation Sheet), enter NONE if none exists]

[Signature of the officer or employee responsible
for the modification proposal and date]
Typed name of the officer or employee responsible
for the modification proposal]

*Subsections 27(a), (b), and (d) are effective on December 1, 1990. Subsection 27(f) is effective on June 1, 1991.

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER TITLE 18, UNITED STATES CODE, SECTION 1001.

[End of certification]

- (d) In making the certification in paragraph (2) of the certificate, the officer or employee of the competing Contractor responsible for the offer or bid, may rely upon a one-time certification from each individual required to submit a certification to the competing Contractor, supplemented by periodic training. These certifications shall be obtained at the earliest possible date after an individual required to certify begins employment or association with the Contractor. If a Contractor decides to rely on a certification executed prior to the suspension of Section 27 (i.e., prior to December 1, 1989), the Contractor shall ensure that an individual who has so certified is notified that Section 27 has been reinstated. These certifications shall be maintained by the Contractor for a period of 6 years from the date a certifying employee's employment with the company ends or, for an agency, representative, or consultant, 6 years from the date such individual ceases to act on behalf of the Contractor.
- (e) The certification required by paragraph (c) of this clause is a material representation of fact upon which reliance will be placed in executing this modification.
- 1.3 52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (DEVIATION NOV 1990) (JAN 1990)
- (a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

- (a) The awarding of any Federal contract.
- (b) The making of any Federal grant.
- (c) The making of any Federal loan.

- (d) The entering into of any cooperative agreement.
- (e) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and tribal organization," as used in this clause, have the meaning provided in Section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, or an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

- (a) An individual who is appointed to a position in the Government under title 5, United States Code, including a position under a temporary appointment.
 - (b) A member of the uniformed services, as defined in subsection 101(3), title 37, United States Code.
 - (c) A special Government employee, as defined in Section 202, title 18, United States Code.
- (d) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, and officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days. "State," as used in this clause, means a State of the United

States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

- (1) Section 1352 of title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.
 - (3) The prohibitions of the Act do not apply under the following conditions:
 - (i) Agency and legislative liaison by own employees.
- (A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.
- (B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.
- (C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:
- (1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.
- (2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.
- (D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action—
- (1) Providing any information not specifically requested but necessary for an agency to make an informal decision about initiation of a covered Federal action;
- (2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and
- (3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

- (E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.
 - (ii) Professional and technical services.
- (A) The prohibition on the use of appropriated funds in subparagraph (b)(1) of this clause, does not apply in the case of—
- (1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.
- (2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.
- (B) For the purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. The following examples are not intended to be all inclusive, to limit the application of the professional or technical exemption provided in the laws, or to limit the exemption to licensed professionals. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.
- (C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.
- (D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.
- (E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.
- (iii) Selling activities by independent sales representatives.
 The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply to the following selling activities before an agency by independent sales representatives, provided such activities are prior to formal solicitation by an agency and are specifically limited to the merits of the matter:

- (A) Discussing with an agency (including individual demonstrations) the qualities and characteristics of the person's products or services, conditions or terms of sales, and service capabilities; and
- (B) Technical discussions and other activities regarding the application or adaption of the person's products or services for an agency's use.

(c) Disclosure

- (1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to <u>include</u> profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.
- (2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes—
- (i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
- (ii) A change in the officer(s) or individual(s) influencing or attempting to influence a covered Federal action; or
- (iii) A change in the officer(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.
- (3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.
- (4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.
- (d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penatties.

- (1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.
- (2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.
- (f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

1.4 52.216-18 ORDERING (OCT 1995)

- (a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from the effective date of the contract through the end of the contract period.
- (b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.
- (c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

1.5 52.216-19 DELIVERY-ORDER LIMITATIONS (OCT 1995)

The Contractor shall honor any order in accordance with this contract. If the Contractor is unable to meet the requirements of an order, the Contractor must return the delivery order to ordering office within seven (7) days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

1.6 52,216-22 INDEFINITE QUANTITY (OCT 1995)

- (a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.
- (b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum." The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."
- (c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.
- (d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after one month beyond the effective period of the contract.

1.7 52.220-1 PREFERENCE FOR LABOR SURPLUS AREA CONCERNS (APR 1984)

(a) This acquisition is not a set aside for labor surplus area (LSA) concerns. However, the offeror's status as such a concern may affect (1) entitlement to award in case of tie offers or (2) offer evaluation in accordance with the Buy American Act clause of this solicitation. In order to determine whether the offeror is entitled to a preference under (1) or (2) above, the offeror must identify, below, the LSA in which the costs to be incurred on account of manufacturing or production (by the offeror or the first-tier subcontractors) amount to more than 50 percent of the contract price.

(b) Failure to identify the locations as specified above will preclude consideration of the offeror as an LSA concern. If the offeror is awarded a contract as an LSA concern and would not have otherwise qualified for award, the offeror shall perform the contract or cause the contract to be performed in accordance with the obligations of an LSA concern.

1.8 52.225-9 BUY AMERICAN ACT - TRADE AGREEMENTS ACT - BALANCE OF PAYMENTS PROGRAM (JAN 1996)

(a) This clause implements the Buy American Act (41 U.S.C. 10), the Trade Agreements Act of 1979 (19 U.S.C. 2501-2582), the North American Free Trade Agreement (NAFTA) Implementation Act (Pub. L. 103-182, 107 Stat. 2057), and the Balance of Payments Program by providing a preference for domestic end products over foreign end products, except for certain foreign end products which meet the requirements for classification as designated, NAFTA, or Caribbean Basin country end products.

"Caribbean Basin country end product", as used in this clause, means an article that: (1) is wholly the growth, product, or manufacture of a Caribbean Basin country (as defined in section 25.401 of the Federal Acquisition Regulation (FAR) or (2) in the case of an article which consists in whole or in part of materials from another country or instrumentality, has been substantially transformed into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was so transformed. The term refers to a product offered for purchase under a supply contract, but for purposes of calculating the value of the end product includes services (except transportation services) incidental to its supply; provided, that the value of those incidental services does not exceed that of the product itself. The term excludes products that are excluded from duty-free treatment for Caribbean countries under the Caribbean Basin Economic Recovery Act (19 U.S.C. 2703(b)). These exclusions presently consist of (i) textiles and apparel articles that are subject to textile agreements; (ii) footwear, handbags, luggage, flat goods, work gloves, and leather wearing apparel not designated as eligible articles for the purpose of the Generalized System of Preferences under title V of the Trade Act of 1974; (iii) tuna, prepared or preserved in any manner in airtight containers; (iv) petroleum, or any product derived from petroleum; and (v) watches and watch parts (including cases, bracelets and straps), of whatever type including, but not limited to, mechanical, quartz digital or quartz analog, if such watches or watch parts contain any material that is the product of any country to which the Tariff Schedule of the United States (TSUS) column 2 rates of duty apply.

"Components", as used in this clause, means those articles, materials, and supplies incorporated directly into the end products.

"Designated country end product", as used in this clause, means an article that (1) is wholly the growth, product, or manufacture of the designated country (as defined at FAR 25.401), or (2) in the case of an article which consists in whole or in part of materials from another country or instrumentality, has been substantially transformed into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was so transformed. The term refers to a product offered for purchase under a supply contract, but for purposes of calculating the value of the end product includes services (except transportation services) incidental to its supply; provided, that the value of those incidental services does not exceed that of the product itself.

"Domestic end product", as used in this clause, means (1) an unmanufactured end product mined or produced in the United States, or (2) an end product manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. A component shall also be considered to have been mined, produced, or manufactured in the United States (regardless of its source in fact) if the end product in which it is incorporated is manufactured in the United States and the component is of a class or kind (i) determined by the Government to be not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality, or (ii) to which the agency head concerned has determined that it would be inconsistent with the public interest to apply the restrictions of the Buy American Act.

"Eligible product", as used in this clause, means a designated, North American Free Trade Agreement (NAFTA), or Caribbean Basin country end product.

"End products", as used in this clause, means those articles, materials, and supplies to be acquired under this contract for public use.

"Foreign end product", as used in this clause, means an end product other than a domestic end product.

"NAFTA country", as used in this clause, means Canada or Mexico.

"NAFTA country end product", as used in this clause, means an article that (1) is wholly the growth, product, or manufacture of a NAFTA country, or (2) in the case of an article which consists in whole or in part of materials from another country or instrumentality, has been substantially transformed in a NAFTA country into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was transformed. The term refers to a product offered for purchase under a supply contract, but for purposes of calculating the value of the end product includes services (except transportation services) incidental to its supply; provided, that the value of those incidental services does not exceed that of the product itself.

- (b) The Contracting Officer has determined that the Trade Agreements Act and NAFTA apply to this acquisition. Unless otherwise specified, the Acts apply to all items in the schedule. The Contractor agrees to deliver under this contract only domestic end products unless, in its offer, it specifies delivery of foreign end products in the provision entitled "Buy American Act-Trade Agreements-Balance of Payments Program Certificate." An offer certifying that a designated, NAFTA, or Caribbean Basin country end product will be supplied requires the Contractor to supply a designated, NAFTA, or Caribbean Basin country end product or, at the Contractor's option, a domestic end product. Contractors may not supply a foreign end product for the line items subject to the Trade Agreements Act unless-
- (1) The foreign end product is an eligible product (see FAR 25.401);
- (2) The Contracting Officer determines that offers of domestic end products or of eligible products are either not received or are insufficient to fulfill the Government's requirements; or
- (3) A waiver is granted under section 302 of the Trade Agreements Act of 1979 (see FAR 25.402(c)).
- (c) Offers will be evaluated in accordance with the policies and procedures of Subpart 25.4 of the FAR.
- 1.9 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)
- (a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.
- (b) The use in this solicitation or contract of any Commerce Acquisition Regulation clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

Attachment A - Glossary of Terms

Attachment B - Federal Information Processing Standards

Attachment C - PTO Applications

Attachment D - Small, Small Disadvantaged, and Women-Owned Subcontracting Plan

Attachment E - Trademarks

ATTACHMENTS TO CONTRACT 50-PAPT-6-00041

GLOSSARY OF TERMS

alternating current ΑC (IBM) Advanced Technology AT basic input/output system BIOS bits per second agd International Telegraph and Telephone Consultative Committee compact disc-read only memory CD-ROM CLIN contract line item number commercial off-the-shelf COTS dots-per-inch dpi EIA Electronic Industries Association ΞPA Energy Policy Act FAX facsimile Federal Communications Commission FCC Federal Information Processing Standard FIPS Ηz hertz 1/0 input / output Integrated Drive Electronics IDE Institute of Electrical and Electronic Engineers IEEE industry standard architecture ISA International Standards Organization ISO K kilobyte light emitting diode LED MB megabyte MHz megahertz musical instrument digital interface MIDI modulation/demodulation Modem Multimedia PC Level 2 MPC II Swedish standard for maximum video terminal radiation MPR II milliseconds ms National Institute of Standards and Technology NIST ns nanoseconds peripheral component interconnect PCI (Hewlett Packard) Printer Command Language PCL Personal Computer Memory Card International Association PCMCIA portable operating system interface for Unix computer POSIX environments PS/2 (IBM) Personal System/2 Patent and Trademark Office PTO quarter inch cartridge QIC random access memory RAM small computer system interface SCSI single in-line memory module SIMM universal asynchronous receiver/transmitter UART VLF/ELF very low frequency/extremely low frequency video random access memory

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FEDERAL INFORMATION PROCESSING STANDARDS

FIPSPUB1-2	CODE FOR INFORMATION INTERCHANGE, ITS REPRESENTATIONS, SUBSETS, AND EXTENSIONS 1984 November 14.
FIPSPUB4-1	REPRESENTATION FOR CALENDAR DATE AND ORDINAL DATE FOR INFORMATION INTERCHANGE 1988 January 27.
FIPSPUB5-2	CODES FOR THE IDENTIFICATION OF THE STATES, THE DISTRICT OF COLUMBIA AND THE OUTLYING AREAS OF THE UNITED STATES, AND ASSOCIATED AREAS 1987 May 28.
FIPSPUB6-4	COUNTIES AND EQUIVALENT ENTITIES OF THE UNITED STATES, ITS POSSESSIONS, AND ASSOCIATED AREAS 1990 August 31.
FIPSPUB16-1	BIT SEQUENCING OF THE CODE FOR INFORMATION INTERCHANGE IN SERIAL-BY-BIT DATA TRANSMISSION 1977 September 1.
FIPSPUB17-1	CHARACTER STRUCTURE AND CHARACTER PARITY SENSE FOR SERIAL-BY- BIT DATA COMMUNICATION IN THE CODE FOR INFORMATION INTERCHANGE 1977 September 1.
FIPSPUB22-1	SYNCHRONOUS SIGNALING RATES BETWEEN DATA TERMINAL AND DATA COMMUNICATION EQUIPMENT 1977 September 1.
FIPSPUB29-3	INTERPRETATION PROCEDURES FOR FEDERAL INFORMATION PROCESS ING STANDARDS FOR SOFTWARE 1992 October 29.
FIPSPUB42-1	GUIDELINES FOR BENCHMARKING ADP SYSTEMS IN THE COMPETITIVE PROCUREMENT ENVIRONMENT 1977 May 15.
FIPSPUB55-2	GUIDELINE: CODES FOR NAMED POPULATED PLACES, PRIMARY COUNTY DIVISIONS, AND OTHER LOCATIONAL ENTITIES OF THE UNITED STATES 1987 February 3.

FIPSPUB58-1	REPRESENTATIONS OF LOCAL TIME OF THE DAY FOR INFORMATION INTERCHANGE 1988 January 27.
FIPSPUB59	REPRESENTATIONS OF UNIVERSAL TIME, LOCAL TIME DIFFERENTIALS, AND UNITED STATES TIME ZONE REFERENCES FOR INFORMATION INTERCHANGE 1979 February 1.
FIPSPUB66	STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES 1979 August 15.
FIPSPUB70-1	REPRESENTATION OF GEOGRAPHIC POINT LOCATIONS FOR INFORMATION INTERCHANGE 1986 November 14.
FIPSPUB75	GUIDELINE ON CONSTRUCTING BENCHMARKS FOR ADP SYSTEM ACQUISITIONS 1980 September 18.
FIPSPUB104-1	ANS CODES FOR THE REPRESENTATION OF NAMES OF COUNTRIES, DEPENDENCIES, AND AREAS OF SPECIAL SOVEREIGNTY FOR INFORMA TION INTERCHANGE 1986 May 12.
FIPSPUB107	LOCAL AREA NETWORKS: BASEBAND CARRIER SENSE MULTIPLE ACCESS WITH COLLISION DETECTION ACCESS METHOD AND PHYSICAL LAYER SPECIFICATIONS AND LINK LAYER PROTOCOL 1984 October 31.
FIPSPUB137	ANALOG TO DIGITAL CONVERSION OF VOICE BY 2,400 BIT/SECOND LINEAR PREDICTIVE CODING 1984 November 28.
FIPSPUB138	ELECTRICAL CHARACTERISTICS OF BALANCED VOLTAGE DIGITAL INTERFACE CIRCUITS 1975 September 24.
FIPSPUB142	ELECTRICAL CHARACTERISTICS OF UNBALANCED VOLTAGE DIGITAL INTERFACE CIRCUITS 1980 January 31.

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FIPSPUB143	GENERAL PURPOSE 37-POSITION AND 9-POSITION INTERFACE BETWEEN DATA TERMINAL EQUIPMENT AND DATA CIRCUIT-TERMINATING EQUIPMENT 1985 June 10. (Reaffirmed 1-12-89.)
FIPSPUB154	HIGH SPEED 25-POSITION INTERFACE FOR DATA TERMINALEQUIPMENT AND DATA CIRCUIT-TERMINATING EQUIPMENT 1988 November 4.
FIPSPUB161-1	ELECTRONIC DATA INTERCHANGE (EDI) 1993 April 19.
FIPSPUB162	1,200 BITS PER SECOND TWO-WIRE DUPLEX MODEMS FOR DATA COMMUNI CATIONS USE ON TELEPHONE-TYPE CIRCUITS 1992 April 2.
FIPSPUB163	2,400 BITS PER SECOND TWO-WIRE DUPLEX MODEMS FOR DATA COMMUNI CATIONS USE ON TELEPHONE-TYPE CIRCUITS 1992 April 2.
FIPSPUB164	2,400 BITS PER SECOND FOUR-WIRE DUPLEX AND TWO-WIRE HALF-DUPLEX MODEMS FOR DATA COMMUNICATIONS USE ON TELEPHONE-TYPE CIRCUITS 1992 April 2.
FIPSPUB165	4,800 BITS PER SECOND FOUR-WIRE DUPLEX AND TWO-WIRE HALF-DUPLEX MODEMS FOR DATA COMMUNICATIONS USE ON TELEPHONE-TYPE CIRCUITS 1992 April 2.
FIPSPUB166	4,800 AND 9,600 BITS PER SECOND TWO-WIRE DUPLEX MODEMS FOR DATA COMMUNICATIONS USE ON TELEPHONE-TYPE CIRCUITS 1992 April 2.
FIPSPUB167	9,600 BITS PER SECOND FOUR-WIRE DUPLEX MODEMS FOR DATA COMMUNICATIONS USE ON TELEPHONE-TYPE CIRCUITS 1992 April 2.
FIPSPUB168	12,000 and 14,400 BITS PER SECOND FOUR-WIRE DUPLEX MODEMS FOR DATA COMMUNICATIONS USE ON TELEPHONE-TYPE CIRCUITS 1992 April 2.
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FIPSPUB169

ERROR CORRECTION IN MODEMS EMPLOYING ASYNCHRONOUS-TO-SYNCHRONOUS CONVERSION
1992 April 2.

FIPSPUB170

DATA COMPRESSION IN MODEMS EMPLOYING CCITT
RECOMMENDATION V.42 ERROR CORRECTION
1992 April 2.

FIPSPUB174

FEDERAL BUILDING TELECOMMUNICATIONS WIRING
STANDARD
1992 August 21.

PTO APPLICATIONS

The PTO has a large base and investment in common software packages and developed software. To that end, any processor and peripheral shall be totally compatible with this software and capable of executing each without modification to either the hardware, operating system, or the application software (exclusive of standard set-up). Any or all of the following software packages may be used on the hardware. Any workstation shall be able to run the current and updated versions of the software specified and, shall be able to run the Microsoft Windows version(s) of the software as they become available. The following are examples of the commercial software products to be run on the workstations.

A. Wordprocessing:

ICL/CCI Office Power
WordPerfect
Microsoft Word for Windows
Word Perfect
Word Perfect for Windows

B. Spreadsheets:

Microsoft Excel for Windows Quattro Pro

C. Database Management Systems:

Dbase Foxbase, Filemaker Pro Oracle Folio Views Paradox

D. Graphics:

Aldrich Chemical WIMP Corel Draw Micrographix Draw Microsoft Power Point

E. Email

Microsoft Mail

F. Integrated Packages:

Framework

G. Telecommunications:

ICL/CCI PC Power Crosstalk Smartcom Procomm Plus Smartterm STN Express Fastlyn

H. Compilers:

Gennifer Microsoft Cobol Microsoft C Nantucket Clipper Quicksilver

Microsoft Basic
Microsoft Visual C + + version 2.0 or higher
Microsoft Visual BASIC version 2.0 or higher

I. Remote Management Tools:

Carbon Copy PC Anywhere

J. 4th Generation Language:

PC-Focus
PC-Oracle
TI Information Engineering Facility (IEF)

K. Decision Support:

PC-SAS PC-SPSS

L. Desktop Publishing:

Pagemaker Ventura Publisher

M. CAD/CAM:

AutoCad

N. Desktop/Time Manager:

Instant Recall Q-DOS Sidekick INFOSelect

O. Project Management:

Timeline Microsoft Project

P. Utilities:

Direct Access
Fullback
Mace Gold
Norton Utilities
PC Tools Deluxe

Q. Graphical User Interfaces Microsoft Windows

R. Memory Management:

QEMM386 MAX386 Netroom

S. Peripheral Device Management: Microsoft CD-ROM Extensions

T. Network Management Software Intel Lan Desk

ATTACHMENT D, WHICH CONSISTS OF 25 PAGES, IS NOT RELEASABLE

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MS-DOS

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IBM

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Apple

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Microsoft

Microsoft Corp.

Windows

Microsoft Corp.

Windows NT

Microsoft Corp.

PowerPC

IBM Corp.

Alpha

Digital Equipment Corporation

PS/2

IBM Corp.

AT

IBM Corp.

Novell

Novell, Inc.

NetWare

Novell, Inc.

UNIX

AT&T Company Corporation

Banyan Vines

HP

Hewlett-Packard Co.

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E-1

Hewlett-Packard Co.

PostScript Adobe Systems, Inc.

PCL Hewlett-Packard Co.

Hayes Microcomputer Products, Inc.

Kodak Eastman Kodak Co.

EtherTalk Apple Computer, Inc.

Ethernet Xerox Corp.