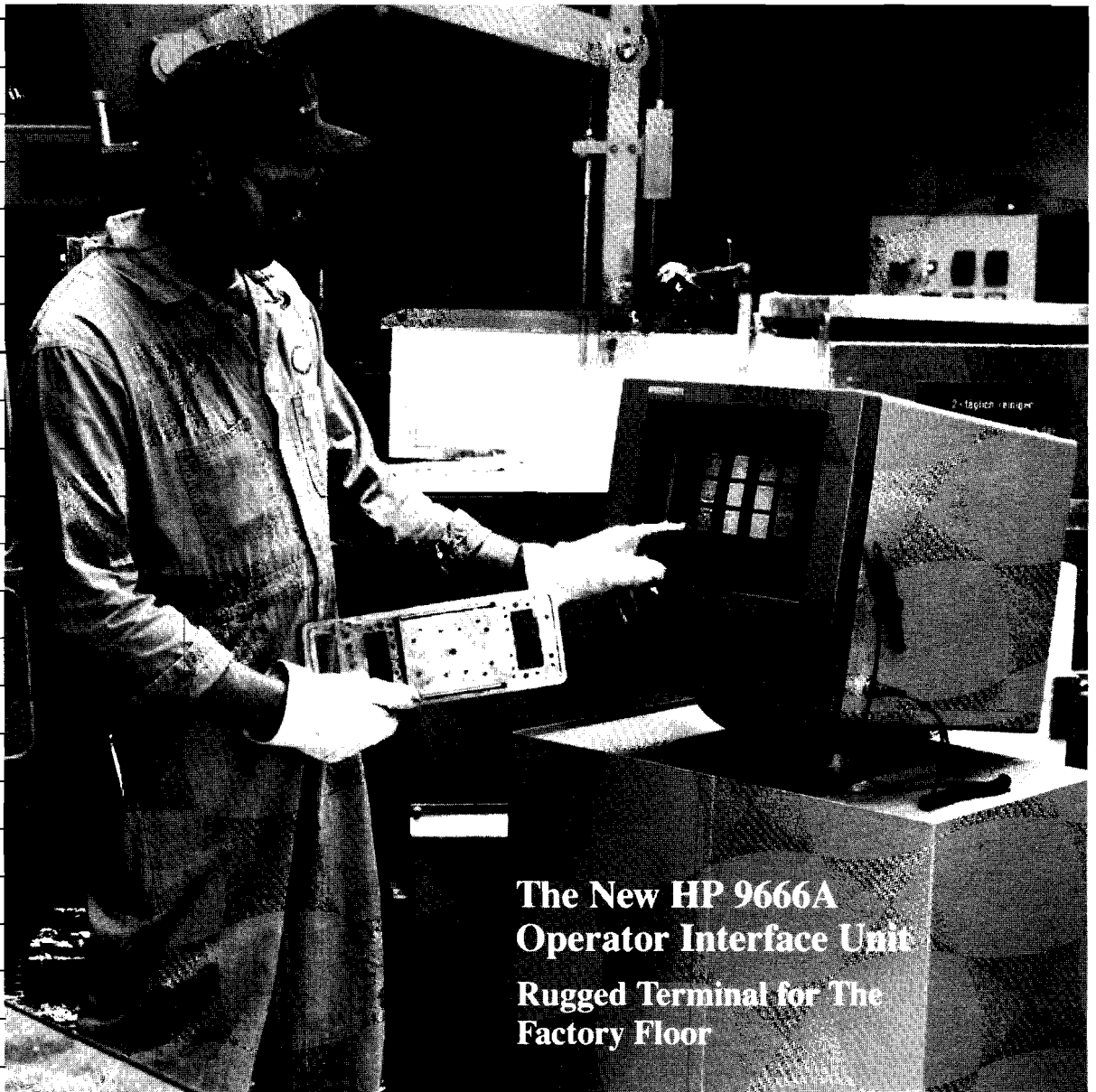


HP CHANNELS

Information For Hewlett-Packard's Value-Added Businesses.

August 1986



**The New HP 9666A
Operator Interface Unit
Rugged Terminal for The
Factory Floor**

Volume 5, No. 9

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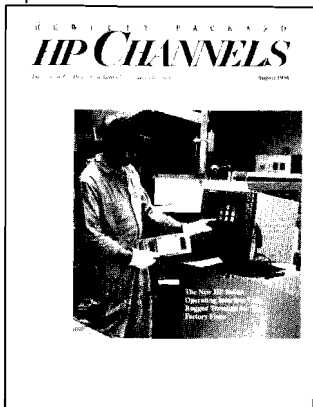
Darleen Brettes

HP Channels is published monthly for Hewlett-Packard's value-added businesses to provide you with information about HP's products and services to help you be more successful.

For further information on any of the products and services discussed in *HP Channels*, please contact your HP sales rep.

Note: Not all HP computer products are sold and supported in all countries. Please check with your local HP sales office.

On the cover



The HP 9666A Operator Interface Unit is not just another terminal – it is the only HP rugged terminal specifically designed for use on the factory floor. See story on page 22.

How to get your name added to the distribution for *HP Channels*

If you work for a company that is a value-added business for Hewlett-Packard and want to receive your own copy of *HP Channels*, call Hewlett-Packard and have your sales rep send your name to Tracy Wester.

HP sales reps only: To add new US and Canadian accounts to the distribution for *HP Channels*, please send me the following information (on HPDesk 0000/53 or to the address listed at the end of this section): company name, address, phone number, contract number, contacts' name/title, HP sales rep name and employee number. For accounts outside of the US or Canada, contact Tracy Wester to get the name of the person that handles the distribution of *HP Channels* in your country.

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HP's Business Systems Group Committed to Value-Added Suppliers

Jim McDonnell, Commercial Value-Added Marketing Manager

Since more than 40 percent of HP's business computer sales are made through value-added suppliers, we recognize the important role these companies play in satisfying customer needs. Today, customers are looking for total solutions. No single computer company could provide solutions for all possible markets, so, HP's Business Systems Group is committed to working with our value-added businesses who can add their vertical market expertise to our computers.

New opportunities for growth

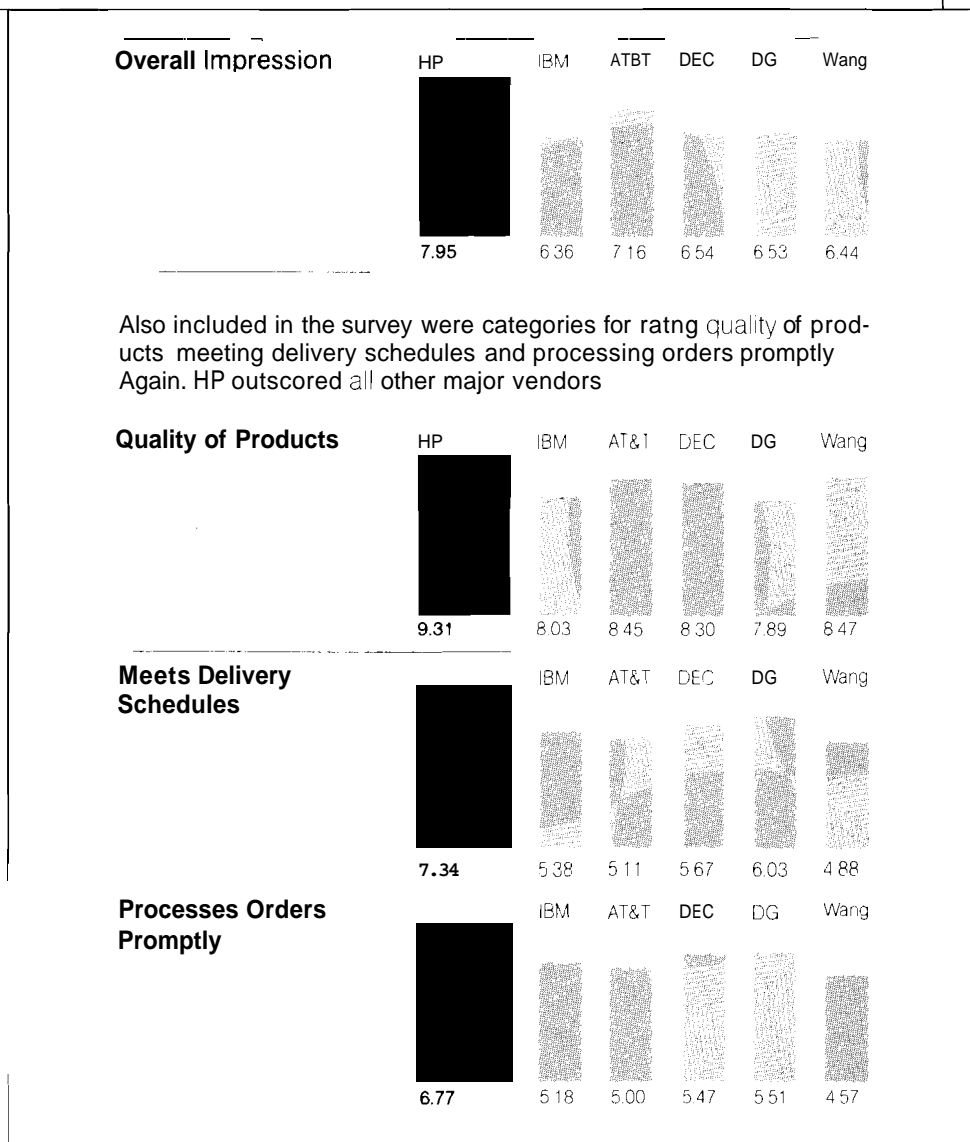
We are entering a period of major change in the business computing industry: the emergence of the integrated office system. This integration of mainframes/departmental computers, office automation, networks, and personal computers into integrated business systems offers new opportunities and challenges. Our goal is to compete successfully to gain share in the commercial systems market, focusing on the \$5,000 to \$400,000 price range. We are also focusing our office strategy here, using the concept of the Sales and Service Productivity Network to serve the needs of the large numbers of potential users in regionally dispersed branches. Historically, HP has been strong in the manufacturing and distribution marketplace, both with HP proprietary and value-added solutions. In order to reach our goal, however, HP realizes that we need to be present in many large and growing markets where we have neither the expertise nor the resources to provide solutions. That's why in these vertical markets such as legal, financial services and local government, we rely on solutions from value-added resellers and software suppliers.

Both our market focus and channel strategy depend on successful recruit-

ment and ongoing support of value-added businesses. With most market

How do HP VARs rate the HP VAR program?

"While none of Hewlett-Packard's average scores hit a perfect 10, the company did manage to pull in an unprecedented number of 10s from value-added resellers."



The scores presented here appeared in the "Report Card" column in the July 1985, September 1985 and January 1986 issues of VAR BUSINESS, a bimonthly magazine insert to Computer Systems News. The survey was conducted by CAMP Publications, the publisher of Computer Systems News.

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

growth and new customers being at the low end, VARs especially become an important channel of selling systems.

An important relationship

We score highly in the industry on our working relationships with value-added businesses. In a *Computer Systems News* survey of VARs working with such companies as HP, IBM, DEC, DG, Wang, and AT&T, we finished first overall and scored very high in the areas of product quality, meeting delivery schedules, processing orders promptly and overall impression.

Various media efforts not only help HP's exposure, but that of our value-added businesses, as well. Awareness of HP as a business system supplier has grown significantly this year through our "What if" TV advertising, a campaign we will continue next year. It's easier to sell a solution running on an HP system when business professionals and managers are more aware of HP as a major provider of business computers. We also prepare joint press releases when a value-added business joins HP. In addition, we target vertical market trade journals with advertising in order to increase visibility within specific industries.

Benefits of working with us

Our industry-leading programs stem from a combination of our value-added and vertical marketing teams and the value-added channels sales force. As

the first level of support, sales reps help develop marketing programs and strategies and give access to HP's marketing, product, and administrative resources.

To help our VARs and software suppliers develop their product, we offer various training programs. The Executive Training Series seminars cover product training on the HP 3000, sales techniques, and marketing strategies. Annual conferences provide an opportunity to interact with other value-added companies and HP executives during presentations and workshops. In addition, conversion assistance is available directly from HP when transferring programs from another system to an HP system.

Hewlett-Packard also provides demo/development systems at a substantial discount (40 percent) to qualified companies. And we offer attractive short-term financing that enables the purchase of a development system on a rental or lease basis.

We help VARs and software suppliers gain visibility through strong merchandising programs. Through our regional program, we are able to give individual attention and focused geographic visibility. Our vertical market advertising, public relations, and conferences, along with a trade-show loaner program, sales literature, and other professional promo-

tional tools are just some of the activities which will help attract customers. In our national program, we work closely with select companies, tailoring cooperative marketing programs.

A look to the future

In the *Computer Systems News* survey, HP was rated number one for quality of our products. Our business computer systems are built in the tradition of all HP products, with an emphasis on quality and a recognition of our customers' long-term needs. From a company that is known for carrying products into the next generation by utilizing innovative technologies, has come the new HP Precision Architecture – the Spectrum Program – representing a fundamental change in computer design and offering major price and performance advantages over more complex architectures. Growth paths are available from all HP 3000 computers to the current product line and among members of the current line for investment protection.

We plan to be at the forefront of the industry, and want to bring value-added suppliers along with us.

NATIONAL ACCOUNT VAR WINS BACK-TO-BACK HP 3000 SERIES 70s FOR HP

Kevin Burbank, Markets Manager

Summit Information Systems is a very successful HP value-added reseller with solutions for the financial services industry. Their history of excellent performance earned them membership in HP's National Account Program from its inception. Their success continues with two recent HP 3000 Series 70 sales.

Through their own marketing effort, Summit caught the interest of the Federal Aviation Administration Western Credit Union in Los Angeles. The credit union was anxious to replace a Burroughs 6800 mainframe with a better solution. Summit teamed up with Jime Hester and Jim Ornest in HP's Los Angeles sales office. In true form, Summit did an excellent job of reference selling and cost justification, while the HP sales team assisted with demonstration equipment. The result: a Series 70, and more than \$400,000. Total sell cycle was less than four months.

Meanwhile, the Space-Coast Credit Union in Melbourne, Florida was inves-

tigating alternatives to their service bureau arrangement. In their search for software they contacted Summit. Summit, in turn, contacted Cheryl Arnold, HP end-user sales rep in Orlando, Florida, and the action began. The winning factors include Summit's flexibility in agreeing to act as the facilities manager for Space-Coast Credit Union; attractive leasing available from HP Credit Corporation through Summit as a member of the National Account Program; and a local HP reference, provided by Cheryl, that attested to HP's quality and reliability. The result: another HP 3000 Series 70, for more than \$400,000.

Summit Information Systems Corporation is a privately held company located in Corvallis, Oregon. Founded in 1980, they have gained national recognition in the financial services industry as a supplier of quality products and services for credit unions. Summit now has over 70 employees and 100-plus installations.

SUCCESSFUL SOLUTIONS is a forum for you as HP value-added businesses to share your sales expertise and experiences with our readers. If you have a success story or application article that you feel would benefit other value-added businesses, we would like to hear from you. Please send your ideas, comments, articles, and questions to:

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USA

Business Computers

HP 3000

INTRODUCING THE HP 3000 SERIES 52:

GREAT PERFORMANCE AT A BREAKTHROUGH

PRICE

HP now introduces the HP 3000 Series 52, which combines increased performance for the midrange of the HP 3000 product line with new memory configurations. The Series 52 features include:

- 42XP CPU factory-integrated to achieve up to a 30 percent performance improvement over the Series 42.
- 4-Mbyte standard main memory. Expandable to a maximum of 8 Mbytes in 2-Mbyte increments.
- Same power requirements and footprint of the Series 42.
- Supports all peripherals, datacommunications, and software currently supported on the Series 42.
- Support on the MPE V operating system (T-delta-5 and UB MITs).

The introduction of the Series 52 slashes the price on HP's midrange system offering by about 50 percent. By integrating the 42XP CPU with the Series 42 in the factory, we have streamlined the product, the ordering process and installation. Customers can now simply order Product No. 32552A (new Series 52 system) or Product No. 32552AH (box swap upgrade) and receive in one package a system with Series 42XP performance and 4-Mbytes of standard memory.

Series 42 promotion extended

The new price point established by the Series 52 makes it an excellent

competitor for the MicroVAX II and IBM's new System/3X systems. And, until October 31, you can order the Series 52 in the same system bundle as the "Series 42 Promotion Package" to take advantage of an even lower system price.

Competition

The increased performance and low price of the Series 52 places it in an attractive position when compared to comparable IBM and DEC processors. These processors include the DEC MicroVAX II and the IBM System 36 Model 5360-D and System 38 Models 200, 300,400. The Series 52 is positioned against large configurations of the MicroVAX II and against IBM's new System 38 Model 400. The Series 52 shines against comparable IBM System 38 configurations at about a 30 to 50 percent lower price. While IBM has begun to build a bridge between the System 36 and System 38, differences in their operating systems, compilers, and file structures result in a complicated system upgrade process. The Series 52, however, is fully compatible with all existing HP 3000s, running the MPE V operating system.

In competing against the MicroVAX II, the Series 52 has made the HP 3000 midrange offering very competitive. The Series 52 has a price that is comparable to the MicroVAX II yet provides much greater expandability and greater performance (30 to 50 percent better in database-intensive applications).

Ordering information

The following table provides a summary of the new Series 52 product

structure and prices. The functional unit value for the processor is 3, the same as for the Series 42.

Series 52 product structure

Product No.	Description
32552A	HP 3000 Series 52 SPU with 4 Mbytes memory
Opt. 502	Add-on 2 Mbytes memory
Opt. 503	Add-on 4 Mbytes memory
Opt. 015	220-240V/50 Hz single phase operation
Opt. 022	Software on cartridge tape
32552AH	Upgrade to Series 52 with 4 Mbytes memory
Opt. 015	220-240V/50 Hz operation
Opt. 022	Software on cartridge tape
Opt. 502	Add-on 2 Mbytes memory
Opt. 503	Add-on 4 Mbytes memory
Opt. 601	Upgrade from pre-Series II or HP 2000 with 128 Kbytes
Opt. 602	Upgrade from Series II with 128 Kbytes
Opt. 603	Upgrade from Series III with 128 Kbytes
Opt. 605	Upgrade from Series 33A/B with 256 Kbytes, HP 2649E
Opt. 606	Upgrade from Series 33C/U with 256 Kbytes, HP 26498
Opt. 607	Upgrade from Series 30A/B with 256 Kbytes, HP 26498
Opt. 608	Upgrade from Series 30C/U with 256 Kbytes, HP 26498
Opt. 617	Upgrade from Series 37 with no memory
Opt. 618	Upgrade from Series 37XE with no memory

Be sure to order the HP 3000 MPE VIE Media product (#51450A) and its appropriate options when ordering either a new Series 52 or a box swap upgrade.

Availability

The Series 52 is orderable beginning August 1. Availability for the Series 52 and Box Swap upgrades to the Series 52 is 6 to 8 weeks in the US and non-European countries only. Due to VDE restrictions, availability in Europe will be 10-12 weeks. Contact your HP sales rep for more information.

HP 3000

LAN/V ON THE HP 3000 INSTALLATION POLICY

The purpose of this article is to clarify some of the questions that have come up with regard to the installation of the LAN/V (Product No. 30242A) product on the HP 3000. When a user orders the current LAN product, HP will provide installation of the LAN/V link for users with Account Management Support (AMS). For users not covered by AMS, Hewlett-Packard software installation is available on a time and materials basis. Included in the purchase of 30242A are installation of the Local Area Network Interface Controller (LANIC) and the connection of the LANIC to the user's AUI cable (only if the AUI cable is installed, connected to a MAU, and is accessible).

Customer installation responsibility

Prior to the installation of the LANIC and LAN software, the user is responsible for installation of the coaxial cable, including terminators, taps, and Medium Attachment Units (MAUs), connecting an AUI to each MAU; and routing the AUI cables to the HP 3000s. The user must also ensure that all safety grounds in the power system for the area served by the coaxial cable are interconnected. The user is responsible for compliance with all applicable building codes in the installation of LAN cabling and components. Typically, a user will subcontract the installation of the cable to a cable installation company or have their facilities people do the installation. This approach is typical of what other LAN suppliers are doing and further serves to eliminate our involvement in building code or labor union problems that might arise at the user's site.

If the coaxial cable, AUI cable and MAU are installed and connected, HP will attempt to perform a test that demonstrates product operation over the coaxial cable. If problems are encoun-

tered during this operation, HP will, at the user's option, attempt to resolve them. If it turns out that the source of the problem is related to improper installation of the coax cable or related accessories, then the service that we provide in helping our users will be viewed as consulting and billed on a time anti materials basis. HP offers significant networking expertise and is ready, willing, and able to help users implement Local Area Networking as one of their data communications solutions.

HP 3000

HP-ASSIST FOR MMIPM MODEL 10 AND 20 INTRODUCED

HP-ASSIST services for Materials Management (MM) and Production Management (PM) Model 10 and 20 software have been introduced on the August 1, 1986, HP Price List. The correct product numbers are shown below. Please note that they differ substantially from the previous MM/PM Model 10 and 20 ASSIST products. Systems engineer/application engineer activities, customer deliverables, and product training remains unchanged. Consult the Application Engineering Operation (AEO) Guidelines for MM/PM-ASSIST (P/N32276A + 65A-60002) at the Software Distribution Center (SDC) for more information. Prices, product numbers, and customer deliverables for MM/PM Model 30 ASSIST remain unchanged.

Implementation assistance for MM/PM Model 10 and 20 software was obsoleted in February 1986 following HP's plans to eliminate the base software products.

Please write in or attach this article to your *HP Manufacturing Management II Ordering and Configuration Guide*

(P/N 5954-6333D) to serve as an easy reference. For more information on MM/PM-ASSIST, contact your HP sales rep.

Product No.	Product
32904A + 60B*	MM Model 10 ASSIST IA, ITT, PIA
32904A + 61B*	MM Model 10 ASSIST IA
32904A + 63B*	MM Model 10 ASSIST ITT
32904A + 65B*	MM Model 10 ASSIST PIA
32904A + 65Z	MM Model 10 ASSIST additional service unit
32903A + 60B*	MM Model 20 ASSIST IA, ITT, PIA
32903A + 61B*	MM Model 20 ASSIST IA
32903A + 63B*	MM Model 20 ASSIST ITT
32903A + 65B*	MM Model 20 ASSIST PIA
32903A + 65Z	MM Model 20 ASSIST additional service unit
32911A + 60B*	PM Model 10 ASSIST IA, ITT, PIA
32911A + 61B*	PM Model 10 ASSIST IA
32911A + 63B*	PM Model 10 ASSIST ITT
32911A + 65B*	PM Model 10 ASSIST PIA
32911A + 65Z	PM Model 10 ASSIST additional service unit
32912A + 60B	PM Model 20 ASSIST IA, ITT, PIA
32912A + 61B*	PM Model 20 ASSIST IA
32912A + 63B*	PM Model 20 ASSIST ITT
32912A + 65B*	PM Model 20 ASSIST PIA
32912A + 65Z	PM Model 20 ASSIST additional service unit

*Must order quantity of 12

HP 3000

SYSTEM SL CAPACITY EXPANDS ON UB-MIT

The capacity of the System Segmented Library, SL.PUB.SYS, was increased for release G.02.BO of MPE VIE. It can now hold up to 510 code segments and can contain up to 65,535 records. This is an increase of 255 code segments and 32,768 records. This additional capacity provides room for growth which is necessary for the future development of user applications, value-added software products, and HP products.

For the majority of MPE 3000 users, this enhancement is transparent. Group and Account SL files remain unchanged, preserving the transpor-



tability of users' executable libraries. However, the System SL file has been changed. Its format has been altered to support the increased capacity. For this reason, user programs and value-added software that access the internal structure of the System SL, assuming the old format, will no longer work correctly. The following are examples of changes made to the format of the System SL file:

- Both record 1 and 2 contain Reference Table Pointers instead of only record 1.

The Free Map starts in record 3 instead of record 2.

Reference Table Records now contain two 64-word entries instead of four 32-word entries.

- Nine bits are now required for the 510 code segment numbers.

The System SL format changes may have an impact on some value-added software programs, especially compilers, linkers, and performance tools. To get more information regarding the changes to the internal structure of the System SL file, contact your HP systems engineer.

Note: If a program tries to access the internal structure of the System SL using the old file format, the integrity of the system can no longer be guaranteed.

HP 3000

PRICES REDUCED ON REMARKETED HP 3000 SYSTEMS

Effective August 1, 1986, the prices of the following remarketed systems were reduced.

System solution

Product No.	Description
34201AR (for US)	
34251AR (for non-European countries)	
	Series 48R (2 Mbytes, 2 GICs) HP 7925MR with HP-IB HP 7925SR HP 7970ER with HP-IB 30018AR (qty. 1) HP 2624BR with cable (qty. 4)
Opt. 001	Replaces HP 7970ER with 7974AR
Opt. 002	Replaces HP 7925SR with 7933HR
Opt. 004	Deletes (4) HP 2624BRs
Opt. 009	Deletes HP 7925MR

We have added Option 009 to delete the HP 7925MR. This means that the Series 48R bundle may be purchased with newer peripherals such as the HP 7933HR and 7974AR at a savings.

Remember that the Series III/30/33 promotion upgrade to the remarketed Series 48R system also applies to System Solution. HP is open to considering sales situations where an upgrade path to the Series 42R for users not needing the power of the Series 48R is more appropriate.

Attractive trade-in credits between \$11,000 and \$13,000 may be received toward the purchase of a standalone Series 48R and System Solution. These excellent trade-in credits on obsolete Series II1130133 is HP's commitment to provide an incentive to the installed base customers to upgrade to the cur-

rent HP 3000 systems. Since both upgrade and bundle promotions expire on October 31, 1986, we urge you to call your sales rep to talk about these exceptional values.

Price reduction on Series 42R and Series 48R

Effective August 1, 1986, both prices for remarketed Series 42R and Series 48R are in effect.

Product No.	Description
32542BR	Remarketed Series 42R (1 Mbyte, 2 GICs)
32548BR	Remarketed Series 48R (2 Mbytes, 2 GICs)

A wide range of remarketed peripherals and workstation products are available to complement remarketed systems.

Note to European countries:

Similar price reductions have been made for Europe. Contact your sales rep for details such as new pricing, applicable product numbers, and ordering information.

Correction

In the July issue of *HP Channels*, the article entitled "HP 3000 MPE VIE Systems Support the HP 2564B Printer" (page 4) contained an error in the chart providing printer maximums on MPE V/E systems.

The correct support matrix is as follows:

System	Number dprinters supported on RS-232 or RS-422	Number dprinters supported on HP-IB
Series 37	1	2
Series 39/4X/5X	2 (ATP only)	4
Series 6X/70	4	4



Hewlett-Packard's Technical Value-Added Business Conference

September 17-19, 1986
Red Lion Inn, San Jose, California

"Winning Together" is the theme of this year's Technical Value-Added Business Conference. Announcing the new products and programs, HP plans to present how we can win together through the general sessions and workshops (see listings below). Artificial Intelligence Opportunities for value-added businesses, HP-UX and Your Future, International Licensing, the HP PLUS Program, Rugged Products/Vectra, and Hard-copy Products are a few of the many topics covered at this year's conference. These workshops are all aimed at the concerns and opportunities facing you, the HP Value-Added Business.

HP will concentrate on new value-added business marketing programs and current HP strategic marketing directions to help you make important business decisions well into the future.

Please be sure to register for this event by August 15, 1986. If you have not yet received your invitation, call HP Program Management Office, Travel Incentives, Inc., (408) 973-0373, or write to the same people at 21760 Stevens Creek Boulevard, Cupertino, CA 95014. Or contact your HP value-added sales rep right away.

We look forward to seeing you in San Jose and to "Winning Together"!

SEE YOU THERE!

Agenda

Wednesday

- **NEW PRODUCT INTRODUCTION 6-9 p.m.** *New Product Introduction and cocktail party*

REGISTRATION 5-8 p.m.

- **WELCOMING RECEPTION 7-9 p.m.**

Thursday and Friday General Sessions

- **WELCOME AND INTRODUCTIONS**
Rick Ellinger, U.S. Technical Program Manager
- **HP CORPORATE OBJECTIVES AND FOCUS**
Dean O. Morton, HP Chief Operating Officer
- **WORKING AND WINNING TOGETHER**
Dick Alberding, Executive Vice President
- **HP DESIGN SYSTEMS GROUP DIRECTIONS**
Dick Watts, Marketing Manager
- **HP MANUFACTURING SYSTEMS GROUP DIRECTIONS**
Don Schoeny, Marketing Manager
- **HP PERSONAL COMPUTER GROUP DIRECTIONS**
Bill Murphy, Marketing Manager
- **HP PERIPHERAL GROUP DIRECTIONS**
Rick Belluzzo, Marketing Manager
- **VALUE-ADDED CHANNEL OPPORTUNITIES AND FOCUS**
Jerry Klemushin, Value-Added Channels Manager
- **HP PRECISION ARCHITECTURE - ARCHITECTURE FOR THE 90's**
Michael Mahon, Lead Designer - "Spectrum" Architecture

Thursday Product Workshops

- HP Workstation Computers, the HP 9000 Family
- Artificial Intelligence, Opportunities for VABs
HP 1000 and Precision Architecture, Coexistence and Migration
- Printers and Plotters - Equal Profits
- Networking
Mass Storage
- Graphics Technology
- Tools and Modules for Program Development
- RTE Enhancements
- HP 1000 Real-Time Systems
- Rugged Products - New Opportunities with Industrial Products
- Programmer Productivity Tools - ALLBASE and HP Today
- HP Precision Architecture
- Vectra in the Technical Marketplace
- HP-UX and Your Future

Friday Program Workshops

- HP Peripheral OEM Program
- HP Consultants Program
- The HP Systems Integrator Program
- Programs for Manufacturing Partners
- Marketing Communications, Tools for Sales
- International Licensing
- Working with HP
- The HP PLUS Program

HP Integral PC

HP INTEGRAL PCs I/O SPEED ENHANCED BY USING HP-UX DIL

HP recently developed Nelson Benchmarks using the HP Integral PC, HP-UX TECH BASIC 5.0, HP-UX "C" 5.0, and the HP-UX DIL 5.0 (Device I/O Library). In the tests, the Nelson Benchmarks were conducted using an HP 3437 voltmeter, and an HP 3495 scanner (theoretical limit is 21 milliseconds (ms) due to instruments). The results (see table at right) indicate that when using compiled software languages, such as HP-UX "C" coupled with HP-UX DIL, the Integral PC can offer potential users very satisfactory I/O speed for instrument control solutions. All measurements are in milliseconds.

Again, as the Nelson Benchmarks point out, the Integral PC's I/O speed can be greatly enhanced by using HP-UX DIL either called from HP-UX TECH BASIC or in conjunction with the HP-UX "C" compiler. With this I/O product enhancement, the Integral PC with its integrated printer, mass storage device, and display can be a very attractive instrument controller for the measurement automation marketplace.

Ordering information

Product No.	Description	Available
HP 9807	HP Integral PC	Now
HP 82857J	HP-UX "C" 5.0	Now
HP 82860J	HP-UX TECH BASIC 5.0	Now
HP 82988J	HP-UX TECH BASIC 5.0 ROM Upgrade Kit (current disc owners)	Now
HP 82989I	HP-UX TECH BASIC 5.0 ROM	Now
HP 82969I	Device I/O Library (DIL)	Now

Benchmark results

Computer I/O system	I/O Nelson (ms)
HP Integral PC (IPC) HP-UX TECH BASIC 5.0 (ROM)	593.0
TECH BASIC 5.0, ext. DIL (Calls)	231.4
TECH BASIC 5.0, ext. BURST "C" 5.0, DIL (through O. S.)	92.2
"C" 5.0, DIL (BURST)	181.0*
HP Series 80 HP-86B, Series 80 BASIC	40.0*
HP Series 80	1608.0
HP Touchscreen II ISL I/O GW BASIC	756.0
ISL I/O Lattice "C"	134.0
HP Vectra PC, 8 MHz TBASIC/National High Level	380.0
TBASIC/National Medium Level	365.0
TBASIC/National Low Level	355.0
ISL I/O: GW BASIC	232.0
ISL I/O: Lattice "C"	52.0
HP 9000 Series 300 HP-UX 5.1 TECH BASIC	
310 TECH BASIC	1250.0
320 TECH BASIC	1080.0
HP 9000 Series 300 HP-UX 5.1 Quiet System	
310 "C" Kernel I/O	219.0
320 "C", Kernel VO	206.0
310 "C", VO BURST	34.8
320 "C", VO BURST	25.8
HP 9000 Series 200/300 Rocky Mt BASIC	
S200 Model 36/BASIC 4.0	82.8
S300 Model 10/BASIC 4.0	58.5
S300 Model 20/BASIC 4.0	43.4
HP 9000 Series 500 HP-UX 500 Model 30/TECH BASIC	920.0
HP 9000 Series 500 BASIC 500 Model 20/BASIC 2.0	125.0
IBM PC/XT IBM/National: BASICA	1855.0
ISL I/O: BASICA	775.0
ISL I/O: Lattice "C"	134.0
IBM PC/AT (old 5 MHz) IBM/National: BASICA	740.0
ISL I/O: BASICA	350.0
ISL I/O: Lattice "C"	74.0

**These numbers were obtained at HP using a standard Integral PC without extra memory. The use of extra memory will slightly degrade I/O speed.*

HP Integral PC

CALCULATOR/HP-UX NOW AVAILABLE IN HP INTEGRAL PC CONTRIBUTED LIBRARIES

The Calculator/HP-UX software product, which emulates the HP Series 10 handheld calculators, will be available in the HP Integral PC contributed library in August. Calculator/HP-UX has been included in the HP 9000 Series 200 contributed library since last fall. Series 300 Calculator/HP-UX is currently being shipped with the HP-UX 5.1 Programming Environment.

Due to inclusion in the contributed libraries and with the 5.1 Programming Environment, Series 200 and Integral PC Calculator/HP-UX will be obsoleted from the HP Price List August 1, 1986. All current users with Office Tools Family support will be supported until August 1, 1991.

Calculator/HP-UX displays on the computer screen the shape of a calculator. Using a pointing device, such as an HP Mouse, 10-key pad, or cursor-control keys, numbers are entered and calculations are performed in the same fashion as the Series 10 calculators. There are four major sets of advance calculation keys available, **Mathemati-**

cal and Scientific calculations, Trigonometric calculations and Coordinate conversions, Statistical calculations and Trend Analysis, and Business and Financial Solutions. All of these calculations can be performed without having to have a separate handheld calculator.

Please contact your HP sales rep with your questions.

Product No.	Description
45413G	Calculator/HP-UX single user
45413H	Calculator/HP-UX multiuser

HP 9000

MUSE FOR HP 9000 SERIES 500

OBSOLESCENCE

MUSE software for the HP 9000 Series 500 will be removed from the HP Price List effective December 1, 1986. HP will continue to offer support services to the MUSE installed base until December 1, 1991. The following part numbers are included in this obsolescence:

Product No.	Description
79300MA	MUSE multiuser
79300MM	MUSE right-to-reproduce multiuser
79300SA	MUSE single user
79300SM	MUSE right-to-reproduce single user

If you are looking for an office automation product with a document composer that integrates text and graphics, Series 500 Alis/HP-UX should be shipping by the end of the summer. Refer to the Alis/HP-UX Technical Data Sheet for more information (P/N 5954-7056).

Additional Series 500 text editing software packages are listed in the HP Technical Software Catalog (PIN 5953-9598).

HP 9000

HP 9000 SERIES 300 HP-UX 5.15 UPDATE

HP 9000 Series 300 HP-UX 5.1 users who are not on support services may purchase update products to upgrade their current system to HP-UX 5.15 through Corporate Parts Center (CPC) effective July 1. The update products also consist of new and updated manuals reflecting the changes to the HP-UX products. HP-UX 5.15 is broken into 12 update part numbers. The components are single- and multi-user Programming Environment, single- and multi-user FORTRAN, and single- and multi-user Pascal. Each has a separate part number for 3 $\frac{1}{2}$ -inch double-sided disc and $\frac{1}{4}$ -inch cartridge tape media. Below is a table outlining the part numbers available.

Product No.	Description	Requires prior installation of:
98517-17200	Single-user Programming Environment 3 $\frac{1}{2}$ -inch disc	Single-user HP-UX 5.1 Programming Environment
98517-17500	Single-user Programming Environment $\frac{1}{4}$ -inch cartridge tape	Single-user HP-UX 5.1 Programming Environment
98597-17200	Multi-user Programming Environment 3 $\frac{1}{2}$ -inch disc	Multi-user HP-UX 5.1 Programming Environment
98597-17500	Multi-user Programming Environment $\frac{1}{4}$ -inch cartridge tape	Multi-user HP-UX 5.1 Programming Environment
98518-17200	Single-user Pascal 3M-inch disc	Single-user HP-UX 5.1 Pascal. Must also order 98517-17200
98518-17500	Single-user Pascal $\frac{1}{4}$ -inch cartridge tape	Single-user HP-UX 5.1 Pascal. Must also order 98517-17500
98598-17200	Multi-user Pascal 3M-inch disc	Multi-user HP-UX 5.1 Pascal. Must also order 98597-17200
98598-17500	Multi-user Pascal $\frac{1}{4}$ -inch cartridge tape	Multi-user HP-UX 5.1 Pascal. Must also order 98597-17500
98519-17200	Single-user FORTRAN 3 $\frac{1}{2}$ -inch disc	Single-user HP-UX 5.1 FORTRAN. Must also order 98517-17200
98519-17500	Single-user FORTRAN $\frac{1}{4}$ -inch cartridge tape	Single-user HP-UX 5.1 MRTRAN. Must also order 98517-17500
98599-17200	Multi-user FORTRAN 3 $\frac{1}{2}$ -inch disc	Multi-user HP-UX 5.1 FORTRAN. Must also order 98597-17200
98599-17500	Multi-user FORTRAN $\frac{1}{4}$ -inch cartridge tape	Multi-user HP-UX 5.1 FORTRAN. Must also order 98597-17500

What is HP-UX 5.15?

FORTRAN, C, and Pascal compilers have been modified to allow the user the option to generate code specifically tuned for the MC68020 and the MC68881 resulting in substantial performance improvements. FORTRAN B1D performance has increased from 292 KWhets with HP-UX 5.1 using lib881 to 642 KWhets with HP-UX 5.15. Two important FORTRAN VAX/VMS features have also been added: BYTE/LOGICAL*1 data type (logical variables and constants can now be substituted for integers in all numeric contexts) and support ENCODE/DECODE statements.

HP-UX FORTRAN now supports most of the requested VAX/VMS features. With HP-UX 5.15 a new assembler will be shipped, which is capable of supporting the instructions and new addressing modes introduced with the MC68020 and MC68881. This new feature set plus our desire to be compatible with Motorola's UNIX assembler, has resulted in a new syntax for the Series 300 assembly language. To provide an upgrade path for our current users, a translator will be supplied to port assembly source code written in the old syntax to the new syntax. The translator program "atrans", which is the translator from the Pascal Workstation assembly code to HP-UX assembly code will also be appropriately updated. The enhancements provided with the HP-UX 5.15 release, are, for the most part, targeted towards the Model 320. A user with a Model 310 may also benefit by taking advantage of some of the new FORTRAN features, or programming with the new assembler.

Users should update to this release if:

They have a Model 320 system and desire greatly improved floating point math performance. C, FORTRAN, and Pascal compilers now provide the ability to generate inline code for the

68881. Support for the 68881 is also included in libraries and commands like libc.a, libm.a, as, and adb.

▪ *They have either a Model 310 or a Model 320 system.* The 5.15 Compiler Update offers various code generation improvements in the C and FORTRAN compilers on both Models 310 and 320 systems. In addition, various bugs have been fixed in many components of this release.

UNIX is a trademark of AT&T Bell Laboratories

HP 9000

Now SAVE ON SINGLE-USER VERSION OF ALIS/ HP-UX

To make it even easier for you to include technical office automation with every sale, we are adding the single-user version of Alis®/HP-UX as an 'ADD' option to the Series 300 HP-UX system bundles (320ML, 320M, 320C, monochrome, and color A/I systems). Between August 1 and November 1, 1986, when your users order one of these systems (98582L, 98582B, 98583B, 98584A, or 98585A), by specifying Option 301 they will get the single-user version of Alis/HP-UX for about 50 percent off the regular list price.

Any users who have purchased Alis/HP-UX prior to August 1 with one of the systems listed above will receive a credit to reflect the option price. Also, any users who purchased one of the eligible systems prior to August 1, but did not purchase a single-user version of Alis/HP-UX at that time, can order the option to take advantage of this offer.

Remember, this is a limited-time offer. It may be extended based on

sales, but to be safe, get your orders in before November 1.

Ordering information

Product No.	Product Name
Option 301 ordered with eligible systems (98582L, 98582B, 98583B, 98584A, or 98585A)	Single-user Alis/HP-UX

Alis is a registered trademark of Applix, Inc.

HP 9000

NEW HIGH- RESOLUTION MONITORS FOR THE HP 9000 SERIES 300

Two new high-resolution monitors will be added to the HP 9000 Series 300 on September 1, 1986 – the HP 98785A 16-inch color monitor and the HP 98786A 17-inch monochromatic monitor. Both of these monitors should appeal to users who are trying to cut costs.

The new HP 98785 monitor is functionally identical to the HP 98782A 19-inch high-resolution color monitor. Like the HP 98782, it operates at 60 Hz non-interlaced refresh rate and has an antiglare coating. However, it has a much smaller footprint and sells for less than the HP 98782A. The HP 98785 is compatible with the HP 98547A high-resolution color video board and the 98700A display controller that currently work with the HP 98782A 19-inch monitor. An optional tilt-swivel is also available.

The HP 98786 monitor is functionally identical to the HP 98781A 17-inch high-resolution monochromatic monitor. It has a built-in tilt-swivel base and an antiglare screen. It is priced less than the 98781A. A new video board (HP 98544B) is also available for the

HP 98786. The new HP 98786/98544B pair is functionally identical to the former HP 98781/98544A pair, which will be taken off the HP Price List February 1, 1987. These two pairs are not inter-compatible and cannot be "mixed". The new monitor/board pair will replace the former pair in the HP 9000 Models 320M, 320ML, and AI Monochromatic Development Systems. The price of the bundles will not change.

With addition of these new monitors, the Series 300 will have a full range of monitors – 12-inch and 17-inch monochromatic and 12-inch, 16-inch, and 19-inch color, including both low- and high-resolution options.

Update

The following is an update to the article entitled "ARPA Berkeley Upgrade available for HP 9000 Series 300 Bundle Purchasers," published in July 1986, issue of HP Channel (page 12).

The article told about a free upgrade to the new 50952B NS-ARPA Services1300ARPA! Berkeley networking software that is available to users who received the bundled HP-UX systems (PIN 98582B, 98582L, 98583B, 98584A, 98585A, and 98586A) with the previous 50952A NS-only software. This upgrade applies to purchases starting May 1. 50952B will be included in these bundled systems products when it starts shipping which is planned for late Fall 1986.

A card should have been included in the above Series 300 system products with instructions to return the card for the upgrade. Some of the initial systems shipped did not include the upgrade card, in which case you will be notified by the factory. For those users requiring an order to be placed, your field office has been informed about a no charge ordering procedure for this product.

Personal Computers

Portable

INSTALLABLE DEVICE DRIVER FOR THE HP PORTABLE PLUS

Shelp, an installable device driver for the Portable PLUS, provides access to a 'pop-up' calculator, note pad, keyboard macros, and a remote off function from within any non-graphics-based application. Designed to increase productivity with practical efficiency, Shelp is available on the HP Portable PLUS at a single keystroke.

The algebraic calculator provides the four primary functions: add, subtract, multiply, and divide. Ten storage registers are also supported. One of the most powerful capabilities of the calculator is the ability to 'playback' the current calculation into the suspended application. You will no longer need to hunt for your misplaced handheld. The Notepad might be used to keep track of frequently called telephone numbers or a list of things to do. Keyboard macros create shorthand keystrokes for repeated typing of commonly used strings of characters. For example, if you frequently type the words 'Hewlett-Packard', you could associate that combination of keystroke with the 'H' key. That's all it takes.

To get your copy of Shelp (P/N V7550, for the HP Portable PLUS only, \$55 US list) send payment in US funds to Hewlett-Packard Company, Users Library, 1000 NE Circle Blvd., Corvallis, OR 97330; or call 503-757-2000, (please reference Visa or Mastercard credit cards).

Portable

512-KBYTE HP PORTABLE PLUS PRICE REDUCED

Since the introduction of the enhanced HP Portable PLUS, we have seen a tremendous response to the increased memory capacity of the machine. The average memory configuration of a Portable PLUS has increased to over 600 Kbytes, many with users configuring the machine to 896 Kbytes, and some have used the unique architecture of the computer to configure to the maximum memory, over 1.25 Mbytes of CMOS continuous memory.

In support of this increase in memory usage and in response to market conditions, we are pleased to announce significant price reductions for the following Portable PLUS products. Effective July 1, the prices of the following products have been reduced:

Product No.	Description
45711F	512-Kbyte Portable PLUS
45711E	512-Kbyte Portable PLUS with built-in modem
82981A	128-Kbyte Memory Drawer
82984A	128-Kbyte Memory Card

Desktop

HP DESKMANAGER: HP'S ALL-IN-ONE OFFICE SOLUTION

HP DeskManager, the communications backbone of the HP Personal Productivity Center (PPC) has undergone a major facelift. HP Desk can now act as an application manager for any application a user chooses. Furthermore, this stellar performer in the office marketplace has been made even stronger

with task automation for routine business tasks through forms processing, a customizable user interface, and improvements in administration and maintenance.

In addition to these changes, three new products work in conjunction with HP DeskManager to offer:

Personal computer electronic mail off-loading the HP 3000

- Shared filing and archival services,
- Resource scheduling.

These applications work together giving you an unbeatable all-in-one office solution.

Read on for more information on HP DeskManager, AdvanceMail, HP File/Library, and HP Schedule.

Desktop

HP DESKMANAGER: THE CORNERSTONE OF HP PPC

What if you could offer your customers the following:

- A single interface into all their applications - from office, data processing, in-house applications, to VAR (value-added reseller) software.
- A means to automate tasks by allowing forms to be distributed, printed, and edited within HP DeskManager.
- A customizable interface so that customers see exactly what they want to see.
- Interrupt capabilities so that people who work in an interrupt-driven way



can work the same with the system as they do without it.

- An easier way to administer and maintain HP DeskManager as well as monitor its usage.

And offer all this for the same low price as previous versions of HP Desk? Add the optional products – HP File/Library, HP Schedule, AdvanceMail, and any other Personal Productivity Center (PPC) applications – and you have an unbeatable solution for office automation. (See accompanying articles in this issue.)

The marriage of data processing and office automation

As an "application manager" HP DeskManager allows you to invoke any application from within HP Desk. The applications are not limited to those supplied by HP. By using simple script (command) files, any HP, customer, or VAR program will work under the Desk umbrella. Furthermore, data-passing capabilities make it possible to exchange documents and files between HP Desk areas, and, with slight application modifications, between HP Desk and another application. The result is that users only need to learn one interface and that the exchange, retrieval, and communication of information is expanded and simplified.

Task automation

Routine information-gathering procedures can be automated using the new Forms Processing capabilities of HP Desk. Forms created with VPLUS/3000 can be distributed, edited, printed, and filed within HP Desk. Imagine automating a monthly expense report system, for example. Data can even be collected and passed to an external application (e.g. IMAGE/3000) via a user-written program, automating distributed data entry. In a competitive

bidding situation, none of our competitors even come close to offering this.

Seeing is believing

Because not every corporation or every individual within that corporation work in just the same way, we've designed a customizable HP Desk interface. Customization can occur on a system-wide level (e.g., welcome banners or help screens) or by each individual user (e.g., the ordering of items in different Desk areas or default printers and environment files).

Dealing with interruptions

HP DeskManager adapts to the interrupt-driven way we work with a new Suspend and Resume key. Users may begin an activity, hit the suspend key – check their calendar, copy information from another Desk area, create a graph – then with a touch to the Resume key return to their original work exactly as they left it.

A helping hand

System administrators will love the new maintenance and administration features of HP DeskManager. The new version includes semi-automated mail maintenance so that much of the maintenance activities run in the background while users are still on the system. Remote directory synchronization ensures that the network reflects the most up-to-date user community. We've added a wide variety of network statistics for better traffic monitoring, problem auditing, and analysis, resulting in a more accurate basis for billing users according to usage. Finally, system security has been improved so administrators have more control over user access to applications and MPE commands, as well as the allocation of disc space in different Desk areas.

Note that HP DeskManager (B.00.00) is fully compatible with versions A.03.00 and A.03.01, but not with earlier versions of HP Desk. Before introducing the new version, therefore, your users' entire network

must be running version A.03.00 or later.

HP DeskManager (B.00.00) is orderable now.

Product No.	Description
36570A	HP DeskManager Right to Use
Opt. 310	For Series 37
Opt. 320	For Series 39-70
36570R	HP DeskManager Right to Copy
Opt. 310	For Series 37
Opt. 320	For Series 39-70

Desktop

ADVANCEMAIL:

STAND-ALONE PC

ELECTRONIC MAIL

FOR PPC

AdvanceMail enhances the integration of Personal Computers into the HP Personal Productivity Center (PPC) by providing electronic mail facilities between the PC (HP Touchscreen, HP Vectra, and IBM PC) and HP DeskManager.

AdvanceMail is unique in the marketplace because:

- Users can work "stand-alone" on their PC and only need connect to HP Desk when actual message transfer is required. So users retain all the benefits of local PC processing, while message transfer can take place at off-peak times freeing up resources on the HP 3000.
- All HP and IBM PCs are supported.*† HP connects a wider range of personal computers into their host-based elec-

tronic mail system than any other vendor.

With AdvanceMail, PC users can exchange documents and messages with other PPC users without leaving the PC environment. AdvanceMail's unique features include:

- **Batch and interactive mail transfer** – so users can mail urgent messages immediately and transfer normal messages whenever they choose.

- **Message filters** – giving users better control over their work. Filters allow users to choose which messages are transferred from the HP 3000 and to where: AdvanceMail's in tray or filing cabinet to a printer or deleted.

- **Local in and out trays** – for writing, replying to, forwarding and filing messages, all without connecting to the HP 3000.

- **Automatic conversion profile** – so documents are converted to a suitable format that is determined by the user before delivery to the PC. No matter what software individuals use, either terminal or PC-based solution, AdvanceMail lets users communicate transparently with other PPC members.

- **Filing cabinet** – for organizing documents and messages.

- **HP DeskManager Foreign Service Connection support** – so it's as easy to send a telex or a message to an external system such as IBM's PROFS as it is to send a message to another HP Desk user.

- **AdvanceNet support** – AdvanceMail supports asynchronous connections to the HP 3000 over RS-232 and connections via NS/3000 and OfficeShare LAN/3000 (IEEE 802.3) providing for customers now and in the future.

AdvanceMail is orderable now. Note that AdvanceMail only works with the

new version of HP DeskManager (B.00.00).

Product No.	Description
HP 27534A	AdvanceMail for the HP Touchscreen
HP 27535F	AdvanceMail for the HP Vectra and IBM PC

In addition, an upgrade kit from HP Message to AdvanceMail will be orderable September 1 and available from Direct Marketing Division 60 days later.

**AdvanceMail for the HP Portable PLUS provides the Portable user with modified functionality more suitable for the Portable user's needs. For more information, contact the Portable Computer Division in Corvallis, Oregon, 503-757-2000.*

†† *Please note that AdvanceMail does not support MS-DOS version 3.0.*

Desktop

SHARED FILING AND SCHEDULING FOR THE PPC

Introducing new capabilities for HP Desk users:

- HP File/Library – a shared filing application with sophisticated keyword indexing and retrieval as well as archival services that helps reduce on-line storage requirements.

- HP Schedule – extends the time management facilities of HP Desk by providing a comprehensive meeting and resource scheduling tool. With HP Schedule, you can organize meetings with other HP DeskManager users, even if they are on different computers, and at the same time schedule any resources you might need, from meeting rooms to corporate jets.

HP File/Library

Shared or community filing means that people within an organization who have overlapping interests or respon-

sibilities can share information easily and quickly. Key features include:

- Integration with HP DeskManager – any HP DeskManager item can be indexed in the new "Library" area of HP DeskManager.

- Archival and off-line indexing – items can be archived to tape while an on-line index is retained in the Library. Similarly, any other "off-line" document – paper, periodicals, or even MPE files – can be indexed on-line so that customers can take advantage of electronic indexing retrieval.

- Indexing by eight filing attributes – documents are automatically indexed by subject, creator, create date, document type, and status. The user can also supply values for author, keywords and comments to provide a unique description of a document, making it easier to find later.

Searching by attributes – when searching for a document the user can specify any combination of filing attributes to find exactly the right information.

- Sophisticated security and access rights – makes sure that information is seen, archived, deleted, etc. only by authorized people. A special Check In/Check Out function lets authorized users remove a document from the Library area, edit it and then check it back in.

HP Schedule

- Meeting scheduling – HP Schedule searches for free time from designated Calendars of HP Desk users and suggests convenient meeting times; no more telephone tag.

- Resource selection and booking – eliminates time wasting when booking resources: conference rooms, overhead projectors, or other equipment can be

booked at the same time as the meeting.

- Accommodates non-Calendar users – it doesn't matter if not everyone in the organization will use an electronic calendar: HP Schedule places meeting requests in the In Trays of those users, so they can either respond personally or via an HP Desk message. No one is left out.

- Automatic conflict notification and appointment insertion – make life as easy as possible for HP Schedule users.

Both HP File/Library and HP Schedule are orderable now. Remember, these applications will only work with the new version of HP DeskManager (B.00.00). (See "HP DeskManager: HP's All-in-one Office Solution".)

Product No.	Description
27520A	HP File/Library Right to Use
Opt. 310	For Series 37
Opt. 320	For Series 39-70
27520R	HP File/Library Right to Copy
Opt. 310	For Series 37
Opt. 320	For Series 39-70
27522A	HP Schedule Right to Use
Opt. 310	For Series 37
Opt. 320	For Series 39-70
27522R	HP Schedule Right to Copy
Opt. 310	for Series 37
Opt. 320	For Series 39-70

Desktop

NEW "TECHNICAL" HP VECTRA PC CAD BUNDLE AVAILABLE

HP's Corvallis Workstation Operation (CWO) has announced a preconfigured, preassembled HP Vectra PC bundle designed specifically for CAD/CAE and other power-user applications. CWO general manager Chung Tung said, "The bundle not only makes selling Vectra easier, it also means our customers will spend less than half the time setting up their system."

Compared to ordering Vectra PC in the traditional "a la carte" fashion, the bundle reduces the number of boxes a user receives from nine to three. "The customer will also have increased confidence because the system has been pre-tested with all the pieces installed," Tung added.

What's included in the system

Specifically, the 82964E Vectra PC CAD/CAE Bundle includes the following system components:

Product No.	Description
72445A	Vectra PC Model 45 (640KB RAM, 1.2-Mbytes floppy drive)
45817A	40-Mbyte hard disc and controller
45983A	Enhanced graphics adapter
35743A	Enhanced graphics display with tilt/swivel base
24540A	Serial/parallel interface
82965A	High-speed (8MHz) math coprocessor
45951A	Vectra PC DOS/PAM

The entire system is pre-assembled at the factory. All the user has to do is plug in the line cord and display, format the hard disc, add DOS, and go. Opening

the SPU to add cards or other options is unnecessary.

"We've put together a system that's the choice of 80 percent of the PC-CAD market. The combination of the new enhanced graphics display, a fast, high-capacity disc, and 8MHz coprocessor transform Vectra into an ideal platform for most every popular package, including AutoCAD, VersaCAD, P-CAD and PC Productivity's new Crossroads software," said Keith Marchington, product manager for the bundle. The configuration is also well suited for running popular office software.

Peripheral choices

To maintain peripheral flexibility, CWO chose not to include a printer, plotter, or input device. "Different software packages have different requirements," said Marchington. "Some want a mouse, some want a digitizer. Consult the installation guide in your software manual to ensure the best fit." The combination of HIL, serial, and parallel interfaces — included with the bundle — mean most any combination is possible. A customer may want to add an additional dual-serial card if a serial input device and serial plotter are chosen," Marchington added.

More information

For more information about the 829648 bundle, or suggested configurations with leading CAD software, contact your HP sales rep.

Mass Storage

**NEW HP 5%-INCH
FLEXIBLE DRIVE
WITH HP 9000
SERIES 300 RUNS
ZBM SOFTWARE**

The new Hewlett-Packard 360-Kbyte 5%-inch flexible disc drive, the HP 9127A, was introduced June 1, 1986, as a direct replacement for the discontinued HP 9125S. The performance of the HP 9127A meets or exceeds that of the 9125S and has identical support. No upgrade kit will be available.

The new drive reads, writes, and formats in IBM DOS format for data exchange between IBM's 5%-inch systems and HP computers. For easy data exchange between HP flexible disc drive systems and HP microfloppies, the HP 9127A also reads, writes and formats in LIF format.

The HP 9127A allows the user to read copy-protected software on the HP 9000 Series 300 systems with the new HP Series 300 DOS coprocessor card. The new coprocessor card allows Series 300 users to run off-the-shelf IBM software. This configuration expands the software selection for the HP 9000 Series 300 users, adding DOS applications to technical workstation tasks.

Support for the HP 9127A is also provided by the HP 9000 Series 200, HP Touchscreen and Touchscreen II personal computers, however these hosts do not run IBM software.

For further product information please contact your HP sales rep or refer to "Lower Cost 5%-inch Flexible Drive for IBM Data Exchange" in the June issue of *HP Channels*, page 31.

Mass Storage

**WHERE TO SELL THE
HP 35401A TAPE
DRIVE**

We have added some new system support for the HP 35401A autochanger tape drive and feel that a summary of supported configurations will be helpful to you.

The HP 35401A offers two modes of operation depending on the computer system that it is being used with. These are Sequential and Selective mode.

- *Sequential mode* – This allows cartridges to be accessed in order one through eight unless the sequence is manually overridden from the front panel. Sequential mode is particularly suitable for unattended system backup, perhaps with several backups stored in a single magazine.
- *Selective mode* – In this mode, cartridges can be accessed in any order through a load cartridge command. This mode is also suitable for unattended backup, and for applications such as software duplication and selective file storage to particular cartridges.

The HP 35401A modes supported by each of HP's computer families are shown in the table. It should be noted that there are a small number of systems that support the HP 35401A, but do not offer unattended backup. This is due to operating system restrictions. With these particular operating systems, operator **intervention** is required to advance cartridges. Some further notes on using the HP 35401A with different systems are given below.

HP 3000 systems

The HP 35401A is supported in Sequential mode on the HP 3000 using MPE V/E U-MIT with a patch tape. The tape drive is supported as the pri-

mary backup device on systems with up to 504 Mbytes of data storage but does not support user logging.

HP 9000 systems

Support with HP 9000 systems varies by system model and operating system. BASIC and Pascal systems support the HP 35401A but do not support unattended backup.

HP-UX systems support Selective mode with the exception of the Series 500 systems which only support Sequential mode. A special utility program is required for the Series 500 and is available through the support organization at no cost. This utility will be included in HP-UX 6.0 when it is released.

Support for the Shared Resource Manager (SRM) will be available later this year with the SRM 3.0 operating system.

HP 1000 computer systems

Support for HP 1000 systems is not yet available. Further information on a likely support date will be available shortly.

Summary table

System	Operating system	Mode	Notes
HP 3000 Series 37/39/40/42/44/48158168170	MPE V/E U-MIT	Seq	With patch tape
HP 9000 Series 200	BASIC 4.0 Pascal 3.1 HP-UX 5.1	Seq Seq Sel	Not unattended Not unattended
Series 300	BASIC 4.0 Pascal 3.1 HP-UX 5.1	Seq Seq Sel	Not unattended Not unattended
Series 500	HP-UX 5.0	Seq	With utility
SRM	SRM 3.0	Seq	Not yet available
HP 1000	RTE	Seq	Not yet available

Mass Storage

NEW RACKMOUNT KIT FOR HP 35401A TAPE DRIVE

A rackmount kit is now available for mounting the HP 35401A $\frac{1}{2}$ -inch cartridge autochanger tape drive in a standard 19-inch EIA rack. This new kit, model number HP 35490A, will accommodate any 12.8-inch (325mm) wide by 10.2-inch (260mm) high module, but has been specially introduced for use with the HP 35401A.

The rackmount kit comes complete with all necessary fixtures, fittings, and instructions, and will allow users to incorporate one or more of the new tape drives into their existing rack configurations.

Mass Storage

TAPE DRIVES THAT SUPPORT THE HP 92193E CLEANING CARTRIDGE

The HP 92193E cleaning cartridge kit which was introduced in July has met with a good number of inquiries and looks like being a popular tape head cleaning alternative. However, HP feels that the initial announcement has caused some of you unnecessary problems, and would like to clear up any confusion now.

This product is not currently supported on the HP 791X range of disc/tape drives, which use the Linus tape drive. This is because the internal operating system for these drives is unable to recognize when a cleaning cartridge has been inserted.

Finally, to remind yourselves of which drives can use this very useful product, please refer to the following list.

Tape drives that support the HP 92193E cleaning cartridge:

- HP 35401A $\frac{1}{2}$ -inch Cartridge Autochanger Tape Drive
- HP 9144A $\frac{1}{2}$ -inch Cartridge Subsystem
- HP 9142A $\frac{1}{2}$ -inch Tape Subsystem
- HP 7942146 Disc/Tape Drives

Networks

ANNOUNCING HP NS/3065 ASSIST AND HP BTL-PLUS ASSIST

Beginning August 1, 1986, implementation assistance services are available for your HP NS/3065 and HP BTLPLUS board test networking users. HP NS/3065 ASSIST and HP BTLPLUS ASSIST support services are designed to assure user's satisfaction and success with their implementation of HP NS/3065 and HP BTLPLUS in a networked HP test system environment.

These services use the proven, structured implementation approach common with other HP-ASSIST products. Each service consists of three phases: Implementation Analysis (IA), Implementation Team Training (ITT), and Project Implementation Assistance (PIA). These phases equate to a proactive implementation process of planning, education, and results. The activities and deliverables defined for each HP NS/3065 ASSIST and HP BTLPLUS ASSIST service focus on solving the technical and business needs for the application. This includes the delivery of comprehensive project

documentation, on-site training, and consulting assistance.

Benefits

Implementation assistance helps users achieve the maximum benefit from their investment in an HP board test network system. It ensures that they successfully implement the desired product capabilities and develop the skills needed to effectively use these capabilities. These services focus on the complete implementation process for a subset or "pilot" of the total project effort. This is accomplished by applying the product's capabilities using a select set of controller nodes and production circuit boards. The user develops a thorough knowledge of the product's capabilities and how they were applied. They also gain the expertise to complete their migration to a network-based test system. The benefits a user receives from a planned implementation are:

- Minimum effort for migrating to a network based file structure
- Maximum productivity for test programmers and operators
- Optimal utility from their test system and network resources
- Resident expertise developed for system operations and management
- Capability to implement future network growth or change.

Target prospects for these services are installed-base customers or new prospects for multiple-board test systems who want the maximum productivity from their integrated-board test network system.

HP NS/3065 ASSIST and HP BTL PLUS ASSIST are value-added components of a solutions-oriented sales strategy.

Ordering information

Just one copy of the appropriate HP-ASSIST product is needed per site independent of the number of copies of

HP NS/3065 or HP BTLPLUS software a user purchases.

HP NS/3065 ASSIST and HP BTLPLUS ASSIST services can also be tailored by using Additional Service Unit% to provide additional implementation activities such as installation support for their HP DS/1000 or HP-IB network, or on-site implementation assistance for more than two nodes and two board types. Refer to the data sheets for the standard defined services included in each HP-ASSIST product.

Product No.	Description	Data sheet Product No.
44670A+60A	HP NS/3065 ASSIST	5954-7388
44670A+652	Additional Service Unit	N/A
44582A+60A	HP BTLPLUS ASSIST	5954-7389
44582A+652	Additional Service Unit	N/A

For information on support of other HP Q-STAR test network products, contact your HP sales rep.

Networks

**SOFTWARE SUPPORT
FOR NETWORK
SERVICES FOR THE
DEC VAXIVMS**

HP Network Services (NS) for the DEC VAX/VMS (NS for the VAX) is now available. This software runs on a DEC VAX and allows communication with HP systems over a Local Area Network. At introduction, the VAX-9000 connection will be supported, with additional connections occurring after intersystem testing is complete. The support information in the *HP 9000 Networking Sales Training Manual* (May 1986) and the *HP 9000 Networking Technical Data Manual* (June 1986) is incorrect. The support structure and support product numbers

for NS for the VAX are outlined below. **Please note: AMS support is not available.**

The support services for HP software running on a DEC processor are structured to match the support services for software on an HP processor, i.e. operating system, category, and product support. Software support for HP products running on the DEC VAX are assigned an artificial operating system support number to designate the type of CPU and media for software updates. This support has a zero price as users do not receive either labor or material support for the DEC operating system itself. The purpose of the artificial operating system support number is to facilitate the delivery of software support on NS for the VAX.

As always, users select the level of support at the operating system level. Datacom category support extends the level of operating system support to the datacom software. Product support, SMS, provides users with software and manual updates for NS for the VAX.

For example, a user who wants response center usage assistance on NS for the VAX should purchase the following support:

Product NO.	Description
99064M+H51	RCS for non-HP operating system (DEC)
99087M+COO	Datacom Category C Support for DEC VAX
50950A+S00	SMS for NS for the VAX

If a user has NS for the VAX running on two DEC VAX machines, the second system can be supported as an additional site with the following support:

Product No.	Description
99064M+V00	ASC for non-HP operating system (DEC)
99087M+V00	Extended datacom Category C Support for DEC VAX
50950A+W00	Extended SMS for NS for the VAX

For your reference, the complete list of software support products for NS for the VAX and the DEC VAX appears below.

Product No.	Description
50950A+S00	SMS for NS for the VAX
50950A+W00	Extended SMS for NS for the VAX
99087M+COO	Datacom Category C support for DEC VAX
99087M+V00	Extended datacom Category C support for DEC VAX
99087M+Q00	Manual Update Service for datacom Category C support for DEC VAX
99064M+H51	RCS for non-HP operating system (DEC)
99064M+V51	ASC for non-HP operating system (DEC) – with media
99064M+V00	ASC for non-HP operating system (DEC) – without media
99064M+S51	SMS for non-HP operating system (DEC)
99064M+W51	Ext SMS for non-HP operating system (DEC) – with media
99064M+W00	Ext SMS for non-HP operating system (DEC) – without media

Networks

**FILE TRANSFER NOW
SUPPORTED BETWEEN
NS3000 AND NS9000**

The AdvanceNet products are now certified to provide data transfer between the HP 3000 and the HP 9000. The NS9000 and NS3000 products provide Network File Transfer (NFT) between these two CPUs. The computers are connected through the LAN Link products, LAN/3000, LAN/300, and LAN/500.

Availability

Intersystem is supported with the following operating or product release ver-

sions: NS3000; NS-ARPA Services/300; NS/9000 Series 500; UBMIT; UNIX 5.1, NS Version 5.17; and UNIX 5.1.

Ordering

To connect the HP 3000 and the HP 9000, the Network Services and the LAN Link product must be ordered for each CPU. The product numbers are shown below:

- HP 3000 System
- 32344A NS3000 Network Services
- 30242A LAN/3000 LAN Link
- HP 9000 Series 300
- 50952B NS-ARPA Services1300
- 98643A LAN/300 Link
- HP 9000 Series 500
- 50954A/R NS9000 Network Services
- 27125B LAN/500 Link

Please note the default option for the LAN/3000 is ThickLAN and the default option for the LAN/300 and LAN/500 is ThinLAN. To provide a compatible LAN connection, please refer to price list for options and part numbers to delete and replace AUI and MAU with thick or thin cabling.

Typical applications

The interconnectivity between the HP 3000 and HP 9000 provides users with the ability to connect their design and manufacturing environments. Two typical applications include the following:

- Transfer of part number list between manufacturing and design. Design will look into the manufacturing parts list to determine availability of parts, and manufacturing will look into design to determine what parts will be required to manufacture new products.
- Transfer of engineering data collected and stored in the IMAGE database on the HP 3000 to the HP 9000 for workstation analysis.

Networks

MULTIPOINT HP-ZB EXTENDER ADDS MORE VALUE TO HP-ZB PERIPHERALS

The new HP 37204A multipoint HP-IB extender increases the value of HP-IB peripherals. No longer do they have to be within close range of the computer. Now HP-IB printers and plotters can be situated up to 1,250 meters away.

The 37204A replaces the popular 37203A. It is lower in cost, has better performance, and a powerful new multipoint capability. HP 37204As can be daisy-chained together, requiring only one extender at each site, giving HP-IB a networking capability just like a LAN.

A network of remote HP-IB printer/plotters can be controlled from a single computer port, eliminating the need for a separate (RS-232-C) port for each device, or the inconvenience of using plotters/printers in eavesdrop mode.

As with the 37203A, no software modifications are needed to add distance to a system, just simply drop them in. The 37204A is suitable for all HP-IB devices with the exception of high-speed disc/tape memories. A sec-

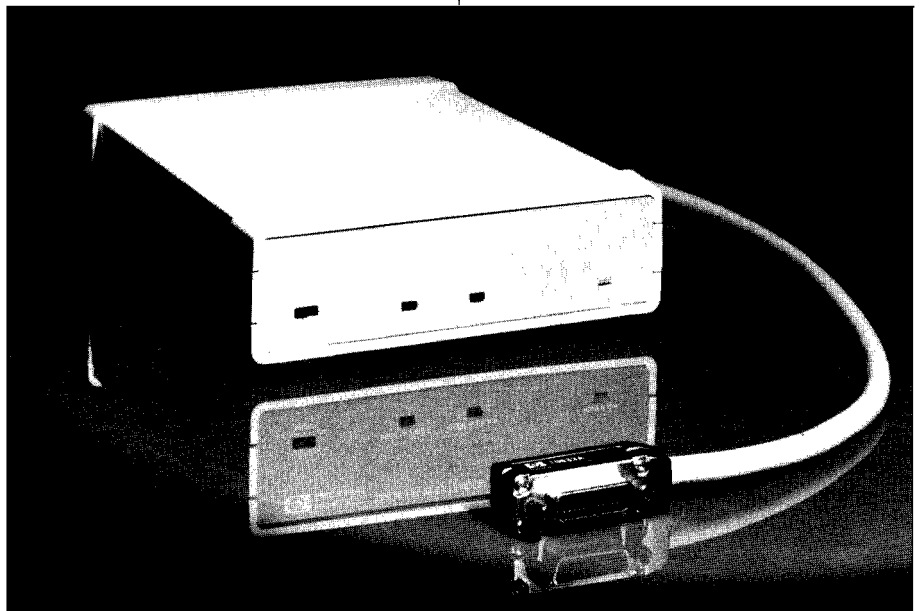
ond product, the 37204B will soon be introduced to accommodate the additional support requirements of printers used on HP 3000 computers. Until such time, continue to specify 37203A Option 010 for these applications.

The 37204A is on the HP Price List and available now for immediate shipment. Standard versions only are also available from Direct Marketing Division (DMK) to meet urgent requirements within the US. A data sheet (PIN 5954-2050) and a sales amplifier (training information and competitive summary PIN 5954-7906) are now available.

Ordering Information

Option	Description
Std.	Equipped with dual coax interface for multipoint operation.
001	Fiber optic interface - single
002	Fiber optic interface - dual (for multipoint operation)
303	Half-width rack mount adaptor
305	Standard 19-inch rack mount adaptor

OEM discounts are available.



The HP 37204A multipoint HP-IB extender combines powerful new features with improved performance to provide added flexibility for HP-IB systems.

Plotters

HP 7470A PLOTTER OBSOLESCENCE DATE SET

On February 1, 1987, the HP 7470A plotter will be obsolete due to a continuing decline in market demand since the introduction of the HP ColorPro, eight-pen plotter. The February 1 obsolescence date has been set to give scientific measurement OEM customers time to convert their systems to include the HP ColorPro plotter.

We recommend you convert all HP 7470A orders to HP ColorPro orders immediately. The HP ColorPro plotter offers several advantages over the HP 7470A:

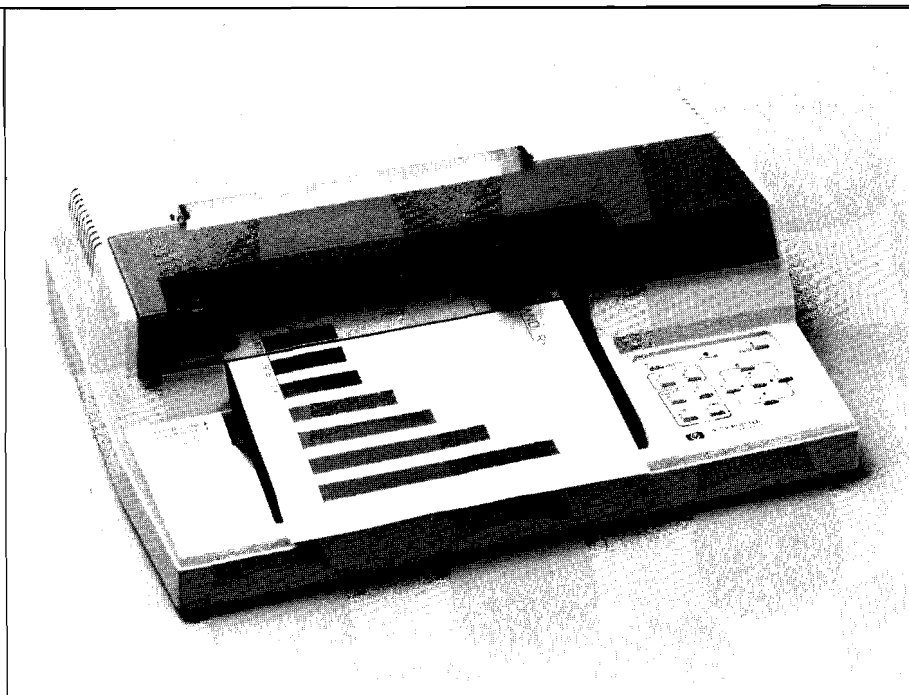
- More pens – eight-pen capability makes color graphics convenient and easy
- Software – The HP ColorPro plotter is supported by the most popular graphics software packages. HP ColorPro software support will be much more extensive than HP 7470A support.
- Advertising/Promotion – The HP ColorPro is featured in many promotions. Including direct mail campaigns to HP small plotter installed base, HP LaserJet printer installed base, Microsoft installed base, Macintosh users at business addresses.

Built-in demo: You can demonstrate impressive plots with the handy built-in demo.

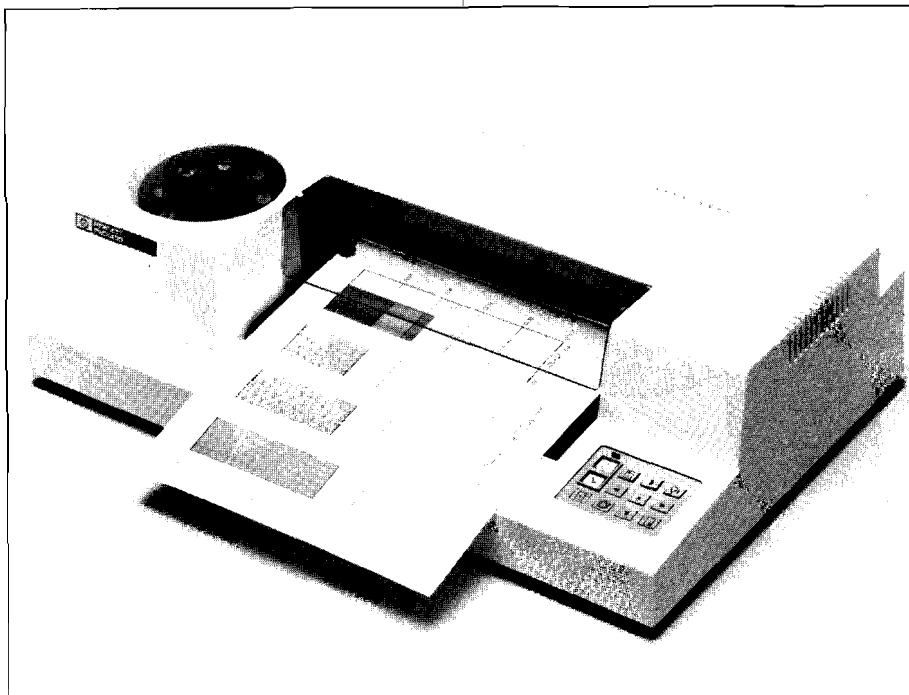
HP 7470A and HP ColorPro plotter comparison guide

HP 7470A	HP ColorPro
A/A4 paper, transparency, glossy paper	Same
2-pen	8-pen
RS-232-C, HP-IB, or HP-IL options	RS-232-C or HP-IB interface options*
Eavesdrop capability	No eavesdrop capability

*HP ColorPro plotter must be ordered with an interface option either RS-232-C (Option001) or HP-IB (Option002).



The HP 7470A 2-pen plotter.



The 8-pen HP ColorPro plotter

Plotters

MEASUREMENT GRAPHICS PRICES INCREASE

The prices of the following products have increased as of July 1.

Product No.	Description
HP 7090	Measurement plotting system
HP 7045	High-performance X-Y recorder
HP 7035	General-purpose X-Y recorder
HP 7015	Low-cost X-Y recorder

Your users will continue to find these products an excellent value for their applications. The HP 7090 is significantly lower priced than typical alternatives such as waveform recorders, data acquisition systems, and signal analyzers. Traditional X-Y recorder users will also appreciate the flexibility of the HP 7090's dual analog and digital graphics output, and its superior performance.

Printers

INTRODUCING HP TmsRmn/Helv SOFT FONTS FOR HP LASERJET PRINTER

On August 1, HP introduced a replacement for the current HP TmsRmn/Helv (Times Roman/Helvetica) Soft Font Base Sets. The current base sets are being discontinued because the previously defined supplemental sets are incompatible. The new Supplemental TmsRmn/Helv Soft Fonts are also being introduced at the same time.

are also being introduced at the same time.

- In addition to the features in the old base set, the new base set includes 6-point medium, bold and italic, 8-point bold and italic and 30-point bold.
- The new supplemental sets are compatible with the new base sets but *not* with the old base sets because of spacing differences.
- All of the product numbers have been changed.

Ordering information

Product No.	Description
<i>HP 3.5-inch disc format</i>	
33411AC	Base Set, USASCII (replaces 33411AA)
33411AD	Base Set, Roman-8 (replaces 33411AB)
33411AE	Supplemental Set, USASCII
33411AF	Supplemental Set, Roman-8
<i>Vectra/IBM 5.25-inch disc format</i>	
33412AC	Base Set, USASCII (replaces 33412AA)
33412AD	Base Set, Roman-8 (replaces 33412AB)
33412AE	Supplemental Set, USASCII
33412AF	Supplemental Set, Roman-8

The HP TmsRmn/Helv base and supplemental soft font sets are available in portrait and landscape and have the following characteristics:

Base sets:

- 6-, 8-, 9-, 10-, 14-point sizes (medium, bold, italic)
- 18-, 24-, 30-point sizes (bold)

Supplemental sets:

- 7-, 9-, 11-point sizes (medium, bold, italic)
- 18-, 24-, 30-point sizes (medium, italic)

A free base set upgrade program is available for those users who own an

old base set and are now purchasing a new supplemental set. Since the old base set, by itself, is of the same quality as the new base set, users who own current base sets and do not use supplemental sets will not need to upgrade.

Below are details:

- The owner purchases the supplemental set.

Inside the supplemental set is an upgrade coupon. The user sends in the coupon and disc number "1" from the current base set.

- The new version of the base set with a new license agreement (allowing use on three printers) will be shipped to the owner free of charge. The same agreement will be with the supplemental set.

Printers

HP LASERJET PRINTER SOFT FONT LICENSE EXPANDED TO MULTIUSER

In a continuing effort to satisfy our Hewlett-Packard LaserJet PLUS and LaserJet 500 PLUS printer users, HP is expanding the soft font license from single user to multiuser.

In the past, the HP LaserJet PLUS and LaserJet 500 PLUS soft font licenses required users to purchase a separate copy of the soft fonts for each HP LaserJet printer installed. Effective immediately, HP is allowing users to purchase a single soft font package for up to three printers.

This new multiuser soft font license is advantageous to both HP and the user. Why go to the trouble of pricing and buying competitive soft fonts when the user can buy one? As the second and third printers are added, the font cost per printer drops.

If you want another good reason to buy HP LaserJet PLUS and LaserJet 500 PLUS printers, here is the answer—multiuser soft fonts.

Printers

USABLE PAPER FOR THE HP LASERJET PRINTER

The HP LaserJet printer was designed for use with high-quality copier bond paper but many users wish to use cotton bond paper. When using the unsupported bond papers (mainly 25%, 50%, or 100% cotton content), users have experienced a distinct vertical smear, various print quality defects and accelerated wear to several parts of the paper path (e.g., rubber rollers, feeder guide, backdoor, and fusing unit).

We have identified two brands of cotton bond paper that were specifically designed for use with non-impact printers such as the HP LaserJet printer. Neither of these papers comply with the HP LaserJet paper specifications.

- Gilbert Neu-Tech
- Neenah Copier

Both of these papers have a 25% cotton content but the manufacturers have paid close attention to uniform chemical composition and a smooth surface texture. Also, these papers are less abrasive and less susceptible to environmental factors that affect print quality (temperature and relative humidity). Since the HP LaserJet printer tolerates these papers, fewer problems have occurred.

It is important to note that both papers are unsupported and continued use may result in damage to the HP LaserJet printer. Use of these papers or any media not specified in the LaserJet paper specifications invalidates the warranty and the user assumes responsibility for any printer damage.

For complete information on HP LaserJet printer supported paper, refer to the *HP LaserJet Printer Paper Specifications Guide* (PIN 5954-2268).

Printers

PRINTERS PLUS "SUPER SWAP" CAMPAIGN

Do you have older HP printers or a printer from another vendor? If so, you can now get performance upgrades with generous trade-in credits through the "Super Swap" program (effective May 1, 1986). This campaign offers upgrades to HP 2564B, HP 2567B, HP 2680A, or HP 2689A printers.

Benefits

- Offers a wide range of solutions, capabilities, and performance levels. You can replace outdated, limited-feature printers with faster, more-versatile models.
- Maximizes return on investment. You can get these printer upgrades at costs

close to what you are currently spending on maintenance alone.

- Responds to specific customer needs. For a variety of EDP solutions, we offer quality line printers and fast, reliable laser printers.

"Super Swap" represents only one of a three-part bundle offered by the Printers Plus Program – "Pick-A-Daisy" and "Performance Push" are also available to round out this total solution program. Contact your sales rep for more information.

Printers Plus Super Swap Trade-in Matrix

UPGRADE FROM:	UPGRADE TO: 2564B	UPGRADE TO: 2567B/2680A/2689A
TWO 263X	\$1500	\$3000
2608A	1500	3000
2608S	1500	3000
2611A	1500	3000
2613A	1500	3000
2617A	1500	3000
2619A	*1500	4500
ANY NON-HP 300 LPM OR GREATER	1500	4500

* This is an addition to the introduction package.



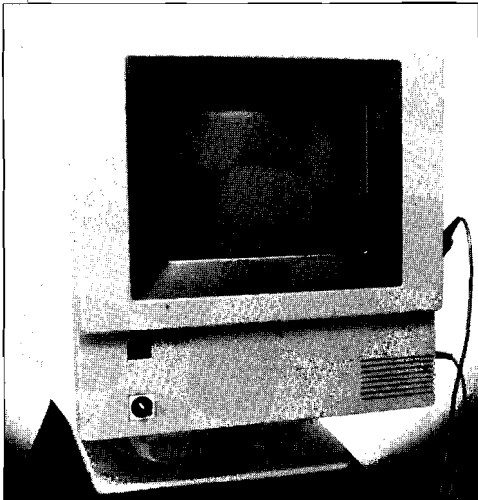
NOTE: Prices above are US list and may vary outside of the United States. Check with your local HP sales rep for prices in your county

Terminals

HP INTRODUCES RUGGED TERMINAL FOR FACTORY FLOOR

HP has announced the HP 9666A Operator Interface Unit (OIU), the only HP rugged terminal specifically designed for use on the factory floor.

Compact and low cost, the HP 9666A's 12-inch high-resolution color display and state-of-the-art interactive touchscreen is incorporated in a compact dust and drip-protected NEMA 12 enclosure. It is specified to operate from 0 to 60 degrees Centigrade. The touchscreen can be used in alphanumeric as well as graphics applications.



The HP 9666A Operator Interface Unit is the only HP rugged terminal specifically designed for the factory floor.

With the unique HP-HIL (Human Interface Link) interface, the user can connect input devices and hardcopy devices simultaneously. The OIU allows the user to daisy chain up to three input devices to the keyboard, thus offering considerable flexibility in the input configuration and freeing the auxiliary port for hardcopy devices.

Support by a wide variety of HP software, the OIU also has TEKTRONIX 401014014 compatibility mode which allows it to operate with TEKTRONIX Inc.'s PLOT 10 software. In addition, the OIU operates with Precision Visual's DI-3000 and GRAFMAKER, ISSCO's DISSPLA and TELL A-GRAF, SAS Institute's SAS/GRAPH, and Megatek's TEMPLATE. These packages run on HP as well as non-HP systems.

The sealed-membrane keyboard has twenty function keys that can be used to simplify the operation of the terminal. These keys can be programmed to tailor the terminal for specific applications.

The Systems Port offers both RS-232-C and HP-422 capabilities at data transmission rates up to 19.2 kbps with handshaking. For additional flexibility, a second port offers another RS-232-C serial interface.

The OIU provides a subset of the ANSI X3.64 standard for those users requiring a device-independent environment. Additionally, the OIU can execute many DEC VT100 and VT52 control sequences.

If you would like more information on the HP 9666A OIU, please contact your HP sales rep.

Competition Factory Rugged Color Graphics Terminal

COMPANY MODEL	HP #9666A OIU	DEC RT200	IDT	*BKS RUGGEDIZING KIT (w/HP 2397A)
RESOLUTION	640 X 400	800 X 240	512 X 512	640 X 400
COLOR	8 OF 64	4 OF 64	8 OF 64	8 X 64
REFRESH	60Hz	60 Hz	60Hz	60Hz
DISPLAY SIP	12"	13"	19"	12" THRU PLEXIGLASS WINDOW
COMPATABILITY DEC TEKTRONIX	INTERFACES w/HP 1000,3000 + 9000 ANSI X 3.64 4010/4014/4105	VT100/VT52 4010/4014	VT/241 4010/4014	INTERFACE w/HP1000 3000,9000 ANSI x 3.64 4010/4014/4105
OUTPUT OPTIONS	2 RS232C PORTS STANDARD RGB HP1B	RS232C 20mA 100P RGB	RS232C PARALLEL 20mA 100p RGB	1 PORT RS232 2 PORT OPTIONAL RGB HP1B
DATA RATE		19.2K BAUD	19.2K A	19.2K BAUD
INPUT OPTIONS	TOUCH SCREEN GRAPHICS TABLET MOUSE BARCODE	TABLET MOUSE BARCODE	TOUCH TABLET MOUSE	GRAPHICS TABLET MOUSE BARCODE
SPECS	OVERTEMP SENSOR 60 C TEW			50 C TEMP

- NO COOLING UNIT
- NOT RACKMOUNTABLE
- NO OVERTEMP SENSOR
- UNABLE TO USE TILT SWIVEL
- NON-SUPPORTABLE BY HP

Terminals

**PRICE OF INTEGRAL
PRINTER ON HP
262X TERMINALS
SUBSTANTIALLY
REDUCED**

Now available with the HP 2622A/D and 2624B terminals are the integral printers (Option 050 - removed from the Corporate Price List on March 1, 1986) at an attractive low price. The price has been reduced by over 50 percent. No customer discounts apply to this exceptional low price.

Quantities are limited, so please order now. All orders will be accepted on a first-come, first-serve basis and orders are noncancellable.

Terminals

**AMBER CRT AT NO
CHARGE ON HP 262X
TERMINALS**

Option 062 amber CRT is now available at no additional cost with the HP 2622A/D and HP 2624B terminals.

Terminals

**LAST CHANCE TO
ORDER HP 2627A
COLOR GRAPHICS
TERMINALS**

This is the last chance for users to purchase the HP 2627A color graphics terminal (removed from the HP Price List, March 1, 1986). The price of the HP 2627A terminal has been dramatically reduced. No customer discounts apply to this exceptionally low price.

All orders must specify immediate delivery. Quantities are limited, so

please order now. Orders will be accepted on a first-come, first-serve basis and are noncancellable.

Terminals

**1986 TERMINAL
TRADE-IN PROGRAM
ENDS AUGUST 31**

You have until August 31 to bring in your terminal for the 1986 Terminal Trade-in Program. Users have already purchased thousands of terminals during this very successful program.

Why? Because the 2390 Series terminals with their enhanced capabilities, high reliability, and especially their ergonomic design, frees users to be more productive, more comfortably. All these features, plus a great promotion program, make this the best time for users to upgrade their terminals.

Don't delay; you only have another 30 days to bring in those terminals before the program ends.

For additional information please refer to the May issue of *HP Channels*, page 16.

Terminals

**HP 2622D TERMINAL
TO BE DISCONTINUED
NOVEMBER 1, 1986**

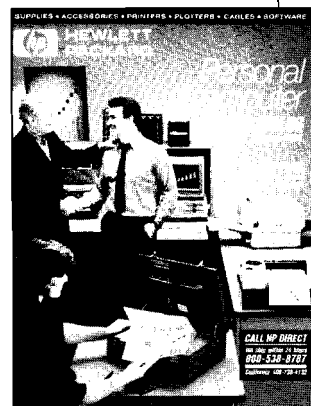
With the introduction of the HP 45263D and HP 45262D Video workstations, demand for the HP 2622D asynchronous workstation on the HP 260 system has fallen off sharply. The HP 2622D asynchronous workstation will be removed from the HP Price List on November 1, 1986. No orders will be accepted beyond November 30, 1986. The HP 2622D will carry a 10-year support life.

Supplies

Supplies

**CATALOG OF HP
COMPUTER SUPPLIES
NOW AVAILABLE**

The new edition (Summer 1986) of the *Computers Users Catalog* is now available in the United States and Canada, and will be available in Europe next month.



Featuring Direct Marketing Division's (DMK) complete line of computer products, the catalog is a valuable tool for facilitating product orders as well as a reference document for supplies and accessories for HP computer equipment. Full-color photographs, detailed descriptions, compatibility



charts, three index categories and explicit order guides make product selection easy and convenient. More than 130 new products are highlighted in the front section of the Summer 1986 issue, including:

- Improved plotter pens, transparency film, and glossy paper in a range of vivid new colors that come in multi-color packs or customized single-color choices
- MicroManager™ stacking modules that snap together to form a customized, low-cost workstation for supporting Personal Computers and peripherals
- Mobile PC Centre on wheels that compactly holds a computer-terminal, disc drive, printer, and supplies

LaserControl 100 software that makes the HP LaserJet Printer compatible with 25,000 existing IBM PC/XT/AT programs without complicated strings of commands. (available in US only)

Ease of ordering products

For fast ordering, you may find DMK's direct phone order service extremely helpful. In the US, telemarketing consultants stand by to accept customer calls any weekday between 9 a.m. and 5 p.m. in all time zones. Availability and price are confirmed on the spot and the shipment sent on its way within 24 hours or less (usually the same day if calls are placed before 1 p.m.). Orders can be placed against HP direct open accounts or charged to VISA, MasterCard, or American Express credit cards. And, there are no charges for surface delivery – HP picks up the tab. Special fast-order direct phone lines for computer supplies also are available in many countries outside the US. See listing at end of section.

Requesting the Computer Users Catalog

To request a free copy of the *Computer Users Catalog*, you should call HP

at the Direct Order phone numbers, or contact your local HP sales office. The Summer 1986 edition is available to North American customers only. The most current edition is available to international users until the new international English language version and translated versions are published next month.

Users who wish to receive future catalog editions should fill out and mail back the request card in the catalog.

Supplies

CAD STATION GIVES MORE ROOM WITHOUT TAKING UP MORE SPACE

Give your HP 9000 Series 300/500 customers the convenience of a large work area in a compact package with Direct Marketing Division's (DMK) new CAD mini-workstation.

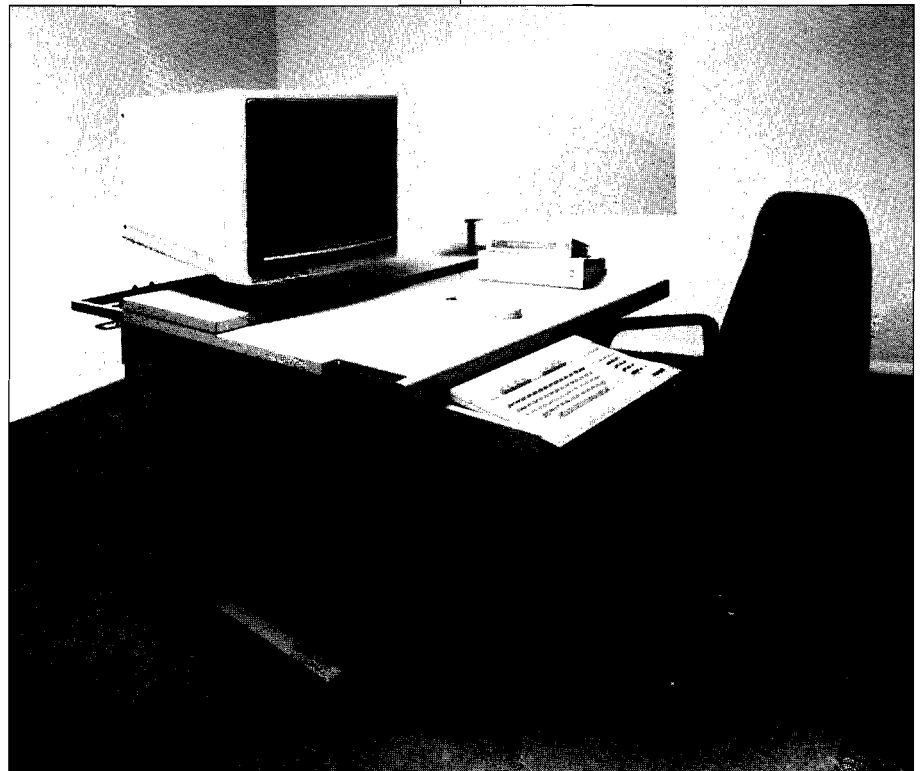
Catalog ordering information

Product No.	Catalog
5953-2450	International edition (English language)
5953-2450(C)	Canadian edition
5953-2450(FR)	French language edition
5953-2450(GE)	German language edition
5953-2450(UK)	UK edition
5953-2450(D)	US edition

MicroManager™ is a trademark of MicroComputer Accessories, Inc.

Check the following outstanding features:

- Raised 14.25 inch (362mm) wide monitor platform.



Pull-out work surface – extends from 28 inches (711mm) to a full 36-inch (914mm) depth.

- Cable pass through in main work surface top for HP-HIL and graphics table devices.
- Pull-out keyboard drawer for easy data entry.
- Keyboard drawer unit slides from left to right for optimum location.
- **HP Design Plus** style to match system cabinets.
- Matching "C" size document holder available (PIN 92213D).

When a Series 3001500 system is installed in a 92211L/M mobile support cabinet, it will roll easily under the CAD table. If a 92211R mobile mini-rack is used, it will roll next to the CAD table and match the height of the main work surface. CAD table dimensions: 29.5-inch (749mm) H monitor platform, 28.4-inch (720mm) H main work surface × 28.0 inches (711mm) D extended to 36.0 inches (914mm) D × 44 inches (1125mm) W. Color is dove gray top with French gray sides and oak wood trim.

Save even more space with the new "C" size document holder. It has been specifically designed to mount in the top surface portion of the 92213B CAD workstation table. The document holder features height and tilt adjustment and is attached to a two-section arm for easy positioning. Dimensions for the document holder are: 20.0 inches (508mm) H × 30.0 inches (762mm) W. Mounting arm extends from 13.0 inches (330mm) to 22.25 inches (565mm). Color is dove gray.

Product No.	Description
92213B	CAD Mini-workstation
92213D	"C" size document holder

For fast service and easy ordering, users should call DMK's direct order phone number listed at the end of this section.

Supplies

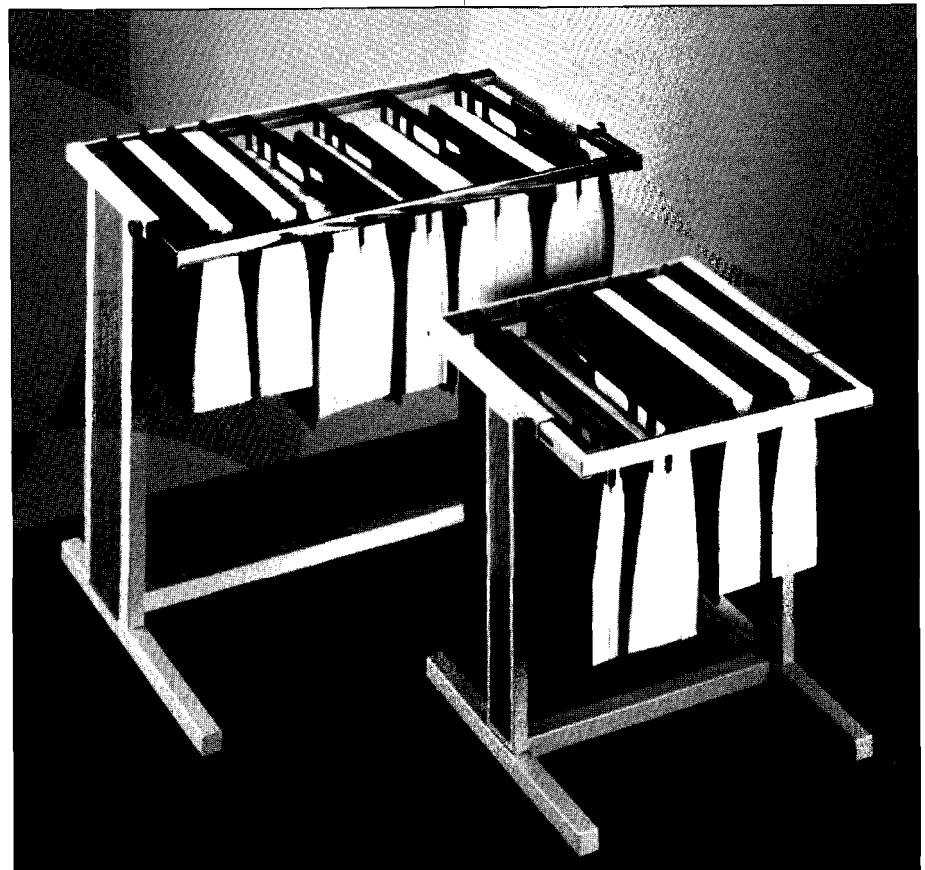
NEW MOBILE FILES STORE DATA BINDERS OUT OF SIGHT

With the new mobile file units from Direct Marketing Division, users can now store data binders and other hanging file material in a convenient corner or under a desk, rolling them out only when needed. Smooth-gliding casters make it easy to move files from one area to another, or share information with coworkers. These drop-filing systems use HP data binders (PIN 92174A-K) with or without data binder handles (PIN 92272K/L), and other files such as the 94194Q media hanging file. The mobile files come in two sizes – compact, with 13½ inches of horizontal filing capacity and large, with 24 inches of horizontal filing space. For fast service, users can order cream gray files

using DMK's direct order phone numbers listed at the end of this section.

Product No.	Description
92272N	Compact mobile file unit 18.8"H x 16.5"L x 14.8"D (476 x 419 x 375 mm)
92272M	Large mobile file unit 24 H x 27"L x 20 D (610 x 686 x 508 mm)

For these and other workstation accessories, see the new summer 1986 *Computer Users Catalog*, (PIN 5953-2450D).



DMK direct order phone numbers

DMK Fast Phones — the easy, direct way for you to order supplies, accessories, media, furniture, and software from Direct Marketing Division.

Location	Telephone Number
Australia	(03) 895-2645 (03) 895-2615 (03) 895-2815 (03) 895-2861
Austria	(0222) 2500-615 (0222) 2500-616
Belgium/Luxembourg	(02) 761 31 11
Canada	
Toronto Local	416-671-8383
Ontario	1-800-387-3417
Quebec	1-800-387-3417
British Columbia	112-800-387-3154
Other Provinces	1-800-387-3154
Denmark	(02) 816640, ext. 258
Finland	(90) 887 2361
France	(1) 69 28 32 64
Greece	(01) 6726090
Italy	(02) 92369702
Japan	
Sagamihara	0427 59 1311
Osaka	06 304 6021
Middle East	
Athens	(01) 6828811
Norway	(02) 24 60 90
South Africa	
Johannesburg	(011) 8025111
Cape Town	(021) 537954
Spain	(91) 6374013 (91) 6370011
Sweden	(08) 7502400
Switzerland	(057) 31 22 53 (057) 31 22 54 (057) 31 22 59
The Netherlands	(020) 547 6606
United Kingdom	(0734) 697201
United States	800-538-8787
Alaska, California, and Hawaii	408-738-4133
West Germany	(0130) 3322

SOFTWARE PACKAGES

AVAILABLE AND WANTED

If you have a software package available for cross-licensing, or are looking for a package to cross-license, this section will help you. Your entry will appear for two months; the most recent additions are shaded. To list your company in the Cross-Licensing Classifieds (at no charge), see the address at the end of this section.

Software Packages Available

Industry: *Electronic music publishing*

Abstract: OBERON SYSTEM II (Oberon Music Systems) is an HP 1000-based system which performs computerized sheet music typesetting and laser printing. The company's custom software allows for user modification, and design and development of additional *musical font* characters. The *fonts* themselves are currently open for licensing; the *software* is being tested for migration to HP Vectra PC prior to release

Contact Person: Music System Marketing Department

Type of Distributor Wanted: Computer-aided publishing (CAP) distributors

Geographic Coverage: Worldwide

Industry: *Order Processing/Distribution*

Abstract: OBERON SYSTEM I is a completely integrated, on-line, menu-driven order processing and distribution system, with features including automatic G/L posting; multiple site "ship-to" address for order release; order status at the item level; order release by item, order, or custom combination; alternate sourcing of items released for shipping; reservation/allocation processing; electronic message routing to designated operators; automatic order number assignment and printing of bills of lading and packing slips; automatically generated printed tags for physical inventory processing; task suspension; screen printing on command; provision for manual addition of freight and miscellaneous charges; custom sorting and printing of reports; and completely automated "Help" documentation. OBERON SYSTEM I is currently operating on HP 1000 A-Series.

Contact Person: Marketing director

Type of Distributor Wanted: HP 1000 or other mainframe supplier capable of integrating/interfaces systems.

Geographic Coverage: North America

Company Name: OBERON SYSTEMS, INC.

Address: 3815 W. Burbank Blvd.
Burbank, CA 91505

Phone: (818) 954-9591

Industry: *Computer-aided design (CAD) with AutoCAD®*

Abstract: AutoCAD is the leading CAD package in the world, with 60 percent of the **marketshare** for micro-based CAD users. Applications include Mechanical, Electronic, and Architectural design. AutoCAD runs superbly on the HP Vectra PC, supporting HP's newly announced Enhanced Graphics Adapter (PIN 45983A) and HP's Enhanced Graphics Display (PIN 35743A). Output is handled by HP LaserJet printers and/or the HP line of highquality plotters. AutoCAD is available to Fortune 1000 companies through our National Accounts Discount Program, or **direct to design/drafting** persons of smaller companies.

Company Name: AVCOM Corporation

Address: 101 First Street, Suite 172
Los Altos, CA 94022
USA

Phone: 415-326-8686

Contact Person: Bradley S. Bishop

Type of Distributor Wanted: National accounts representatives

Geographic Coverage: United States

Industry: *Distribution*

Abstract: MCBA's Distribution System is a field-proven, quality-assured, complete set of packages written in COBOL II with IMAGE for the Hewlett-Packard 3000 family of computers. It is a highly adaptable multi-company system that is equally workable in the retailing, distribution, or service-oriented business environment. MCBA's Distribution System offers modularity, flexibility, ease of use, value for the user, and cost-effectiveness for the Software Installer.

Company Name: MCBA, Inc.

Address: 425 W Broadway
Glendale, CA 91204-1269
USA

Phone: 818-242-9600

Contact Person: MCBA sales representative

Type of Distributor Wanted: HP 3000 Series

Geographic Coverage: Worldwide

Industry: *Cross industry - Network management*

Abstract: MIMNAC is a totally integrated, distributed information system for microwave networks. Based on HP 1000, MIMNAC gives microwave network operators the tools to plan, implement, and operate a microwave service for today's and tomorrow's telecommunication needs. MIMNAC utilizes its own or customer-specified outstations. The MIMNAC system logs analog and digital alarms at microwave networks transmitter, receiver, and repeater. It is a network, grouping these alarms into related dockets for ease of operator handling. MIMNAC is a reliable telecontrol facilities-for remote switching.

Company Name: Bothma, Searle & Wilk (Telecoms) CC

Address: P.O. Box 365
Halfway House
1685
Republic of South Africa

Phone: (27) (11) 805-1843, **Telex:** (SA) 4-26824

Contact Person: Neville Searle or Deon Bothma

Type of Distributor Wanted: HP 1000 real-time system supplied integrator

Geographic Coverage: Worldwide

Industry: Cross industry - drafting

Abstract: CecileCAD is a powerful, low-cost, user-friendly 2D and 3D wire frame package that allows mechanical engineers, architects, facility planners, structural engineers, and civil engineers to create high quality professional drawings. It is linked to a database for municipal and planning applications. It also supports a drawing office manager, bill of materials to be used as a basis for MRP implementation, and special design programmes in the structural and civil fields. CecileCAD supports HP plotters and can be run on HP 9000 Series 200 and 300 microcomputers and on MS-DOS systems such as the HP Vectra PC. CecileCAD has a flat menu which may be accessed from the keyboard, mouse, or tablet, and includes many sophisticated functions such as: Macro, symbols, assembly, detailing, multiple scales, pattern manipulation, windowing, and a most powerful text and dimension editor.

Company Name: Allyson Lawless (Pty) Ltd

Address: P.O. Box 73285
FAIRLANDS
Johannesburg
2195
South Africa

Phone: (011) 476-4100

Contact Person: Dror Sery/Allyson Lawless

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

Industry: Cross industry - Terminal Emulation

Abstract: Complete text and graphics terminal emulation for the HP Series 9000 workstations. Contact Optimization address listed below for a list of emulators and their availability.

Company Name: OPTIMATION, INC

Address: Suite 120, 299 California Ave.
Palo Alto, CA 94306-1912
USA

Phone: 415-326-1824

Contact Person: Marlen Clough

Type of Distributor Wanted: Leading third-party ISV or OEM

Geographic Coverage: Worldwide outside North America

Industry: Pharmacy operations

Abstract: Rx Databank is a patient profile pharmacy computing system, devised by pharmacists and written by Computer Solutions, Inc. to run on the HP 3000. Designed to eliminate excess paperwork, Rx provides easy access to patient, doctor, drug, and Rx data with various report options. The highlights include:

- Automatic drug price updates
- Generic cross reference for drugs
- A patient consultation subsystem
- Fully-integrated drug-to-drug interaction checking
- Optional use of abbreviated directions and Spanish directions
- Automatic third-party submission on magnetic tape
- Easy access to doctor and hospital data

Company Name: Computer Solutions, Inc.

Address: 397 Park Avenue
Orange, NJ 07050
USA

Phone: 201-672-6000

Contact Person: Tom McCarthy

Type of Distributor Wanted: Open

Geographic Coverage: Continental United States

Industry: Any Business Environment

Abstract: ACCULINK is a powerful and sophisticated data communications product which provides full file transfer capabilities and comprehensive terminal emulation of VT-102, VT-100, VT-52, ADM3A, Televideo 950-C, and IBM3101C terminals. Parity, baud rate, emulation selection, file transfer, printing, and many other options are selected with simple commands. Acculink is designed to meet today's growing business needs with flexibility, power, and reliability.

Company Name: IE Systems Inc.

Address: 112 Main Street
P.O. Box 359
Newmarket, NH 03857
USA

Phone: 603-659-5891

Contact Person: Laura J. Grasso

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

Industry: Chemical/Petrochemical

Abstract: PLANTDIAG is a powerful plant diagram generation system which runs under HP-UX on all HP 9000 systems (Series 200, 300, and 500). The system, which is menu driven, allows complex plant diagrams to be quickly generated on color graphics monitors. Plant diagrams may be plotted to any size (up to AO) and can also be stored and retrieved later for modification to allow for plant design changes. A wide range of HP graphics input and output devices are supported including digitizers, graphics tablets and mice etc.

Company Name: TQC Ltd

Address: Hooton Street
Carlton Road
Nottingham
NG3 2NJ
United Kingdom

Phone: (UK) 0602 503561

Contact Person: Kevin Lees

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

Industry: Transportation

Abstract: The International Transport and Trade Systems Consortium supplies leading software packages for companies involved in the international movement of goods. All systems run on HP 3000 computers and are based on international syntax rules for trade data interchange. Systems are available for freight forwarders, liner agents, shipping lines, container leasing companies, and exporters. A terminal planning and control system will also be available early 1987. The systems' employ a native language support feature which allows the system to function correctly for users from diverse countries using different languages. All Screen, Message and Help text is customizable without changing the application programs, via the use of message catalogues.

Company Name: Bonnier International Transport Systems AB

Address: Box 149
S-421 22
Vastra Frolunda
Sweden

Phone: (46) 31 299080

Contact Person: Peter Sherman

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

Industry: Software development

Abstract: C-77 is a software package to translate ANSI FORTRAN 77 programs to C language. C-77 performs the code translation automatically and extremely fast. The resulting C code runs up to 35 percent faster than the original FORTRAN code and takes about 30 - 40 percent less disc space.

C-77 supports ANSI X3.9-1978 FORTRAN 77 Full Language extended with the MIL-STD-1753 standard features and Hollerith constant. For example COMMON, DATA, EQUIVALENCE, and ENTRY statements are supported. C-77 is available for HP 500 and 300 Series running on HP-UX.

Company Name: Intrinsic Ltd

Address: P.O. Box 20
33721 Tampere
Finland

Phone: +358-31-171666

Contact Person: Mikael Holmstrom

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

Industry: Cross industry - Utility software

Abstract: GangNet is Local Area Networking software for HP's 9000 Series 2001300. With a dedicated interface and cable for each attached workstation, up to eight Pascal workstations are able to share single copies of drawings, symbol libraries, source code files, etc., via any combination of HP or Bering mass storage devices.

With GangNet you will reduce file and revision maintenance, regain valuable disc capacity by combining local hard disks with GangNet, and share programs and development tools.

Industry: Cross Industry - Utility software

Abstract: MoonUnit Alpha is software for the Pascal application developer whose product requires a color monitor driven by HP's 98627A (RGB) card. This interface card supports high quality color graphics displays, but normally requires a separate monitor for alphanumeric.

MoonUnit Alpha eliminates the need for dual monitors by providing for simultaneous text and graphics to be displayed on the color screen driven by the RGB card. The application software developer can use this capability to create mixed text and graphics screen formats as required, thus providing products which require only one monitor.

It is compatible with HP's Pascal workstation versions 2.0 through 3.1 and provides for fully transparent operations of the user's application software and operating system tools. The software utilizes the 512 x 390 pixel resolution output from the HP 98627A card in either US or European versions of RGB monitors.

Industry: Cross Industry - Utility software

Abstract: CopySelect is SRM tape archival software for HP's 2001300 Pascal Workstations. CopySelect allows for the Shared Resource Manager tape back-up unit to be used for single selected file operations instead of just disc image back-up as it is in the standard SRM. Required directory data as well as the designated files are selected and copied to or from the tape drive in the SRM mass storage subsystem.

Company Name: Endeavors Gmup, Inc.

Address: P.O. Box 2923
Tulsa, OK 74101
USA

Phone: 918-663-2758

Phone: Glen Reid, President

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

Industry: Cross industry

Abstract: PROLOG HP/9000 is a fast and comfortable Prolog language interpreter. The full range of the Clocksin and Mellish language definition is implemented with numerous extensions. PROLOG HP/9000 runs on HP Series 2001300 workstations under the Pascal workstation or the HP-UX operating system. A software interface to the operating system and to compiled external procedures is provided. The high level symbolic computation power of Prolog can therefore be combined with the efficiency of more traditional programming languages to create optimized applications. A low-cost demo version is available.

Company Name: Astrodienst Ziirich AG

Address: Scheuchzerstr. 19
8033 Ziirich
Switzerland

Phone: (01) 361 64 64

Contact Person: Dr. Alois Treindl

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

You can list your company in the **Cross-Licensing Classifieds** (either Software Packages Available or Software Packages Wanted) by sending the information in the format used here to:

Hewlett-Packard Company
Value Added Solutions Marketing
Attn: Marilyn Rauchle
10520 Ridgeview Court
Building 49C
Cupertino, CA 95014
USA

Entries will run for two months. The most recent additions are shaded. Be sure to send the information in at least one month before you wish it to appear.

H E W L E T T - P A C K A R D

HP CHANNELS

*Hewlett-Packard Company
Corporate Marketing Communications
3200 Hillview Avenue, Building 16L
Palo Alto, CA 94304-1298 USA*

ADDRESS CORRECTION REQUESTED
RETURN POSTAGE GUARANTEED
