Introducing a new family of HP 260 business computers

On the cover

HP CHANNELS

Introducing a new family of HP 260 business computers

The HP 260 family of business computer systems now includes two new members: the HP 260 Series 30 and Series 40. Their look is completely new and their design incorporates the latest innovative technologies. Both series offer PC integration and a smooth growth path to HP 3000 computers, as well as support for up to 15 active users. The Series 40 additionally features disc caching. See articles beginning on page 1.

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.

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Please address editorial correspondence to:

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HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

The HP 260's Commitment to its Value-Added System Suppliers

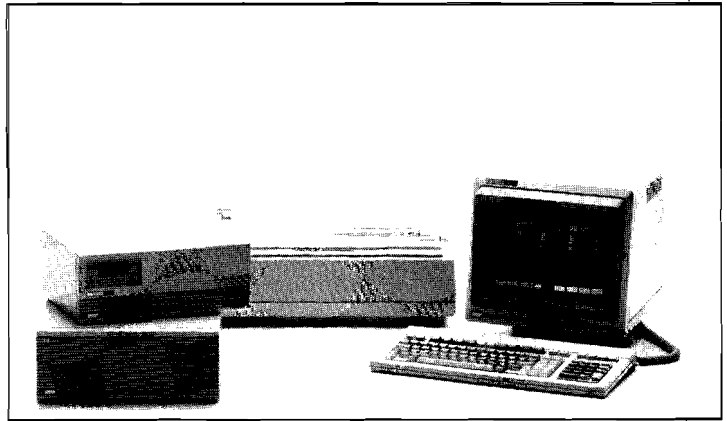*by Ottmar Schneider, HP 260 Marketing Manager*

Perhaps a more appropriate title for this article would be "Value-Added System Suppliers' Commitment to the HP 260." Since the introduction of the HP 250 system in 1978, many knowledgeable and enthusiastic system suppliers have guided its development. This input has taken the system from a single-user HP 250 system to today's 15-user HP 260 Series 40 featuring disc caching.

The first HP 250 was a maverick in the marketplace. Its unusual desk design won numerous awards for user ergonomics. To launch the HP 250 as an engine for application development, HP offered source-code programs for financial accounting, manufacturing, and order management, System suppliers customized these applications and developed their own to provide tailored vertical-market solutions. Based on their feedback, several enhancements were implemented over the years:

The box under the microfloppy drive is one of the newest members of the HP 260 family, the Series 30. It is HPS lowest-cost, multi-user system. By swapping the CPU board, u Series 30 achieves the power and capabilities of a Series 40, including disc caching.

the number of user/tasks increased, structured programming in the BASIC/250 language was allowed, system costs decreased, and office solutions were provided.

In 1985, the first HP 260 was introduced. Fully compatible with the HP 250, the HP 260 reconfirmed HP's commitment to the product line. With improvements in system design and manufacturing, as well as a new, lower-cost workstation concept, the HP 260 became more competitive in the entry-level marketplace.

The latest HP 260 systems, the Series 30 and Series 40, evolved in response to several market needs – the most important ones being a smooth growth path to HP 3000 systems, an answer to the PC challenge, and higher performance. Again, system suppliers played a significant role in how these new features are implemented.

Providing a link to the HP 3000 family while protecting the users' hardware and software investments became a strategic objective. A high level of compatibility was required to allow system suppliers to offer their solutions on both HP 260 and HP 3000 systems. With the availability of HP Business BASIC/V for the HP 3000 system, HP 2601250 applications can easily be ported to an
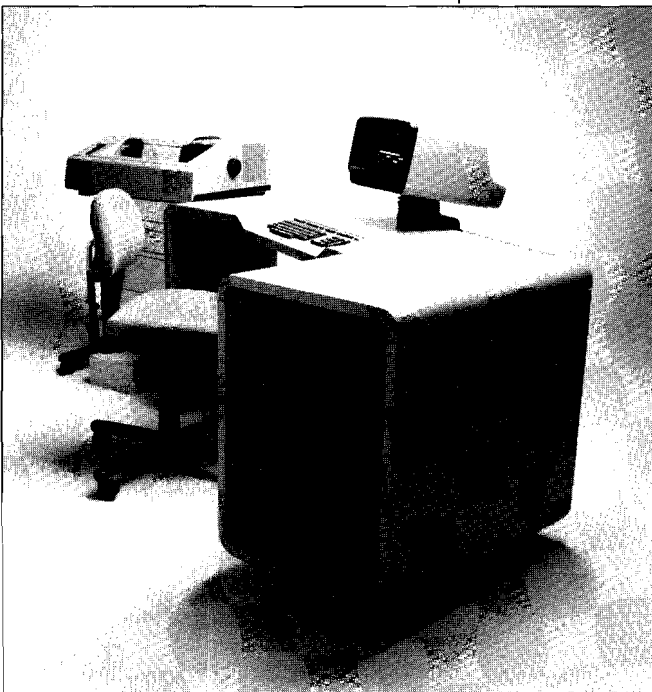
The original HP 250, billed as "a human-engineered small business computer," was designed to offer "the first-time user a self-contained computing facility with full database munugernent capability." (HP Journal, April 1979)

HP 3000. Additionally, common peripherals between HP 260 and low-end HP 3000 systems provide increased hardware compatibility.

Instead of trying to beat the PC challenge, we've joined it! The new B.08 Operating System allows HP and other popular personal computers to be used as fully-functional HP 260 workstations. System suppliers can now offer integrated solutions utilizing PCs and a powerful, database-oriented HP 260 system. End users enjoy all the benefits of personal computing while maintaining one-touch access to HP 260 applications.

Performance is no longer an issue with the HP 260 Series 40. This powerful computer utilizes disc caching and a fast central processing unit. For current HP 2601250 users needing a low-cost performance boost, HP 260/HP 250 PLUS performance upgrades are available. The Series 30, HP's lowest-cost, multiuser business computer system, can achieve the power and performance of a Series 40 by simply exchanging the CPU board.

We feel these new systems reaffin our commitment to HP 260 value-added system suppliers and the low-end, multiuser market. As Klaus-Dieter Laidig, general manager of HP's Boeblingen General Systems Division, states, "HP's continued investment in the HP 260 program is driven by the strategic importance of the small business market."

The success of the HP 260 program is the direct result of our value-added system suppliers' belief in the product and their willingness to work with HP in all phases of product development. We look forward to working with our system suppliers in the future to address the needs of small-businesses around the world.

General

1986 Commercial VAR Conference Scheduled for November

Commercial VARs should mark November 16, 17, and 18 on their calendars. These are the dates for the 1986 Commercial VAR Conference to be held at the Marriott Hotel in Santa Clara, California. Registration and a welcome reception will be held on Sunday evening with general sessions and workshops on Monday and Tuesday.

This year's conference promises to be the best yet. Sessions are planned to give commercial VARs information that can directly improve their day-to-day operations. They will be given details about Hewlett-Packard's product, marketing, and business plans. In addition, VARs will have an opportunity to communicate their ideas to HP management.

VARs will get an update of the latest HP technology at the Product Fair on Monday afternoon. They'll also have a chance to talk with HP product managers at a theme reception following the fair.

Commercial VARs will receive a formal invitation through the mail in September. For more information, contact your HP sales rep or Sandy Perry in HP's Business Systems Sector's value-added marketing group at 408-865-6460.

Small Business Computing

INTRODUCING THE HP 260 SERIES 30 AND 40

The new HP 260 Series 30 and Series 40 are fully compatible and designed with new VLSI technology. They are ideal systems for first-time computer users requiring a powerful data processing system. Both the Series 30 and Series 40 can support up to 15 active users.
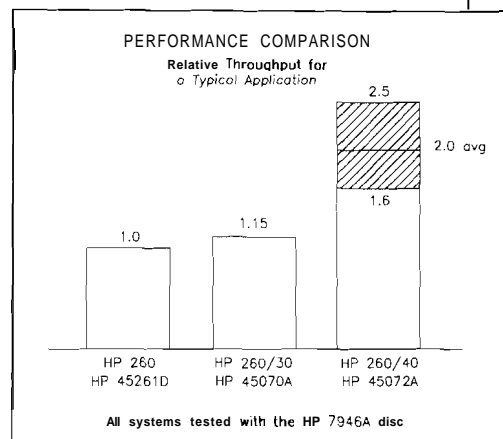
Although the Series 30 and Series 40 look the same, they offer important differences. The Series 30 is the entry-level HP 260 system that challenges the multi-user PC solution in price and functionality. It includes 512 Kbytes of main memory, two RS-232-C ports, an HP-IB channel, and system software (including the IMAGE1260 Data Base Management System). It is well-suited for price-sensitive users needing one to five workstations.

The Series 40 system is the high-performance model and features one Mbyte of system memory and disc caching as standard. Disc caching works to eliminate many of the time-consuming disc accesses that limit I/O and system throughput. The amount of performance improvement achieved with disc caching depends on the CPU-versus 110-intensive mix of an application. On average, the Series 40 is twice the speed of the previous HP 260 SPU (HP 45261D).

The hardware for the HP 260 Series 30 and 40 is completely new. All boards feature new designs to optimize performance, add functionality, improve user installability, and enhance system reliability There are no manual switches to complicate installation, and ASI ports run at a 19.2 K baud rate.

The HP 260 Series 30 and 40 support an optional I/O extender, allowing up to 20 I/O devices (workstations and serial peripherals) to be attached to either system. For a compact arrangement, the SPU, disc, tape, and I/O extender (or second disc) can be installed in a new, low-cost cabinet (HP 45065/6A) or in the popular Design PLUS mini-rack cabinet (HP 92211R).

If a user starts with a Series 30 SPU and needs more performance and power at a later date, only the CPU board needs to be changed. This upgrade is available as PIN HP 45072AH. Additional memory and I/O boards must be ordered separately.

PERFORMANCE COMPARISON
Relative Throughput for a Typical Application

	HP 260 HP 45261D	HP 260/30 HP 45070A	HP 260/40 HP 45072A
	1.0	1.15	2.5 / 2.0 avg / 1.6

All systems tested with the HP 7946A disc

Small Business Computing

A RANGE OF WORKSTATION CHOICES

With Operating System B.08, HP 260 users can choose from three types of workstations: the HP 45263D video workstation, the HP 2392A "HP 3000-standard" terminal, and HP or IBM PCs. Each type offers unique advantages.

The HP 45263D video workstation is the lowest-cost alternative. It offers fast screen display and the ability to build custom cables up to 100 meters in length. On the Series 30 and 40 systems, the HP 45263D can support a locally attached barcode reader.

The HP 2392A is a popular HP 3000 terminal which can now be used as an HP 260 workstation. A printer, barcode reader, or modem can be connected to the HP 2392A making it a practical and low-cost remote workstation choice. Current users of HP 250 and HP 260 systems running the new B.08 operating system can also use the HP 2392A workstation.

Popular HP and IBM personal computers can also be used as remote or local workstations. These include the HP 150 II (HP Touchscreen II), HP Vectra PC, HP Portable PLUS, and IBM PC, PC AT, and PC XT. Operating System B.08 provides support for several terminal emulator software packages that allow PCs to operate as fully functional HP 260 workstations with superior file-transfer capabilities. Users of the previous HP 260 system (HP 45261D SPU) can also use PCs as workstations.

Small Business Computing

USING PCS WITH THE HP 260

If you need to grow from one or two PCs into a real multi-user/multi-tasking environment, you should consider growing to the HP 260 family. PCs running the appropriate terminal emulator software can be used as HP 260 workstations while retaining all PC functionality. The table below shows which PCs can be used, as well as which terminal emulator software is required for workstation and file-transfer capabilities.

An HP 260 PC-workstation allows the user to run all personal applications like word processing, spreadsheet analysis, and graphics on the PC, while using the HP 260 system for shared application programs such as purchase

order control and inventory control. On HP PCs, PC and HP 260 applications can be accessed via P.A.M.

The PC-workstation can also be a powerful communications channel. The PC can act as a communications gateway to HP 3000 systems, IBM-compatible systems, HP AdvanceNet, other HP 260 systems, and public databases and information services. (Additional hardware and software for the PC may be required to access some networks.

PC support on the HP 260 is a function of the B.08 Operating System. It is also available for installed-base HP 260 users.

Personal computer	PC terminal emulator software	Product number
HP 150 II (HP Touchscreen II)	AdvanceLink*	HP 45431A
HP Vectra PC	AdvanceLink 2392	HP 68333F
HP Portable PLUS	REFLECTION I	HP 82863K
IBM PC/AT/XT	AdvanceLink 2392	HP 68333F

Required for file-transfer capabilities only

NEWLY SUPPORTED HP 260 PERIPHERALS

In addition to the HP 2392A and PC workstations described in previous articles, several other peripherals are now supported on HP 260 and HP 250 systems running Operating System B.08.

Support of the HP 9144A stand-alone tape drive now enables greater flexibility when selecting disc/tape drive combinations. The HP 2603A daisywheel printer offers letter-quality printouts. and the ColorPro plotter offers fast, high-quality graphics.

Newly supported data entry devices include the HP 92915A and HP 92916A barcode readers. The HP 92915A is for use with the HP 2392A workstation. The HP 92916A is for use with the HP 45263D video workstation, HP 150 II (HP Touchscreen II), or HP Vectra PC.

Additionally, the HP 2334A multi-MUX enables HP 260 Series 30 and Series 40 systems to access X.25 Packet Switching Networks. It is also supported as a multiplexer for remote workstations.

For more information about these peripherals, please consult the new HP 260 Configuration Guide (P/N 5954-6223) or product-specific information.

Small Business Computing

JOINING THE HP 3000 FAMILY

The HP 260 family now offers a secure, long-term growth path. With the Join13000 program, HP 260 systems will have unlimited growth potential through HP 3000 systems.

Join13000 consists of a set of products and programs, including versatile conversion tools, to help provide an easy HP 260 to HP 3000 migration path.

The Phase II release of the HP Business BASIC/V language, scheduled for the November UB Delta 1 MIT release. will provide HP 260 applications with 90 percent or greater compatibility when ported to an HP 3000 system. The end user will experience little or no change in the use of the application on the HP 3000.

Keep watching for more details about the Join/3000 program in November when all parts of the program will be in place.

PERFORMANCE UPGRADES FOR THE INSTALLED BASE

For current HP 260 and HP 250 users who need a low-cost performance boost, the HP 250 PLUS or HP 260 PLUS performance upgrade kit is the solution. The PLUS upgrade kit delivers the performance level of the new HP 260 Series 40 to users of the HP 45260A (HP 250) and 45261D (HP 260) SPUs.

The HP 250 PLUS or HP 260 PLUS performance upgrade consists of OS B.08 and a new CPU board containing one megabyte of high-speed RAM memory and a faster processor. This fully integrated CPU board replaces the old CPU board, the block switch board, and all 64- and 128-Kbyte memory boards installed in the system.

The PLUS upgrade is the best upgrade alternative for today's HP 250 and 260 users needing to add more users and additional applications. With the PLUS upgrade, there are no changes in the user or system management environment and no disruptions to the work flow. For a very small investment, system performance typically can be doubled.

The PLUS upgrade can be ordered as P/N HP 45261AH.

Additionally. memory boards for HP 45260A and HP 45261D SPUs have been reduced in price.

NEW DATA COMMUNICATION SOFTWARE FOR THE HP 260

The HP 260's data communication features now include a new product. The Asynchronous Program Development (APD/260) package is available with the B.08 release of the HP 260 Operating System. APD/260 provides the following advanced data communication features:

■ APD/260 enables all the features of TIO-II. (TIO-II permits an HP 260 to communicate with any RS-232-ClV.24 device or system, regardless of the communications protocol used by that device.) APD/260 will replace the current TIO-II package.

■ APD/260 allows you to program using new Inter-Process Communication statements. These straightforward statements utilize HP's implementation of the XMODEM protocol to transfer data, commands, and files between the HP 260 and another remote computer.

APD/260 is supplied with documentation to explain the features of these powerful programming tools. Product HP 45209A is available with unlimited right to copy and is supplied on tape cartridge. APD/260 is aimed at experienced programmers and Value-Added System Suppliers.

NEW HP 260 ORDERING INFORMATION

Below is an abridged list of new HP 260 products. For complete information about new products and product options, please refer to the new HP 260 Configuration Guide (PIN 5954-6223).

Orders for North America can still be placed with Personal Computer Distribution Operation (PCDO) in Sunnyvale, California. All other orders can be placed with Boeblingen General Systems Division (BGD) in Boeblingen, West Germany.

| Product No.	Description
HP 45070A	HP 260 Series 30 SPU. includes 512 Kbytes of memory, two RS-232-C ports, HP-IB port, system software, power cord, and standard manual set
HP 45072A	HP 260 Series 40 SPU, includes disc caching, 1 Mbyte of memory, HP-IB port. system software, power cord. and standard manual set
HP 45261AH	HP 250/HP 260 PLUS Performance Upgrade. Includes 1 Mbyte memory, B.08 operating system and user documentation
HP 45008A	512-Kbyte memory board
HP 45009A	512-Kbyte add-on memory module
HP 45127A	ASI interface
HP 45128A	Video MUX interface
HP 45129A	INP board
HP 45071A	I/O extender, includes power cord and installation
HP 45065A	System cabinet, 100-120V operation, US/Canadian power cord
HP 45066A	System cabinet, 220-240V operation, European power cord

Small Business Computing

NEW HP 260 SALES TOOLS

In conjunction with the introduction of the HP 260 Series 30 and Series 40, a new set of sales tools has been created.

A full-color flyer entitled *HP 260 Solutions: Combining Technology With Industry Expertise* can be used to generate leads through direct mailings or as a trade-show give away. The flyer is available in English (US and European versions), Italian, Spanish, Swedish, Norwegian, German, French, and Finnish (PIN 5954-6211)
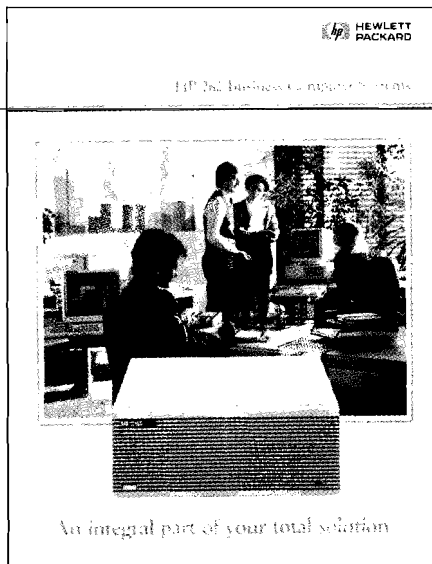
The 12-page, full-color management brochure entitled *HP 260 Business Computer Systems, an integral part of your total solution* can be ordered using PIN 5954-6210. The brochure outlines features and benefits of the new systems and highlights the special relationship between HP and value-added system suppliers. As a follow-up piece to the flyer or as the first information given to a user, the brochure is available in English (US and European versions), Italian, Spanish, Norwegian, Danish, German, Dutch, French, and Finnish.

A new System Overview (PIN 5954-6213) will be available by mid-September. This eight-panel, full-color brochure gives more information about the new HP 260 family and has pictures and short descriptions of all supported peripherals. It is designed to be used as a follow-up piece to the management brochure and will be available in English, Italian, Danish, Swedish, German, and Finnish.

To round out the sales literature targeted toward end users, all current HP 260 data sheets have been updated and three new ones created. The data sheets are for users requiring more indepth information about a specific part of the system, such as the SPUs, IMAGE/260, and data communication or office support software. The data sheets can be ordered according to the following part numbers:

P/N	Product
5954-6218	Series 30140 SPUs (new)
5954-6219	Performance Upgrades (new)
5954-6220	APD/260 (new)
5954-6227	NETWORK1260
5954-6228	QUERY1260
5954-6229	TEXT1250
5954-6230	DSG/260
5954-6231	REPORT WRITER/260
5954-6332	GPL/260
5954-6233	DSN/INP/DS/RJE
5954-6234	IMAGE/260
5954-6235	SLIDE/260
5954-6236	HP 45263D Workstation

Two additional sources of information are available: a new HP 260 Sales Training Manual (PIN 5954-6224) describes features, upgrades, product positioning, and performance gains; and the new HP 260 Configuration Guide (PIN 5954-6223) that is organized in the same easy-to-follow, step-by-step method as the last configuration guide. Contact your HP sales rep to get your own copies.

HP 3000

MORE PRODUCTS LINKING TO HP SYSTEM DICTIONARY

In the months since HP System Dictionary's introduction last February, both HP and independent software vendors have been busy implementing links to HP's new standard data dictionary. This article is an update on their progress. Readers unfamiliar with System Dictionary should refer to the *HP Channels* articles in the March (page 14) and May (page 4) issues.

Cognos

Jim Sinclair, manager of HP development for Cognos, reports:

"Cognos now has a project well under way to integrate System Dictionary with PowerHouse. We will be providing a System Dictionary interface with:

A high-speed directory generator which extracts subsets of System Dictionary definitions and creates a QDD dictionary.

■ A Powerhouse Extension Set to System Dictionary to fully support Power-House definitions.

■ A conversion utility to convert QDDR-maintained Dictionary13000 dictionaries to the PowerHouse extended System Dictionary.

"Cognos is committed to supporting products such as System Dictionary from Hewlett-Packard, and will continue to work with our customer base to allow PowerHouse to integrate with the evolving HP environment."

Protos Software

Gary Simmons, vice president of Protos Software, reports that Protos is moving ahead with its plans to provide links to System Dictionary.

Larry VanSickle, president of Protos Software, adds, "System Dictionary [SD] is a significant advance over previous dictionary products. In linking PROTOS to SD we found that SD's intrinsics were easy to use and understand. . . SD is a significant contribution to programmer productivity on the HP 3000.

Productive Software Systems

Productive Software systems also has plans to link its ROBOT/3000 product with System Dictionary. Roger Olson, chief executive officer of Productive Software Systems adds, "I am a real believer in the use of data dictionaries to control the software environment. I am very excited about the System Dictionary intrinsic level interface and am planning to link ROBOT13000 with System Dictionary as well as writing other products that will work with System Dictionary."

InfoCentre

Ray Ouellette of InfoCentre reports. "In order to make optimal use of the [System Dictionary] SD features, our direction is to integrate SD to the SPEEDWARE product line in a very close and transparent manner. We believe that this philosophy of fully integrating SD into the SPEEDWARE development cycle meets the fundamental objectives that System Dictionary sets out to fulfill, and that a simple interface mechanism would fall short of the high standards set by these two fine products."

IMACS

David Dummer of IMACS, describing his current plans to link Data-Express, DataExpressPlus, and Report-Express to System Dictionary, reports, "The new interface to System Dictionary will initially use database and file definitions with the ability of the system administrator to set up user profiles that range from allowing unlimited access to allowing access to a specific domain and scope. When Inform groups are added, they will, of course, be supported together with the inform gmup security controlling the DataExpress user. The intent of this interface, as with the current ones, is to make sure that a system administrator can both control and aid the end user through the user-profile facility and that the dictionary information can be presented to that end user in as friendly and meaningful a manner as possible."

In discussing longer-range plans, David Dummer adds that IMACS "anticipates announcing products that aid the data administrator's role early in 1987."

HP 3000

IMPORTANT UPDATE ON BUSINESS REPORT WRITER SUPPORT

Users supporting Report Facility will soon receive a complementary copy of HP's latest report writing software – Business Report Writer (BRW). Users will see the increased flexibility and performance available with BRW. In addition, they will notice that BRW can be used to write standard reports for both of the following types of software: (1) any application that uses Dictionary 3000, and (2) all Financial Accounting applications.

All users on software support that choose to implement BRW *must* add BRW support to their contract. This ensures that the user continues to receive software support for *all* of the software running on their system. The following support products are required:

▪ *Software Materials Subscription (SMS) or Extended SMS* on BRW. This service provides users with the latest software, documentation, and periodicals to keep current on BRW.

▪ *Category Support or Extended Category Support for the Productivity Tool Category.* These support products extend the level of support selected on the operating system to all software in the Productivity Tools Category. Category support is required if (1) the user has AMS or RCS level support on the operating system, and (2) the user does not currently have Productivity Tools Category support.

Specific support product number information for BRW is provided below

Support Product No.	Description
Central System Support	
36070A **+**S00	▪ SMS – **BRW**
990828+C00	▪ Category Support – Productivity Tools Category
Additional System Support	
36070A**+**WOO	▪ Extended SMS – **BRW**
990828 + V00	• Extended Category Support – Productivity Tools Category

General

**Technical Value Added
Business Conference
September 17-19, 1986**

Hewlett-Packard is pleased to present "Winning Together," the Technical Value-Added Business Conference at the Red Lion Inn in San Jose, California.

Join the valuable Product and Program Workshops, Product Fair, and HP executive-level information-packed General Sessions.

Register now, if you haven't done so already, by contacting the HP Program Management Office, Travel Incentives, Inc. at 408-973-0373.

HP 1000

DATAPAIR/1000 SHIPS – NEW DISCS SUPPORTED

In the beginning of August, Datapair/1000 (PIN 92050A/R) began shipping. Because Datapair provides increased system reliability by duplicating disc data, demand has been strong from users having applications in manufacturing, laboratory automation, and telecommunications. The common need

is to ensure that valuable production data is not lost due to disc failure. We have received Datapair orders for manufacturing applications in process control, batch, and discrete production facilities.

Datapair now supports two MAC family discs – HP 7920M and HP 7925M – interfaced via HP-IB and the 12745D HP-IB adaptor kit. Please note that the MAC family disc must be paired together and cannot be paired with a CS/80 or SS/80 family disc. Datapair also supports the CS/80 and SS/80 discs.

For further information on Datapair/1000, please contact your HP sales rep.

HP 1000

HP 1000 A900 MEMORY PRICES REDUCED

Effective September 1, 1986, prices for HP 1000 A-Series error-correcting memory products (PIN 12220A and 12221A) are being reduced. These reductions follow substantial decreases in the cost of materials and similar pricing moves by HP 1000 competitors.

Keep in mind that having enough memory to avoid excessive swapping to disc in large applications will help you realize full A900 performance potential. Buying more memory in such cases can be very cost effective.

Correction

In the July issue of HP *Channels,* in the article entitled "HP 1000 Product Discontinuance" (page 10), there is an error in the obsolescence information. The HP 9415A will be removed from the HP Price List and obsoleted as of September 1, 1986, not July 1, 1987, as printed.

HP 9000

HP INTRODUCES THE HP 9000 MODEL 320SRX

If you think you have to wait years to have interactive response and sophisticated 3D images on a workstation that's truly affordable, well, the waiting stops now.

The new HP 9000 Model 320SRX solids-rendering workstation is here. It delivers interactive performance plus features like rational, non-uniform B-splines; fast hidden surface removal; and advanced illumination techniques together with applications from known leaders in solids modeling.

This new workstation extends HP's graphics capabilities and provides affordable power for computer-aided-design (CAD) applications that require high-performance graphics, realistic rendering, and interactive design. The new workstation will be used primarily for mechanical engineering CAD and 3D solids. Many other applications that require high-performance graphics such as molecular modeling and high-end architectural and engineering construction markets will also find the HP Model 320SRX attractive.

To allow truly interactive rendering of solid objects, bottlenecks in the traditional graphics pipeline had to be eliminated. These bottlenecks were analyzed and critical functions were identified then implemented in hardware and microcode. Custom VLSI chips were developed and used in the four stages of the pipelined graphics architecture.

The Model 320SRX is a bundled workstation system that includes: Model 320 32-bit SPU with I/O expander, 4 Mbytes RAM, high-speed HP-IB, DMA, LAN, display station with 1280 x 1024 (60Hz noninterlaced)

monitor, transform engine/scan converter, and eight planes of frame buffer memory plus four overlay planes, and the HP-UX operating system with graphics libraries. The user also has the option to add more frame buffer cards to provide 16, 24, or 32 planes of graphics memory. 32 planes of graphics memory allows the display of sixteen-million colors, simultaneously, for shading of complex objects as well as full Z-buffer hidden surface removal.

The components of this system will also be available to allow current Model 320 users to upgrade. The Display Controller (HP 98720A) and HP-UX (HP 98720A Opt. 022) can be added to an existing Model 320. *Note: HP 98720 Opt. 022 (HP-UX) must be used with the 98720A.* A graphics accelerator (HP 98720A Opt. 721), eight planes of additional memory (HP 98720A Opt. 722), and a power supply (HP 98720A Opt. 723) can be added to the Display Controller for increased power and memory.

HP 9000

ARPA/BERKELEY NETWORKING AVAILABLE ON HP 9000 SERIES 800

Hewlett-Packard's 50980A/R ARPA Services1800 networking product is being introduced on the September 1 HP Price List. This product provides the Advanced Research Projects Agency (ARPA) and Berkeley 4.2 UNIX™ networking services for the HP 9000 Series 800 Model 840 on the Ethernet local area network.

The ARPA services (FTP, TELNET, and SMTP) and the Berkeley services (rcp, rlogin, rexec, remsh, and send-mail) provide *de facto* industry-standard

communications between the Series 800 and other systems supporting these services. At first release, ARPA Services1 800 will be HP certified for communication with DEC VAX/VMS computers running Wollongong's WIN/VX, DEC VAX BSD 4.2 computers, Sun workstations, and IBM PC AT and HP Vectra PC running Network Research Corporation's FUSION FNS-PC-TCP.

The 50980A/R ARPA Services1800 must be purchased with the 98194A LAN/9000 Link.

UNIX is a trademark of AT&T Bell Laboratories.

HP 9000

ARPA/BERKELEY NETWORKING SERVICES INCLUDED WITH HP 9000 SERIES 300 BUNDLES

Starting September 15, 1986, shipments of the HP 9000 Series 300 Model 320 bundled HP-UX systems (PIN 98582B, 98582L, 98583B, 98584A, 98585A, and 98586A) will include the 50952B NS-ARPA Services/300.

Prior to September 15, these systems were shipped with the 50952A product, which only includes HP's Network Services. The HP 50952B NS-ARPA Services1300 includes HP's Network Services and the *de facto* industry-standard ARPA/Berkeley networking services. See the July issue of HP *Channels* (page 12) for details on the 50952B. An upgrade program is in place for those users who received one of these Series 300 Model 320 systems without the 50952B NS-ARPA Services/300.

Contact your HP sales rep for more information.

HP 9000

NEW HIGH-RESOLUTION MONITORS AVAILABLE 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 will 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 60Hz 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 HP 98700A display controller that currently works 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. A new video board (HP 98544B) is required for the HP 98786. The new HP 987861 98544B pair is fully compatible with the former HP 98781/98544A pair, which will be taken off the price list February 1, 1987. These two pairs are *not* intercompatible 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 Sys-

tems. The price of the bundles will not change.

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

HP 9000

EXTEND HP EGS WITH ME SERIES 10

For existing HP EGS users that have a need to extend their ME CAD capabilities, HP is offering the HP DesignCenter ME Series 10. The ME Series 10 has already proven itself as a successful 2D design and drafting system tailored to meet the needs of mechanical engineers.

To provide our HP EGS users with a growth path in ME CAD, a promotional discount is being offered to existing HP EGS (PIN 98305A/R) users who would like to buy the ME Series 10. The user can decide to run the ME Series 10 on the same hardware as HP EGS, or buy a dedicated workstation. Only one low-priced ME Series 10 can be provided per HP EGS order.

The promotional program will only run until March 31, 1987.

HP 9000

FURTHER SUPPORT FOR HP 35401A ON HP 9000 SERIES 500

With the release of the new "AUTO-BKUP," software script users using an HP 9000 Series 500 with HP-UX 5.0, or a later release, can take full advantage of the HP 35401A tape drive's unattended backup facilities.

Before the release of AUTOBKUP, this combination of hardware and software required manual intervention to complete a backup of more than 67.1 Mbytes. The process required the user to respond to a host query as each cartridge was filled with data. The correct keyboard response would cause the tape drive to unload the cartridge tape it had just filled and then load another so that backup could continue.

However, AUTOBKUP provides a neat way to save users the inconvenience of waiting for each cartridge to be recorded by taking care of all responses automatically. As a result, the HP 35401A is now fully supported with completely unattended backup on these popular machines.

Copies of the AUTOBKUP script are currently available through HP's network of response centers.

HP 9000

THE KNOB IS BACK: NIMITZ KEYBOARD SUPPORTED ON HP 9000 SERIES 300

The 98203C Nimitz keyboard with the rotary knob (on HP 9000 Series 200 Model 216)

Back by popular demand is . . . the knob. On the September 1, 1986, HP Price List, the HP 98203C HIL Nimitz keyboard with the rotary knob will be supported on all HP 9000 Series 300 BASIC and Pascal systems, along with BASIC and Pascal on Models 217, 200, and 237 of the Series 200. HP-UX will not be supported. For users who

buy Model 310 bundles, there is a Delete Opt. 005 available on the August 1 HP Price List that deletes the ITF keyboard.

The same foreign language options that are available for the 98203B keyboard are offered for the HP 98203C HIL Nimitz keyboard. Below is a list of the keyboards and the upgrade option for the HP 98203C:

Product No.	Description
Opt. 001*	Field upgrade kit (Available for all language keyboards)
98203C	US ASCII keyboard
98203CF	French keyboard
98203CE	Spanish keyboard
98203CD	German keyboard
98203CJ	Katakana keyboard
98203CS	Swedish/Finnish keyboard

*Needed for SPU to support keyboard

New revisions of the operating systems available through Direct Marketing Division (DMK) will be needed to support this new keyboard. The new products will be BASIC 4.03 and Pascal Workstation 3.12. Users planning to move to HP-UX should be aware that the HP 98203C is *not* supported and that there are no plans to do so. For information on the HP 98203C, call your HP sales rep.

Orders for both hardware and software will be accepted beginning September 1.

Correction

In the August, 1986, issue of *HP Channels* (page 9) the article entitled "Muse for HP 9000 Series 500 Obsolescence" stated that Series 500 Alis/HP-UX would be shipping by the end of the summer. Series 500 Alis/HP-UX has since been removed from the HP Price List. Series 300 Alis/HP-UX is currently orderable and shipping.

General

ANNOUNCING A NEW RELEASE OF HP SLATE

The latest version of HP Slate (A.05.00) improves the range of terminals and printers that may be used with the product. Supported terminals are the HP 2390A, HP 2394A, and the HP 2397A, while on the printing side the popular HP 2686A LaserJet and the HP 2934A printers may be used for letter- and draft-quality documents.

HP Slate operates in new languages

This release also offers text entry and handling in Arabic and Hebrew languages. As long as the appropriate firmware is installed on HP 150B/ Touchscreen PC and HP 2622A terminals, users simply press a button to start working in the alternative language. Once created, documents may be printed on the HP LaserJet or HP 2934A printers with the appropriate font cartridges.

These non-Latin facilities are described in special new appendices that will be supplied with the HP Slate user manual, *Using* HP *Slate* (PIN 36576-90030). For more information, please contact your HP sales rep.

General

HP TELEX 11: ENHANCED NEW RELEASE

The latest release of HP Telex II (A.02.02) includes all available fixes for known problems. A number of en- hancements have also been added:

- *Character substitutions* – Illegal characters may now be mapped to mul- tiple characters. For example $ (which

is illegal) is now mapped to the word "dollar".

File equations for printers – Individ- ual file equations may be set up for spe- cific printers.

File handling – It is now possible to have the name of the file containing the telex included in the heading box of the HP Telex printout. Users may also edit copies of incoming telexes before trans- mitting them, by exiting from HP Telex and using the new TELCOPY UDC to copy the print file to their own group and account. They may then enter HP Telex and edit the file with HP Slate. In addition to these changes, the security of HP Telex print files has been tight- ened, so that all access other than read is restricted to the HP OFFICE account.

If you would like further details, please contact your HP sales rep.

General

FINANCIAL CALCULATOR, DELUXE VISICALC/150, AND EXECUDESK SYSTEM TO BE DISCONTINUED

On October 1, 1986, HP will discontinue distribution of Financial Calculator (PIN 45423A), Deluxe Visi- Calc®/150 (PIN 45405A), and the ExecuDesk System (PIN 45442A) for the Touchscreen PC.

The decision to discontinue Financial Calculator and Deluxe VisiCalc was based on lack of customer demand for these products.

The ExecuDesk System consists of ExecuDesk (with Financial Calculator included free), Executive MemoMaker, Executive Card Manager, Charting Gal- lery, and Deluxe VisiCalc®. Orders

have also been declining for the ExecuDesk System, since most Touch- screen users are now adding to their software collections with individual products rather than a package of sev- eral products.

Following standard HP policy, sup- port and media replacements for these products will available for five years beginning October 1, 1986.

Upgrade programs will be announced shortly for Lotus™ 1-2-3® and ExecuDesk (PIN 45444A) that will allow 1-2-3 (version 2.01) to execute under the ExecuDesk environment.

Lotus. 1-2-3, and VisiCalc are US registered trademarks of Lotus Development Corp.

Portable

THE BUSINESS CONSULTANT – A WHOLE NEW IDEA IN CALCULATORS

With the introduction of the Business Consultant Professional Calculator, Hewlett-Packard has introduced the world to a whole new way of calculating.
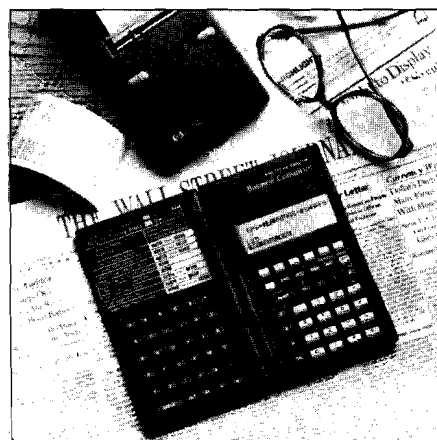
The Business Consultant calculator from Hewlett-Packard Company communicates with a new HP printer via an infrared light beam. The calculator, designed for business professionals, provides user-defined solutions without the need for programming.

The Business Consultant is ideal for business professionals like you who want answers fast – and who don't have time to learn special programming code. Softkeys and built-in menus make solving standard business problems a snap. And an exciting new formula solver customizes the calculator to your individual needs. Simply provide the Business Consultant with all but one of the values in a formula, and it solves for the unknown.

With the Business Consultant's revolutionary formula solver, you define problems specific to your work as regular equations – and then solve them in a flash. Using the formula solver, you can store your formulas in your Business Consultant, then calculate and recalculate with them using softkeys.

The Business Consultant solves your everyday business problems using its built-in functions for finance, summing and number lists, mathematics, general business. and statistics.

And with the Time and Appointments menu, you can instruct the Business Consultant to remind you of your appointments. Store up to six appointment reminders at one time. The Business Consultant beeps when pending reminders become due and even keeps track of reminders that are past due and haven't been acknowledged yet.

Its "clamshell" design houses two easy-to-use keyboards. The alphabetic keyboard is separate from the numeric keyboard, so it's easy to express your formulas in words. For instance: PROFIT = (PRICE – VARCOSTS) × UNITS – FIXED COSTS.

Hardware features of the Business Consultant include:

Innovative dual-keyboard format

▪ Three replaceable N-cell batteries

▪ 1.2 Kbytes of RAM

4-line by 23-character display

▪ 64-Kbyte ROM

▪ Infrared printer interface

The optional "Consultant Series" of application booklets provide solutions tailored to specific professional needs. Depending on the country you're in, booklets are available in areas such as marketing, manufacturing, personal investment, and more.

You can create permanent records of the information or analysis you're working with using the thermal printer that will be available in late 1986. This printer has a unique infrared interface that links it to the Business Consultant without a tangle of cords. It's powered by an optional AC adapter or four AA alkaline batteries for convenient portability.

Business Consultant localization information

The Business Consultant is available in several languages. The ROM, information label, and manual have been translated into French, Spanish, Italian, and German. Messages, prompts, and softkey labels also appear in these languages.

Business Consultant owner's manuals have been translated into Swedish, Danish, and Japanese, as well.

The translated owner's manuals and Business Consultants will be available in September.

The Consultant Series of application booklets will be developed in the US in English. Other countries will develop their own consultant series, patterned after the US version.

For more information, ask your sales rep for a Business Consultant Flyer (PIN 5954-1353D).

Product No.	Description
HP-18C	Business Consultant professional calculator

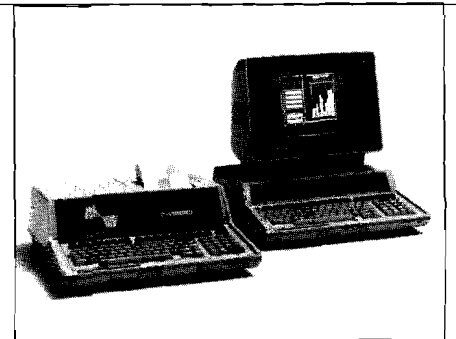## HP SERIES 80

PRODUCT

STREAMLINING

The HP Series 80 personal computers (HP-85B and HP-86B) have been a popular and successful product line for over six and a half years. During this time, many thousands of these powerful, yet friendly and easy-to-use systems have been installed worldwide. Their unique combination of powerful HP BASIC, flexible I/O, and convenient packaging has gained many enthusiastic and loyal customers. And the HP-85B and 86B continue to sell extremely well as the lowest-cost HP personal computers1 controllers.

The HP-85B and HP-86B continue to sell well as HP's entry-level technical computers.

Over the years, the Series 80 product line has accumulated a large number of hardware and software products, some of which have outlived their usefulness or intended purpose. In order to streamline the Series 80 product line – to keep it cost effective, make it less confusing and improve our ability to continue to offer Series 80 products to the market at competitive prices – we are planning to remove a number of these low-volume, outdated products from the HP Price List, effective November 1, 1986.

The products being discontinued have been carefully chosen in order to eliminate most of the low selling items without removing any products that are

important to the marketplaces in which Series 80 computers are currently being sold: the low-end measurement automation and technical computing sectors.

The products being removed from the price list in November include five European language versions of the HP-86B (Swedish, Norwegian/Danish, Finnish, Dutch, and Swiss-French), several plug-in enhancements and accessories, and a number of very low-selling software packages. All of these products will continue to receive full service and support for five years after they are removed from the market, in line with the Hewlett-Packard product support policy.

Hardware

The enhancements and accessories to be discontinued are:

Product No.	Description
82900A	CP/M[a] System
Opt. 001	Term/80 Terminal Emulation System
82929A	
Opt. 001	Hybrid ROM Development System
82950A	Series 80 Modem
82966A	Data Link Interface
82967A	Speech Synthesis Module
00087-15011	MIKSAM ROM

The CP/M system processor has outlived its usefulness, so it, and all CP/M software for Series 80, are being discontinued.

The Series 80 modem is no longer an important accessory. Users who require modem capability will be able to fill that need by use of an external modem connected via an RS-232 (serial) interface.

Software

Because of the ease-of-programming Series 80, and the fact that most Series 80 products are now being sold to OEMs, VEUs, or other technically oriented users who wish to develop their own specific application software, we find that there is little need for much of the currently available software. Approximately 47 different Series 80 software products are being removed from the price list. Eleven of these are CP/M software application packages. Most of the balance of the software products are vertical applications which no longer appeal to the current Series 80 marketplace. Others will still be available in multi-pac products, such as the Statistical Analysis, Electrical Engineering, and Personal Productivity multi-pacs, which will remain on the price list. Software updates, replacement manuals, and discs will be available from Direct Marketing Division (DMK) during the five-year support period.

It is unlikely that the items included in this discontinuance plan will be of importance to OEMs, VARs, etc. However, resellers of Series 80 products who do use the products should make sure that they have adequate stocks available to them. You may desire to make a last-time volume purchase of any items you need before the November 1, 1986 discontinuance date.

For a complete list of the products which will be discontinued this November, please contact the Corvallis Workstation Operation SalesCenter, 503-752-7717.

Series 80 still lives

It is important to know that the discontinuance of these low-volume products does not mean that the Series 80 is being discontinued. The Series 80 is still a very important and profitable product line for HP and will continue to be in the foreseeable future.

Please contact the HP Corvallis Workstation Operation SalesCenter at 503-752-7717 if you have any concerns or questions involving the discontinuance of these products.

Portable
HP-75 OBSOLETED

The HP-75D handheld computer is being obsoleted. The HP-75D and its companion product, the HP 82718A expansion pod, will be removed from the HP Price List effective November 1, 1986. There are no plans at this time to manufacture a replacement product for the HP-75; however, alternative products to the HP-75 are the HP-71B handheld computer and the Portable PLUS.

Products that will obsoleted include:

■ HP-75D and HP-75D Opt. 001

■ Localized versions of the HP-75 – HP-75DB, DH, DS, DZ, DD, DJ, DU, DF, DK, DU Opt. 001

■ HP 82718A expansion pod and HP 82718A Opt. 001

■ HP 82713A module simulator

Support life for the HP-75 is five years and will continue through October 1991. As usual, all accessory items will be available to support users who own HP-75s.

Please be sure to place your final orders soon. For more information, contact your HP sales rep.

Portable
128-KBYTE PORTABLE PLUS OBSOLESCENCE

Since its introduction in April, we have seen a tremendous response to the new, high-contrast display and the greater memory capacity of the new enhanced Portable PLUS (the average memory is now at more than 600 Kbytes).

Since the Portable PLUS is now offered in either 256-Kbyte or 512-Kbyte base memory configurations, as

of August 1, the 128-Kbyte version of the product with the grey screen (PIN 45711A or 45711B) will no longer be offered. These products will continue to be supported for five years.

The 256-Kbyte and 512-Kbyte versions of the product are orderable as follows:

Product No.	Description
45711D	Portable PLUS with 256 Kbytes memory; no modem
45711C	Portable PLUS with 256 Kbytes memory; 1200 bps modem
45711F	Portable PLUS with 512 Kbytes memory; no modem
45711E	Portable PLUS with 512 Kbytes memory; 1200 bps modem

Factory display and memory upgrades have been extended for the Portable PLUS until October 31 for existing 128-Kbyte Portable PLUS units. Please contact your HP sales rep for further information.
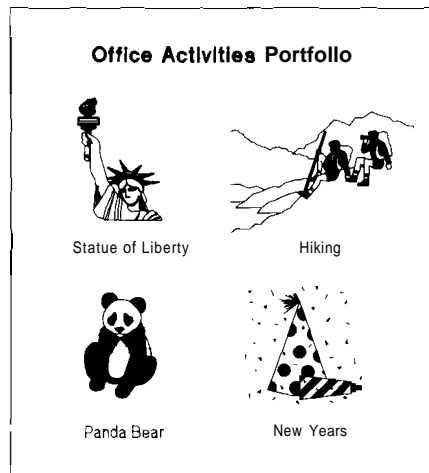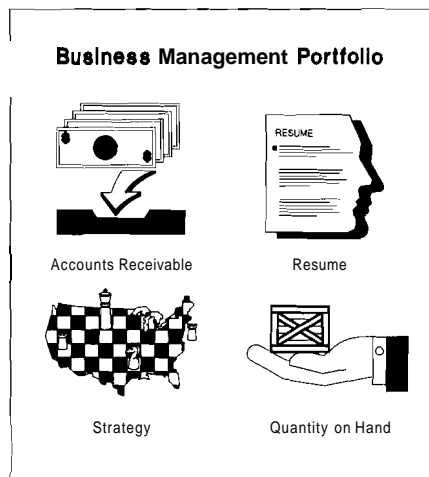
Desktop

GALLERY PORTFOLIOS NOW AVAILABLE

Over 500 new Gallery pictures now available

The Business Management Portfolio, tailored for the manager or business professional, is on the August 1 HP Price List. It includes pictures for business functions: facilities, finance, government, manufacturing, marketing, personnel, quality assurance, research and development, and sales; more general pictures such as pre-fab charts and forms, icons, OSHA symbols and maps of the individual US states, the US, and various countries and regions of the world are also included.

The Office Activities Portfolio, for the office end-user who produces more "social event" slides, includes illustra-

tions and icons for people, workers, office equipment, buildings, transportation, space, shapes, calendars, signs, letters, Script and Gothic fonts, and an office layout template set. For time spent away from the office, there are pictures of holidays and special days, seasons and weather, recreation, sports, plants, animals, and cartoons.

Business Management Portfolio

Accounts Receivable   Resume

Strategy   Quantity on Hand

Office Activities Portfolio

Statue of Liberty   Hiking

Panda Bear   New Years

Ordering information

Each Gallery Portfolio is available on 5¼-inch discs and 3½-inch discs. Make sure to specify the appropriate product number when ordering your Gallery Portfolio.

Gallery Portfolio	Vectra PC (5¼" disc)	Touchscreen PC (3½" disc)
Business Management Portfolio	68326F	45570A
Office Activities Portfolio	68324F	45568A

Benefits to the user

The Gallery Portfolios enable Graphics Gallery users to add professionalism and impact to their visuals. Choosing from a wide range of ready-made, professionally designed illustrations and icons, Gallery Portfolios enable you to enhance your drawings and present with more visual impact.

Some of these Portfolio pictures are shown above. More samples and product details are available in the data sheet (PIN 5954-7224).

You can now use the expertise of a graphics artist in every Drawing Gallery slide you create.

Desktop

MIGRATION TO DRAWING GALLERY MADE EASY

Now it's easier for HP Draw users to migrate to Drawing Gallery with the new guide: *For HP Draw Users: A Guide to Drawing Gallery.* This guide serves as a quick reference card to help the experienced HP Draw user quickly get up to speed with Drawing Gallery for the HP Vectra PC and IBM PC/XT/AT. It includes a general comparison of the two products along with a map of the Drawing Gallery screen and tips for getting started. This is followed by a pull-out dictionary that is organized by topic. Instructions on how to accomplish tasks in Drawing Gallery are included, along with notes to help users transition quickly.

With the introduction of HP Graphics Curator13000 last spring, for Figure GAL file conversion, graphics users can now use their many custom figures created using HP Draw with The

Graphics Gallery and Executive Memo-Maker. This guide makes the eventual transition from host-based graphics to PC-based graphics much easier.

Benefits Graphics Gallery provides for HP 3000 graphics users

- Eight times the performance of HP Draw.

- Picture compatibility with HP 3000 Figure files.

- Runs on any HP Vectra PC, HP Touchscreen PC, or IBM PC/XT/AT – doesn't impact host.

- Output quality matches or exceeds HP 3000-based products.

- Complete picture editing equals more flexibility.

- Direct integration with Lotus@1-2-3® and Symphony^B worksheets.

All of these advantages add up to an excellent graphics solution for users.

How to order

This guide will be mailed to all those on the HP Draw MUS as well as those on the PC Shared Services. It will also be sent to those users with HP Draw support service contracts. To receive additional copies, place an order with Direct Marketing Division (DMK) for PIN 5958-9626, at a cost of $5 (US list).
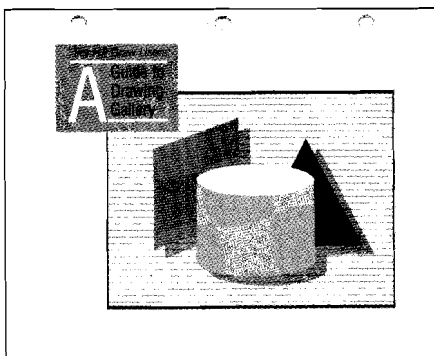
Lotus, 1-2-3, and Symphony are US registered trademarks of Lotus Development Corp.

Desktop

ENHANCED HP-IB COMMAND LIBRARY FOR HP VECTRA PC AND COMPATIBLES

On September 1, HP introduced the 82990A HP-IB Interface and Command Library and the 82990E Command Library (software only) for the HP Vectra PC, the IBM PC, PCIXT, PCIAT, and compatible personal computers. This product supersedes the 61062BA HP-IB Interface and Command Library.

The 82990A product consists of an HP-IB interface card for the HP Vectra PC and other IBM PC, PCIXT, and PC/AT compatible computers and software that allows the user to create HP-IB and PC Instrument control programs. The software also includes the HP-IB peripheral driver which provides support for HP-IB printers and plotters. The 82990E product does not include the HP-IB interface card, but does include all software and manuals.

The Command Library provides 26 commands that allow users to enter and output ASCII strings, real numbers, and arrays of real numbers, as well as directly access and control the HP-IB interface and its control lines.

New features

HP has added functionality to the previous release of the product by including support for Direct Memory Access (DMA) I/O operations and extending language support to include all four memory models of Lattice^m C. DMA I/O operations provide a performance increase in situations where

large, fixed amounts of data are being transferred. Additional language support for all memory models of Lattice C means that the user is no longer restricted to 64 Kbytes of data and 64 Kbytes of code space as in the previous release of the product.

The complete list of supported software is:

- Vectra BASIC

 MS®-Pascal

- MS®-QuickBASIC

- Lattice C
  (all four memory models)

- GW™-BASIC

 MS®-Compiled BASIC

- Microsoft® C

Disc/tape support

Concurrent with the release of the 82990A, HP is also introducing the 88500DT Command Library which provides support for the HP 9154A, 9134H, and 9134L disc drives and HP 9142 tape drives. This is a software-only version of the popular 88500A Disc/Tape Interface and Command Library.

Product upgrades

For those users who already own the previous version of the software that came with the 61062BA HP-IB Interface and Command Library, an upgrade part has been set up at Direct Marketing Division (DMK) that consists of the enhanced software and new manual. The part number of the upgrade is 82990-65001. Purchase of the upgrade

requires proof of ownership of the 61062BA product.

Product benchmarks

New benchmarks for the HP-IB Interface and Command Library are currently being run at Instrument Systems Lab and will be published in a future article.

Ordering information

Product No.	Description
82990A	HP-IB Interface and Command Library
82990E	HP-IB Command Library

Lattice is a US registered trademark of Lattice, Inc.

Desktop

UPGRADING FROM HP MESSAGE TO ADVANCEMAIL

With the introduction of Advance-Mail, HP now provides a superior electronic mail application linking HP Vectra PC, HP Touchscreen PC, and IBM PC users to HP DeskManager B.00.00. By allowing PC users to easily exchange messages and documents with HP DeskManager users, AdvanceMail enhances the integration of PCs into the Personal Productivity Center.

Users will find that AdvanceMail offers significant advantages over its forerunner, HP Message:

Unlike with HP Message, the AdvanceMail user does not have to be logged on to the HP 3000 to read and respond to mail. Functions associated with the In Tray, Out Tray, List Area, and Filing Cabinet in HP DeskManager can all be performed on the PC in a "stand-alone" mode. This means that the PC user can continue to take advantage of local processing power, thus off-loading resources from the HP 3000.

▪ Mail can be transferred between HP DeskManager and AdvanceMail at any time – either immediately, or at a convenient time via a batch mail session. Consequently, mail transfer can take place at a time when communication costs are lower (via modem or X.25).

AdvanceMail will eventually supersede HP Message as HP's PC-based electronic mail package. HP Message will be obsoleted in March 1987; it will continue to be available until then because it supports HP DeskManager A.03.01 as well as B.00.00. Advance-Mail supports only HP DeskManager B.00.00.

HP has put in place a favorable upgrade program for those users who want to continue their investment in PC mailing, but who also want to take advantage of AdvanceMail's benefits. Upgrades will be orderable from September 1 from the Parts Price List.

Product No.	Upgrade *kit*
27534-63007	HP Message to AdvanceMail upgrade for the HP Touchscreen PC
27534-65009	HP Message to AdvanceMail upgrade for the HP Vectra PC and IBM PC

Upgrades will be available with HP DeskManager B.00.00.

For more information about AdvanceMail or the upgrade program for HP Message customers, contact your HP sales rep.

Desktop

HP 9133H HARD DISC/ HP TOUCHSCREEN II PC PROMOTION EXTENDED

HP is pleased to extend the HP 9133H/HP Touchscreen II promotion for 30 more days. This worldwide promotion will reduce the price of the HP 9133H disc drive when ordered with the HP Touchscreen II personal computer. (See page 30 of the June issue of HP *Channels.)*

The purpose of this promotion is to keep HP competitive within the IBM PC market and position the HP Touchscreen II personal computer as HP's "lower-priced PC." In addition, HP hopes to competitively position the 20-Mbyte Touchscreen II configuration in Europe.

Optimized for the single user, the HP 20-Mbyte Winchester hard disc will provide Touchscreen II users an additional 4,900 pages of data storage. The HP 9133H will allow users to easily utilize such everyday applications as word processing, business graphics, and spreadsheets.
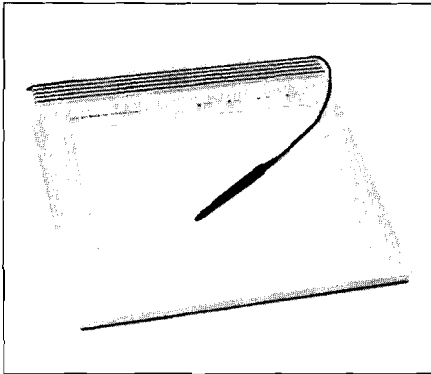
This promotion will end October 31, 1986.

For further information, please contact your HP sales rep.

General

HP 9111A GRAPHICS TABLET TO BE DISCONTINUED

The HP 9111A graphics tablet will be removed from the HP Price List on December 1, 1986. Connect rates for HP 9111A tablets are primarily on

HP 9816/26/36 computers, which do not support the new low-cost HIL tablets (HP 46087/88A). The HIL tablets are a better choice for many users because they offer most capabilities of the HP 9111A, but at a much lower cost. HIL tablets are supported by the HP 9000 Series 300 computers.

Support life for the HP 9111A tablet will be 10 years. There is no compatibility between the HP 9111A and HIL tablets. For more information, contact your HP sales rep.

Plotters

NEW LOW-COST HP DRAFTPRO PLOTTER FOR PERSONAL CAD SYSTEMS

On August 18, HP unveiled the HP DraftPro plotter, a new, low-cost, C/D-size drafting plotter, at the SIGGRAPH tradeshow in Dallas, Texas.

The PC-CAD market

When design systems emerged a few years ago, they were targeted at large companies where purchase price was of little concern. Recently, however, a renaissance has occurred in design engineering. Attracted by a low purchase price, designers have been turning to PC-based CAD systems in increasingly large numbers. And with 200,000 of these systems expected to be shipped through 1986, the future of the PC-CAD market looks great.
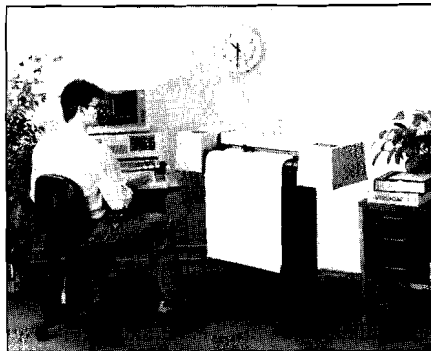
Two groups of users are surfacing: small, budget-limited departments within large firms, and small architectural and engineering-design firms. Pen plotters are popular with these PC-CAD systems because they offer users color and high line quality at reasonable prices.

Low price, high reliability

PC-CAD systems cost significantly less than their minicomputer counterparts (typically priced over $50,000). The low-priced HP DraftPro plotter is designed to go along with the low price tag of PC-based CAD. For under $15,000 (US list), users can have a professional CAD system – an HP Vectra PC, drafting software, and an HP DraftPro plotter.

Reliability at a low price is a key feature of the eight-pen HP DraftPro plotter. The product design incorporates plastic injection molding and VLSI electronics. This reduces the overall parts count and therefore the number of potential failure points resulting from continual daily use.

The HP DraftPro plotter comes with a 90-day, on-site warranty. In the US, the cost of an HP DraftPro service contract is only $10 per month – that means users can have the equivalent of a one-year on-site warranty for only an additional $90 – and that includes next-day service. (Check with your sales rep for the cost of the DraftPro service contract in your country.)

Professional-quality output

Although the HP DraftPro plotter is less expensive, it is not less professional. With 0.013mm (0.0005 in.) mechanical resolution and 0.2 percent accuracy, the HP DraftPro plotter can produce high-quality, multicolored drawings on paper. vellum, or polyester film. The DraftPro plotter uses architectural and engineering C/D-size and A1/A2 metric-size media only. And the HP DraftPro plotter draws with both liquid-ink and fiber-tip pens.

Pen sorting capability

The HP DraftPro plotter also features pen-sorting capability, independent of the software application. For each full buffer of vectors, the HP DraftPro plotter groups lines of the same color together and draws them at the same

time, thereby decreasing the number of pen changes. Maximum pen velocity of 40 cmls (15.7 in./s) and acceleration of 2g also contributes to quick plotting time.

The HP DraftPro plotter is easy to move and requires a minimum amount of space. (In fact, the DraftPro easily wheeled through 60 crowded blocks in Manhattan on a recent press tour.) It weighs 30 kg (66 pounds) and measures 1030 mm (40.6 in.) high.

The HP DraftPro plotter is compatible with most popular personal computers including the HP Vectra PC, IBM PC, and Apple Macintosh. An RS-232-C interface comes standard with the plotter. An easy-to-install, plug-in HP-IB interface is available as an accessory. A combination HP-IB and Kanji cartridge is also available for the Japanese market.

For more information, contact your HP sales rep.

Specifications

Media sizes: A2/C, AIID, architectural
    C and D
Media types: Paper, vellum, polyester
    film
Pens: 8: fiber-tip and liquid-ink
    carousels
Mechanical resolution: 0.013 mm
    (0.0005 in.)
Addressable resolution: 0.025 mm
    (0.001 in.)
Repeatability (for the same pen):
    0.10 mm (0.004 in.)
Buffer size: 7,448 bytes
Pen speed: 40 cmls (15.7 in./s)
Pen acceleration: 2g
Interfaces: RS-232-C/CCITT V.24 stan-
    dard; HP-IB available as an option
Data sheet:
    PIN 5953-9890(D) (with prices)
        5953-9890 (without prices)
        5954-1711 (without prices,
        A4-size European format)

Ordering information

Product No.	Description
HP 7570A	DraftPro plotter
HP 17570A	HP-IB cartridge
HP 17571A	HP-IB/Kanji cartridge

Plotters

HP DRAFTPRO PLOTTER EXPANDS DRAFTING PLOTTER LINE

With the introduction of the HP DraftPro plotter, HP's line of large-format drafting plotters has been expanded to four models:

- A4/A- through A1/D-size HP 7580B
- A4/A- through A0/E-size HP 7575B

A4/A- through A0/E-size roll-feed HP 7586B

A2/C- and A1/D-size DraftPro plotter

The CID-size DraftPro plotter is not a replacement product for the A- through D-size HP 7580B. Competitively priced, the DraftPro plotter is targeted for the PC-CAD market (systems under $20,000) and will compete directly with products from Houston Instruments.

During the past year, the HP 7580 has gained acceptance with our PC-CAD buyers. With the DraftPro plotter in our product line, HP expects the HP 7580 family to appeal to performance-minded users, and, as always, to continue setting the standard for line-quality and precision plotting. On the other hand, the DraftPro plotter will fill a gap in our product line by appealing directly to cost-sensitive PC-CAD buyers.

Here are the most notable differences between the HP DraftPro plotter and the HP 7580 family:

HP DraftPro plotter

Good performance – the DraftPro plotter has 70 percent of the throughput of the HP 7580 family. Although it has only half the acceleration of the HP 7580 family, the DraftPro makes up some ground with a new feature called pen sorting.

- *Benchmarks* – a benchmark mechanical drawing with 2,009 vectors took six and a half minutes on the HP DraftPro plotter.

Very good line quality – the DraftPro has 0.2 percent accuracy and 0.1 mm (0.004 in.) repeatability on paper only.

- *Mediu sizes* – DraftPro accepts A2/C, A1/D, and architectural C and D sizes only.

- *Interfaces* – RS-232-CICCITT V.24 is standard; HP-IB (IEEE-488) is available as an accessory.

- *Competitive products* – Houston DMP 51152 and DMP 56.

HP 7580B drafting plotters

High performance.

- *Benchmarks* – a benchmark mechanical drawing with 2,009 vectors took four and a quarter minutes on the HP 7580 plotter.

- *Excellent line quality* – the HP 7580 drafting plotters offer 0.1 percent accuracy and 0.1 mm (0.004 in.) repeatability on paper, vellum, and polyester film.

- *Media sizes* – HP 7580 plotters accept A4/A, A3/B, A2/C, AIID, and A0/E (HP 7585B and 7586B only), and architectural sizes.

- *Interfaces* – RS-232-C and HP-IB are both standard (switch selectable).

- *Competitive products* – CalComp 104X family.

To help users compare these plotters at a glance, HP has updated the family flyer *Drafting Plotters for the Design Professional* (PIN 5954-7131). The flyer includes photos of all HP drafting plotters, including the new DraftPro plotter, and a matrix comparison of features. Contact your sales rep to get a copy of the Flyer.

HP DraftPro and HP 7580 plotter comparison summary

	HP DraftPro	HP 7580
Pens	8	8
Media sizes	C and D	A - D
Performance (benchmark)	Good (6:30)	Excellent (4:15)
Writing quality	Very good	Excellent
Accuracy	0.02 in, or 0.2%	0.01 in. or 0.1%
Pen sorting	Yes	No
Interface	RS-232-C*	RS-232-C and HP-IB

HP-IB is available as a plug-in accessory.

Plotters

VARIETY OF SOFTWARE FOR HP DRAFTPRO PLOTTER

With all the lending vendors in archi- tectural, mechanical, and electronic PC-CAD software supporting the HP DraftPro plotter at introduction, you can be sure you will be able to find the right software.

Many HP systems and graphics libraries support the HP DraftPro plot- ter, inciuding the ME Series 5/10, ME 90 Test System; HP PCDS; Technical BASIC for the HP Integral PC; BASIC 4.0; and the Starbase Library for the HP 9000 Series 200, 300, and 500 sys- tems. Check the "HP Proprietary Design Graphics Software" matrix shipped with each HP DraftPro plotter introduction kit for further details.

Also, over 80 percent of the PC-CAD software packages sold through the retail channel support the HP DraftPro plotter now, and that num- ber is expected to grow to over 90 per- cent by mid-October.

For example, popular packages like AutoCAD, VersaCAD, ANVIL 1000MD, CADKEY, Design Board 3D, Cascade I, and Robo-CAD PC have the HP DraftPro plotter listed in

the application menu and are fully sup- ported by the software vendor.

Design Graphics Software for the HP DraftPro Plotter (P/N 5954-7125) lists the software vendors that currently support the plotter. HP is receiving numerous inquiries from software vendors anxious to support the HP DraftPro plotter, which will further broaden the range of applications.

For software packages, the HP Draft- Pro plotter can be driven successfully by the HP 7580 driver in most cases (but not all). Users who can't wait for their software company to release a new version that supports the HP DraftPro plotter may be able to use the HP 7580 driver in the software package. Users should consult the software vendor to find out.

For users that have written their own software, the HP DraftPro plotter con- tains 86 of the 98 instructions found in the HP 7580 and 7585 drafting plotters. It's probable that software written for the HP 7580 plotters will work suc- cessfully with the HP DraftPro plotter, but we recommend testing it first to be sure.

Plotters

NEW DISPOSABLE DRAFTING PENS FOR POLYESTER FILM

On September 2, 1986, HP will expand its current disposable liquid-ink drafting pen line by introducing new pens that can be used on polyester film. Also. the current disposable liquid-ink drafting pen line, which can be used on vellum or paper, will be broadened to include two new line widths and four more colors. Both pens are designed to be used with the HP 7580A/B, 7585A/B, 7586B, 7550A, and the new HP DraftPro plotter. These new pens require minimal assembly, no ink fill- ing, no cleaning, and they increase HP drafting plotter throughput by 100 per-

cent when compared to conventional refillable drafting pens.
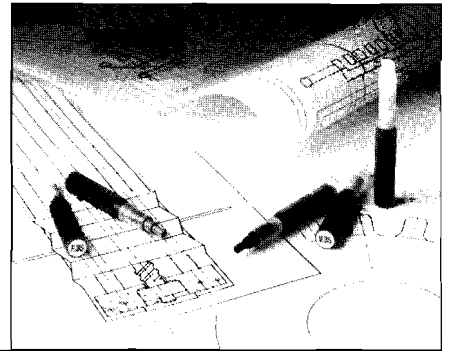
New polyester film pens

For final-quality, archival drawings, plotter users can use these new pens on double-matte polyester film. These pens have tough tungsten carbide/jeweled sapphire tips that can withstand abra- sive polyester film and they contain fast-drying ink for its non-absorbent surfaces. The new pens come in four line widths (0.25 mm, 0.35 mm, 0.50 mm, 0.70 mm) in black ink.

New vellum and paper pens

To meet the diverse drafting needs of our users, new colors and point sizes have been added to our current dispos- able drafting pen line. There are four new opaque colors to choose from in popular line widths (0.35 mm, 0.70 mm) – violet, yellow, brown, and orange, as well as red, green, blue, and black. In addition, two new line widths (0.25 mm and 0.50 mm) have been added, in black ink only, for users who require multiple line widths in their drafting applications. These pens can be used on vellum for final-quality, diazo-reproductive drawings, or on plotter paper for preliminary drawings and check plots.

Benefits

Users will appreciate the many bene- fits of these pens when compared to

conventional, liquid-ink refillable drafting pens.

■ No messy cleaning or refilling required

■ Excellent line quality – equivalent to refillable drafting pens

■ Faster writing speed

■ Four line widths available – extra fine to broad

Each package of disposable liquid-ink drafting pens contains four single or multicolor pens with identical point sizes, as well as instructions on pen assembly, usage, and care. The pens can be ordered from Direct Marketing Division (DMK) and Direct Marketing Operation (DMO) in Europe. For more information and a list of part numbers, ask your sales rep for the Disposable Drafting Pen flyer, PIN 5954-7105 (D) for domestic and PIN 5954-7104 for the international versions.

Printers

INTRODUCING THE
HP QUIETJET PLUS
PERSONAL PRINTER
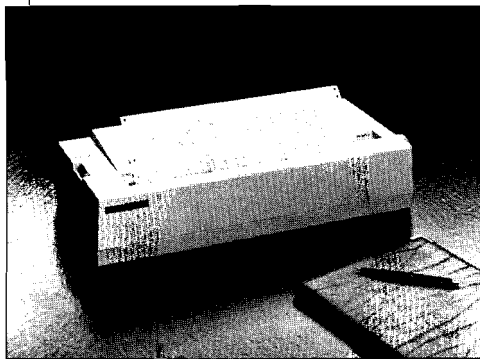
Hewlett-Packard has introduced the HP QuietJet Plus printer – the newest member of HP's personal inkjet printer family.

The QuietJet Plus printer is the wide carriage inkjet printer that users have been asking for. Its positioning theme of Quiet Quality emphasizes the quiet operation and good print quality this personal convenience printer provides. You can easily carry on a telephone conversation or a meeting while the QuietJet printer works. Combining wide carriage inkjet printing, improved print quality, improved paper handling, and other new features, the QuietJet Plus printer complements and builds upon the quiet, compact, and affordable ThinkJet printer.

New features

■ 15-inch wide carriage printing (132 column at 10 cpi)

　Six print pitches

　160 cps draft, 40 cps NLQ at 10 cpi (192 cps draft, 48 cps NLQ at 12 cpi)

■ Adjustable width tractors, a knob and a rubber platen for easy cut-sheet feeding and paper adjustment

　Key-panel selectable NLQ, draft, or compressed printing modes

■ Quad-density graphics (192x192 dpi)

■ Full HP Roman 8, full IBM 8 PC character sets (both US and European), HP 3000 line draw. ECMA-94, and many ISO 7 character sets

■ RS-232-C and Centronics Parallel interfaces both standard

　Full local-language support

■ Ability to handle European paper sizes

These new features make the QuietJet Plus printer simple to use, versatile in the many things it can do, and very competitive against other wide carriage personal printers in the market today. The QuietJet Plus printer is compatible with the ThinkJet printer and is supported on HP personal computers and terminals and most other popular PCs and PC software.

Software support

With the introduction of the QuietJet Plus printer comes an extensive offering of HP/IBM compatible software which will enable the user to access the extensive feature set of the QuietJet Plus printer easily and quickly. The top selling applications provide a QuietJet Plus printer driver. The user will also get support through the ThinkJet printer driver from current software packages. Below is just a highlight of the key packages currently supporting the QuietJet Plus printer.

■ Lotus™ 1-2-3® and Symphony™

■ WordStar™ and WordStar 2000

■ WordPerfect™

■ Microsoft® Word, Windows, and Chart

　HP Gallery and Executive Series

■ Framework™ II

■ DisplayWrite 3

■ MultiMate™

■ pfs:® Series

■ Volkswriter™

For a detailed listing of the major software packages supporting the QuietJet Plus printer, see the Software Reference Sheet (PIN 5954-6973). Watch for software updates through future HP *Channels* articles.

Ordering information

Product

Product No.	Description
2227A	HP Quietlct Plus printer – US
2227AU	HP QuietJet Plus printer – UK
2227AF	HP QuietJct Plus printer – France
2227AD	HP QuietJet Plus printer – Germany
2227AP	HP QuietJet Plus printer – Switzerland
2227AE	HP QuietJet Plus printcr – Spain
2227AY	HP Quietlct Plus printcr – Dcnmark
2227AB	HP QuietJet Plus printer – all other countries

Literature

Product No.	Description
5954-6970	Quietlct Plus Data Sheet
5954-6971	QuietJct Plus Sales Guide
5954-6972	QuietJet Plus Product Flyer
5954-6973	Software Rcference Sheet
5954-6974	QuietJet Plus/ThinkJct Ordering Checklist and Price Guide

Lotus. 1-2-3, and Symphony are US registered trademarks of Lotus Development Corp.

WordStar is a US registered trademark of MicroPro International Corp.

Printers

JetSeries Supplies for Quality HP Inkjet Printing

HP ThinkJet and QuietJet printers are part of a specially designed print system which consists of the printer, print cartridge, and JetPaper. Together they provide quiet operation and quality printing – a winning combination.

HP JetPaper delivers consistent quality output and new JetPaper products have been improved, resulting in a 10-fold reduction of print cartridge clogging. Non-HP paper provides poor print quality and can clog the print cartridge.

A full range of JetPaper supplies for ThinkJet and QuietJet Plus printers are readily available to support all of your printing needs.

New JetPaper products include narrow and wide fanfold inkjet paper, cut-sheet paper and inkjet mailing labels. JetPaper *must* be used with the HP ThinkJet and QuietJet printers.

JetPaper supplies are available in convenient package sizes and are offered at competitive prices. Volume discounts are also available through Direct Marketing Division (DMK).

Ordering information

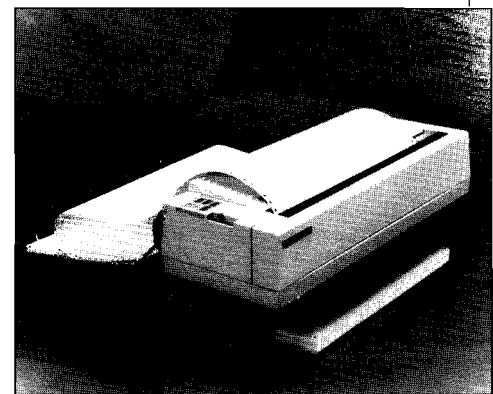| Product No.	Description
51630A NEW	Z-fold JetPaper, 500 fanfold sheets. 8% x 11″, 20 lb. microperforated.
51630B NEW	Z-fold, wide JetPaper, 500 fanfold sheets. 14% x 11″, 20 lb. microperforated (for QuietJet Plus printer)
51630D NEW	Z-fold, wide JetPaper, 2,500 fanfold sheets. 14⅞ x 11″, 20 Ib., microperforated (for QuietJet Plus)
51630F	Z-fold, wide JetPaper, European format. 500 sheets, not perforated
51630H	Z-fold, wide JetPaper, US format, 2,500 sheets, not perforated
51630J NEW	Cut-sheet JetPaper, 500 sheets. 8% x 11″. 20 lb.
51630L NEW	Z-fold JetLabels, 2,500 pressure-sensitive address labels, 3% x ⁵⁄₁₆, fanfold/2 across on 9%″ form width
92261H	Z-fold narrow JetPaper, European format, 1,000 sheets, microperforated
92261J	Cut sheet JetPaper, A4 size. 2,000 sheets
92261K	Z-fold narrow JetPaper, European format, 2,500 sheets, microperforated
92261M	Cut sheet JetPaper, A size, 1,000 sheets
92261N	Z-fold JetPaper, 2,500 fanfold sheets. 8½ x 11″, 20 lb. microperforated
92250V	Dust cover for ThinkJet printer, 100% cotton
92250W NEW	Dust cover for QuietJet Plus printer, 100% cotton

Printers

Accessories for the HP QuietJet Plus Printer

Add the convenience of paper control with these new desktop accessories for the QuietJet Plus printer.

■ *QuietJet Plus printer stand.* Stores paper under the printer instead of behind it. If space is limited, the new open front design allows the user to slide the paper easily under the printer and load it. The stand also has a raised rear edge to improve paper flow into the printer and help route cables out of the paper path. Dimensions are 3.5-inches (89mm) H x 21-inches (533mm) W x 11.7-inches (297mm) D.

■ *Paper catcher for the 92261T Quiet-Jet Plus printer stand.* Since the new QuietJet Plus printer has fast printing speeds and the potential for printing multipage reports on 14%-inch x 11-inch paper, paper control is essential. The 92261G paper catcher keeps the printout from piling up behind the printer, refeeding, or falling on the floor. The catcher is constructed of steel chromed wire and mounts easily on the rear edge of the 92261T printer stand. Dimensions are 2.5-inch (64mm) H x 16.3-inch (414mm) W x 13.5-inch (343mm) D.
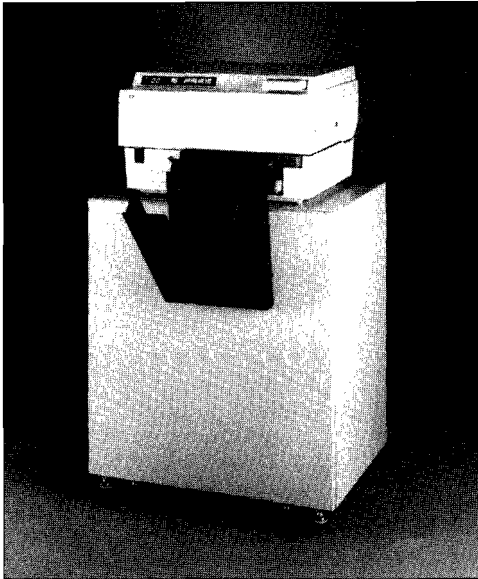

Product No.	Description
92261T	QuietJet Plus stand
92261G	Paper catcher

For fast service, call Direct Marketing Division's (DMK) direct order phone numbers listed in the Supplies section.

Printers

UNIVERSAL SUPPORT STAND GOOD FOR HP LASERJET PRINTER

The 92214P Design Plus support stand is an excellent low-cost stand for the HP LaserJet printer. Available from Direct Marketing Division (DMK), this stand features a printout catcher tray that can be modified to mount inside the cabinet as a storage shelf for font cartridges and other supplies. The cabinet also has space for extra toner cartridges and paper trays. Heavy-duty casters and leveling glides are standard. With the front door closed, a LaserJet forward collator (P/N 92285F) can easily be used. Dimensions are: 28.4 in. (720mm) H x 23.6 in. (600mm) W x 17.7 in. (450mm) D. Color is dove gray.

Product No.	Description
92214P	Design Plus Support Stand

For fast service, call DMK's direct order phone numbers listed in the Supplies section.

Printer,!

NEW COLOR PRINT CARTRIDGES FOR HP INKJET PRINTERS

Red, green, and blue ink single-color print cartridges are now available for use with ThinkJet and the new QuietJet Plus printers. Users can now add flair and get attention by printing one-color-per-page of text or graphics. In addition, some users will use the blue ink print cartridge as an alternative to the original black for most of their printing.

Product No.	Print cartridge single color
51605R	Red ink (new)
51605G	Green ink (new)
51605B	Blue ink (new)
92261A	Black ink (original)

For fast service, use the Direct Marketing Division (DMK) direct phone numbers to order.

Printers

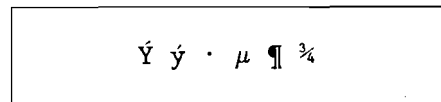## PRESTIGE ELITE SOFT FONTS FOR THE HP LASERJET PLUS AND LASERJET 500 PLUS PRINTERS

A new family of HP LaserJet PLUS and LaserJet 500 PLUS printer soft fonts, based on the Prestige Elite style, is now available. The Prestige Elite soft font family appeared on the August 1 HP Price List.

Features

Prestige Elite in 7- (medium) and 10-point sizes (medium, bold, and italic in 10-point)

- Math in 7- and 10-point sizes (medium)
- Legal in 7- (medium) and 10-point sizes (medium, bold, italic, in 10-point)
- Line draw and PC Line in 12-point size (PC Line matches IBM PC line draw)
- Portrait and landscape orientations

Many symbol sets are supported including Roman-8, Roman Extension, USASCII, Math, HP and IBM line draw, and Legal. In addition, the Roman-8 and Roman Extension symbol sets include these new characters:

Ý ý · μ ¶ ¾

The Prestige Elite soft font family has all the fixed pitch fonts contained in the "D", "G", "J", and "M" font cartridges. Like other HP LaserJet PLUS soft fonts, this new family may be used with up to three printers.

Ordering information

Product No.	To be used with
33411EA	HP 150
33412EA	HP Vectra/IBM PC

Printers

HP LASERJET PRINTER FAMILY CAMERA-READY COPIES

Do you need the cleanest and darkest possible images for photo offset printing but find yourself having to replace cartridges frequently?

Documented test results from Canon show that new EP toner cartridges print lighter for the first 100 to 500 pages. As the photosensitive drum rotates, the

toner in the cartridge mixes better, resulting in darker print. Since this effect varies with the cartridge production process, some cartridges will have sufficient density for camera-ready copies early in the cycle and some later in the cycle. All Canon-based laser printers have this common "wear-in" pattern. The density should then remain the same until approximately 3,000 pages have been printed. Around 3,000 pages, the user may again experience lighter print density.

For large print jobs that require consistent camera-ready copies, the user should monitor cartridge print density.

Printers

FORMS DESIGN SERVICE AVAILABLE FOR HP LASERJET PRINTER OWNERS

Creating and designing forms electronically has definite advantages. With the HP LaserJet PLUS printer and a forms design software package, users can change and update forms as well as reduce inventory costs.

But, how many users would rather not invest time and money in a forms design software package or need help converting their preprinted forms into an electronic format?

Moorehead Electronic Business Forms will provide this service for simple and complex forms. They create or duplicate all simple to complex forms and store them on a floppy disc for the user. Then, when you need a hardcopy of the forms, you can print them out on the HP LaserJet PLUS printer and in the quantity you desire.
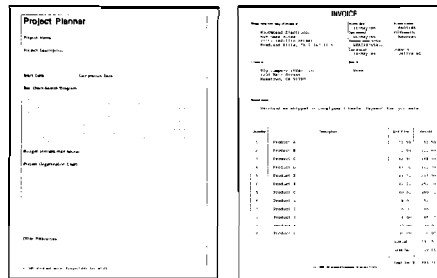
Two .samples forms from Moorehead Electronic Business Forms

Another service Moorehead provides is the capability to scan and digitize images such as logos and letterheads. The logos and letterheads are stored on the floppy disc and can then be downloaded into the HP LaserJet PLUS for printing on letters or memos.

Moorehead has a variety of industry-specific and standard forms starting at $120. Whether you are in need of legal forms from another state or just require an interoffice memorandum, Moorehead can supply your needs.

For more information, write Moorehead Electronic Business Forms, 23301 Ladrillo Street, Woodland Hills, CA, 91 1367-4136, or phone 818-347-0050.

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: *Cross industry – utility software*

Abstract: The LARC Laser Package is a formatter for the Hewlett-Wckard LaserJet PLUS laser printer. It is a stored command formatter similar in command structure to TDP/3000. The package handles full page formatting, multi-column output, and utilizes all the features of the LaserJet PLUS to approximate a typeset appearance in the final document.

The package runs on the HP 3000 (any model). The LaserJet PLUS can be connected directly to the HP 3000 or can be driven through the second port on an HP 262x type terminal (or PC emulation).

Company Name: LARC Computing Inc.

Address: 339 South San Antonio Road
Los Altos, CA 94022
USA

Phone: 415-941-9310

Contact Person: Martin Gorfinkel

Type *of Distributor Wanted:* One able to provide some support on the HP 3000 for users.

Geographic *Coverage:* Worldwide

Industry: *Cross industry*

Abstract: DOCUMENTATION13000 automatically documents existing programs written in any language available on HP 3000 computers. The system scans through the source files and extracts such valuable information as: IMAGE databases and sets used by the program, VPLUS/30000 forms files and forms, MPE and KSAM files, data elements, CALLs, COPYLIBs, $INCLUDE files, etc.

DOCUMENTATION13000 stores the information in its own IMAGE database and simplifies the conventional process of writing specifications for new programs.

Company Name: Diamond Optimum Systems, Inc.

Address: 5837 Wilkinson Avenue
North Hollywood, CA 91607
USA

Phone: 818-980-5854

Contact Person: Igor Yasnogorodsky

Type *of Distributor Wanted:* Open

Geographic Coverage: Worldwide

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 GIL 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 make mainframe supplier capable of integrating/interfacing systems.

Geographic Coverage: North America

Company **Name:** OBERON SYSTEMS, INC.

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

Phone: (X18) 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 high-quality 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 stations throughout a network, grouping these alarms into related dockets for ease of operator handling. MIMNAC provides 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 supplier/integrator

Geographic Coverage: Worldwide

Industry: *Cross industry – drafting*

Abstract: CecileCAD is a powerful, low-cost, user-fnendly 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 Wunted: Open

Geographic Coverage: Worldwide

Industry: *Manufacturing/Distribution*

Abstract: TMRS is a transportation control and distribution management system. It's a powerful new software system that cuts corporate transportation costs by 20 to 60 percent. TMRS is tailored to the manufacturing industry's need to contain transportation and distribution costs. The on-line system provides accurate, up-to-date, systemized information that allows companies to organize and develop least-cost transportation networks, evaluate existing distribution methods, monitor and track products, inbound and outbound traffic flows, mode of transportation, volume of business, and costs in any way they want. The system generates information for decisions regarding distribution and marketing, cost accounting, pricing, purchasing, inventory control, and warehousing.

Company Name: Ford & Associates, Inc

Address: 402 4th Street
Box 59
Savanna, IL 61074
USA

Phone: 815-273-3616

Contact Person; Kenneth G. Ford

Type of Distributor Wanted: Open

Geographic Coverage: Continental United States