

Management Topics	
The HP A900 and the HP 9000 Are Too Fast!	
Evaluating Your Organization	
Computer Support	
Choosing a Support Program: Ongoing Hardware	
Support Services	
Personal Computers	
New Interface Brings More Power to Portable,	
Benchtop Applications	
Introducing the UCSD p-System for the HP-86/87 9	
MIKSAM for Series 80	
HP 250 Series	
Suggestion Box	
HP 1000 Series	
HP A900 Benchmarks Run like Magic!!	
Super Enhancements to GRAPHICS/1000-II	
New Package Makes HP A900 Price/Performance Even Better	
A-Series Product Pitch Is Available	
A-Series Product Pitch is Available	

1		1000	$\gamma$	.!
$\vdash$	$\mathbb{P}$	3000	$1 \leq \triangle r$	$\Box$
	11	OOO	$\cup$ $\cup$ $\cup$ $\cup$	

HP Financial Accounting Package Is Introduced 1	3
The Series 39 — the Most Affordable HP 3000 ever! 1	
HP Series 64 to Change Model Number	14
More about the HP 2333A Dual Host Configurator 1	15
HP Toolset's Program Key Speeds COBOL II Program Translation	15
Peripherals	
Hewlett-Packard Reduces Price on Graphics Package for Laser Printer and Doubles Disc Storage on Laser Print Station	16
for Laser Printer and Doubles Disc Storage on	
for Laser Printer and Doubles Disc Storage on Laser Print Station	16
for Laser Printer and Doubles Disc Storage on Laser Print Station	16 17
for Laser Printer and Doubles Disc Storage on Laser Print Station	16 17 18
for Laser Printer and Doubles Disc Storage on Laser Print Station	16 17 18

#### On the Cover:

The new Series 39, which replaces the Series 40SX, makes the HP 3000 more affordable than ever. For more information, see article on page 14.





# The HP A900 and the HP 9000 Are Too Fast

The U.S. Government tracks sales of computers to other countries according to thresholds of performance. Up to a certain threshold, a computer vendor can obtain a bulk license for shipment to almost any country. HP's computers have fallen in this range up to now. However, the HP A900 and HP 9000 have passed into the second category, in which we can get bulk licenses on these two machines only in the following countries:

Australia, Belgium, Denmark, France, Germany, Federal Republic of; Greece, Iceland, Italy\*, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Turkey, United Kingdom.

Austria, Bahamas, The; Barbados, Benin, Bolivia, Botswana, Burundi, Cameroon, Central African Republic, Chad, Colombia, Liberia, Liechtenstein, Madagascar, Malaysia, Maldives, Mali, Malta, Mauritius, Mexico, Morocco, Nepal.

Congo, Costa Rica, Cyprus, Dominican Republic, Ecuador, El Salvador, Ethiopia, Fiji, Finland, Gabon, Gambia, The; Ghana, Grenada, Guatemala, Nicaragua, Nigeria, Panama, Paraguay, Peru, Philippines, Rwanda, Senegal, Sierra Leone, Singapore, Somalia, Sri Lanka, Sudan, Suriname.

Guinea-Bissau, Haiti, Honduras, Hong Kong, Indonesia, Iran, Ireland, Ivory Coast, Jamaica, Jordan, Kenya, Korea, Republic of; Lebanon, Lesotho, Swaziland, Sweden, Switzerland, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Upper Volta, Uruguay, Venezuela, Western Samoa, Yugoslavia, Zaire.

Shipments of the HP A900 and HP 9000 to all other countries must be individually licensed by the U.S. Government. OEM's who will be shipping these computers to countries not on this list should contact the Hewlett-Packard Corporate Export Licensing Administration Office for licensing procedures. (contact: Alex Kozera 415-857-8543.)

# **Evaluating Your Organization**

To ensure your continued growth, now may be a good time to take some time and check the "health" of your company in the following areas. We have chosen some of the areas we think are important to the success of a company, and posed questions which should help you evaluate how your company is doing. This may help you to adjust your market plan and direction, if necessary.

#### Product and Market Area

Market emphasis: What is your target market? Do you know who your prospects are? Do you know who are your major competitors and their strengths and weaknesses? Are there strategies you need to take to position yourself against the competition?

Products: Do you have a clearly defined product or products to sell? Are they well documented and priced? Do you have a good pricing system for custom work and support?

#### Management Skills

Business Plan: Do you have a formal plan that lists your research and development, marketing and financial plans for the next 12 months and then 2 - 5 years? Have your previous sales projections been accurate?

Organization Plan: Do you have a good organization that can implement the key elements of your business plan? Are there any weak areas? What kind of hiring/reorganizing do you plan to do in the next year?

Financial Plan: Do you have financial projections for income/expenses, balance sheet and working capital for the next year? How much deviation from your projections can your organization accommodate? Do you have a cash flow projection for the next 12 months?

Banking: Do you have a good banking relationship? Do you discuss your business and financial plan with your banker? Can you get short-term financing if necessary? Do you have other sources of funds besides your bank?

<sup>\*</sup> Includes San Marino and Vatican City.

# HP Computer Museum www.hpmuseum.net

For research and education purposes only.

# Management Topics

#### Sales and Marketing

Sales: Do you have full-time salespeople? Are your people trained or do they need additional training in some areas? What are your projections for additional sales people and offices? Do you have satisfied customers that can be used as references?

Marketing: Do you have a marketing plan? Do you have a database of prospects that you are reaching on a regular basis? Are you developing any public relations/advertising/merchandising to develop leads for your sales force? Do you have effective sales literature and technical data sheets for your sales representatives?

#### Technical and Support

Technical: Do any of your technical people need additional training? Is your research and development effort progressing on new products and product upgrades?

Support: Do you have standard support products and costs? Do you have an enhancement strategy for your software? Do your customers have support contracts with you?

These questions should help you begin to think about your company's health, and steer your company along a road to having a strong and successful year. You may want to discuss your plans with your HP sales rep.

# Choosing a Support Program: Ongoing Hardware Support Services

A range of hardware maintenance services are provided which allow you to choose the price/performance level that meets your needs.

#### **System Maintenance Services**

Several important features are included with our system maintenance programs at no additional cost. A Customer Engineer is assigned to your account. Your account Customer Engineer schedules visits to perform preventative maintenance, install additional system hardware on agreement, update your system with engineering improvements, monitor your site environment periodically, and maintain an up-to-date system log. When your system requires emergency service, your HP Customer Engineer has the training and materials to resolve most problems very rapidly. He stays-on-site beyond your coverage hours and works until your problem is solved. For very difficult problems, your Customer Engineer initiates an escalation plan which enlists all necessary Area and factory-level technical and management attention required to provide a solution.

These features are a part of each of the system maintenance agreements described below.

#### Guaranteed Uptime Service (GUS)

If your HP 3000 computer applications call for a very high level of system availability, Guaranteed Uptime Service provides a minimum of 99% uptime coverage for your system core (CPU and one or two system domain discs).

Whenever your uptime is reported below 99%, you receive a service credit for one month of charges for all products covered by GUS. GUS assures a 4-hour, on-site response time and service that provides around-the-clock, continuous coverage.

#### Standard System Maintenance Service

Next to Guaranteed Uptime Service, this is our quickest response and most comprehensive hardware support program for many business and technical applications. This same-day-service program provides onsite response within four coverage hours. Support coverage is from 8 a.m. to 9 p.m. every day of the normal work week (excluding HP holidays). Extended coverage options are available which can provide service up to seven days a week, 24 hours per day.

#### **Basic System Maintenance Service**

If your business operates only during normal working hours and you can manage an operations delay of one work day for a maintenance response, then this service meets your support needs. Coverage is from 8 a.m. to 5 p.m., Monday through Friday (excluding HP holidays). An improved response time and out-of-coverage service are also available at additional cost on a per-incident basis.

#### **Remote Support Program**

The Remote Support Option to our Standard or Basic System Maintenance Service improves your support coverage while reducing your monthly maintenance charge. Service is initiated from an HP site via a telephone connection to your system. This improves our response to emergency calls, provides assistance to our on-site Customer Engineer, and even helps us anticipate system problems. The Remote Support Option is available on HP 3000 Series 40, 44 and 64 systems equipped with a qualified modem.

#### **Workstation Maintenance Services**

For HP workstation products (terminals, desktop or personal computers and their associated peripherals), most customers do not require the features of our system maintenance programs. The following programs are specifically tailored to the support requirements of most workstation product installations, and provide the most cost effective support.

#### **On-Site Product Maintenance**

This is our most economical on-site maintenance program for your HP workstation products. On-Site Product Maintenance gives you next-day response between the hours of 8 a.m. and 5 p.m., Monday through Friday (excluding HP holidays). Out-of-coverage support and improved response time are also available on a per-incident basis.

#### Field Repair Center Maintenance Service

This is our lowest-cost hardware support for your workstation products. This "return to HP" service is available at Hewlett-Packard Field Repair Centers. Repair time at the HP facility is three days, maximum (not including shipping time). Our Field Repair Centers operate in major metropolitan areas between the hours of 8 a.m. and 5 p.m., Monday through Friday (excluding HP holidays).

#### **Per-Incident Service Option**

If you choose the Basic System or the On-Site Product Service, occasionally you may require a response faster than next-day coverage or service outside the normal coverage hours.

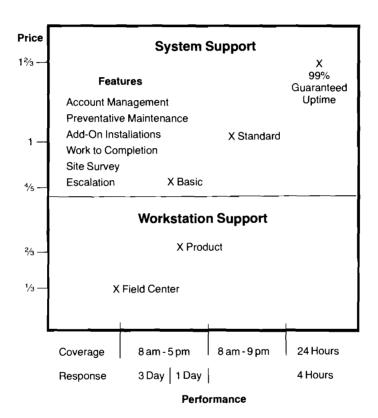
# Computer Support

Standard Coverage Per-Incident Service improves the response time to that of Standard System Service for a fixed charge. For calls received between 8 a.m. and 5 p.m., Monday through Friday (excluding HP holidays), the per-incident charge gives you same-day response within four hours.

Out-of-Coverage Service provides on-site support outside of your normal coverage period seven days a week, 24 hours per day for a fixed additional charge.

#### **Choosing Support**

The system and workstation maintenance services discussed above are differentiated primarily on the basis of price and performance as measured by response time and hours of coverage. This relationship is illustrated in the chart below, and summarized along with our service options in Tables 1 and 2.



#### Selecting the Right Services

The Service Selection Guide (Table 3) can assist you in choosing the best service for your system and its workstations based on your support requirements and system applications. Here are a few guidelines to remember when configuring your support program:

- If your system has multiple terminals or terminal workstations, you can save money by covering them with a workstation rather than a system service. Choose On-Site Product Maintenance for onsite service or Field Repair Center Maintenance for return to HP, lower cost-of-ownership service.
- The remainder of your system, excluding your workstations, must be covered by the same system service with identical hours of coverage. GUS is the only exception. If GUS is selected for your HP 3000

- system core, the rest of your system components can be covered by Standard or Basic System Maintenance.
- Desktop systems and personal computers are not eligible for Standard System Maintenance. Choose Basic System Maintenance for desktop computers configured with system peripherals (disc drives, mag tapes, and system printers). In these configurations, account management and system support features are essential.

Choose On-Site Product Maintenance for desktop computers used as workstations (flexible discs, plotters, and desktop printers) to achieve the lowest cost, on-site service. Select Field Repair Center Maintenance for the lowest cost-of-ownership service HP offers.

#### **Service Selection Guide**

Service					Field
System	Gus	<b>Standard</b>	Basic	On-Site Product	Repair Center
Commercial Systems	99% uptime for critical applica- tions; 24 hrs/ 7-day coverage series HP 3000 only	Versatile service for systems needing a quick response; extended coverage options available	Not Recommended		Not
Small Business Systems		For business applica- tions needing a fast response or extended coverage	For systems that can tolerate a 1-day response;		
Technical Systems	Not	For manufacturing control applications where downtime is costly or multiple shift coverage is needed	lower MMC	A	/ailable
Desktop Computers	Available	- Not Available	For desktop computers with system peripherals (system agreement features required)	Next day on-site response for desktops used only with work- station peripherals	Desktop work- stations with backups avail- able; low MMC
System Workstations		Not recommended exc console or extremely or products without back- workstations	itical workstation	Next day, on- site response for most system workstations	Workstations with backups; lowest cost service desired

# Personal Computers

# New Interface Brings More Power to Portable, Benchtop Applications

Users of HP-41 handheld computers and HP-75 portable computers can now tap the power of high-end computers and test and measurement equipment with an interface introduced by Hewlett-Packard in March.

The HP 82169A HP-IL/HP-IB Interface expands control and communication capabilities of Series 40 and Series 70 computers by linking their low-cost HP-IL interfacing systems for battery-operable devices with high-performance HP-IB computers and lab equipment. The interface is an attractive solution for achieving a high-level of bench test automation at the low end. And thrifty high-end users will appreciate being able to substitute inexpensive HP-IL devices where applications permit.

This new interface lets HP-IL and HP-IB interface systems talk to each other and work together by correcting for a difference in protocol and data processing speed. The Hewlett-Packard Interface Loop (HP-IL) is a low-power bitserial interface. It transmits data one bit at a time — perfect for small, battery-operable devices. The Hewlett-Packard Interface Bus (HP-IB, or IEEE 488), on the other hand, sends eight bits of data simultaneously. It's a high-performance solution but consumes more power than HP-IL. Now, let's say you want to operate an HP-IB instrument with an HP-IL controller, an HP-41 in this case. First hook up the HP-IL and HP-IB interfaces to their proper outlets on the HP 82169A. Next, enter your commands on your HP-41. The HP-IL/ HP-IB Interface relays the data to the HP-IB device as if they were on

HP-IL. This process works the same way when your controller is an HP-IB device.

Hooked up to the HP-IL/HP-IB Interface, portable computing products such as the HP-41 and the HP-75 put at the user's disposal a variety of peripherals, instruments, and computers which previously eluded them. They can operate HP-IB versions of the HP 82905B printer and the HP 7470A and HP 9872B plotters; operate and control power supplies and instruments such as the HP 1980 oscilloscope; and talk directly with HP-IB computers such as the HP 3000, the HP 9845, and the HP 125. Depending on their requirements, high-end users shopping for a digital multimeter can choose the inexpensive HP-IL 3468A. And the HP-IL/HP-IB Interface has many other plusses. Like userfriendliness.

■ Flexible two-mode operation. "Translator" mode lets the user control devices across the interface from either the HP-IL or the HP-IB side. A portable controller such as the HP-41 or the HP-75 can take command of powerful HP-IB equipment; a high-performance HP-IB instrument can control inexpensive HP-IL peripherals. "Mailbox" mode permits controllers on HP-IL and HP-IB sides simultaneously, so the user can have two systems operating independently of one another. Data travels the interface loop to the HP-IL/HP-IB Interface where it's passed through two 110-byte buffers. The buffers act as translators, gathering, holding, and organizing the data in a form that can be picked up and carried by the HP-IB interface to your chosen computer. This process works the same way with an HP-IB controller.

- Uniform protocol. The HP-IL and HP-IB interfaces use similar protocol, so almost all commands can be translated across the HP-IL/HP-IB Interface.
- Interchangeable device address systems. Addressing is continuous across the interface, moving in either direction.
- Simple operation. Just plug HP-IL and HP-IB interfaces into their appropriate outlets on the HP-IL/HP-IB Interface. Flip a switch to choose your mode; set others to select your device address.
- Portability. The HP-IL/HP-IB Interface is a small, shallow, rectangular package (6.3" x 4.7" x 1.1") resembling a medium-size cigar box. It weighs just over half a pound.

To sum up, the HP 82169A HP-IL/HP-IB Interface helps users make the right connections. It's the friendly, flexible solution for increasing benchtop system automation and expanding high-end system options.



# Introducing The UCSD p-System for the HP-86/87

The UCSD p-System provides HP 86/87 users with an additional widely accepted software development system which is now available. The p-System supports both Pascal and FORTRAN-77 and offers the user a complete integrated operating system including compilers, an assembler, a symbolic debugger, an editor, linker, and file handler. This system will allow the user to develop highly portable software applications as well as provide a bridge between series 80 and the growing library of third party software developed for the p-System.

The UCSD p-System is the fastest growing software development system for micro-computers. The system is currently employed by over 60,000 micro-computer manufacturers, application developers and end users. Object code (p-code) developed by the system is directly transferable and executable without recompilation on any micro-computer that supports the p-System.

Software development support includes a powerful screen oriented editor, a character oriented editor, a flexible file handler, and a linker to allow the user to link-edit assembly code into Pascal and FORTRAN modules. For high resolution graphics support, TURTLEGRAPHICS is supplied in the form of machine independant, adaptable library subroutines. TURTLEGRAPHICS, which supports Pascal and FORTRAN routines includes the following capabilities:

- Generation and storage of figures
- Automatic scaling and translation of the coordinate system
- Storage and retrieval of screen images from I/O facilities
- Graphic support including overwrite, underwrite, and compliment

The p-System is offered in both 3.5" and 5.25" disc media. Configurations are available to support Pascal, FORTRAN, or both. Also a runtime subset module is available that supports execution of p-system applications only, (no software development facilities included).

The p-System supports both the HP86 and the HP87 and requires a total of 96K of total RAM. Extended memory mode supported with a minimum of 160K. Built-in electronic disc supported with excess of 160 bytes of RAM. No ROMs are required or supported with the p-System. The p-System can be run with a single disc drive; however, dual drives are highly recommended.

UCSD p-System and UCSD Pascal are trademarks of the Regents of the University of California.



### MIKSAM for Series 80

Hewlett-Packard is pleased to introduce the MIKSAM ROM (multiple indexed keyed sequential access method) for the HP-86/87. MIKSAM, a single, standard ROM, allows you to create and maintain a customized file management system. This capability is provided in the form of 13 additional BASIC commands which provide you with the necessary tools to efficiently retrieve, add, and delete information from data base files. And since you have complete control of the structure and the interface to the data base, interaction with the data is placed completely under BASIC program control. Conceptually, a MIKSAM key file is a list of key record number pairs sorted by key order. This list is structured in the form of a binary tree allowing the list to dynamically expand and shrink while maintaining the key order. This results in very efficient retrieval, addition,

No additional ROMs are required to support the MIKSAM ROM. Memory requirements are dependent on application programs. MIKSAM requires a minimum of one mass storage device. The size and number of mass storage devices required beyond the minimum is determined by the individual application programs.

and deletion of given key values.



### **SUGGESTION BOX**

Dear HP 250 OEMs,

Tom Hughes, a dedicated HP 250 enthusiast and OEM sales rep from the Rolling Meadows sales office, called the other day to tell me about the constructive meetings the midwest POEM organization has been conducting. A recent session dealt with the critically important but often understated aspect of "Disaster Planning". The seriousness of preparing your customers (and your own sites) for a disaster warrants further consideration. This group of midwestern HP 250 OEMs had some good thoughts which I would like to pass on to you.

As an OEM, do you work with your customers to make sure that they have a practical and practiced plan for saving their backup tapes and computer equipment in the event of a disaster? If fire strikes, is there a plan in place for pushing the disc drive into the hallway or other protected area? Is someone in charge

of safeguarding critical storage media so that the system can be restored when the smoke clears? Perhaps waterproof covers can be quickly thrown over equipment so water damage is minimized. Many action plans could be implemented to protect you and your customer's investment. Careful disaster planning should be a part of closing and supporting your customers. Your prospect/customer will appreciate your sincerity in helping them prevent possible disasters and training them to protect their investment in the event of a disaster.

If you would like to share information on topics which benefit HP 250 OEMs, please send me a letter or a copy of your meeting's notes. Working together we can utilize this column to benefit many. Send your inputs in Europe to:

Thomas Lang, BGD Hewlett-Packard GMBH Post Hach 1430 D-7030 Boeblingen West Germany

倾

# HP A900 Benchmarks Run like Magic!!

Recently, a large OEM wanted to verify for themselves, that the HP 1000 A900 Minicomputer is truly a 3 MIP machine, and that its cache memory scheme would provide them with the performance improvements they needed over the E-Series computer.

The A900, code named "MAGIC", whizzed through the OEM's benchmarks (written in standard Pascal) like sheer magic! In every case, it exceeded the 3:1 performance ratio over the E-Series, which HP has been quoting.

The OEM ran their benchmarks on an RTE-6/VM-based E-Series computer with 1 Mb of memory and an RTE-A.1-based A900 with <sup>3</sup>/<sub>4</sub> Mb of memory.

The following is a tabular summary of the A900 benchmark results compared to the E-Series.

Test	A900
	(E-Series = 1)
UNPACK	5.69
BCASE	4.48
BCOPY	6.50
BEXPR	5.18
RANDOM	8.88
CSHK*	3.42
BDATA	6.06
PACKED	4.11
COMPR	5.73
CALNG	3.56
MLOCK	3.48
START	3.17

On the average, the A900 turned in five times the performance of the E-Series computers.

\* Special note must be made of the benchmark CHSK ("Cache Killer" according to the customer), which was supposed to access data at random from any place in memory, and thus degrade the hit rate on the cache for the A900. We are happy to note that even in this instance the A900 came out 3.42 times faster than the E-Series!

To quote the customer, "The A900 definitely exceeded our expectations. It truly does more than HP promised it could do."

That's right, the A900 does run like sheer magic!!

# Super Enhancements to GRAPHICS/1000-II

The A.83 PCO will add great new features to Graphics/1000-II. The enhancements consist of the addition of polygon primitives and color modeling. Both the Device-independent Graphics Library (DGL) and Advanced Graphics Package (AGP) will be enhanced. Further, support is added for the HP 2627A Color Terminal, the HP 2608S Printer on RTE-A.1, and the HP 9111A Graphics Tablet.

With color modeling, users may now specify color attributes using either RGB (red, green, blue) or HSL (hue, saturation, luminosity) color models. This feature is especially useful with color terminals such as the HP 2627A. Polygon output primitives are closed areas which may be filled with a certain style and color. In DGL and AGP, polygon primitives may be concave, convex, or selfintersecting (see figure). It even handles holes! Of course everything is device independent, if a device does not have its own polygon capability (e.g., plotters), Graphics/1000-II will simulate using software generated fill. If the device can fill its own polygons (e.g. HP 2627A), then Graphics/ 1000-II will use this hardware feature.

You can see that these enhancements greatly expand the number of applications for Graphics/1000-II. Polygons are especially useful in data display and presentation graphics applications. In conjunction with color modeling, shaded 3D figures can be created with AGP. Don't forget that all these new features are also available on the HP 9000 in Graphics/9000 AGP and DGL. Graphics/1000-II applications using polygons and color modeling are transportable to the HP 9000.

The A.83 PCO also brings new device support. The HP 2627A Color Terminal is fully supported by Graphics/1000-II. Yes, the HP 2608S is now supported under RTE-A.1 with graphics, and yes, the HP 9111A Graphics Tablet (serial number prefix 2251 or greater) is again supported on L and A series computers.

## New Package Makes HP A900 Price/Performance Even Better

The A900 processor is already famous for setting new industry standards for price/performance; and now this engine is complimented with an outstanding combination of memory and software products at substantially reduced prices.

A new package, called the Performance/900, is an option on Model 19 systems which offers the user either a 1.5 Mb or 3 Mb system and some of HP 1000's best software products. The software included is FORTRAN 77, Pascal, Symbolic Debugger, Image/1000, and Graphics/1000 2D and 3D products.

The Performance/900 transforms the Model 19 into an unbeatable development system for OEMs and System Designers requiring high performance at affordable prices. Couple the Performance/900 with HP's new OEM program, offering a 40% discount on all demo/development systems, and you'll be amazed how inexpensive this supermini can be.

To order the Performance/900, specify:

2199A/B option 101 for 1.5 Mb ECC system

2199A/B option 102 for 3 Mb ECC system

### A-Series Product Pitch Is Available

Would a 35mm slide set and script on the HP 1000 A600, A700, and A900 Computers help you sell your products? If so, ask your HP sales rep for Sales Aid Kit SA-114C.

SA-114C is a 90-minute scripted presentation which provides an overview of the HP 1000 A-Series computers, product line evolution, operating system, subsystems, and a detailed account of the A600, A700, and A900 computers. Customize your presentation by picking and choosing just the slides you want for a particular customer.

## HP Financial Accounting Package Is Introduced

HP announces HP Financial Accounting, a range of HP 3000 applications software which can be automatically interfaced, to give your customers a complete financial accounting solution.

#### **Product Overview**

Accounting is essential to virtually all business, whatever their size or special needs, and HP Financial Accounting offers solutions which can be used in many environments.

HP Financial Accounting is composed of eight separate products. The entry-level, non-customizable product, HP General Accounting, is an integrated low-cost solution for your customers with standardized accounting and bookkeeping needs. This product includes the same comprehensive set of features as in HP General Ledger, HP Accounts Receivable and HP Accounts Payable. It can be used in conjunction with HP Report Facility or HP Interface Facility. It is not intended for customers who need customization capabilities however.

HP General Ledger, HP Accounts Payable and HP Accounts Receivable can be purchased as standalone applications or they can be automatically interfaced to provide a complete, integrated financial accounting solution. A solution which includes additional screen and data base customization capabilities.

For your customers with more sophisticated accounting requirements, two products are available which enhance the capabilities of HP General Ledger. HP Allocator automatically spreads actual costs and budget information to appropriate responsibility centers and makes even the most advanced cost allocations simple. HP Dual Ledger maintains a secondary ledger which accommodates two different sets of accounting conventions. Your customers can interactively maintain and report information reflecting different tax accounting systems, different management information, and even different currencies.

The product offering is further enhanced by HP Report Facility and HP Interface Facility. HP Report Facility allows modification of standard report formats or the design of completely new reports without any knowledge of data bases. HP Interface Facility reduces implementation time by interactively reformatting data which is transferred between HP Financial Accounting and other in-house systems.

#### "White Collar" Productivity

HP Financial Accounting focuses on increasing productivity in key areas in your customer's environment-accounting, EDP and functional management. In particular, it is a product for financial managers who want increased sophistication, improved cash management and up-to-the-minute financial information.

#### Customization

All applications, except HP General Accounting include the ability to customize HP's standard package without changing the programs. Screens, reports, interfaces, database structure, error messages and "help" screens can all be customized. And this customization in no way affect's HP's support commitment.

#### Multi-national

HP Financial Accounting can handle both sales and value added tax, multiple currencies, differing payment methods, varying national reporting requirements and it is documented in local languages. It's the ideal solution for your international major accounts (check with your nearest Application Center for introduction schedules in countries outside North America and the United Kingdom).

#### Ease-of-use

Simple menus and function keys guide users through each application. On-line documentation and error messages give clear and comprehensive explanations and extensive, user-oriented documentation is provided in local languages.

These are just a few of the features that make HP Financial Accounting such an attractive product. And don't forget the fact that, unlike most of the competition, we are able to offer a one vendor solution with all the benefits this brings to the customer. HP Financial Accounting can be sold to the installed base or used as a door-opener into new accounts.

### The Series 39 the Most Affordable HP 3000 ever!

The Series 39 system lowers the price of the entry level system of the HP 3000 product line by up to 20%. Replacing the Series 40SX in the product line, the Series 39 is the most affordable HP 3000 ever offered.

#### What is the Series 39?

The Series 39 uses the packaging concept first introduced with the 40SX. The package consists of an SPU and a disc drive with an integrated cartridge tape drive. The SPU is a Series 40 with 256Kb of memory (Hint — The configuration rules are the same as for the Series 40). With a choice of three disc drives — the 28Mb HP 7911, the 65Mb HP 7912, and the newly introduced 132Mb HP 7914 — the Series 39 adds another model to the two previously available 40SX models and doubles the disc storage previously offered in a packaged system.

The Series 39 offers the three packaged systems (SPU, 256Kb of memory, two GICs, disc drive, and the cartridge tape drive) at a very affordable price!

# What will the Series 39 do for you?

This HP 3000 system is designed to be sold to a small business, a branch office, and a small-tomedium size department. You can now confidently sell against the IBM System 34 or System 38 and the low end of the VAX family the 11/730. When priced against the Series 39, the HP 3000 price comparison against the IBM System 34 is better than ever! In some comparisons, the Series 39, which has a clear performance advantage, is priced below the IBM System 34. Îmagine how it stacks up against the IBM System 38! The Series 39, again, with a clear performance advantage, is consistently priced lower than the VAX 11/730.

Current availability for the Series 39 is 10 to 12 weeks.

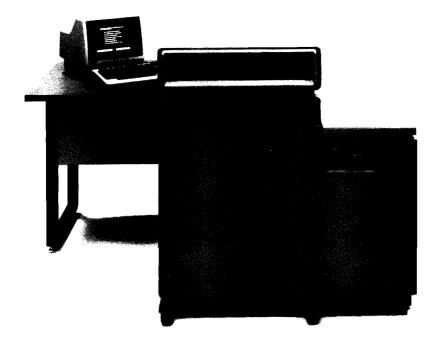
For more information, contact your HP sales rep.

### HP Series 64 to Change Model Number

Between April 25 and June 6, 1983, HP will begin shipment of HP 3000 Series 64 systems with a new product number. The product number of the Series 64 will change from 32460A to 32460B (or 32460AH to 32460BH in the case of an upgrade).

The reason for this change is the replacement of the current power system in the Series 64 with a new design. The new power system is expected to be even more reliable than the one currently in use and this increased reliability will be reflected in a decrease in the monthly maintenance price. The change in power systems will not alter in any way the functionality of the system, and the system price will remain the same.

Beginning March 1, the new product number will replace the old number. Sometime in the window of April 25 to June 6, all outstanding orders for 32460A and 32460AH systems will be filled by shipping 32460B and 32460BH systems. A letter will be included in these shipments explaining the difference in product numbers. In a few cases, the customer's requirement is such that the order and the shipping list match exactly. If your customer falls into this category, and if the customer has a 32460A or 32460AH scheduled for delivery in the timeframe of the change, please have the order retransmitted appropriately. In all other cases, you need not do anything.



# More about the HP 2333A Dual Host Configurator

Among the fanfare of introducing the HP 2333A Multipoint Cluster Controller, one very important feature received little attention. That feature is Dual Host Configuration.

#### What is Dual Host Configuration?

The HP 2333A provides users with the option of connecting to two different HP 3000s or to two different computer ports on the same HP 3000. Customers regard this feature as providing redundant system connections and a very convenient way of accessing two different data bases. The specifics of this feature are:

- Both host ports can be active simultaneously
- One host port can run up to 19,200 bps while the second host port can run up to 9600 bps
- There is complete flexibility when configuring these host ports (i.e., one port can be configured on a DSN/Data Link and the other port can be configured remotely via a modem)
- Users may log on to either computer
- There is no response time degradation when running dual host configurations.

To order the second host port, it is necessary to order product number 40251A along with Option 021 (DSN/Data Link Adapter) or with Option 022 (RS-232-C Adapter).

It is important to note that each host port is configured into a separate INP. So if your customers wish a dual host configuration for the HP 2333A, they need two INP boards.

For more information, contact your HP sales rep.

# HPToolset's Program Key Speeds COBOL II Program Translation

Have any of your new COBOL II customers ever asked if there was an easier method to compile, prep and run their COBOL II programs than issuing MPE commands?

There certainly is! It's HPToolset's program key set.

After logging onto Toolset, and entering your workspace, you create your COBOL II program using Toolset's full-screen editor, which is accessible through the Edit screen-labeled function key. Next to this key, you will find the Program Key. When this key is selected, a menu appears which displays all your source files, as well as the USL and program files which were automatically created by Toolset when you defined your workspace.

By selecting one or more of your source files from the menu, you next press the Compile function key to initiate compilation of your program. Alternately, you could select the Go key which combines the compile, prep and run steps into one. It's just that simple to compile and execute your COBOL II programs.

If any of your customers have complained about numerous compile listings cluttering up their desk, then Toolset provides the solution. After your program compilation completes, Toolset saves your latest compile listing online, including any summary compilation errors. If you have any compilation errors, you can select one of them, and Toolset's Edit key takes you directly to the respective line in your source file for immediate editing. All this is accomplished from your terminal without having a hard copy of your listing.

Following recompilation, you may then select the :PREP or :RUN key to complete the translation of your COBOL II programs.

HPToolset's program key set provides an instant boost in your COBOL II programmers' productivity. Not only does it eliminate the need to issue MPE commands to compile, prep and run your COBOL II programs, but it also speeds turnaround times. By eliminating the endless trips to the line printer to pick up your compile listings, you save time, effort and costs by having Toolset manage your online listings for you.

Remember Toolset the next time your current or new COBOL II customers ask if there is an easier way to develop COBOL II programs.

# Hewlett-Packard Reduces Price on Graphics Package for Laser Printer and Doubles Disc Storage on Laser Print Station

# Reduced Price on Graphics Package

The graphics package for Hewlett-Packard's 2680 laser printer has been reduced, depending on options ordered. The package includes firmware, memory, and graphics support software which enables the user to print graphics on the laser printer. With this package, graphics can be output from non-HP sources as well as from HP's graphics software such as HPDRAW, HPEASYCHART, and DSG/3000.

The 2680 laser printer is a 45-page-per-minute printer which performs both routine line printer applications and special printing applications, such as reducing several pages of information into one; printing entire documents complete with text and illustrations; and printing logos, signatures, and other special character sets.

#### HP Doubles Disc Storage on 2685 Laser Print Station

A new option for the 2685 laser print station enables users to select 128 megabytes of disc memory — double that of the standard disc that comes with the 2685. The new option also saves floor space since the disc is mounted in the same cabinet as the tape drive.

Standard features of the 2685 laser print station include a laser printer, tape drive, disc drive, controller, one graphics terminal, and one operator's console.

# "B" Versions Provide New Sales Opportunities for HP Drafting Plotters

Hewlett-Packard has introduced the HP 7580B and 7585B, new versions of the 7580A and 7585A Drafting Plotters. Shipments begin in March. These new versions will replace the 7580A and 7585A and provide significant enhancements over the A models at no increase in price!

Enhancements include a dual interface, eavesdrop capability, improved accuracy, and mechanical upgrades in the D-size plotter.

#### **Dual Interface**

Both RS-232-C/CCITT V.24 and HP-IB (IEEE 488-1978) are standard on the B versions. Dual interfacing allows switch selection of either interface.

#### **Eavesdrop**

Two RS-232 connectors are available on the plotters' rear panel so that the plotter can be connected in series between a modem (or computer) and a terminal. This feature is useful in remote modem environments and opens up new sales opportunities for our drafting plotters.

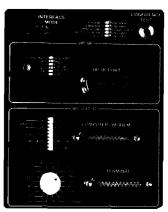
#### Improved Accuracy

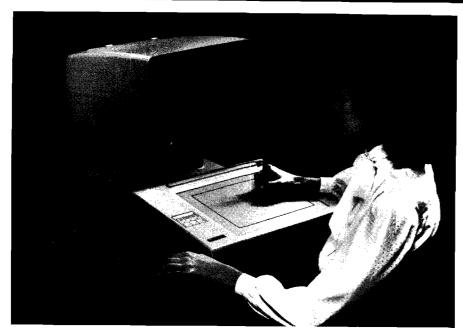
The improved accuracy specification for the 7580B and 7585B is 0.1 percent of deflection or 0.25 mm, whichever is greater. This new capability will allow the plotters to be used in many new applications requiring higher accuracy.

#### **Mechanical Changes**

To improve writing quality in the D-size plotters, the 7580B mechanics have been upgraded to include refinements which were incorporated in the E-size plotters (grooved platen, y-arm mount, pinch wheel cam support, etc.).







# A New Graphics Tablet for RS-232 Environments

Now you can offer your customers a low-cost, color graphics work-station: the HP 2627A graphics terminal and Hewlett-Packard's new HP 17623A graphics tablet. The terminal provides the RS-232-C interface and the tablet provides comfortable, freestyle data input and CRT cursor control capability. With software like HPDRAW, GRAPHICS/1000-II or GRAPHICS/9000, a 2627/17623 workstation is a cost-effective way to provide tablet interaction in an RS-232-C environment.

# Increased Interactivity for Increased Productivity

The 17623A maximizes interaction with a terminal because cursor control is independent of the host computer. The results are faster response time and increased operator productivity.

# High Resolution for High Quality Output

Our new tablet offers two levels of resolution: either 390 x 512 points to match the terminal's screen, or 1560 x 204B points for a resolution four times greater than the screen (except with DGL software). Your customers will appreciate high-resolution mode when preparing logos and diagrams for reports or overhead transparencies. Screen-resolution mode is useful for tasks that require rapid data transfer instead of high quality output.

# Natural Operation for Increased Comfort

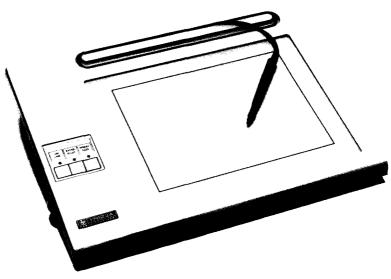
Moving the stylus on the tablet is as natural as writing with pen and paper. The tablet can be tilted to a comfortable angle for use on a table and it's light enough to be held on a lap. Both right- and left-handed operators can use the tablet with equal comfort thanks to a key which rotates the tablet's coordinate system.

#### Flexible Digitizing

Coordinate data can be sent to the computer in ASCII format for easier programming, or in binary format to reduce data transfer time. And users have a choice of coordinate transfer modes. One coordinate can be sent for each press of the stylus for applications such as menu selection, or a stream of data can be sent for freehand drawing or tracing applications.

#### Simple Installation

The tablet is easy to set up. An interface module plugs into the terminal's keyboard socket. The tablet and keyboard then plug into the module. No power cord is required because the module draws power from the terminal.



# Give Your Cable (Installer) a Break!

Would you be interested in saving your customers over half the cost of cabling when they relocate their HP 264X Terminals?

HP's Computer Users Catalog offers the regular 15-foot (4.5m) replacement cables and, in addition, the following 50-foot (15m) cables at substantial savings.

CSO 50- Foot (15m) Cable	Equivalent 15-Foot (4.5m) Cable
92219A	None
92219B	13232N
92219C	13232M
92219D	13232C
92219E	13232Y

These eliminate having to search for extension cables with properly mating connectors, a process which often makes the installation of computer systems so frustrating.

Further, multi-point extension cables are also available:

Length	CSO No.
100 ft (30m)	02640-60134
250 ft (77m)	92220A
500 ft (154m)	92220B
1000 ft (308m)	92220C

Don't overlook these convenient items when you configure your customer's system. These and many other cables are only a phone call away from being shipped.

### New HP 7935 Supported on Current HP 3000s

HP is pleased to announce support of the new HP 7935H 404 Mb Removable Media Disc Drive, which offers the lowest price per Mb in the industry for removable mass storage. This new disc drive offers your customer great versatility as a fast disc-to-disc backup device, as a private volume, or as a fast data transfer device.

#### Support

HP has tested and will fully support this new disc drive on the current HP 3000 systems. Specifically, eight 7935H discs will be supported on the Series 39, 40 and 44. In addition, the Series 64 will support up to 16 drives. This is consistent with the present level of support for 7933H discs on each of these systems. HP does not support the 7935H on the earlier systems, such as the Series 30, 33, and III.

#### Availability

The 7935H can be ordered immediately and has a 12-week availability. Installation of the 7935H on HP 3000 systems requires the release of the "R" MIT currently scheduled for April 1983.

For more information on the 7935H, and an upgrade path for existing 7933 owners, please contact your HP sales rep.

# HP's Daisywheel Printers on Desktop Computers with Non-US Keyboards

The status of support for the HP 2601A and HP 2602A Daisywheel Printers on desktop computers (Series 200, 98XX) is shown in the accompanying chart. It is important to realize that full support applies to US keyboards only. Users with other keyboards utilizing national character sets are required to perform some extra software development. Just why this is so is explained in this article.

HP's Daisywheel Printers offer national character sets that are implemented by 7-bit character set substitution. The printer communicates with the computer using 7-bit datacomm. Seven data bits are used for ASCII character definition. However, desktop computers with non-US keyboards use eight datacomm bits between the computer and printer to define national character sets using the 256 character Roman Extension set (which is not supported by the 2601A and 2602A).

Appendix C of the 2601A Installation and Reference Manual (02602-90902), and page 7 - 5 of the 2602A Owner's Manual (02602-90001), enumerate the 7-bit character codes for the various national printwheel character sets. Series 200 and 98XX manuals enumerate the 8-bit Roman Extension character set codes. (If the 2601A Manual is stamped "Preliminary", look in Section 6 for this information.)

#### Daisywheel/Desktop Support Status

	9816	9825	9826	9835	9836	9845
HP 2602A, Opt 046 Only (HPL, BASIC, and Pascal)	X		X		X	_
HP 2601 A (HPL and BASIC Only)			X		X	Х

Customers who desire letterquality printing capabilities in conjunction with a desktop computer equipped with non-US keyboards should be made aware that userdeveloped software is required to convert the data transmitted to the printer from the computer's 8-bit codes to the 7-bit codes required by the printers.

When using HPL or BASIC, facilities are available to automatically translate characters. In HPL, use the "CONV" statement (see the HPL programming manual). In BASIC, you need the AP 2.0 binary. Use the "CONVERT" attribute of the ASSIGN statement. This attribute is documented in the new BASIC Language Reference Manual (09826-90056).

#### March 1983, Volume 2, Issue 5

**OEM News** is published monthly for Hewlett-Packard OEMs to keep you informed of HP products and services and to provide information to help you be more successful.

If you work for a company that is an OEM for Hewlett-Packard and want to receive your own copy of **OEM News**, call your Hewlett-Packard sales representative.

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

**Note:** Not all HP computer products are sold and supported in all countries. Please check with your local HP Sales Office.

If you have any suggestions, comments, or letters about **OEM News**, please send them to:

Editor: Sheri Bebb Godshall Hewlett-Packard Company Computer Marketing Group 19320 Pruneridge Avenue Cupertino, California 95014 USA



ADDRESS CORRECTION REQUESTED RETURN POSTAGE GUARANTEED