

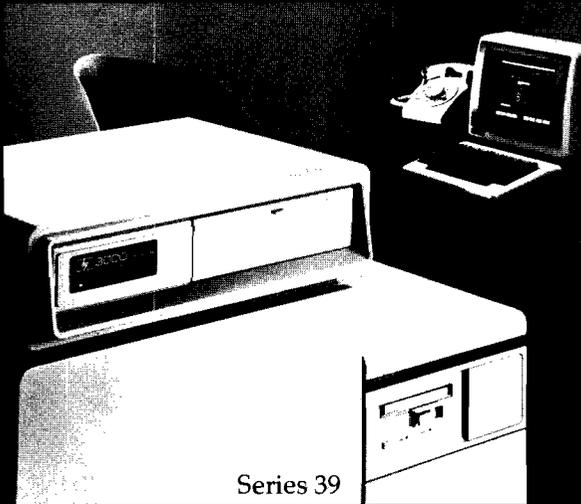
Computer
News

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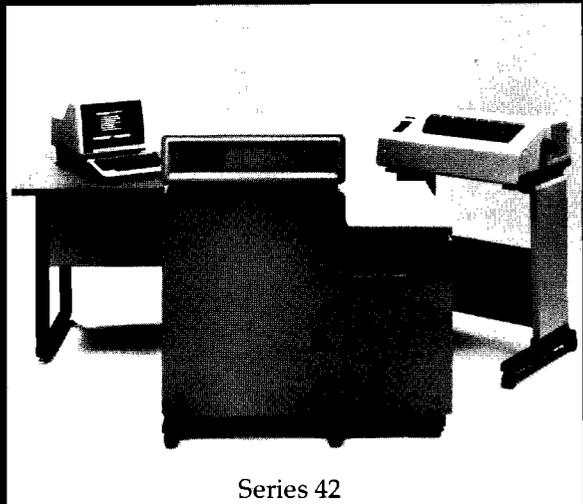
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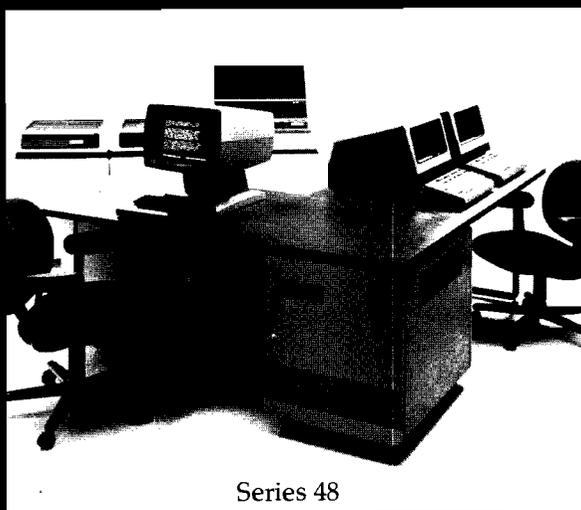
The 1983 HP 3000 Family



Series 39



Series 42



Series 48



Series 68

 HEWLETT
PACKARD

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Personal Computers: A View from the Top

Following is the first of a two-part interview with Paul Ely, Executive Vice President of Hewlett-Packard. The first half of the interview will focus on Paul's personal experiences in using personal computers in his work and the applicability of this technology to senior level managers and their staffs. He will also comment on the interactive office and the use of personal computers by nontechnical professionals who may perceive computers to be too complex to learn to use effectively.

Interviewer: "We hear a lot about personal computers being used in the home, the entertainment market, and in small businesses. With secretarial and support staffs, how applicable is the trend to use personal computers going to be at the senior level?"

Paul: "We have examples of a number of customers whose senior managers use personal computers. For instance, one of our large customer's chief executive has decided that utilizing personal computers will increase not only his own personal productivity, but the productivity of his entire staff. As a result, a personal computer network has been installed.

"This is really a whole HP interactive office network which includes an HP 3000 to support all of these people — word processing capability for the secretaries and personal computers for all the senior managers. They use HPMAIL* and VisiCalc* to develop unique programs on their personal computers to utilize the information base. A lot of the memos that were once received in paper form are now being delivered by HPMAIL in a format that can be manipulated on personal computers. The individuals are very enthusiastic about this system.

"However, I've met numerous examples of executives who don't want to have anything to do with a keyboard, don't want to see a personal computer, and are not even sure their secretary needs one. Ultimately, however, through contact with those who use personal computers, the major benefits of computer interfacing are quickly realized.

"Our personnel manager has personnel responsibility for all 25,000+ people involved with HP computers. Personnel has a very large VisiCalc* base that has been coupled with a financial program which helps us plan our people hiring. It would be difficult and time-consuming to accomplish this any other way.

"My own personal experience is that by taking some problem and using VisiCalc*, I can obtain answers almost immediately. And because it's so easy to recalculate by changing an assumption here and there, in-

cluding going to limit cases, you begin to understand how things work . . . you begin to see it happen in front of you on the terminal screen.

"For example, I was studying our discounts and made a simple little model at home one evening. I studied it for a couple of hours making changes to the model and watched the recalculation occur instantaneously. I returned to work the next day with a whole new perspective on how to make sure that we offer the best possible discounts but still maintain our current profits. I wouldn't have known what questions to ask if somebody else were doing the analysis. I didn't have to become a computer programming expert, yet the model was very sophisticated in terms of helping me understand what happens when we change our discount, selling, and pricing assumptions.

"I know the use of personal computers will be useful for senior managers. In the long run, most senior managers will use them. In the short run, some senior managers will use them while they will increasingly be used by the people on their staffs. In my opinion, personal computers will be either directly or indirectly used by senior managers."

Interviewer: "What will be the overall impact on the secretarial and support staffs that use these personal computers? Do you see their work becoming more cumbersome in learning new skills?"

Paul: "Just the opposite. My secretary has a personal computer. She does all of her word processing on it. It's connected into the HP Corporate mail system, and she also uses the CONDOR database program. The routine part of her job is easier and she has more time left-over to help me do things that are more complicated. She loves it.

"As a matter of fact, she can sit down and type a memo and instead of walking to the Xerox machine, making 12 copies, folding, stuffing, and typing envelopes, she just places it in HPMAIL where she already has a distribution list maintained. For example, when we made some of our announcements about our organization recently, I sent personal letters to about 150 executives in other companies. She was able to do that in a matter of a day and a half — part time.

"I make presentations often and frequently I need slides. She used to either make rather simple slides using a large letter type font on her typewriter, or we would have the slides prepared by another department or outside arthouse. Now, with the use of one of our plotters, making a four-color slide containing graphs and complex figures is easy. Some slides are sketch-illustrated concepts, such as organizational charts, for example. It has boxes, text, and is shaped. She can do charts much more easily than she could before.

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

"If you talk with the professional people that I work with, I think they would also agree that tasks can be completed more quickly and efficiently with the aid of computers and peripherals."

Interviewer: "The other general concern is that many senior level managers view computers as being very difficult to use. There appears to be a separate language which is complex to the person not well versed in computer terminology. There is a lot of fear that one may be exposed as a computer illiterate."

"What is HP doing to eliminate that type of fear? How are we assuring that our personal computer products and workstations will be a positive learning experience for our customers?"

Paul: "First of all, there is a lot more that needs to be done. The first item we have taken care of is to eliminate the need to ever "program" the computer. Although I know how to program, in the last two years of using a personal computer, I have not written a single program, because I haven't had to. The benefits I get from a personal computer come from using things like WordStar*, HPMAIL, and HPINFORM, which is a way for me to get information from the company's data files. These are not computer languages. If you know how to use a sheet of paper and a pencil, then you can use VisiCalc*. It takes an hour or two to get started, but once you have learned the basics, you can progress quickly. The threshold is to take the first step and try it. HP's contribution is to continue to make a variety of software packages available."

"Slide generating packages are another improvement. You can make a slide without a whole bunch of rigmarole. You certainly don't have to understand computers to make a slide. You simply type it and literally fill-in a menu. If you want a bar chart, the terminal asks you enough questions that are quite obvious. Where I think we can make additional contributions is in creating better user materials."

Interviewer: "Is this something that we are working on?"

Paul: "Yes. We have made dramatic changes in our personal computer manuals over the last year, but my personal feeling is that we are only 20 percent of the way there. I think we can make it much easier to learn

how to use our products which will also make the product itself easier to use. These things are happening, but I think our goal should be to make it happen faster. It will pay-off for all users, not just for senior managers."

"As far as typing is concerned, I'm not a good typist. The items I generate do not require much typing. It turns out that if you're building a worksheet by just punching numbers in, it's just as easy as using a little hand calculator. The amount of time spent typing, even in using HPMAIL to send a little message, is insignificant when compared to having to write it down. The difference to me is not that great and when I press the key the job is done. If I handwrite my message, the job is just starting. Imagine all the people that are going to handle it before its delivered, ranging from the secretary to the mailroom clerk."

"One benefit I've found from doing some typing myself is that you can really express yourself better. Using a dictating machine is the least concise. Writing something is the next best. If I type it, particularly when it's very easy to change a sentence, edit, or change a word, this is the most concise method. I find typing is a way to communicate the most with the least number of words."

In the next edition of *OEM NEWS*, Paul Ely will comment on the progress HP and third party suppliers are making in developing software to run on HP personal computers, organizational changes within the Personal Computer Group, and the impact of these changes on the products, strategy, and overall character of this group. He will talk about the graphic capabilities of this class of equipment, and comment on the portability of these products. In addition, data communications and the implications to personal computer networking will be described.

*VisiCalc** is a U.S. registered trademark of VisiCorp.

*WordStar** is a U.S. trademark of MicroPro International Corporation.

"CONDOR" is a U.S. trademark of Condor Computer Corporation.

* HPMAIL has a new, upgraded job description and title to go with it: HPDESKMANAGER. See page 24 in this issue for more information about HPDESKMANAGER. — Editor.



QUESTION: WITH RISING COSTS, WHAT IS HP DOING TO KEEP SUPPORT PRICES DOWN?

ANSWER: First of all, HP's strategy of offering a range of standard support services which can be efficiently produced, has been extremely successful in keeping our price increases below the rate of inflation. Secondly, offering a broad range of support products enables our customers to choose support products best suited to their needs. For example, customers are able to choose the highest level of coverage for a system and a lower level for peripherals.

HP's newest service, Volume On-Site Repair Center (VRC) for peripherals, is another example of HP's continuing effort to pass along cost savings to our customers in the form of reduced rates. Through this program, customers with twenty-five or more peripherals are charged Field Repair Center rates. An HP Customer Engineer schedules weekly visits to the customer site to perform the repairs.

QUESTION: HP OFFERS SO MANY SUPPORT SERVICES, THAT IT IS SOMETIMES DIFFICULT TO KNOW WHICH IS THE ONE BEST SUITED TO MY NEEDS. IS THERE A ONE PAGE TABLE DESCRIBING ALL THE SUPPORT SERVICE OPTIONS?

ANSWER: The HP publication "HP Computer System Support Services System Implementation and Support Planning Guide" contains two tables: one matrix describes Hardware Support Services and the other matrix describes Software Support Services. The publication number is 5953-5231. You can order this from your HP sales rep.

QUESTION: WHAT IS HP'S SOFTWARE WARRANTY POLICY?

ANSWER: We warrant that the media (magnetic tape, flexible disc, etc.) on which the software is delivered is of high quality, i.e., that the software can be loaded and executed. HP does provide the initial 90 days of software support at no charge if the customer purchases some level of support for one year following the initial 90-day period. CSD's hardware and software support services are 90-day period. CSD's hardware and software support services are designed to provide equivalent services during warranty as contracted for the long term under an HP Customer Support Services Agreement. The flexibility in this policy enables customers to receive the service most appropriate to their needs.

QUESTION: WHAT DO YOU SEE AS THE FUTURE OF REMOTE SUPPORT?

ANSWER: Remote Support is an indispensable part of HP System and Network support. Through Remote Support, HP will be able to perform many of our support functions remotely. This will enhance the productivity of HP support personnel. Remote Support will also enable HP to determine the cause of intermittent discrepancies without interrupting system operation. Overall, Remote Support will increase HP's effectiveness in dealing with both routine and complex problems and will reduce the cost of software updates.



Employee Training — One Key to Productivity

Productivity — the buzzword of the eighties. And rightly so, in today's fast-paced, high-tech information age, productivity could be the determining factor in a company's success. Hewlett-Packard is in the productivity business. We'd like to describe how our customer training program fits into HP's focus on productivity.

Higher productivity can be defined as improved asset utilization: Increased output from the same level of input. An organization's most valuable asset is its people — that's where training comes in. To be as productive as possible with your HP system, well-trained employees are necessary.

The benefits of an on-going formal training program are both tangible and intangible. Tangible benefits can be translated into dollar savings. Training, like any other investment, should yield measurable results. Quantifiable returns could include: more productive employees, new employees becoming productive more quickly, reduction in employee turnover, or any other measure applicable to your needs.

Just as a formal training program can have measurable gains, so can adhoc programs have measurable costs. Allowing new employees to pick up the basics from a more experienced user or by simply reading the manual and "learning by doing" on their own has several disadvantages. Some employees can become frustrated learning on their own — there may be no one formally designated to answer their questions or to give immediate feedback. This frustration can drag out the learning process which is detrimental to both the user and the organization.

Also, the tendency in this type of situation is to learn enough to "get by." In an HP training course, the course topic is covered completely. And, the courses are constantly being updated to include the latest information and best techniques.

The instructors are Systems Engineers, who because of their real world experience with customer situations, can point out potential problem areas and help with specific applications.

In addition, the classroom atmosphere allows for student interaction which is a crucial part of the learning process. Much is gained by sharing experiences with others who have similar responsibilities.

As for the intangible benefits — people *enjoy* training. It's a chance to spend a few days in a different work environment and to develop new contacts. The em-

ployee returns to work armed with new skills and higher self-confidence. He feels that the organization is in itself a key motivator for better job performance. And the main goal of training is better job performance.

People are an organization's most valuable asset. As such, employee training is key to organizational productivity and, therefore, success.

New Workstation Product Service

Interested in service for your workstation products priced at return-to-HP rates but performed at your facility? Hewlett-Packard's newest hardware service offering is called Volume On-Site Repair Center Service (VRC). By placing 25 or more personal computers, terminals, floppy disc drives or workstation printers or plotters on a VRC maintenance contract, you may receive Field Repair Center Service at your facility. This saves up to 50% over next day on-site service for those products not used in critical applications or backed up by redundant units.

VRC service incorporates a scheduled weekly visit at an HP approved work space to repair failed units. Information on these units, including the model, serial number and a specific failure description, must be called in a day prior to the visit. This enables the HP customer engineer (CE), to obtain parts which may be needed for the repair. You must take all units which have been called in for repair to the approved work area before the CE arrives.

Like all other on-site hardware service maintenance, a customer representative must be present at all times while the CE is on-site. A benefit the VRC customer receives is the ability to demonstrate the exact nature of the failure to the CE and then verify that the CE has fixed the problem before the CE leaves. This last step is important since a week will elapse before the next scheduled visit.

If you would like more information about the VRC service or are interested in obtaining this service, please call your local sales office. A service representative will contact you to discuss your individual needs.



HP's Software Distribution Center Begins Software Replication

HP's Software Distribution Center inaugurated its Software Replication Facility during the month of March by producing and distributing the most recent HP 3000 systems installation software.

This software release, titled Q-MIT, completed an extensive process of testing before being accepted for distribution to Field Software Coordinators. For the first time, installation sets of software are being distributed to additional sales offices for more productive installations of this version.

The Software Replication Center produced and shipped over 480 magnetic tapes to 52 worldwide locations. Within the next five days, 90 additional systems sets, comprising 540 tapes were produced for sales offices to facilitate systems installations and updates.

Within the next several months, we will begin shipping customized HP 3000 software directly to you. The software will be distributed using version and contract

requirement information on IBS. Using newly developed software for accurate, fast replication and rigid acceptance criteria for the content, the Replication Center will have the capability to produce in excess of 1000 customized shipments each week. At this time, we will be able to produce both 1600 bpi or 800 bpi media options.

The combined efforts of many functions at HP and the field SEO have implemented this plan so that well-controlled, traceable, supportable versions of software are installed around the world. Centralizing this replication effort, with a consistent, controlled manufacturing process will result in a more productive field SEO by eliminating the duplication of effort with each new HP 3000 software release.

Future plans involve expansion of the reproduction capability to include production of software updates for HP 1000 and HP 9000 systems. The facility also plans to add capacity for Linus tape cartridges, floppy disks and mini-cartridges. The major focus of the Software Replication Center will be to improve customer satisfaction through a high quality media replication process coupled with timely distribution of the product.

Super Workstation Solution for Desktop Computer Systems

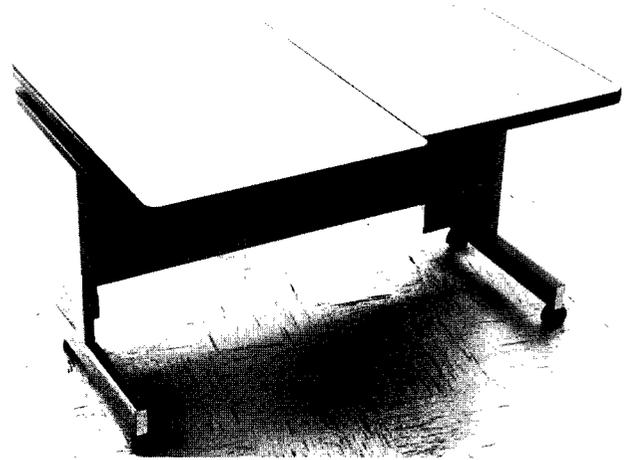
Do you and your customers need comfortable, convenient workstations for desktop computer systems? The HP 92213A dual-tiered, mobile workstation is the answer. Its unique features include:

- Raised, sliding worksurface for graphics tablets and similar peripherals
- Lower main table surface. When a desktop computer such as HP 9000/Model 20 is used, the home row keys on the keyboard are 29.5 in. (750 mm) above the floor. This is an ideal height for operator comfort.
- Casters for mobility
- Color compatibility with HP desktop systems

	Main Table	Tiered Work Surface
Height:	26" (660 mm) including casters	28.4" (720 mm)
Width:	48" (1220 mm)	24" (610 mm)
Depth:	24" (610 mm)	30" (762 mm)

The tiered work surface is six inches deeper than the main surface and can be slid easily to the left or right side of the table providing a large, convenient work surface for graphics tablets, etc.

Remember, if you and your customers currently own or are thinking about ordering an HP desktop system such as the HP 9000/Model 20, HP 9845C, or HP 9836, the solution to "what can I put it on" is the HP 92213A dual-tiered workstation table.



This and other workstation solutions are described in HP's *Computer Users Catalog*, P/N 5953-2450(D). Contact your HP sales rep for this catalog or for further information.

HP DIRECT ORDER

HP Fast Phones — the easy, direct way for customers to order supplies, accessories, media, furniture and software.

Location	Telephone Number
US	800-538-8787
CA, AK, HA	408-738-4133
UK	0734-792868, 792959
Germany	07031-142829, 223133
Netherlands	020-470639
S. Africa	802-5111 53-7954 28-4178



Series 80 Now Supports 10Mb Disc Drives

For applications which demand the extra storage capacity of a 10 megabyte Winchester disc drive, Series 80 now supports the HPs 9133B and 9134B disc drives under native (BASIC language) mode. This capability is built into the new HP-85B and HP-86B computers. Owners of the HP-86A or HP-87 can add 10Mb disc drives if they also add the new Electronic Disc ROM (00087-15012); the HP-85A will not support the 10Mb discs.

The large capacity of the HPs 9133B and 9134B disc drives are ideal for user-written applications which require fast access to huge amounts of data. With the exception of revision A of FILE/80, HP-written software will also run from a 10Mb disc drive. A new revision of FILE/80 will soon be available which takes advantage of 10Mb drives.

Also note that the 10Mb disc drives are accessible under native mode only; CP/M or p-System software cannot access these disc drives.



HP-75C Security Cradle Now Available

HP has introduced a security cradle for the highly portable HP-75C to help guard against theft and unauthorized use. The HP 82701A Security Cradle is a lockable holder for the HP-75C Portable Computer, which, when secured to a fixed object (such as a desk), prevents the computer from being removed. It also prevents the removal of plug-in modules, the plug-in 8K Memory Module, and the battery pack from the HP-75C. The cradle does allow for full access to the HP-75C keyboard, the card reader, the HP-IL receptacles, and the AC adapter/recharger receptacle.

The HP 82701A Security Cradle is packaged with the following parts:

- Security cradle
- One five-foot cable
- One padlock and key
- Four mounting screws
- Two adhesive mounting strips.

HP Series 40 Extension Module Comparison

Two recently introduced extension modules for HP Series 40 Handheld Computers, the HP-IL Development Module (00041-15043) and the Extended I/O Module (82183A), enhance the many capabilities of the HP-41. The Development Module is highly recommended for those individuals who are designing their own HP-IL peripherals. The Extended I/O Module is designed for the user who wants enhanced control over existing HP-IL peripherals. This article highlights the major features of both modules.

HP-41 Development Module

Scope mode — A second HP-41 can be added to the loop and used only to display the mnemonics for HP-IL messages as they travel around the loop.

I/O Buffer — A block of data registers can be set up as a buffer area to facilitate the input or output of data. This circumvents the problems and limitations associated with using the Alpha register for I/O operations (specifically the loss of characters with byte values of zero).

Input and output numbers using the X-register. A1- to 7-byte integer can be sent or received.

Direct access to the HP-IL integrated circuit. The contents of any control register can be changed, and certain status bits can be polled.

Alpha register functions. Characters can be inserted at, or removed from, any position in the Alpha register.

Transmit all HP-IL messages to devices on the loop. Several of these messages can be sent by specifying their mnemonic.

Calculations in hexadecimal, octal and binary (with the aid of a program contained in the Owner's Manual).

Boolean operations upon 32-bit unsigned integers.

Extended I/O Module

Mass storage functions — Tape-to-tape copy of individual files or entire cassettes (private option available), and access to directory information, such as file name, file type, file length, and the location of the file on the tape.

Character manipulation functions — The Alpha register is used as an I/O buffer to send or receive

information over the loop or to the X-register (the problem with sending and receiving null characters has been taken care of). Characters can be inserted at, and removed from, any position in the Alpha register.

HP-IL control functions — These functions make device control, loop configuration and data transfer operations simple and straightforward. They automatically take care of "overhead" commands such as loop addressing and designating devices as talkers or listeners. An important feature of the data transfer functions is the ability to input or output an HP-41 program as a series of hexadecimal-coded ASCII data bytes, the same format in which a program is stored in the HP-41's memory.

Advanced control functions — These are the low-level HP-IL commands which control the transfer of data around the loop. Use of these functions requires a detailed knowledge of loop protocol and the response of each device to these commands.

Should you or your customers consider using either of the two modules, we recommend that they become thoroughly familiar with the concepts and protocol of the HP-IL interface loop. An excellent source for this information is "The HP-IL System: An Introductory Guide to the Hewlett-Packard Interface Loop," by Kane, Harper, and Ushijima.

Please note that the Extended I/O Module does not contain any functions for generating Series 40 bar code. This capability was shifted to the HP 82184A Plotter Module.

HP-86/87 Advanced Programming ROM Is Now Available

HP is pleased to announce that the Advanced Programming ROM is now available for the HP-86/87 Personal Computers.

The functions, statements, and commands provided by the Advanced Programming ROM give you extended control over data, programs, and your Series 80 system operations. This ROM set allows you to perform operations which were not possible using your Series 80 Personal Computer alone.

Some of the capabilities that this ROM set provides are:

- Subprogramming
- Full cursor and CRT control
- Full keyboard control
- Find and Replace variable names
- Cross-Reference program lines numbers and variables
- Merge programs
- Set, clear and test 64 flags
- Save and get programs as Data files

HP Series 80 and Computer-Aided Work

There are more than 600 software solutions available for the HP Series 80 and the number is growing every day. Not only do we offer solutions for every professional's core software needs — word processing, spreadsheet analysis, information management, presentation graphics, and data communications, we have them in several different "flavors," depending on your needs:

- WORD/80, WORDSTAR*
- FILE/80, dBASE II™
- GRAPHICS PRESENTATIONS
- TERM/80, DATA COMMUNICATIONS, THE SERIES 80 MODEM
- VISICALC* PLUS, SUPERCALC

Plus, we have a 600-page catalog full of computer-aided work software. Categories for this competence software include:

- Business Management — Accounting, Banking and Finance, Securities and Investments, Real Estate Analysis, and Tax Planning
- Engineering — Civil, Electrical, Mechanical, Structural/Architectural, and Chemical
- Mathematics and Statistics
- Physical Sciences
- Games

To order a catalog, contact your HP sales rep.

WordStar* is a registered trademark of MicroPro International Corporation.

dBASE II™ is a trademark of Ashton-Tate.

VisiCalc* is a registered trademark of VisiCorp.

File Manager Available for the HP-86/87

On May 1, HP will begin filling orders of the new File Manager 86/87, P/N 88104A. The operation and capabilities of this software pack are the same as File Manager 83/85.

File Manager provides an electronic filing system which allows the business or technical professional to define a file structure which meets specific needs. You can create your own file structure, enter data into it and then perform searching, sorting, reporting and plotting functions. Reports can be generated in line, column or label format, and for greater impact, you can plot line, curve, pie and bar charts.

Ease-of-Use

File Manager is completely menu driven. With the softkeys on the HP Series 80, you can select and initiate a command by pressing a single key. Each softkey is labelled on the screen, and a HELP key will guide you through each procedure. HELP messages are available in six local languages: Dutch, German, French, Spanish, Italian and English. File Manager is also designed with abundant error-trapping and comprehensive data integrity checking to assure easy, reliable performance.

Now File Manager operates on all Series 80 Personal Computers. Order it now.

Answers to Common Series 100 Questions

"How do I get the new Series 100 manuals?"

"Which software packages are available from HP?"

"What courses are available for the Series 100?"

"I think I found a bug
— is it known?
— is it fixed?"

"Are there any manual corrections I should know about?"

The answers to these questions keep changing as products are introduced, bugs are fixed, courses are created, procedures are changed, and so forth.

There is a way for you to have your own personal database on the Series 100 — and have it automatically updated every two months. How? Subscribe to the *Series 100 Communicator*. The "Ordering Information" and "Software Status Bulletin" sections in every issue give the current answers to all of those questions.

How to Subscribe to the Series 100 Communicator

The subscription is Product 45530N — Series 100 Software Notification Service.

OEMS: Call the nearest HP office and ask for "Computer Products Order Processing."



HP Scores Well in German User Survey

One of the leading computer magazines in Germany, *Computerwoche* (in conjunction with Datapro), recently published the results of their 1982 survey of users of Small Business Systems and Minicomputers. The results showed the HP 250 in joint first place for overall satisfaction, and overall HP in 4th position.

The survey was based on responses from 477 users. These users were using 42 different models of computers supplied from 22 different manufacturers.

Users worldwide continue to give HP good ratings, but this is the best ever showing in the German marketplace. In the last three years, HP has consistently improved its rating from 8th position in 1980, to 4th in 1982, demonstrating the increased appreciation of the quality of HP's Small Business Systems, and also the increased professionalism of all the German Sales and Support organizations.

Make sure you take advantage of existing users' satisfaction, when looking for new business.



Hewlett-Packard's New Measurement and Control Software Controls Real-Time Automation Processes

Hewlett-Packard has introduced a new measurement and control software package that makes process control and machine automation faster and easier — HP Control/1000. Designed for high overall performance and reliability in medium and large scale industrial automation environments, HP Control/1000 provides the flexibility needed to customize a wide range of automation solutions. It is best suited for pilot plant control, sequencing large machinery such as printing presses, monitoring engine test cells and automating chemical process facilities.

To obtain the capabilities inherent to this software requires a direct integration of an HP 1000 A600 microcomputer and the HP 2250 measurement and control system. The A600, designed for use in process and industrial automation applications, is embedded in the HP 2250 front-end for local control of its measurement and control hardware. This configuration functionally replaces the customized L-Series CPU and MCL/50 language system in the HP 2250.

Benefits of the real-time executive operating system include true multi-tasking capabilities

Combining the A600's Direct Memory Access per I/O channel with the Real-time Executive operating sys-

tem provides true multi-user, multi-tasking capabilities. We've eliminated the need for the HP 2250 language, MCL/50, and replaced it with easy-to-use subroutines which you can call from application programs. You need never know that you're using anything other than a high level language.

High Level Languages for Process Control include FORTRAN 77 and Pascal

Now you can write your process control programs in the high level languages, FORTRAN 77 or Pascal, and run them on the A600. With HP Control/1000, Hewlett-Packard has retained the best features of the MCL/50 language and given it the ability to be called as subroutines from high-level languages running in the local processor. Now, program control, computation, and data manipulation can be performed in a high-level language, and Measurement and Control card I/O calls will still retain the user friendliness of MCL/50. For applications which demand maximum speed, a mode has been created which allows you to talk directly to the M&C cards without the overhead of the I/O subroutine calls.

HP Control/1000 provides 512 kilobytes of memory

Supporting an extensive 512 kilobytes of memory allows the A600 to decouple from the host computer to perform detailed measurement and control tasks — independently. The A600 significantly simplifies the writing of application programs with high level languages. You can now write your application programs without worrying about constant segment passing to the HP 2250, due to lack

of memory. For number crunching intensive processes, you no longer need to pass the data to the host — the A600 can do the calculations in real-time, in the HP 2250.

True networking performance

Now process control or machine control computers can benefit from all the features of the DS/1000-IV, HP's advanced communications hardware and software, which can incorporate an HP system in a computer network. It is then equipped to share information with other HP computers in a network and to also utilize peripherals at other systems. This networking prevents data loss should a communications link failure occur. Continuous link self-testing features ensure continued operation should the host link be broken.

Physical packaging includes both an 80" rack-mount cabinet for semi-clean environments and a new rack-mount, NEMA — 12 enclosure for the factory floor.

These features add up to substantial savings in both software development costs and the necessary hardware for your automation tasks. With Control/1000, you can depend on Hewlett-Packard for an unbeatable price/performance ratio in your measurement and control application.

Orders are now being accepted. Delivery is 12 weeks ARO.

New RFI/EMC Certified HP 1000 E/F Systems

In January, HP introduced two new RFI/EMC certified HP 1000 E/F Series systems. The new Model 60 (HP 2178C) and Model 65 (HP 2179C) have been certified to meet FCC (US) and VDE (European) standards. Availability is eight weeks.

The new systems are housed in the HP 29431F cabinet. This is the same cabinet the A-Series systems use. The HP 29431F is a 56 inch tall steel cabinet. It offers better cooling than the existing Model 60/65 (which use an HP 29402C cabinet) and can rack mount HP 7908/11/12/14R CS-80 discs. Options are available for a mag tape trim for the upper part of the cabinet (Option 051), and a solid lower door (Option 053) if you do not need a cut-out for a Linus tape unit.

Previously, we have required an HP 264X terminal as the system console. On the new Model 60/65, we are dropping this requirement. An HP 262X terminal can be used

as a system console. However, an off-line load device, mag tape or HP 264X terminal, must still be available on-site.

Presently, there are no RFI/EMC certified HP 264X terminals, although plans call for an HP 264X terminal to be qualified before October 1, 1983. The implications are that in Europe where VDE standards are in effect today, an HP 264X terminal cannot be purchased with an HP 2178C or HP 2179C system. The customer must either buy a mag tape unit or use a previously purchased HP 264X terminal. In the US, a mag tape or non-certified HP 264X terminal can be purchased until October 1, 1983, or a certified HP 264X terminal after that date.

If you want a mag tape with your systems, use the HP 7914TD. The HP 7914TD incorporates an HP 7914R (132 Mb disc), and an HP 7970E (1600 bpi mag tape unit), into an HP 29431 style cabinet, at an outstanding price. The HP 7914TD has been qualified with the HP 2178C and HP 2179C. If you are presently purchasing an HP 264X terminal and an HP 7908/11/12R disc, you might consider an HP 262X terminal and an HP 7914TD. The incremental cost is surprisingly low and system capability is

significantly increased. The system and HP 7914TD cabinet can be bolted together with a 40026A (bolt together kit).

To ensure compliance, it is important that you purchase only certified peripherals and accessories. Two products in particular have options for RFI/EMC compliance. The HP 12979B (I/O Extender) Option 001 provides a shielded cable and modified power cord. Option 001 must be ordered if you want an I/O Extender with an HP 2178C or HP 2179C. On the HP 12966A terminal interface card, Options 105 and 106 provide special RFI/EMC cables.

Remember:

- RFI/EMC qualified E/F Systems available now — Model 60 (HP 2178C) and Model 65 (HP 2179C)
- There is no longer an HP 264X system console requirement; however, an off-line utilities load device, HP 264X terminal or mag tape, must be available on site
- HP 7914TD, an outstanding value for the customer who needs a disc and a mag tape. Buy the 40026A bolt together kit if you want the system and peripheral bays tied together.

HP 1000 Communicates with DEC and IBM Via HP PLUS

In today's multi-vendor, multi-processor distributed systems network environment, your sales situation may demand that the HP 1000 computers communicate not only with other HP computers but also with other processors from DEC, IBM, etc. This is where three of the major third-party datacomm products on HP PLUS can be most beneficial.

ICC's DEC Protocol Handler

Industrial Computer Corporation (Atlanta, GA) has a product, DDCMP, that provides DEC-to-HP 1000 communications by implementation of DEC's Message Exchange Component Protocol, Revision 4.0.

ICC's DDCMP Protocol Handler offers straightforward, error-free data and message transfer capabilities in a multiple-CPU HP/DEC system with RSX operating system. Although DDCMP does not include communications with VAX-based systems at this time, ICC can provide this capability upon request.

SSI's ICE/1000 for IBM Communications

HP 1000s may now effectively communicate with IBM mainframe computers using the Intelligent Communications Emulation System, ICE/1000, from System Services Incorporated (Boulder, CO). ICE/1000 emulates an IBM 3274 (C Model) remote terminal control unit communicating via an SNA/SDLC link to the mainframe system.

CCS's VTEP-1 Virtual Terminal Emulation Package

Corporate Computer Systems' VTEP-1 package allows HP 1000 system users connected to RTE, HP's operating system, to gain remote access to other terminal-oriented computers (DEC, IBM, etc.). A VTEP Command Set enables users to establish remote connections either interactively or through the use of command transfer files.

The datacomm software available from ICC, SSI and CCS are complementary products (i.e., not competitive). Your sales situation will dictate the one(s) required for you or your customer's application. HP PLUS software supplier datacomm products let you and your customers use HP 1000 systems in a multi-vendor, multi-processor network environment.

For more information on any of the packages described in this article, contact your HP sales rep.

HP Third Party Systems House Leverages Five HP 1000 Systems

Eyring Research Institute, Inc., of Provo, UT, a recent third party systems house, was granted a \$3 million, three year contract with a major manufacturing firm to specify, design, implement, and install an open-loop process monitoring system. The system monitors a combination chemical batch and moving web process. The moving web process involves the application of chemicals to a constantly moving web of a plastic film base. The final system provides the users with the capability of specifying how process variables are to be monitored and when. This information, along with material and QC information, is deposited in a central database that provides data for statistical analysis and raw data reporting. In real-time, operators are alerted to deviations from process standards so corrective action can be taken. All monitoring is done using the HP 2240 instrument controller.

Eyring provided the software and computer equipment integration for more than \$2 million. The customer was responsible for the selection and installation of the instrument sensors. The total amount of HP equipment sold was \$850,000. This is a prime example of how a systems house can help HP sell our hardware into industrial automation and monitoring applications. As a result of this successful project, Eyring is now marketing a statistics package (STAT/1000) through our Software Supplier Program. STAT/1000 runs on HP 1000 E/F- and A-Series computers. This statistical package is a subset of the monitoring and analysis system produced by Eyring.

If you have any applications that deal with process monitoring and control or would like to discuss the development of a custom system, you may contact Eyring directly by calling Steve Carter at Eyring Research, 801-375-2434.

All articles are subject to editing and minor revisions; however, you will be contacted if there are any questions regarding information content. If major revisions are required, the editor will work with you to improve the article. You will be notified upon acceptance of your article.

Photographs, charts, and illustrations are always welcome to accompany an article. Artwork should be black-and-white, preferably original and camera-ready (no polaroid pictures).

If you have an artistic flair, or if you are active in producing computer graphics, don't forget the cover of *Interface 1000*. It's the perfect place to get the exposure your artwork deserves.

Mail all contributions to:

Editor, *Interface 1000*
 HP 1000 International Users
 Group
 289 S. San Antonio Road,
 Suite 205
 Los Altos, CA 94022 USA

Become a Published Author in *Interface 1000*

Interface 1000 is the magazine of the HP 1000 International Users Group, IUG, a non-profit association that promotes the exchange of technical information among users of HP 1000 computers.

Although the magazine includes general association news, the feature articles are clearly the most important part of *Interface 1000*. Feature articles are a valuable source of technical information, ranging from the analyses of the most sophisticated capabilities designed in HP 1000 software, to product reviews, to technical descriptions of application programs which are of great value to a wide range of users.

To promote a valuable exchange of technical information, the editors of *Interface 1000* actively seek technical articles from HP employees, HP 1000 customers, OEMs and third party vendors.

Authoring a published article provides you with great personal and professional achievement. To help compensate you for the time involved, however, the HP 1000 IUG is offering an honorarium of \$25 per typeset page of your feature articles.

If possible, please submit a 1600 bpi tape containing the text of your article, along with a hardcopy print-out. Also, include your address and phone number along with your article.

Upgrades: An Opportunity to Grow with HP

All HP 1000 A-Series owners will be able to upgrade their computers to take advantage of both the additional power in the RTE-A operating system and the powerful program development features offered by VC+, an enhancement package for RTE-A.

Customers who have subscribed to software services in order to keep abreast of software developments (either CSS or SSS), will receive an automatic, free-of-charge upgrade from RTE-A.1 to RTE-A in June 1983. This upgrade will include firmware and installation, wherever necessary, in addition to a copy of the latest software.

Customers who do not subscribe to software services will still be able to upgrade their equipment to run either RTE-A or VC+. One upgrade kit, HP 12108A, provides the firmware required to run RTE-A on an installed A600. Another kit, HP 12107A, converts an A600 into an A600+ and adds VC+ software. For the same price, kit HP 12107B adds VC+ software and firmware on an installed A700. A900s require no upgrades to run the new software.

In cases where a marginal amount of memory has been configured into a system, the upgrade may require some additional memory to yield the best results.

This Upgrade Program and Transition Aids is part of Hewlett-Packard's commitment to providing lasting value for customers. The latest advances in software are available to your installed customers to increase the value and extend the life of their equipment. Let your customers know about the Upgrade Program and Transition Aids to give them the opportunity to grow with HP.

HP 1000 Upgrade Program and Transition Aids

The HP 1000 A-Series computers are the most desirable real-time computers on the market today. And only two "small details" need attention: what to do with the installed M-, E-, or F-Series computer equipment when the A-Series arrives and, how to move application software from an M-, E- or F-series computer to an A-Series computer.

Effective immediately, the HP 1000 Upgrade Program and Transition Aids can ease your M/E/F-Series move to the A-Series. This program offers you five new ways to ease the effort and cost.

The *HP 1000 Upgrade Program and Transition Aids* for users replacing their M/E/F-Series systems with A-Series systems features the following:

- Hardware Return Credits for HP 1000 E/F-Series equipment
- Preferred Path Credits for M/E/F-Series systems being upgraded to Model 26, 27 and 29 Systems.

Transition Aids for all M/E/F-Series users wanting to use the A-Series include:

- A new software Conversion Aids Package for SE consulting
- Discounted General License Products
- Peripheral Conversion Kits and special interfaces/drivers

The HP 1000 Upgrade Program and Transition Aids has been carefully put together to help you to buy HP 1000s, to buy more than originally planned, and to also buy sooner.

International Users Group Conference October 18 – 21 Fort Worth, Texas

Opening to the theme of "New Frontiers," the HP 1000 International Users Group 1983 International Conference promises to be the best conference ever. Set in the heart of one of the "Old Frontier's" legendary cities, the 1983 Conference will be held at the Hyatt Regency Hotel, Ft. Worth, Texas, on October 18 through 21, 1983. The featured topics will be of great interest to you and your customers. In line with the conference theme, the presentation of papers is taking on a new look with special emphasis on four categories:

- Array Processors
- Engineering Applications
- Graphics
- Games

There will be papers submitted in other exciting categories, such as:

- Computational Applications
- Data Communications
- Instrumentation IEEE 488/HP-IB
- Operations Management
- Systems Software
- Image and File Systems



Performance is the Key with Three New HP 3000 Systems

Superior performance and versatility describe the three new additions to the HP 3000 family.

The innovation of disc caching allows the Series 68, Series 48, and Series 42 to produce faster response times and higher throughput, and saves time-consuming trips to access information on disc. This feature checks the main memory for any particular information before going to the disc for it, reducing waiting time for information and eliminating many accesses to disc.

The more I/O intensive the application, the more performance improvement occurs with disc caching; the higher the amount of memory, the higher the increase in throughput. Disc caching is standard on all Series 42, Series 48, and Series 68 systems, and is available on the Series 39 as an add-on product (P/N 30539A).

MPE-V, the latest version of the HP Multiprogramming Executive (MPE) Operating System, allows more concurrent running of applications. Users can now configure significantly more terminals and peripherals than were possible with MPE-IV, supporting up to 400 sessions and 80 spooled devices.

Series 68, the HP 3000 Leader

The Series 68 is the highest performance HP 3000 system ever offered, replacing the Series 64 and offering new levels of expandability. A 30–100% performance improvement over the Series 64 compares with a price increase of only 12%.

With its mainframe capability, the Series 68 is ideal as a central node in a network. Rivaling the IBM 4341 in both performance and price, the Series 68 matches up against the entire range of high-end 4341s. The Series 68 combines the performance and expandability of a mainframe with the ease-of-use of an HP 3000.

Application software — including

graphics, text processing, word processing, and programmer productivity tools — gives the Series 68 an advantage unavailable with the IBM 4341.

The new addition of disc caching to the HP 3000 family makes the Series 68 suited for large-scale data processing applications, giving faster response times and higher throughput.

MPE-V permits Series 68 users to run more concurrent applications than before, and they can also configure more terminals and peripherals. MPE-V supports 200 sessions, 80 spooled devices, and programs as large as 8Mb, compared to MPE-IV's 110 sessions, 16 spooled devices, and 2 Mb programs.

The Series 68 is available in either a one- or two-bay configuration. The two-bay configuration provides a 50% increase in aggregate I/O bandwidth, allowing more concurrent disc access and improved throughput. The auxiliary bay permits addition of up to 336 point-to-point terminals — 133% more than the Series 64 — as well as discs and other peripherals.

The Series 68 has the following standard features:

- Series 68 processor
- 3Mb main memory
- Disc caching
- MPE-V
- Two general I/O channels
- Remote diagnostic capability

Series 48 Provides Increased Performance and Expandability

The Series 48, new mid-range HP 3000 family system, offers performance and expandability.



The Series 68: Highest Performance HP 3000 System ever offered.

The Series 48, with disc caching, shows a significant performance improvement in I/O intensive applications over the Series 44, which it replaces. A 20 – 30% improvement over the Series 44 makes the Series 48's performance notable. The Series 48 beats the low-end IBM 4341s in price, performance, and ease-of-use.

Versatility is another feature of this system, which can support the wide variety of tasks found in a large department. The Series 48 is an excellent system for small or medium businesses, especially those with a large number of terminals or data communications applications.

The system supports 132 total terminals, 104 of which may be point-to-point.

Standard features of the Series 48 include:

- Series 48 processor
- 2Mb main memory
- Disc caching
- MPE-V
- Two general I/O channels
- Remote diagnostic capability

Series 42 Provides Performance at a Low Cost

The new low-cost Series 42 offers the sought-after quality of performance at a small cost. The Series 42 gives better performance and more terminal support than the Series 40 it replaces, with 92 total terminals. The system supports up to 3Mb of memory.

As with the Series 48, disc caching improves the Series 42's performance in I/O intensive applications. With disc caching, the Series 42 gives a performance superior to all IBM's S/38 models, at a much lower price.

The Series 42 gives a 20 – 30% performance improvement over the Series 40. This low cost allows a company to dedicate a system to a single application.

Standard features with the Series 42 include:

- Series 42 processor
- 1 Mb main memory
- Disc caching
- MPE-V
- Two general I/O channels
- Remote diagnostic capability

Series 39 is Improved

The low-cost Series 39, introduced in February, now has increased memory and the ability to support disc caching.

Targeted for small configurations, the Series 39 does not have disc caching as a standard feature. However, a disc caching upgrade will now provide faster response times and higher throughput as a customer's applications grow. Disc caching can be added because of the MPE-V operating system, which is standard on the Series 39.

In addition, the Series 39 will now contain 512Kb of memory as standard, compared to the previous 256Kb, allowing support for more terminals and applications. Users who already have a Series 39 with 256Kb can now order an attractively priced upgrade product (P/N 30539A) to support MPE-V, memory, and disc caching at a bargain.

Maximum memory supported on the Series 39 has been increased from 2Mb to 3Mb. The system also supports more users by increasing the maximum number of terminals from 56 to 92.

Series II to Series III Upgrade is Alive and Well

And Doing Successfully, too!

The Series II to Series III upgrade offers you the least expensive solution for those of you who demand higher performance but are unwilling or unable to spend a lot of money. This upgrade path has been an excellent solution for many customers.

Now there is even more incentive to upgrade. HP announced credit reductions effective in September. These reductions will reduce the amount of credit and thereby increase the purchase price of Series III on trade-ins. Therefore, upgrade while the price is right!

Following are answers to the two most frequent questions asked about the Series II to Series IIIIR upgrade.

What is required to upgrade the disc drive on the Series II to a master for the Series IIIIR?

You will need the following products:

HP 13037U	Master Disc Upgrade Kit
HP 13013B	Multi-Unit Cable
HP 13213B	Data Cable

What is required to upgrade the tape drive?

The customer is not required to purchase additional equipment to upgrade his tape drive for the Series II to the Series IIIIR. The local CEO will reconfigure the tape drive to be compatible with the Series IIIIR.

New HP 3000 and HP 250 Software Guide Published

To highlight the quality and variety of the software available for HP 250 and HP 3000 systems, HP has compiled a new software directory. All proprietary products for both systems and HP 3000 packages offered under the HP PLUS program are included. The pocket-size booklet serves as a guide to the software and an aid in selecting appropriate packages to meet customer needs.

Within the HP 3000 and HP 250 sections, the software packages are indexed according to functions such as information management, office systems, and manufacturing applications. HP PLUS packages are grouped under "Referenced" and "Listed" headings.

Gathered into one publication like this, our software makes a truly impressive collection. Customers and prospects will find this booklet a convenient guide to HP's software.

A copy of the guide has already been sent to our US mail list of 14,000 people.

Bulk quantities of the guide have been shipped to sales offices worldwide. Ask your sales rep for one if you haven't received yours.



Writing Revolution at HP

How many of your customers are in the business of producing documentation — either for use within their own companies or for external use? How many of them use HPWORD, and how many of them use the HP 2680 laser printer? We at HP have been using the two together to produce all documentation for the HP Financial Accounting software package. By adding our own in-house software, we've been able to merge words, data and graphics into our manuals. No need to go to offset printers; no need to use a graphics artist.

The advantages for us, which you can hopefully pass on to your customers, are:

- No typesetting — resulting in:
 - Cost savings.** This is because the manuals are printed in-house on the laser printer, rather than going to an outside printer.
 - Time savings.** No need to wait for copies to come back from printers before we can see the "final version." Each print-out comes with screens, diagrams, headings, footings, etc. included.
- Every copy is printed directly on the laser printer. This avoids storage costs and obsolescence of old stock.
- The writer has total control and responsibility over his/her manuals. Everything is controlled from the writer's HP 2626W terminal.
- Review is facilitated. The reviewer of the document sees exactly what the user will see.

You can assure your customers that by using HPWORD with the laser printer they will be able to update their documents and have them on-hand immediately. You can similarly be sure that the HP Fi-

nancial Accounting documentation is right up-to-date, because these tools allow us to incorporate changes and produce updates (ready for distribution) within days of receiving the changes.

HP-DSN is Rated #1 in the Industry

As more companies decentralize their data processing activities, questions arise concerning the ability of computers to handle typical communications-oriented applications. How are these computers being used? How easy are the protocols to learn and use? How reliable is the communications software?

In an attempt to answer these and other pertinent questions, Data Decisions surveyed the users of computers that function in a data communications environment. Among the more significant findings, single vendor users were more satisfied with their computer networks than multi-vendor users. Although complex functions, such as accessing remote applications and databases and transferring files among machines are supported most heavily at sites with large mainframes, medium and small computer users also support these activities to a significant degree. Finally, although fewer sites implemented distributed processing solutions this year than last, increased activity in networking is planned by the majority of respondents during the next 24 months.

Data Decisions 1982 nationwide study focused on 24 computer model/family groups, which were categorized as small, medium, and large machines. Represented vendors included HP, IBM, DEC, Honeywell, Burroughs, Control Data Cyber and Sperry Univac. The HP 3000 was ranked as a "small" machine along with Burroughs B1800/B2800, Honeywell Series 60

level 62/64, IBM S/370 and 2/38 and Sperry Univac 90/30/40.

The principal thrust of the survey dealt with performance in a data communications environment. Users were asked to indicate their overall satisfaction in terms of ease in developing communications oriented applications programs, user friendliness of the network, network reliability during up time and ease of recovery from line and equipment failures, quality of vendor training, and efficiency during normal operation.

So How Did We Stack Up Against Operation? Great!!

HP Distributed Systems Network capabilities for the HP 3000 were rated # 1 in overall performance among all vendors tested. In the specific areas of reliability, recovery, applications, development, and service, HP was rated within the top four vendors overall, and the top three among small computer manufacturers.

Networking products are key elements in solving your customer's distributed processing problems and in leveraging significant sales opportunities for you. So, let the industry leading HP-DSN products work for you today!

Introducing HPDESKMANAGER

HPMAIL, the electronic mail product released last May has been given major new features and now forms the Core Office System of the Interactive Office product range. New features include a word processor and a calendaring facility, both totally integrated with the existing electronic mail and personal filing functions. Other enhancements have been made which are intended to improve the effectiveness of professional office workers. All existing HPMAIL customers on support contracts will be upgraded to the new version of the software at no extra charge.

HPDESKMANAGER runs on all members of the HP 3000 Business Computer family, concurrently with other Data/Information Processing activities. By offering office workers an integrated "Electronic Desk," including the ability to mail messages, documents, business charts and data files to other HPDESKMANAGER users in the network, HP hopes dramatically to increase the number of professional office workers using Interactive Office products from terminals on their desks.

Key features include:

- Operation from any HP Terminal or Personal Computer that can be connected to the HP 3000 (both hardwired and remote modem connected). Portable travelling terminals can also be used to access HPDESKMANAGER while away from the office, and standard data processing applications can be accessed from the same terminal.
- Easy-to-use Word Processing (HPSLATE), designed to be used by managers and professionals, as well as secretaries, which is full screen oriented and function key driven.
- Calendaring facilities which include "Reminder" functions and "Free-Time" lists in addition to

an automated Personal Desk Calendar.

- The ability to mail and file graphs and system files as well as messages and word-processor documents.
- Electronic mail message routing management among multiple HP 3000 systems, using standard Distributed Systems Network capabilities concurrently with normal data processing network usage.
- Improved designate facilities which allow secretaries to be automatically copied with their principals' correspondence.
- Computer Assisted Learning which allows first-time users to learn how to use HPDESKMANAGER directly from their own terminals.

In addition to the many customer installations, HPMAIL (part of HPDESKMANAGER) is successfully used within HP as a management communications tool. The HP network links over 3000 people by name across North America and Europe. The new features also add significantly to its attractiveness to smaller, single HP 3000 customers who are interested in using their HP 3000 to improve the effectiveness of their professionals and management teams.

Support

36570T CSS support 36570V
Additional site support
36570S SSS
Support 35015A
Implementation Consulting

Existing HPMAIL customers who have purchased the CSS support will be automatically upgraded to HPDESKMANAGER at no additional charge.

Training for HPDESKMANAGER

The training for HPDESKMANAGER is a computer-based training program which is bundled with the product. Its installation is simple and should be done at the same time as HPDESKMANAGER.

The training is divided into eight modules: the first five cover the basic features of HPDESKMANAGER, the last three teach the user some of the more advanced features. However, by covering just the first module, the user will learn how to read, reply, send and print messages which is all the functionality he or she requires to get started.

The training will run on most HP terminals. The advantages of this type of training are that users can go through the course at their own pace, in their own time, and in the privacy of their own offices. They can choose the modules they want to cover and then follow up by using the product itself to consolidate what they have learned.

The documentation which customers will receive with HPDESKMANAGER includes a Learning HPDESKMANAGER booklet (P/N 36570-90001) and the HPDESKMANAGER Trainer's Notes (P/N 36570-90029).

The booklet should be available to all those doing the training course. It explains how to run and use the training, and details the contents of each module.

The Trainer's Notes should be used by anyone involved in giving training courses on HPDESKMANAGER. The manual suggests ways of training different groups of users, outlines an introduction to HPDESKMANAGER Session, and gives details of each module, together with additional information and explanation for the trainer. Finally, some practice exer-

cises for users to go through after taking each module are suggested.

The training has been designed to be flexible enough to meet the many and varied needs of your customers. Make sure they know that the training is included with the product and how they can make the best use of it!

Announcing the RAPID Report Writer Package

You asked for it, you got it! The new Report Writer Package will offer a price advantage for you and your customers who need and want both Report/3000 and Inform/3000.

This package is aimed at meeting all of you and your customer's reporting needs. Inform/3000 provides a friendly menu driven interface that is perfect for casual users. And with the new Report utility, which converts Inform report specifications into Report source code, there will be no stopping the Report Writer Package. End users and programmers alike will want to use Inform to prototype reports and to customize them with Report/3000.

If you and your customers want all four RAPID products, you can continue to use the Programmer Productivity Package (HP 32248A) or use the Report Writer Package (HP 32258A). Don't forget to order the fourth product — Inform in the first case or Transact in the second.



HP 9816S Minimum Configuration Available

An exciting, cost-effective new HP Model 16 configuration for OEMs is now available. The new HP 9816S Option 256 deletes the BASIC 2.0 language and one HP 98256A memory card. This option provides the HP 9816S mainframe with 256Kb of memory on the processor board, the full function 3.0 Boot ROM, and no language. (This compares with the HP 9816A, which has 128Kb of memory on the processor board, the more limited 3.0L Boot ROM, and no language.)

Those who might want this option include:

- OEMs or software suppliers with Pascal, execute-only systems that run in 256Kb of memory.
- HPL or ROM BASIC users who need more than the HP 9816A's 128Kb of memory and/or the 3.0 Boot ROM.
- Large companies that can expense a Model 16 in parts, if each part is under a certain dollar limit.

If you or your customer fall into one of these categories, or if you need a minimum-configured Model 16 for some other reason, this cost-effective configuration is available to help solve your problems.

HP 9133B and 9134B Support on HP Series 200

Increased capacity and improved performance make the new HP 9133B and 9134B 10Mb Winchester drives an ideal match for the HP Series 200. These drives are now supported using either the powerful Pascal 2.0 or BASIC 2.0 with 2.0 Extensions.

The HP 9133B is a combination 9.6Mb formatted Winchester with a 3½" flexible disc drive. The HP 9134B is a 9.6Mb formatted Winchester disc drive.

These 10Mb Winchesters contain a new HP-designed drive control board that streamlines data transfer over the HP-IB bus. For example, the standard 10Mb/Series 200 system can achieve the disc's maximum sustained transfer rate of 50Kb/sec (with Pascal) and 45Kb/sec (with BASIC) without a DMA card. This is especially advantageous for the HP 9816, since you can use the available I/O slots for other needs. In addition, you can access all the 9.68Mb formatted capacity with either Pascal or BASIC.

Facts about BASIC

The Series 200 can automatically boot BASIC 2.0 and 2.0 Extensions from the 5Mb Option 010 or 10Mb Winchester drives, if you have the following:

- 3.0 Boot ROM (supported on the HP 9826/36 and HP 9816S, not HP 9816A)

- Loader Utility (supplied with BASIC 2.0)
- BASIC 2.0
- BASIC 2.0 Extensions or greater
- 512Kb of RAM (Note: This configuration leaves less than 50Kb of user space; 768Kb is recommended).

Facts about Pascal

The Series 200 can automatically boot Pascal 2.0 from the 5Mb Option 010 or 10Mb Winchesters, if you have the following:

- 3.0 Boot ROM (supported on the HP 9826/36 and HP 9816S, not HP 9816A)
- Pascal 2.0 or greater
- 512Kb of RAM

Other Facts

A new CPU board upgrade kit with the necessary 3.0 Boot ROM will soon be available for customers with a 2.0 Boot ROM and an HP 9826/36. Also all HP 9826/36s will be shipped with a 3.0 Boot ROM.

All HP 9816Ss have a 3.0 Boot ROM. HP 9816As do not support the HP 9133B and HP 9134B.

HP Series 200 Terminal Emulator Revision can Operate with 3270 Protocol Converters

Revision B of the HP Series 200 Terminal Emulator, P/N 09800-10 x 80, adds some new features: 2621 cursor control, tabs, alpha highlights, and the ability to ignore received parity.

These features will allow the Series 200 Terminal Emulator to act as a terminal to an HP 9000 HP-UX system, operate with various commercially available 3270 protocol converters, and access the SOURCE and other similar services. We will test the emulator with several 3270 protocol converters, and will provide application notes on their use soon.

With the new features, the Series 200 Terminal Emulator can parse the following additional escape codes:

Cursor Control Operations:

esc ε a <col> c<row> Y

Moves the cursor to column "col" and row "row" on the screen (screen relative addressing).

esc ε a<col> c<row> R

Moves cursor to column "col" and row "row" in memory (absolute addressing).

esc ε a +/- <col> c +/- <row> Y

Moves cursor on screen relative to its present position.

Tab Control Operations:

esc 1 Set tab
 esc 2 Clear tab
 esc 3 Clear all tabs
 esc i Back tab
 esc I Horizontal tab

The cursor can be moved to the next tab stop using the TAB key or to the previous tab using the SHIFT and TAB keys. The cursor can also be moved to the next tab stop on receipt of an ASCII Ht Character.

Display Enhancement:

esc ε d <char>

Selects the display enhancement indicated by "char" to begin at the present cursor position.

This feature will only work on hardware that supports display enhancements.

The new revision will begin shipping in early May, and an upgrade kit, P/N 98081-17 x 81, will be available through HP. Ordering and pricing information will be available in a future *OEM News* issue.

New Context MBA™ Sales Aids Available

Context MBA™ and the HP Model 16 team up as a powerful management system. Comprehensive

documentation is part of the appeal. A recent issue of *Small Business Computers* said:

"A package as powerful as Context MBA is often quite complex, and by its very nature cannot be completely simplified. The people at Context Management Systems offer, through a well thought-out package and excellent documentation, what in this business is often a contradiction . . . a powerful package that is easy to use."

Now there are dynamic new sales aids to help you learn this package quickly and help you sell it. The following documentation is supplied with each Context MBA order:

- Using the Context MBA on Your HP 9816/9836 — This booklet covers hardware configuration, complete startup procedures, and descriptions of the keys, functions, and commands unique to the HP computers. This is the place to start in learning the power of MBA!
- Tutorial — A step-by-step introduction to using MBA, Com-



prises twenty 2-page lessons, each up to one hour long. On the left side is a textual description of an MBA function command, while the right side contains a reference, some examples, and a picture of the video display relating to the text example. This leads you through a hands-on session with each model, so you can learn it thoroughly.

- **Reference Manual** — If you didn't get enough familiarity from the tutorial, this covers display functions, general commands, built-in functions and commands used in the graph mode, database and word processing context, and MBA error messages. Here's where to go for in-depth MBA expertise.

You can make good use of the following demo aid:

- **Demo Models for the Context MBA** — Here's how to impress your customers with a minimum of work. These demo some of Context MBA's power and flexibility through 13 prebuilt models, including financial, sales, and even a power-supply analysis!

Each model demonstrates how tables, graphs, and word processing can be used together on the same screen. For example, one model shows both a salaries database and a graph correlating salaries with company performances. Another model shows actual and projected sales figures for two regions, analyzed by product, summarized, and plotted as a series of pie charts. A third model is a blank formatted one into which you can retrieve personnel records from the supplied personnel database. Also included is a demo guide that explains the models, how to use them effectively, and what to say to your customer.

As "frosting on the cake" in helping you sell, you can order these sales aids through your HP sales rep:

- **Context MBA Quick Reference Card** — This handy 18-page reference card and command tree, P/N 5953-4641, tells you how to use MBA without looking it up in the manuals!
- **Series 200/MBA 4-color Flyer** — This high-impact flyer, P/N 5953-4642, emphasizes the Model 16's high-speed contribution to MBA, compared with competitive personal computer offerings.

Context MBA is a registered trademark of Context Management, Inc.

Head-to-Head Competition with Super-minicomputers

The HP 9000 provides mainframe performance in a workstation package. It exemplifies and is key to the CAE topology of choice for the 1980s — The Engineering Productivity Network. Our technology and this product have allowed us to leap ahead of our competitors. We must now take advantage of this opportunity to establish a leadership position in the growth segment of the traditional mainframe and super-minicomputer market. There is no other workstation competitor that has a better reputation in the CAE market or as wide a range of products (from the Series 200 up through the HP 9000) as Hewlett-Packard.

You all face some tough situations pursuing sales opportunities where we have entered the competition late in the customer's decision-making process. Attempting to sell a new concept to a prospective customer (i.e., concept-selling the Engineering Productivity Network) places new demands on all of us, but I can assure you that the payoff will be there.

So, how do you sell super-minicomputers? As you find prospective customers who have traditionally purchased mainframes or super-minicomputers within the CAE design center (i.e., computation-intensive applications in which one or two users consume a large portion of the computing resources), describe the HP 9000 and Series 200 strategy in the EPN context with unwavering commitment.

The most effective way we have found (in our experiences with the customers that have visited us over the past few months) is to say, "Imagine having 3 MIPS or more available to users who are currently accessing a VAX or IBM mainframe, by distributing the computational capability to HP 9000 workstations." We have found that this gets even the most dedicated user to listen to the rest of our story.

Obviously, our workstation product is not yet perfect. We are continuing to enhance the display and networking functionality. We are also aggressively pursuing application solutions from third party suppliers and from our own proprietary developments.

HP Series 200 to Disc Transfer Rates for BASIC 2.1

This table of data, measured by our lab, shows the transfer rates obtainable using BASIC Extensions 2.1 with the HP Series 200 system and the HP 98625A Disc Interface.

Because there are so many variables involved, this data is best used for providing transfer rate estimates, rather than as precise results.

With HP 98625A Interface

Disc Drive	BASIC 2.0 with AP binary from BASIC Ext. 2.1							
	Doing OUTPUT, ENTER, LOAD, or STORE				Doing TRANSFER			
	no DMA		with DMA		no DMA		with DMA	
	inter-leave	rate Kb/s	inter-leave	rate Kb/s	inter-leave	rate Kb/s	inter-leave	rate Kb/s
HP 9121D	2	14.4	2	14.4	2	14.6	2	14.6
HP 9895A	2	19.8	2	19.8	2	16.8	2	20.1
HP 913x Opt. 010	9	11.9	9	48.8	9	12.0	9	49.5
HP 7911P	—	—	1	255*	—	—	1	257*
HP 7912P	—	—	1	746	—	—	1	770

*Data is for outputs; the transfer rate for inputs is about 425 Kb/s.



HP DRAFT in a Swiss Role

An HP DRAFT system was recently sold to a toolmaking company in Switzerland specializing in the production of plastic injection-molded parts. The company has about 50 employees and an annual turnover of about \$3 million. Although a relatively small company, it has been successful, partly because of continuous investment to keep the factory up-to-date.

In November 1982, their chief engineer saw HP DRAFT at an exhibition and immediately contacted HP Switzerland. The company planned to rationalize their working methods at the end of 1983. However, due to an unexpected increase in orders this year, the engineering department was overloaded with work, and the decision to evaluate HP DRAFT was accelerated.

In December, two company employees took part in a detailed demonstration. After only a few hours instruction, they were able to create the plan view and a cross-section of an injection-molded part, and this drawing was good enough to present to a customer as a proposal drawing.

European Suppliers of Color Video Monitors for HP 2627A and 2700 Terminals

We have had a lot of questions concerning European suppliers of color monitors for connection to the HP 2627A and 2700 terminals. Here is some information about the two most commonly used suppliers and the model numbers of compatible monitors.

The manufacturers and monitors are:

BARCO

- For the 2627A: CDCT 435
- For the 2700: CDCT 3/51

CONRAC

- For the 2627A: 7211 C19
- For the 2700: 7211

These are distributed by:

BARCO

- In Belgium (European HQ)
BARCO VIDEO AND COMMUNICATION
Th. Sevenslaan 106
B-8500 Kartrijk
Belgium
Tel: (0)56/21.11.24
Twx: 85842

- In UK
CAMERON
Burnfield Rd, Geffnock
Glasgow G46 7TH, Scotland
Tel: 041 633 00 77
Contact: Mr. Maclean

CONRAC

- Germany (European HQ)
CONRAC ELEKTRON GMBH
Industriestrasse 18
D-6992 Weikersheim
Germany
Tel: 0 7934/ 70 71
Twx: 07 42 31
Contact: Walter Hammel
- UK:
LINK ELECTRONICS
Walworth Industrial Estate
Andover
Hampshire, UK
Tel: 0264/61345
Contact: Roger Daymond

This is not an exhaustive list. There could be more local distributors. But we believe these people can help you.

Upgrades to the ATP Direct Connect Type 232

Many of you have faced a problem when upgrading your applications to ATP Direct Connect Type 232.

The ATP was designed to receive characters with no greater than 25% distortion. What this means is that if you install an RS-232-C link greater than the 50 foot restriction or install a data switch, distortion may and often does occur. If this distortion is greater than 25%, these applications will not work.

The ATP solution to the RS-232-C 50 foot limitation is the RS-422 interface. It is recommended that when you wish to go beyond the RS-232-C restriction, order the ATP Direct Connect Type 422. This provides a 4000 foot link plus good noise immunity. This is the ideal solution. All that is needed to upgrade to an RS-422 solution is the appropriate ATP hardware plus RS-232-C to RS-422 adapters for the terminals. These adapters can be purchased from Hewlett-Packard as product number 13266E for HP 2622A, 2623A, 2624A/B and 2626A/W and as product number 13260E for HP 2645A, 2647F and 2648A. If you do not have one of the terminals, you may purchase a "black box" that does RS-422 to RS-232-C conversions. Of course, this is not an HP-supported solution.

For more information on ordering RS-422 terminal adapters, please call your HP sales rep.

Cluster Controllers — How are They being Used?

As time marches on, more and more customers are installing cluster controllers. They are appearing in both local and remote environments.

For local environments, they are being used in the following applications:

- Junction panel space is limited and more terminals need to be added within the terminal limitation
- To achieve the maximum terminal configuration on the Series 4X
- To provide cabling convenience
- Any remote site with a need to connect two or more terminals

Junction panel space is limited and more terminals need to be added within the terminal limitation — Often-times, customers mix and match ATP direct connect ports with ATP modem ports (e.g., 96 direct connects and 24 modem ports) using up all the junction panel space. By adding an INP and a cluster controller, additional terminals can be added to the local environment, provided the configuration remains within the limitations for terminal configurations.

To achieve the maximum terminal configuration on the Series 4X — Since both series allow less direct connect terminals than multipoint terminals, the user can maximize their terminal configuration by adding a local cluster controller. Keep in mind, these terminals connected to a cluster controller are managed by Multipoint Software and are considered to be multipoint terminals.

To provide cabling convenience — There are some customer sites where there are limitations for

stringing a group of cables. The cluster controller provides the convenience of laying one cable while connecting up to 16 terminals.

For remote environments, the cluster controller is being used for this application.

Any remote site with a need to connect two or more terminals — Sites are distributed throughout different geographical areas. Configuring convenience, line cost savings, connections of any point-to-point terminal (HPs 262X, 264X, 238X), and excellent data integrity makes this solution very attractive.

Customers who have installed multi-point software with the cluster controller see very little difference between this configuration and the point-to-point configuration. In fact, where the cluster controller was configured side-by-side with point-to-point terminals, users showed no preference in using either type of connection. This does not mean that the cluster controller is right for every situation. If you or your customer expects the very best response time the system can offer, the cluster controller is not the solution. Rather, a point-to-point connection will offer the very best response time.

A WORD OF CAUTION: When adding a cluster controller to terminal configurations, customers are responsible for testing their own application software with a cluster controller configuration. Any programs that are written to change point-to-point terminal types to something other than Terminal Type 10 will not work with the cluster controller. At this time, the cluster controller can only work with Terminal Type 10 devices.

For more information, please phone your HP sales rep.

HP 2382A Option F07 and the Optional Extended Keyboard

Special Option F07 provides the user with an HP terminal which can "speak" to non-HP systems using ANSI control sequences. These ANSI control sequences are handled while retaining the desired features of the HP terminal. In addition to functioning on ANSI systems, F07 can still function as a standard terminal on HP systems. This versatility is accomplished by giving the terminal a selectable mode of operation: "ANSI Mode" or "HP Mode." Essentially, adding Option F07 gives the user two terminals in one.

Option 100, Extended Keyboard, is now available for the HP 2382A. It is not included in the special option, F07. It is a separate option.

Without the extended keyboard, however, the user cannot use the keypad editors which are common on ANSI systems. Please be sure to let the customer know that the extended keyboard is a necessary option when ordering F07 for the HP 2382A.



When Quality also Means Ergonomics

As of May 1, 1983, Hewlett-Packard provides its Terminals and Personal Office Computers with new Ergonomic Features such as:

- Tilt & Swivel Pedestal which allows the user to tilt the screen up or down by 10 degrees and rotate the screen up to 360 degrees
- Palm Rest which provides hand support to relieve muscle strain and capability to adapt to different task requirements

The Tilt & Swivel Pedestal and Palm Rest added to the numerous Ergonomic Features on the HP display work-stations (detachable keyboard, high character definition, functional keyboard layout . . .) contribute to user comfort by allowing:

- Flexibility in machine positioning and location

- Adaptability to different users, tasks, and environmental conditions
- Relief from annoying visual disturbances such as reflections and glare spots

The Tilt & Swivel Pedestal is orderable as an:

- Option 401
- Upgrade kit (Product Number 40206A) (availability two weeks) (This price doesn't include the Customer Engineer installation)

The Palm Rest is Product Number 92171R.

The Tilt & Swivel Pedestal and Palm Rest are available on the following products:

	2621A/B/P	2622A	2623A	2624A/B	2626A/W	2627A	HP 125A/B
Tilt & Swivel Pedestal	YES	YES	YES	YES	YES	NO	YES
Palm Rest	Extended Keyboard	YES	YES	YES	YES	YES	YES



Manufacturers Want System Solutions to Data Capture

Bar codes are popping up all over the place. You are surely familiar with the little stripes appearing on grocery items.

In 1967 chief executive officers of the grocery industry met to find a way to increase productivity. In 1973 UPC code was accepted as a standard bar code for this business. By 1981 eighty percent of grocery items (at least in the US) were coded. The payback for the expensive bar code equipment seen in your neighborhood supermarket is less than one year!

Bar codes in supermarkets allow inventory control, provide customer profiles, contribute to labor scheduling and give information on what happens when a given product is moved to a different location.

"Great," you're thinking, "but what has all this got to do with me?" You're right — we don't make bar code equipment for supermarkets. And only our HP 3075/76 terminals read UPC.

The fact is that all our bar code products read Code 3 of 9 and Interleaved 2 of 5, codes used in manufacturing applications. And manufacturers are crying for bar code solutions.

About a year ago, 2500 US companies, vendors to the Department of the Defense, received letters requesting compliance to a military standard known now as LOG-MARS. This standard spells out bar code requirements for suppliers to DOD.

The automotive industry is seeking ways to increase productivity in some 260 manufacturing plants and 58 assembly plants. They've got to keep track of almost one million parts and reduce inventory to three weeks.

The aeronautical industry wants a method for complying with a law requiring that every transaction (manufacturing and maintenance) on an aircraft be recorded.

Looking back at the initiative of the grocery industry, bar code development was a non-mandated activity in a widely dispersed industry at a time when the technology was not available. Compare this history with the needs of manufacturers today when off-the-shelf technology is at their disposal.

Who are the players? One is NEMA (National Electrical Manufacturers Association), a group involved in developing bar code standards and an educational campaign to familiarize members with bar codes. Another is AIAG (Automotive Industry Action Group), also concerned by the educational issue. The feeling is that the systems people should be leading the way in data capture.

System solutions are available, and our data capture terminals — the HP 307X Family, the HP 92911A bar code accessory, the HP 3092/93 Industrial Terminals — will open up these opportunities. And this is only the tip of the iceberg!



BAR CODE NEWS

THE JOURNAL OF BAR CODE SYSTEM APPLICATIONS JAN/FEB 1983

How Bar Codes
Increase Manufacturing
Productivity



Free Subscription to *Bar Code News* — Good Sales Tool

More and more customers are turning to bar codes for automatic identification. Most often they are

familiar with bar code technology and its benefits, but some customers ask us for information on applications and statistics on increased productivity.

A subscription to *Bar Code News* may help you keep up with the latest and greatest on bar codes. This magazine, which comes out every two months, covers news and commentary on the state of products and applications involving bar code technology. It provides article features, advertising from vendors in the field and opinions about future directions in symbology marketplaces.

Feel free to make a photocopy of the reader qualification form. For your free subscription, fill it out and mail it to:

Bar Code News
North American Technology
174 Concord Street
Peterborough, NH 03458

HP 7910 Trade-Up Program Improved and Extended

Several months ago, we announced the start of the HP 7910 Trade-Up Program. Since that time we have received many enthusiastic inquiries from you. To make it even more attractive, we have done two things.

First, the Trade-Up Program has been expanded to include HP's new 132Mb disc drive, the HP 7914. Trade-Up credit toward the purchase of the HP 7914 is the same as for the HP 7912. Secondly, we are extending the program beyond the original termination date of May 1, 1983. Rather than establish a termination date at this time, we will give you ample notification of our intent to close out the program at some point in the future.

Take advantage of this excellent selling tool, made even better with the addition of the HP 7914.

To receive a FREE subscription to *Bar Code News*, please fill in all the information below:

READER QUALIFICATION

Name _____ Title _____

Company _____ Business Phone _____

Address _____

City _____ State _____ Zip _____

Please indicate your firm's primary business (check only one)

- | | |
|--|---|
| <input type="checkbox"/> Manufacturing | <input type="checkbox"/> Educational |
| <input type="checkbox"/> Service | <input type="checkbox"/> Medical/Laboratory |
| <input type="checkbox"/> Retailer | <input type="checkbox"/> Library |
| <input type="checkbox"/> Wholesaler | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Government | |

Total Number of Employees in your Organization:

- Under 100 100-249 250-499 500-999 over 1,000

Check here if you are involved in the purchase or specification of products or services related to the implementation of a bar code system

Signature _____ Date _____

Return to: **Bar Code News**, North American Technology
174 Concord St., Peterborough, NH 03458

SCORE — The Way to make Points with Graphics Users

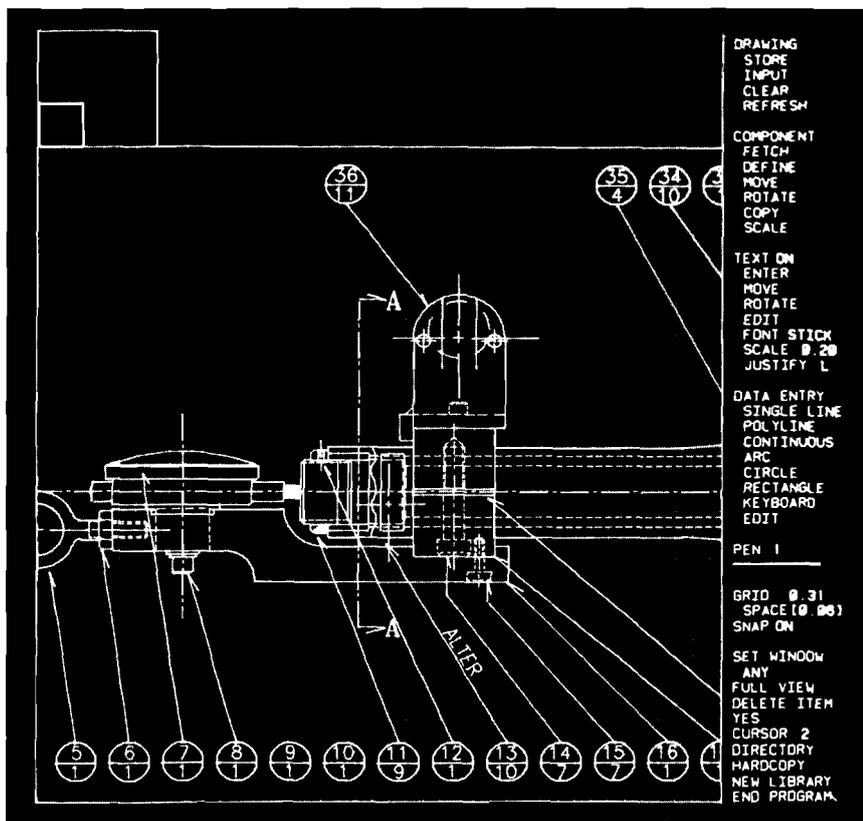
Hewlett-Packard has recently completed an extensive application program for graphics systems utilizing the InteGraL/60 (52113A) software. Named SCORE — Schematic Capture Or Real-time Entry — this Pascal program provides the user with the capability of high-speed, interactive manipulation of lines, text and symbols to generate mechanical or electrical schematics, or presentation quality graphics output. The high degree of interactivity has proven to be of such significant advantage that many users have adopted SCORE for everything from overhead slides to E-sized drawings.

The program was originally written as a demonstration program of the various InteGraL/60 procedures as used in a typical application envi-

ronment, and has grown to almost 7000 lines of fully documented Pascal code. SCORE features powerful drawing routines, text generation in any of 12 different fonts, defining and manipulating symbols, storing and recalling drawings from disc, snapping to user-defined grids, windowing routines, picture editing and many other typical schematic capture functions.

The software is also intended to give the novice InteGraL/60 user an insight into the design and development of a graphics design system as the complete source is made available to you free of charge. For OEMs or third parties, this may provide the stepping stone to generating final, finished and documented products with reduced design and programming time.

For more information contact your HP sales rep.



Large Screen Display running the SCORE program showing menu areas and a portion of a mechanical drawing being generated.

Winchester Disc News Briefs

Option A 86 Extended

Option A 86 for the HP 9133A and HP 9121D expired May 31. Your customers can still purchase the HP 82937A HP-IB interface.

10Mb Winchester Support

Series 200 now supports the 9133B and 9134B 10Mb Winchester using Basic 2.0 with extensions (AP2.0) or Pascal 2.0.

The Series 80 products, except for the HP-83A and 85A, will start supporting the 9133B/34B June 1.

June 1 also marks the day Series 1000 Model A will support the 10Mb.

Rackmounts Available

Rackmounts for the 82901M and 913X Winchester? You bet! The product number is 88136F.

Defective Cleaning Kits

If you have received a 92193A/B Flex Disc Drive Cleaning Kit in the last two months from HP, it might be defective due to a hub ring change by the vendor. The problem has been identified and resolved. If you do have a kit that does not function, try placing a write protect tab over the index hole, or better yet, return it to HP for a replacement.

Used Equipment Available for Your Cost Sensitive Customers

Used Hewlett-Packard computing equipment returned from leases, test inventories and other sources, will now be sold under a new program. This program provides new procedures for quoting and ordering this equipment. Warranty and other features have been added to increase customer satisfaction. Many products are already available for quotation, including: HPs 2621A, 2621B, 2621P, 2622A, 2624A, 2624B, 2631A, 2631B, 2631G, 2635A, 2635B, 2640A, 2640B, 2645A, 7221A, 7221B, 7221C, 7221S, 7225A, 7906A, 9815A, 9825A, 9825B, 9845A, 9845B, 9871A, 9872B, 9872C.

Only limited quantities of this equipment are available, so your HP sales rep must reserve an item before making a quote to a customer. Reservations are for a full 30 days, but cannot be extended. Or-

ders received for equipment that was not reserved cannot be honored.

These products go fast, so have your sales rep call for a product reservation when you have identified an interested customer. Price and availability will be quoted at that time. If the product is not currently in our inventory, your sales rep will be put on a priority list and be notified as soon as there is a quotable product available.

Products come with a full HP 90-day warranty. Prices will include freight and packaging, operator's manual and reference manual. These products are available for coordinated shipments.

This program is entirely separate from previous Corporate Sales Finance programs.

Used lease equipment varies in age and condition. Some products will have cosmetic flaws but all will be in working condition and covered by a 90-day warranty. Used lease equipment can provide low cost hardware for customers who require this type of solution.

Configuration News Flash Subject: HP 2608S

As a result of recent environmental and configuration testing, several established rules concerning configuration of the HP 2608S 400 1pm printer on HP 3000 systems have been changed.

There are three key points listed below which must be remembered, especially for all new system sales. Please update your HP 3000 Configuration Guides to reflect these rule changes.

- The HP 2608S is a "High-Speed" device (i.e., not a "Low-Speed" device like the earlier HP 2608A).
- Because it is a "High-Speed" device, the HP 2608S *must* be configured on a "High-Speed" GIC. In other words, *any* GIC on which an HP 2608S is configured is by definition a "High-Speed" GIC.
- The HP 2608S can share its "High-Speed" GIC with *any* other "High" or "Low-Speed" devices *except* the HP 7906, HP 7920 and HP 7925M/S MAC family disc drives.

What are the ramifications of these configuration modifications for existing systems?

Series 39 (40SX), 40, 44 and 64

First, the good news. Low-end customers, who have in the past purchased a "3rd GIC" for the purpose of configuring an HP 2608S line printer, will now be able to configure their system using only the two GICs which come standard with the system.

Second, the not-so-good news. It is recognized that some customers may currently have configurations which are in violation.

This situation may arise because some existing customers may have configurations with greater than two "High-Speed" GICs per IMB. (Remember, the Series 39, 40 and 44 each support a maximum of two "High-Speed" GICs and, the Series 64 supports two "High-Speed" GICs *per* IMB for a maximum of four per system.) This will occur primarily with customers who have Series 40, Series 44 or single IMB Series 64 systems with *multiple* MAC family master disc drives and/or CS '80 disc drives configured on *two* "High-Speed" GICs and an HP 2608S on a third "High-Speed" GIC.

While this situation may not be common among existing HP 3000 customers, it is a situation that will require correction. Thus, at the next preventative maintenance (PM) visit, the field support team is requested to either: 1) reconfigure all customer systems where they are currently operating with greater than two "High-Speed" GICs per IMB, or 2) have the account SR inform the customer that they are now operating with an unsupported configuration.

If the customer selects to run with more than two "High-Speed" GICs, they risk the possibility of system failures and/or system performance degradation due to data overruns on the disc. CSY recommends that all customers operate with a maximum of two "High-Speed" GICs per IMB. However, some customers may be enjoying the performance gains achieved

through spreading their MAC family discs over multiple GICs. Such customers must fully accept liability for the performance/reliability ramifications of operating with an extra "High-Speed" GIC. In this case, the decision to modify the existing configuration or leave "as is" will belong to you and the account support team. Alternatively, if a customer chooses to operate with an HP 2608S sharing a GIC with an HP 7906, 7920 or 7925 disc drive they have a risk of Electrostatic Discharge (ESD) which can cause data corruption on the HP-IB bus.

HP has performed a series of tests to determine if two "High-Speed" GICs could be supported on the Series 30/33, to allow separation of the HP 2608S from the required HP 7906/7920/7925 disc drive. Fortunately, the results clearly indicate that there is sufficient bandwidth for two "High-Speed" GICs and, therefore, this is now a supported configuration.

Most customers who own a Series 30/33 or 30R/33R and an HP 2608S will not be affected because they are currently operating with the HP 2608S printer on a second "High-Speed" GIC. In this case, no action is required. If, however, a customer is operating with both the system disc (HP 7906/20/25) and the HP 2608S on the same GIC, then this system should also be reconfigured with a second "High-Speed" GIC.

Finally, the HP 2608A is a "Slow-Speed" device, and, therefore, is unaffected by the above configuration changes. In addition, the HP 2608S is *not* supported on the Series III or any previous system, so it is also unaffected by these changes.

☐

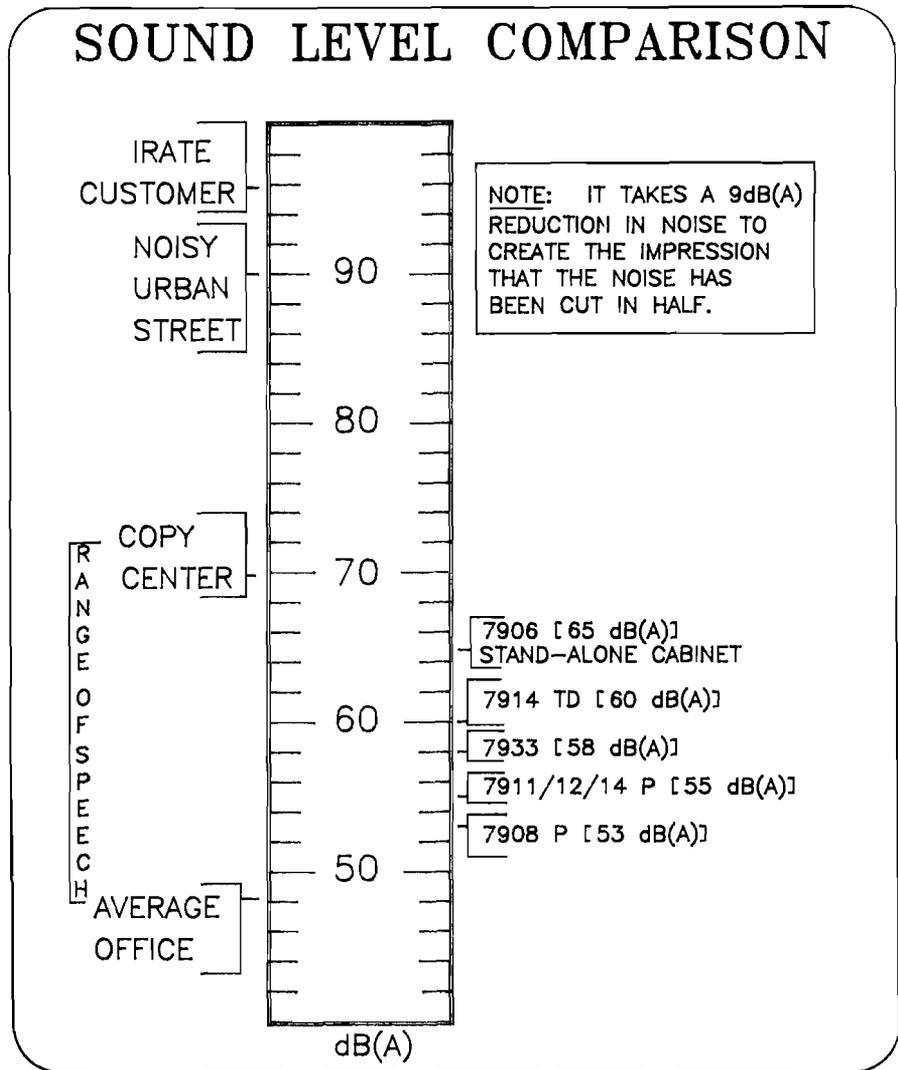
How Loud Is My Disc Drive?

Disc drives operate at different noise levels, and it's important that you are aware of what level of noise to expect when you buy a disc. Take a minute to compare the noise level of operating disc drives with some typical sounds.

As you can see by the above chart, the HP 7914TD and the HP 7933 operate at about the same sound level. The 7933 was intended for data center operation or for a system in an enclosed area. When buying a 7914TD, 7933, or 7935, be sure that the disc drive's noise will not be unacceptably louder than your environment. If, for example, the disc drive will be run in a quiet office, you may want to install the disc drive in an enclosed area or near a sound-absorbing wall.

Sound levels and other environmental specifications for our disc drives can be found in the DMD *Site Environmental Requirements Manual* available from HP (P/N 5955-3456).

Contact your HP sales rep for ordering information.





The building which currently houses CPB in Yate.

A Milestone for HP in Europe

April 28, 1983 was a special day for Computer Peripherals Bristol (CPB). It marked the first product to be manufactured there and the breaking of ground for the new permanent buildings, which are scheduled to be complete in Summer, 1984.

CPB will manufacture most of the mass storage products for the European market, initially the HP 7911, 7912 and 7914 disc drives.

CPB is also building a marketing team which will provide support in Europe for all the mass storage products. Emphasis is being put on having a strong international group which can communicate

with all European regions.

As CPB grows, many more milestones will be reached. In the meantime, CPB is there to support you on mass storage products.



Artist's impression of the Wallscourt Farm Factory.



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