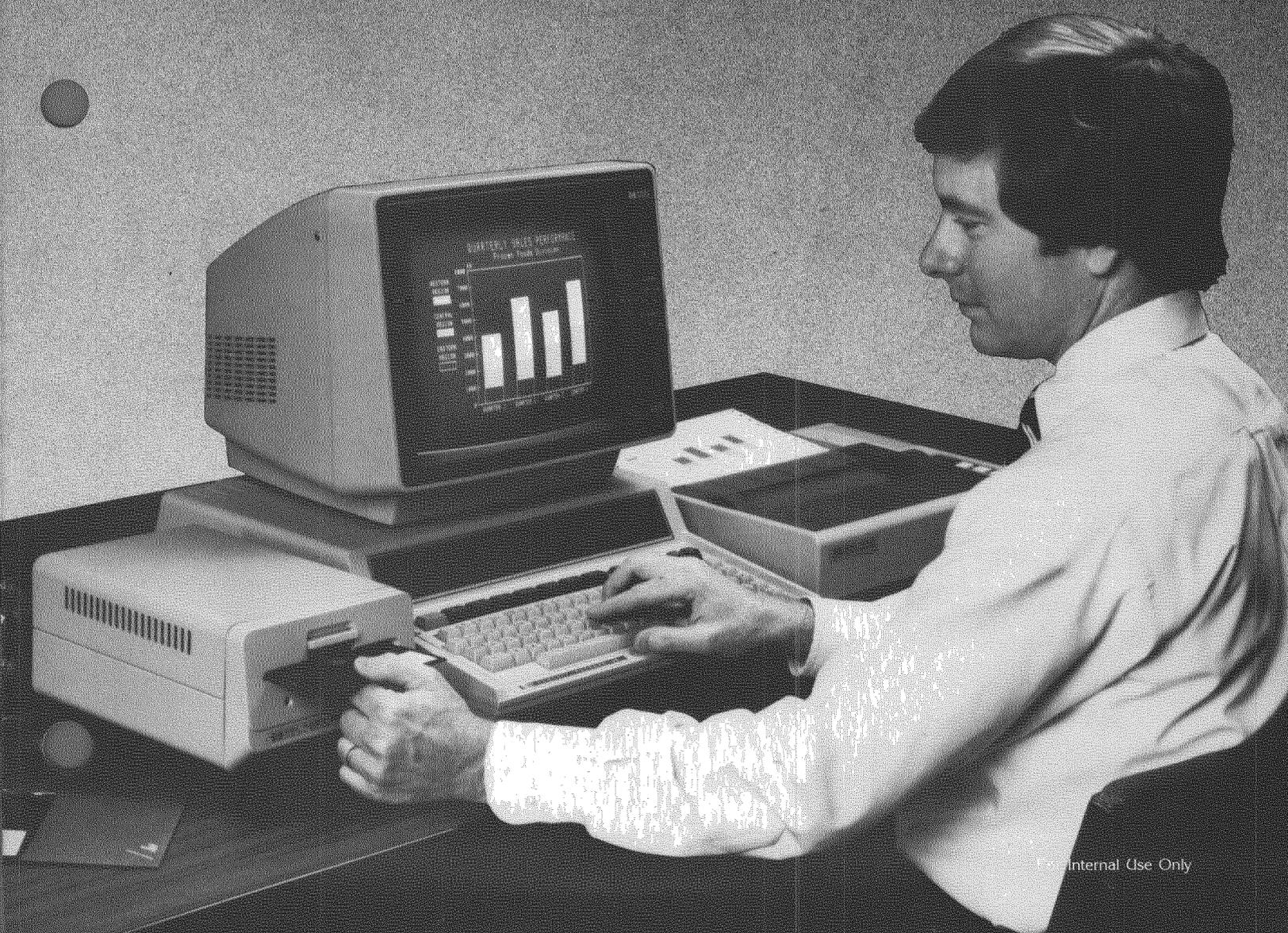


# Computer News

For HP Field Personnel  
July 15, 1982

**The New HP 86 —  
The Professional's Choice**



For Internal Use Only

CMG Computer Marketing Group  
 CMG/ 3PP Computer Marketing Group/  
 Third Party Program  
 CSD Computer Support Division  
 CSO Computer Supplies Operation  
 SRO Systems Re-Marketing Operation  
 TCG Technical Computer Group  
 DSD Data Systems Division  
 RVD Roseville Division  
 YCD Yokogawa Computer Division  
 DCD Desktop Computer Division  
 BDD Boeblingen Desktop Computer Division  
 CVD Corvallis Division  
 PCD Personal Computing Division  
 GTO Grenoble Technical Systems Operation  
 BCG Business Computer Group  
 BCG/ AS Business Computer Group/  
 Application Systems  
 CSY Computer Systems Division  
 FSO Financial Systems Operation  
 IND Information Networks Division  
 MSO Manufacturing Systems Operation  
 CSP Commercial Systems Pinewood  
 BGD Boeblingen General Systems Division  
 DTD Data Terminals Division  
 GSD General Systems Division  
 HPG Grenoble Division  
 CPG Computer Peripherals Group  
 BSE Boise Division  
 COL Colorado Springs Instrument Group  
 DMD Disc Memory Division  
 GLD Greeley Division  
 SDD San Diego Division Instrument Group  
 VCD Vancouver Division

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**HP Computer Museum**  
**[www.hpmuseum.net](http://www.hpmuseum.net)**

**For research and education purposes only.**

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### On the Cover:

Hewlett-Packard's lowest price, newest personal computer is the HP-86, which features software for word processing, information management, accounting and many other solutions for professionals. See article beginning on page 14.



Information on data communications products for the HP 1000 will now be found under the Information Networks Division (IND) section of Business Computers. IND currently has tactical and product responsibility for DS, IBM, and X.25 communications for the HP 1000 computer family even though it is actually a part of Business Computer Group. So look for articles on DSN/DS, DSN/IBM and DSN/X.25 for the HP 1000 under the IND section.

*Karen Campbell, Editor*

# CMG

## Ed Case Wins HP 125 Contest

Bill Richion/CMG



Ed Case, HP-Grand Rapids, is the official winner of the HP 125 Contest with 121.00 units credited to his name! His effort also gave Jim Ditulio the prize for the top District Manager in North America, and the Grand Rapids office the top position for the East Area of the Midwest region.

Ed turned in one order for over 100 units right at the wire to bump Steve Majerick from the top position. Steve had been at the top for a number of months.

Three hundred ninety-five SRs were credited with HP 125 sales. 1,227 HP 125s were ordered in the last three days of April. Twenty-five District Managers had over 30 units credited to their names. Almost every area in North America contained at least one district which sold 25 or more units.

## HP 125 Sales Contest Winners for SF02

Name/Region	Units Sold
Ed Case/MSR	121.00
Steve Majerick/MSR	48.25
Pete Cooper/MSR	47.75
Dennis Lamb/SSR	47.75
Jackie Sharp/CSR	42.25
Martin St Amand/CSR	41.25
John Magazine/MSR	41.00
Bill Knight/SSR	37.00
Paul Fasi/NSR	33.50
Mike Jordon/NSR	29.00
Dave Leicht/SSR	29.00
Rich Cosmos/ESR	27.00
Carl Nessen/ESR	26.00
Bob Guhl/NSR	26.00
Gerhardt Schmid/CSR	25.00
Barry Biegler/NSR	23.75
Will Lewis/MSR	22.50
Dave Eggum/MSR	21.25
Tom Hughes/MSR	21.00
Rich Dodd/ESR	20.00
Charlie Dingman/ESR	20.00
Tim Whelan/ESR	19.00
Judy Duchesne/NSR	19.00
Bob Shafron/NSR	19.00
Steve Kelly/NSR	18.50
Ron Vernon/NSR	18.50
Mike Schmidt/MSR	18.50
Lorraine Thomson/NSR	18.00
Ross Duncan/NSR	17.25
Pam Odle/NSR	17.00
Bill Pate/NSR	17.00
Gary Halstead/SSR	16.25
John Burich/MSR	16.00
Glen Lowry/NSR	16.00
Bob Deutsch/ESR	16.00

### Top Five District Managers in North America

District Manager/Office	Qty
Jim Ditulio/Grand Rapids	125.00
Vince Khanna/Brisbane	79.25
Ben Clark/L.A. Airport	77.50
Frank Hogan/Ft. Lauderdale	74.00
E. Westernskow/Englewood	57.00
Jack Greene/Piscataway	57.00

## Computer Products Purchase Agreement Correctly Sets Customers' Expectations

Bill Richion/CMG

Your customer cannot get a discount on a product that is shipped unless the Computer Product Purchase Agreement is in place prior to the product being shipped. Make certain that your customer is aware of this if the customer is going to place an order prior to concluding the Computer Product Purchase Agreement. If an order happens to ship earlier than you or your customer expected and an Agreement is not in place, your customer will not get a discount.

Your customer should understand that the functional units of a Price Clause cannot be increased once a product has been shipped under that Price Clause.

Your customer must understand that the effective date of the Price Clause must be the date of or prior to the date of the purchase order for the first product that is to be discounted under the Price Clause.

Your customer can only enter into a new Price Clause when the customer has either 100% fulfilled the commitment of the Price Clause or 12 months from the effective date of the Price Clause, whichever is first.

These are cardinal points of which your customer should be aware. It is difficult for you, embarrassing for HP, and bad for the HP/customer relationship if the customer's expectations differ from the above.

## 3PP

### HP PLUS Contracts for Personal Computers and Terminal Products

Ray Cebold/CMG

(For US only) With the addition of personal computers and terminal products to the HP PLUS program, the "factory driven" procedures were introduced. This means the product divisions will be responsible for administering all aspects of their program, including qualifying the supplier into the program and determining what development incentives to grant. The support required from the field organization will be on an occasional basis only and very limited in scope. Primarily this support will be the taking of orders for demo/development systems; the exception being those suppliers who also have packages for the HP 1000, HP 3000, or HP 9800 systems. These suppliers will continue to deal with their supporting SR. In this case, the supporting SR is responsible for dealing with the division. Currently the people at the divisions who should receive the forms package are:

- Corvallis Division (HP 41C) — Chuck Smith
- Personal Computer Division (SERIES/80) — Nancy Ulman
- General Systems Division (HP 125) — Bill Johnson
- Data Terminals Division (Terminals) — Dan Jorgenson

The HP PLUS program has not been implemented by San Diego Division, so there is no contact for plotter products.

## CSD

### HP 3000 Series 40SX/40/44 Cooperative Support Program

Ron Shlitzkus/CSY and Jay Friedman/CSD

Do you have a technically sophisticated customer or a customer geographically located outside HP's service areas? Is your customer considering doing their own maintenance? If so, HP now has a program to help the customer be successful with self-maintenance on their HP 3000 Series 40SX, 40, or 44 computer system and related peripherals.

The Cooperative Support Program provides your customer with an in-depth study on the maintenance and operation of the HP 3000 Series 40SX, 40 and 44 system processor unit, as well as technical training covering the maintenance and operation of the following related peripherals:

- HP 7920/25
- HP 7970E
- HP 2608A
- HP 7911/12
- HP 7933
- HP 263X
- HP 262X
- HP 264X

In addition, the Cooperative Support Program provides:

- The HP Maintenance Newsletter, a monthly publication available to self-maintenance customers to keep them abreast of technical information about their products
- A hardware PICs where self-maintenance customers can obtain answers to their technical problems by contacting their designated HP service office

- The Manual Update Service, providing automatic mailing of all related manual changes to your customers as updates are made available by the related product divisions
- Should customers find themselves in need of replacing or exchanging a part from their service inventory, the Cooperative Support Program provides the acquisition of repair parts through the Assembly Exchange Program.

If you have any questions about the Cooperative Support Program for the HP 3000 Series 40SX, 40, or 44, please feel free to contact CSD or BCG Sales Development. In addition, CSD can assist you with a Self-Maintenance Package (SMP) to help you and your customer make decisions on training requirements, spare parts stocking, documentation, tools and test equipment needs, etc. Because the SMP is custom-tailored to your customer's system configuration, please contact CSD Sales Development early and allow at least three weeks lead time for preparation. Prior to contacting CSD we also recommend consulting your local District Customer Engineering Manager.

## CSO

### Organization Is Easy with Media Storage Cabinets

Dan Brumm/CSO

Organization means time savings! HP media storage cabinets make organization and retrieval of valuable media and programs easy for your customers.



*Media Storage Cabinets — Efficient and roomy inside, complemented by a clean functional exterior design.*

## Custom HP Design

CSO offers four attractive cabinets for convenient storage and security for media, programs, and supplies. Storage features (shelf locations, etc.) have been optimized to meet the storage requirements of all HP System users. Cabinets and doors are putty-colored to match or complement a wide range of HP products.

## Security Lock

All cabinets have a roll-up door which can be locked to keep valuable media, programs, and supplies safe and secure.

## Space Efficient

The roll-up door makes efficient use of available space, which means more useful storage space inside the cabinets. When the door is open, access to any part of the cabinet is easy.

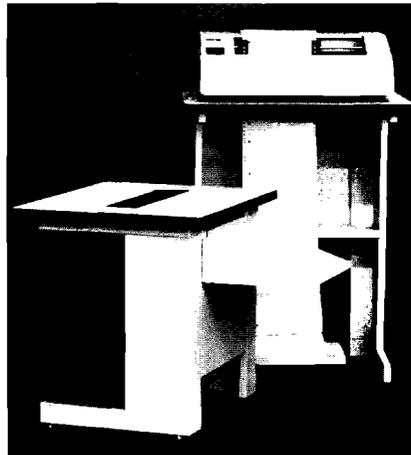
Help your customers with organization — recommend media storage cabinets featured on pages 36 and 37 of the HP Spring 1982 *Computer Users Catalog* (P/N 5953-2450).

US customers may order by calling CSO toll free at 800-538-8787. In California, Alaska, and Hawaii call 408-738-4133. In Germany call

(07031) 667-829. Elsewhere, customers should contact their local sales office. (These cabinets are also available from CSO for internal HP use, at low TAC prices).

## Offer Your Customer a Convenient, Low Cost Solution to Printer/Terminal Stands

*Jim Kinney/CSO*



*The HP 92210P (left), and 92210H.*

The 92210H Walkup Terminal/Printer Stand and the 92210P Regular Printer Stand are ruggedly built to stand up to tough, daily use. Each stand is built using 20- and 21-gauge cold rolled steel for panels and shelves, 16-gauge channel tubing for legs, and fiber resin heat fused to 1-inch particle board for a mar and stain resistant top. The stands also have detachable printout catcher shelves, 30 x 24-inch slotted tops (for bottom paper feeding printers) and a 7-inch storage shelf for documentation or other miscellaneous items.

Both stands are Hewlett-Packard pearl gray to match our peripheral equipment, systems and other 92210 series workstation furniture. The HP 92210H 38-inch Walkup Terminal/Printer Stand is \$205 (US domestic price) and the HP 92210P 27-inch Printer Stand is \$185 (US domestic price).

It's easy for your customers to order these stands. US customers call 800-538-8787 toll free. In California, Alaska and Hawaii, 408-738-4133 collect; in Germany, (07031) 667-829. Elsewhere, customers should contact their local HP Sales Office.

# SRO

## SRO Return Procedures

*Hal Eubanks/SRO*

The procedures for de-installing and returning upgraded equipment to SRO (RSE Boeblingen) is currently being updated in the HP 3000 Series 40, 44, and 64 Computer System Installation Manuals, Appendix, to recognize the procedures established last November. This will include a revised Return Equipment Checklist for the CE to use when de-installing the equipment, as well as revised shipping labels. These manuals should be published in July and will be part of the manual set shipped with the new HP 3000 Systems.

The major points of the Return Procedures Program are as follows:

- Replaced equipment must be deinstalled and made ready for shipment to HP at the same time the upgrade equipment is installed or buyer will be subject to

forfeiture of the credits issued. The Return Program gives the customer credit for the replaced equipment when the new upgrade system is shipped in North America. Title passes to HP when the credit is given.

- At de-installation the CE will contact SRO or the appropriate HP Country Traffic Office so that HP can arrange for a common carrier to pick up the equipment. The equipment must be received by SRO within 30 days (US and Canada) and 60 days (ICON) and within 60 days by RSE (Europe) of de-installation. The timely return of equipment allows for the shipment of Re-Marketed Systems sales with a desired availability.
- SRO will mail a customized packet to the appropriate CEDM for return credits issued by SRO when the new HP 3000 System ships, beginning July 1. This packet will contain a memo addressed to the CEDM outlining the Program and provides the information needed by the CE to de-install and return the equipment to SRO. RSE will not offer this packet initially.

If you should have any questions about the Return Procedures, please contact SRO Sales Development at 408-738-8858.

## Successful Re-Marketing in Europe

*Gerhard Ullmann/RSE and Andy Tasnady/SRO*

Re-Marketing and Supplies Europe (RSE) product management combined with the European Sales Center (ESC) provides a new

resource for European sales personnel. Some representatives have already taken advantage of this team. For example, Fernando Fajó from the Madrid sales office took the honor of making the first RSE Re-Marketed sales in Europe. The first shipment from RSE went to a customer of Jorge Fabregas in Barcelona. Both of these sales took place in tough competitive situations (Jorge won against a Nixdorf 8870/3) to small companies. The low price combined with the proven performance of these systems convinced the customers and made the SRs successful.

Re-Marketed Systems in the HP 3000 product line can help in many sales situations. For further information on the Re-Marketed products now available contact the ESC. To reserve a system for your customer call Gerhart Ullman or Walter Stierle at ext. 995 in Boeblingen. Quantities are limited so reserve your unit before making a formal quote to your customer.

## European Re-Marketing Operation Now Established

*Gerhard Ullman/RSE and Russ McBrien/SRO*

Starting March 1, Walter Stierle, Operations Manager of the new Re-Marketing and Supplies Europe (RSE) has been assembling a team of people to introduce Re-Marketed Systems to the European marketplace. RSE combines the new Re-Marketing team with the already successful computer supplies activity in Europe.

Today, RSE is in full operation and Re-Marketed Systems are easier than ever to order. A European marketing team now exists to assist you with sales. Personnel from both RSE and BGD (Gerhart Ullmann, RSE Product Marketing; Barbara Brenner, BGD Order Processing) and the European Sales Center (ESC) are confident that they can help you to close many deals with previously unreachable customers. RSE is currently located at the Boeblingen facility and can be reached at COMSYS location B217.

## Success with HP Series 33R

*Hal Eubanks/SRO*

**Jerry Picco**  
**Sales Office: Dayton, Ohio**

"We are going to win this." This was what popped into Jerry Picco's mind after discussing the Series 33R with a prospect. Jerry sold the system to a small, local OEM that was bidding for an Air Force contract. Originally presenting the HP 40SX for an administrative application, and competing with NCR (who has a large market share in the Cincinnati area), Jerry used his "ace-in-the-hole" to win the order. Jerry recognized that the 33R System would meet the customer's performance requirements and also provide the dollar value that was important.

The customer was so pleased they placed an order for *five* 33R Systems, bringing the total value of the order to over \$108,000! 

## DSD

### HPSPICE Leverages \$123,000 System Sale at Honeywell

Jim Ley/DSD

While many managers pay lip service to increasing productivity through CAD/CAM, others act. Honeywell in Minneapolis recently placed an order for a fully configured Model 65. LaMar Boettner, the HP SR, and HPSPICE were the primary reasons the system sale went to HP.

Honeywell's Systems and Research Group (equivalent to HP Labs) was already a large user of CAD systems, but productivity of electrical engineers was hampered for a number of reasons. Engineers previously did circuit simulation on Honeywell's MULTICS timesharing computer network. This in-house system ran the powerful Berkeley version of SPICE, but the resulting turnaround time for complex simulations was unacceptable. Also, the tabular printouts were cumbersome and deriving meaningful information was difficult. Managers at Honeywell knew that if they were going to optimize the productivity of their design engineers, they needed an alternative to this slow and inconvenient timesharing solution.

There are a number of competitive solutions now available in the marketplace. ISPICE (NCC's timesharing network) and I-G SPICE are available. Honeywell had looked at DEC's 32-bit VAX machines (they even own a few) and DG's 32-bit machines, but decided on the price-performance of the HP 1000. Managers were leaning toward a 32-bit machine, but they changed their minds when shown the large data set capabilities of RTE-6/VM.

Performance concerns for HPSPICE were also removed when a demo was performed for the Honeywell IC design engineers. Despite the fact that Mike Berryman, the SE HPSPICE Champion, is a mechanical engineer, he had no difficulty in learning how to demo HPSPICE. HPSPICE is friendly and does not require computer programming expertise.

LaMar Boettner, the HP SR, is no expert in circuit design either. His challenge in selling HPSPICE to Honeywell was not knowing internals of HPSPICE or complex circuit design, but in finding a manager inside the Systems and Research group at Honeywell who was partial to HP and who was interested in improving the working environment of the engineers.

The benefits which sold Honeywell are:

- Engineers will no longer have to wait days to verify circuit designs.

Turnaround time for these new leading-edge solid-state devices will be drastically shortened using the clear, easy-to-read graphical printouts generated on HP graphics peripherals.

- Managers will have direct control over their projects. They will not have to worry about the limitations of shared timesharing networks.
- The flexibility and power of the Model 65 system also supports general purpose FORTRAN programming and general purpose testing at Honeywell.

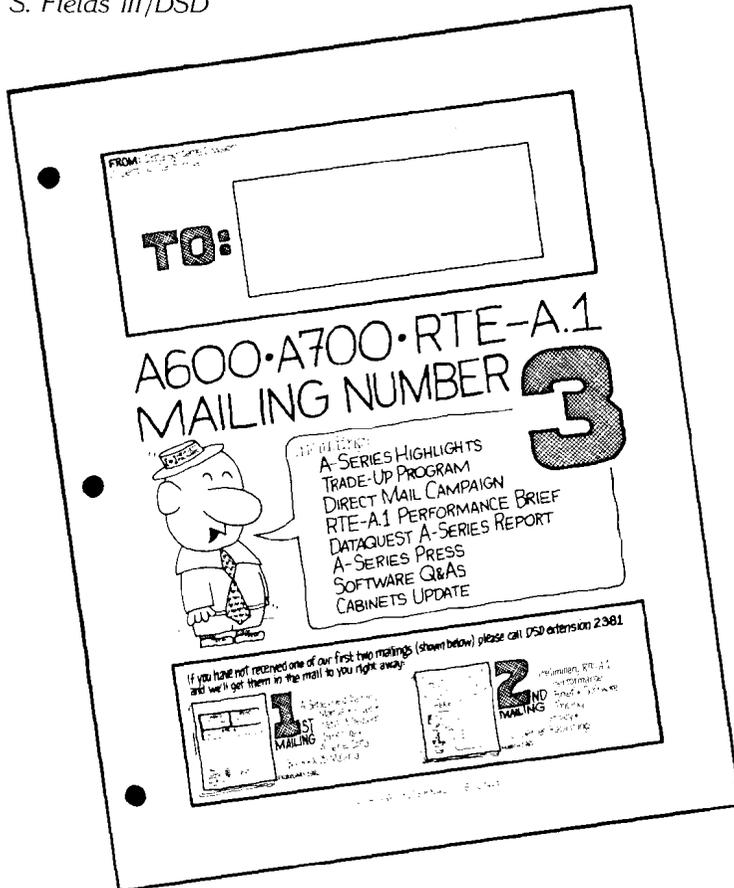
Congratulations go to LaMar, Mike, and the Honeywell managers for solving today's problems with today's technology.

The following is a configuration of the system purchased by Honeywell:

Qty.	Item	Description	Price
1	2179B	HP 1000 Model 65 System Processor	\$ 32,500
1	Opt. 002	System Software on Linus Cartridge	1,600
	Opt. 102	Value Pack W/ 2Mb memory	21,500
1	2648A	Graphics Terminal/System Console	7,100
1	2608A	Line Printer	10,900
1	7912P	65.6M byte standalone Fixed Disc	15,000
1	7908P	16.5M byte standalone Fixed Disc	9,900
1	92091A	HPSPICE Circuit Simulation Software	15,000
		Other Components/Interfaces	9,876
System Configuration Total			\$123,376
Before Discount:			

## A600/A700/RTE-A.1 Mailing Number 3

Davis S. Fields III/DSD



A new packet of information has been distributed to you. Mailing Number 3 has been mailed to all SRs and SEs worldwide. This field training manual has eight chapters:

1. A-Series Highlights — A brief description of the most important A-Series news
2. The Trade-Up Program — Full details on the program to turn your L-Series customers into A-Series opportunities
3. Direct Mail Campaign Update — A description of DSD's direct mail effort, which has already sent 30,00 letters to OEMs across the US

4. RTE-A.1 Performance Brief — Your copy of the Performance Brief, with comments in the margins to bring out the main points
5. Dataquest A-Series Report — Dataquest Inc.'s analysis of the new A-Series product line
6. A-Series Press — Quotes from a few of the many A600 and A700 articles which have appeared
7. Software Q&As — Answers to the most commonly asked software pricing questions
8. Cabinets Update — An update on the A-Series system cabinets.

We are continuing to collect and organize information which will help you in your efforts to be successful with the A600 and A700.

## HP PLUS's SSS Spells Success!

George Low/DSD

On the February 25 DSD Teleconference, we introduced our first HP PLUS Process Control Software, J/PICS, from Scientific Systems Software, Inc., in Melbourne, FL. Since that time we have had over 20 solid leads for potential HP 1000 sales based on SSS software, reports Vince Wojteczko, SR from the HP Orlando office who handles the SSS account on HP PLUS.

Here's the first of many successful sales efforts to come for HP 1000 Systems based on SSS software — from Shell Oil Company in Houston, Texas. Congratulations to SR Fred Lender of the HP Houston office for closing this deal.

Although Shell is already a good HP customer, this is the first HP 1000 System with RTE-6/VM to be implemented at Shell. The HP 1000 Model 60 System with 1 Mb of memory, 7912P CS/80 disc, and other peripherals is teamed with an HP 2250 (also the first 2250 into Shell!) to be installed in July on an offshore drilling platform in the Gulf of Mexico. Initially to be used as a supervisory station, the HP 1000 System will be used eventually as an automated monitoring and control system for natural gas production at the high-pressure well head. Fred tells us that Shell is very high on the SSS software, especially the operator display software in J/PICS, with the color graphics option. There is potential for six or more HP 1000 systems on other Shell platforms.

J/PICS is a user-friendly process-control software system designed for convenient implementation, operation, and maintenance of process computer information and control applications. The Shell sale is a perfect example of how HP PLUS

software can help you leverage HP 1000 system sales. Consult your TCG HP PLUS Catalog for more software programs in other application areas — or call us at DSD. The number of programs available on the HP PLUS program is growing every day.

## DSN/X.25 Supported on the HP 1000 A-Series Computers

### Where to Find Information on This and Other HP 1000 Data Communication Products

*Jeff Hornung/IND and Alic Rakhmanoff/GTO*

Information on data communications products for the HP 1000 will now be found under the Information Networks Division (IND) section within Business Computer Group.

As many of you already know, Information Networks Division was created nine months ago with the charter to provide the strategic focus for data communications within all of Hewlett-Packard. In addition to the strategic responsibility, IND currently has tactical and product responsibility for DS, IBM, and X.25 communications for the HP 1000 computer family even though it is actually a part of Business Computer Group. So look for future articles on DSN/DS, DSN/IBM, and DSN/X.25 for the HP 1000 under the IND section.

## The 2608S on the HP 1000 — Clarification

*Peter Philipp/DSD*

2608S support on M/E/F-Series, including graphics, will occur on the 2226 PCO to RTE-4B and RTE-6/VM. It will be included in all new M/E/F-Series systems and operating systems shipped after October 1, 1982. For customers on support, the updated software should also be in their hands by October.

2608S support on the A-Series, excluding graphics, will occur on the 2301 PCO to RTE-A.1. It will be included in all new A-Series systems shipped after March 1, 1983. For customers on support, the updated software should also be in their hands by March.

Graphics support on the A-Series will occur on some PCO after the 2301 PCO.

For critical situations requiring support of the 2608S prior to these dates, contact Sales Development at the factory.

April sales came from:

**Electro Mechanical Test Applications** — Engine Test (jet and internal combustion), Component Inspection (switches), Power Generator Monitoring, Battery Test.

**Data Acquisition** — Radar Range Monitoring, Nuclear Reactor, Wind Tunnels (five different sites).

**Process Control** — Ore Processing, Rolling Mills, Paper Mills, Pipelines, Pilot Plants, Wire Manufacture.

Sales Development, working with you during the last 12 months, has completed:

- Seven automation briefs
- 30 customer seminars
- 13 shows
- Over 100 leads distributed
- Installed 34 demos
- Two technical papers.

You in the field have sold over \$5 million worth of 2250s during the past year and have sold over 30 per month during the last two months (over 6000 points per month.) For accomplishing this, we thank you.

## HP 2250 vs. Neff

*Randi Iten/RVD*

Recently a group within one of our key customers organized and made an internal presentation comparing HP 2250, Neff, and Pacific Data instruments. Historically this group has been a heavy Neff user and initially recommended Neff as a result of the presentation because of its proven history of reliability and delivery and their existing parts and maintenance skills. However, the group's management suggested they reevaluate their decision based on the fact that the Neff system was over 2-1/2 times the cost of the HP 2250 (\$70K vs. \$26K). The machines had already

# RVD

## Quick Update from RVD Marketing

*Bill Senske/RVD*

A lot of interest has been generated by the new HP thrust into Industrial Automation. Midwest region and Japan are now over quota for 1982 year-to-date and sales in other regions are growing rapidly. Product Line 86, Measurement and Control, is growing at 29% per year 1981 to 1982, and we are just getting started in this new market.

been presented as having comparable performance and accuracy specifications. Consequently, we have received orders for 2250s from this group as well as other groups within the same company. We have also been significantly over target in 2250 orders for the last two months, thanks to you. Keep up the great work!

## New Documentation Structure for the OEM PSI Card

*Sue Wood/RVD*

In response to large-volume OEM customer concerns, the manual structure for the PSI product has been changed. The new structure is implemented on the B-version (CCITT compatible) PSI cards.

In the past, OEM PSI customers received a 50-page document with each card they purchased. These manuals contained foldout schematics, theory of operation, parts lists, etc.; information that is supplemental to card installation. Shipping this manual with each card resulted in as much paper waste.

Concurrent with the introduction of the HP 12826B and 12042B PSI cards, the manual supplied with the card was reduced to approximately 10 pages.

This "installation guide" is an abbreviated version of the comprehensive installation and service manual and provides only that information needed to install the card.

The installation and service manual will still be available and orderable from Computer Supplies Organization.

P/N	Description
12826-91001	Programmable Serial Interface for modem connection from M/E/F-Series computers Installation and Service Manual
12042-91001	Programmable Serial Interface for modem connection from L/A-Series computers Installation and Service Manual

# DCD

## Smaller HP 9826/36 Memory Sizes Needed for Software

*Larry Inman/DCD*

Your customers can save some money when they order their HP 9826/36s to work with certain HP software packs!

In the March 1982 issue of HP 9826/36/45 Desktop Computer Software Pricing Information, P/N 5953-4606, the minimum R/W memory size required for each of the 9826/36 packs in the following list

was given as 320kb. Since the publication date, we have obtained new information on the minimum memory sizes needed, as shown here.

Please note these changes and pass them along to your customers, who can save money by ordering only the R/W memory required by their software.

P/N	Description	Minimum R/W (Kbytes)
98825A	AC Circuit Analysis	256
98826A	Linear Systems Analysis	240
98828A	Digital Filter Design	256
98827A	Waveform Analysis	256
98821A	Numerical Analysis Library	64
98810A**	VisiCalc	256
98820A	Statistics Library	240
98820B	Statistics Library, Part I	240
98820C*	Statistics Library, Part II	240
98817A	Project Management	100
98818A	Forecasting	100
98815A	Graphics Presentation	240

\*Requires Part I to operate.

\*\*Total R/W required; no language necessary.

## New CAE Strategy Seminar is Available

John Boose/DCD

DCD recently sent the field marketing managers slides and a storyboard for a seminar, "Hewlett-Packard's Computer Aided Engineering Strategy for the 80s." This is a subset of a factory presentation, geared primarily for engineering managers in large manufacturing companies. It complements the slide presentation on the Manufacturers' Productivity Network.

The seminar is divided into three areas:

- CAE definition
- CAE Business Strategy — Products, Applications, and Networking
- CAE Evolution and Success Factors.

Due to the complexity and sensitivity of the material, I would suggest that DMs and above present the material. For a more detailed presentation, you should probably call on a factory manager.

If you would like to see the presentation, contact your field marketing manager. If you did not receive a copy in your area and would like additional slides, please contact Marvel Ross at DCD. If you would like to arrange for an in-depth presentation on our CAE strategy by factory management, contact your DCD Sales Development person.

## HP Graphics Marketing Council Takes Action

John Boose/DCD

The HP Graphics Marketing Council has developed a new brochure for technical computer graphics products. This colorful brochure, "The HP Graphics Spectrum", P/N 5953-4613, should be in your hands by now. It describes our range of mainframes from the HP-85 to the HP 1000, all of our graphics peripherals, and our graphics software offerings.

The brochure is used as a response piece for our graphics ad, "HP presents graphics improvements in engineering productivity." The ad has recently been run in several graphics-related magazines, so you should be receiving inquiries on our graphics products.



The Graphics Marketing Council has also been heavily involved in two major graphics trade shows in the US. We have large booths and will present several papers at both the National Computer Graphics Association (NCGA) show and SIGGRAPH. NCGA was held in Anaheim, CA, June 14-18. SIGGRAPH will be held in Boston, MA, July 26-30. You should look for graphics-related leads from both shows!

The Graphics Marketing Council involves representatives from 12 HP divisions. We are formulating our tactical plans for next year. If you have any suggestions related to improving HP's image in graphics or merchandising our total graphics family, please pass your comments along to me at DCD.

## EGS/45: Where Else Can You Sell It?

Rick Stahlin/DCD

Here are some order statistics for the EGS/45 through April:

- Two-thirds of the orders are from the US
- Half of all orders include 9845Cs
- Average EGS/45 sale exceeds \$50K.

About half the sales are for applications other than PC layout and electronic schematic drawing, such as:

- Integrated circuit design and mask layout
- Mechanical drawings for test system front panels, instrument enclosures, and skylights
- Architectural design and floor plan layout
- Process diagrams for material and information flow.

This reinforces our contention that EGS/45 is a highly capable general technical drawing tool. It incorporates some powerful features that clearly differentiate it from other HP graphics software such as the HP 9111 utilities and CAP/45.

One such feature is the EGS/45 library facility. The user is free to modify the supplied library parts or create others to support a particular application. The EGS library implements a true hierarchical graphics data structure; i.e., parts can be defined that are assemblies of other parts, as well as the EGS/45 primitive drawing elements. The user can create modules or subassemblies, store these, and add them to a higher-level assembly drawing. An example might be defining a flip-flop library part from EGS primitives, combining the flip-flops to form a shift register, incorporating multiple shift registers in a CPU circuit, and so on.

Another key EGS/45 feature is its layered data structure. Essentially, you're drawing on 256 layers of mylar, overlaid on one another. Each layer has its own color, and you can selectively display or plot any or all layers.

This has obvious implications in multilayer PC board layout, but it's equally important in other applications as well. Consider the architect or facilities engineer who is laying out an office floorplan. First, he draws the walls and fixed building features on one layer. Then, viewing this building outline, he may proceed to lay out telephone and electric services, overhead lighting, office and corridor placement, etc. If each of these is entered on a separate layer, each can be plotted independently, along with the building outline.

The EGS/45 Schematic Drawing Module's material list capability is another tool that applies to many technical documentation tasks. It can list how many desks and files in an office layout, how many elbows and valves in a piping design, how many of each type connectors in an automotive wiring harness, or how many cities with what populations are on a map.

Finally, EGS/45's friendliness and flexibility set it apart from many competitive offerings, and contribute directly to productivity. Jack Barnette, head of Lockheed Georgia's Ground Support Equipment Group, cites these qualities as key to his decision to select EGS/45 from a broad competitive field.

"We approached all the various vendors, had lengthy discussions with the serious contenders, and then set up demonstrations of the systems," Barnette said. "The reason we finally settled on the Hewlett-Packard equipment was that it served our purposes better than the rest.

"I wanted an easy-to-use but powerful man/machine interface, and I didn't want to have to retrain all my engineers to become software experts. Second, we were looking for flexibility. We all knew that there would be additional or unforeseen applications; we wanted to be able to use the same system if possible. We felt that we could tailor the system in-house for our application. I know the system was developed initially as an in-house item at Hewlett-Packard, and that is absolutely apparent in our use of it. We have not found any bugs. It's obvious that somebody didn't sit down to generate a CAD product — that it evolved through use in product development at HP. And that's saving me time and headaches.

"Because of the very friendly user interface," continued Barnette, "training time is minimal. In two hours, we had engineers on the system who could use it for as much as a day or two without any significant problem. There was an almost immediate gain in productivity because the repetitive tasks were reduced. For instance, in the area of sketching and layout — the design phase — we believe we have data that indicates a 33% to 50% improvement in productivity; in parts list generation, we are achieving a 62% productivity improvement; in the process of inking a drawing, we are achieving a 97% productivity improvement, and we are not yet using the system to its full capacity. In the design area, we are adding library items as we use the machine. As this library builds up in volume, we expect continued improvement."

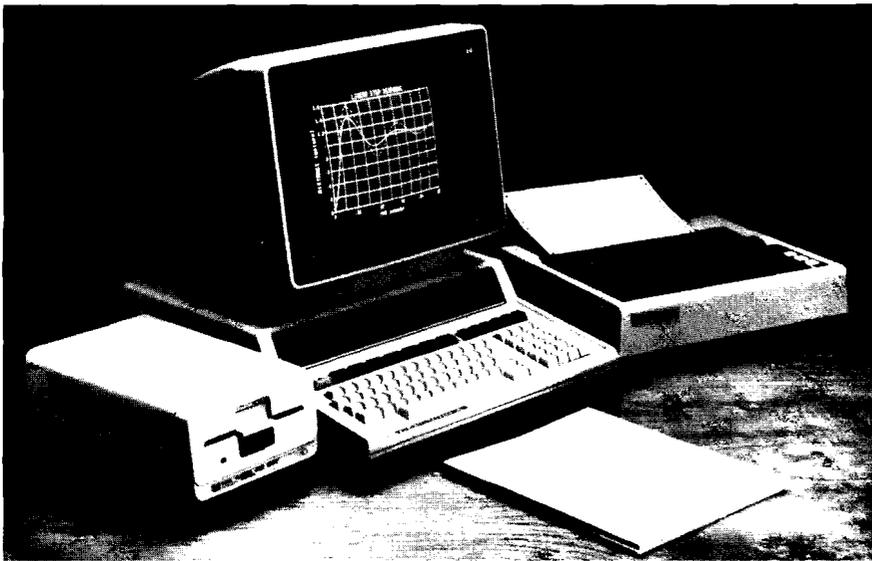
Please direct any inquiries about the Lockheed application to Bill McCarrick at the Atlanta sales office.

Jack Barnette has written a complete article on EGS/45 that should appear in the July issue of *IRED*.

## PCD

### New HP-86 is HP's Lowest-Priced Personal Computer

Steve Ruddock/PCD



Hewlett-Packard's lowest price, newest personal computer is the HP-86 (center), which features software for professionals in engineering, science and the office. The HP-86 monitor is available in 9" and 12" sizes.

HP's newest, lowest-priced personal computer, the HP-86, lets you offer your customers HP quality at a competitive price. And a host of new software means a broad range of solutions for all professionals are available on the HP-86 at a lower cost than comparable Apple II, Apple III, and IBM systems.

The modular HP-86 features keyboard and microprocessor in one package, industry-standard 9" and 12" monitors, and a new flexible disc drive offering low-cost mass storage.

All existing Series 80 BASIC software is compatible with the HP-86, and the new machine runs CP/M software with the addition of the HP 82900 CP/M System. All other Series 80 peripherals run with the HP-86.

New software features solutions for professionals including accounting, word processing, data base management, critical-path method analysis, and personal and business tax-planning. The new pacs are distributed under HP PLUS and complement existing graphics, electronic spreadsheet and data communication software.

Low-cost, modular hardware, together with new and existing software solutions, make the HP-86 attractive to professionals in business and office environments, as well as to HP's traditional base of engineering and science professionals.

PCD also is introducing the HP-87XM (for "extra memory"). As the increased-memory version of the HP-87A, introduced in March, the HP-87XM features 128kb of user memory, expandable to 640kb.

The HP-87XM will be HP's most expandable personal computer, for your customers who need to add a large number of peripherals or instrumentation. US price of the HP-87XM is \$2,995.

#### New HP-86 Modular Personal Computer

Four ports in the back of the computer let the user expand the HP-86's power. The HP 82900 CP/M System, the HP 82950 Modem, HP Memory Modules and additional ROMs all can be plugged into the ports. Recommended US list price of the HP-86 is \$1,795.

Dedicated interfaces connect the computer to a display monitor and one or two disc drives. The HP 82912 (9" diagonal) and HP 82913 (12" diagonal) monitors both display text, in an 80-column by 24-line format, and graphics. Recommended US list prices of the 9" and 12" monitors are under \$300 and under \$350, respectively.

The HP 9130 flexible disc drive features 270kb capacity in a new, small package, and uses double-sided, double-density discs. Recommended US list price of the HP 9130 drive is \$850.

At less than 1/3 cent per byte, the new drive offers one of the lowest mass storage costs of all flexible disc drives.

The HP 82905B dot matrix impact printer, with compressed and expanded type, and a variety of print formatting options, is expected to be most popular with the new HP-86. Its recommended US list price is \$795.

## Software for the HP-86

Some of the most popular personal computer software solutions have been custom-written for the HP-86, or are available in CP/M mode.

These include accounting software from Peachtree Software Incorporated. General ledger, accounts receivable and accounts payable software packages are being introduced now by HP, and make up a complete solution for many professionals who need small business accounting. In addition, Peachtree's inventory control and PeachPay<sup>TM</sup> Payroll System packages for the HP-86 will be available in late summer and early fall. These accounting programs carry a suggested US list price of about \$750. (PeachPay is a trademark of Peachtree Software Incorporated.)

Data base management on the HP-86 makes use of dBASE II software, running under CP/M, and featuring relational data base management. It is available now from HP for a suggested US list price of \$650. (dBASE II is a product of Ashton-Tate.)

Also available under CP/M are three tax planning software packages, written by CPAs, for personal, professional and estate tax planning. These packages are supplied by Aardvark Software and are available now.

Many other CP/M solutions run on the new HP-86, including WordStar<sup>TM</sup> word processing package, SpellStar<sup>TM</sup> spelling checker program, and MailMerge<sup>TM</sup> mail list manager. Milestone<sup>®</sup> software, a project tracking program, lets professionals control time and money constraints when managing projects. (WordStar, SpellStar and MailMerge are trademarks of Micropro International Corp. Milestone is a registered trademark of Software Digital Marketing.)

Existing Series 80 software runs on the HP-86 and makes up a "core" of

solutions for all professionals. This software includes VisiCalc<sup>®</sup> PLUS and Graphics Presentations Pac. (VisiCalc is a registered trademark of VisiCorp.)

Two data communications software solutions let the HP-86 communicate with other computers and with information banks such as THE SOURCE<sup>SM</sup>, Dow Jones News-/Retrieval<sup>TM</sup> and CompuServe<sup>TM</sup>. HP-86 data communications can be done over phone lines with the HP 82950 Modem, or "hardwired" with HP's Data Communications Pac and an HP serial interface. (THE SOURCE is a service mark of Source Telecomputing Corp., a subsidiary of The Reader's Digest Association, Inc; Dow Jones News/Retrieval is a registered trademark of Dow Jones & Company, Inc; CompuServe is a trademark of CompuServe Incorporated.)

Large numbers of other programs, both written for Series 80 machines and those that run under CP/M, are available from HP under the HP PLUS software program. All are listed in the HP Series 80 software catalog.

## HP-85 Interfacing Strength Wins Again

*Liz Aust/PCD*

Syva Corporation, a subsidiary of Syntex, has been a great success story for HP and Syva alike. When Palo Alto FE Dan Grove first approached Syva, they were at a make-or-buy decision point for a controller for their blood analysis instrumentation. In the past, they had built their own controllers, but had seen the HP-85 being used by several of their competitors. Through a two-year process, Dan was able to win them over. Dan estimates their needs to be 1,500 to 2,000 units over the next three years.

The story doesn't end with the OEM agreement. In addition, Syva also uses the HP-85 in both a production real-time environment and in R&D. In the production environment, there are two 85s performing quality control. The 85 interfaces with a Metler digital analytical balance via a serial current loop interface. The balance measures the amount of a chemical powder that is put into a vial. The 85 monitors the sample's variance, reporting out of spec samples.

In R&D chemical development, the HP-85 controls a complex network of digital diluters that mix and measure ten component chemicals at a time. Then, through a BCD interface channel, the 85 receives data from a spectrophotometer that measures the chemical compound's light absorbency. The 85 grabs the absorbency over time and measures the rate of change.

Bruce Kirkpatrick, a Syva engineer who worked on the original blood analyzer project, now serves as a Series 80 consultant to the production facility. Their goal is to eliminate keyboard input steps in the chemical production process to reduce the incidence of human error. Bruce has also written math application software for them, including regression analysis and correlation statistics.

For all parties involved, the HP-Syva relationship has been very successful. FE Dan Grove is very pleased with the support he has received from PCD's industrial sales development team. And it looks like the 85 got HP in the door at Syva; there are now two HP 1000 systems in place.

## New HP PLUS Software for HP-85 Personal Computer

Bill Hodges/PCD

The HP-85 portable personal computer is still going strong, and the solutions you can offer your customers just increased with seven new software packs.

These new solutions range from word processing and accounting to surveying and design programs. All are distributed or referenced under the HP PLUS program.

### Complete Accounting Package for the HP-85

TAJ<sup>™</sup> I-85 (The Accounts Journal)<sup>™</sup> is a completely *integrated* account software package for the HP-85. (TAJ and The Accounts Journal are trademarks of Production Data Systems.) TAJ has been successfully used by Series 80 users since January 1981, and includes general ledger, account receivable, account payable, and payroll modules. All of the modules *interface* with the general ledger and reside on *one* disc. TAJ also allows the user to set up data discs so that one disc can hold a company's data. Other features are:

- General Ledger
  - Simultaneous Debit/Credits Posting
  - Always in balance; four level, six digit account numbers
  - Automatic depreciation on fixed assets
  - Detailed financial reports
  - Complete account edit and review
- Account Receivable
  - Transaction detail by customer
  - Balance forward
  - Automatic finance charge posting and monthly charge posting

- Account Payable
  - Transaction detail by vendor
  - Balance forward
- Payroll
  - Automatic deduction posting
  - End of year W-2 data
  - 10 deductions, 6 user definable

TAJ I-85 is available from PCD (P/N 00085-16001).

### Word Processing for the HP-85

WRITE/IDEA<sup>™</sup> is a recently introduced word processing system for the HP-85. (WRITE/IDEA<sup>™</sup> is a trademark of Marvin Parsons.) Flexible and friendly, it enables the production of documents from conception to hard copy. Reports, articles, letters, manuscripts, and any other text document can be created and edited with simple English commands and printed on HP Series 80 compatible printers.

Up to nine tabs can be set and text can be automatically centered and right justified.

The SEARCH command can be used to perform a string search throughout a document. Automatic word replacement for all occurrences of a word throughout an entire document can be accomplished with the WORD REPLACE command.

Text can be merged using Block Store, Block Load, and Block Insert operations.

Transparencies of notes, tables, or outlines for use with overhead projectors can be made from data files created with WRITE/IDEA and produced on peripheral plotters such as the HP 7470A.

Users who selected the HP-85 for analytical and technical applications can now expand their uses to include word processing with WRITE/IDEA. It's easy to learn to use, easy to sell, and requires little or no support. It's available directly from Threshold Software, Inc, telephone 916-972-0847.

### Accounting Software for the HP-85

DATA-FLEX<sup>™</sup> is a recently introduced accounting software package that includes general ledger, accounts receivable, and payroll. (DATA-FLEX is a trademark of Racing Services, Inc.) It is a friendly system which has been designed for companies with up to 200 employees. The software is menu-driven and has been designed for simplicity, efficiency, and flexibility. An accounts payable module will be available in the future. Some of the features are:

- General Ledger
  - Up to 400 accounts with 4300 transactions per month
  - G/L Transaction Journal, Monthly Trial Balance, Detailed Trial Balance.
  - Formattable Balance Sheet and Profit and Loss Statement
  - Eighty-Column Reports
- Accounts Receivable
  - Up to 500 customers with up to 5000 transactions per month
  - Monthly Charge Generation, Aged Trial Balance, Customer Statements
  - Eighty-Column Reports, Address Label Printing
- Payroll
  - Up to 200 employees with up to 1600 Timesheets Per Cycle
  - EIC Tax Capability, W-2 Printing, Tax Table Maintenance Program
  - Manual and Automatic Checks, Check Printing Capability
  - Job Cost Report, MTD and YTD Payroll Reports, Tax Bracket Report
  - Variable Overtime Rate

DATA-FLEX is very adaptable to small businesses such as engineering consulting firms, high technology firms, and other start-up opera-

tions. It is available directly from Racing Services, Inc, telephone 916-929-1517.

## Optical Design Using the HP-85

OSLO-85 is an optical design and analysis program written for the HP-85. It is meant to be used by students, optical engineers, and others who need the capability to design and evaluate a wide variety of optical systems, but who are not involved with everyday lens design. Any surface of the system can be tilted and decentered, and can have a shape that is aspheric or toric. Up to 50 such surfaces can be accommodated. Other features are:

- Up to 100 surfaces for spherical surfaces on a common axis
- Evaluation of paraxial ray tracing, exact ray tracing, spot diagram analysis, and computation of aberration coefficients
- Optimization portion based on either optical path differences or transverse ray displacements
- Special multicommand operating system for friendly interaction between user and the program
- Extensive use is made of graphics, both on the HP-85 display and on an external plotter (7225A/B)
- Zoom graphics allows user to make measurements from the HP-85 display images

OSLO-85 is available from Sinclair Optics, Inc, telephone 716-381-9100.

## Digital Filter Design and Discrete-Time Systems for the HP-85

This recently announced applications software package for the HP-85 is a menu-oriented, prompt-driven, interactive program for analyzing and designing digital filters and discrete-time systems. *Design* options include:

- Automated design of finite impulse response (FIR) digital filters to meet frequency domain specifications
- Automated design of infinite impulse response (IIR) digital filters of the Butterworth and Tchebyshev variety to meet frequency domain specifications
- Design of FIR filters to meet frequency sampling specifications
- Least squares design of FIR filters
- Transformation of analog systems to digital systems by the methods of impulse invariance, covariance-invariance, and bilinear-z transformation.

Designed filters may be computed, tabulated and shown graphically for the following data:

- Filter coefficients, filter impulse response, and filter frequency response (magnitude and phase; linear or log scale; analog and digital overplot)
  - Graphing can be seen on the HP-85 display, thermal printer, or 7225A/B plotter.
- Purely analysis features of the package are as follows:
- Impulse response and frequency response using ARMA discrete-time systems
  - Fast Fourier Transform (FFT) analysis of user-specified real and complex sequences.

This software package is available from Parametrics, Inc, telephone 303-221-3163.

## Linear System Analysis and Feedback Compensator Design for the HP-85

This recently announced software package for the HP-85 is a menu-oriented, prompt-driven, interactive program for analyzing linear systems and designing feedback compensators. Transfer function blocks may

be entered in feedforward and feedback configurations to realize transfer functions for complicated linear systems. The software computes, lists, and plots the following time domain data:

- Impulse response
- Step response.

The user may read time delay, rise time, and settling time. The following frequency domain characteristics are computed, listed, and plotted:

- Bode plots (magnitude and phase)
- Nyquist plots
- Root-locus plots.

Gain and phase margins are also computed and listed. Time and frequency domain plots may be overplotted to observe effects of parameters variations on response characteristics.

Software packages is an excellent tool for electrical design engineers and is available from Parametrics, Inc, telephone 303-221-3163.

## Well Survey Analysis for the HP-85

The "Radius of Curvature Well Survey" software program was designed and developed to allow the user to calculate and plot direction surveys on [oil] well-bores with hole inclination. Survey data can be entered from the HP-85 keyboard or a tape/disc data file. The user may review and edit the input data before calculations are started. When the calculations are completed, output can be printed on the HP-85's internal printer or other external printer. Additionally, survey data may be stored on a mass storage device or plotted on the HP-85 display or HP 7225A/B plotter. Excellent program for petroleum engineers, geologists, surveyors, small engineering firms, and students. It is available from the Remex Corp., telephone 616-942-9800.

## Series 80 "Personal Successes" Continue

Warren Catchpole/PCD

The HP-85A is continuing to enjoy widespread customer acceptance and support. In virtually every field, and in a varied number of applications areas, the 85 is being used to help people satisfy their personal computer requirements.

For example, Mr. Bob Lottero, the President of Northern Technology Incorporated, a firm located in Whitefield, NH, has just recently sold an energy management system to the city of Springfield, MA. At the heart of the system is an HP-85, which is being used as a controller for the cable tv based network. This package, which sells for significantly less than competitive systems, is being touted in an upcoming issue of *American City and County* magazine, and Mr. Lottero anticipates widespread interest in his product. According to Bob, the HP-85 was selected, after extensive research, because the unit, "makes it possible (for us) to provide an essential technology to people who need it — and at an affordable price".

For Compu-Plan, a Kloster, NJ firm, the HP-85 has made it possible to offer a product that can be used by savings and loan officers to provide clients with accurate and convenient price quotations on life insurance policies. These quotations, which are first displayed on the CRT before being sent to the printer, are given to the customer as a part of their "Personalized Illustration (Profile)".

Nancy Rundlet, based in the Paramus office, recounts the elements involved in this successful sale, "I sold the (HP-85's) integrated concept, portability, and general compactness. Once the customer got his hands on it (Mr. D'Agostino,

the company president, was loaned a unit for one week) he didn't want to let it go!"

The HP-85 is also being used in the areas of quality verification and process control. For example, Alliance Metals, one of Xerox's component parts suppliers, has recently begun using an HP-85 in conjunction with a 41CV to generate quality control charts that are included in product shipments to Xerox. This application is mutually beneficial for both Xerox,

who requires that their suppliers provide such charts, and the component manufacturer, who, prior to the introduction of the HP-IL interface, (which connects the HP-85 and 41CV together to form a system) had a choice of doing the work manually or spending \$20,000 for an automated chart generation system. According to the HP SR, "... the HP-85A, HP-IL, and 41CV ensure that the customer's solution is short, simple, and inexpensive!"

## New Backplane Policy for the HP-85

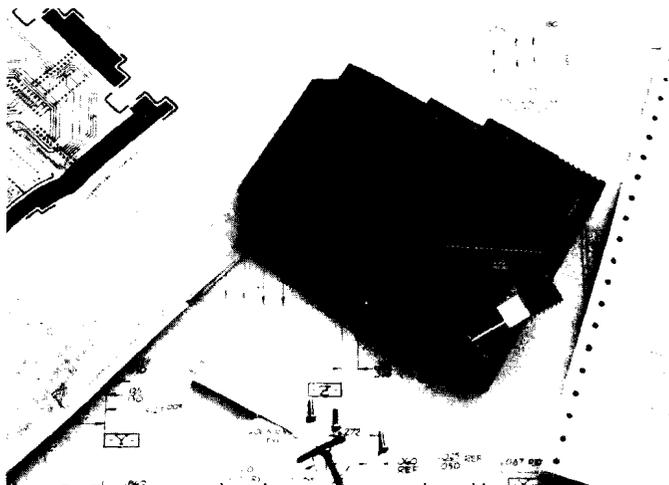
Greg Erdmann/PCD

The HP-85, because of its low-cost and I/O capability, has been a favorite of many for instrumentation applications. Now its I/O capability is being strengthened even more for OEMs who wish to build custom interfaces into the backplane. Already PCD has received great interest from several OEMs who want to build special I/O cards such as 2780 (IBM compatible) and A-to-D interfaces.

The guidelines for receiving backplane drawings and documentation are the following:

- Only OEMs may receive the necessary documentation
- The OEM must be capable of using the documentation in an unsupported basis
- A special will be made available from PCD so that the OEM can order parts kits including interface case parts, grounding strap, and translator chip. (This chip allows communication with the HP-85 CPU.)

Call your sales support person if you have a potential OEM candidate, and good selling!



hp



## Business Computers Software Directory Update Now Available

Marilyn Moore/BCG

The Business Computers Software Directory is becoming bigger and better than ever with the newest update! There are 146 *new* software packages included in the update, as well as data sheets for HPMAIL, HPDRAW, and HPEASYCHART. There are many, many new applications packages, including:

- Project management
- Job costing
- Statistics packages
- Feedlot management
- Hospital systems
- Educational systems
- Property management
- Sales order processing
- Banking/credit systems
- Construction management
- Government systems
- Professional billing
- Real estate systems
- Vehicle management
- LOTS of payroll, personnel, and accounting

Also included are *many* new utilities to satisfy your customers' every need!

To receive their updates, your customers must send in the prepaid postcard in the back of the Directory. Internal Directory owners should *also* mail in this postcard; if you have lost it, please send a COMSYS to Marilyn Moore at the Business Computers Sales Center (COMSYS 4701). Do *not* send a COMSYS if you do not already have the original

Directory! All updates will be provided free of charge, and will be included in the Directory for all new purchasers, with no increase in price.

The BCG Software Directory is an even better deal than ever before — be sure *each one* of your customers has one!

## General Accounting/3000 Leads to New System Sales

Martha Linenburger/FSO

General Accounting/3000 helps attract first time HP computer users. A recent survey conducted by Financial Systems Operation revealed that over 30% of GA/3000 customers are new HP users. If you are like one HP horizontal SR in the Southwest who estimates that 95% of his new prospects ask for financial software, read on . . .

### Selling GA/3000 to First Time Users

HP SRs who have sold hardware systems bundled with GA/3000 to new users recommend selling HP's name, reputation for quality products, support, and full product array to the first time user. Seventy-one percent of buyers of GA/3000 cite "single vendor solution" as a key buying factor. One HP horizontal SR in the Southeast found that aggressive Third Party competition did not change the buying decision; the customer preferred dealing with HP as a single vendor for both hardware and software.

More prospects are converting from either batch or manual systems. They are looking for timely, accurate information and better management control. Your key to success lies in

emphasizing known product features: ease of use; on-line, interactive capabilities; and IMAGE data base management.

Other GA/3000 selling features include:

- Ease of installation (averaging 14 days to 2.5 months)
- Quality documentation
- Management inquiry capability.

### Increase the Size of Your Sale

Suggest that your customer purchase an HP 2382A terminal as a managerial review station. With GA/3000, a manager can review at a glance the general ledger, activity against a specific account — even an up-to-date income statement or balance sheet on-line.

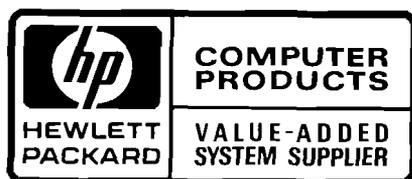
### Steps to Successful Selling

- When contacting potential customers, identify the accounting executives, the controller, treasurer, and general accounting manager — they're important to you. Financial executives are key decision makers in 46% of GA/3000 buying decisions, MIS Directors in 32%.
- Screen your prospects carefully. Your GA/3000 Field Training Manual provides a guide for customer qualification. Your SE Financial Specialist also has available a qualification questionnaire to help you evaluate customer needs.
- Provide a General Information Manual (P/N 5953-0698) to help your prospect review GA/3000. The GIM "walks the prospect through" GA/3000, screen by screen, so that the customer may fully appreciate all product features and their integration.
- Thirty-five SEs have now received GA/3000 training and can provide assistance in handling detailed financial questions.

Remember, new customers are generally looking for financial software, and prefer dealing with one vendor to meet all their needs. GA/3000 provides the opportunity to sell a total solution to a wide variety of customers.

## Value-added System Supplier Logos Are Ready

Lynne Ovington/BCG



Just what your OEMs have been requesting to enhance their product advertising — the HP/Value-Added System Supplier Logo is here!

Once your OEMs have signed the "Value-Added System Supplier Identity Program Agreement" (P/N 5953-2230(00) D) they will be eligible to use this new logo. This agreement must be signed prior to giving your OEM the logo sheet (P/N 5952-2248). The logo sheets have been sent to Third Party SRs and bulk shipped to all sales offices. The VASS Identity Program Agreement has been sent to the Contracts Administrator in each sales office. Both are orderable from Corporate Literature Distribution.

The VASS logo is one more good reason for a prospective OEM to sign with Hewlett-Packard.

# CSY

## Additional CST Entries for HP 3000 Series 64 Systems

Samuel Quezada/CSY

A resegmented version of FOS is now available, for HP 3000 Series 64 systems, as an interim solution to the current shortage of Code Segment Table (CST) entries within the system. This resegmented version of FOS is standard on all new Series 64 systems and is available for installed Series 64 systems.

All software that executes on HP 3000 systems is divided into segments so that it can more easily be brought into memory to be processed. Whenever a segment is active on the system its location and status is kept in an entry in the CST table. There are 192 entries that can be used for sharable software: MPE, KSAM, IMAGE, system segmented libraries, group segmented libraries, and user segmented libraries. MPE, KSAM, and IMAGE take up 94 CST entries. By resegmenting this software the number is reduced by 40% to approximately 56 entries. With the resegmented FOS (which reduces the system usage of CST entries) more user and subsystem software can be concurrently executed on the HP 3000 system.

There will be no perceptible performance degradation due to the resegmented software on the Series 64. Performance degradation becomes perceptible, however, on smaller memory systems (systems with less than 2 Mb of memory) as the system tries to accommodate the larger segments in the smaller memory size. Thus, we are limiting this offering to the Series 64 where the performance impact is minimal.

Software support for resegmented FOS will be the same as that for the standard version of FOS: Customer Support Service, Additional Support Service, and Software Subscription Service. This resegmented version of FOS must be viewed as an interim means of facilitating additional CST entries, available and supported, until a permanent extension of the CST is developed. That permanent extension of the CST for the Series 64 is currently being developed and should be available within a year.

Users with installed Series 64 systems can receive the resegmented version of FOS with a new Master Installation Tape (MIT D.00.20). This resegmented software is equivalent, in functionality, to the most recent version of FOS (C.00.20). Both versions of these MITs will be concurrently updated in the future.

## HP Series 64 Has New Console

Audrey Dickey/CSY

With the introduction of the new HP 2647F Intelligent Graphics Terminal by Data Terminals Division, the 2642A Option 964 will be replaced as the system console for HP 3000 Series 64. The new system console will be the 2647F Option 890. You will be able to order the new console now. The 2642A Option 964 will be removed from the price list September 1.

The price of the 2647F is \$9950 and the Option 890 is \$1750, making the net price of the new system console the same as the old, \$8200. In order to effect this reduction in the price of the 2647F, Option 890 removes the graphics capability.

Another change in the ordering of the system console involves the cable. The 2647F Option 890 does not include a cable. This solves the problem of the console arriving with the wrong cable. When the customer orders the new console, make sure one of the following three cables is ordered:

- 13232I HP Direct Connect RS-422
- 13232N Modem cable
- 13232X HP Direct Connect RS-232

In this way, your customer will be assured that the proper cable will be in place when the system arrives.

## HP 250 Rated Best in Datapro Survey!

*John Whitesell/CSY*

According to a recent survey of 2,753 mini computer users by Datapro Research Corporation, the HP 250 was rated highest in overall satisfaction, with a perfect 4.00 score, compared with 42 other computer systems.

Users ranked the IBM S/34 at 3.42, Wang at 3.36, and Basic Four/MAI at 3.07.

The HP 250 was also one of only five systems for which 100% of the users said they would recommend the system to another user.

And as you might expect, the HP 250 was the only system that received a perfect 4.0 rating in both ease of operation and ease of programming.

The Datapro survey is based on returns from a mailing to a cross-section of *Computerworld* readers, and the survey is described in detail in the June 14 issue of *Computerworld*.

# IND

## DSN/X.25 Supported on the HP 1000 A-Series Computers

*Jeff Hornung/IND and Alic Rakhmanoff/GTO*

At the initial introduction of DSN/X.25 for the HP 1000 in February, only the RTE-6/VM and RTE-XL operating systems were supported, and testing for RTE-A.1 compatibility was in process. The modifications have now been completed, and RTE-A.1 will be supported on the 2226 software revision of DSN/X.25.

RTE-A.1 is supported on software revision 2226. This will be shipped to all customers on 91751T/S support services. New product shipments with software revision 2226 will begin in early August.

The DSN/X.25 product, 91751A, is now compatible with M/E/F-, L-, and A-Series computers.

The 91751A product does *not* have Options 300/600/700 for the various processors. The current product structure will remain as is and the base "A" product must be ordered for all processors.

The interface card used for the L-Series, 12075A, is also used for the A-Series.

To make future references easier, go to your copy of the Technical Data Supplement, P/N 5953-2825, and in the DSN/X.25 Data Sheet wherever there is a reference for the L-Series, add an A-Series reference.

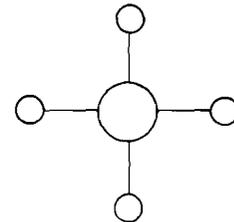
## DSN/DS for the HP 1000

When to use Point-to-Point, DSN/X.25 and Multidrop Connections

*Suzanne Hernandez/IND*

The introduction of DSN/X.25 for the HP 1000 widened the range of connection schemes that are available to DS/1000-IV.\* Now that the DSN/X.25 product is compatible with the M/E/F-, L- and the new A-Series computers, it's a good time to review the positioning of the different connection alternatives.

### Point-to-Point



Point-to-Point connections, (i.e., hardwired or modem) provide maximum speed and throughput for heavy network traffic. Maximum line speed is 230 kb/s.

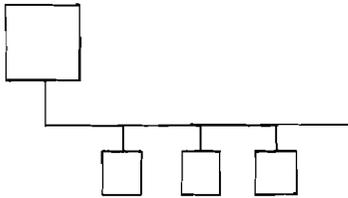
### DSN/X.25



DSN/X.25 connections may yield more cost-effective solutions for large, geographically dispersed networks with medium network traffic. Users are charged a one-time connect fee to the Packet Switched Network per computer, and monthly service charges based strictly on volume of data flow. Maximum line speed is 56 kb/s.

# Business Computers

## Multidrop DS



Multidrop DS connections offer low cost communications solutions for local HP 1000 to HP 1000 applications requiring infrequent, low volume data transmission. Maximum line speed is 19.2 K baud *shared* between a maximum of twelve nodes.

The real benefit of these connection schemes are that they are entirely transparent to the user. This means that *no program modifications are necessary* in converting from one scheme to another.

As many of you know, product responsibility for DS/1000-IV transferred from DSD to IND several months ago to provide focused attention on HP's data communications products. Since that time, the highly HP 1000 experienced lab, support, and marketing team has continued to further the success of DS/1000-IV, as well as to take a leadership role in defining Hewlett-Packard's next generation DSN/DS product.

As a reminder, remember to look for articles on DS/1000-IV under the IND section of the Business Computer Group. And rest assured that your technical customers' interests are being well represented!

\*All DS/1000-IV features with the exception of Forced Cold Load and Remote Virtual Control panel are supported under all connection types. FCL and VCP features are supported as follows:

	P-P	X.25	Multidrop
FCL	✓	NO	✓
VCP	✓	NO	NO

## DSN/X.25 Additional Network Certification

*Jeff Hornung/IND and Beau James/IND*

Currently the HP 1000 and 3000 DSN/X.25 products support only the TELENET X.25 Packet Switched Network in the US and the Transpac network in France. We are currently in the process of working toward certification of the following networks:

Network Name	Country
Tymnet	US
Datapac	Canada
BPSS	UK
Datex-P	Germany

We are also investigating the Japanese DDX network, but we currently do not know what is required for certification since this network does not conform to the 1980 CCITT standard.

We will keep you informed as the certification progresses and when certification is obtained.

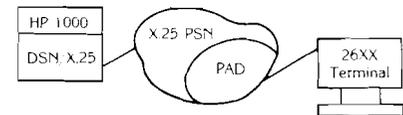
## Connecting Terminals to Computer Systems Over X.25 PSNs

*Jeff Hornung/IND and Beau James/IND*

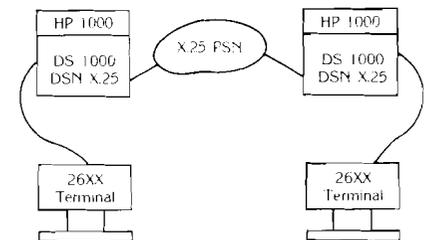
Many of you are aware that the X.25 Packet Switched Networks allow terminals to connect to the network

and communicate with host systems also connected to the network, but there is often confusion surrounding what is really required. Here are sample terminal connections and some of the benefits of each.

### HP 1000 System Connections

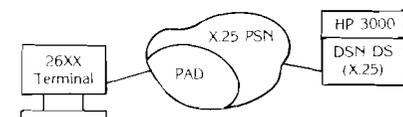


- Terminal must be character mode and connects to PSN PAD
- Functions as any RTE terminal
- Block mode not supported
- Dial up connection
- Only DSN/X.25 software is required



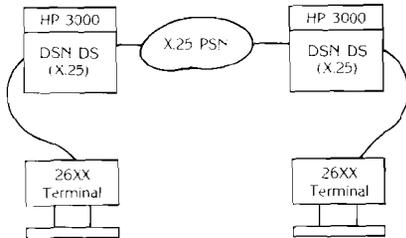
- Terminal uses virtual terminal capability of DS/1000
- Functions as any RTE terminal
- Leased line connection to network
- DSN/X.25 and DSN/DS are required

### HP 3000 System Connections



CSP

- Terminal must be character mode and connects to PSN PAD
- Terminal function as any MPE log on device
- Dial up terminal connection to network
- DSN/DS is required (includes X.25 software and PAD software)

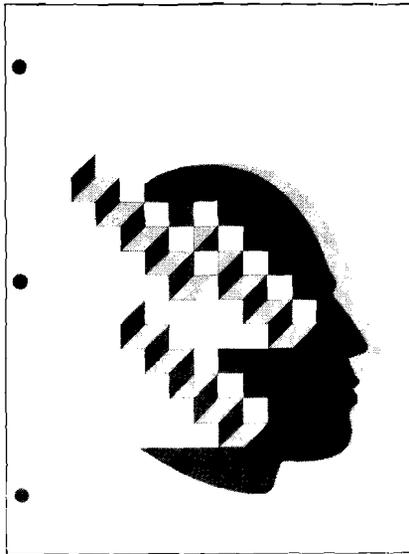


- Terminal uses virtual terminal capability of DSN/DS
- Functions as any MPE log on device
- Complete block mode application support
- Leased line connection to network
- DSN/DS is required (includes X.25 software and PAD software)

## HPTOOLSET Sales Aids

*Dick Wong/IND*

Accompanying the HPTOOLSET field information packet which all SRs, SEs, and their managers recently received are invaluable sales tools. These are the HPTOOLSET sales supplement entitled, "The HPTOOLSET Program Development System", and the HPTOOLSET data sheet.



Unlike the field training manual which is restricted for internal use only, the HPTOOLSET sales supplement can be used in your sales presentation with customers. In addition to its attractive cover, the supplement takes you step-by-step through the development of a COBOL II program using HPTOOLSET's productivity tools. Included in this sales document are examples of how screen labeled function keys, menus, full screen editing, and COBOL II symbolic debug simplify and reduce COBOL II development time and effort.

Follow up your presentation with the HPTOOLSET data sheet. The data sheet has been enhanced with examples of screens from the sales aid supplement, and provides detailed information on HPTOOLSET's productivity tools.

So, be sure to include the HPTOOLSET sales aid, "The HPTOOLSET Program Development System", and the HPTOOLSET data sheet in your chest of sales tools. No customer presentation should be without them.

## TDP/3000 and the Laser Printer

*Philip Dowding/CSP*

We have recently produced two manuals using TDP/3000 and the HP 2680A Laser Printer. The remarkable thing about this is that there was no need to typeset either of these manuals. We just took the laser printed output and handed it over as the camera-ready copy for printing. This is possible because TDP when used in conjunction with the Laser Printer produces documents of such quality and with such a variety of typefaces that the typesetting is, in effect, already done. If you want to take a look at these two manuals for yourself they are the HPMAIL Reference Guide (P/N 36570-90001/36570-90002) and the HPMAIL Administration Manual (P/N 36570-90004).

The implications of not having to typeset manuals will be clear to those of you who have had anything to do with manual production. The most obvious advantage is that of saving money. Typesetting is an expensive business, and we estimate that we saved well over \$20,000 in typesetting and layout costs on these two manuals. When such a large sum can be saved on just two items, we figure that justifying cost to your prospects is going to be no problem.

But saving money is not the only advantage. There are plenty more. One of the factors to be taken into account in introducing new or enhanced products is the substantial amount of time that has to be scheduled to allow for typesetting and printing of the documentation to support the product. This time can be around 8 weeks for a 100-page manual, especially if any cutting and

pasting is required. Such a length of time is highly significant in the case of a product that is still under development. For instance, feedback from a test site sometimes makes it necessary to modify a product at a late stage in its development. In the case of software products, such changes can usually be implemented very quickly. But, unfortunately, this is not the case with the supporting documentation which is more than likely already at the typesetter. And if extensive changes are required, it is going to be at a price. It could even mean that a desired enhancement is left to a future release just because the manual lead time is so great.

Now with TDP, necessary late changes can be made to a product and the documentation can be updated accordingly without great expense. It is even possible for the document writer to make changes right up to the very last minute before the copy is handed over for printing.

Typesetting a document usually involves retyping the whole document on a typesetting machine. Consequently the typeset version of the document has to be proofread to check for any typing and formatting errors that might have been introduced — a time consuming and laborious process. This duplication of effort is completely avoided when the HP 2680A is used by TDP as the 'typesetting machine'. A document writer can be confident that what he or she has already typed and checked is what will appear in the printed document.

We feel that this is just the start. Soon TDP is to be enhanced so that graphics files produced by products such as DSG/3000 can be included in the text. Just imagine, a camera-ready manual including graphics taken directly from the Laser Printer. No cutting and pasting. No layout.

This is certainly going to increase our use of TDP and the Laser printer, and the next set of manuals using this method is already being planned.

We are using HP's own Interactive Office products not just because they are there, but because we want to run our operations in the most cost effective way. We believe also that if you have customers who want to produce high quality documentation at a low cost, they will be extremely interested in what can be done. All that's needed is for you to tell them about it!

## BGD

### "Winning Against" the Competition

*Harry Amphlett/BGD*

The field marketing group of the European Sales Center in Boeblingen is producing audio cassettes with information designed to help salesmen win against competitive manufacturers.

Each cassette deals with a particular manufacturer or product and highlights the comparative strengths of HP and the HP 3000 series. They help the salesman anticipate likely objections and formulate his strategy in a competitive situation. Unlike many sales aids of this type, the situations are very realistic. Customers do not always readily accept a point and are often persistent and direct in their questioning.

Starting with DEC, the series is called "Winning Against".

The underlying theme of the whole series is that one should understand the customer's needs, and concentrate on areas where HP is strong and the competition is weak.

## Dutch OEMs Get the Picture

*Hans Huijjer/HP Netherlands*



On June 4, 42 Dutch OEMs and 6 HP representatives chartered an airplane to the Boeblingen facilities for a one day visit.

On arrival at the factory, the visitors were welcomed by Jef Graham, manager of the European Sales Centre. This was followed by a presentation on the marketing support program and the facilities that HP can offer to OEMs.

The afternoon was started with factory tours, with special attention being given to the production lines for the HP 3000, HP 250 and the 9800 series. The tours were followed by separate sessions dealing with strategies for technical and business computer products, respectively. The information given to the OEMs during these sessions was most enthusiastically received.

The last formal item on the agenda was a management round table, which gave visitors the opportunity to ask questions and express their concerns. The feeling of the day was summed up by one of the OEMs: "I have been working with HP for several years now, and this one day has really succeeded in putting me in the picture." 

## DTD

### HP 2647F: Interest Is Running High

Jerry Erickson/DTD and Ed Washington/DTD



By now, you should have received the Field Training Manuals and sale literature on the new HP 2647F. Many of you have also actually seen the product at the National Computer Graphics Association (NCGA) conference in Anaheim, CA, or while here at the factory for a customer visit. As expected, interest in the 2647F is running high due to its extensive feature set that makes it suitable for many business and technical applications.

Some major features are:

- Screen preview graphics

- Full alphanumeric block mode terminal capabilities (VPLUS compatible, etc.)
- Local BASIC/AGL programmability
- Local word processing software accessory
- Shared peripheral I/F for easy connection to hardcopy plotters/printers (standard)
- Local flexible disc storage
- Display enhancements with Line Drawing, Math and Large Character Set (standard)
- Convertible Graphics/Numeric Keypad
- 64K Program Memory.

All of these features have prompted some of you to ask how the 2647F fits in with other products from HP like the HP-87, HP 125, HP 9836. To help put things in perspective, keep in mind the distinction between the 2647F as a *terminal* and these other products as *computers*. For applications that require extensive stand alone capabilities, such as AUTO-PLOT and local programmability, and compatibility with the HP 1000 or HP 3000 recommend the HP 2647F. If a large number of calculations must be performed or extensive software libraries are required, recommend a Hewlett Packard personal or desktop computer. Remember that no other HP product can match the combined off-line graphic workstation capabilities and on-line terminal features of the 2647F.

Feature		HP 2647F	HP 87	HP 125	HP 9836
Terminal Compatibility	Char Mode	Yes	Yes	Yes	Yes
	Block Mode	Yes	No	V/3000 Compatible	No
	Graphics	Yes	No	No	No
Screen Graphics Resolution		720 x 360	544 x 240	Not Available	512 x 390
User Workspace		64K	60K	35K	64K
CP/M		No	Yes	Yes	No

### HP 2623A Special Option F07 ANSI Compatible Terminal

Art Doucet/DTD

This article is a follow up of the ANSI compatible articles in the June 15 and July 1 issues of *Computer News*. It is in response to System Engineers and SRs request for more information about the HP 2623A ANSI compatible terminal. This article will answer the question: What is ANSI compatibility and why was it developed?

As stated in the June 15 article, Special Option F07 provides the user with a HP terminal that will function properly on non-HP systems using ANSI protocol. What exactly is ANSI protocol? First of all, ANSI is the abbreviation for the American National Standards Institute. In an effort to standardize the software communication between computing devices, the Institute defined a set of control sequences, also known as escape sequences. These sequences move the cursor, set tabs, change the display enhancements, and control many other terminal functions. Since the Institute's purpose was to make these sequences an industry standard, we call this ANSI Compatible.

The significance of the 2623A Option F07 is that HP's control sequences are not ANSI compatible. The HP terminal will not respond to even simple cursor positioning control sequences if the host computer is using ANSI protocol. For instance, the ANSI control sequence to move the cursor to the right is "ESC[C", and the HP sequence to perform the same function is "ESC C". Now, with the "flick" of a switch, the 2623A will respond to ANSI protocol. One example of a computer using ANSI

protocol is the DEC VAX™. (DEC and VAX are registered trademarks of the Digital Equipment Corporation.)

Of course, we wouldn't want to limit the capability of 2623A Option F07 to functioning only on ANSI protocol hosts. F07 still functions as a standard 2623A graphics terminal. F07 accomplishes this by giving the terminal a selectable mode of operation: "ANSI Mode" or "HP Mode". In the HP mode, F07 responds to Hewlett-Packard software protocol. The dual mode of the 2623A F07 makes it very useful for dual mainframe computing environments.

Why was F07 developed? It was developed in response to your customer needs. There are many customers who appreciate HP's high quality terminals, but couldn't fully use them on their ANSI protocol systems. With this special, customers can purchase an HP 2623A that will function properly. Editors and application programs can be run with little or no modification. When F07 is configured for ANSI mode, it responds to a subset of the ANSI sequences specified in ANSI X3.64 1977 and ANSI X3.41 1974 and some non-ANSI control sequences. Graphics sequences such as the (ESC \* sequences) are also recognized. These graphics sequences are recognized in ANSI mode so that the user can reconfigure the terminal programmatically while in ANSI mode. All specifications for general features, data communication, power requirements, product safety, and product support are the same as those of the standard 2623A terminal. I hope this article answers some of your questions. For more information on ANSI mode control sequences, call DTD Sales Development.

## When to Sell the HP 2622A vs HP 2624B

Jeff Cox/DTD

The HP 2622A is Hewlett-Packard's low cost block mode terminal while the HP 2624B is Hewlett-Packard's high performance data entry product. The question has been asked "When do I sell the HP 2622A vs the HP 2624B?"

If your customer requires a basic block mode capability with two pages of display memory and display enhancements, then the HP 2622A is

the right product. If your customer also needs an RS-232 serial printer capability then the HP 2622A with Option P03 is the appropriate solution.

However, if your customer needs 2622A capabilities plus four to nine pages of display memory, Local edit checks, Local forms cache and/or Multipoint support then the HP 2624B is the best solution.

HP 2624B = HP 2622A + OPTION P03 + ADDITIONAL DISPLAY MEMORY + LOCAL EDIT CHECKS + LOCAL FORMS CACHE + MULTIPOINT SUPPORT
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## 13296A (Shared Peripheral Interface) and Options

Gary Evans/DTD

Over the past few months we have received a number of calls about the 13296A, HP-IB Interface cables, the raster dump option and the rotated raster dump capability. When ordering the 13296A without an option you get the shared peripheral Interface PCA (P/N 02640-60128), the 2 meter HP-IB cable (P/N 8120-1834) and the HP-IB load box (P/N 02640-60215). Specifying Option 048 provides one raster dump ROM (P/N 1818-0746) and the 2648A user and reference manual. This

ROM is standard in all 2648As shipped after November 1, 1980. Specifying Option E76 provides the rotated raster dump ROM for the 2648A. This ROM rotates and dumps the raster from the display of a 2648A to a HP graphic printer.

The 13296A Option E76 must be ordered as a special using a HEART override. Surprise! The 2647F comes standard with a Shared Peripheral Interface HP-IB cable and load box.

## Publications to Support Special Products

Bill Mitchell/DTD

Many of you may not be aware that data sheets and a price guide are available to support many of our popular specials. A description of the

publications available are given below along with their publication numbers.

Part No.	Description	Pub No.
2622A Opt. K21 93984W	Industrial keyboard 2622A K21 Upgrade Kit	5953-2079
2622A/2623A/ 2624B Opt. K24	Key Function Definition	5953-2080
262X Opt. K07	Orange Display	5953-2082
2645A/2647A/ 2648 Opt. D99 93984M	DC1/DC3 Hand Shake Protocol	5953-2053
	Printer Multiplexer: multiple 264X or HP 2621A/P can share one 2631A/B	5953-2083
	Price Guide	5953-2084

These publications are available in bulk from the literature center in Palo Alto or by contacting your sales development contact.

The Price guide may save you considerable time, because you won't have to contact the factory and it also

provides excellent documentation for order processing.

There are more specials available than we have data sheets so if you don't see it just ask. We may have it or we may do it.

## HP 2621B Goes Canadian

Sarah Jane Militello/DTD

HP Puerto Rico obtained approval from the Canadian Standards Association (C.S.A.) on May 17 to ship the HP 2621B and HP 2629L terminals to Canada.

Shipments to Canada against the order backlog are scheduled to begin at the end of June. Please note that even with the four-week delay, the availability for new orders of 2621Bs is substantially lower than 2621A/P terminals.

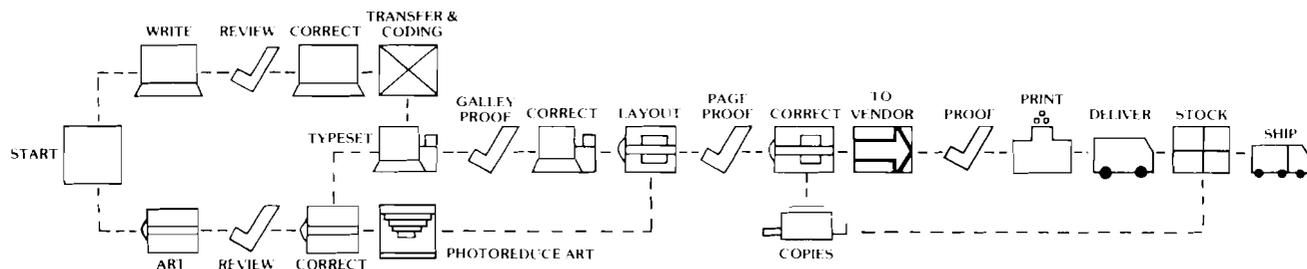
Any questions regarding particular orders should be directed to Miriam Villanueva at 809-891-5235 ext. 343.



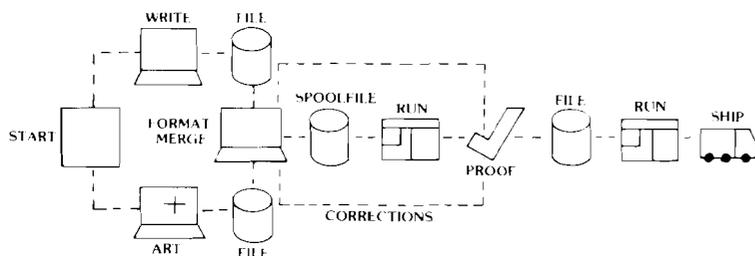
## How to Save HP 2680 Prospects Money on Their Printing Costs

Bill McGlynn/BSE

### CONVENTIONAL PRINTING METHOD



### LASER PRINTING METHOD



Virtually every company has a need to print instruction or procedure manuals at one time or another. Boise Division, for example, prints sales reference manuals, operator manuals, service manuals, and many others. In the past, all these documents had to be created the conventional way.

#### Printing the Conventional Way

First, the text was composed on a terminal. As the text was being entered, artwork was being prepared by the artists. The preliminary text was then photocopied and sent out for review, and any corrections to the text were made at the terminal. Text was then transferred onto a disc and given to the typesetter, who prepared a galley for proof. Any changes made to the galley required retypesetting, and ultimately, repasting up the changed portions. From this corrected galley, the document was

manually pasted up — complete with illustrations. Next, a proof of this galley was made by photocopying the master, which was then distributed for proofing. Once all corrections were made to text and illustrations, it was taken to the printer where the printer did preliminary presswork, printing, and finish work. The printing process often took up to two weeks — which further extended the production process.

#### Printing Manuals with the Laser Printer

Using the laser printer to produce documents resulted in shorter production processes and in most cases, significant cost savings. Editing was still done on-line; but using this method, so were illustrations. These two could then be merged electronically into a document which was ready for proofing, and an original could be run for each reviewer.

Corrections could be made more quickly using this method. For example, if text or graphics corrections occurred, the changes could simply be entered into the computer and an updated version of the manual printed for proofing — much more quickly than resetting type, cutting, and repasting. A near-complete review document is now made available early in the production stage, and making changes is much less cumbersome. Once approved, the final document can be stored on-line, then run as needed on the laser printer — already collated. On-line storage eliminates costly storage space and the waste which results from obsoleting printed materials, as well.

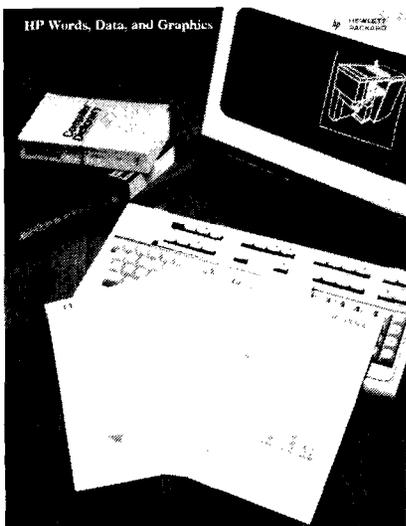
Without considering savings which resulted from the reduced storage needs and reduced waste, Boise Division saved 43% on a recent manual which was produced on the 2680. This 66-page manual was bid at \$8.45 at a local printing vendor. Labor, materials, equipment, and service (SMCC) totals only \$4.80 for the same manual printed by the 2680 (this includes the price of having an outside vendor print the covers on a heavy glossy stock). A non-HP entity could expect to save

approximately 38% on the same manual when buying equipment at retail prices.

Two large North American companies have already ordered two 2680s to use in printing manuals. This application is made even broader with the addition of HP's new text and graphics capabilities, which enables more complicated figures and illustrations to be prepared using the computer system.

## HP 2680 Graphics Brochure Available

Mike Miloch/BSE



A new color sales brochure on HP 2680 graphics is now available.

The brochure, aimed at technical publications managers and other top managers, is designed to introduce the laser printer's graphics capabilities. The brochure describes the easy-to-use, flexible graphics software which enables the user to merge text, data, and graphics and print them on the laser printer.

Copies of the brochure (P/N 5953-7114) may be ordered from literature distribution.

## Reliability of HP 2608S Demonstrated by Lower Service Prices

Debbie Herrud/BSE

HP's new 2608S line printer is the most reliable line printer in our line today. This is demonstrated by the new lower service prices. In actual figures, the SMMC for the 2608S is \$90 and the BMMC is \$72, compared with \$109 and \$87 for the 2608A, respectively. This is due to improved reliability and serviceability for the 2608S.

The major reason for improved 2608S reliability is the rigorous testing which the factory did on the early units. Those tests resulted in numerous design changes which improved the printers' dependability.

In addition to being more reliable, the 2608S is easy to service. One feature which makes it easier to service is the reduction of electrical adjustments; the 2608A had nine such adjustments possible, and the 2608S has only three. The 2608S has a control microprocessor which assists the CE in performing the adjustments, thus eliminating the need for an oscilloscope and reducing the time required to perform the adjustments.

And, extensive self test capabilities have been added to the 2608S which can be used by the customer to verify that his printer is operational. The self test is capable of identifying a failure down to the replaceable assembly level. This will aid the customer engineer in identifying the failed PCA and will reduce the mean time to repair the printer.

Each of these features results in tangible savings to your customers; making the 2608S a dependable solution to line printing needs.

## Switchbox and Dual HP 7976As Supported

Sallie Ewing/BSE

The HP 26075A multiple system access selector is now fully supported on the 2680A and 7976A when used with HP-IB 3000 systems. This allows the customer to share these powerful peripherals between multiple systems. Because the 26075A is a manual switch, the HP-IB line must be quiet when switching. This precludes the use of a disc on the same GIC as the 26075A, since there is no way to take a system disc off-line.

Up to two HP 7976As are now supported on the HP 3000 Series 40, 44 and 64. Minimum main memory required for a single 7976A is 512kb, while dual 7976A's require 768kb.

# COL

## User's Guide and Software Aid in Selling InteGral/60

Jim Abrams/COL

### User's Guide

The philosophy behind the development of the 52113A User's Guide (P/N 52113-90902) was to produce a document that could be used for a variety of reasons by a number of individuals. This philosophy included the sales person as we provided you with an extremely effective sales tool for many situations.

The User's Guide was written in a concise, easy to read manner aimed at an audience consisting of present graphics users and those who may wish to develop graphics skills.

Those people who have never been exposed to computer graphics before will find the User's Guide an excellent introductory tool which provides them with the fundamentals of generating graphical objects in a computer system. To help the user visualize how this is actually done using a 1360 Graphics System, examples of programs using InteGral/60 procedure calls are included in almost every chapter.

We feel that as a part of every sales situation you will be able to rely on the User's Guide to provide your customer with more details on the InteGral/60 software as well as illustrations of how Pascal programs can contain InteGral/60 procedure calls to provide useful interactive design applications.

## User's Guide

How many times have you been involved in a sales situation when the customer asks if the software they are seeing can perform a certain function? You state that it could, but either the customer would have to integrate that as part of the application program, or the present demo program would have to be re-written to illustrate that particular feature. Wouldn't it be nice if you or your SE could perform that feature in an interactive way right then?

We think we may have a perfect solution to those "yes, but" situations when you're attempting to demonstrate the features of the 1360 Graphics System. There are over 80 different procedure calls as part of the InteGral/60 software, and often times we've found it very useful to utilize them in a very flexible environment.

This was one of the reasons that we developed an application program known as TUTOR. Primarily a learning and diagnostic tool, TUTOR has allowed us to show customers various features of the InteGral/60 software that are not always shown in the demo programs, such as rotation of text. TUTOR is an interactive program which allows the user to type in two letter mnemonics and parameters that either access InteGral/60 procedures or other features of the program, like a command stack or file manipulation. And instead of writing and compiling various Pascal programs, the user can create and edit text files which contain the TUTOR commands and then execute them just by calling up that file name.

We have had a great deal of success with TUTOR in customer visits, and if you are interested in obtaining a copy of TUTOR for use with your 52113A InteGral/60 software, please have your SE contact me and I will be glad to send them a copy along with documentation.

One of our main desires is to develop tools that can be used for a variety of purposes, and hopefully we've shown you how we're accomplishing this with the two tools mentioned in this article. Please feel free to contact either myself or your RSE about these items and any other ideas you may have on what other tools you may find useful.

# VCD

## Bar Codes for Teatotalers

*Harold Fast/VCD*

Whether you imbibe or not, there may be bar codes in your future. Bar code printer sales are increasing each month. Field inquiries are at a higher level now than ever before.

HP currently has two printers that produce bar codes for commercial applications. They are the HP 2680 Laser Printer from the Boise Division, and the HP 2631G Option 200 Factory Data Printer from the Vancouver Division. These printers can produce labels for a variety of material handling, manufacturing, and process control applications. The 2680 is capable of high volume printing and the 2631G Option 200 printer is a relatively low volume printer. Limited to producing approximately 450 labels per day, the 2631G is intended to be used as a distributed printer, located near to the point of application, rather than as a system printer.

The 2631G Option 200 is available with an HP-IB interface only. On HP 1000 and HP 3000 systems, the 2631G Printer is normally slaved off of an HP 2647 terminal or an HP 3075 Data Capture device. There is not a Device Driver on either the 3000 or the 1000 for a direct connected 2631G at this time. Bar code printing has also been successfully accomplished on the 2631G Option 200 hooked up to HP 80 Series systems and the HP 125. While there is no supported software for bar codes for either the 80 Series or the 125, this may be an appropriate approach for some customers.

Bar codes are generated through the use of escape sequences sent as data to the 2631G. At the present time the customer will have to provide his own bar code application software.

Industry is just starting to make use of bar code technology in the manufacturing, materials handling, and process environments. Over the next few years the demand, and therefore the available products, will steadily increase. The next generation of Workstation Printers from the Vancouver Division, to be introduced in FY'83, will provide bar code printing capabilities with a greater variety of system interfaces available.

To give you a little more exposure to bar codes, there is a booklet available from the Vancouver Division, the Bar Code Printing Guide. If you would like to receive a copy of this booklet, just send a Comgram to Harold Fast at the Vancouver Division, COMSYS Code 5400.

## HP 3601A Modem Cable

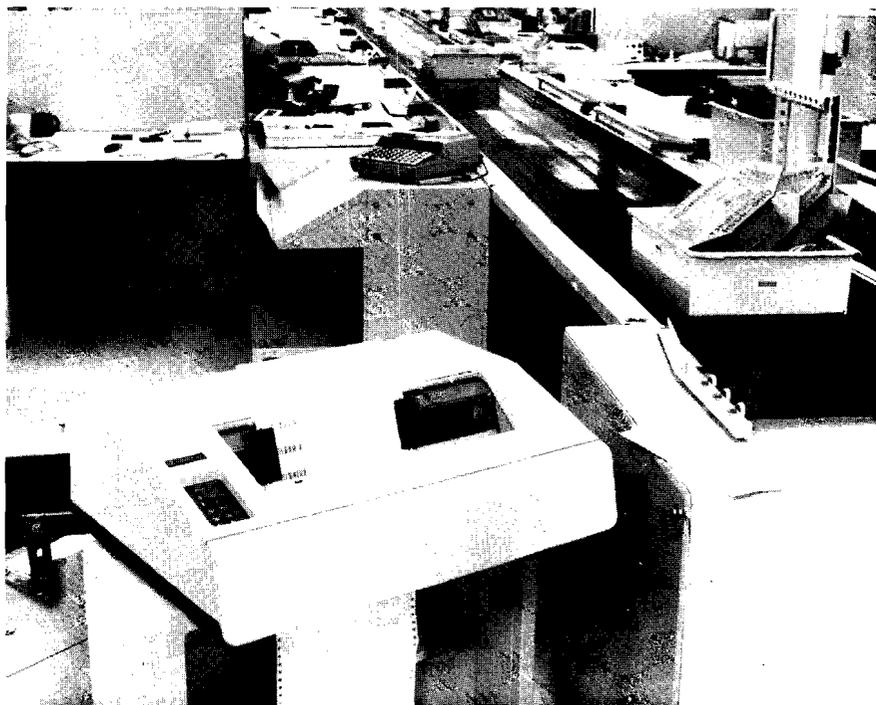
*Bob Weis/VCD*

In the May 15 issue of Computer News there is an article that explains how to order a modem cable for the 2601A.

Well, it seems we not only gave you the wrong part number but also the wrong cable. The cable shipped with every 2601A is a Diablo Modem cable, P/N 320355-02-DIA.

In the May 15 article we said you can order that cable from CPC, but that is a mistake. If you need a modem cable, you can order an HP modem cable, P/N 02631-60065 from CSO.

We hope this did not cause any problems or inconvenience for you or your customer.



## Competing with IBM System 38

Vince Khanna/Neely Brisbane

The recent market statistics of the order rate of IBM System 38 are very impressive. However, the HP SRs are in a very strong position in beating the competition every time, provided the prospect passes the very basic qualification test that they have the flexibility of making a non-IBM decision based on sound business criteria.

To be successful we need to be knowledgeable of IBM's overall selling style, how they are positioning the System 38 and what are our company's and HP 3000's strengths versus the competition. Here are a few facts that you can take for granted in any System 38 sales situation:

**Anticipate an extremely aggressive but professional posture by IBM.** You can be certain that they will be selling at all levels which necessitate that we do the same.

**IBM is selling programmers productivity not only to the technical buyers but also to the economic buyer decision makers.** If you remember a few years ago, IBM's sell to the executives was exclusively solutions and not tools. This is where our main strength is. At the current time IBM (System 38) has no "solutions" to talk about. We all know that one thing economic and user buyers can really relate to is solutions to their business problems. HP is in a very strong position with not only HP application software but also software available from hundreds of third parties.

We should sell not only our products like GA, MM, PM, and SFD, but we should alert the prospect of several alternatives to the above products which are available from software suppliers.

We should make the office automation and decision support tools like TDP, WORD, HPMAIL, DSG, and INFORM as issues to be considered. IBM has very little (or nothing) to offer in this area. Demonstration of WORD, HPMAIL, INFORM, DSG, and especially the graphics demo to the key buyers is a must.

If the prospective customer is a manufacturer (discrete or continuous), a presentation of our MPN strategy can further the chances of our success more than anything else.

**Do not overlook selling the technicians.** Our productivity tools like RAPID are just as powerful as what System 38 has to offer. Moreover, our data base, MPE, and related tools are mature and field tested. Give demos and include toolbox to neutralize IBM's full screen editor.

**You can expect IBM to sell the idea that the System 38 is new technology and the HP 3000 technology is old and is to be obsoleted by HP in a couple of years.** You can expect some very pointed questions from your prospect in this regard. HP is committed to MPE and we have always incorporated new hardware and software technologies to our existing products while maintaining compatibility. Our HP 3000 track record attests this fact. The situation just mentioned is one of the most significant objections you will have to overcome.

**IBM's System 38's weakest point is their very poor performance.** In a recent benchmark, the HP 3000 System 44 beat their top of the line Model 5 three to one in compiles, five to one in interactive and 15% in batch. If you get into a benchmark situation, then exercise all the *standard* rules of benchmarking.

### Watch Outs

IBM may switch their proposal from System 38 to 4300 (or vice versa) if they feel that they are losing.

IBM has been presenting slides on their benchmarks against HP 3000s. The data they have been using is based on past situations like the Bechtel benchmark. Do not be afraid of challenging such data. When you are ready to close and get the business, your customers' CEO may get a call from IBM's branch manager. Alert your prospect of this fact.

*Must Reading:* Steve Wilk's competitive report on the System 38.

### Summary

With good strategy and aggressive posture, the System 38 can be beat every time. The HP 3000 has too many facts in its favor! 

