

# Computer News

For HP Field Personnel

March 15, 1982

## *Announcing the New Laser Printing Upgrade Program*





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### On the Cover:

*The new HP 2680 upgrade program allows up to \$16,850 in credit towards purchasing a laser printer. See article on page 17.*



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

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## CMG

### HP-IB Sales Aid

By John Cloutier/Instrument Group

#### Measurement Automation

How Hewlett-Packard supports you from concept to a working measurement system



Instrument Group, in collaboration with TCG, has published an 18-page, full-color brochure to help you with your HP-IB sales. Designed to assure engineers, scientists, and their man-

agement that HP-IB measurement systems are practical and that HP is the clear leader in instruments, controllers, and peripherals, the brochure:

- Defines HP-IB and explains how and why it is more than IEEE-488
- Outlines HP-IB's broad range of applications
- Demonstrates that it is easy to move from a measurement problem to an HP-IB solution
- Shows breadth and depth of product line in instruments, controllers, and peripherals
- Emphasizes that concept-to-working-system support is available from HP.

If you haven't seen the brochure yet, there should be some on the Instrument sales literature shelves in your office. They are also available from Literature Distribution (P/N 5953-8350).

These brochures are so popular that warehouse stock is presently pretty low (so are funds for reprinting), so please request copies accordingly.

#### Third Party News

##### Software Supplier Double Commissions

By Ray Cebold/CMG

Software has become a major factor in closing system sales in today's market. The HP PLUS program was developed to aid SRs in locating quality solutions that would leverage the sale of HP systems. In further recognition of the importance of software, payment of double commissions was begun when the systems sale was leveraged through an independent software supplier. This commission structure represents an excellent opportunity for reps dealing with Third Parties to increase their compensation.

On March 1, the HEART system will have the potential to pay double commissions on software supplier sales. However, I want to review the payment guidelines and how they will be implemented by HEART to ensure proper processing and prompt payment of commissions. Major guidelines for the commissions are as follows:

- New system sales of HP 1000s, HP 3000s, and high-end desktops (HP 9845/9836/9826) are eligible for double commissions
- Custom software development is acceptable for the commission
- Sales of add-on equipment are not eligible
- The supplier does not need to have signed a formal software supplier agreement in order for commissions to be paid
- Sale of an HP PLUS, distributed package (package listed on the Corporate Price List) is not eligible for double commissions.

If the sale qualifies, a new split type of 5 for the commission only portion of the order (second or third split set on HEART source sheet) will indicate this split set has commission and no quota. This order will be noted in the engineering order and commission detail report by "SOFW" appearing in the stat flag field.

Order Processing will also have to code "SW" in the special codes section and "system sold as a result of XYZ software supplier" in the special instructions to get payment. *It is the responsibility of the end user rep to notify Order Processing whether or not each new system order was leveraged through a software supplier.*

Other factors affecting double commission payment:

- A third party can be both an OEM and software supplier, but only for two unrelated products. Only when a third party acts exclusively

as a software supplier will a sale qualify for double commissions.

- If a software supplier has multiple sales offices, only the SR responsible for recruitment and ongoing support of the supplier may get double commissions.

The decision of whether or not the system sale was really leveraged through a software supplier is the responsibility of local sales management. If there are doubts, a good guide would be to apply the same value added guidelines which are used for software OEMs.

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## CSO

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### HP 125 Software Shipped Off the Shelf

By John Herrgott/CSO

Many of your customers bought their HP 125 with the understanding that they would buy additional software later, when it became available. Now US customers can get the software they need—*fast*—from CSO. All the HP 125 software listed below is in stock:

45531A	VISICALC/125
45532A	GRAPHICS/125
45533A	WORD/125
45534A	LINK/125
45535A	BASIC/125
45536A	PROGRAMMING PACKAGE

We can usually ship your US customer's order the day after it is placed. This fast delivery service is available to customers who have an open account with HP and order through our toll free telephone order department. Have your customer call 800-538-8787 (in California, Alaska and Hawaii call 408-738-4133) to order HP 125 software and other HP 125 supplies.

### ATP Connector Kits for HP 3000 Series 64 Systems

By Jim Kinney/CSO

Specially designed connectors for the HP 3000 Series 64 ATP are now available from CSO. CSO stocks ATP connector kits and a special crimping tool and bulk cable for the RS-232C (3 pin) and RS-422 (5 pin) interfaces.

#### Connector Kits

RS-232C Interface (four complete 3-pin assemblies):

P/N 92224A Male connector assemblies

P/N 92224B Female connector assemblies

The Price is \$US 50/kit (2 or 3 kits—\$44/kit; four or more kits—\$40/kit).

RS-422 Interface (four complete 5-pin assemblies):

P/N 92225A Male connector assemblies

P/N 92225B Female connector assemblies

The Price is \$US 54/kit (2 or 3 kits—\$48/kit; four or more kits—\$44/kit).

#### Bulk Cable

P/N 92179C Shielded 3-wire/24 AWG cable sold by the meter, 30 meters (100 ft.) minimum

The Price for 30 to 99 meters is \$US 1.20/meter (100 or more, \$0.85/meter).

P/N 92179D Shielded 5-wire/24 AWG cable sold by the meter; 30 meters (100 ft.) minimum.

The price for 30 to 99 meters is \$US 1.45/meter (100 or more, \$1.08/meter).

#### Crimp Tool

Crimping both the 92224 and 92225 ATP connector pins to the wire is done with a standard RS-232 connector pin crimp tool. A special

tool—HP P/N 92229A—is required to crimp the cable shield to the shield inside both the 92224 and 92225 connectors. Call CSO for price and availability information.

CSO also carries preassembled replacement cables for ATP cables shipped by IND and DTD with their products. See your new CSO Spring Computer Users Catalog (5953-2450D) for part numbers and prices.

To order, US customers may call toll free 800-538-8787. In California, Hawaii, and Alaska call 408-738-4133; in Germany, (07031) 667-829. Elsewhere, customers should contact their local sales office to order these items.

## SRO

### Hal Eubanks Joins SRO Sales Development

By Mary Chin/SRO

In my last article we promised you a strong sales development team. We have started this process and I'm very happy to announce that Hal Eubanks has joined our team.



He comes to us with an MBA and 12 years of computer experience. Hal has been with HP for seven years, spending the last five years in a variety of marketing functions at DSD.

As mentioned in our teleconference, you can call the BCG Sales Center for preliminary pricing and configuration information on SRO products. When your customer needs a formal quote, please call Hal to reserve a unit. Hal is looking forward to working with you and participating in your success. Give him a call at 408-738-8858 ext. 446 or TELNET 1-738-0446.

### Introducing HP 3000 Series 30R

By Russ McBrien/SRO

Systems Re-Marketing Operation will be pushing the price threshold for HP 3000s even lower with the introduction of the Series 30R; product number 32430CR. Your price sensitive customers will be able to choose between two re-marketed entry level systems. At \$39,490 (this includes a 30R SPU with 512Kb memory, 7920M, 7970E and console), the Series 30R is the lowest cost member of the HP 3000 family.

A familiar and reliable product, the Series 30R offers all the advantages of MPE IV. Transact/3000 and Infrm/3000 are just a few of the benefits of MPE compatibility among HP 3000.

All these peripherals are re-marketed and are Master devices complete with HP-IB interfaces and cables. (All ADCCs and GICs must be ordered separately).

There are a few HP 3000 Series 30R and Series 33R systems available in Europe through Boeblingen. Contact BGD Sales Development in Boeblingen if you think you might have a customer for a Series 30R or Series 33R in Europe.

The Series 30R will be on the April 1 CPL and will be available for sale in the US, Canada, and ICON as follows:

Product	Description	US List Price
32430CR	HP 3000 Series III or w/512Kb + console	\$11,225
015	50Hz Operation	500
507	Expand Main Memory to 1024Kb	6,000
920	50Mb Disc Drive 60Hz	12,925
921	50Mb Disc Drive 50Hz	12,925
925	120Mb Disc Drive 60Hz	19,750
926	120Mb Disc Drive 50Hz	19,750
970	1600 bpi Tape Drive in upright cabinet 120 VAC	9,880
971	1600 bpi Tape Drive in upright cabinet 230 VAC	9,880

### Advantages of Re-Marketed Systems

By Andy Tasnady/SRO

Here are just some of the advantages re-marketed systems offer your customers and you.

#### Customer Advantages

**Discount Schedules**— Re-marketed products are offered under the same discount schedules as similar products purchased new. This includes full OEM discounts and the 28% demo development discount.

**Warranty and Installation**— Systems Re-marketing Operation provides a full 90-day warranty and full coverage of installation costs.

**Functional Units**— Re-marketed products offer purchase agreement functional units. The HP 3000 Series IIIIR carries three functional units, and the HP 3000 Series 30R and 33R carry two functional units each.

#### SR Advantages

**Quota and Commissions**— Re-marketed products offer full quota and commission credits.

**Increased Sales** — Re-marketed products enable you to offer a wider range of solutions to meet your customer's needs. This results in an increase of successful solutions and sales.



## DSD

### HP 1000 System Designer's Guide Update Available

By Ted Proske/DSD

The March 1982 update to the HP 1000 System Designer's Guide is off the press. Update packages for the field were included in the A-Series introduction package sent to you for the February 25 Teleconference. Update packages for customers for whom you've ordered the Guide have also been sent, so all customers should be up-to-date. If you want to get HP 1000 System Designer's Guides for your customers, you can now get off-the-shelf delivery from DSD. Just send a HEART override order for DSD Sales Aid SA-307 to Cindy Martinez at Division 22, Building 42U in Cupertino. Transfer cost of \$20 includes the first copy and updates for one year. A subscriber's address form is attached to each System Designer's Guide sent to an SA-307 subscriber. When the subscriber returns this form, the address information is put into a subscriber's file used for addressing updates.

### OEM Selling

By Martha Weeks/DSD

The HP A600 and A700 are the most powerful computers DSD has ever offered to OEM customers. Along with the new product introduction, DSD announces an aggressive marketing program to help you sell these products to OEMs.

The best opportunity to get business from an existing OEM is when the OEM is developing a new product or is dissatisfied with their present vendor. As announced during the February 25 Teleconference, the direct mail campaign from DSD is geared toward OEM new product development opportunities, and the Target OEM program concentrates on OEMs dissatisfied with their current vendor.

### Direct Mail

Beginning April 1, DSD will be mailing a letter introducing the A600 and A700 to approximately 30,000 OEMs. Response pieces to the mailing will be the HP 1000 A-Series flyer and the "15 Reasons" OEM brochure. The leads we receive from the mailing will be sent directly to DMs within seven days from the time they are received at DSD—that's fast turnaround! This mailing will be followed by another mailing in the next several months.

### Target OEM Program

Recently published information indicates an increasing number of customers are considering changing computer vendors from Data General, Sperry-Univac, and General Automation. The Target OEM program will help you find and sell to the customers of these vendors. Your DMs have already received DG, Univac, and GA OEM leads, along with competitive information about the products the HP 1000 competes with. We are also providing you with ammunition to use when calling on these OEMs. In conjunction with Computer Marketing Group, DSD is developing an updated OEM Sales Training Manual and an OEM Calling Kit, which consists of a 35mm slide presentation and a one-on-one flip chart to help you explain HP's commitment to the OEM marketplace.

A major part of the OEM marketing program is follow-up. DSD Sales Development has a data base to track all of the direct mail and Target OEM leads. Based on feedback about why you have or have not been successful in selling to these OEMs, we will be able to determine the next course of action to help you get additional OEM business.

### DSD Promotion Literature

By Dick Loulien/DSD

The following summarizes the new literature distributed to you for the February 25 Teleconference. Except for the System Designer's Guide update, the literature has also been distributed in bulk to field office literature clerks.

Description	P/N
HP 1000 A-Series Computer Flyer	5953-2899
"15 Reasons" OEM Brochure	5953-2827
HP 1000 A600/A700 Technical Data Book	5953-2898
HP 1000 A-Series Products Ordering Information	5953-2889(D)
Distributed Systems Network Tech. Data Sup.	5953-2825
Distributed Systems Network Perf. Brief	5953-2829
Systems Designer's Guide Update	N/A

The following two flyers prepared for the September 1981 Teleconference are no longer in stock and will not be reprinted:

P/N 5953-2871	HP 1000 Computers System Flyer
P/N 5953-2876	HP 1000 Microcomputers Flyer

The Peripheral Selection Guide is presently out of stock but it will be updated and available to you in the April timeframe.

## HP 1000 Assistance in Interfacing and Design

By Gary Trujillo/DSD

DSD is announcing a new support program called Assistance in Interfacing and Design (AID). This program is aimed at re-enforcing HP's ability to support the sophisticated system designer during his application development phase and our SRs' pre-sales consulting efforts. The AID program will focus on the A-Series computers and will provide documentation, consulting and training.

Documentation for this service will rely on design level documentation such as the Engineering Reference Documents and Technical Specifications. Consulting will be provided by those SEs who have attended AID training workshops. The standard SE consulting rates and terms will apply. These field experts will be backed up by the AID Group at DSD.

Initially, three training workshops will form the specific technical basis for AID:

- I/O Interfacing and Driver Design
- A700 Microprogramming Workshop
- PSI Workshop

All three workshops will appear on the April 1 CPL and will initially be held in Cupertino. Data sheets describing these courses and their prerequisites will be included in the DSD Customer Training Handbook now being distributed. The April to September North American Training Schedule will contain the class schedules. If you can't wait for these courses, we are running the set of workshops starting March 22. Please reference Kent Ferson's article on HP 1000 AID Courses in this issue for registration information and more detailed course information.

An operations plan detailing the specifics of AID will be distributed worldwide to SEDMs in March. Until that time, I will be glad to answer any questions you may have. My telephone number is TELNET 1-257-2898 or 408-257-7000, ext. 2898.

## HP 1000 AID Courses Available

By Kent Ferson/DSD

DSD is offering design level classes to customers and SEs on the following products: Programmable Serial Interface, A700 Microprogramming, and A/L-Series I/O design. All three classes are geared for the sophisticated HP 1000 customer by providing excellent technical information and professional instruction.

### 22975B PSI Course

This 5-day workshop beginning March 22 and May 17, introduces the system designer to the internal architecture of the PSI card and its firmware development package on both the M/E/F- and A/L-Series systems. A Z80 crossassembler (MicroTec) is run on the HP 1000 for program development and the code is debugged using a 1611 logic analyzer. *Prerequisites:* Customer should purchase the 24602A Firmware Development package prior to attending class and have a good working knowledge of Assembly language, digital hardware, and RTE.

### 22976C A700 Microprogramming

This 5-day workshop, beginning March 29 and June 7, introduces the system/microcode designer to the internal architecture of the A700 computer and its microprogramming package. *Prerequisites:* Customers should have a good working knowledge of HP 1000 Assembly language, digital hardware, and RTE.

### 22977B A/L-Series I/O Driver and Interface Design

This 5-day workshop, beginning April 5, May 24, and June 14, is aimed at both hardware and software designers planning to develop drivers or interfaces based on the A600, A700, or L-Series I/O architectures. *Prerequisites:* Customers should have a good working knowledge of HP 1000 Assembly language, digital hardware, and RTE.

### Ordering and Registration

The courses will be on the April 1 CPL. In the interim, use a HEART override with the following information: P/N 22975B or 22976C or 22977B; Sales Force 02; Marketing Division 22; Supplying Division 2200; Product Line 65; Cost \$2000 per student.

Joan Feeley (ext. 2003) is the training registrar at DSD for both the OEM design classes and the ATS customer classes. Field Training Registrars should contact Joan to register customers in the classes with the following information:

- Customer Name
- Company Name
- Sales Order Number

Also, a "Training Registration Request" should be filled out and mailed to Joan at DSD (Bldg. 42U). The OEM design classes will appear in the North American Training Calendar under the Cupertino site.

Class registration for SEs will follow normal channels through CSD.

If you have any questions, please contact Kent Ferson at TELNET 1-257-2496.

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## RVD

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### HP 25504A Relay Mux Cables

By Alan Housley/RVD

Before shipping the HP 25504A Relay Multiplexer M&C Card, a flaw was detected with the cable assemblies causing the effective common mode specification to reduce below 110 dB in high humidity environments. To correct the flaw and meet the 110 dB common mode specification, a new cable was designed specifically for the 25504A. (Originally, all 2250 analog function cards were designed to use identical cables.)

Therefore, the cables that are being shipped with 25504A M&C cards are:

25504A Wide Range Relay Multiplexer

Option 011 Terminated Cable  
2x 25551-60003 (Not 25551As)

Option 012 Interminated Cable  
2x 25551-60004 (Not 25551Bs)

Option 013 TRC Cable  
1x 25552-60002 (Not 25594As)

Option 111 Installed Terminated Cable  
2x 25551-60003 (Not 25551As)

Option 113 Installed TRC Cable  
1x 25552-60002 (Not 25594As)

If you have a customer that specifically ordered the 25551A, 25551B, or 25594A cable products for use with the relay multiplexer card instead of ordering one of the cable options listed here, you should have the order retransmitted to cancel those cable products and order the appropriate 25504A cable options.

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## New HP 2250 Direct Mail Piece

By Alan Housley/RVD

Beginning the first of February, we introduced a new direct mail piece, second in our series on Electromechanical Product Test, to over 20,000 North American contacts.

The mailing features a new HP 2250 flyer that you too can order from the Lit Depot (P/N 5953-5001) for your own direct mail campaigns, trade shows, or as a response piece. This flyer emphasizes the seven key reasons why the 2250 can improve product testing:

- Human engineering
- High performance analog measurements at the system level
- Functionally complete measurement and control interfaces including industrial signal conditioning
- Digital I/O of all types
- Single vendor support and worldwide service contracts
- Flexible packaging
- Easy access to screw terminations.

Only one automation tool passes the 7-way test. Nobody else comes close in all 7 ways.



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## DCD

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### HP 9815S To Be Discontinued

By Ted Chen/DCD

The HP 9815S will be removed from the CPL on November 1, 1982. This was decided because worldwide sales have deteriorated rapidly and relatively few orders are expected, and the 9815S will not pass the FCC specifications for EMI. The deadline for complying with this spec is October 1, 1983.

Here is the tentative discontinuance timetable:

November 1, 1982	Removal from CPL
November 30, 1982	Last domestic order accepted
January 31, 1983	Last international order accepted
May 1983	Last domestic shipment
July 1983	Last international shipment

Service support, replacement parts, and consumables will be available until November 1982. Orders for interfaces will be taken until at least November 1983. Interfaces will be supported by service until November 1992.

DCD will cooperate to ensure meeting your customers' final requirements smoothly and promptly. Please COMSYS or call me at DCD, ext. 2180, if you expect any significant orders for the 9815S or for any related parts. This information is important for our materials resources planning.

## Know Your Competition!

By John Boose/DCD

The personal computer market's rapid expansion is no secret. Dataquest Inc. estimates the market will grow at least 40% annually to 3.7 million units, valued at \$4 billion, by 1985. DCD has information on more than 60 different companies, with the list growing every month. Because of the amount of information available and its dynamic nature, it is impossible to pass everything along to you. However, we plan to start highlighting some of the available data and we'd like you to send us any interesting information you may have. With this in mind, we have set up several competitive "experts" in the factory with these responsibilities:

US personal Computers	John Abegg
Japanese personal computers	Katsumi Honda
IBM	Jim Sheppard
DEC	Sue Bodoh
TEK & instrument controllers	Jim Stroh

If you need detailed competitive information, call one of the people above.

The following two BASIC language benchmarks run by Avondale Division may interest you.

### Benchmark I

```
10 N=1
20 PRINT N ! START
30 N=N+1
40 IF N=10000 THEN GOTO 60
50 GO TO 20
60 PRINT N ! DONE
```

### Results

N not explicitly defined as an integer	
9826	6.1 sec
Apple II Compiled BASIC	9.0 sec
HP 3000 Interpreter (no loading)	15.5 sec
HP-85	39.8 sec
IBM Personal Computer	57.0 sec
Apple II Interpreter BASIC	94.0 sec
PET Microsoft BASIC	106.0 sec
TRS 80 Microsoft BASIC	122.0 sec
N explicitly defined as an integer	
9826	4.0 sec
HP 3000 Interpreter (no loading)	18.1 sec
HP-85	41.6 sec

### Benchmark II (Adds Floating Point Calculation)

Adds these lines to Benchmark I:

```
25 N3=30000+30000
N2= N3*N3+N3
```

Results	
9826	
HP 3000 Interpreter (no loading)	27.6 sec
Apple II Compiled BASIC	29.0 sec
IBM Personal Computer	93.0 sec
HP-85	100.8 sec
Apple II Interpreter BASIC	140.0 sec
PET Microsoft BASIC	160.0 sec
TRS 80 Microsoft BASIC	210.0 sec

In early February we had identified 12 computers now using the MC-68000. The best known of these is the new TRS-80 Model 16, a multi-tasking system selling for \$4999. Another interesting 68000 product is Fortune System's 32116, which sells for \$4995 and features a UNIX operating system. Both were introduced in January.

## New HP 9826 and HP 9836 BASIC Utilities

By Kathy Miner/DCD

Thirteen new BASIC language utility programs are available for the HP 9826 and HP 9836 under two product numbers — P/N 09826-10000 (for current 9826 owners who have BASIC 1.0 systems), and P/N 09836-10000 (shipped with 9826 and 9836 BASIC 2.0 systems).

These packages include disc and interface card utilities, games, and other system utilities.

Current owners can order P/N 09826-10000 for US \$200. The pack includes three discs with the new utility programs, plus the utilities and demo they received with their 9826. The manual gives details of the original utilities and describes the new ones.

If your customers plan to order a 9826 with the BASIC 1.0 operating system (Option 001 or 701), they will receive P/N 09826-10000 with it. If they plan to upgrade to BASIC 2.0 (9826/36 Option 011 or 711), they will receive P/N 09836-10000 with their upgrade.

The PHYREC binary, used extensively in the utility programs, has been revised to work with the new utilities. Current 9826 owners who purchase the updated utilities should stop using their old utility discs when they start using the new pack, to avoid appending the old PHYREC to the new programs.

Although the manual is the same for both packs, the 09836-10000 pack supplied with 9826 and 9836 BASIC 2.0 systems differs from the 09826-10000 as follows:

- It has four discs instead of three; the fourth contains a 9836 demo
- The PHYREC binary, Secure and System Configuration programs use absolute addresses, so they are different for the two operating systems (9826 BASIC 1.0 vs. 9826/36 BASIC 2.0).

# Technical Computers

## New HP 9826A Languages and Memory

By John Abegg/DCD

The new language options for the HP 9826A are BASIC 2.0, HPL 2.0, and Pascal. In addition to enhancing both BASIC and HPL, all known bugs were fixed in the new versions.

With the introduction of the new 9826A language options for BASIC and HPL, the older language options will be discontinued on June 1, 1982. Here are the changed options.

### For 9826

Desktop Computer	Discontinued P/N	New P/N
BASIC ROM	9826 Opt. 001	9826 Opt. 011
HPL ROM	9826 Opt. 004	9826 Opt. 014
BASIC RAM	9826 Opt. 701	9826 Opt. 711
BASIC RAM	9826 Opt. 704	9826 Opt. 714

### For 98261

#### Add-on Languages

BASIC ROM	98261 Opt. 001	98261 Opt. 011
HPL ROM	98261 Opt. 004	98261 Opt. 014
BASIC RAM	98261 Opt. 701	98261 Opt. 711
HPL RAM	98261 Opt. 704	98261 Opt. 714

The 98254A 64Kb RAM memory card will also be discontinued June 1, 1982, due to the introduction (at a reduced cost per byte) of the 98256A 256Kb RAM memory card in January 1982.

## HP 9845 HP-IB Secondary Addressing Bug

By Jim Borchert/DCD

When HP 9845 Option 2XX models make use of the HP-IB's secondary addresses, the address information is incorrect. A software workaround was published in the August 1981 DCD Software Status Bulletin which

may help customers who encounter the problem.

The I/O ROM has been revised to solve this problem. It was tested at several Beta sites in December and January. The revised ROM should be available by Q2 FY'82 at no charge to customers who are experiencing the bug.

## PCD

### Introducing the HP-87A Personal Computer

By Bill Bailey/PCD



The HP-87 is the newest addition to the Series 80 family of computers from Personal Computer Division. Compared with the HP-85, the HP-87 is like a big brother; it has a bigger screen, a larger memory, and a larger package. While the HP-85 will continue to be the first choice for those who need a portable, integrated system, the HP-87 will be the choice of those who need a more powerful system.

The HP-87's larger display accommodates the industry standard 80 characters by 24 lines of alpha text, and also offers higher resolution graphics (240 x 544 dots). Add to

that more memory (user memory may be expanded from 32K to 544K), top it off with some major enhancements to the Series 80 BASIC language, and you have an extremely powerful system. The HP-87's upwards compatible super-set of the HP-85 BASIC includes:

- String arrays—the HP-87 supports one or two dimensional string arrays like:  
A\$(2,20)="column two, row 20".
- Multi-character variable names—variable names like ANGLE are more meaningful and ease programming and debugging.

- Line labels and line label calls—these make it unnecessary to keep track of line numbers.
- Indented program listings—for easier comprehension.
- Multi-parameter functions—like:  $A\$=FNA\$(X,Y,Z\$)$
- Multiple binaries—up to five binary programs may be in memory simultaneously.
- Seven keys for 14 soft-function key definitions that default at power-on to the most commonly used typing aids.

The HP-87 also has a built in HP-IB interface and a built in mass storage ROM to facilitate the connection of mass storage, printers, plotters and other devices and leave all four general ports free for additional memory or other modules.

### Three System Configurations

The HP-87 is offered in three system configurations with a different mass storage device in each system. System 5 combines the HP-87 with the 82902M single flexible disc drive providing 279Kb. Most customers will want the System 10, which consists of the HP-87 and the 82901M dual flexible disc drive and provides 540Kb. For very large mass storage requirements, System 30 includes the new HP-9135A Winchester/flexible disc which gives you 4.8Mb.

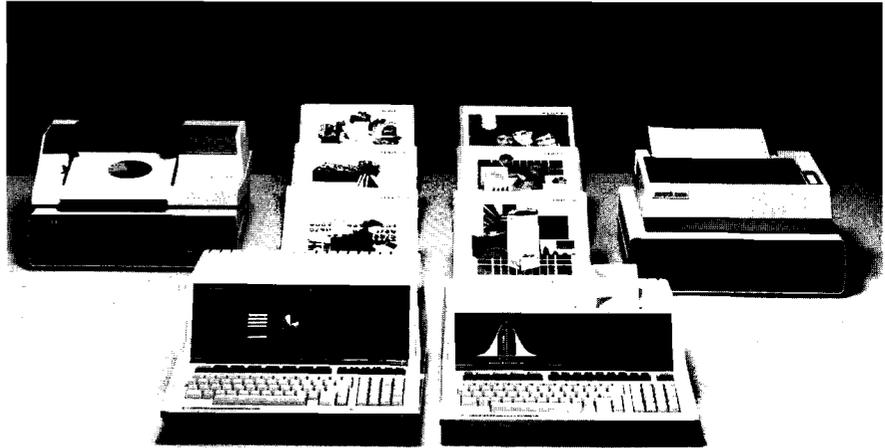
And if you couple the HP-87 with HP's new, low-cost, high performance 7470 Graphics Plotter and 82905B dot matrix printer you have an unbeatable combination for today's analytical professional.

### Ordering Information

		Price
System 5	HP-87A	\$2495
	8290M	1500
System 10	HP-87A	2495
	82901M	2200
System 30	HP-87A	2495
	HP 9135A	5500

## HP-85/HP-87 Compatibility

By Bill Bailey/PCD



The HP Series 80 Family

Although there are many differences between the HP-85 and the HP-87, we have gone to great lengths to ensure upward compatibility, both in software and hardware.

All the Series 80 interfaces are completely compatible. The commands used to communicate through the interfaces are also identical. Other interchangeable hardware includes the ROM Drawer, System Monitor, and Programmable ROM Drawer. (Note: HP-85 ROMs are not compatible with HP-87 ROMs. RAM modules for the HP-85 and HP-87 are not compatible.)

Disc mass storage is also highly compatible. Both machines use the 82900 series flexible disc drives with 5-1/4" double-sided double-density discs. An HP-85 can catalog or copy an HP-87 disc, and vice versa. Data files on disc are fully interchangeable, including VisiCalc® PLUS files.

An HP-87 can usually load and run an HP-85 BASIC program. The HP-87 recognizes an HP-85 program, says PLEASE WAIT, and automatically begins to convert it into HP-87 code. With long programs,

this may take several minutes. In order to perform the conversion, the HP-87 must have all the HP-87 ROMs necessary to support ROM statements used in the HP-85 program. At this point, the user may store the converted program and subsequent loads will not require conversion.

Some further editing such as changing scale parameters or moving BPLOTs may be desirable to take advantage of the HP-87's superior graphics or added capabilities, such as 80-column alpha, and graphics line types.

However, because the system architecture is different in the HP-87, HP-85 binary programs will not work on the HP-87. Assembly language programs are similar, but major changes have been made in CRT control, memory access, and string variable handling.

HP-85A customers who have had the opportunity to run their BASIC language programs on the HP-87A have been very favorably impressed with program transportability between the 85 and 87. 

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## BCG

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### Executive Seminar on Distributed Systems

By Sheri Costa/BCG

The Executive Seminar on Distributed Systems was designed to help the HP sales force introduce the concepts and benefits of Distributed Data Processing to large manufacturing companies.

Because of the demand from the field, we have opened up the seminar to non-manufacturing companies such as large banks, and insurance and utility companies.

This two-day concept-oriented seminar will provide the attendees with a thorough understanding of distributed processing concepts and information necessary for them to plan and implement distributed systems in their own companies.

#### Target Account

- Large industrial company
- \$400 million plus in annual sales

#### Target Audience

- Head of large organizational unit who has profit and loss responsibility, such as a VP, Division or General Manager
- Head of Information Systems function, typically the Director of Management Information Systems.

The brochures are sent to all AMs, DMs and FMMs to distribute to their SRs at least five weeks prior to a seminar. The brochure is used as a selling tool to invite accounts with \$400 million plus in annual sales and potential customers to the seminar. After the SR has called the factory for space availability and the account has been qualified by the factory, Paul Ely will send them a brochure along with a formal invitation.

Remember, these seminars are held on a quarterly basis; the next one is scheduled for April 1 and 2. If you need more information, please call 408-725-8111.

### IBM System/38 Competitive Analysis

By Steve Wilk/BCG

Ever since IBM introduced the S/38 in October 1978, HP has looked at this product as a possible threat to our successful HP 3000 product line. Business Computer Group has just published a competitive analysis of the S/38 that compares the strengths, weaknesses and direction of the S/38 to the HP 3000 system. The conclusion is very favorable for the 3000 and should be read by all Commercial SRs. A copy of this document is now in the hands of your Commercial DM (worldwide) and we encourage your comments on it.

### HP 3000 Users Group News

By Gloria Weld/BCG

The HP 3000 International Users Group will host its annual North American Conference March 1-5, 1982 in San Antonio, TX. Two thousand HP 3000 Users are expected to attend. Two hundred vendors have reserved booths in the vendor exhibits. HP's booth will include a laser print station, the latest demos of the Interactive Office products, the General Accounting package (GA/3000), and PASCAL/3000 as well as self-paced training.

For registration information, call or write to the HP 3000 International Users Group, 289 South San Antonio Road, Los Altos, CA 94022, phone 415-941-9960, or call Jane Copeland, Conference Coordinator, phone 512-358-3280.

### Ensure Your HP 3000 Series 40 Customers Have Adequate Power Protection

By Cynthia Politica/CSD  
and Andree Driskell/BCG

**CAUTION!** The HP 35030A 1.8 KVA 60Hz Power Line Conditioner is sufficient protection for only the HP 3000 Series 40 and 40SXs SPUs. This is an undesirable solution because the SPU can receive adverse voltage fluctuations from an unprotected disc drive. "... an unprotected system component can receive a transient on its AC input and couple the noise to its chassis. Then the noise is coupled to an I/O cable leading to the chassis of the protected component ..." [Duell, Arthur, and Roland, Vincent "Power Line Disturbances and Their Effect on Computer Design and Performance." *Hewlett-Packard Journal*, (August 1981) pg. 30.]

Two power line protection alternatives exist:

*Alternative One* — Purchase multiple 35030A power line conditioners with a total KVA rating capable of protecting the entire system. At installation, the CE must bond the conditioners together with a ground braid and connect them to a common isolated ground.

*Alternative Two* — Purchase a single power protection device with a capacity large enough to protect the entire system. Although a non-HP solution, this may be a simpler and less expensive alternative for customers with multiple disc drives. Your Site Preparation Specialist will advise your customers of the type and size power protection device necessary for adequate protection of their system.

## IND

### HPSLATE Free Trial Offer

By Alma Rodoni/IND

We have initiated a new merchandising program to help your customers assess HPSLATE, realize its benefits to their organization, and to generate HPSLATE orders for you.

A one-page HPSLATE Free Trial Offer advertisement for HPSLATE appears in the February issue of the HP 3000 International Users' Group Newsletter, *Interact*. Any existing customer can take advantage of this offer by completing the coupon in the ad and mailing it to either IND Cupertino Marketing (if they are a North American customer), or CSP Marketing (if they are a European or ICON customer).

Once the coupon is received at either Cupertino or CSP, the SR for each customer participating in the program will be notified by COMSYS and will mail the customer the following items:

- A Free Trial Offer version of the HPSLATE software (on a magnetic tape reel) which will *time out* 30 days after installation.
- An HPSLATE using guide
- Software installation instructions.

The software installation instructions tell the customer that because he has not purchased any software support for HPSLATE, he cannot receive any free support from the SEO. For any questions or problems, the customer is instructed to call one of two phone numbers which are available from 10 to 11 a.m. and 2 to 3 p.m., local time, in the US (Cupertino) and England (CSP).

By the end of the 30 days, customers are requested to place their orders for HPSLATE by contacting their SR. If the customer decides not to purchase HPSLATE, he may keep the tape and the Using Guide . . . compliments of HP!

The HPSLATE Free Trial Offer is valid until April 1, 1982. If you have any questions or comments, we would like to hear from you. Contact either Tom Stokes at CSP (COMSYS 1600), or Alma Rodoni at Cupertino (COMSYS 6600).

### The Interactive Office Folder

By Alma Rodoni/IND

IMPACT was an overwhelming event, during which you found yourself buried in field training manuals, brochures, general information manuals and data sheets.

To be sure that no information has been lost in the madness, listed below is The Interactive Office literature available at the Distribution Center. This includes The Interactive Office folder which is designed to hold the other literature pieces. Briefly, here's how you could use The Interactive Office folder. In the left pocket put the overview brochures, for example: The Interactive Office brochure, HP 3000 Information Management Systems brochure and the Distributed Systems Network brochure. In the right pocket put the detailed product information, for example: HPWORD brochure, DSG brochure, HPSLATE, DSG/3000 and the product data sheets.

The Interactive Office folder helps you present HP products in an integrated, organized fashion. Make sure your office has a healthy stock of all this literature today!

P/N	Description
5953-0659	The Interactive Office Folder
5953-0654	The Interactive Office Brochure
5953-0655	HPWORD Brochure
5953-0683	HPWORD Data Sheet
5953-0682	HP 2626W Data Sheet
5953-2040	HP 2626A Data Sheet
5952-9459	HP 2601A Data Sheet
5953-8251	HPSLATE Brochure
5953-8252	HPSLATE Data Sheet
5953-8250	TDP/3000 Brochure
5953-0599	TDP/3000 Data Sheet
5953-0598	DSG/3000 Brochure
5953-0600	DSG/3000 Data Sheet
5953-0677	Inform/3000 Data Sheet
5953-3476	HP 125 Brochure
5952-9460	HP 2680 Laser Printing Brochure

Also available are the following seminar kits:

#### The Interactive Office Seminar

30000-60039	35mm Seminar Kit
30000-90243	Script Only
30000-90246	35mm Slides Only
30000-60039	Overhead Slide Kit
30000-90243	Script Only
30000-90245	Hard Copy
30000-92247	Overhead Transparencies Only

#### Decision Support Graphics/3000

32250-60001	35mm Presentation Kit
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#### New Dimensions Seminar (TDP/3000, DSG/3000, IDS, IFS)

90000-60035	35mm Presentation Kit
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#### HPSLATE

36576-90005	35mm Presentation Kit
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#### Self Paced Learning Data Sheets

5953-7412	Using HPWORD
5953-0618	Using DSG/3000

## HP to be in Office Automation

By Alma Rodoni/IND

Hewlett-Packard will be participating in the third annual Office Automation Conference (OAC) on April 5-7, 1982 in San Francisco. The OAC is one of the leading office systems conferences in the US. The conference, sponsored by AFIPS (American Federation of Information Processing Societies), is expecting an attendance of about 14,000.

HP's Ruann Pengov is Program Chairperson for the OAC. Other participants include John Young who will be hosting an executive luncheon, Joel Birnbaum (Director of HP labs) who will be the featured speaker on Communications and Systems Technology, and Chris Kocher (Product Manager for office graphics and the Laser Printer software) who will be presenting his paper "Business Graphics: A Means of Improving Managerial Effectiveness".

This event represents a great opportunity for HP customers to gather information about the area of Office Systems and gain a better understanding of HP's strategy and commitment in this area.

HP will have a booth on the exhibit floor highlighting "The Interactive Office" with demonstrations of all our office products.

We understand that many customers will visit the OAC. In fact many of you have coordinated customer visits related to Office Systems with OAC dates. We have set aside free admission tickets to the exhibit floor (a \$30 value) and a limited quantity of brochures for you to give to your installed base customers. Let your Sales Center contact know the quantities you need and we'll send them to you.

It is participation in events like this that will elevate Hewlett-Packard's image as we continue to establish our credibility with The Interactive Office. Let's be sure we share this kind of information with our customers. The next time you walk in the door the first question will be answered. . .

*Yes! Hewlett-Packard is a viable office systems vendor!*

## MSO

### HP 2382A Terminals Supported by MM/3000 and PM/3000

By Dan Kaplan/MSO

When customers ask you whether or not the HP 2382A "SHADOW" terminals are supported by Materials Management or Production Management, the answer is *yes*. We currently tested both the release version of PM/3000 and the A.00.05 version of MM/3000 in the factory and discovered that the SHADOW terminal works as either the System Administrator or User terminal for both MM/3000 and PM/3000. The SHADOW is configured through the CUSTOMIZER just like any other HP 262x terminal. Contact MSO On-Line Support if there are any questions.

## BGD

### Eat Now, Pay Later!

By Angela Ramsay/BGD



Recent visitors to Boeblingen will have noticed that lunchtimes in Work 2 have taken on a new flavor! High technology has hit the cafeteria and it is now possible to pay for your meal without any money changing hands. The new cafeteria system was devised by the EDP department in Boeblingen and enables people to pay using their company ID cards. The total amount spent in the cafeteria is deducted from their salary at the end of the month.

The system runs on an HP 3000, with three data bases containing all relevant information. There are three check-out points, each consisting of a 3075 terminal with magnetic card reader and screen. Personnel details are read off the magnetic strips on the ID cards and the cashiers type in the article number for each item. The 10 most common items from the menu are entered using the function keys. The day's menu and prices are stored each morning. One check-out point is reserved for people still paying in the conventional manner and it is still possible to pay for visitors with a requisition which is automatically charged to the right department.

The system has been in operation for over one month and has proved highly successful so far. Waiting time has been cut and the process is hygienic and effective. 

## DTD

### Introducing the New HP 2389B OEM Terminal

By Linda Lazor/DTD

The HP 2389B OEM Office Display Terminal will be available April 1, 1982 for purchase by HP terminal OEM customers. Except for a different faceplate, the 2389B has the same popular features of the 2382A terminal.

The 2389B will be offered at a price of \$1785. OEM customers are eligible to receive an additional 10% discount on the A-5 discount schedule. Options are the same price as the 2382A optional features.

Modifications to the 2389B are unsupported. Due to its unique features and low price, the 2389B should be very attractive to software OEMs providing information services or writing office application software.

### Announcing Special Option K24 for the HP 2624B Key Function Definition

By Gary Borders/DTD

The HP 2624B Option K24 provides the user with the capability to redefine up to 13 special function keyboard keys. A four-key softkey sequence is allowed for 11 keys on the main keyboard and two keys on the numeric pad. The following keys may be redefined: ESC, BACK SPACE, TAB, BACK TAB, DEL, CAPS, CTRL, RETURN, left SHIFT, right SHIFT, ENTER and the TAB and BACK TAB keys on the numeric keypad. The user may also define any of these keys to assume the function of any one of the other definable keys.

This option allows the keyboard to better suit the user's particular needs. For example, the BACK TAB key on the numeric keypad can be changed to a comma key, and the TAB key on the numeric keypad can be changed to a RETURN or ENTER function. The functions of the CTRL and CAPS keys may be exchanged; any of the 13 keys disabled.

The Option K24 provides this capability through a soft keyboard definition menu. Each parameter has an associated four-character field where the definition can be entered. An indicator will appear at the bottom of the display when the configuration menu is exited to let the user know

when any of the 13 keys differs from its operation in the standard 2624B terminal. The definition values for the 13 keys are stored in the non-volatile memory and are saved when the terminal is powered down.

This special option is provided as 2624B Option K24 when ordered with a terminal. The upgrade kit to provide this capability on an existing terminal is 93994B Option K24. Both the standard and the upgrade kit are priced at \$200. As with other Specials products, a HEART override is required, and standard discounts apply (Product Line 67, Supplying Division 5600, Marketing Division 4200, Sales Force 02).

### Special Accessories Go to Puerto Rico

By Lou Witkin/DTD

The following special accessories used with HP 2621A/P terminals are now being built at HP Puerto Rico.

Please use a HEART override to order: Supplying Division is 5600, Marketing Division is 4200, Product Line is 67, Sales Force is 02.

#### Accessory No.

#### Description

93981C	Okidata printer cable (used with 2621A-K05)
93981D	2631 printer cable (used with 2621A-K05)
93983D	K02 to K04 upgrade kit
93983E	2621-K45 upgrade kit
93983E-001	2621-K03 upgrade kit
93986E	2621-K10 firmware
93986E-100	2621 US extended keyboard
93986E-101	2621 Swedish/Finnish extended keyboard
93986E-102	2621 Norway/Danish extended keyboard
93986E-103	2621 French extended keyboard
93986E-104	2621 German extended keyboard
93986E-105	2621 UK extended keyboard
93986E-106	2621 Spanish extended keyboard
93986E-145	2621 ASCII (bit paired) extended keyboard

# Computer Terminals

## HP 2382A Modem Support

By Sarah Jane Militello/DTD

Although the 13265A Modem Pod does fit easily into the new HP 2382A carrying case (as indicated in the February 1 and 15 issues of *Computer News*), the pod is not supported with the 2382A.

Please note that the 2382A supports Bell 103A, 202A or equivalent type modems and not the 13265A Modem Pod.

## New Sales Development Engineer

By Dave Forter/DTD

Jerry Erickson has joined DTD Sales Development to support MSR West and MSR Central, effective March 1, 1982. Neil Exter will continue to support MSR East, but will also begin supporting the Manhattan and Woodbury offices in ESR. Kevin Wandryk will continue to support the Paramus and Piscataway offices.

Jerry is transferring into Sales Development from DTD's Product Marketing area where he has had forecasting responsibilities for the last year. We are fortunate that Jerry has previous experience in DTD Sales Development, Marketing experience with Singer, and a few years in the US Navy. Jerry is a graduate of the US Naval Academy.

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## GSD

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### Introducing Enhanced OM/250, FIN/250, and APGL/250

By Chris Eckhardt/GSD

A new revision of HP 250 source code software products was released to manufacturing on February 10, 1982. These products—OM/250, FIN/250, and APGL/250—have been enhanced to include the following features:

- Expanded access capabilities for multi-user environments
- Multi-user read-only access to customer, inventory, and order information via the new General Inquiry module
- Disc-to-tape back-up capability.

With this release, the applications may be run on most of the new disc drives supported on the HP 250. However, because of size limitations, the 4.7Mb drive is not recommended. In addition to the enhancements, a significant number of software problems have been corrected in this revision. (See Software Status Bulletin for more details.)

## Fourth Annual HP 250 OEM Conference

By Mary Etta Port/GSD

On March 2 and 3, HP 250 OEMs will be attending the Fourth Annual HP 250 OEM Conference. In the past, over 50 OEMs have come to Cupertino to exchange software, share business strategies and learn about the HP 250 product and merchandising directions. This year should be an especially exciting conference, as we plan to auction off refurbished HP 250s (45251As with 7910 discs and the B.04 operating system).

Other highlights of the conference include technical workshops on project management, application software (OMII/FIN/MFG), OS4, in the HP Business Basic strategy. Other agenda items include: new product introductions and training, OEM organizational group meetings, division update and directions, system support, OEM merchandising/advertising, HP management round table and OEM award presentations.

This year, for the first time, we will be hosting not only North American OEMs, but also OEMs from English speaking intercontinental countries as well as Spanish speaking countries. These last two intercontinental groups will be conducting their own separate OEM meeting on March 4 as well. It should be a most productive and exciting conference. 

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## **BSE**

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### **New HP 2680 Upgrade Program Offered**

*By Tom Old/BSE*

HP now has a printer upgrade program which can give customers credit on their current HP printers towards the purchase of an HP 2680 or 2685.

The upgrade program allows up to \$16,850 in credit towards purchasing a laser printer. With the 2680's list price at \$92,000, subtracting the maximum upgrade credit effectively reduces the price of the laser printer to \$75,150—and you can apply the discount on top of that.

This program can help you sell the 2680 as a line printer replacement to the installed base, and makes cost justifying the laser printer even easier.

Details of the program will be arriving in the sales offices soon. For information on which printers qualify and how much credit is available for each, contact Boise Division.

### **Tips on Cost-Justifying an HP 2680**

*By Ed Pavlinik/BSE*

Do you need help in finding tangible savings to assist your prospects in cost-justifying an HP 2680? Here are some examples of costs that may be eliminated or reduced by using the 2680 laser printer.

#### **Forms Costs**

Most computer shops use preprinted forms extensively—spending as much as thirty cents per form. One 2680 customer budgeted \$120,000 annually for his preprinted forms. This cost could be avoided by using the 2680's capability to generate electronic forms. Using the laser printer can also prevent the huge waste which occurs when preprinted forms are made obsolete due to new

government regulations, address changes, or corporate requirements. In addition, forms inventory storage and carrying costs can virtually be eliminated by using the 2680 to generate forms on demand.

#### **Paper Costs**

Using 8-1/2 x 11" paper instead of the traditional large green bar paper can save \$550 per month (\$6000 per year) at a volume of only 200,000 pages per month. Using the 2680's 2:1 and 4:1 reduction capabilities, customers can save on mail distribution costs, archival storage costs, and expensive photo-reduction of computer output. This can amount to hundreds of dollars per month.

#### **Printing Service Bureau Costs**

Many organizations use outside printing service bureaus for non-impact print output. The laser printer service bureaus charge as much as three and a half to four cents per page of print and space output, with customized output generally costing more. One 2680 customer was paying \$60,000 annually for a monthly report consisting of 150,000 pages. Job turnaround times were typically unacceptable, and critical reports were often delivered late. The 2680 can eliminate costly dependency on outside service bureaus.

#### **Print Shop Costs**

Product catalogs, price lists, and manuals are frequently done by outside printing vendors. One 2680 prospect spends \$35,000 quarterly for price books. Due to the high cost of reprinting them, they aren't reprinted as often as prices change. This resulted in thousands of dollars of lost revenue. Using a 2680, new price books could be generated on demand, within minutes after pricing changes are entered. Manuals, parts lists, and spec sheets also can be easily updated and printed on the 2680—ensuring that printed information is completely up-to-date.

#### **Stand-Alone Word Processing Station Costs**

Several 2680 prospects plan to use the 2680 as an output device for a 3000 system running HPWORD, TDP, and SLATE. The 2680's throughput is much faster than that of the daisywheel printers, and many other benefits result from consolidating word and data processing on the HP 3000. Training, maintenance, and efficiency of asset utilization are improved via 2680/3000 usage.

#### **Compared with the Competition . . .**

Customers with a stand-alone Xerox 1200 print station or an IBM 6670 are good prospects for the 2680. HP's 2680 provides the reliability, speed, and flexibility—in addition to the cost savings which result from using it—to make it an attractive alternative to these machines.

### **High Speed Tape Support on HP 1000 M/E/F-Series Systems**

*By Sallie Ewing/BSE*

DSD now has a special driver for the HP 7976A high-speed tape drive on HP 1000 M/E/F-Series Systems.

The price per customer is \$7000 for the first drive and \$2400 for any subsequent drives.

This special, ordered as a 93577M, consists of the special driver and driver manual for the RTE-IVB or RTE-6/VM operating systems. The customer will also need a standard HP-IB I/F card for the 7976A. This includes cable and can be ordered from Roseville as a 12821A (listed at \$840).

For quoting and ordering specifics, please contact your Sales Support representative at DSD.

# Computer Peripherals

## Switchbox on Starfish

By Sallie Ewing/BSE

There is a restriction on the HP 26075A Multiple System Access selector (Switchbox) which should be clarified. This issue involves the supportability of a switchbox connected to a Starfish on HP 3000 Series III Systems. The Switchbox cannot be used on a Starfish if you also have a 7935H used as a system disc on this Starfish.

The Starfish is, in effect, a single GIC. A 7976A with a Switchbox cannot be on the same GIC with the system disc drive (i.e., 7935H). This is an unsupported configuration because data integrity cannot be guaranteed.

The Switchbox is only supported on the HP 2608A and the 7976A or any 3000 system. For more details, please call your Boise Division sales support engineer.

## HP 2608A Update

By Jim Skog/BSE

With more than 8000 HP 2608A printers sold, the average new production unit has a failure rate of less than 1.25 times per year. Customer satisfaction is further enhanced by the low purchase and maintenance pricing. Printing at 400 lines per minute, the HP 2608A can provide some specialty printing solutions like shifting between character sets and printing a special "block" character set. Using two 2608As provides redundancy with higher throughput, as well as the capability of printing out smaller jobs and listings without having to wait for large spoolfiles to finish. Whether configuring the original system or adding an additional printer for growing print volumes, the 2608A is a solid first choice.

## HP 2680 Application: Go with the Flow

By Ed Pavlinik/BSE

Nearly all DP shops with programming staffs need to generate program documentation manuals consisting of flowcharts and text. In many DP groups, the text is hand-typed or entered into a terminal. Flowcharting symbols are manually drawn, then cut and pasted onto proof copy which is then reproduced. This process requires long lead times and often results in failure to update software documentation.

One large corporation recently investigated the HP 2680 laser printing system. Flowchart symbols were created in a demo using IDS software and stored as characters, then printed at the desired page location together with the text. This prospect was especially impressed by the ease with which the flowcharts could be modified and new versions printed on the 2680—a clear competitive advantage!

Large organizations frequently find that their organization charts are out of date. By creating these charts via IDS and IFS software, the 2680 can be used as an ideal output device. Changes can be made easily by calling up the appropriate file, entering changes on a graphics terminal, recompiling the environment, and then printing. In fact, a program can be written to extract data from an employee data base, then write to a field within the organization chart. In this fashion, new charts can be generated whenever the organization changes. Several sales offices in Texas are now using the 2680 to print updated versions of field organizational charts in a highly customized format on a 17-inch page (taking two 8-1/2" x 11" sheets of paper).

These applications, as well as others like word and document processing, can help justify purchasing a 2680.

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## COL

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### HP 1360 Off to a Great Start

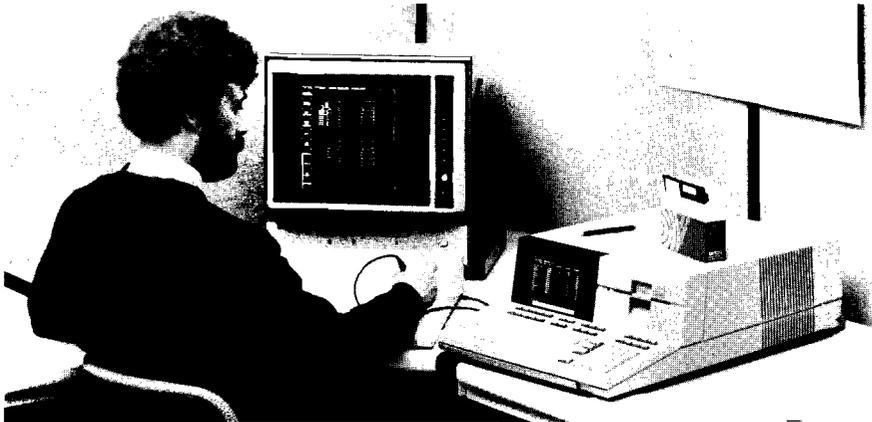
By Joe Hunter/COL

Following the teleconferencing on the HP 1360, a major customer introduction was conducted on the 1360 in the US and Europe. The response to this programmable tool for graphics was very encouraging. Within a week of the tour, several orders and many serious inquiries were received to confirm our belief that this is an excellent desktop computer graphics solution.

To provide you with sales tools for this product, two items from the teleconferencing and introduction are available: a videotape on a product demonstration and a set of slides for customer and seminar presentation. Contact your RSE if you would like either of these.

### HP 1360 Applications

The 1360 system is an HP 9826A based programmable tool for a wide variety of computer graphics tasks. It does not have an application program but rather is a system with a utility program to allow a user to create a specific application program. Typically, a desktop user programs his own application for computer-aided testing, computer-aided engineering or any of the other computer tasks the 9826A is capable of. The InteGral/60 utility software allows a desktop user an easier way to now use a 9826A in computer graphics and utilize the various HP graphics peripherals. For drafting, layout, design, tooling, testing, simulation and analysis, the 1360 is an economical, single-user solution. Its 9826A base makes it fast for the single user; its large screen, high resolution display makes it ideal for the high detail needed in computer-aided design.



## HP 1360 Sales Opportunities

Because of the programmable nature of the 1360, it is an ideal product for OEMs and third parties. Several of these types of customers expressed interest in the 1360 in the recent customer tour. Two of our first orders were from OEMs seeking to use the speed and high performance capabilities of the systems. If you have such a customer, please contact us; we would be most pleased to work with you to make a successful sale.

## Demonstrating the HP 1360

The 1360 is an excellent product to demonstrate the 9826A's capabilities. It not only shows high resolution graphics, it shows the processing speed of the 9826A and the use of multiple peripherals on the 9826A. To demonstrate a 1360, the following is needed in the 9826A:

- One GP-IO interface, 98622A (Do not order any cable option)
- PASCAL based system software
- 589,824 Bytes of memory (64K on processor board plus eight 64K RAM Boards or two 256K Boards)

A DMA board (98620A) is useful, but not necessary, in the current demonstration system.

If your area has a 1351A and large screen (choice of 14", 19" or 21"), several items will be needed. The

1351A must have a 16-bit parallel interface (52106A) and a 16-bit cable (52121A). Also, order 52113A, InteGral/60 software.

If your area does not have a 1351A and large screen, order 1360S. This will give you the hardware, cable kit and InteGral/60 diskette necessary for the demonstration.

The last necessary piece of hardware is the tablet. An HP 9111A is all that is required. A 9111A Option 050 is not necessary, but will work.

For demonstration diskette, please contact your RSE.

## DMD

### HP 7906 Disc Cartridge Moves to CSO

By Greg Hite/DMD

On April 1, 1982, the production of the HP 7906 formatted disc cartridge (P/N 12940A) will be transferred to Computer Supplies Operation (CSO). CSO will perform the same stringent tests on the disc cartridges using the same testing equipment previously used at DMD. Shipments from DMD will continue through March; all orders currently placed with DMD must be transferred to CSO, including TAC orders.

No change in cost or list price will be realized. Availability will still be CSO's same great "off-the-shelf" service.

## SDD

### New Overhead Transparency Kits for SDD Graphics Plotters

By Mary Zoeller/SDD

#### HP 17057A Overhead Transparency Kit for the HP 7470A Graphics Plotter

The new HP 17057A Overhead Transparency Kit provides overhead transparency production capability on the HP 7470A low cost graphics plotter. This new kit has all of the materials necessary for your 7470A plotter customer to create 50 high quality overhead transparencies for presentations—a convenient, cost effective solution to a customer's need for presentation materials in a timely manner.

The kit contains a specially designed transparency film which has a paper-backing. This paper protects the film from any scratching which might be produced by the media's movement in the 7470A, and assures that the film will not slip while being driven through the grit wheels. Table 1 outlines the complete contents of the 17057A (see next page).

#### HP 17055A Overhead Transparency Kit for the HP 9872, 7220, 7221, and 7225 Graphics Plotters

The current 17055A Overhead Transparency Kit has been updated with a new box cover design and multi-lingual instructions as described in the section below. The 17055A contains all of the materials a customer requires to produce high quality overhead transparencies for presentations.

The supplies contents of the 17055A kit remain unchanged and are intended for use on San Diego Division's flatbed plotters (9872, 7221, 7220, and 7225 with velocity select). Table 2 shows the contents of the 17055A (see next page).

# Computer Peripherals

**Table 1**

17055A Overhead Transparency Kit Contains:	Part Number	
	Line Widths .3 mm	Line Widths .6 mm
One each of the following package of pens (4 pens per package, 1 pen of each color).		
Black, red, blue, green	5060-6818	5060-6819
Black, orange, brown, violet	5060-6834	5060-6835
1 package Paper-Backed Transparency Film (50 sheets/package) 216 x 280 mm (8.5 x 11 in.)	9270-0360	
US Price \$95		

**Table 2**

17055A Overhead Transparency Kit Contains:	Part Number	
	Line Widths .3 mm	Line Widths .6 mm
One each of the following package of pens (4 pens per package, 1 pen of each color).		
Black, red, blue, green	5060-6818	5060-6819
Black, orange, brown, violet	5060-6834	5060-6835
Solvent, 29.6 ml (1 fluid oz.)	5060-6828	
2 package Transparency Film (100 sheets/ package) 216 x 280 mm (8.5 x 11 in.)	9270-0639	
US Price \$125		

## Updated Package Design and Multi-Lingual Instructions

The new box cover design presents a color photograph of the graphics plotter, surrounded by overhead transparency sample plots. Translations of "Overhead Transparency Kit" are printed in ten languages on the front cover to address our worldwide markets. In addition, the usage instructions attached to the inside box lid cover have been translated and will be contained in each kit.

Both the 17055A and the 17057A Overhead Transparency Kits give transparency capability to the graphics plotters—an important feature to help you sell graphics. The kits and their parts are available through Computer Supplies Operation's toll free telephone ordering number, as well as San Diego Division and Parts Center Europe.

*Note:* The transparency kits will *not* operate on the HP 7580A drafting plotter.

## Full Range of Liquid Ink Drafting Pen Tip Sizes for the HP 7580A

*By Mary Zoeller/SDD*

On March 1, 1982, San Diego Division will begin to supply a complete range of pen tip sizes for the HP 7580A liquid ink drafting pens. These new sizes are in response to customer requests and your inputs from the field.

Listed below is the expanded line of drafting pen tips for the 7580A drafting plotter.

P/N	Pen Tip Size	Price
9260-0742*	0.18mm	\$22
9260-0741	0.25mm	22
9260-0588	0.35mm	22
9260-0744	0.50mm	22
9260-0579	0.70mm	22
9260-0763*	1.0mm	22

(\*Available April 1, 1982)

These supplies may be ordered by customers through Computer Supplies Operation's toll free telephone number or HP sales offices.

Your assistance in providing information on the 7580A customers' needs is appreciated and helpful in SDD's efforts to increase customer satisfaction with graphics.

## VCD

### Price Change for Thermal Printers

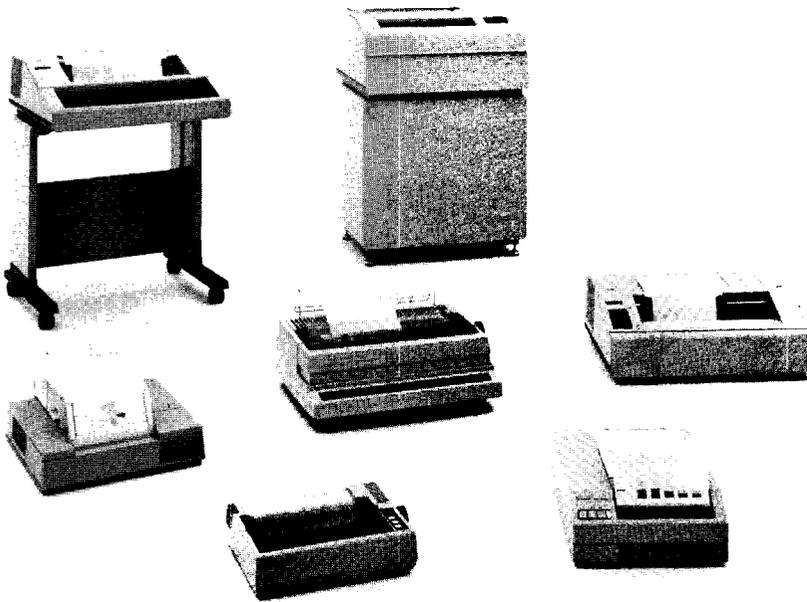
By Web Augustine/VCD

Effective April 1, 1982, prices on several thermal printing products will be increasing. Old and new prices for these modules are as follows:

Product	Description	Current Price	New Price
2671A	Alphanumeric Printer	\$1095	\$1195
2671G	Graphics Printer	1295	1495
2673A	Intelligent Graphics Printer	1895	2195
13287A	Thermal Print Mechanism	590	720

### Workstation Printers—HP Offers 10 of Them!

By Erin Greene/VCD



You probably haven't run across the term "workstation printers" in *Dataquest* or *Printout*. Yet, we at HP glibly drop the term in everything from data sheets to our latest ads. Is it a new concept or just another buzz word?

Actually, "Workstation printers" is simply an expression that suggests a specific capability. A workstation printer is a printer that can be conveniently located where the actual work is accomplished. Convenience is the key because hard copy is accessible where and when it's needed most.

"Workstation printers" imply still more—affordability and mobility. That means convenience when and where your customer wants it. A customer can purchase two or three 267X printers for quick, quiet convenience printing at engineering workstations and a 2601A in the office area for letter quality printing. The four different interfaces available on the 267X Series and convenient size make relocation from one workstation application to another all the handier.

To help you help your customer choose the right workstation printers, a concise and complete comparison of the HP workstation printers is included in the recently updated HP 2631B Printer data sheet (P/N 5953-6262 [54]). Throughput, print quality, paper handling, printer features, and application examples are summarized for all ten workstation printers: the HP 82905, 2671A, 2671G, 2673A, 2631B, 2631G, 2601A, 2608A, 2635B, and 9876A.

## HP 2670 Series Thermal Paper

By Harold Fast/VCD

Thermal paper is available for the HP 2670 Series Printers in a variety of options. This article will review those options for you.

### Paper Color

The paper is available with either blue or black images. The blue image offers greater contrast and is, therefore, judged by most people as the more readable of the two. Blue image paper is also less expensive than black. Some copy machines, however, are "blind" to blue. A yellow transparency, placed over the blue copy, may alleviate the problem.

### Fan-Fold or Roll

The paper is available in either fan-fold or roll in 8-1/2 by 11 sheets. The roll is 8-1/2 inches wide and is available with or without perforations every 11 inches. A frequently voiced objection to thermal printers is the hassle of dealing with roll paper. The fan-fold paper has overcome that objection, as it is very convenient to use. It is, however, more expensive.

### Where to Buy

The 2670 Series thermal paper is available through the Computer Supplies Operation Catalog, page 13.

### A Word of Caution

The print quality of the 2670 Series Printers is exceptionally good. A major contributor to this print quality is the HP thermal paper that is manufactured to our exacting standards. Use of thermal paper other than HP paper will compromise our print quality and may seriously reduce the life of the thermal print head on the printer.

## Expanded Graphics on the HP 2670 Series

By Bob Weis/VCD

If you haven't seen the HP 267X demo and viewed its example of expanded graphics, you should. It's a great selling tool for a customer who does graphics work.

The capability to expand graphics is a function of the host and not that of the printer. For example, on the 9826A demo disc, there is a file that shows an expanded pie chart. This expansion is done by a BASIC program controlled by the 9826. Your customer is not just limited to a BASIC routine, but can obtain a subroutine from DCD or VCD to also enable expanded graphics with HPL. This is an important selling feature for the 2671G or 2673A with the 9826A or 9836A. If you have a customer interested in graphics, show the expanded graphics and all of the other features of the 267X and the 9826A or 9836A.

## The HP 2671A Alphanumeric Printer: Affordable Convenience

By Web Augustine/VCD

The ideal desktop printer solution for convenience printing is also easy on your customer's budget. An impressive \$1195 is only part of the story, however. The HP 2671A's long list of features, including a fast 120 CPS, convenient fan-fold paper, easy-to-read text, quiet operation, three different character sets, and two print modes make the printer an even greater value.

You can confidently recommend the 2671A for quick program listings, generating frequent reports and transaction documents, or even software debugging. Since it has four different interface options, you can sell it with desktop computers, terminals, and a wide variety of microcomputers and systems.

What's more, there's hardly any wait. Write up the order now, and you'll have a happy customer in four to eight weeks. (Off-the-shelf delivery is available through CSO. In most cases, that means 2-day delivery!)



## SONY Buys the MPN Concept

By *Patty Einarson/DSD and Jim Ley/DSD*

Exposing SONY (San Diego) upper management to the MPN concept was the result of well calculated preparation. SR Greg White, inherited this major television manufacturer's account last May. His predecessor had initiated a sale of an HP 1000 for use in the QC/QA areas of CRT production. Receipt of the order was ensured when an errorless communications test was completed between our F-series computer and SONY's IBM 4331. This test was the result of coordinated support between DSD and the IBM Systems Analysts.

Having completed the initial sale, Greg's real challenge was how to present the MPN concept to SONY and ensure future multiple system sales. The key was to motivate SONY's middle management to discuss their concerns about future expansion and the need for factory and plant automation.

SONY now assembles over a half million television sets per year in their San Diego facility. In order to meet projected sales, production must be doubled by mid 1984. After understanding these facts, Greg knew he could meet their primary needs of increased automation and reduced manufacturing overhead.

First, Greg requested a tour of each manager's production area. SONY happily obliged and Greg, Brian Sojka (the SE), and Ray Kraatz (the 01 SR) were given a complete tour and briefing of the SONY manufacturing process. Greg was thus introduced to most of the middle managers, a task which otherwise would have taken months to achieve.

After a complete examination of their needs, the following topics surfaced as primary concerns:

- Computers in manufacturing
- Factory data collection
- Data acquisition
- Data communications
- General purpose testing
- Computer graphics.

Fortunately, slide shows concerning these topics were readily available from DSD and local SEs. The seminar was given at SONY by DSD Sales Development Engineer, Ed Brummit and SE Dick Klein. Attendance was limited to 20 engineers and production managers.

The response was beyond the most optimistic expectations. The seminar went so well that SONY's upper management requested that it be repeated for all managers and that the second seminar be given on a Saturday so that everyone could attend without fear of halting production.

On Saturday, November 21, 1981, Ron Eckhardt and Patty Einarson from DSD Sales Development presented the seminar again. All of SONY's upper-level management attended, including the Senior Vice President of SONY of America.

Greg's overall, careful preparation ensured very impressive presentations. He did an outstanding job coordinating speakers, securing a location, and he even managed to set up a display of equipment and demos to show SONY's management.

Greg can attest to the results. "As a direct consequence of the seminar, I am experiencing very good success in implementing solutions on the factory floor. This month, two fully configured L-series computers, factory data link communication capabilities, and desktops for CRT test systems have received final approval."

Congratulations go to all who participated. It shows what factory and field teamwork can accomplish! DSD looks forward to SONY's upcoming factory visit. 

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Worldwide Third Party Program  
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- CSD** Computer Support Division  
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