COVER: Now you can offer your HP 3000 customers an integrated HPPAY/HP General Ledger solution. HPPAY is a total payroll solution of software, tax updates, and implementation services. See stories beginning on page 23.

Cover photograph by Don Myer
HP Computer Museum

www.hpmuseum.net

For research and education purposes only.
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December 1, 1983
New BDG Sales Promotion Kit
Karen Campbell/BDG

In response to the many requests from the field for local promotion support, BDG Marcom has prepared a Sales Promotion Kit. Included in this kit are guidelines on advertising, trade shows, publicity, seminars, direct mail, and other promotional activities. Line art and photographs will be provided on a regular basis throughout the year, ensuring up-to-date photographs of our product line.

Copies of this Sales Promotion Kit have been sent to all US and Canadian FMMs and FMAs, as well as Computer Group Division Marketing Managers. ICON in Palo Alto will distribute the kits to ICON countries, and European countries will receive their kits through HPSA-Geneva. An OEM version will be available soon through Third Party.

A limited number of kits are available to US and Canadian DSMs upon request. Call Karen Campbell at 408-973-7642.

HP Journal book update
John LaCava/CSO

In response to questions we’ve received, here’s more information about Inventions of Opportunity, the book of HP Journal articles with an introduction by Bill Hewlett that we announced in the last issue of Computer News.

The book is cloth bound, 8½ x 11 inches, and has a paper jacket wrap. Each book comes in an individual carton suitable for mailing. For bulk shipment, ten books in their mailing cartons are packed into each large shipping carton.

The idea for the book came from Roberto Albanesi, HP’s country manager for Italy. Everyone we’ve talked to thinks it’s a great idea, that customers will want it and be pleased to have it on their bookshelves, and that it should have real value as a promotional gift or recruiting aid. Internal orders are on a transfer-at-cost basis. Customer orders are list price.

How to order
Order the books from Computer Supplies Operation as follows.
- HP part number 92233R.
- HP Employees: order via HEART for TAC price
Customers: call Computer Supplies Operation at one of the special telephone numbers listed on page 35.

Of course, customer orders may also be placed in the regular way through local HP sales offices in those areas not served by one of these special phone lines.

Re-marketed product brochure now available
Carol Robertson/SRO

With the continued success of re-marketed products, Systems Re-marketing Operation announces a new sales aid for HP's re-marketed solutions. The new brochure entitled *Hewlett-Packard Re-Marketed Systems and Peripherals* (P/N 5954-0224) was distributed in October to our worldwide sales organization.

The brochure discusses HP's high quality re-marketed products and can be a valuable asset to customers considering re-marketed solutions. The brochure was not designed for Used Lease Equipment sales.

THIRD PARTY

New Application Note form available
Marilyn Rauchle/3PP

We'd like to thank SRs who urged their software suppliers and OEMs to respond to our call for Third Party Application Notes in September.

In order to make it easier for you to work with your third parties to get the necessary information, we have developed an Application Notes form. We have provided third parties with their initial copy of this form directly, as an insert to the December 1 issue of HP's *Computer Focus* magazine.

Forms also have been distributed to all HP Third Party Program Regional Managers. If you need additional copies of the form, contact your regional manager, or order forms from the HP literature distribution center (P/N 5953-9031).

The instructions on the form require:

- All forms to be typed
- Third Parties to return the completed forms to their local HP SR
- The HP SR to sign the form on the bottom of the front page before sending it in. *No forms will be accepted without a rep's signature.*
Application Note forms should be sent to:

**Domestic**
Hewlett-Packard Company
Third Party Marketing
Attn: Lynn Gardner
19447 Pruneridge Ave.
Cupertino, CA 95014

**International**
Hewlett-Packard S.A.
Attn: Spencer Chan
Route du Nant-d' Avril 150
P.O. Box CH--1217 Meyrin 2
Geneva, Switzerland

**ICON**
Hewlett-Packard Company
Intercontinental Headquarters
Attn: Mona Foley
3495 Deer Creek Road
Palo Alto, CA 94304

We will be relying on the HP sales force to review and approve the information provided on the form for accuracy, and to ensure that it meets HP standards for fairness and professionalism.

**January 15 deadline**

All forms must be returned to us by January 15 to be considered in the first selection procedure. Forms may be returned at any time; however, by meeting the January 15 deadline, your third parties have more of a chance to see the results of this program in their 1984 sales. Both you and your third party will be notified when we receive the completed form. You will also be notified should one of the forms you submitted be selected for publication as an Application Note. A literature order number will be printed on the back of each note to enable you to order multiple copies from the literature distribution center.

Encourage your software suppliers and OEMs to return their forms to you. Be sure all information is complete — package name, market focus, description, key features, support and typical user profile.

You have an interest in this program too. Once the selected notes are printed they will become an important sales aid for you to hand out to prospective customers with similar applications.

Remember the January 15 deadline and if you have any questions about the Application Note program, contact Marilyn Rauchle, Third Party Merchandising Program, Business Development Group, phone TELNET 125-3067 or 408-725-8111, ext. 3067.
HP-86B obsoletes HP-86A
Mike Steed/PCD

The HP-86B has been extremely popular since its introduction this summer. Most customers have switched from the HP-86A to the HP-86B because of its lower price, larger memory, and built-in HP-IB. As a result, the HP-86A will be removed from the Corporate Price List as of December 31. Any customers who prefer the HP-86A for its 5½” disc drives or parallel printer interface should place their orders before that date. Our remaining inventory of HP-86As is being sold on a first-come-first-served basis.

As always, the HP-86A will be supported for five years. Because the HP-86A is software-compatible with the HP-86B, the customer will have continued access to new software.

CP/M® utilities for Series 80
Nancy Ulman/PCD

A package of six useful public domain utilities formatted for the HP-86 and HP-87 has recently been accepted into the Series 80 Users’ Library. The CP/M® Utilities I Package includes a description of each utility in the package and a 3½” or 5¼” recorded flexible disc. Cost of the package is $16 (3½” version) or $21 (5¼” version). The package should be ordered directly from the Series 80 Users’ Library in Corvallis. The program number for the CP/M Utilities I Package is 8291038. Note that you must have the HP 82900A CP/M system to use this package.

The CP/M Utilities I Package is made available through the Users’ Library on an as-is basis so that others may take advantage of the capabilities they provide. Note that the documentation for these utilities is limited and many of them were not designed for the CP/M novice. Therefore, knowledge of CP/M assembly level programming is recommended.

Included in the CP/M Utilities I Package are the following programs:

- ARCHIVE/BACKUP allows full or incremental backups of floppy or hard disc systems. A patch to CP/M is required. This patch is documented in the ARCHIVE.DOC and ARCHPAT. ASM. files, also part of the utility package.
- CP-COM is a UNIX®-like file copy utility which allows copying of files between drives and/or user areas. To obtain instructions on its use, the user need only enter the command with no parameters.
- FIND STRING is a text file search utility. It will search one or more text files for the desired string. For instructions on its use, enter the command with no parameters.
- LIBRARY UTILITY allows packing of multiple files into one file in order to conserve disc space. Complete instructions are included in the LU.DOC file on the program disc.
- SUPER DIRECTORY program displays a sorted directory with file sizes and remaining space on the disc. Numerous options allow sending the directory listing to a printer or disc file and scanning some/all of drives and/or user areas.
- SUPER SUBMIT utility allows inline and interactive submit program generation and allows nesting of submit files. Enter the command SSUB with no parameters for complete instructions on use.

Another new CP/M utility offered through the Users’ Library is a set of programs that provide a generic utility for moving ASCII data between Series 80 BASIC (Native) mode and Series 80 CP/M. HP TO CP/M is available from the Library for $25 plus media cost. To get a copy of this utility, order program number 8991003 from the Series 80 Users’ Library. The program must be recorded so be sure to add media cost and specify either 3½” or 5¼” disc.

For users of the Series 80 CP/M system, both the CP/M Utilities I package and the HP TO CP/M program will provide useful capabilities at a reasonable price. These software products and hundreds of others are described in the third edition of the Series 80 Software Catalog. If you don’t have a copy of the current catalog, you can order one from HP’s Computer Supplies Operation (P/N 5953-7804). Transfer cost is approximately $5.

CP/M® is a registered trademark of Digital Research, Inc.
UNIX® is a US trademark of Bell Laboratories
Current revisions of Series 80 software

Keith Marchington/PCD

What follows is a list of the current revisions of all Series 80 software and changes made to the HP-86/87 core software (WORD/80, FILE/80, HP-86/87 VisiCalc®, HP-86/87 Graphics Presentation and Data Communications) between each revision.

WORD/80

WORD/80 is currently at revision B. It started shipping July 1, 1983.

Enhancements: Enhancements from revision A to B were: increased speed, pause for single sheet printers, automatic electronic disc support, national language keyboard support, and extended PUT capabilities.

Bug fixes: A number of minor bugs were fixed.

Hardware requirements: WORD/80 now requires 128KB RAM versus 96KB for revision A.

FILE/80

FILE/80 is currently at revision B. It started shipping August 1, 1983.

Enhancements: Enhancements from revision A to B were: increased speed, electronic disc support, national language keyboard support, more flexible data structure (non-unique primary keys), and query data dump capabilities.

Bug fixes: Inability to print with the HP-IB HP 2602 printer and other bugs were fixed.

Hardware requirements: FILE/80 now requires 128KB of RAM versus 96KB for revision A.

HP-86/87 Graphics Presentation

The HP-86/87 Graphics Presentation Package is currently at Revision C.

Enhancements: The enhancements made from revision A to B were: support for the HP-86 (proper screen aspect ratio, GRAF file support (ability to store raster versions of a slide for use with other programs), and printer support (for dumping charts to a graphics printer).

The enhancements made from revision B to C were: electronic disc support, national language keyboard support, and HP-7475 support.

Bug fixes: No major bugs.

Hardware requirements: No change from A to B. Revision C requires 128KB RAM versus 96KB for revision A and B.

HP-86/87 VisiCalc®

HP-86/87 VisiCalc is currently at revision B. It started shipping in late 1982.

Enhancements: There were no enhancements made to VisiCalc at this Revision.

Bug fixes: A major bug affecting the LOADING of data (data disappeared when loaded) was fixed.

Hardware requirements: No changes were made in the requirements for the package.

Data Communications

This package is currently at revision C.

Enhancements: There were no enhancements between revision A and B.

The following enhancements were made between revision B and C: increased data integrity, full allocation (HP-86/87 version) for increased speed, and addition of NO HANDSHAKE mode.

Bug fixes: Between revisions A and B, a problem with the REMOTE CONSOLE mode forced the revision.

No bugs were fixed between revision B and C.

Hardware requirements: No change

Current Series 80 revisions

The following table shows the current revision of all Series 80 software produced at PCD.

<table>
<thead>
<tr>
<th>HP-85 package name</th>
<th>P/N</th>
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<td>BASIC TRAINING</td>
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<td>GENERAL STATS</td>
<td>(82804A)</td>
<td>A</td>
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<td>FINANCIAL DECISIONS</td>
<td>(82803A)</td>
<td>A</td>
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<tr>
<td>MATH</td>
<td>(82811A)</td>
<td>A</td>
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<tr>
<td>CIRCUIT ANALYSIS</td>
<td>(83810A)</td>
<td>B</td>
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<tr>
<td>GAMES</td>
<td>(82818A)</td>
<td>A</td>
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<tr>
<td>LINEAR PROGRAMMING</td>
<td>(82808A)</td>
<td>A</td>
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<tr>
<td>TEXT EDITING</td>
<td>(82816A)</td>
<td>B</td>
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<td>WAVEFORM ANALYSIS</td>
<td>(82809A)</td>
<td>B</td>
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<td>BASIC STATS</td>
<td>(82805A)</td>
<td>A</td>
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<tr>
<td>REGRESSION ANALYSIS</td>
<td>(82806A)</td>
<td>A</td>
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<td>GRAPHICS PRESENTATION</td>
<td>(82801A)</td>
<td>C</td>
</tr>
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<td>VisiCalc Plus</td>
<td>(82800A)</td>
<td>C</td>
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<td>INFORMATION MGT</td>
<td>(82817A)</td>
<td>B</td>
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<td>SURVEYING</td>
<td>(82813A)</td>
<td>B</td>
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<td>GAMES2</td>
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<td>DATA COMMUNICATIONS</td>
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<td>C</td>
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<tr>
<td>MODEM</td>
<td>(82850A)</td>
<td>A</td>
</tr>
</tbody>
</table>
New Plotter Programming Guide for Series 80

Judith Cope/SDD

Customers who wish to write their own plotter programs can now do so easily with the new HP Plotter Programming Guide for Series 80 Computers (P/N 07580-90032). This new guide can be used with any HP plotter and includes:

- instructions on how to connect the plotter to any Series 80 computer
- an introduction to graphics plotting concepts
- step-by-step BASIC programming examples for graphics, bar charts and pie charts
- device-specific sections for the HP 7470, 7475 and 7580/7585
- a section on how to use HP-GL to enhance the graphics statements available in Series 80 BASIC.

This is the perfect manual for the graphics programming beginner, or for the Series 80 user who would like to develop software for the plotter.

SDD also publishes the HP 7580 and 7585 Drafting Plotter Programming Guide (P/N 07580-90030). Another useful tool for Series 80 owners, this guide details many of the features available only on the HP 7580/7585.

Both guides are available through SDD and will be available from CSO after January 1, 1984.

Software Updates

Currently there are update parts available from the Computer Supplies Operation (CSO) for some of the revised core software. Here is a list of the current products available:

<table>
<thead>
<tr>
<th>Product</th>
<th>P/N</th>
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<tr>
<td>WORD/80 Rev. B.</td>
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<tr>
<td>5¼”</td>
<td>82823-17501</td>
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<tr>
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<td>5¼”</td>
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<td>HP-86/87 Graphics</td>
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<td>3½”</td>
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VisiCalc* is a registered trademark of VisiCorp.

CP/M is a registered trademark of Digital Research Inc.

December 1, 1983
HP 150 software distribution

This article covers the following aspects of the distribution of HP 150 software for sales/support use:

- What software has been (and will be) distributed
- Who will receive the software
- When distributions are being made
- How to order software for sales/support use
- What about manuals?

Information is based on a COMgram sent to the field on November 1, 1983.

What is being sent?

HP 150 software comes in two versions — the regular customer product (A suffix on product number) and the demo/support product (Y suffix on the product number — referred to as the 'Y Kits').

The purpose of a Y Kit is to facilitate sales and support of the product within HP and our dealer network. They are the same as the corresponding A products with these exceptions:

- The binder and disc are marked not for resale

Who is it being sent to?

Y Kits are being supplied by the Personal Computer Distribution Operation (PCDO) to dealers with consignment systems, are being supplied by PCDO to HP offices with demo systems, and are being distributed to SEO and CEO subscribers via CSD's Software Distribution Center (SDC).

Because of the national advertising campaign, the following priorities were set for any products which may be in shortage:

1. Dealer consignment systems
2. PICS, CE Librarian, and TSE subscribers
3. Demo systems
4. SE, CE subscribers.

This is the subscription priority system described in the HP 150 Software Support Plan (August, 1983). Please share the HP 150 software among the Sales, CEO, and SEO personnel in your area until the material is freely available.

When distributions are being made

These tables give the product number, description, and date for each product distributed. (Canadian shipments were held up due to the ICON end-of-year shipment freeze.) This information is correct as of November 1, 1983.

### "Key" products (Primary or Core Products)

- **Operating Sys and Terminal Support Kit**
- **WordStar**, **SpellStar**/*MailMerge*™
- **VisiCalc™**
- **Graphics**
- **Condor™** (Levels I and III)
- **MemoMaker**
- **Personal Card File**
- **DSN/Link**
- **BASIC**

<table>
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<tr>
<th>P/N</th>
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<td></td>
<td>Terminal Support Kit</td>
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<td>WordStar*, <strong>SpellStar</strong>,</td>
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Note: n/a — not applicable; will not be distributed to this list

* PICS, CE Librarian, and TSE subscribers
+ will be distributed before November 30

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Hewlett-Packard pays either no royalty or a reduced royalty to the original software author.

Y Kits may include additional discs or documentation for demo/support use.

A Y Kit may support a family of several A products.
### “Distributed” Products (Secondary Products) — as of November 3, 1983

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
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<td>10/27</td>
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<td>n/a</td>
<td>n/a</td>
<td>11/02</td>
<td>n/a</td>
</tr>
<tr>
<td>45468Y</td>
<td>dBASE-II™</td>
<td>44</td>
<td>10/27</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>11/02</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Notes:**
- n/a — not applicable; will not be distributed to this list
- * PICS subscribers but not distributed to CE Librarian or TSE subscribers.
- + will be distributed before November 30

If you do not receive a distribution you should have received, contact the SE Administrator (SEA) in your area. Neither POD, PSD, PCDO, nor SDC can help you.

**How to order Demo/Support Kits**

Note that Demo/Support Kits (Y Kits) are only for sales and support use. Orders will not be accepted from user divisions — **divisions must order the regular customer products (the A products) as listed in the customer literature.**

The field should order Y kits. If you are not a subscriber, or if you need one of the secondary (distributed) products listed above, order the Y Kits from Personal Computer Distribution Operation (PCDO — formerly A5D7, now D700). They are listed on SODA (via the Parts Price List), marked **field only,** and have list prices.

The Transfer-A1-Cost (TAC) prices are given in the tables above. The list price for each Y Kit is set, so that those who order them from outside the US (who pay list minus 30.5%) will pay roughly the same price as those in the US (who are billed at TAC).

Enter an I2 order. As with all I2 orders, you specify the price as **please advise** ("PLSADV"). PCDO is at 408-720-1800 or TELNET 720-2525.

**What about HP 150 Manuals?**

Due to legal limitations, manuals for HP 150 applications are not available to customers without the corresponding software. We have extended this limitation to internal users as well. Manual orders require special handling in Order Processing and Manufacturing. For most of the Y Kits, the bulk of the cost is for the manuals. Therefore, ordering the entire Y Kit is cheaper for HP — and faster for you.

Thank you for your support of the HP 150!

**Trademarks**

- WordStar™ is a US registered trademark of MicroPro International Corporation.
- SpellStar™ and MailMerge™ are US trademarks of MicroPro International Corporation.
- VisiCalc™ is a US registered trademark of VisiCorp.
- Condor™ is a US trademark of Condor Computer Corporation.
- Picture Perfect™ is a US trademark of Computer Support Corp.
- Diagraph™ is a US trademark of Computer Support Corp.
- MicroPlan™ is a US trademark of Chang Laboratories, Inc. plus MicroPlan Consolidation.
- dBASE-II™ is a US trademark of Ashton-Tate.
Introducing the HP 150 software application that looks and works like the HP-12C! That's right — with Financial Calculator, you compute on the HP-150 the same way you would with your pocket calculator. Therefore, with no computer commands to learn, you can immediately apply your HP-12C experience to using Financial Calculator.

Financial Calculator has the full functionality of the HP-12C such as keystroke-simple time and money solutions and powerful functions designed to solve some of the most advanced financial and accounting problems: mortgage and bond amortization, discounted cash flow analysis, internal rate of return, net present value calculations, and fundamental statistical functions.

But ease of use and functionality do not stop there — Financial Calculator can print intermediate results to keep track of important data. It can also transfer both programs and registers to and from files to allow you to build up your personal library of financial or statistical applications. Data also can be transferred to VisiCalc®.

And all that computing power available at a $75 list price!

VisiCalc® is a US registered trademark of VisiCorp.

"Series 100 Communicator" subscriptions now easier to order

John LaCava/CSO and Curt Gowan/POD

You may now order subscriptions to the Series 100 Communicator through CSO rather than the SEO/Sales Office as in the past. This will make the Communicator much easier to obtain. Here are the details:

**Part number change/pricing**

Effective November 1, the old part number, 45530N, was replaced by three new part numbers, each of which corresponds to a one-year subscription.

<table>
<thead>
<tr>
<th>P/N</th>
<th>Edition</th>
<th>US List</th>
</tr>
</thead>
<tbody>
<tr>
<td>45530A</td>
<td>US Edition</td>
<td>$24</td>
</tr>
<tr>
<td>45530B</td>
<td>Canada/Mexico</td>
<td>33</td>
</tr>
<tr>
<td>45530C</td>
<td>International</td>
<td>43</td>
</tr>
</tbody>
</table>

The higher prices for subscriptions outside the US reflect the cost of sending periodicals by accelerated mail.

**New trade orders**

Trade customers should order Communicator subscriptions just as they would order any product from CSO — by using CSO's special phone lines (see phone numbers in this issue of Computer News in Computer Supplies) or by ordering through their local sales office.

Customers should be sure to order the appropriate edition (US, Canada/Mexico, or International).

**Current trade subscribers**

Current subscribers whose orders were placed through the SEO/Sales office will continue to receive their Communicators without interruption. When their subscriptions expire, they will be notified to reorder through CSO using the new part numbers.

**New Series 100 owners**

HP 150 customers can receive a free six-month subscription by returning a card included on the first page of the Owner's Manual; the subscription begins with the next issue of the Communicator. Upon receiving the last issue of the free trial, the customer will receive instructions on purchasing a regular one-year subscription.
Internal orders
Place internal orders on CSO (A500) with a HEART I2 order.

SEO/CEO SDC distribution
The Series 100 Communicator will continue to be distributed with Series 100 software on these SDC subscription services:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5751-5748</td>
<td>Series 100 PICS Subscription</td>
</tr>
<tr>
<td>5957-3679</td>
<td>Series 100 CE Librarian</td>
</tr>
<tr>
<td>5957-3671</td>
<td>Series 100 CE Subscription</td>
</tr>
<tr>
<td>5957-3685</td>
<td>Series 100 SE Subscription</td>
</tr>
</tbody>
</table>

SEO/CEO people can order Communicator-only subscriptions (45530A, B, or C) from their SEA or via CSO.

Questions about a subscription
Direct customers' questions to the organization from which their current subscription was ordered (Sales Office/SEO or CSO).

Starting date and back issues
A subscription will start with the next issue of the Communicator. If a customer wants current or back issues, single copies are available from CSO at $4 per issue (US List). Part numbers for back issues and summaries of all major articles are listed in each issue of the Communicator.

Also in this issue

- Announcing the HP 9000 Series 200 HP-UX products
- HP Series 200 HP-UX computers — avoid post-sales problems
- HP 9816 Special easing pain of keyboard upgrading
- HP Series 200 networking capabilities increased again
New RND Sales Guide — the right stuff
Duncan Campbell/RND

The RND Sales Guide is the right stuff. It is a complete and accurate description of HP Technical Computers’ I/O functions and a timesaving reference manual for implementing your sales plans. Updates will be provided periodically to keep the Sales Guide accurate.

RND wants I/O products to continue to be a key part of your selling strategy. Please send your comments on the Sales Guide to RND Marketing, COMSYS 5200.

HP 1000

HP 7970ER tape drives supported on HP 1000 M/E/F
Diane Leeds/SRO

HP 7970ER magnetic tape drives are now supported on HP 1000 M/E/F series computer systems. The tape drive, when configured to interface with an M/E/F, is priced to sell at $12,040 (US list).

At this time, you must first reserve this tape drive through SRO Sales Development. The product option only must be ordered as a HEART override; the 7970ER itself is on the CPL. The chart below lists the necessary ordering information.

<table>
<thead>
<tr>
<th>P/N</th>
<th>Price US List</th>
<th>Factory Base</th>
<th>SMMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 7970ER</td>
<td>$8,130</td>
<td>$7,810</td>
<td>$97</td>
</tr>
<tr>
<td>Opt. 226*</td>
<td>3,910</td>
<td>3,910</td>
<td>35</td>
</tr>
</tbody>
</table>

*HEART OVERRIDE: To override HEART on this option, please follow instructions in the OP Field Documentation.

Availability on this option is four weeks. If you have any questions, please give SRO Sales Development a call at TELNET 720-2467.

Ordering Information

We have just introduced a new textbook, Structured FORTRAN 77 Programming with Hewlett-Packard Computers by Professor Seymour Pollack, Department of Computer Science, Washington University in St. Louis.

Professor Pollack emphasizes the important interrelation between FORTRAN 77 and structured programming. FORTRAN 77 language features are carefully illustrated through the use of numerous well-structured examples. In this way the characteristics of the language, and principles and techniques of structured programming reinforce one another. The author’s top-down approach provides the student with a proven methodology for effective design and implementation of programs.
The book is an attractive text for users of HP FORTRAN 77 regardless of the extent of their previous FORTRAN background. For readers with programming background in any other high level language, the book is an orderly presentation of HP FORTRAN 77, emphasizing effective design and implementation through the use of good, clear, logical structure.

The HP FORTRAN 77 compiler fully implements the American National Standards Institute X3.9-1978 standards (ANSI 77) for FORTRAN. It has many extensions to provide a more structured approach to program development and more flexibility in computing for scientific applications. As part of its extensions, HP FORTRAN fully implements the MIL-STD-1753 Military Standard FORTRAN.

You can order this comprehensive tutorial from CSO; its part number is 92836-90005. It is available now! See the CSO Fast Phone numbers in Support/Supplies in this issue of Computer News.

HP 9000
Announcing the HP 9000 Series 200 HP-UX products
Chris Van Woerkom and Dave Deane/FSD

Three new computers have been added to the HP 9000 family. A new, high-performance CPU board option is available for the Series 200 Models 200, 236, and 236C. It accommodates the HP-UX operating system which will further enhance our line of 16/32 bit, MC68000-based workstations.

Hardware
It's simple! Take the CPU board out of a current Model 220 (HP 9920) or Model 236 (HP 9836A/C), replace it with a new CPU board, and you have a Series 200 product capable of running HP-UX.

The new CPU board includes a 12.5 MHz 68000 processor (previously, only an 8 MHz 68000 was available). In addition, the board contains 16Kb of cache memory and the memory management hardware necessary for multi-user applications. Note that there is no user RAM present on the new CPU board.

The base level hardware order numbers are HP 9920U, 9836U, and 9836CU. They designate the new-CPU versions of the HP 9920A, 9836A, and 9836C respectively. As such, they include no software or extra RAM.

The Series 200 HP-UX products are more expensive than the corresponding Series 200 products. This is primarily due to the increased cost of the state-of-the-art, higher-performance parts on the CPU board (for example, 45-nsec static RAM parts are used for cache). In general, U products are about $1,200 more expensive than the analogous A/C products.

Systems
There are two ways to sell a configured UNIX system. A bundled T system is generally the best choice for your customers' first HP Series 200 HP-UX installation. A T system consists of an HP 9XXXU computer, 1Mb RAM, and the complete HP-UX software product. The T systems provide a $940 discount, compared with the price of the individual components.

For your customers who purchase multiple Series 200 HP-UX installations, the second and successive systems should be ordered as U products along with RAM and the "additional copy" HP-UX software product. This will result in an additional savings of $310 for single-user systems and $1,060 for multi-user systems, as compared with the price of the corresponding T product.

Upgrades
A CPU upgrade kit is available to allow installed Series 200 products to run HP-UX. The HP 98143U provides the higher-performance CPU board. A special bundled upgrade kit, P/N 98143T, offers an economical way to upgrade an S system to a T system. The 98143T includes a high performance CPU board, 0.5Mb RAM, and a DMA board. The bundled upgrade saves customers $2,500 as compared with the price of the individual components. The special price will be in effect for nine months to allow existing customers to upgrade to HP-UX more easily.

DMA board
A new DMA board has been developed that will work with both Series 200 processor boards. The HP 98620B replaces the HP 98620A. Note that existing customers cannot use their HP 98620A cards in Series 200 computers that contain the high-performance CPU board.
### Technical Computers

<table>
<thead>
<tr>
<th>HP Product</th>
<th>Description</th>
<th>List Price (US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>98670A</td>
<td>#012 Single-User HP-UX</td>
<td>$2,500</td>
</tr>
<tr>
<td></td>
<td>#005 Additional copy</td>
<td>1,250</td>
</tr>
<tr>
<td>98680A</td>
<td>#022 Multi-user HP-UX</td>
<td>4,000</td>
</tr>
<tr>
<td></td>
<td>#005 Additional copy</td>
<td>2,000</td>
</tr>
<tr>
<td>9920U</td>
<td>Modular computer</td>
<td>5,700</td>
</tr>
<tr>
<td>9920T</td>
<td>#012 Mod. computer with single user HP-UX</td>
<td>11,500</td>
</tr>
<tr>
<td>9920T</td>
<td>#002 Mod. computer with multi-user HP-UX</td>
<td>13,000</td>
</tr>
<tr>
<td>9836U</td>
<td>Computer</td>
<td>13,200</td>
</tr>
<tr>
<td>9836T</td>
<td>#012 Computer with single-user HP-UX</td>
<td>19,000</td>
</tr>
<tr>
<td>9836T</td>
<td>#022 Computer with multi-user HP-UX</td>
<td>20,500</td>
</tr>
<tr>
<td>9836CU</td>
<td>Color Computer</td>
<td>16,200</td>
</tr>
<tr>
<td>9836CT</td>
<td>#012 Color computer with single-user HP-UX</td>
<td>22,000</td>
</tr>
<tr>
<td>9836CT</td>
<td>#022 Color computer with multi-user HP-UX</td>
<td>23,500</td>
</tr>
<tr>
<td>98143U</td>
<td>Processor upgrade</td>
<td>3,000</td>
</tr>
<tr>
<td>98143T</td>
<td>#012 HP-UX upgrade with single-user software</td>
<td>5,500</td>
</tr>
<tr>
<td></td>
<td>#022 HP-UX upgrade with multi-user software</td>
<td>7,000</td>
</tr>
<tr>
<td>98620B</td>
<td>DMA board</td>
<td>500</td>
</tr>
</tbody>
</table>

The following peripherals are also supported on the Series 200 HP-UX products:

- HP 79719 Track Mag Tape Drives
- HP 7914P Disc Drive
- HP 7933H Disc Drive
- HP 7935H Disc Drive
- HP 2622B Terminal
- HP 2623B Terminal
- HP 2624B Terminal

In addition, the 09800-10X80 terminal emulator will allow a Series 200 product to act as a terminal on a Series 200 HP-UX product.

There are some restrictions on the use of discs outlined in the Configuration Guide.

### Software

The Series 200 HP-UX products offer the HP-UX operating system in either single- or multi-user configurations. You have the choice of buying the software standalone or bundled-in with the hardware. HP-UX on the Series 200 is a direct port of the Bell System 111 kernel, commands, and libraries, as well as the C and FORTRAN 77 compilers.

Also, we have added the existing Series 200 Pascal compiler, DGL (graphics library), and a number of extensions from Berkeley 4.2 UNIX.

The software comes in a bundled configuration with the UNIX core, FORTRAN, C, Pascal, DGL, the UNIX datacommunications capabilities, an MC68000 assembler, and ADB assembly language debugger.

In general, HP-UX on the Series 200 is compatible with the Series 500. The primary differences are outlined in the Sales Training Manual. A more detailed list will be sent to the SEs.

### Supported peripherals

The Series 200 HP-UX products support all the existing Series 200 peripherals except the following:

- HP 9885M/S 8" Flexible Disc Drive
- HP 2601A Daisy Wheel printer
- HP 2602A Daisy Wheel Printer

HP 9885M/S 8" Flexible Disc Drive
HP 2601A Daisy Wheel printer
HP 2602A Daisy Wheel Printer

The following peripherals are also supported on the Series 200 HP-UX products:

- HP 79719 Track Mag Tape Drives
- HP 7914P Disc Drive
- HP 7933H Disc Drive
- HP 7935H Disc Drive
- HP 2622B Terminal
- HP 2623B Terminal
- HP 2624B Terminal

In addition, the 09800-10X80 terminal emulator will allow a Series 200 product to act as a terminal on a Series 200 HP-UX product.

### Literature

You should have received the HP Series 200 HP-UX Sales Training Manual by now. Other Series 200 literature has been revised to include the HP-UX products.

You have a ready-made market for these new HP-UX products in your base of scientific and engineering customers. Series 200 HP-UX will also open many new customer doors for you!

**UNIX is a trademark of Bell Laboratories**

### HP Series 200 HP-UX computers — avoid post-sales problems

*Dave Deane/FSD*

Here are two notes that will help you avoid possible post-sales problems with HP Series 200 HP-UX products.

First, there is no high-performance CPU option on the HP 9826. This decision was made because most HP-UX customers require a larger screen than offered on the Model 226. However, if your customer already has a Model 226, it is possible to upgrade to a high-performance CPU with the 98143U Upgrade Kit. There is one restriction: if an older (pre-1982) Model 226 does not have a CONTAINS 09826-66553 POWER SUPPLY sticker above its HP-IB connector, the 09826-66553 power supply board must be purchased and installed in order to upgrade the CPU board. This is the same restriction that applies to the Powerfail Upgrade Kit.
Second, because HP-UX offers a multi-user/multi-tasking environment, the physical system configuration becomes more critical. This is especially true in large systems. For example, a printer should not share the same HP-IB bus as a plotter if both are heavily used.

There are several considerations that should be addressed when configuring a large HP-UX system. These are spelled out in detail in Chapter Two of the *HP Model 220U Installation Manual*, P/N 09920-90005. This manual is being sent to SEs.

**HP 9816 Special eases pain of keyboard upgrading**  
*Jim Geer/FSD*

_for North America Only_

Here's an opportunity for your North American customers who felt the standard keyboard (without numeric entry pad) just didn't offer the functionality they desired, to get the new expanded keyboard at a special price — reduced 29%. During the special, HP 9816 owners pay only $495 US for the enhanced keyboard (with the exchange of their small keyboards) — at a savings of $205 from the list price. The Upgrade Special will be in effect from November 1, 1983, until February 29, 1984. Plans are now under consideration for a similar offer in both Europe and Japan, with details to come.

In the US, the exchange is being coordinated through the Corporate Parts Center, with orders to be directed to them. No discounts are available on this special price, other than those required under the normal Dealer program. Orders for the extended keyboard under this special should specify the distinct keyboard part numbers established for this purpose, as follows:

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>98203-69012</td>
<td>ASCII Keyboard: standard HP 98203B for use on HP 9816 with serial number prefix 2320A.</td>
</tr>
<tr>
<td>98203-69112</td>
<td>ASCII Keyboard: same as HP 98203B Option 001 for use on HP 9816 with serial number prefix 2230A (cable has special grounding strap).</td>
</tr>
</tbody>
</table>

_Alternate keyboard options:_

- Local language part numbers and ordering information to be determined.

**HP Series 200 networking capabilities increased again**  
*Sue Bodoh/CNO*

Effective December 1, two more networking products are available for the HP Series 200 computers. These new products, plus the HP 3270 Display Station Emulator announced last month, will enhance your networking sales possibilities.

**HP 2622 Block/Forms Mode Terminal Emulation**

The new HP 98790A Series 200 Block/Forms Mode Terminal Emulator emulates the HP 2622A Terminal’s block and forms mode features, as well as its line and character mode. It also provides bidirectional file transfer, screen dump to a printer, and Print All On. The emulator does not support HP 2622P operations. The Block/Forms Mode Terminal Emulator has been fully tested with the HP 3000, particularly with HPMail, HPSlate, and VIEW/3000 applications.

Although the HP 98790A is capable of character and line mode operation, the current Series 200 Terminal Emulator, P/N 09800-10X80, will not be discontinued. There are two reasons for this: first, the HP 98790A will not operate on the HP Model 226 computer because of its nonstandard CRT size; and second, your customer has a choice if he does not need block/forms mode capability.

The HP 98790A sells for $250 US, and is ordered with one of three media options: Option 630 for 3½" media, Option 650 for 5½" external media, and Option 655 for 5½" internal media. HP 98790M and R Right-to-copy products each sell for $125 US.

**SRM enhancements**

SRM 2.0 provides many new enhancements, including better performance, plotter spooling, new console commands, and support of new peripherals, plus controller operation on the HP 9920.

The HP 98619A SRM Operating System (OS) was revised effective December 1 to SRM 2.0 software. All customers on support services will automatically receive the new software.

*Warning: Current HP 9826 Option 500 customers will need to purchase an additional HP 98256A RAM Card to use the SRM 2.0 software.*

Customers who have SRM 1.0 and who are not on support services will be able to buy the SRM 2.0 OS at a discount.
Effective December 1, an HP 9920-based SRM system is available as HP 9920 Option 500. We will continue to offer the HP 9826 Option 500 SRM system. However, we recommend that customers purchase the HP 9920 Option 500 because of its better price/performance and expandability. The HP 9920 Option 500 sells for $10,000 US; your customer must purchase either an HP 82912A or 82913A Monitor separately. The HP 9826 Option 500 sells for $12,110 US, and only includes one memory board. Therefore, your customer must purchase an additional HP 98256A Memory Card separately.

Both SRM systems will be shipped with the SRM 2.0 OS, which can be purchased separately as the HP 98619A at $2,020 US.

A field training manual for these new products (plus the 3270 Emulator) has been distributed worldwide, along with the new HP 9000 Family Data Communications Technical Supplement. These publications provide details on the new products.

*Please note in your Sales Training manual that the HP 98795A 3270 Display Station Emulator now has the added feature of 3279 extended color capability.*

Be sure to contact all of your prospects who have asked for these types of networking power.

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**HPSPICE has shipped — Order your copy to demo!**

*Rosanne Wyleczuk/EPD*

HPSPICE software has shipped from Ft. Collins. This circuit simulation program serves as an excellent demo of the HP 9000 computer systems or order the multi-user version (98183A) for demo purposes now. This computer-aided engineering tool, enhanced with a simple command set and graphics output capabilities, will astonish engineers who are familiar only with large mainframe-based simulators.

You will easily be able to use HPSPICE on the HP 9000 with your knowledge of the HP 1000 version. Also, continue to use the Sales Training Manual for the HP 1000 HPSPICE as background training material. The User Guide shipped with the product, consisting of several exercises, is an excellent resource for creating a demo that meets your needs.

**EPD reduces prices on HPSPICE and GRAPHICS**

The cost of graphics software on the HP 9000 has been reduced by 20%! Look at the tables below and compare. In this new position, we anticipate even greater customer enthusiasm for graphics software on the HP 9000. Also consistent with HP 9000 computer system pricing, the price of the multi-user version of HPSPICE is now $10,000. This price reduction is consistent with the product's capabilities on the HP 9000 systems, and is consistent with recent product introductions by competitive workstation vendors. You will see this reduction on the December price list.

**Summary of December 1 CPL changes**

<table>
<thead>
<tr>
<th>Product</th>
<th>Old</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPSPICE</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>HPSPICE</td>
<td>15,000</td>
<td>10,000</td>
</tr>
<tr>
<td>DGL</td>
<td>1,000</td>
<td>800</td>
</tr>
<tr>
<td>DGL</td>
<td>2,500</td>
<td>2,000</td>
</tr>
<tr>
<td>AGP</td>
<td>2,000</td>
<td>1,600</td>
</tr>
<tr>
<td>AGP</td>
<td>5,000</td>
<td>4,000</td>
</tr>
<tr>
<td>DGL bundled</td>
<td>300</td>
<td>240</td>
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<td>AGP bundled</td>
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<tr>
<td>AGP bundled</td>
<td>1,500</td>
<td>1,200</td>
</tr>
</tbody>
</table>

**Minimum disc space for HPSPICE on HP 9000**

*Rosanne Wyleczuk/EPD*

The minimum disc space for the HPSPICE product has been determined using some actual tests of the program, and some qualified estimates as described below.

The minimum disc space for HPSPICE is 4Mb for the first circuit simulation user. The recommended disc space is 5Mb. Each additional user may require 2 to 2-1/2 Mb more space. This calculation assumes a required 1Mb for HPSPICE, and additional space for 20-25 circuit input and output files per user.

Note that the user space for circuit data will vary widely with the size of circuits described and the analyses performed. Also, space will be consumed by VM when multiple simulations are executing at the same time; the amount varies with the number of simultaneous simulations.

Therefore, to permit growth (and assuming other use of the HP 9000 system), a 7912 P/R disc is recommended. For the single-user product (P/N 98163A) the 7911 P/R may initially be satisfactory, but this allows little room for growth.

If this data affects your customer and backlogged orders, please contact me at TELNET 157-3277.

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**Minimum disc space for HPSPICE on HP 9000**

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If this data affects your customer and backlogged orders, please contact me at TELNET 157-3277.
New book tells how to design effective business graphics

Gretchen Coar/SDL

Have you noticed over the last few years how computer graphics have changed the way business people communicate? Today, every meeting and every report offers opportunities for using computer graphics output on 35mm slides, overhead transparencies, flipcharts, or standard-size paper.

People have discovered how powerful graphics can be for analyzing data, improving recall, and shortening meetings. But this graphics power is elusive. Poorly designed graphics can confuse, mislead, and distract an audience, or simply overwhelm their senses.

Fortunately, your customers don't need art degrees to create good business graphics — they can read HP's new booklet, *Steps to Effective Business Graphics*. The 54-page, color booklet leads readers through seven simple steps for designing charts using typical business graphics software. In less than an hour, they'll learn how to choose the correct type of chart, use color effectively, and combine the principles of good design to enhance each chart.

*Steps to Effective Business Graphics* (P/N 1115957-6979) is only $12 (US list price). Customers can order the booklet directly through CSO or through HP sales offices. For internal HP orders, send an 12 order via HEART to CSO (A500). CSO Fast Phones are the fast and easy way to order this book. See Support/Supplies in this issue for CSO phone numbers.

New printers supported as remote spooled devices

Hans Nilsson/IND and Scott Wipperman/IND

Remote spooled printing on the HP 3000 will be expanded to include the new printers being introduced by the Boise and Vancouver Divisions. (See HP 3000 support for new 300 line-per-minute printer.) These printers will be supported in both point-to-point configurations and as devices on an MTS network. The new HP 293X family of 200 cps printers and the HP 2563A 300 lpm printer will provide lower cost solutions with better print quality for customers that want hardcopy output at locations remote from the host computer system.

DSN/ATP will support these new printers as spooled devices on HP 3000 Series 64 and 68 remotely or directly connected, and on Series 48, but directly connected only. The 293X family of printers can be connected to a local or remote ATP. The 2563A printer must be connected via a direct connect port. It cannot, in other words, be connected via modems using ATPs.

DSN/ADCC will support these new printers as spooled devices on HP 3000 Series 39, 40, 42, 44, and 48. Also on the ADCC, the HP 293X family of printers can be remotely or directly connected. The HP 2563A printer must be connected via a direct connect port and is not supported remotely over point-to-point modem connections.

There may be performance degradation when 2563As are simultaneously working over ATPs or ADCCs. Specific performance data will be released when it becomes available. Also be aware that these new printers are not supported as spooled devices over the DSN/ATC.

DSN/MTS will support these new printers as spooled devices on current HP 3000 Computer Systems (Series 39, 40, 42, 44, 48, 64, 68) running MPE-V. The 293X family of character printers can be connected to a local or remote MTS link via either an HP 2333A MTS cluster controller or the second port of an HP 2624B terminal on a MTS link. Additionally, the 2933A and the 2934A can be attached directly to an MTS or Datalink line by ordering the appropriate multipoint Option (033, 034, or 039).
Similarly, the 2635A 300 lpm printer can be connected to either a cluster controller or an MTS link. To connect it to a 2333A, order the RS-232 Option 049 with the printer. Don’t configure the 2635A on the second port of an HP 2624B, however. This is not a supported configuration because the printer would overwhelm the terminal. By ordering the 2563A with the MTS Option 505, the printer can be connected to an MTS link using the appropriate Multipoint or Datalink pod.

As with any printer connected to an MTS link, there are several considerations to keep in mind.

Limit the number of printers per MTS line to four, with a maximum of 16 printers per system. The aggregate baud rate of the printers should not exceed the baud rate of the MTS line they are attached to. And the performance of printers on an MTS line is dependent upon the speed of that line, the printer’s priority, the traffic pattern, and the processor load.

The following table summarizes supported configurations of remote spooled printers on HP 3000 Computer Systems. For more information on these new products, refer to their Data Sheets and Field Training Manuals.

### Remote Spooled Printer Support Matrix

<table>
<thead>
<tr>
<th>PRINTER</th>
<th>ATC</th>
<th>ADCC</th>
<th>ATP RS-232</th>
<th>ATP RS-422</th>
<th>MTS DIRECT</th>
<th>MTS 2333A</th>
<th>MTS 2624B</th>
<th>MPE RELEASES</th>
<th>HP3000 SYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2601A</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>MPE-V</td>
<td>B</td>
</tr>
<tr>
<td>2602A</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>MPE-V</td>
<td>B</td>
</tr>
<tr>
<td>2631B</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>MPE-V</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>MPE-V</td>
<td>A</td>
</tr>
<tr>
<td>2932A</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>MPE-V</td>
<td>B</td>
</tr>
<tr>
<td>2933A</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>MPE-V</td>
<td>B</td>
</tr>
<tr>
<td>2934A</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>MPE-V</td>
<td>B</td>
</tr>
<tr>
<td>2608S</td>
<td></td>
<td>LOCAL D ONLY</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>MPE-V</td>
<td>A &amp; B</td>
</tr>
<tr>
<td>2563A</td>
<td>LOCAL D ONLY</td>
<td>LOCAL D ONLY</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>MPE-V</td>
<td>B</td>
</tr>
</tbody>
</table>

A. Series III, 30, 33  
B. Series 39, 40, 42, 44, 48, 64, 68  
C. The new 8 bit functionality available on local connections only  
D. Use of this printer on this interface may affect system performance.  
  Performance data will be released when available.

* NOT MPE-VR
DSN/MTS spooled printer support update  
Scott Wipperman/IND

Some confusion seems to have resulted from the announcement concerning MTS support of spooled character printers for HP 3000 systems running MPE-V. This enhancement supports:

- HP 2601A, 2602A, and 2631B character printers as spooled devices or application-controlled devices when they are connected to an HP 2333A Multipoint Cluster Controller, or
- the second port of an HP 2624B CRT on an MTS link.

Please note that the only supported CPUs are the HP 3000 Series 39, 40, 42, 44, 48, 64, and 68. The only supported Operating System is MPE-V. There are no plans to support MTS Spooled Character Printers on MPE-IV, MPE-VR, the HP 3000 Series III, 30, or 33.

The enhancement allows HP 3000 users to have both terminal access and spooled printing at a remote site — all on the same link. There are some limitations and performance considerations, though. So before selling MTS Spooled Printing, refer to the "Printer Support on DSN/MTS" section of the HP 3000 Data Communications Products Field Training Manual (August 1983) for product positioning, configuration, and support information.

While you have your copy of the HP 3000 Data Communications Products Specifications Guide Supplement out, a clarification needs to be made. On page 21 of the supplement, the 30010A INP is listed under "Product Requirements." While MTS in general, and the HP 2608S as a spooled MTS device, are supported using this INP on the HP 3000 Series III, spooling to character printers is not supported. Please note this in your copy.

HP 3000 support for new 300 line-per-minute printer  
Adrienne Kelly/CSY

CSY is pleased to announce support for the new HP 2563A Series 300 LP, available from Boise Division. The HP 2563A uses an improved dot placement accuracy to increase the print quality of its 5x7 dot matrix cell. The printer, which is designed to accommodate a wide range of applications, operates at 300 lpm in standard mode and 150 lpm in high density mode. It incorporates the best features of the HP 2608S, which it replaces, and has added printing capabilities, including bar code and compressed formats.

The standard interface in the HP 2563A Series 300 LP is HP-IB. To increase the flexibility of system printers, Boise is currently investigating support of the HP-IB Extender from South Queensferry Division. The HP-IB extenders will increase the acceptable distance of the 2563A (and future printers from Boise) to a maximum of 500 meters from the system.

Support

CSY has tested and fully supports this new printer via HP-IB on the following HP 3000 systems:

<table>
<thead>
<tr>
<th>System</th>
<th>Number of Printers</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/33</td>
<td>2</td>
</tr>
<tr>
<td>4X</td>
<td>4</td>
</tr>
<tr>
<td>6X</td>
<td>4</td>
</tr>
</tbody>
</table>

Unlike the HP 2608S, the HP 2563A is a low speed device. It does not require a dedicated GIC and has no restrictions on sharing a GIC with other devices. The printer is shipped with one electrical device load, but may be configured for a range of one to seven device loads. Its internal cabling requirement is one meter.

The RS-232C interface and DSN/Multipoint interface may be used for connecting the 2563A as a remote workstation printer. Please see New printers supported as remote spooled devices in this issue of Computer News for datacomm configuration support.

Availability

The HP 2563A may be ordered immediately from Boise Division and has four to six weeks availability. The printer is supported on the Q Delta 1 MIT and all MITs following Q Delta 1.

Notwithstanding its enhanced features, the 2563A is economically priced at $5,780, half the price of its predecessor, the 2608S. The exceptional price/performance of this printer sets a new standard for computer system printers, which should make it an attractive solution for HP 3000 customers.

For more details on HP 2563A characteristics, please see Introducing four new printers in this issue of Computer News.
Firmware bug discovered in some HP 7470A plotters
Suzanne Tylka/SDD

The HP 7470A Option 001 plotter with serial prefix 2308A has a firmware bug when the plotter is interfaced to the HP 3000 in eavesdrop mode with HPDraw, HPEasyChart, or DSG/3000 software packages. Symptoms include missing or erroneous vectors on a plot and a flashing light on the plotter. The bug is most obvious when labeling with software-generated characters. This bug is unique to the HP 7470 plotter and does not apply to the new HP 7475 plotter.

To fix the bug, SDD has set up a 3000/7470 service kit (P/N 07470-60100). The kit is available from CPC (Division 1500) for $25 and is an extended warranty repair. The affected plotter should have the EPROM installed by the nearest field repair center. SDD will accept charges for one hour of labor plus parts. No travel charges will be accepted.

For all incoming orders, the HP 7470A is not supported on the HP 3000 unless Option 300 is specified. Option 300 will be shipped with a special board — one with a “fixed” EPROM in place of the ROM.

Dedicated GIC not required for HP 7974A
Sandy Hansen/GLD

Unlike the HP 7970E 1/4” tape drives, the new HP 7974A does not require a dedicated GIC (General I/O Channel) on the HP 3000. This means that the tape drive can share a GIC with another HP-IB device such as a printer, saving the cost of an additional GIC which might otherwise be needed. This is another good reason to recommend this drive to your customer!

Immediate availability on refurbished HP 3000 S/30R, S/33R or S/IIR
Russ McBrien/SRO

For North America Only

Due to new streamlined manufacturing techniques we are now able to offer fully refurbished systems with instant availability. If you need to get an HP 3000 shipped from the factory ASAP, we can help. We are prepared to ship immediately upon receipt of order. Did a competitor’s system go down? With these top quality re-marketed systems you can have an HP 3000 on site fast. Do you need rapid response to an account’s need for additional processing power? Immediate availability re-marketed systems will be on the way as soon as the order is received.

This offer is good on S/30R, S/33R and S/IIR.

If you have a pressing need for an instant system, just call the Immediate Availability HOTLINE for your area:

<table>
<thead>
<tr>
<th>Region</th>
<th>Contact</th>
<th>Hotline number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neely</td>
<td>Liza Lopez</td>
<td>408-720-2446</td>
</tr>
<tr>
<td>Southern</td>
<td>Ray Dean</td>
<td>408-720-2513</td>
</tr>
<tr>
<td>Midwest</td>
<td>Carol Robertson</td>
<td>408-720-2447</td>
</tr>
<tr>
<td>Eastern</td>
<td>Ray Dean</td>
<td>408-720-2513</td>
</tr>
<tr>
<td>Canada</td>
<td>Carol Robertson</td>
<td>408-720-2447</td>
</tr>
</tbody>
</table>

CALL TODAY!

NOTE: This program IS on a trial basis and may be discontinued at any time. The guarantee of instant availability is made only on re-marketed system products. Not all peripherals or other products from other divisions may be available for immediate shipment, but we will work with you to develop a complete solution.
HPPAY — a total payroll solution for your HP 3000 customers

Martha Linenburger/FSO

For North America Only
Now you can offer your customers an HP 3000 payroll solution. HPPAY provides a highly competitive feature set, implementation services, and one year of tax updates — all for one price. HPPAY reflects HP's commitment to help your customers meet business and productivity objectives.

Customers purchasing HPPAY receive:

- HPPAY
- HPPAY-ASSIST Implementation Services
- One Year of Free Tax Update Service
- HPPAY Manual Set

HPPAY product overview
HPPAY has an extensive feature set designed to streamline payroll processing. You can tailor software without programming with HPPAY. System tables specify tax, deduction, and pay parameters. And HPPAY has an interface to HP General Ledger so that customers can take advantage of an integrated HPPAY/HP General Ledger solution.

HPPAY will win new system sales
- Payroll is a HOT application. IDC anticipates a greater than 30% compounded annual growth rate through 1985 for payroll software sales.
- HPPAY’s feature-set far surpasses that of IBM MAPICS payroll software and other competing products. Take advantage of our strengths and sell more hardware in conjunction with HP’s newest application solution. Your HPPAY Training Kit provides a complete overview of the competition.
- HPPAY integrates with HP Financial Accounting. Let multi-application selling and a single vendor solution lead to more hardware sales for you.

Target customers — HPPAY goes anywhere
HPPAY fits in all industries. Composed of a comprehensive feature set, HPPAY is functionally capable of meeting the general needs of all businesses.

Current GA/3000 and HP Financial Accounting users, as well as prospective HP Financial Accounting customers, are excellent candidates for HPPAY. Financial customers want an integrated solution. HPPAY increases the breadth of HP's financial product line.

Primary customers for HPPAY are:
- Divisions of large horizontal or major accounts
- Small to medium-sized companies in the horizontal marketplace.

Primary decision makers for HPPAY are:
- Financial professionals
- EDP managers.

HPPAY early success program
You've told us you need references in order to sell application solutions. In response to your message, we initiated the HPPAY Early Success Program in October. The objective is at least one reference site per Sales Area by December 31.

As of November 1, six reference sites have begun implementation. The Early Success program is being managed by your Area Application Software Center Manager. If you have a prospect who will make an excellent HPPAY reference, contact your Application Center.

Competitive features
- Interface to HP General Ledger provides an integrated financial solution
- Extended security down to specific tasks within menu options ensures payroll confidentiality
- Flexibility through interactive tables
- Virtually unlimited user-defined pay types, pay frequencies, and deduction types
- Real-time database update
- Reduced paper reports through on-line inquiry capability
- All standard reports in compliance with state, federal, and Canadian regulations
- Report writer for user-defined reports.

Tax update service
Tax update service is provided free for one year with the purchase of HPPAY. After one year, HPPAY users may purchase tax update service from HP as a separate product. The service will be renewable on a yearly basis at a competitive price.
System requirements

Required Software:
- MPE IV or later release of HP 3000 Fundamental Operating System.

Required Hardware:
- Minimally configured HP 3000
- HP Block Mode Terminals which are VPLUS/3000 compatible.

Sales aids

You can introduce HPPAY to your customers with the following aids:

<table>
<thead>
<tr>
<th>Sales Aid</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPPAY Product Evaluation Guide (PEG)</td>
<td>32296-90004</td>
</tr>
<tr>
<td>HPPAY Overhead Presentation</td>
<td>32296-92001</td>
</tr>
<tr>
<td>(Available Dec. 9, 1983)</td>
<td></td>
</tr>
<tr>
<td>HPPAY 35mm Presentation</td>
<td>32296-90002</td>
</tr>
<tr>
<td>(Available Dec. 9, 1983)</td>
<td></td>
</tr>
<tr>
<td>HPPAY Data Sheet</td>
<td>5953-7558</td>
</tr>
<tr>
<td>HPPAY Performance Data Sheet</td>
<td>5953-7559</td>
</tr>
<tr>
<td>HPPAY-ASSIST Data Sheet</td>
<td>5954-0556</td>
</tr>
<tr>
<td>HPPAY Application Fit</td>
<td>5954-0557</td>
</tr>
</tbody>
</table>

How to order

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Price  (US List)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32296A</td>
<td>Right-to-Use HPPAY. Includes HPPAY software, implementation services, one year of tax updates and one manual set.</td>
<td>$21,400</td>
</tr>
<tr>
<td>32296M/R</td>
<td>Right-to-Copy one HPPAY without sublicense. Includes HPPAY software, HPPAY-ASSIST, one year of tax updates and one complete manual set.</td>
<td>11,200</td>
</tr>
<tr>
<td>32296+61A</td>
<td>Customer Application Analysis for additional sites. Requires 32296M/R.</td>
<td>0</td>
</tr>
<tr>
<td>32296+63A</td>
<td>Implementation Team Training for additional sites. Requires 32296M/R.</td>
<td>1,500</td>
</tr>
<tr>
<td>32296+65A</td>
<td>Project Implementation Assistance for additional sites. Requires 32296M/R.</td>
<td>3,400</td>
</tr>
</tbody>
</table>

HPPAY is available for sale in the US and Canada. Refer to your HPPAY Field Training Manual for further ordering information.

HPPAY training

Twenty-one Customer Support Representatives have now completed HPPAY training. Your CSR can help you close deals.

Your HPPAY training kit will be arriving soon. The kit contains:
- HPPAY Product Evaluation Guide (PEG)
- HPPAY Field Training Manual
- HPPAY Competition Audio Cassette
- HPPAY Data Sheet
- HPPAY-ASSIST Data Sheet
- HPPAY Application Fit.

Your training materials make learning about HPPAY an easy process. So listen to the 30-minute HPPAY competition audio cassette while driving to your prospect's site. Spend an hour reading the HPPAY Field Training Manual. And then increase your system sales with our newest HP 3000 application solution.
Solutions through HPPAY-ASSIST

Chris Cockill/AMD

Hewlett-Packard realizes that payroll software is a critical application for any business. In order to ensure fast, efficient installation and use of the application, AMD has developed implementation and consulting services as an integral part of HPPAY. Known as HPPAY-ASSIST, three services have been designed to help analyze payroll system requirements and successfully implement the HPPAY application software product. These HPPAY-ASSIST services consist of Customer Application Analysis, Implementation Team Training and Project Implementation Assistance.

The three services represent distinct stages in the payroll system implementation. Each is a prerequisite for the next. An HP CSR will work with you and your customer within the framework of each service to assist in the project implementation. The CSR, with a strong educational background, work experience, and training in the financial and payroll applications, will perform both pre-sales activities (such as demos, interviews, and application fit analyses) and post-sales activities (such as implementation assistance, installation, and support).

The HPPAY-ASSIST services are included in the product price for the A copy of the software. These services are well-defined and consist of specific activities and customer deliverables that will increase the probability of the customer’s success in installing and implementing a payroll solution. For the R and M copies of the software, the HPPAY-ASSIST services must be ordered separately.

Implementing a payroll software system is an important business decision and a significant undertaking. Your customer’s success depends upon having a clear set of objectives, a realistic plan for achieving them, and the necessary resources and project management talent to carry out the plan. HPPAY-ASSIST increases the probability that your customer will be successful, which means greater customer satisfaction which may result in more sales and greater long term returns for you.

Each module has specific objectives and activities that will be performed by the Customer Support Representative. As a result of those efforts and activities, the customer will receive certain deliverables such as a Requirements Analysis Document, Slide Presentations, a Project Management Orientation and Workshop, Project Milestones, a Project Plan and a Post-Implementation Review, to mention just a few.

As you can see, the HPPAY-ASSIST services are well-defined and will ensure a fast, efficient installation and implementation of our new payroll package. Why not discuss those potential payroll opportunities with your local CSR today?

HPFA customer profile

#0000007
Leslie A. Kriese/FSO

Name:

Business type: Ceramic earthenware, stoneware and giftware, including cookie jars, cookware, serving plates and souvenirs.

Geographic location: Southern California.

Reasons for purchasing HPFA:

• HPFA’s closing procedures ensure that their books will be balanced before they’re closed. This was critical to their Controller.
• Shortened closing cycles.
• HP Interface Facility’s ability to quickly, easily interface HPGL to their in-house payroll, accounts payable and accounts receivable systems.
• It’s from Hewlett-Packard!

Application of HPFA: This customer has implemented HP General Ledger and will utilize HP Interface Facility this winter, after installing OM3000. HPIF will be used to integrate their custom-written AR and third party AP with HPGL.

In addition to HPFA, the customer also purchased OM3000 and five 2622As for use with HPFA, OM/3000 and word processing. Their HP 3000 will be field upgraded to a S48 early next year.

Previous system: A manual GL, coupled with a custom-written AR and AP package from PCS.

Implementation time: One month!

Why the competition lost to HPFA: The competition covered two extremes, either loading their GL on a micro, or purchasing MSA’s GL package.
Purchasing a micro was initially attractive, since they could then easily interface their GL with their spreadsheet software. Because the micro could not adequately handle the size of their chart of accounts and would require the addition of two hard drives, this idea was dropped.

MSA lost because of their closing procedure, and the fact that HPFA is from Hewlett-Packard.

Quote: “The system is excellently designed; I really enjoy it. Being an accountant can be boring, but HPFA has made coming to work fun again. I've stayed until 1:00 a.m. some nights just to play with it.

“A major part of our decision to go with HPFA and OM/3000 was the people we’ve met at HP.” — The Assistant Controller

Favorite computer vendor: Hewlett-Packard

HP SR: Bruce Hendersen
HP CSR: Steve Calderwood

*For additional information on this customer, please contact Leslie Kriese at FSO, 408-263-7500, ext. 5048.

Though the current versions of the HP 3000 business graphics software do not support the HP 2688A, 2625/28A and 150A, the 7475A plotter can be supported by specifying device model number 7220C for RS-232 environments and 9872C for HP-IB environments.

These enhancements, when released, make an already superior graphics offering even more outstanding.

**HPTelex communicates at 50 baud**

*Shirish Hardikar/OPD*

The fact that HPTelex communicates at 50 baud is a definite advantage.

The entire world uses Telex and, therefore, uses the 50-baud BAUDOT. The US market has one or two exceptions:

- Western Union Telegraph Co. Telex II/TWX which allows TWX users to communicate among themselves in ASCII at higher baud rates — but whenever they wish to communicate with the millions of ordinary US and overseas businesses using Telex, they have to be limited to a subset of ASCII which maps onto BAUDOT. But since everyone else communicates at 50 baud, the higher speed of TWX is of limited value.

- Various vendors offer interfaces to ASCII terminals at varying baud rates. Once at the Telex exchange, however, dialogue is slowed down to network and converted into BAUDOT to provide compatibility with the rest of the world.

Telex is the one true standard. Whether it is a teleprinter in Africa or a computer system in France, you can always communicate via Telex.

HPTelex meets and uses the world-wide industry standard of BAUDOT Telex communications. Like the rest of the world, the US Telex systems use BAUDOT — a communications system which has not changed since the 1930s and today links over 1.5 million business users in an integrated, worldwide network.

What is more, with HPTelex the speed of the network has no effect on response time for the user. Remember, any number of users can compose and send Telex messages at the same time; in the background, HPTelex takes over and automatically queues messages, dials and verifies numbers, re-dials if required, logs calls, and produces hardcopy.

HPTelex is a communications-compatible, unattended Telex system.

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**HP 3000 graphics software update**

*Kerin Henderson/PSD*

Enhancements to the HP 3000 business graphics software — HP EasyChart, DSG/3000 and HPDraw — announced in September (and described in the September 1 issue of *Computer News*) will be available in the field in early 1984.

Field distribution of the software should occur in January/February for customer-availability in February/March. We will inform you of any changes to this schedule.

The enhancements include 35mm slide output from HPDraw; new high-quality text fonts for all graphics products; color palettes for screen graphics, plotter output, and 35mm slides; background vector to raster conversion for output to HP 2680A and 2688A laser printers and 2608S line printer; and support of a number of new devices including the HP 2688A, HP 2625A and 2628A terminals, HP 150A personal workstation, and the HP 7475A plotter.
How to order HP Telex  
*Barbara Savage/OPD*

We have received several orders for HP Telex which we are unable to ship in a timely manner because the orders do not include one piece of vital information: the customer's Telex number.

Every HP Telex Interface Unit shipped to a customer contains a PROM with the customer's Telex number (and, if applicable, the Telex answerback code) “burned in.” Without this information the Unit is useless.

So, please remember to specify your customer's Telex number and answerback code for the Telex line to be used with an HP Telex Interface Unit — use the Special Instructions part of the HEART/COCHISE order form.

If your customer is awaiting installation of the Telex line by one of the Telex-network Carriers, please write "Telex number to be advised" in the Special Instructions part so that we will hold the order. Notify OPD Order Processing (COMSYS 1600) as soon as the Telex number and/or answerback code are available.

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**HP OFFICE-ASSIST — the key to successful office systems**  
*Pat Wilcox/AMD*

The explosion in the office systems market has had a positive impact on customer interest in office systems solutions. However, as even the international OA conferences continually point out, no one knows when, how and where to begin implementing office systems.

Hewlett-Packard has a total solution for our customers. The software we have today can address the needs of a typical office environment. HP OFFICE-ASSIST, a new consulting and training program, will provide the guidance and step-by-step methodology to get the project team and users up and running on the new system.

Services like those of HP-ASSIST are the missing link that we need to ensure successful customer implementations.

The three services of Customer Application Analysis, Implementation Team Training and Project Implementation Assistance have been structured to stress a phased implementation of the new system. There is no charge to the customer for the representative analysis of their business, computer, and office environment. The Project Implementation Assistance services that are currently available address HPWord, HPDeskManager, HPListKeeper, HPMenu and HPEasyChart.

HP OFFICE-ASSIST is available separately or is included with the Interactive Office Pack. Your customers can learn about this new service from an insert in the new Interactive Office brochure. You can learn more about these services by contacting your local Application Center.
Re-marketed peripherals — the total technical solution
Diane Leeds/SRO

Over the past two years, SRO has been successful in helping commercial SRs close orders with previously unreachable price-sensitive customers. And SRO can now offer that same advantage to you technical SRs.

Re-marketed peripherals can reduce the total system cost of a new M/E/F or A-series computer. This can result in selling systems to customers who could not previously afford to buy HP products. In addition, since customers can save an average of 15-25% off the price of these peripherals, selling those add-on disc drives and tape drives becomes much more likely. You’ll have no problem meeting quota!

In addition, your customers can get delivery on most re-marketed peripherals fast. Current availability is two weeks on all products, except for HP 7970ER Option 226 which is four weeks.

SRO offers a wide range of peripheral products to fit your customers’ needs. The following chart shows the products currently available and US list prices for a configured product with the correct interface.

<table>
<thead>
<tr>
<th></th>
<th>M/E/F-Series</th>
<th>A-Series</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HP 7920MR</td>
<td>$12,175</td>
<td>NS*</td>
</tr>
<tr>
<td>HP 7920SR</td>
<td>9,825</td>
<td>NS</td>
</tr>
<tr>
<td>HP 7925MR</td>
<td>16,750</td>
<td>NS</td>
</tr>
<tr>
<td>HP 7925SR</td>
<td>13,725</td>
<td>NS</td>
</tr>
<tr>
<td><strong>Tapes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HP 7970ER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opt. 226</td>
<td>12,040</td>
<td>$12,200</td>
</tr>
<tr>
<td>Opt. 626</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*NS — Not currently supported

And, if the great prices and fast availability aren’t enough, SRO currently has a special promotion on HP 7920SR disc drives. If your customer buys any re-marketed disc drive between now and March 31, 1984, they have the opportunity to purchase an HP 7920SR at half price! See the October 15 issue of Computer News for additional details on this program or call SRO Sales Development.

So remember to add re-marketed peripherals to your bag of HP solutions for new and existing technical customers!

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HP 9885 and 913XA/B obsolescence
Kathy Kimball/GLD

As of January 1, 1984 the Greeley Division will obsolete the HP 9133A/B, 9134A/B, and 9135A Winchester products. The products that replace these are our new small-footprint 5 and 15Mb Winchesters — the HP 9133V, 9133XV, and 9134XV. Because we are experiencing parts problems on the A and B Winchesters, you should begin ordering only the new HP 9133V/XV and 9134V/XV Winchester now.

The new 15Mb Winchesters are only supported by the HP 150 and Series 200 at this time. We do have a 10Mb solution for Series 80, HP 120, HP 125, and HP 1000 Series A users. This is available as an Option 010 on both the HP 9133XV and 9134XV. Option 010 jumpers the 15Mb drive down to the 10Mb for those that cannot support the 15Mb. The Option 010 is available at the same price as the 9133XV and 9134XV as of December 1.

On February 1, 1984, we will also be obsoleting the HP 9885 8" flexible disc drive, both master and slave versions.

---

New HP 9895A options and new supplying division
Dawn Mahowald/GLD

The HP 9895A has a new simplified option structure. From November 1, 1983 on, it will be available for $5,900 (USFB) with these options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>50 Hz Power Option</td>
<td>No Charge</td>
</tr>
<tr>
<td>010</td>
<td>Single Drive w/ manual for HP 3000 hook up and use</td>
<td>$1,330</td>
</tr>
</tbody>
</table>
Every deleted option will be available under its regular part number from other HP sources. Also, the old Options 035 and 045 (Disc Utilities for the HP 9835 and HP 9845) will be included with every 9895A ordered and will continue to be free of charge. Customers who already have a 9895A and want the 9835 or 9845 Disc Utilities can order them from FSD.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Alternate Source</th>
<th>P/N</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>002</td>
<td>rack mount</td>
<td>CPC/PCE</td>
<td>09895-88622</td>
<td>$ 30</td>
</tr>
<tr>
<td>035</td>
<td>HP 9835 disc utilities</td>
<td>FSD</td>
<td>09835-15220</td>
<td>100</td>
</tr>
<tr>
<td>045</td>
<td>HP 9845 disc utilities</td>
<td>FSD</td>
<td>09845-10090</td>
<td>100</td>
</tr>
<tr>
<td>068</td>
<td>2 boxes of 8’ double-sided media</td>
<td>CSO</td>
<td>92195A</td>
<td>168</td>
</tr>
<tr>
<td>135</td>
<td>HP 9835 IBM Data Exchange Utility Software</td>
<td>FSD</td>
<td>09835-18230</td>
<td>500</td>
</tr>
<tr>
<td>145</td>
<td>HP 9845 IBM Data Exchange Utility Software</td>
<td>FSD</td>
<td>09845-10740</td>
<td>500</td>
</tr>
<tr>
<td>185</td>
<td>HP 8X IBM Data Exchange Utility Software</td>
<td>FSD</td>
<td>09845-10740</td>
<td>500</td>
</tr>
<tr>
<td>333</td>
<td>2m HP-JB cable for HP 3000</td>
<td>GLD</td>
<td>88695A</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CSO</td>
<td>10633B</td>
<td></td>
</tr>
</tbody>
</table>

Q: What does HP mean by the term Media-Monitor?
A: The Media-Monitor provides additional protection and helps maximize disc life. All flexible discs have a limited useful life, but because the age of a disc is difficult to measure, most users today replace discs too often or too late. HP's family of 3½” mass-storage systems have the ability to track media life during use. When a disc reaches the end of its useful life, the system signals the user to replace it with a new disc.

That about covers the most often asked questions about the 3½” microfloppy. I hope this has provided you with some good information. Of course, if you ever run into other questions that need to be answered, the Greeley HELP line is always available. Just call TELNET 356-HELP or dial 303-356-9103 and ask for the HELP line.

Support rails not needed for rack mount

Kathy Kimball/GLD

In the November 1 issue of Computer News we told you about the rack mounts available for Greeley's new Winchesters. That article stated that you need extra support rails for this rack mount. That was incorrect. Please do not order P/N 12679B support rails when ordering a rack mount for the new Winchesters; they are not needed.

3 ½” microfloppy questions?
Answers — Part 3

Kathy Kimball/GLD

Here we go with Part 3 of the Most often asked questions about our 3½” microfloppy.

Question: What are the “data protection features” that HP talks about when discussing the microfloppy media?

Answer: There are three data-protection features that add to the reliability of the system.

- The media is packaged inside a hard, polymer housing (instead of the traditional vinyl jacket), which protects the disc during handling.
- An auto shutter automatically opens the contamination shield over the read/write gap when the media is inserted in the drive, then automatically closes the shield when the media is removed. This reduces exposure to damage from fingerprints and other contaminants.
- The microfloppy media also has a hard center that positions the disc to read and write accurately and reliably.

Q: What does HP mean by the term Media-Monitor?
A: The Media-Monitor provides additional protection and helps maximize disc life. All flexible discs have a limited useful life, but because the age of a disc is difficult to measure, most users today replace discs too often or too late. HP's family of 3½” mass-storage systems have the ability to track media life during use. When a disc reaches the end of its useful life, the system signals the user to replace it with a new disc.

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HP 7974A — Separate tapes for different operating modes?

Sandy Hansen/GLD

Since the successful launch of the HP 7974A, the new, midrange ½” tape drive, we have received several calls from SRs asking if customers need both start-stop and streaming tapes. Is there a difference in the way data is recorded on tape in the start-stop and streaming modes? The answer is an emphatic no!
Formats are ANSI Standard
The operating mode has nothing to do with the way tapes are recorded. Using the HP 7974A, tapes are written using either ANSI standard 1600 Phase Encoded cpi or 800 Non-Return to Zero Inverted cpi formats.

One of the primary features of tape usage is interchange capability between systems. That capability remains unaltered. Any 1600 tape may be read by any 1600 tape drive, regardless of whether that drive reads or writes in start-stop and/or streaming modes.

Customer reassurance
So, worry no more about ANSI compatibility or separate tapes for separate operating modes. The HP 7974A continues as the solution to your customer's system requirements for backup, data interchange and tape processing applications.

Also in this issue

New cable for IBM computer and HP plotter
Suzanne Tylka/SDD

SDD has redesigned the 17255A cable that interconnects the HP 7170A and HP 7475A plotters to IBM and IBM-compatible computers.

There are two things you need to know about the new cable, designated 17255B. The B cable supports more third-party software than the A cable, including Lotus 1-2-3 and BPS Business Graphics, and it is plug-compatible with the A cable.

The new B cable requires only minor changes to the A cable. Diagrammatically, it looks like this:

<table>
<thead>
<tr>
<th>IBM COMPUTER (F)</th>
<th>HP PLOTTER (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>--- --- 1</td>
</tr>
<tr>
<td>2</td>
<td>--- --- 3</td>
</tr>
<tr>
<td>3</td>
<td>--- --- 2</td>
</tr>
<tr>
<td>7</td>
<td>--- --- 7</td>
</tr>
<tr>
<td>5</td>
<td>--- --- 20</td>
</tr>
<tr>
<td>6</td>
<td>NC</td>
</tr>
</tbody>
</table>

Although the A cable is now obsolete, orders will not automatically be changed to the 17255B. Please cancel your 17255A orders and reorder the 17255B.
HP PLOT/21 and C model flatbed plotters now obsolete

Todd Sullivan/SDD

In the October 1, 1983 issue of Computer News, we announced the obsolescence of the HP 7220C, 7221C and 9872C flatbed plotters. They were removed from the Corporate Price List on December 1, 1983, along with HP PLOT/21 (Model 72021C).

As orders for the C model flatbeds continue to decline, we thank you for converting your customers to the new HP 7475A. An article in the November 1 issue of Computer News ("How the HP 7475A compares with the HP 7220C and HP 9872C") should help you convert any remaining holdouts.

Please continue to remind your customers about the obsolescence and contact SDD if any problems arise.

Also in this issue

New Plotter Programming Guide for Series 80
Firmware bug discovered in some HP 7470A plotters

Introducing four new printers

Erin Greene/VCD

Four new printers will now be available for your end-user and OEM customers. All four printers are 263X-compatible and offer improved print quality and printing features — for about one-half what we charged before!

The HP 2930 Family of Printers

With the 2930 serial printers, your customers will get exceptional print speed and print quality — 200 cps/9 x 12 matrix characters because of an altogether new print head design. We’ve also incorporated last-form tearoff and a straight paper path, improved accessibility, and reduced the noise.

Print selections include expanded (5 cpi), in addition to normal (10 cpi) and compressed (16.36 cpi). Cubic and Courier fonts, ten languages, line drawing, European, and math symbols character sets are all standard.

The HP 2930 Family Printers form a range of print capabilities to suit nearly any environment. The HP 2932A provides the print speed, forms handling, and quiet operation required for most distributed printing applications. The HP 2933A Factory Data Printer meets the needs of data capture and manufacturing — featuring bar code, large character generation, and long distance interfacing. The HP 2934A Office Printer provides 40 or 67 cps letter-quality printing and 200 cps memo-quality printing.
The HP 2563A Line Printer

Printing at 300 lines per minute, the HP Series 300 Model 2563A offers heavy-duty printing for both HP and non-HP systems. Designed for use in all areas of the business network, the 2563A provides the throughput and reliability for high volume applications in the office, data center, or factory floor for jobs that exceed the capabilities of serial printers.

With sound abatement options, the HP 2563A prints at a quiet 60 dBA in either remote or local environments. Standard features include compressed print, large character generation, multination and OCR character sets, raster graphics and bar codes. It also offers conveniences like paper jam detection and easy recoverability.

Providing a variety of interfaces, including RS-232, Centronics, and Dataproductions, the printer offers both end-user and OEM compatibility with many systems. In addition, customized interfaces for the OEM will be available.

How to order an HP 293X printer

Erin Greene/VCD

Although the 293X printers are plug-compatible with the 263X printers, there are several significant differences in ordering 293X printers. The 2631B Opt. 331, for example, is now user-configurable.

The standard unit includes RS-232C interface, ribbon, all supported character sets (128 US ASCII, 96 Roman extension, ISO 7-bit languages, Kana8, 64 line drawing, 64 math symbols), power cord, and owner’s manual.

All cables must be ordered separately. Power supply voltage is user-configurable to 100, 120, 220, or 240V.

The following options are offered:

<table>
<thead>
<tr>
<th>Printer</th>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 2932A</td>
<td>035</td>
<td>RS-422</td>
</tr>
<tr>
<td></td>
<td>042</td>
<td>Centronics-type parallel</td>
</tr>
<tr>
<td></td>
<td>046</td>
<td>HP-IB</td>
</tr>
<tr>
<td>HP 2933A</td>
<td>033</td>
<td>Multipoint synchronous (1st terminal) (cable included)</td>
</tr>
<tr>
<td></td>
<td>034</td>
<td>Multipoint (Nth terminal) (cable included)</td>
</tr>
<tr>
<td></td>
<td>035</td>
<td>RS-422</td>
</tr>
<tr>
<td></td>
<td>039</td>
<td>DSN/Data link (cable included)</td>
</tr>
<tr>
<td></td>
<td>042</td>
<td>Centronics-type parallel</td>
</tr>
<tr>
<td></td>
<td>046</td>
<td>HP-IB</td>
</tr>
<tr>
<td>HP 2934A</td>
<td>Same as 2933A</td>
<td></td>
</tr>
</tbody>
</table>

See the Ordering Information sections of the HP 293X data sheets for additional interface and cable requirement information. For the HP 2933A, order 5953-6276(54); the HP 2933A, 5953-6277(54); the HP 2934A, 5953-6278(54).

Two for one printer program

Artie Stone/BOI

Order one printer and receive two? That’s right! We’re so confident your customers will want the advanced capabilities of the HP 2563A printer, that we’re offering two 2563As for each HP 2608A or 2608S order in backlog.

The details are simple. If your customer has an order for a 2608A or 2608S in our backlog prior to December 1, the order can be upgraded to two 2563As.

A credit will be reflected on the new order to lower the price of the 2563A below that of the 2608. Customers can choose HP-IB, RS-232 or DSN/MTS. In addition, they will receive free Option 500, the expanded capabilities package which includes line draw, math and block character sets, high density Roman-8 and italics Roman-8 character sets, a 3-pack ribbon set, sound abatement cover, and an enclosed printer stand.

This offer will provide your customers double the performance and more capabilities than ever. Ask your local Order Processing department for specific ordering details on this program.

Take advantage of this program before May 31, 1984.
The HP 2687 and Brand X computers

Russ Buschert/BOI

Situation: You are visiting a new customer explaining the benefits of HP computers when the customer says, "What about that new small laser printer you just came out with? Can I plug that into my Brand X computer?" At this point you have two answers:

- Tell them to "get rid of your Brand X computer and buy HP."
- Or you can say, "possibly."

In the few instances where you give them the second answer, we would like to explain how to connect the HP 2687 to a Brand X computer and what to expect.

RS-232C interface

The 2687 is equipped with an RS-232C interface. RS-232C defines an industry-standard electrical interface which specifies voltage levels, connector types, pin numbers in the connector, number of wires, etc. The speed of the RS-232C interface can be adjusted by changing a jumper in the controller to six different rates ranging from 300 baud to 9600 baud.

Printer control codes

In addition, data flowing to the HP 2687 is controlled by the X-on/X-off protocol. When the printer is turned on and ready to print, it transmits an X-on signal to the CPU, indicating it is ready to receive data.

The data must conform to the US ASCII standard, in which there are ten control codes listed below (these codes direct specified operations in the printer).

- BS — backspace
- LF — line feed
- FF — form feed
- CR — carriage return
- SO — shift out
- SI — shift in
- DC1 — X-on
- DC3 — X-off
- ESC — escape
- SP — Space

The US ASCII standard is common to many different CPUs with one notable exception — IBM, which uses EBCDIC. (However, the IBM PC uses the ASCII standard.)

The ASCII control codes will access the base set of features in the 2687 such as line feed and form feed. However, the 2687 has a set of advanced features that can only be accessed by escape sequences. These features are second, third, and fourth fonts, underlining, half line feed, number of copies, line spacing, and portrait or landscape mode. The escape sequences that control these features must be programmed into the application program. The program then imbeds them into the print file where they direct the printer to operate in a mode similar to a daisywheel printer. These escape sequences are HP-standard only and probably not the same as those used by other vendors. If they are not the same, the program would need to be modified.

Support

When the 2687 is connected to a Brand X computer (or non-supported HP CPU) we will support the printer on a regular maintenance contract. It is the responsibility of the customer to make sure their connections are correct and their print files are in the proper format.

OEM possibilities

In addition to your customers who want to buy a 2687 for their Brand X computer, there will also be some very interesting OEM possibilities. Many companies and systems integrators would like to have a printer such as the 2687 as part of their product line. In most cases they will be able to adapt it to their own system easily.

In the back of the HP 2687 Operator's Manual, an exact list of control codes and escape sequences can be found, along with the RS-232C pin number assignments for cabling. If you are interested in ordering the manual, which describes the complete operation of the printer, the part number is 26087-90901. For further information regarding the hardware specifications, contact Preston Frey in Boise Division. For questions about software and programming related to the 2687, contact Greg Slansky, also in Boise Division.
Also in this issue

New printers supported as remote spooled devices
HP 3000 support for new 300 line-per-minute printer
DSN/MTS spooled printer support update

HP 2X terminals meet federal RFI regulations

Joe Winnyk/RTD

Roseville Terminals Division is pleased to announce that our entire line of 2X terminals — including the HP 2382A and 2627A terminals — now meets the new federal regulations on Radio Frequency Interference (RFI).

All the necessary modifications have been made to ensure that our terminals operate well within the limits set by the federal government on RFI standards, and our customers can continue to expect high-quality display terminals coming from Roseville and Puerto Rico production lines.

This announcement is a timely one for RTD. The division has moved into its new home. Marketing and manufacturing departments are established in the new building, and terminals that meet RFI requirements are ready for delivery worldwide.
The unique, right-angle connector design reduces stress on the individual wires and its short length (0.3 m) reduces the possibility of communications errors. Physically and electrically it is identical to the 10833-series.

CSO Direct Order

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

<table>
<thead>
<tr>
<th>Location</th>
<th>Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>800-538-8787</td>
</tr>
<tr>
<td>California</td>
<td>408-738-4133</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0734-792868</td>
</tr>
<tr>
<td></td>
<td>0734-792959</td>
</tr>
<tr>
<td>France</td>
<td>(6) 928 32 64</td>
</tr>
<tr>
<td>Belgium/Luxembourg</td>
<td>(02) 762 32 00</td>
</tr>
<tr>
<td>Switzerland</td>
<td>(057) 31 22 54</td>
</tr>
<tr>
<td></td>
<td>or 31 22 59</td>
</tr>
<tr>
<td>Canada</td>
<td>(416) 678 94 30</td>
</tr>
<tr>
<td>West Germany</td>
<td>07031-142829</td>
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<tr>
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<td>07031-223133</td>
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<td>53-7954</td>
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<td></td>
<td>28-4178</td>
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<tr>
<td>Canada</td>
<td>416-671-8383</td>
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<tr>
<td>Toronto Local</td>
<td>1-800-268-6982</td>
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<tr>
<td>Ontario</td>
<td>1-800-387-3417</td>
</tr>
<tr>
<td>Quebec</td>
<td>1-112-387-3154</td>
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<tr>
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<td>08-7502027</td>
</tr>
<tr>
<td>Sweden</td>
<td>08-7502028</td>
</tr>
</tbody>
</table>

Also in this issue

Handy new HP-IB cable from CSO

Meg Weaver/CSO

You may have noticed a convenient new HP-IB cable being shipped with HP 120 and HP 150 computers and thought that it would be useful in other systems needing short HP-IB cables.

It is now available from CSO. Order P/N 92220R. US list price is $80.

Also in this issue

"Series 100 Communicator" subscriptions now easier to order