Beat IBM by linking to SNA networks
COVER: Hewlett-Packard will introduce the new HP 3000 to IBM SNA data comm product on February 1, 1984. This product is the key to selling the HP 3000 as a node in an IBM Systems Network Architecture (SNA) network. It provides the capability for a wide variety of batch mode applications. See story on page 24.
HP Computer Museum
www.hpmuseum.net

For research and education purposes only.
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40 **Mass Storage**

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41 **Printers**

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- Help your customers learn about bar codes — at a 30% savings
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30 **Financials**

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31 **Office Systems**

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34 **Vertical Markets**

- Good news! Release V of HP SFD/3000 and OM/3000
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## PRICE CHANGES

51 **Computer Groups price changes effective January 1, 1984**
Users groups = customer satisfaction

Dena Stein/SMC

Do your customers know more about Users Groups than you do? Are you the last in your office to know when the next International Users Group conference is? Are you asking customers when the next release of the Contributed Software Library will be available?

If you said “yes” to any of the previous questions, then read on.

Beginning in this issue, we will present information on what is new from Users Groups; information which will help you answer your customers’ questions and lead to greater customer satisfaction.

Membership brochures

Do your customers want information about membership in the International Users Group? Use SLO forms to order brochures from the Corporate Literature Distribution Center. For HP 3000 users, publication number is 5953-7466 and for HP 1000/9000 users, 5953-8742.

Location

Did you know the IUG moved to new quarters at 2570 El Camino Real West, Crocker Bank Building, Fourth Floor, Mountain View, CA 94040? Telephone for membership information is 415-941-9960.

Merger

Two groups are not better than one. Members of the HP 3000 and HP 1000 International Users Groups have just voted to combine forces and operate as one group. Objectives of the new organization will still foster communication among users, HP, and other vendors; and aid members in developing professional abilities and resources through publications, conferences, and its contributed software library.

Publications

When your customers ask the fate of the Users Groups’ HP 3000 and HP 1000 publications, Interact and TC Interface, respectively, you can assure them that for the time being there will be no change.

In fact, here are the topics for Interact’s February issue: transaction logging tips, another look at KSAM, a review of RELATE/3000, and a guide to “keeping data bases fit.”

The next issue of the technical publication, TC Interface, will offer insights into an alternative programming language called PEARL; data curve manipulation; local area networks; writing drivers in a high level language; and MASTR (an intelligent disc editor).

Watch for Interrupt, the new IUG short-lead-time newsletter which provides updates for both Users Groups.

Contributed Software Library

The newest release of the Contributed Software Library will be shipped to HP 3000 IUG members by the first week in January. It will include swap tapes from the HP 3000 Edinburgh conference, October 1983, and the most popular contributions from past years.

HP 3000 IUG Anaheim conference

Mark on your calendar February 26-March 2. The HP 3000 IUG conference will be held in Anaheim, CA.

Alfredo Rego, president of Adager, Guatemala, will
The custom product/ICC program

Sten Andersson/PCD

By now, the word is out about the major purchase of HP-75s with wands and acoustic couplers by a major communications company. And we are working on 30 more big deals (bids) right now. On these bids, the average number of units is 11,186. Two deals are for over 100,000 units, while the smallest is for 100 units. In addition, many include portable peripherals, HP-150s, 1000s, 3000s, and peripherals. Most of these deals involve custom products. They would not have been viable solutions without them. To relieve the field of the cumbersome custom product support, we have developed the Independent Custom Consultant (ICC) program. The field sells 100% of the hardware every time. But let's talk about custom products first — what they do, where to sell them, etc.

The most commonly used custom products are custom ROMs (CROM), custom overlays, and custom touchpads (covering the entire keyboard). Also available are magnetic cards.

The custom ROM offers several features:

- Auto-start for friendliness
- Program security (programs cannot be destroyed or altered for trouble-free operation)
- Programs are executed in the CROM leaving the RAM available for data and variables
- CROM is inexpensive compared to CMOS RAM and EPROM. The advantages are that our customized portable computers are ideal tools for the first-time user, and will help companies increase their productivity.

This portable concept is new and the marketplace is wide open. In addition, the typical competitive products, sold by direct sales forces, are high-priced and do not have state-of-the-art technology. Most of the competitive products sold by dealers do not make it easy for customers to customize. Our products are priced lower than the competition's and, typically, we offer much more power. We can do that because we have products aimed at consumers and they can also be customized to fit into niches.
Now let's see how the field and the ICC interface during the custom products' sales cycle. First, the SR (or dealer) finds the customers. Then you contact the ICC (which the customer has selected from the ICC list) and plan how to close the deal. The ICC then develops the custom products which it sells and supports while you sell and support the hardware. The ICC will also write user manuals, package the system in a briefcase, interface third party products to ours, and so on. The ICC will do whatever your customer does not want to do and what HP does not do. Think of the ICC as a systems integrator.

Now that you are ready to sell, where do you find the business? Look for large groups of people doing identical jobs — pilots flying the same airplane doing flight performance; insurance agents selling the same policies; service reps filling out the same repair orders; sales reps selling the same products and communicating with a host CPU to get updated prices.

Once you have identified potential customers, make your presentations to the managers or leaders who know about multiple-user applications. To help you get started, we have prepared a sample mailer consisting of a custom products brochure, price lists, an ICC description, six custom application summaries, and a sample cover letter. Order your packet (P/N 5953-5650) by calling 800-FOR-HPPC. When you receive it, pick out the application summaries applicable to your customer base and contact Marcia Pierce with the desired content. COMSYS 3900, phone 503-757-2000, ext. 3079, or TELNET 757-757-3079.

If you have any questions, please call the custom products staff at 503-757-2000, ext. 3016 or 2877.

New videotapes available
Chuck Ernst/Corporate Training

The following videotapes are now available to the field sales force:

New product introductions, September 1983

Audience: Computer Sales Force 02
Purpose: To provide Field Sales personnel with information about new product introductions. Originally intended for inclusion in September 20, 1983 Teleconference.

Content: HP 2625A
HP 2687/88 (Desktop Laser Printers)
Word III Financial Accounting Sales Update
Office Products Update: Interactive Office Pack, HP ListKeeper, Graphics Enhancement

Time: 23 minutes.
Model number: HP 2625A; HP 2687/88
Product type: Computer Systems (02).
Product line: Computer Terminals (67).
Terminal Printers (83).
Commercial Softwares (89).
Division: Personal Computer Group (4200).
Date released: November 1983.
How to order: Transmit a HEART (COCHISE) 1-2 order for 90622KZ to obtain a 3/4" Umatic videocassette. This program is not intended for sale to customers.

Increasing quality in manufacturing

Audience: Internal individuals requiring quality concept knowledge.
Purpose: Training tape for those giving quality seminar presentations or just needing quality knowledge.

Content: This program includes:
- Fundamentals of Quality Management
- Financial Justification of Quality Program Investment
- Statistical Concepts and Tools Overview
- Numerous HP Examples of Quality Program Implementations.

Time: 60 minutes.
Product type: Technical Training (TB).
Product line: Other Specialized Training (BB).
Division: Manufacturing Productivity Division (4700).
How to order: Transmit a HEART (COCHISE) 1-2 order for 90654RZ to obtain a ⅜” Umatic videocassette. This program is not intended for sale to customers.

How to order: Transmit a HEART (COCHISE) 1-2 order for 90769RZ for a ⅜” Umatic videocassette. This videocassette is not intended for sale to customers.

Credit ordering procedure reviewed

Lately there seems to be some confusion as to when and how upgrade credits are ordered. Here is a review of some of the fundamentals:

- Credits must be ordered along with appropriate new equipment. The credit quote description indicates the valid products.
- Credits cannot be ordered or added to an order after the new equipment has shipped.
- Credits are applied to the list price of the new product and then the net value is discounted.
- Credits are subject to change so take advantage of them early to receive the highest value.

If you have any questions regarding credits or upgrade programs, call the upgrade and re-marketing contact in 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, ICON</td>
<td>Ray Dean</td>
<td>408-720-2513</td>
</tr>
<tr>
<td>Midwest, Canada</td>
<td>Carol Robertson</td>
<td>408-720-2447</td>
</tr>
<tr>
<td>Eastern</td>
<td>Que Dang</td>
<td>408-720-2467</td>
</tr>
</tbody>
</table>

The right time: a commitment to quality

Audience: Prospective Customers of Hewlett-Packard at any level of Manufacturing Management.

Purpose: To make the audience aware of HP’s concept and method for managing quality of products and processes.

Content: This videocassette shows computers being used in a manufacturing environment to improve quality and productivity.

Time: 18 minutes.

Product type: Computer Systems (02).

Product line: General (X).

Division: Data Systems Division (2200).
Consultants Program to increase HP visibility among key market influencers

Eva G. Johnson/3PP

Did you know that some of your customers and prospects spend over $3 billion a year to buy advice from consultants? These customers include Fortune 500 companies and at least 23 Hewlett-Packard major accounts.

The message is clear — to maximize our sales efforts, Hewlett-Packard must have a substantial presence in the consulting community. With this objective in mind, the Consultants Program, now part of Applications Marketing Division is entering FY84 with an aggressive agenda.

Our aim is to recruit, educate and expand our relationships with consultants. These market influencers can sway end-user selection of vendors in OA, PCs, CAD/CAM and other applications. Also, the presence and influence of consultants in HP's targeted vertical markets (services and industrial) is substantial.

The opportunity is there — and the Consultants Program is dedicated to increasing your sales success to and through consultants.

This article will introduce you to the Consultants Program and inform you about key activities.

Who we are:

We are part of Applications Marketing Division, Business Development Group. We are located in Cupertino, Bldg. 485, next to the Sales Center. So next time you are visiting Cupertino, just stop by or call us at 408-725-8111. These are your contacts:

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lynn Gardner</td>
<td>ext. 4394</td>
</tr>
<tr>
<td>Consultants Program</td>
<td></td>
</tr>
<tr>
<td>Cheryl Archer</td>
<td>ext. 4412</td>
</tr>
<tr>
<td>Eva G. Johnson</td>
<td>ext. 3690</td>
</tr>
</tbody>
</table>

Here are some programs designed to increase HP visibility among consultants and to generate more sales opportunities for you:

- **Target Account Development** — This program establishes an ongoing relationship with the management of the largest and most influential consulting companies, "intelligence work," education on HP products and solutions, and leads. **Team member responsible:** Each consultant program member has assigned accounts, listed at the end of this article.

- **Executive Seminars** — These seminars are aimed at the top management of targeted accounts and conducted at HP in Cupertino with participation of John Young, Paul Ely, and other HP executives. Seminars are designed to foster interaction and the exchange of ideas between HP and consulting firms. The two-day seminar will include hands-on demonstrations, workshops and an open discussion period to foster dialog between our companies. **Team member responsible:** Cheryl Archer, ext. 4412.

- **Consultants Road Shows** — Road Shows are scheduled in individual cities which have a strong concentration of consultants, that is, New York, Chicago, Boston, St. Paul, and in those locations where consultants' seminars would benefit your sales and applications marketing activities. Seminars will focus on presenting HP's strengths and strategies for the 1980s, and delivering information on the HP Consultants Program. They will also provide you with flexible modules designed to educate consultants on HP's solutions in specific application areas (OA, PCs, Financial) and targeted markets. Seminars will utilize managers and specialists from the divisions; at the same time, we want to invite participation of your local specialists from the Application Centers. The Consultants Road Shows will help you develop a closer relationship with your local consultants and to qualify sales opportunities. You'll learn more from us on this subject. **Team member responsible:** Eva G. Johnson, ext. 3690.

- **HP Reference Service** — The HP Reference Service contains continuous updates and enhancements to an already successful five-volume encyclopedia on HP products and applications. It frees you from the responsibility of gathering and keeping current information on HP products and services. The information contained in the service goes beyond sales literature; it includes application notes and product overviews and is updated quarterly. The HP Reference Service can work very well as your personal set of cur-
rent information on product lines, as well as an information service for your major account customers and anyone who needs a point-of-reference and current data on HP computer solutions.

Customers can purchase this service for $225 by calling 800-538-8787. If you want to order it for your use or as a gift for your favorite customer, place an 1-2 HEART order with A500 (Computer Supplies Operation). Internal transfer cost is $87. Note that the service includes telephone access to consultants program resources and a subscription to "Inside HP for Consultants." Team member responsible: Cheryl Archer, ext. 4412.

- **"Inside HP for Consultants"** — A bimonthly newsletter insert to Computer Advances specifically designed for consultants. The insert has been expanded to include information on Hewlett-Packard’s strategic directions, free training schedules, application stories, new third party solutions, and success stories. If you have had recent success in working with consultants in your area, share your success with us and we will include the information in the Consultants newsletter. "Inside HP for Consultants" is an excellent mechanism to keep your local consultants well informed. To add someone to the mailing list, send their names and addresses, or call Cheryl Archer, ext. 4412.

- **Consultants Capabilities Guide** — A guide for you and your customers which lists consultants and consulting companies and describes their expertise, knowledge of Hewlett-Packard products, and key contacts in different locations for specific applications. Team member responsible: Eva G. Johnson.

- **Surveys** — We'll conduct surveys aimed at gathering "market intelligence" on consultants, sales opportunities and other data which will help us market our products to and through consultants successfully. Team member responsible: Eva G. Johnson, ext. 3690.

- **Commercial Product Training** — all new SRs will hear a presentation about Consultants Program during product training.

- **Consultants Factory Visits** — We will welcome the opportunity to work with you on consultants visits to HP. For example, if you are in a situation where consultants are involved, think about bringing them in for a factory visit. We will assist in commitments management, and follow-up.

- **HP Visibility** — We plan to increase visibility of HP among consultants, not only through HP seminars but by our participation in Consultant Trade Shows and invitations by consultants to speak at various Productivity '84 shows.

- **Your Visibility** — We want to make sure that your efforts and success will not go unnoticed. Articles in Computer News and your visibility to BDG management will go along with your successful penetration of consulting companies. The Consultants Program will select three Consultant Star of the Year SRs or application specialists whose activities have contributed to increasing Hewlett-Packard's success among consultants.

**Bottom line**

If you have consulting companies in your territory, especially if they happen to be targeted accounts, and if you want to put our resources behind your marketing efforts, do talk to us. Let’s join our efforts in making FY84 a successful year for selling our applications and systems to consultants and building up their knowledge about HP — because if they get to know us, they will recommend us!

Here are examples of how the Consultants Program is already working with some of you: Dan Majkowski, St. Paul Sales Office, is working with us on scheduling a series of seminars in his area; so is Alan Price from Eastern/Southern. Joan Cohen from HP Lexington Office will work with us on scheduling a Boston Consultants Show. Also in November, Mark De Broeck from the Chicago Office, working jointly with Consultants Program, and Vince Maggiore in the SMC Sales Center, had a successful factory visit with participation of A. Andersen Management from Chicago, Seattle, Philadelphia and San Francisco Offices. —
Marketing

tants Program will follow up and manage commitments on supporting Arthur Andersen’s multiple locations and divisions in the US and abroad. Stan McKinney from the HP St. Louis Office is working jointly with the Consultants Program on making Peat Marwick & Mitchell knowledgeable about HP OA solutions.

We are looking forward to working both with sales and application marketing teams on making FY84 a successful and eventful year for HP and consultants. The following is a list of HP targeted consulting companies with the name of the person from the Consultants Program assigned to each account.

<table>
<thead>
<tr>
<th>Lynn Gardner</th>
<th>Eva Johnson</th>
<th>Cheryl Archer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthur D. Little</td>
<td>Arthur Andersen</td>
<td>American Mgmt. Sys.</td>
</tr>
<tr>
<td>A. S. Hansen</td>
<td>Bectel</td>
<td>A. T. Kearney</td>
</tr>
<tr>
<td>Cooper &amp; Lybrand</td>
<td>Booz Allen Hamilton</td>
<td>Arthur Young</td>
</tr>
<tr>
<td>Hames &amp; Moore</td>
<td>Boston Consultants</td>
<td>Bain</td>
</tr>
<tr>
<td>George S. May</td>
<td>Flour</td>
<td>Brown &amp; Root</td>
</tr>
<tr>
<td>Ray</td>
<td>Harbridge House</td>
<td>CHEM Hill</td>
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<tr>
<td>Riescha Lipton</td>
<td>Int. Envirognr</td>
<td>Boy &amp; Zimmermann</td>
</tr>
<tr>
<td>Main Hudson</td>
<td>Kurt Simon</td>
<td>Deloitte &amp; Touche</td>
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<tr>
<td>Medinger</td>
<td>Laventhal Horwath</td>
<td>Ernst &amp; Whinney</td>
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<tr>
<td>Hewitt Associates</td>
<td>MAC</td>
<td>Parson Corp.</td>
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<tr>
<td>Metalaffe Edy</td>
<td>Parson Corp.</td>
<td>Reliance Consultants</td>
</tr>
<tr>
<td>McKinney &amp; Company</td>
<td>Peat, Marwick &amp; Mitchell</td>
<td>Sargent Lundy</td>
</tr>
<tr>
<td>Stanley Consultants</td>
<td>Mitchell</td>
<td>Temple-Goodwin</td>
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<tr>
<td>Theodore Barry Assoc.</td>
<td>Science Mgmt. Corp.</td>
<td>Towers Perrin Forster</td>
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<tr>
<td>Woodward Clyde</td>
<td>SRI</td>
<td>Price Waterhouse</td>
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Once you have signed the form, please send it to:

<table>
<thead>
<tr>
<th>North America</th>
<th>Hewlett-Packard Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third Party Marketing</td>
<td>Attn: Lynn Gardner</td>
</tr>
<tr>
<td>19447 Pruneridge Ave.</td>
<td>Cupertino, CA 95014</td>
</tr>
</tbody>
</table>

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<tr>
<th>ICON</th>
<th>Hewlett-Packard Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercontinental Headquarters</td>
<td>Attn: Mona Foley</td>
</tr>
<tr>
<td>3495 Deer Creek Road</td>
<td>Palo Alto, CA 94304</td>
</tr>
</tbody>
</table>

This Program is not available currently in Europe, unless a package also is distributed in North America. If you are located in Europe and you have a Third Party that also has a distributor in North America, please send any completed application note forms directly to Lynn Gardner at HP headquarters.

Technical OEM Conference scheduled for March 1984

Anne Bonaparte/OEM Marketing

The 1984 Technical Systems OEM Conference is scheduled for March 28-30, 1984 at Ricky’s Hyatt Hotel in Palo Alto, California.

The objectives of the Conference are to:
- Leverage more sales in 1984 by increasing OEM knowledge and satisfaction
- Reinforce our Working Partnership
- Share HP’s strategic directions and new product plans
- Encourage OEM/HP management feedback
- Facilitate OEM/HP interaction.

All of our Technical OEMs will be invited and we encourage your participation. The agenda is being developed with some exciting speakers and workshops planned. In addition to presenting our overall strategy for technical computers and OEMs, specific product family directions will be shared. Seminars on installation site planning, merchandising ideas and business planning are scheduled. Key speakers for the Conference will be Paul Ely, Joel Birnbaum and Franz Nawratil. For more information, please call either Deborah Gray or myself at 408-725-8111, ext. 3983 (TELNET 125-3983).

Third Party application note forms now being accepted for publication

Marilyn Rauchle/3PP

Just a reminder to send in those completed application note forms from your Third Parties. Urge them to fill out the form and return it to you as soon as possible. The sooner we receive completed forms, the greater the chance we will print an application note on your software supplier or OEM. If you need additional forms, contact your Regional Third Party Program Manager or order them from the Literature Distribution Center, publication number 5953-9031.

This program is designed to give your Third Parties maximum visibility with the HP sales force. Each application note printed will be made available to all SRs and will be designed as a piece of sales literature to accompany SRs on sales calls.
PCDO forms sales support organization
Gary Traynor/PCDO

PCDO now has sales support personnel to assist you. We will provide information regarding the distribution of personal computer products, and will answer any of your PCDO-related questions ranging from order status to product availability. New product delivery information and special bundled product ordering information will also be available. Our new mailing address is:

Hewlett-Packard
P.O. Box 3600
Sunnyvale, CA 94088-3600

or, call us at TELNET 720-2525 or 408-720-1800. Please direct questions to:

Glenna Mills: Eastern/ICON Regions
Caroline East: Midwest/Southern Regions
Gary Traynor: Neely/Canada Regions

We’re waiting to hear from you.

Farewell A5D7
Gary Traynor/PCDO

As of November 1, 1983, Supplying Division A5D7 no longer exists. Personal Computer Distribution Operation (PCDO) D700 has replaced it. Make sure any orders that were transmitted to A5D7 since November 1, 1983 have been changed to D700. Failure to make the change will result in unnecessary delays, and unshippable customer orders.

PC customer-support phone numbers
Gina Grieco/PCG

There are a few new phone numbers that everyone within Hewlett-Packard should be aware of.

The 800-FOR-HPPC number is available for light technical pre-sale questions. It will cover the 10 through 200 series, specializing in the personal computer line. These operators have the responsibility to assist potential customers in locating the Hewlett-Packard dealer or sales office nearest them.

The 800-HP-COACH number is available for after-sale-questions. Operators will be prepared to answer post-sale questions on the Series 80 through 100, with limited support on the Series 200. Specifically, Context MBA, VisiCalc®, and CP/M®-68K will be supported on the Series 200.

In addition, PCG has implemented a dealer’s hot line 800 number. Dealers now have access to a timely and accurate information resource to support Hewlett-Packard’s products.

The 408-725-2600 number is available for post-sale technical questions concerning the Series 10 through 70 calculator and portable computer line and its supported peripherals.

VisiCalc® is a US registered trademark of VisiCorp.

Introducing the Hayes Smartmodem 1200
Bill Swift/CSO

CSO now sells the Hayes Smartmodem 1200. This modem has quickly become the most popular modem in the industry for connecting both terminals and personal computers to remote hosts. This Hayes modem is compatible with both Bell System 103 and 212A modems in either originate or answer modes. Data rates of 0-300 baud or 1200 baud are supported for either full- or half-duplex operation. The modem automatically determines and adjusts to the transmission rate set in your terminal or personal computer. Since it is a direct-connect device, it eliminates the loss and distortion of data experienced with acoustic couplers.

As an intelligent modem, the Smartmodem 1200 analyzes and executes commands and sends back result codes. You may enter commands at the terminal keyboard or issue them through a program running on a personal computer. Set Commands allow you to select and change various operating parameters.
such as dialing speed and pause time for dial tone. A speaker built into the modem lets you listen to the progress of a call and alerts you to wrong numbers and busy signals. Indicator lights on the front panel permit a visual check on modem status.

Other features include:

- Automatic dialing in pulse or tone mode
- Repeat command automatically redials the last number
- Automatic answering.

The Hayes Smartmodem 1200 is available from HP as P/N 92205A. It can be ordered through an HP sales office or by calling CSO Direct Phone Ordering — 800-538-8787 (in California call 408-738-4133). US List prices are:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>US List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$650</td>
</tr>
<tr>
<td>2-4</td>
<td>625</td>
</tr>
<tr>
<td>5+</td>
<td>600</td>
</tr>
</tbody>
</table>

The 92205A modem is in stock now and is on the January Corporate Price List.

**HP-85 product offering simplified**

*Dave Latimer/PCD*

On February 1, 1984, the HP-85 computer product offering will be reduced from nine versions to just one. The HP-85A and the HP-85B Options 001 through 007 will be obsoleted. The HP-85B (standard) will be retained, but it will be enhanced to include a built-in Input/Output ROM. As a result of this enhancement, the HP-85B list price will be increased by $295 to $3,290 (US).

Interfaces such as HP-1B, HP-1L, RS-232C, BCD, or GPIO, will no longer be bundled with the 85B, and must be purchased separately. However, system prices will be the same, as shown below:

<table>
<thead>
<tr>
<th>To obtain an HP-85B with I/O ROM and HP-IB interface.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to February 1, 1984, order:</td>
</tr>
<tr>
<td>HP-85B Opt. 007 (including HP-IB Interface and built-in I/O ROM)</td>
</tr>
<tr>
<td>or HP-85B</td>
</tr>
<tr>
<td>+ I/O ROM (00085-15003)</td>
</tr>
<tr>
<td>+ HP-IB Interface (82937A)</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

| After February 1, 1984, order:                        |
| HP-85B (including built-in I/O ROM)                  | $3,290 |
| + HP-IB Interface                                    | 395   |
| Total                                               | $3,685 |

The HP-85A Upgrade Kit (P/N 82972A), which converts an HP-85A to the functionality of an HP-85B (including built-in I/O ROM), will be available through April 30, 1984. Beyond that date, customers who want to upgrade an HP-85A will be able to order the components of the kit from the Corporate Parts Center.
Personal Computers

Product numbers for HP 150 entertainment software
*John LaCava/CSO*

The following three HP 150 entertainment software packages are now available from CSO.

<table>
<thead>
<tr>
<th>Software</th>
<th>Product Number</th>
<th>HP Internal Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type Attack</td>
<td>P/N 92243EA</td>
<td>92243A</td>
</tr>
<tr>
<td>Temple of Apshai</td>
<td>P/N 92243GA</td>
<td>92243G</td>
</tr>
<tr>
<td>Ricochet</td>
<td>P/N 92243GB</td>
<td>92243G</td>
</tr>
</tbody>
</table>

All three products feature HP Touch and are priced at $39.95 each, US list. They may be ordered from CSO (see Autumn/Winter 83-84 *Computer Users Catalog*, publication number 5953-2450[D]), or through authorized HP dealers.

Series 100 Financial Calculator part numbers
*Patrick Apfel/PSD*

Series 100 Financial Calculator was introduced in the December 1 issue of Computer News. Please note Financial Calculator's part numbers:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/N 45423A</td>
<td>For Trade Orders</td>
</tr>
<tr>
<td>P/N 45423Y</td>
<td>For Consignment/Demo Orders</td>
</tr>
</tbody>
</table>

Sorry for the omission.

Also in this issue

- Introducing HPL 2.1
- HP Series 200 HP-UX hardware runs BASIC, Pascal, and applications
- New document formatter for HP Series 200
- HP Series 200/500 HP-UX manuals available
- New HP EGS/200 videotape available
- HP EGS/200 California success
- Additional system support for HP 2687A and 2688A

New peripherals for the HP 1000
AT&T-IS System 85 certified

January 15, 1984
HP 1000

RTE-A hierarchical file system coming soon for RTE-6/VM users

Jeff Chamberlain/DSD

The C.83 PCO will include the addition of the new RTE-A hierarchical file system to RTE-6/VM. This will further enhance the ability to network existing RTE-6/VM nodes to RTE-A nodes through the DS transparency feature of the new file system. To allow interaction with these new files, the Command Interpreter for RTE-A, CI, will also be included with the C.83 PCO.

The major purpose of this addition to RTE-6/VM is to provide file compatibility with RTE-A nodes in a network. Consequently, some of the RTE-6/VM sub-systems, languages, and utilities will not be updated to use the new files.

These products will not support new files

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>91747A Datasafe</td>
<td>92101A BASIC/1000D</td>
</tr>
<tr>
<td>91745A Datashare</td>
<td>92069A IMAGE/1000</td>
</tr>
<tr>
<td>92091A HP Spice</td>
<td>91730A Multipoint</td>
</tr>
<tr>
<td>92835A Signal/1000</td>
<td>91750A DS/1000-1V</td>
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<tr>
<td>92083A Profile Monitor</td>
<td>91751A DS/1000 X.25</td>
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<tr>
<td>92082A Accel/1000</td>
<td>91780A RJE/1000</td>
</tr>
<tr>
<td>92080A Datacap/1000</td>
<td>91781A MRJE/1000</td>
</tr>
<tr>
<td>92140A PLC</td>
<td>RTE-6/VM generator</td>
</tr>
<tr>
<td>92061A Microprog Pkg</td>
<td>RTE-6/VM LUS 2&amp;3</td>
</tr>
<tr>
<td>92066A RTE M&amp;C sftwr</td>
<td>RTE-6/VM Spool sys</td>
</tr>
</tbody>
</table>

Note that 92120A PMC/1000 and 92130A QDM/1000 (A-Series products) will support new files.

On the other side of the coin, many of the commonly used software products will work with the new file system.

These products will support new files

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>92833A Pascal/1000</td>
<td>92836A Fortran 7X</td>
</tr>
<tr>
<td>92857A BASIC/1000C (at the A.84 PCO)</td>
<td>92860A Symbolic Debug/1000</td>
</tr>
<tr>
<td>New DGL and AGP products expected by April 1984</td>
<td>EDIT/1000</td>
</tr>
<tr>
<td>MACRO/1000</td>
<td>RTE-6/VM Utilities - LINK, MERGE, LINDX, SCOM</td>
</tr>
</tbody>
</table>

Please call your Sales Support Engineer with any questions.

Memory requirement increase for RTE-6/VM systems

Jeff Chamberlain/DSD

Due to the increases in the size of the LINK loader and the directory manager (D.RTR), RTE-6/VM systems shipped after the C.83 PCO must have at least 512K bytes of memory to execute the primary system. We will not change the way the systems are configured (with 256K bytes standard), so you will need to add more memory for the primary system to execute. This is done by specifying Option 014 to delete memory and then ordering the appropriate amount of memory for the application (that is, a 12788E 512K byte memory package). Since this is only applicable to systems, we anticipate few, if any, will be affected. Please contact your Sales Support Engineer with any questions.

New peripherals for the HP 1000

Donald Manoogian/DSD

With the next revision of the HP 1000 software (to be released in February), DSD will support the following peripherals:

- **HP 150**
  The HP 150 personal computer is supported as a terminal or system console device on HP A/E/F Series computers. The HP 150 has a compatibility mode which allows it to emulate an HP 2623A terminal, which means that DGL and AGP will work with it as well. (There are some dimensional considerations because of the 150’s more compact screen size.) The HP 150 uses the same 25-pin terminal connector as the HP 2382A, so the same cable that is used with the 2382A should be used with the HP 150 (Option 006 with most HP 1000 systems).

- **HP 2932A/3A/4A printers**
  These new lower-priced dot-matrix printers from Vancouver Division feature 200 cps print speed, barcode printing, and near-letter quality print (HP 2934A only). They are plug-compatible with the HP 2631B.

- **HP 82906A printer**
  The 82906A is a higher performance version of the HP 82905B personal computer dot-matrix printer
that HP currently sells. The 82906A features 100 cps print speed, sells for $995, and has an HP-IB interface. It is used with the HP-IB interface driver, ID.37, which means that users must provide their own top-of-form control.

- **HP 2687A printer**
  This is the 12 page/minute laser printer announced in September by Boise Division. This printer will be supported on the A-Series only, and must be used with the HP 12040B multiplexer because it utilizes the X-on/X-off handshake provided by this interface.

- **HP 2563A printer**
  This is the new 300 lpm dot-matrix line printer from Boise Division. It is plug-compatible with the HP 2608S, and will be supported with the A/E/F-Series computers. This printer has 75% of the performance of the HP 2608S at 50% of the price.

- **HP 2625A/28A terminals**
  These two new terminals from Roseville Terminals Division feature smooth scrolling and a full feature set. The 2625A has dual data comm ports, one of which can be used to emulate an IBM 3276 terminal.

### HP Quality Decision Management/1000 software for the A-Series

**Sam Haugh/MPD**

QDM/1000 application software has been enhanced to run on the new HP 1000/A-Series computers. QDM/1000 is a powerful tool which enables manufacturing engineers and production managers to analyze and monitor both manufacturing process and product quality through the use of statistical quality control techniques.

Extensive use of Pareto charts, control charts, histograms and scattergrams enables the identification of product quality problems, the causes of the problems, and causal relationships between the process, materials, workmanship, and product defects. As a result, manufacturers can **fix the process, not the product** to dramatically increase quality and productivity while reducing costs.

Features which have been added to the new release include:

- **HP 1000 A-Series and RTE-A support**
  QDM will run on the Model 26, 27, and 29 A-Series HP 1000 systems. The A900 version will be on the February 1 CPL; the A700 and A600+ versions on the March 1 CPL.

- **HP 2627A color terminal support**
  QDM will draw its statistical charts and graphs in gorgeous, eye-catching color. Color makes the graphics easier to analyze as well as being a feature about which customers get excited.

- **Pareto charts**
  In addition to X-bar and sigma control charts, histograms, scattergrams and P-charts, QDM will create Pareto charts. A Pareto chart is a ranked bar chart of descriptive (attribute) data. It enables managers to answer questions such as “What are my five biggest problems?,” allowing them to focus their resources more efficiently.

- **Image-II support**
  QDM uses Image-II. This is a key feature because Image-II offers rollforward/rollback recovery capabilities. For customers worried about data security, these provide an important data integrity feature.

In addition to these main features, 92131A QDM offers a host of minor enhancements.

Prices for the software will be $45,000, $35,000, and $25,000 for the A900, A700, and A600+ versions, respectively. The current factory special for ordering the A900 software at the old price of $40,000 will expire on February 1, when 92131A Option 890 goes on the CPL.

Performance on the A900 will be at least 10% faster than on the F-Series machine. Detailed performance information for the A900 version will be included in the introduction package, which will be sent out in late January. A performance brief for all three versions will be available by March 1.

A wide variety of sales aids will be available also. They will be listed in the field training manual supplement, included in the introduction package.

HP QDM/1000 running on the A-Series family allows you to configure a wide range of excellent price/performance systems to help your customers increase their manufacturing process and product quality. That makes QDM/1000 a powerful productivity solution!
PMC/1000 Process Graphics application note available
Terry Ash/MPD

An application note entitled Process Graphics with PMC/1000 is now available from MPD. This application note discusses how to write a program to generate process graphics displays using a high level language, PMC/1000 subroutine calls, and DGL.

So what is a process graphics display anyway? It is a display which shows the operator a picture of how a process is layed out and what the status of the various components of the process are at that time. For example, a level in a tank might be indicated by drawing the tank and drawing some fluid inside it whose height is related to the actual height of fluid as sensed by the control system. An example process graphics display for a steam boiler is shown below.

To order the application note, please contact Patti Hickox at MPD (COMSYS C700) and ask for a copy of the Process Graphics with PMC/1000 application note.

Trade-up Option 100 (Lightning Express) ends soon
Mike Nissim/DSD

Just before the introduction of the A-Series, DSD offered a special upgrade path from Model 5 to the A600 CPU which was called the "Lightning Express" Trade-up program. This program, which is still in effect, allows customers who had ordered Option 100 on their 2142A/B Model 5 system to trade up their L-Series CPU and memory controller to an A600 (2106AK) board set at an additional cost of $500, and to trade in their copy of RTE-XL for a copy of RTE-A (92077A) for $1,500. Any other software product can be traded up to the RTE-A equivalent under the terms of the L-Series Trade-up program outlined in mailings 3 and 9.

Lightning Express will expire, together with the L-Series Trade-up program, on February 29, 1984. If you want to take advantage of the Lightning Express Trade-up program you must order Trade-up Option 215 on 2106AK (if the customer will be trading in an L-Series CPU with 128K byte memory for a credit of $2,900), or alternatively, order Option 216 (if the customer will be trading in an L-Series CPU with 512K byte memory for a credit of $3,200).

Include the following words in the "Special Instructions" section of your order: LIGHTNING EXPRESS NUMBER --- (the trade-up number assigned to the eligible L-Series CPU), ASIC=--- (the number of serial interface cards in your customer's L-Series CPU). No additional discounts may be given, and all the rules of the L-Series Trade-up program apply, as described in mailings 3 and 9.

Terminal cable options for HP 1000 Model 6+
Mike Nissim/DSD

Recently, we have seen a small number of cases where cable Options 005 or 006 were ordered along with an integrated system console on Model 6+ (P/N 2136C/D and 2186C/D). In those cases, problems resulted at installation because we shipped a long cable which does not fit on the integrated terminal.

Please remember that cable Options 005 and 006 should only be ordered if you require a free-standing system console. If you do not order a cable option we will assume you have ordered an integrated terminal, and we will automatically ship the appropriate cable.
Introducing HPL 2.1
Kathy Miner/FSD

Your HP Series 200 customers who order the RAM-based HPL language system after January 1 will receive a revised version called HPL 2.1. The new version replaces HPL 2.0 and has the same product number and price (HP 98614A, $355 US). HPL 2.1 contains bug fixes, and is FSD’s last planned revision of HPL. A list of the 20 bugs fixed will appear in the next issue of the SE Technical Exchange and in Communicator magazine.

Current RAM-based HPL customers who are on SSS or SIS (HP 98082K/S), and SEs on the worldwide FSD Series 200 Software Subscription Service, will receive HPL 2.1 updates soon. A ROM- or RAM-based HPL 2.0 to RAM-based HPL 2.1 upgrade kit is available for customers not on support services (P/N 98614-17XX00, $100 US).

The new HPL system requires the same amount of RAM as 2.0. See page 2 of the HPL data sheet for RAM requirements. In conjunction with revising HPL, three new peripherals are now supported by HPL 2.0 (ROM- and RAM-based versions) and by HPL 2.1. They are:

- HP 7475A Plotter Option 002
- HP 2932A/2934A Printers
- HP 9133V Option 004 5M-byte Winchester Drive (segmented version only).

HPL 2.1 does not support new hardware configurations; that is, HPL does not support Models 220 or 236C.

ROM-based HPL 2.0 is still available. There are no plans to offer HPL 2.1 in ROM.

HP Series 200 HP-UX hardware runs BASIC, Pascal, and applications
Kathy Miner/FSD and Chris Van Woerkom/FSD

The HP Series 200 HP-UX uses a faster processor board with cache memory, but no user RAM. You’ll be glad to know this hardware can also run the BASIC 2.1 and Pascal 2.1 stand-alone systems. These are fully supported.

We are presently qualifying applications software and have yet to find an application that doesn’t work. So far, HP EGSL200, HP 2622A terminal emulator (HP 98790A), asynchronous terminal emulator (HP 09800-10X80), and IBM 3270 terminal emulator (HP 98795A), have been qualified. A number of other packages are being qualified.

New document formatter for HP Series 200 users
Artie Stone/BOI
Give your customers complete control of their technical documents. HP has just introduced the tool to open the door to technical word processing.

HP TeX (P/N 33402A) is a sophisticated document formatter which enables engineers and scientists to produce high-quality technical manuscripts and documents.

Through use of user-defined macros, your customers can format complex expressions and notations typically reserved for typesetters. HP TeX also will allow underlining, sub- and superscripts, footnote placement, exponents and kerning.

To print HP TeX output, the HP Series 200 supports the HP 2688A workstation’s laser printer (see “Additional system support for HP 2687A and HP 2688A” in this issue of Computer News). The laser printer, introduced in September, is a 12 page-per-minute device which allows you to use up to 32 character fonts per printed page.

SRM users can use HP TeX, also. However, until the 2688 is supported by the SRM, TeX files must be directed to the 2688 via the Series 200 workstation. SRM support is anticipated in March, 1984.

This winning combination of the HP TeX document formatter and the HP 2688A workstation laser printer will offer your engineering and scientific customers a solution for their documentation needs.

HP Series 200/500 HP-UX manuals available
Bill Gates/FSD

The following is an updated list of the current HP-UX manuals for the HP Series 200 and Series 500 computers. It includes manuals for operating systems, software packages that run on HP-UX, and all applicable installation/test/hardware manuals. Customer prices are shown where available.

<table>
<thead>
<tr>
<th>Series 200/500 Manuals</th>
<th>Price (US List)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual</td>
<td>Part Number</td>
</tr>
<tr>
<td>HP-UX Reference</td>
<td>97089-90000</td>
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<tr>
<td>HP-UX Selected Articles</td>
<td>97089-90003</td>
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<tr>
<td>Introducing the UNIX™ System</td>
<td>98680-90025</td>
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<table>
<thead>
<tr>
<th>Software</th>
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<tbody>
<tr>
<td>The C Programming Language</td>
<td>97089-90000</td>
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<tr>
<td>FORTRAN/9000 Comparison</td>
<td>5957-7928</td>
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<tr>
<td>Notes for Series 200/500</td>
<td>97084-90000</td>
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<tr>
<td>DGL Programmer’s Reference Manual</td>
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<td>DGL Supplement for HP-UX</td>
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<td>Graphics/9000 Device</td>
<td>97084-90025</td>
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<td>Handler’s Manual</td>
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<td>HP-UX Asynchronous</td>
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<table>
<thead>
<tr>
<th>Manuals for Series 200 Computers Only</th>
<th>Part Number</th>
<th>Price (US List)</th>
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<tbody>
<tr>
<td>Operating System</td>
<td></td>
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<tr>
<td>HP-UX System Administrator Manual</td>
<td>98680-90010</td>
<td>$15</td>
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<tr>
<td>Getting Started with HP-UX</td>
<td>98680-90027</td>
<td>6</td>
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<tr>
<td>Software</td>
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<tr>
<td>HP Pascal Reference Manual</td>
<td>98680-90015</td>
<td>15</td>
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<tr>
<td>FORTRAN/9000 Reference</td>
<td>98680-90020</td>
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<td>MC68000 User’s Manual</td>
<td>09826-90073</td>
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<td>Software Status Bulletin</td>
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<td>Hardware</td>
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<tr>
<td>Unpacking Instructions for 98680A Option 022</td>
<td>98680-90060</td>
<td>1</td>
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<tr>
<td>Series 200 Keyboard Overlay</td>
<td>98680-85000</td>
<td>13</td>
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<tr>
<td>CS-80 Exerciser Manual</td>
<td>09800-11001</td>
<td>20</td>
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<tr>
<td>System Tests for the Series 200 Computers</td>
<td>09800-10031</td>
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<tr>
<td>Model 220 Installation and Service Manual</td>
<td>09920-90000</td>
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<td>Model 220 Installation Manual for HP-UX</td>
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<td>Model 220 CE Handbook</td>
<td>09920-90039</td>
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<tr>
<td>Model 226/236 Installation Manual for HP-UX</td>
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<td>Model 226/236 Service Manual</td>
<td>09836-90030</td>
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January 15, 1984
## Miscellaneous

**Series 200 HP-UX Documentation Kit**  
98680-87901  
191

Includes:
- 98680-90010  
- 90015  
- 90020  
- 90025  
- 90027  
- 90000-90006  
- 90003  
- 09826-90073  
- 98800-11001  
- eight binders  
- 5957-7925  
- 7928

## Manuals for Series 500 Computers Only

<table>
<thead>
<tr>
<th>Manual</th>
<th>Price</th>
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<tr>
<td><strong>Operating System</strong></td>
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<td><strong>HP-UX System Administrator Manual</strong></td>
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<td>Series 500 03.02 HP-UX Update Overview</td>
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<td>LAN User's Guide</td>
<td>97059-90000</td>
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<td>LAN Node Manager's Guide</td>
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<td>AGP User's Guide</td>
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<td>AGP Supplement for HP-UX</td>
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<td>97085-90005</td>
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<tr>
<td>IMAGE/Data Base Programming Techniques</td>
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<tr>
<td>IMAGE-UX Reference Manual</td>
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<tr>
<td>Data Base Design Kit</td>
<td>97053-90002</td>
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</tr>
<tr>
<td>Applications Migration Package (AMP) Reference</td>
<td>97086-90001</td>
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<tr>
<td>Applications Migration Package (AMP) User's Guide</td>
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<tr>
<td>HP Spice User's Guide</td>
<td>98183-90000</td>
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<td>HP Spice Reference Manual</td>
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</tr>
<tr>
<td>MUSE™ Documentation Kit</td>
<td>79300-10010</td>
<td>56</td>
</tr>
</tbody>
</table>

Includes:
- MUSE Self-Teaching Guide  
- MUSE Reference Manual  
- MUSE System Administrator Manual

These manuals cannot be ordered separately.

## SOFTOOL™ Documentation:

- FORTRAN Programming Environment (FPE)™ Overview  
- FORTRAN Programming Environment (FPE), Volume 1  
- FORTRAN Programming Environment (FPE), Volume 2  
- Change and Configuration Control (CCC)™ Guide  
- CCC Quick Reference Card  
- Change Control (CC)™ Guide (4)  
- VAX™ to F77 Transport Guide  
- IBM to F77 Transport Guide

## Hardware

- CS/80 Disc Exerciser/Installation Note  
- Unpacking Instructions for Series 500 HP-UX  
- System Integrity Tests User's Manual  
- Model 520 Installation and Test Manual  
- Model 520 Service Documentation Package  
- Model 520 CE Handbook  
- Model 530/540 Installation and Test Manual  
- Model 530/540 Service Documentation Package  
- Model 530/540 CE Handbook  
- Series 500 Computer Site Preparation Manual

## Manuals Included With HP-UX

Series 200:

When Series 200 HP-UX is ordered, the manuals included in the documentation kit (98680-87901) are automatically shipped with the product.

The appropriate application software manual(s) are included with the software package.

The appropriate Installation and Test manual is included with the hardware.
For further information

CSO publishes annually a complete index of all documentation currently on record. This publication is called the **HP Computer Documentation Index**, P/N 5953-24600.

*Prices are approximate. Actual prices may vary slightly.

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MUSE is a trademark of MARC Software International, Inc.

SOFTOOL is a U.S. registered trademark of Softool Corporation.

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VAX is a trademark of Digital Equipment Corporation.

New HP EGS/200 videotape available

*John Calhoun/BDG*

A new feature-length videotape on HP EGS/200 is now available.

HP EGS/200, you may recall, is a general-purpose drawing system for HP Series 200 computers, featuring general drawing, technical drawing, electronic schematics, and printed circuit board “personalities.” It will operate in either a stand-alone or Shared Resource Management environment, with either a built-in CRT or large external color monitor and a variety of peripherals.

Designed primarily as a sales tool for HP EGS/200, the videotape will help qualify a prospect without your having to set up a costly and cumbersome “live” demo every time. It is about 80 minutes long and can be shown in separate “modules” for those having only certain areas of interest. The modules include:

- HP Introduction — 2 minutes
- HP EGS/200 Introduction and General Drawing Personality — 19 minutes
- Schematic Drawing Personality — 21 minutes
- Printed Circuit Board Personality — 21 minutes
- Technical Drawing Personality — 11 minutes.

The tapes are available as 3/4” Umatic, ¼” VHS, and ½” Beta. The 3/4” Umatic tape consists of two separate reels. Appropriate pauses are placed on all tapes so that you may skip between major segments if desired.

The videotape goes into extensive detail, showing such operations as placing and copying components, cross-hatching, and connecting in close-up shots that are almost like being there. You should adjust your TV color, tint, and brightness for best viewing on these screen shots, as they will be the best reflection of the resolution, clarity, and functionality of HP EGS/200. Also, you should have the HP EGS/200 Operator’s Manual (P/N 98305-10001) and possibly the Reference Manual (P/N 98305-10000) as well; both are available through SODA and Computer Supplies Operation.

To order your copy of the demo, contact:

Sara Moya
Business Development Group (BDG)
Colorado MARCOM
COMSYS 4000

Be sure to specify the tape size you want — 3/4” Umatic, ¼” VHS, or ½” Beta. The price for any format is $110.

Tom Krantz, resident HP EGS/200 expert and host of the videotape, reports that field acceptance of the piece has been excellent.

The HP EGS/200 Drawing System
HP EGS/200 California success
Al Sperry/BDG

Laurent Gharda, SR in the Brisbane, CA, sales office, recently sold the first HP EGS/200 system in that locale. This $70,000 sale, along with others, earned Laurent a place among the top 10 salespeople for August 1983.

The customer, a California firm that designs infrared detectors, had been looking at another system, and was just ready to place an order when the HP EGS/200 data sheet became available. After looking at the HP EGS/200 specifications, the customer was convinced it would provide better solutions. This was before seeing a demonstration, which was not possible until two weeks before delivery.

The customer bought the HP 9836C-based EGS/200 system, including an HP 9111 graphics tablet, an HP 7580 plotter, an HP 7912 disc drive, and an HP 2671G printer. The system will be used 80% of the time for mechanical design and 20% for printed circuit board design.

The first sale of a new system is usually the most difficult. Laurent confirmed this late in November 1983, when he reported selling two more HP EGS/200 systems.

Computerizing a state for success
Al Sperry/BDG

Although the Department of Transportation (DOT) in most states of the US is not computerized yet, one progressive DOT in a northern state is buying and installing HP Series 200 computer systems. This was a two-step procurement: first to select hardware and second to choose the supplier for the coordinate-geometry software.

Hardware bidders included Digital, IBM, and Tektronix; software vendors included HASP, Holguin, PacSoft, and Wild — so you can see there was serious competition.

Charlotte Mathison, former SR and now an SEDM in the Bellevue, WA, sales office, worked with SE Steve Methany to show the customer HP could supply the best engineering hardware and third party software to solve their problems. Charlotte and Steve took several trips north to make the initial customer presentations.

The customer’s engineering needs range from civil to structural. In February 1983, it became apparent the software would play a vital role in making the sale. The customer’s evaluation showed that a coordinate-geometry package (COGO-200) by Texas-based PacSoft had the power needed for the HP Series 200 computers to do the job.

Some of the priorities the customer used to make a purchase decision included:
- Ability to perform asynchronous communications with the IBM mainframe computer (via terminal emulation)
- Availability of third party software
- Software support and training
- Ability to interface with field-surveying instruments
- Ease of use.

Included in the customer’s 20-member system selection committee were a number of surveyors, and also some people who had never seen a computer. Part of their vote was based on the ease of using the system with the COGO package; the software has a HELP feature available when the user needs it, and graphics appear on the screen automatically as the solution progresses.

Voting was highly in favor of HP, and the customer has contracted to purchase approximately 100 HP Series 200 Models 216 and 220. A number of HP 7585 plotters will be added to the contract early this year, and the sale will total about $700,000 — well worth the effort, according to Charlotte.

Does knowing that most state DOTs are not computerized give you ideas about prospecting sales? Possibly in your spare time...?

HP LAN/9000 customer investments insured
Randi Iten/RND

Recently Hewlett Packard’s first Local Area Network (LAN) product, LAN/9000, was introduced for Ethernet-based high speed communication between HP 9000 Series 500 computers. Ethernet is being sold by many manufacturers, including DEC for VAX™ computers, and is the LAN implementation that is best known to most of our customers. Ethernet is a de facto industry standard created by DEC, Xerox, and...
Intel in 1980 and has allowed HP and other vendors to successfully market and sell LAN solutions.

A true industry standard now exists with the adoption of IEEE 802.3 and HP is committed to provide future LANs based on this standard. HP is also committed to providing an easy transition for Ethernet-based LAN/9000 customers by using the following tactics:

- Ethernet and IEEE 802.3-based networks use the same hardware. IEEE 802.3 offers several enhancements to Ethernet that will be made available to LAN/9000 customers with a software upgrade. **LAN/9000 customer hardware investments are protected.**

- HP will provide the easy software upgrade for all Ethernet-based LAN/9000 customers to allow them to communicate with IEEE 802.3 nodes. **We will offer Ethernet-to-IEEE 802.3 flexibility.**

- Ethernet nodes can share the main cable with IEEE 802.3 nodes even though they can’t communicate with each other. **The transition can be made individually — it doesn’t have to be all nodes at once.**

- DEC has published information indicating that DEC networks will conform to the IEEE 802.3 standard. **HP and major competitors have committed to support the formal industry standard for the convenience of customers.**

Our goal is to make it as easy as possible for you to continue to successfully and aggressively sell HP’s current LAN solution by making our strategy and upgrade commitment clear.

**VAX is a trademark of Digital Equipment Corporation.**

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**Swedish success for HP-Draft**

*John Twaafhoven/BEO*

A manufacturer of fossil fuel-charged power stations in Goteborg with 300 employees recently bought three HP-Draft 9836 color workstations, and one HP 9920 SRM station with a 65M-byte disc. Kent Nielsson, SR in Sweden, made an excellent $200,000 sale with a potential expansion to an MPN configuration with 10 workstations in two years. The order was confirmed after five months and only one demo.

For the last six months they have been using AUTOCAI, which runs on a Sirius, as a learning tool, but this is a stand-alone system and is not suited for SRM or MPN. They knew that their main competitor uses a Computervision system but it does not meet their specific objectives. These are to reduce the time between receiving the orders and releasing the mechanical drawings to production, and to implement further office automation over the next two years.

Because further office automation is planned in the next two years, the managers then attended an HP-CAE seminar for a selected audience. Here it became clear to Kent that strong drafting capabilities were required rather than electrical, variation, or CAM facilities. A few months later Gunner Werning, SE in Stockholm, ran a benchmark and a detailed demo on HP-Draft. The customer realized the ease of use, thus the short learning curve, and the specific drafting characteristics. Both promise a fast productivity increase for the overloaded drafting office. Also HP’s future commitment to offer MPN matches the company objectives.

**HP 9020B performs software benchmark in Nuremberg**

*Al Sperry/BDG*

At the recent European Microwave Exhibition in Nuremberg, Germany, a performance benchmark was run using the SUPER-COMPACT third party software package, which is available for all major computers. This package is used to design high-frequency and microwave analog circuits.

The question to be answered by the benchmark tests was: “Given my circuit, how much CPU time will be required to optimize it on this model computer? How long will I have to wait for a solution?” A practical sample circuit was used that would run long enough to allow measurement accuracy of plus or minus five seconds.

Benchmarks were run by a freelancer on the HP 9000 Model 520B, the DEC VAX™ 11/750 and 11/780, and Apollo workstations. Here are the results:

<table>
<thead>
<tr>
<th>Test No.</th>
<th>Computer</th>
<th>CPU Time (seconds)</th>
<th>Normalized Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VAX 11/750</td>
<td>403</td>
<td>2.52</td>
</tr>
<tr>
<td>2</td>
<td>VAX 11/780</td>
<td>160</td>
<td>1.00</td>
</tr>
<tr>
<td>3</td>
<td>HP 9020B</td>
<td>242</td>
<td>1.51</td>
</tr>
<tr>
<td>4</td>
<td>Apollo</td>
<td>491</td>
<td>3.07</td>
</tr>
</tbody>
</table>
Technical Computers

Note that CPU speed is not the only influencing factor in a particular hardware configuration's benchmarks. Ergonomics and environmental factors also affect the outcome.

The benchmark results must have impressed visitors at the exhibition. After the show, when the number of pure vendor leads was tallied, HP ranked first and DEC second, and Apollo did not receive a single lead.

VAX is a trademark of Digital Equipment Corporation.

The HP 9000 Series 520 goes to sea looking for oil

Bob Ward/BCD

David Brown (HP Winnersh UK) is having continued success with the oil survey company, Oceonics.

A survey ship with its hydrophones needs to be positioned very accurately in the ocean. Oceonics therefore looked for a computer to mount on the ship to calculate the ship's position based on information from satellite navigation and radio location systems in conjunction with echo sounders. An obvious requirement for such a computer was that it had to be sturdy, reliable, compact and easy to use for the inexperienced members of the ship's crew.

Oceonics chose the HP 9845B initially for this job and later moved on to the HP 9826 and 9836 desktop computers. They have been using these machines for several years and are highly satisfied with the results.

One weakness however has been that the survey data still had to be sent back to shore on a magnetic tape for analysis on a large mainframe computer. Oceonics needed a powerful computer easy enough to use and sturdy enough to be mounted on a ship.

They decided to use the HP Series 520. They have ordered nine units and all the indications are that this is just the start of a booming business. We wish David lots of success in the future with the HP 9000 range of computers.

13183 HP-IB demobox obsolete
January 31

Walter Wolf/BCD

We are planning to obsolete the 13183 HP-IB demobox because orders are low. This box has served as a tool to demonstrate and test the HP-IB capability of our desktop computers. We are planning one final production run. If you are interested in getting some of the boxes, please place your order prior to January 31, 1984.

For questions contact HP 9000 Product Marketing Europe.
SNA data comm products
expand market for HP 3000

John Herrgott/IND

The new HP DSN/SNA products are here. Now you can aggressively go after those accounts where SNA data comm is a key requirement. Where is that? Practically any IBM shop, that's where!

SNA is IBM's much talked about networking architecture that is more cost effective and offers more capabilities than their older networking approach based on BSC (bysnc). You will find accounts who are implementing networks now to base their design on SNA. Another opportunity is IBM users of BSC networks who are upgrading to SNA. The bottom line is — when you go up against IBM, the new HP DSN/SNA product will help you win!

The SNA data comm products, HP DSN/SNA Network Remote Job Entry and HP DSN/SNA Link, will appear on the February 1 CPL. Together these products allow users to submit batch jobs from the HP 3000 for processing on an IBM mainframe and receive job output after host processing. This capability could be used in a variety of ways, including: updating data bases on the host or on the HP 3000 distributed node; transferring large jobs created locally to be processed on the host; or using the HP 3000 and an HP 2680 as a high quality remote print station for an IBM host.
**MPE-V/P boosts HP 3000 performance**

*Jeff Byrne/CSY and Larry Russell/CSY*

In early December CSY released MPE-V/P software for new and box-swap upgrade systems and for currently installed HP 3000 systems that have ordered a field upgrade. MPE-V/P Release #1 is a site-specific installation tape planned only for customers who have ordered the disc caching product included with the HP 3000 Series 42, 48, 68, and the high performance Series 39 and with the field upgrades.

MPE-V/P and disc caching offer our customers new levels of I/O and system performance. MPE-V/P has been built onto the reliable MPE-IV Q-Delta-2 base operating system. Though MPE-V/P includes several new features and product improvements, by far the most significant enhancement is the support of disc caching.

Disc caching software measurably improves HP 3000 I/O performance by using main memory as a high-speed buffer for disc-resident information. This fully transparent new software may be activated, disabled, and monitored by your customer’s system manager or supervisor. Performance tests have demonstrated that disc caching can produce dramatic improvements in throughput and response time, particularly for I/O-intensive, multi-user applications. In a benchmark test performed in Atlanta for one of HP’s major accounts, a Series 64 running an early version of disc caching outperformed an IBM 3033 in a batch MRP run (see Computer News, October 1, 1983). Equipped with disc caching, MPE-V/P provides your customers the means to achieve a major breakthrough in HP 3000 performance.

Among the other enhancements appearing on MPE-V/P, OPT/3000 has been updated to show how disc caching utilizes system resources. New OPT displays not only summarize CPU, disc, and memory-related activity, but also indicate how disc caching is affecting resource usage and system performance. The new version of OPT/3000 will enable your customers to better manage their HP 3000 performance. Accompanying these OPT enhancements are changes to various SE diagnostic utilities, targeted for the most part towards disc-caching analysis. For example, a new dialogue has been added to the dump analysis tool to reflect the use of disc-caching tables. MPE-V/P features a completely updated set of tools and capabilities that allow users to achieve and maintain higher levels of performance.
All of these features of MPE-V/P have been engineered with an emphasis on quality. Several new standards implemented during MPE-V/P development have improved the quality of software coding and testing. The module ownership system promotes high-caliber software development by assigning each module to a particular engineer. As a result, outstanding programming efforts can be more easily encouraged and recognized. Testing and debugging efforts have been streamlined through the use of the privileged-mode bounds checking tool (PMBC). This microcode-resident diagnostic enables lab engineers to detect mysterious addressing errors quickly and efficiently. The PMBC helped reduce overall MPE-V/P testing cycle time by eliminating potential defects early on.

The introduction of MPE-V/P is another step in CSY’s drive for higher quality, better performing system software. This latest release provides our new and current customers with a solid base for developing and executing HP 3000 applications.

HP Series 68 I/O bay has been released
Audrey Dickey/CSY

The auxiliary I/O bay for the HP Series 68 has been released with MPE-V/P. This is good news for those customers who need the expansion before MPE-V/E is ready. However, there are some issues that the customer needs to be aware of when taking delivery of the I/O bay. Although the I/O bay is a released product, only limited configurations will be supported with the MPE-V/P operating system.

The following limitations apply to the support of the auxiliary I/O on an HP Series 68 with the MPE-V/P operating system:

- Only two IMBs will be supported. If the customer currently has two IMBs on the system, when the I/O bay (with the third IMB) is installed, one IMB must be removed until the delivery of MPE-V/E.
- Only a maximum of 152 terminals will be supported. Of these terminals, 144 can be point-to-point. The maximum number of modem terminals is 143. The session limit is still 110.
- Only 16 INPs are supported.

- In general, the configuration must be examined to determine the feasibility of large hardware additions to the system. Because MPE-V/P does not have expanded tables, it is possible to configure a system that is not usable because of software limitations. Areas that must be considered, in addition to the number of sessions, are the number of LDEVs (logical devices), DSTs (Data Segment Table entries) and CSTs (Code Segment Table entries). The SE should consult with the SE to ensure that any proposed hardware configuration can be supported with the MPE-V/P software.

When talking to customers about a third I/O bay, make sure they are aware of these limitations. It’s important to remember that the release of MPE-V/P means that the customer can install the third bay now and easily move to MPE-V/E when it’s available.

New laser printers supported on HP 3000
Adrienne Kelly/CSY

CSY and IND are pleased to announce support for the HP Series 1200, models 2687A and 2688A laser printers (available from Boise division) on the HP 3000 computer family.

HP 2688A support

The HP 2688A is supported via HP-IB only. Two HP 2688As can be attached on the HP 3000 Series 39, 4X, and 6X systems. One HP 2688A may be attached on the Series 30/33. The HP 2688A printer is not supported on the Series III. Currently, CSYS supports a maximum of two HP 2680 laser printers on the Series 30/33, Series III (via Starfish), and the Series 39, 4X, and 6X. With the introduction of the HP 2688, the total number of page printers supported on each of these systems will remain the same. In other words, your customer may have a combination of HP 2680s and HP 2688s, but the total number of page printers may not exceed two. The HP 2688 is a high-speed device shipped with four electrical device loads (variable from one to eight). It requires one meter of internal cabling.

HP 2687A support

Using an ATP connection, two HP 2687As can be supported on either a Series 39 or 4X and four HP 2687As can be supported on a Series 6X. However, if the HP 2687A is configured via the ADCC, only one
can be supported on the Series 4X. The HP 2687A is not supported on the Series 30/33 or Series III systems. It is important to note that while the HP 2687A may be up to 500 meters from the CPU using the RS-422 connection, it is not supported in a remote configuration (for example, over modems) at this time. Boise Division is in the process of testing this type of configuration in an attempt to provide remote support in the future. Also, the HP 2687A is not supported via MTS.

The HP 2687 is not supported as a system printer. This is because the HP 2687 uses X-on/X-off handshaking only and therefore is unable to send back an ID status to the CPU. In addition, as an RS-232 device, data integrity and high throughput cannot be guaranteed. These characteristics prevent the HP 2687A from being classified as a system printer. In cases where this presents a concern for your customer, please call your sales development representative for assistance.

Availability
Both the HP 2687A and HP 2688A may be ordered immediately and have 12 to 14 weeks availability. Both printers are supported on the Q-Delta-2 MITs following Q-Delta-2. For those customers who require HP Word (available on both the HP 2687 and the HP 2688) or AGL Graphics (available on the HP 2688 only), support is available on the Q-Delta-2 Product Tape available from CSD in the first quarter of this year.

Small in size and big in performance, these new products will prove to be a high-quality, reliable printing solution for your customers.

Get the power of HP Series 48 with ADCC to ATP upgrade
Hans Nilsson/IND

For all of you who asked for the ADCC to ATP upgrade on the HP 3000 Series 48 — now it is here. ADCC mains and extenders can be returned for credit toward the purchase price of an ATP Direct-Connect Port Controller. That means $1,700 return credit per ATP Direct-Connect Port Controller. Since the HP 3000 Series 48 includes disc caching, I/O constraints are released, and the HP Series 48 can support 40 more point-to-point ports than the HP Series 44.

Following are the key features offered by the ATP on the HP Series 44/48 that are not available with ADCC:

- 12 ports per ATP port controller versus 8 per ADCC subsystem (main and extender) frees I/O backplane slots to increase the maximum number of terminals on the system from 64 to 104, or to add other I/O cards

- Direct Memory Access (DMA) data transfer off-loads terminal character processing from the HP 3000 SPU
- Both RS-422 and RS-232 are supported for local terminals
- 19200 bits/sec maximum data transfer rate
- The ATP on-board buffering virtually eliminates the possibility of data overrun
- On-line diagnostics testing to support system up-time
- Efficient hardware/software design minimizes utilization of SPU (system processing unit) to support terminal I/O.

Note that on the HP 3000 Series 44 and 48, the ATP supports only directly connected terminals; the ADCC must be used for modem ports, PBX ports, and for connections to the system console.

To receive credit for ADCC mains and extensions for ATP Direct-Connect Port Controllers, order the products listed below as they apply. Up to two credits (main, extender, or both in any combination) can be applied toward an ATP Direct-Connect Port Controller.
Memory credits to be reduced

Russ McBrien/SRO

There never will be a better time to upgrade your Series 40 and Series 44 than right now. This is the message you should be taking to your installed customers. As of April 1, 1984, upgrade credits for Series 4X memory products will be reduced. You should work with your customers to ensure they are able to take advantage of the current high credits that are available to them when they upgrade their Series 4X system to the Series 68.

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Current Value</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>30171AN</td>
<td>256K bytes 4X Memory Credit</td>
<td>$3,000</td>
<td>$1,250</td>
</tr>
<tr>
<td>30092AN</td>
<td>512K bytes 4X Memory Credit</td>
<td>$6,000</td>
<td>$2,500</td>
</tr>
<tr>
<td>30161AN</td>
<td>1M byte 4X Memory Credit</td>
<td>$11,200</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

The new values will be reflected on the April 1, 1984 price list. There will be a standard 30-day grace period after April 1 for customers to take advantage of the old values. So get your upgrade order in before the end of April to lock in high return values for your Series 4X upgrades. If you have any questions regarding this credit change, contact your upgrade and re-marketing Market Development contact: 408-738-8858. We will be glad to work with you to develop effective upgrade plans for your installed customers.

HP 7920SR promotion closes a deal

Raymond Dean/SRO

SR Lee Schulz of the Paramus sales office recently closed a deal with the help of the Special Storage Savings Promotion from Systems Re-marketing.

Kyto Diagnostics of New City, NY, was looking for an economical solution to their system needs. Lee contacted Systems Re-marketing and explained the situation. Lee learned of the promotion on the HP 7920s at half price with the purchase of any other re-marketed disc drive. When Kyto Diagnostics found they could save over $4,900 while receiving 50M bytes extra disc storage, the deal was closed.

Lee credited the system sale to the HP 7920SR promotion, which shortened the sales cycle and helped close the deal.

Kyto Diagnostics purchased an HP 3000 Series 30R system for use in laboratory analysis.

Because this was a price-sensitive situation, re-marketed equipment was the perfect solution. Combined with quick delivery and a 50M byte disc drive at half price, Lee was able to close the deal.

Introducing major enhancements for HP Toolset

Sara B. Mah/MPD

As of the Q-Delta-2 Product Tape, MPD is introducing a major set of HP Toolset enhancement. These enhancements are the first phase of transforming HP Toolset into a multi-language applications development system for the HP 3000.

Pascal/3000 program development

The enhancements include:

- Supporting Pascal as well as COBOL II application development
- Making all features now available to COBOL II programmers available to Pascal programmers. Those features are:
  - The User Interface which consists of screen-labelled function keys, commands, menus, and terminal editing keys
The Workspace Manager which oversees and regulates all source files, versions of source files, $INCLUDE files, the USL file, and the program file

The Full Screen Editor which permits easy entry and modification of source code on the screen

The Program Translation Manager which allows programmers to compile, prepare, and execute programs with a minimum of effort

The COBOL II and Pascal Symbolic Debug which speeds interactive program debugging at the source code level.

One of the advantages of the commonality of features is that a COBOL program that contains a Pascal subprogram can now be written and tested entirely with HP Toolset.

**Code Generation Facility**

The GENERATE command in HP Toolset accesses the COBOL Definition Extract Utility and the Pascal Definition Extract Utility, which are components of Dictionary/3000. These utilities extract data definitions from Dictionary/3000 and use them to generate COBOL and Pascal data declarations. COBOL data declarations can be generated for the Environment Division and the Working-Storage and File sections of the Data Division.

In addition, many COBOL clauses can also be generated, such as the Record Key Is clause for the Environment Division and the Block Contains clause for the Data Division. The generated code is put into an HP Toolset editor file or a COBOL Copy Library.

Pascal data definitions can be generated for Pascal VAR and TYPE declarations. These declarations include the following Pascal data types: char, boolean, integer, real longreal, string, set, arrays, non-variant records, and variables. The generated code is put into an HP Toolset editor file.

**COBOL Copy Library creation, editing, and management**

COBOL copy libraries are prewritten code that can be shared between programmers. They are used to standardize data definitions, record descriptions, and file descriptions. They are a tremendous means of increasing programmer productivity.

New commands and function keys have been added which enable the programmer to define, build, edit, list, purge, and copy COBOL COPYlib modules. COPYlib support is an often requested enhancement and we are happy that HP Toolset now supports it. In essence, all capabilities of the COBOL II COBEDIT utility are now supported by HP Toolset.

**New function key structure**

The function keys in HP Toolset have been redesigned to improve ease of use. The former tree-like structure has been replaced by a more logical looping design where keys repeat. New keys have been added to permit the user to step forward and backward through each key set. This increases flexibility of the system and user control. Some keys have been renamed and repositioned for greater clarity. This new interface is very simple and much easier to use.

**How do your customers receive these enhancements?**

Existing HP Toolset users on support contracts will receive these enhancements at no charge. The Q-Delta-2 Product Tape MIT or a later MIT will be required. A Pascal/3000 compiler will have to be added by users who want to start developing Pascal applications. New customers will need to purchase HP Toolset (P/N 32350A) and the appropriate COBOL II (P/N 32233A) and/or Pascal/3000 (P/N 32106A) compilers.

**DEL — going, going, gone**

*Bart Coddington/MPD*

Data Entry Library (DEL) has reached the end of its five-year obsolescence cycle. HP no longer supports this product (P/N 32206A) as of January 1, 1984.

The following letter has been mailed to all customers who have support contracts with CSD. This is probably only half of the customers using DEL, so a product tape is being made available. CSD will distribute the
product tape to all SE librarians. Local SEs can then obtain the software as outlined to customers in the
letter.

**FINANCIALS**

**HPFA Customer Profile**

**#0000009**

Leslie A. Kriese/FSO

**Name:**

**Business type:** Manufacturer of teflon hose for use in space vehicles, aircraft, autos, and refrigerators

**Geographic location:** East Coast

**Size:** $40 million in sales; 400 employees

**Reasons for purchasing HPFA:**
- Customizer-monitor
- Anticipated enhancements
- HELP screens
- HP’s one-vendor solution

**Application of HPFA:** This customer is implementing HP General Ledger, HP Dual Ledger, HP Accounts Payable, HP Allocator, HP Report Facility, and HP Interface Facility. In addition, they also have HP MM/3000 and HP PM/3000 running in test mode, which will be linked to HPFA. They’ve also upgraded their Series 44 to a Series 48 and purchased additional disc and terminal resources.

**Previous system:** In-house

**Implementation time:** While still in progress, their foreign subsidiary is already live on HP Dual Ledger, successfully converting French francs to US dollars.

**Why the competition lost to HPFA:**

The competition included Satcom, AIC, Cardinal Data (formally Shrivel-Data), and Datacomm. They lost due to:
- HP’s one-vendor solution
- Perceived lack of future enhancements
- Customizer-monitor
- HPFA’s HELP screens

**Customer quote:** “The HELP screens are a real plus, a great feature.”

— The Controller

**HP 3000 Reward Program has ended**

Bob Hall/BDG

The redemption deadline of midnight, November 30, 1983, for the free HP-12C calculators offered in the HP 3000 Reward Program has come and gone. To help you reward those customers that had satisfied the purchase conditions of the program, we extended the redemption deadline to December 31, 1983. However, any certificates that are received after the extension date cannot be redeemed and will be returned to you.

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30 COMPUTER NEWS For HP Use Only

January 15, 1984
**Manufacturing**

**HP wins at McDonnell Douglas Astronautics Company**

*Bob Greenfield/SMC*

McDonnell Douglas Astronautics Company has selected HP's manufacturing and office automation solutions for its Harpoon missile depot and repair facility. McDonnell Douglas ordered HP MM/3000, HP PM/3000, HP Business Graphics Package, all of the RAPID products and HP Word, together with an HP 3000 Series 68.

McDonnell Douglas tested the flexibility of HP's solution by specifying changes they wanted us to make to a demo system using both the CUSTOMIZER and RAPID products. Five McDonnell people observed the CUSTOMIZER and RAPID demo over a two-day period. The customized manufacturing applications and RAPID applications were then demonstrated to McDonnell Douglas management. They were very impressed with how much could be accomplished in such a short period of time using the CUSTOMIZER and RAPID. (HP still provides complete support for MM/3000 and PM/3000 regardless of how much the user customizes the products.)

It is interesting that McDonnell Douglas chose HP manufacturing solutions for the same key reasons most of our other customers do:

- HP's one-vendor solution for hardware, software, HP ASSIST, and support
- HP's unique CUSTOMIZER technology which allows customers to tailor the applications to their specific operating requirements
- HP's success in selling solutions to other manufacturers (over 700 applications sold worldwide)
- a successful demonstration of the application products and CUSTOMIZER technology.

Congratulations to Dave Settle (SR), John Pfaff (ASR), Dave Benedict (ASE), Chuck Nix (ASE), and Ross McAninch (SE) of the Midwest/West field team for their successful solutions selling.

**OFFICE SYSTEMS**

**HP Word III coming soon**

*Jay Young/OPD*

HP Word III (A.02.01) will be on the Q-Delta-2 MIT, scheduled for release in February. This release is required to support the HP 2628A terminal and HP 2687A and HP 2688A laser printers. It does, of course, support the HP 2626W as well.

As many customers will be receiving this new hardware before the MIT is released, OPD has made some interim arrangements to ensure customers receive the software when needed.

**New customers**

OPD will ship a product tape and a full set of new manuals, including the new self-paced training to new HP Word customers. The customer will also receive a letter asking him or her to contact his Account SE to arrange installation of the product.

**Existing customers**

HP Word III product tape has already been shipped to Field Software Coordinators. The purpose of this shipment is to enable the field to make HP Word III immediately available to existing customers who
Business Computers

require HP 2628 terminal support. OPD will notify the appropriate field office of shipments of HP 2628 terminals from Puerto Rico to customers.

The FSC product tape can also be used to update customers who have asked for early access to HP Word III to fix known bugs in earlier versions.

In both these cases, installation will be arranged by the Application Center and will be done by CSRs if available. If not, it will be done by an SE and billed to AMD. A COMSYS has been sent to Application Center Managers and SE District Managers explaining this procedure.

We hope that these arrangements will result in a smooth transition for our customers from HP Word II to HP Word III, and ensure full hardware support and customer satisfaction.

For further information on this release, see the field training manuals called HP Word and the Interactive Office, distributed to the field in September (P/N 8557-4605).

HP Word III training and documentation

The manual set for HP Word III has been fully updated for this release and now includes the self-paced training free:

<table>
<thead>
<tr>
<th>Manual</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP Word Reference Guide</td>
<td>32120-90001</td>
</tr>
<tr>
<td>HP Word Quick Reference Guide</td>
<td>32120-90002</td>
</tr>
<tr>
<td>HP Word Administration</td>
<td>32120-90022</td>
</tr>
<tr>
<td>HP Word Self-Paced Training</td>
<td></td>
</tr>
<tr>
<td>Part One</td>
<td>32120-90020</td>
</tr>
<tr>
<td>Part Two</td>
<td>32120-90021</td>
</tr>
</tbody>
</table>

OPD will ship one copy of each manual to new customers.

Existing customers will be updated with a complete set through the usual update service provided by SDC. This distribution has already begun.

Additional copies of manuals are available from CSO. Those not on any manual update service should also order their manuals from CSO.

The files needed to use the self-paced training are included on the product tape in the group TR32120.HPPL85. The self-paced training is not recommended for new users in a new installation of HP Word. It is very useful for those who have received basic training and want to learn more advanced features. It can also be used for new users as long as there already exist experienced HP Word users who can administer the training and answer students’ questions.

Because of the requirement for an improved classroom course, a new HP Word Basics Classroom Course has been developed:

<table>
<thead>
<tr>
<th>HP Word Basics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>At Training Center</td>
<td>36564A</td>
</tr>
<tr>
<td>At Customer Site</td>
<td>36564X</td>
</tr>
</tbody>
</table>

The class materials consist of instructor and student workbooks, practice exercises, and a set of slides.

Distribution of the class to Application Centers and Training Centers has been organized by Jo Tyler at AMD.

A training data sheet has been written for HP Word III explaining how best to use the training materials available to ensure that new HP Word users are trained properly. The data sheet is included in the field training manual. Additional copies of the data sheet are available from LDC.

Finally, to ensure successful implementation of HP Word at your customer site, HP OFFICE ASSIST is available. The part number for HP Word Implementation Assistance is 32120 + 65A (for a maximum of five users) and 32120 + 65B (for a larger installation).
Advertising HP Telex to your customers

Shirish Hardikar/OPD

All the major benefits of HP Telex are rapidly communicated to your HP 3000 customers through this new advertisement.

The world of Telex from your HP 3000 flyers have been mailed to each of you in packs of 15 for your own use. In addition, a small stock is held at the Corporate Literature Distribution Center and can be ordered as P/N 5953-8302 for seminars and mailers.

Revised HP Telex data sheet

A revised data sheet is now available for HP Telex, P/N 5953-8303. Major changes in this revision note include:

- RS-422 connections are not supported
- Recommended printers are the HP 2601A and the HP 263X family; plus any others supported by the MPE spooler (for example, the HP 2602 is not supported)
- For the US only, the multi-carrier dialing codes are supported by HP Telex.

This data sheet obsoletes the previous publication (P/N 5953-8301).

Office Productivity Division reference sites

Andrew Bissex/OPD

Want to win an HP 12C? Read on.

A good reference site has always been one of our most powerful sales aids. In order to help the sales force win new business deals, we are in the process of compiling a comprehensive office systems reference site list.

If you have visited a site and believe it could be used by the sales force to help close a sale, please reply to the questions below. Please do not assume that we already know of the site even if it has been used as a reference site before.

Please include all new or old, large or small, sites using our products successfully. Photocopy and complete this form for each site and return it to Andrew Bissex at OPD, Pinewood, England.

We are also planning to conduct a detailed analysis of several successful sales campaigns. These analyses will eventually form part of a field training manual called How to Win with HP's Office Systems. Please answer the last question if you think your proposed site should be included in this study.
Good news! Release V of HP SFD/3000 and OM/30000

*Sherry Hinds/IRO*

Release V of HP System for Distributors (SFD/3000) and HP Order Management (OM/30000), announced November 1, 1983, has the following features:

- **New purchasing system** — Purchase Order II (POII). This replacement for the current purchasing subsystem (POI) supports many of the features currently available in POI and offers several new and expanded features such as:
  
  Greater than 33 lines-per-purchase-order (up to 999), and ability to process a vendor’s invoice prior to inventory receiving.

  A conversion process to move data from POI to POII will be available.

- **EZORDER**: This process is designed to allow end-users to enter their own orders from their site into SFD or OM, while being restricted by a security data base from accessing any other data.

- **Pricing column display in order entry**: A new option has been added to our sales order entry to have the next quantity and price break display on the screen when a qualifying item is ordered. This will help an order-entry operator increase sales by encouraging customers to increase order quantities up to the next price break. If the customer has already received the best price possible, the message “Best Price Given” displays in the message window.

- **User exits**: User exits have been added to the credit-memo function and to the order-entry program to make them even more easily tailored to users’ needs. They appear after an order line, before item retrieval, and prior to the pricing routine.

- **Board foot and piece lumber tallies**: In the lumber business there is a need to keep track of the number of boards needed to make up an ordered linear or board footage. Our sales order processes now accommodate this need.

- **Accounts receivable split payments**: We can now handle split payments on invoices with up to four payment periods available (for example, 30, 60, 90, and 120 days).
• Trade and OEM pricing: The system can now determine whether to apply trade or OEM pricing, and then whether to apply column or volume pricing. The appropriate discount and chained additional discount are then applied. This is especially useful in the electrical supply industry, where items purchased for a particular customer from some specific vendors and which fall into certain specific commodity code groupings are priced differently.

Training classes for the release were held in Denver, CO, during the week of October 17, with attendance of over 100 CSRs, and application sales representatives and their managers.

OM/3000 applications solutions brochure
Rebecca Derrington/IRO

The OM/3000 (Order Management) brochure was revised and reprinted in November, 1983. A copy was sent to each SFD/3000 (System for Distributors) ASR (applications sales representative) and CSR and their managers. It is available in bulk from the Literature Distribution Center, P/N 5953-7484.

HP ASSIST — working for distribution software
Laura Sherwood/IRO

The first Implementation Team Training seminar for SFD/3000 customers was held in Long Beach, CA, September 14-15, 1983. The Los Angeles Application Center put together a two-day training session which was attended by six of their SFD/3000 and OM/3000 customers who were planning to install the software by the end of the year. The first day of this highly successful session concentrated on project management and implementation planning. The second day involved discussing the various software options within SFD/3000 the customer needs to consider when installing application software. Mary Hageman, Los Angeles support district manager, expects that this training session will significantly reduce installation times in her area. Comments from customers heard at the end of the session were, “Now I have an idea of what to expect and what I need to do,” and “I feel a lot more comfortable about the entire implementation.”
More SFD/3000 and OM/3000 mini sales training manuals
_Paul Sievers/IRO_

The next phase of our vertical marketing effort is now off and running with the release of mini sales training manuals for the office products, paper products, industrial supply, and electronics industries. These manuals include information about the particular market, product fit, industry "hot buttons," and industry definitions.

We look forward to receiving your questions and comments. If you want to order bulk quantities from the Literature Distribution Center, the titles and part numbers are as follows:

<table>
<thead>
<tr>
<th>Title</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Products</td>
<td>5953-7574</td>
</tr>
<tr>
<td>Paper Products</td>
<td>5953-7575</td>
</tr>
<tr>
<td>Industrial Supply</td>
<td>5953-7580</td>
</tr>
<tr>
<td>Electronics</td>
<td>5953-7581</td>
</tr>
</tbody>
</table>

SFD/3000 and OM/3000 training schedule
_Rebecca Derrington/IRO_

Did you know that Information Resources Operation holds specialized internal training classes at its Englewood, CO office? To bring you up to date, here is our Spring schedule:

<table>
<thead>
<tr>
<th>Class</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Seminar</td>
<td>February 1-2</td>
</tr>
<tr>
<td>District Manager Training</td>
<td>February 3</td>
</tr>
<tr>
<td>CSR Training</td>
<td>February 6-10</td>
</tr>
<tr>
<td>ASR Training</td>
<td>February 13-17</td>
</tr>
<tr>
<td>CSR Training</td>
<td>March 12-16</td>
</tr>
<tr>
<td>ASR Training</td>
<td>March 19-23</td>
</tr>
</tbody>
</table>
Another OM/3000 sale in the United Kingdom
Rebecca Derrington/IRO

This is the third sale of an OM/3000 (Order Management) application solution in Mark Hobson's district with the lead resulting from a seminar in May of 1983.

**Business type:** Importer and distributor of photographic and surveying equipment from its parent company in Japan, with annual sales of $30 million.

**Previous system:** They have been purchasing time from an IBM office for sales order processing.

**Competition:** IBM (System 36) and Ericson/Data Saab.

"Despite being the most expensive solution, the customer considered the HP solution to be the most cost-effective after taking into account HP's data base approach (providing the required level of management information) together with the HP 3000 growth path for the future."

— Mike Harman, CSR, UK.

**Configuration:** HP 3000 Series 39 with 400M bytes of disc and eight terminals with OM/3000 and HPFA.

**SR:** Bob Apollo

**CSR:** Mike Harman

**Sales Manager:** Mark Hobson

*For more information, contact Paul Sievers or David Schwaab, Information Resources Operation's sales support team, in Englewood, CO (303-773-1992).*

Industrial Distributor Association show
David Schwaab/IRO

Information Resources Operation's attendance at the NIDA/SIDA (National/Southern Industrial Distributor Association) EDP Software Fair in Dallas, TX, December 1 and 2, 1983, denoted our official entry into the industrial distributor marketplace.

HP's presence was met with a great deal of interest and excitement. We repeatedly heard comments such as, "I didn't know Hewlett-Packard had distribution software." Among these hard-goods distributors, HP's reputation as a hardware vendor preceded us, as attendees were intrigued with HP's software and our one-vendor solution.

Not only were the show attendees interested in HP, but the major industrial distribution publications displayed interest and pleasure in our attendance. We were interviewed by *Industrial Distribution* magazine and *Modern Distribution Management* newsletter, and met with the eastern regional manager of *Industrial Distribution*. They were all interested in our product offering, experience in the marketplace and level of commitment to the industry.

Central to the fair were discussions regarding vendor commitment to the industry, vendor experience in industry including numbers of industrial distributors installed, and the extent of automated inventory control and purchasing provided. Of the significant exhibitors, our product is superior and expensive. Our attendance was evidence to the industry of our entry and commitment to the industrial distributor marketplace. Again, it gives us visibility and momentum in penetrating that vertical market.

We have completed distribution of leads to SFO Applications SRs and eagerly await follow-up data from the field.
The PBX already installed at your customer’s site may be a great vehicle for important sales for you. If that PBX is a Voice and Data PBX it can be used to inexpensively connect a large number of terminals and personal computers to multiple HP 3000s, using existing phone wires.

HP’s PBX certification program assures the customer proper operation of the PBX interface and provides a support plan with the certified PBX vendors that protects the customer from potential problems. With HP’s extensive certification program, the industry’s most comprehensive, you can offer your customer a far greater flexibility than any of our competitors when he makes his or her communications decision.

For more information please consult your DSN/PBX Data Communications Interface Field Training Manual.

<table>
<thead>
<tr>
<th>HP-Certified PBXs</th>
<th>Certified PBXs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBX Vendor</td>
<td></td>
</tr>
<tr>
<td>Northern Telecom</td>
<td>SL-1A, SL-1M,</td>
</tr>
<tr>
<td></td>
<td>SL-1LE, SL-VLE</td>
</tr>
<tr>
<td></td>
<td>SL-1XL</td>
</tr>
<tr>
<td>ROLM</td>
<td>VSCBX, SCBX,</td>
</tr>
<tr>
<td></td>
<td>MCBX, V1CBX</td>
</tr>
<tr>
<td>Intecom</td>
<td>IBX S/40</td>
</tr>
<tr>
<td>AT&amp;T-IS</td>
<td>Dimension System 85</td>
</tr>
</tbody>
</table>

AT&T-IS System 85 certified
Hans Nilsson/IND

AT&T-IS System 85

We recently added AT&T Information Systems (formerly American Bell Incorporated), the world’s largest PBX (Private Branch Exchange) vendor, to our list of certified PBX vendors. This brings the list of certified PBX vendors to four, covering over 90% of the US voice/data PBX market for 1983. In other words, where you find a voice/data PBX, you can be pretty sure that HP has certified it. You can also be sure that you will have customers asking if we interface with System 85, since AT&T-IS expects to sell many System 85s next year.

HP and AT&T-IS have also agreed to work together to develop a standard interface between the PBX and the HP 3000. This interface, called DMI (Digital Multiplexed Interface) will lower the cost, add flexibility, and improve the performance of the PBX-to-host computer connection.

HP 150 Touch PC certified

The HP 150 is now included in the list of products that have been tested. The HP 150-to-HP 3000 connection was tested with AT&T-IS Dimension System 85. (HP 150 testing on ROLM, Northern Telecom, and Intecom will follow shortly.) The PBX offers a flexible solution to the user — when the customer moves within the site, he can simply move the HP 150 to the new location and connect it to the phone. The user can then gain access to multiple HP 3000s through the PBX.
LAN Implementations
Randi Iten/RND

Since networking is becoming more and more of a hot button and is fairly new to most people, some brief explanations of networking terms and concepts may be useful to you. I have some networking topics in mind, but also welcome suggestions from you.

Many versions of LANs exist right now in the marketplace — none of them truly standard. The IEEE committee is doing its best to establish some industry standards. A brief summary of how things stand follows.

- Ethernet was developed by Xerox and enhanced to form the IEEE 802.3 standard. This standard has been fully adopted by the IEEE committee.

- Thin-ethernet was developed by 3COM and is being enhanced to form an extension of the IEEE 802.3 standard. This extension is referred to as Cheapernet and, as the name implies, is less expensive than the present standard. By restricting the number of nodes on the network and the cable length, it saves you money in two ways:
  - The cable is thinner and less expensive
  - The transceiver circuitry exists on-board instead of in an external box.

The IEEE committee has not finished its work with Cheapernet yet.

Ethernet frame protocol looks like Thin-ethernet protocol and IEEE 802.3 frame protocol is expected to look like Cheapernet’s. So if the software talks Ethernet it also automatically talks Thin-ethernet.

You can use this matrix as a quick guide to the relationships of these implementations.

<table>
<thead>
<tr>
<th>Ethernet</th>
<th>IEEE 802.3</th>
<th>Thin-Ethernet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>can coexist on the same cable</td>
<td>use the same frame protocol (software is compatible)</td>
</tr>
<tr>
<td>Cheapernet</td>
<td>use the same frame protocol (software is compatible)</td>
<td>can coexist on the same cable</td>
</tr>
</tbody>
</table>

Also in this issue

HP LAN/9000 customer investments insured 21
SNA data comm products expand market for HP 3000 24
Get the power of HP Series 48 with ADCC to ATP upgrade 27
MASS STORAGE

Re-marketed tape drives reduced
Carol Robertson/SRO

Your customers can now get a 10% reduction in the re-marketed HP 7970ER tape drives. This new price will help to lower total system prices and help you close those deals. The following prices are effective now.

<table>
<thead>
<tr>
<th>Product/Option</th>
<th>Description</th>
<th>US list price</th>
<th>FAC price</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 7970ER</td>
<td>1600 bpi Tape Drive</td>
<td>$6,940</td>
<td>$6,620</td>
</tr>
<tr>
<td>226</td>
<td>HP 1000 M/E/F-Series I/F</td>
<td>3,910</td>
<td>3,910</td>
</tr>
<tr>
<td>324</td>
<td>Initial Master on Series III/IIR</td>
<td>3,590</td>
<td>3,590</td>
</tr>
<tr>
<td>426</td>
<td>HP 3000 HP-IB Initial Master</td>
<td>4,070</td>
<td>4,070</td>
</tr>
<tr>
<td>626</td>
<td>HP 1000 HP-IB Initial Master</td>
<td>4,070</td>
<td>4,070</td>
</tr>
</tbody>
</table>

This new pricing can save your customers approximately 12% compared to the price of a new HP 7974. Plus, your customers can save even more when compared to the price of a new HP 7970E — savings of over 24% depending on the interface.

This is your year to save customers money; quote re-marketed tape drives.

Customers can now save on 800 bpi tape drives
Diane Leeds/SRO

SRO can now offer a solution to those of you selling to price-sensitive customers requiring 800 bpi tape drives. The solution is an HP 7970BR magnetic tape drive at a savings of up to 30% over similar new tape drives. The HP 7970BR offers the same performance as an HP 7970B and the same 90-day warranty; in fact, the only difference is the price. For example, the price of an HP 7970BR configured to interface to an HP M/E/F-Series is only $9,408, and that includes the lo-boy cabinet.

SRO has a limited supply of these tape drives, so you must first reserve this tape drive through SRO Sales Development. In addition, the HP 7970BR must be ordered on a HEART override. Pricing information on the options available is as follows:

<table>
<thead>
<tr>
<th>Product/Option</th>
<th>Description</th>
<th>US List</th>
<th>Factory Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 7970BR*</td>
<td>800 bpi Tape Drive, 45 ips, NRZI</td>
<td>$5,887</td>
<td>$5,737</td>
</tr>
<tr>
<td>015</td>
<td>Add 230V</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>226</td>
<td>M/E/F interface, lo-boy cabinet</td>
<td>3,521</td>
<td>3,431</td>
</tr>
<tr>
<td>236</td>
<td>M/E/F interface, lo-boy cabinet</td>
<td>2,528</td>
<td>2,478</td>
</tr>
<tr>
<td>324</td>
<td>Series III interface, lo-boy cabinet</td>
<td>2,593</td>
<td>2,528</td>
</tr>
</tbody>
</table>

*HEART OVERRIDE: To override HEART on this product (including options), please follow instructions in the OP Field Documentation.

The HP 7970BR is on a four-week availability schedule. If your customer requires faster delivery, call SRO Sales Development.
Expanded capabilities package for the new HP 2563A

Tom Old/BOI

The new HP 2563A line printer from Boise has been shipping now for more than a month. We have introduced the printer with six- to eight-week availability and at roughly half the price of the HP 2608s.

The expanded capabilities package, Option 500, is a bundled package of standard options for the HP 2563A. The pricing for each piece separately is as follows:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Factory Base, if sold separately</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>Character Set</td>
<td>$145</td>
</tr>
<tr>
<td></td>
<td>(line draw, math symbols,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>large block character sets)</td>
<td></td>
</tr>
<tr>
<td>004</td>
<td>Character Set</td>
<td>145</td>
</tr>
<tr>
<td></td>
<td>(high density, Roman 8)</td>
<td></td>
</tr>
<tr>
<td>005</td>
<td>Character Set</td>
<td>145</td>
</tr>
<tr>
<td></td>
<td>(high density, Roman 8 italics)</td>
<td></td>
</tr>
<tr>
<td>068</td>
<td>3-Pack of Ribbons</td>
<td>75</td>
</tr>
<tr>
<td>110</td>
<td>Sound Cover</td>
<td>150</td>
</tr>
<tr>
<td>112</td>
<td>Enclosed Stand</td>
<td>260</td>
</tr>
<tr>
<td></td>
<td>Total Factory Base</td>
<td>$920</td>
</tr>
</tbody>
</table>

All of these prices are offered under Option 500 for only $850 (factory base) which is a reduction of $70, or more than a 7.6% decrease. Why do we offer this bundled option?

- To provide a means to "fully equip" the HP 2563A.
- To offer a package that shows most of the features of the HP 2563A at a reduced price.
- To give you a tool to sell more options on the printer with less work.

Bar codes for the HP 2563A

Tom Old/BOI

One of the most common questions we heard from the field last year was, "Do you have a 300 lpm printer that does bar codes?" We finally do, and it is the HP Series 300LP, Model 2563A. Hopefully, you know that it was introduced in December, 1983, and is shipping in quantities. But how do you print bar codes?

To print bar codes you must order the optional character set, Option 007, which has a factory base price of $145, and provides Codes 3 of 9, Interleaved 2 of 5, and Industrial 2 of 5. The use of the character set is described in your training material and in the literature provided with each product. Printing bar codes requires a shift into the desired character set.

For customers who need to produce labels to meet MIL-STD 1189, order the additional OCR character sets, Option 004. This, like all of our standard character sets, sells for $145 (factory base). So for less than $300 you can add all of the required character sets. No other printer vendor can do it for that price.

Demand for bar codes is growing. When you show the HP 2563A, why not quote the bar codes character set (Option 007) to allow your customers to have this feature. We can upgrade the printer, but why not give your customers the full features the day the printer is installed?

The HP 2563A versus the Printronix P-300

Tom Old/BOI

Many of you know about the Printronix P-300. It has been installed on a great many of our systems. Now we have a printer to save this business for HP — the HP Series 300LP, Model 2563A. How does it compare?
The list of feature comparisons can go on for pages. But we have a product that:

- Is offered for a lower list price that can be discounted to your customers. Most of the P-300s are sold through distributors and are seldom discounted.
- Provides a variety of interfaces to meet your system needs.
- Prints bar codes.
- Is a proven winner in the OEM marketplace.
- Qualifies for HP service support.

Boise Division is working to add more features and fill more of the niches that are covered by the P-300. We no longer have to see P-300s on our systems — the HP 2563A is alive and doing great.

### Additional system support for HP 2687A and HP 2688A

**Artie Stone/BOI**

The HP 2687A and HP 2688A office and workstation laser printers are now supported on additional systems.

**The HP 250 and the HP 2687A**

- The HP 2687A is supported as an RS-232 device. An RS-232 modem cable (P/N 8120-3258) is required for interfacing. Order #17355A (2 meter cable) from CSO.
- The HP 2687A is supported on the new release of the HP 250 operating system.
- Your system OEM customers can purchase the printer on the A-1 schedule.
- For multiple printers per system, contact CSY in Roseville.
- Order the printer from Boise with Option 251.

**The HP 1000 A-Series and the HP 2687A**

- The HP 2687A printer requires the HP 12040B multiplexer. (The HP 12005B I/O card does not support X-on/X-off protocol, and therefore does not support the HP 2687A printer.)
- The printer is supported as an RS-232 device. Order RS-232 I/F cable #92219G (3.8 meter) from CSO. RS-422 support is expected late in the fourth quarter of FY84.
- HP 2687A support requires the C.83 PCO cycle on RTE-A upgrades.
- Order the HP 2687A printer with Option 214.

**The HP Series 200 and the HP 2688A**

- You must have the HP TeX document formatting software on your Series 200. (See "New document formatter for Series 200 users" in this issue.)
- The HP 2688A is supported as an HP-IB device.
- Any line printer output can be directed to the HP 2688A printer (the HP TeX driver provides this capability).
• Order the printer with Option 850 and 040.

The HP 1000 A-Series and the HP 2688A

• The HP 2688A printer will be a “special” on the HP 1000 A-Series. A special driver must be ordered from DSD. Contact DSD Specials Engineering for pricing and availability information.

• Graphics support is under investigation. Contact DSD's Specials Engineering group for further information.

This information is covered in your new HP 2687A and HP 2688A Technical Sales Training manual. For further information, call your Sales Center contact.

Also in this issue

New peripherals for the HP 1000 14
New document formatter for HP Series 200 users 17
New laser printers supported on HP 3000 26

HP terminals get high marks in areas of vendor reliability and support

Jerry Gross/BDG

When a large group of computer managers recently were asked to name the criteria they used to choose a particular terminal, over half said the vendor's reliability and reputation were “very important.” In the area of reliability/vendor support, Hewlett-Packard terminals were rated the highest of 50 widely used interactive terminals. The HP 2624, HP 2622, and HP 2640 came out the top three leaders in this category.

The survey, conducted under the direction of Data Decisions, Inc., asked over 2,000 computer and DP managers to rate their terminals in the areas of overall performance; reliability and vendor support; ergonomics; and display, editing, and formatting features. The managers were also asked to describe how they currently used their terminals and how they expected to use them in the future. The survey indicated that computer managers place a higher priority on vendor reliability and support than on a terminal's special features or overall performance. (HP terminals were top finishers in the overall performance and display and editing/formatting features categories as well.)

While most terminals in the survey were being used for inquiry/update, data entry, and program development, computer managers indicated that a terminal's ability to handle graphics and personal computing capabilities would be an important factor in future purchasing decisions. In general, price and compatibility with existing equipment were the most important criteria for future terminal purchases.

Help your customers learn about bar codes — at a 30% savings

Jerry Erickson/SMC

For US only

During January and February, 1984, you can help your customers learn more about bar codes by having them order a special Bar Code Evaluation Kit. The kit includes the HP 39800A Bar Code Reader (a $1,150 value), but sells for only $795 — a savings of over 30%. To place an order, just ask your customer to call 800-227-9770 (or 415-965-7643 collect) in California, Alaska, and Hawaii.

The Bar Code Evaluation Kit consists of the following items:

- HP 39800A, Option 001 Bar Code Reader
- Male-Male RS-232 Cable and Female-Female Adapter to allow easy connection
- Bar code print samples from HP 2933A, HP 2563A, and HP 2680A printers
- Bar code labels generated with various printing technologies
- Educational material about bar code technology:
- Technical literature on HP's bar code equipment:
  - HP 39800A Bar Code Reader, HP 3081A Industrial Work Station Terminal, HP-75D Portable Computer (preliminary data sheet), HP 2933A Factory Data Printer, HP 2563A Line Printer, HP 2665A Print Station, preprinted bar code labels.

This offer is good until February 29, 1984. The kit is presently available in the US only and there is a limit of one per order.

To promote this offer, we will be using both space advertising and direct mail.

Call now and place your orders.

Note: Specify that an HP computer system is being used when placing the order. If this is not specified, an HP 16800A Bar Code Reader will be included in the kit instead of the HP 39800A.

For further information regarding this campaign, contact the BDG Sales Center.
Cabling for the HP 3081A terminal

Jerry Erickson/SMC

The HP 3081A Industrial Work Station Terminal is a current loop device. The same cable handles power and data communications.

Two qualities of cable are available for the HP 3081A. In each case the cable is supplied on a 300-meter reel. The customer cuts the cable to a length equal to the distance between the terminal and the HP 92922A four-channel adapter and power supply in the point-to-point configuration, or to the distance between the terminal and the HP 40253A interface in the cluster controller configuration.

If the distance is less than 60 meters, the customer chooses the HP 92920A cable on a 300-meter reel. If the distance is greater than 60 meters and less than 120 meters, the customer selects the HP 92921A type of cable on 300-meter reel. At installation the cables are cut to the appropriate length, and installed by an HP CE or by the customer. Note that in either case, the HP 3081A terminals are hardwired to the cable and have a compression seal around the cable to maintain dust-tight/water tight seal.

Detailed information on installing the HP 3081A is found in Appendix B of the HP 3081 Operating and Service Manual (P/N 03081-90001).

HP 264X price increases

Bob Bebb/POD

Prices on HP 264X terminals have gone up as of January 1, 1984. Old and new US prices are shown below:

<table>
<thead>
<tr>
<th>Product</th>
<th>Old Price (US List)</th>
<th>New Price (US List)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 2645A</td>
<td>$4,600</td>
<td>$5,100</td>
</tr>
<tr>
<td>HP 2647F</td>
<td>9,950</td>
<td>10,500</td>
</tr>
<tr>
<td>HP 2648A</td>
<td>7,150</td>
<td>7,650</td>
</tr>
<tr>
<td>HP 2649A</td>
<td>3,215</td>
<td>3,715</td>
</tr>
</tbody>
</table>

Option and accessory prices have not changed. These changes have been reflected in the January 1 Corporate Price List. Normal pricing policies apply.
Changes to HP 264X terminals

Bob Bebb/POD

The HP 264X family of terminals was successfully modified to pass FCC and VDE Level A RFI regulations effective October 1, 1983. All units built after that date (identified by serial prefixes of 2336A or later) comply with the regulations.

As a result of RFI modifications, some models were made obsolete and others had feature and option changes. In addition, changes were made to accessory and "special" products.

Obsolete products

The HP 264X family now consists of the HP 2645A, HP 2647F, HP 2648A and HP 2649A. Products that have been obsoleted from the product line are listed below. A list of alternative terminals with similar feature sets is also provided.

<table>
<thead>
<tr>
<th>Obsolete Products</th>
<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 2641A</td>
<td>None. APL/3000 is obsolete</td>
</tr>
<tr>
<td>HP 2645N</td>
<td>Option 002 or 012 on HP 262X terminals</td>
</tr>
<tr>
<td>HP 2645R</td>
<td>None</td>
</tr>
<tr>
<td>HP 2645S</td>
<td>Option 001 on HP 262X terminals</td>
</tr>
<tr>
<td>HP 2647A</td>
<td>HP 2647F</td>
</tr>
<tr>
<td>HP 2649B</td>
<td>HP 2645A</td>
</tr>
<tr>
<td>HP 2649C</td>
<td>HP 2648A</td>
</tr>
<tr>
<td>HP 2649E</td>
<td>None</td>
</tr>
<tr>
<td>HP 2649G</td>
<td>HP 2647F</td>
</tr>
<tr>
<td>HP 2649H</td>
<td>HP 2647F Option 890 (deletes graphics)</td>
</tr>
<tr>
<td>Opt 005</td>
<td>Option 005 on HP 262X</td>
</tr>
<tr>
<td>(All HP 264X)</td>
<td></td>
</tr>
</tbody>
</table>

Feature changes

As a result of RFI modifications, the following features are now standard:
- 16K of memory: 12K for display (the maximum possible) and 4K for data comm buffering
- Display enhancements: Underline, inverse video, blinking, and half-bright
- Line drawing, math, and large character sets
- Upper and lower case Roman character sets.

Option changes

The following options are no longer necessary since the features are now standard:
- Option 003: Display Enhancements
- Option 004: Display Enhancements, and Large Character sets
- Option 008: Adds 4K Display Memory
- Option 009: Adds 8K Display Memory
- Option 100: Roman Character set (was option on HP 2649A only)

Accessory product changes

The following is a summary of changes to HP 264X accessory products:
- 13231A (Display Enhancements) is no longer required; it can still be ordered for use with terminals having serial prefixes of HP 2336A and prior.
- 13234A (4K RAM Memory) is obsolete. Order 13297A Universal RAM Memory.
- 13297A (Universal RAM Memory) now comes standard with 16K. Previous standard was 8K. Option 002 (16K) is obsolete.

Note: Customers who have previously ordered memory accessories may need to reevaluate their needs since they now receive more standard memory.

Obsolete specials

The following special options are no longer available due to RFI modifications:

<table>
<thead>
<tr>
<th>Obsolete Special</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 13296A</td>
<td>Option H19</td>
</tr>
<tr>
<td>HP 2647A</td>
<td>Option H99</td>
</tr>
<tr>
<td>HP 2649A</td>
<td>Option H15</td>
</tr>
<tr>
<td>HP 2649A</td>
<td>Option S96</td>
</tr>
<tr>
<td>HP 2649B</td>
<td>Option E70</td>
</tr>
</tbody>
</table>

In addition, other specials have been obsoleted due to low demand. These are:

<table>
<thead>
<tr>
<th>Obsolete Special</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 264X</td>
<td>Option H99</td>
</tr>
<tr>
<td>HP 264X</td>
<td>Option E31</td>
</tr>
<tr>
<td>HP 264X</td>
<td>Option S99</td>
</tr>
<tr>
<td>HP 26493C</td>
<td>Option 001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Obsolete Special</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 264X</td>
<td>Brightness Control</td>
</tr>
<tr>
<td>HP 264X</td>
<td>Delete Keyboard</td>
</tr>
<tr>
<td>HP 264X</td>
<td>Add Simulator, Delete Keyboard</td>
</tr>
<tr>
<td>HP 26493C</td>
<td>929 Upgrade Kit</td>
</tr>
<tr>
<td>HP 2649A</td>
<td>Composite Service Manual, Order from CSO at P/N 02640-90170.</td>
</tr>
</tbody>
</table>
Help for HP 2649A OEMs

Bob Bebb/POD

The HP 02640-60250 and 02640-60267 display PCAs were made standard on HP 2649A terminals built after October 1, 1983. The change was made in order to pass FCC and VDE RFI regulations. In some applications these PCAs are incompatible with the OEM’s original design. Reengineering by the OEMs could require several months during which their product would be unavailable. If your OEMs experience the above problem, the HP 2649A with the old display PCAs can be supplied under the conditions listed below.

Conditions for receiving non-RFI complying HP 2649A

HP can supply non-RFI complying terminals to OEMs under the following conditions: 1) they modify our terminal so thoroughly that it in essence becomes a subassembly for their product, or 2) we believe that they can reasonably be expected to get our assemblies to pass RFI in their product, and 3) the customers are willing to assume responsibility for final compliance of their product with all applicable RFI regulations for the countries to which they ship.

Solution

If your OEMs satisfy the above criteria, the following solution has been designed to allow them time to make the necessary modifications:

• POD will build a special HP 2649A that will use the old display PCAs and options. With the exception of these old assemblies, the terminal will contain all of the current RFI modifications (cable routings, coballoy paint etc.). These changes should be immaterial to OEMs and should improve their ability to pass RFI regulations.

• The special will be priced at the HP 2649A US price as of date of order plus $250. Note, the HP 2649A price has been increased by $500 to $3,715 as of January 1, 1984.

• The special will not appear on the Corporate Price List and must be ordered via HEART override.*

• The special will be available for order until April 1, 1984. After that date it will no longer be available. Customers will be asked to make “lifetime” buys.

• Delivery must be taken before August 1, 1984.

• Availability is 13 weeks. Due to production constraints, we will not be able to deliver inside this quoted availability.

Please note, this offer is available only for HP 2649A OEM customers who meet the above conditions. A review of each situation by POD will be required to determine whether a customer qualifies. If you have an HP 2649A customer who would be helped by this solution, please contact me at 408-720-3031 or COMSYS 4200 and I will supply further details.

*HEART override: To override HEART on this product please follow instructions in the OP Field Documentation.
CUSTOMER SUPPORT

Travel guide and travel directory update
Karen Herlth/CSD

An update to the Customer Service Travel Guide is currently being distributed to all Travel Guide subscribers. The guide defines support capabilities for all Service Responsible Offices (SROs) in the Computer, Medical, Analytical and Measurement Groups.

If you are not currently a subscriber and would like to get started, the first step is to order a Travel Guide Demand Kit. The kit contains a Travel Guide, binder and dividers. The part number for the Demand Kit is 5955-3221. You may order it through HEART.

The next step is to get on the subscription to receive the updates.

- The SEO can load their subscription order directly into SEA
- CE offices operating IBS can load their orders directly.

Also coming is the Computer Systems Travel and Office Directory. This customer document illustrates the locations of our worldwide Computer Sales Offices, Customer Training Centers and Distributors. The Travel Directory is being distributed to Computer Sales Offices in January.

Updating responsibility for information in the Travel Guide and Travel Directory has changed. Please direct all updates to CSD Technical Marketing. Updating forms and procedures are contained in the new release of the Travel Guide.

COMPUTER SUPPLIES

Your customer’s next best friend... the Computer Users Catalog
Scott Anderson/CSO

The Computer Users Catalog — 125 pages brimming with convenience products and the day-to-day supplies your customers need.

Every minute of your time is precious — yet, customers often have “low ticket” questions that must be answered in the interest of customer satisfaction.

The new Computer Users Catalog helps customers answer many of these questions. And because direct phone ordering is so easy, any residual doubts can usually be resolved while they’re on the line to our telemarketing professionals.

Put more than 1,500 computer products right at your customer’s fingertips. One hundred and fifteen new products, more color photos and 25 extra pages make this the most complete catalog we’ve ever offered.
For easy referencing, the catalog has seven categories:
- Personal computers and software
- Peripherals and terminals
- Cables and connectors
- Workstation furniture
- Operating supplies
- Magnetic media
- Books and learning aids

Extensive cross-referencing and three different indices help customers quickly locate even obscure products. Compatibility guides and easy-to-use ordering charts help customers understand how to configure and purchase items, such as cables, that in the past have required sales assistance.

**Fast, easy ordering — in the US**

Make sure that all your customers have the Autumn/Winter 83-84 Computer Users Catalog. It not only makes the job of selecting products easier, it also opens the door to CSO's fast, friendly Direct Phone ordering system. Customers can order against their HP open account or change their order to VISA, Mastercard or American Express credit card.

Our professional telemarketing team is ready for customer calls between 9 a.m. and 5 p.m. in all time zones. Product availability and price are confirmed on-the-spot, and we ship within 24 hours of order receipt.

**Fast, easy ordering — internationally**

Special fast-order direct phone lines for computer supplies are now available in many countries — including the ones listed below — offering on-line price and availability information, as well as fast order entry. Of course, orders may be placed in the regular way through local HP sales offices in those areas not yet served by these special phone lines.

**Multiple catalogs for the international marketplace**

Catalogs are stocked in sales office literature departments.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5953-2450(D)</td>
<td>US edition. Divisions can order from Literature Distribution Center, Palo Alto. Five or fewer copies, telex 0070. More than five send SLO.</td>
</tr>
<tr>
<td>5953-2450(UK)</td>
<td>UK edition. In the UK, order from the Literature section, CSC, UK TELNET 765-4810.</td>
</tr>
<tr>
<td>9301-0761</td>
<td>Japanese language.</td>
</tr>
</tbody>
</table>
Mobile file offers easy filing — extra work surface
Jim Kinney/CSO

Stay on the move with CSO's new mobile file. Dual wheel casters let you roll this modular unit right up to your desk for easy filing. In the meantime, store the 25.3" x 20.5" x 23.3" file conveniently under any standard size work table. Or use the four square feet of file top as an extra work surface. Locking, plastic-laminated top panels slide outward, so items stored on top can remain stationary even when opening.

And because the 92210M file offers 1.1 more cubic feet of storage than a regular file drawer, computer printouts can be stored as easily as legal and letter size documents.

Along with providing valuable storage and work space, this handsome pearl gray file will also contribute to the aesthetics of your work area. Constructed of embossed steel, the file was designed specifically to complement other HP workstation furniture.

The US list price is $280. See the Autumn/Winter Computer Users Catalog (publication number 5953-2450[D]) for ordering information and quantity discounts.

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>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>Canada</td>
<td>(416) 678 94 30</td>
</tr>
<tr>
<td>West Germany</td>
<td>07031-142829</td>
</tr>
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<td>The Netherlands</td>
<td>07031-223133</td>
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<tr>
<td>South Africa</td>
<td>020-470639</td>
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<tr>
<td></td>
<td>802-5111</td>
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<td>53-7954</td>
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<tr>
<td></td>
<td>28-4178</td>
</tr>
<tr>
<td>Canada</td>
<td>416-671-8383</td>
</tr>
<tr>
<td>Toronto Local</td>
<td>1-800-268-6982</td>
</tr>
<tr>
<td>Ontario</td>
<td>1-800-387-3417</td>
</tr>
<tr>
<td>Quebec</td>
<td>1-112-387-3154</td>
</tr>
<tr>
<td>British Columbia</td>
<td>1-800-387-3154</td>
</tr>
<tr>
<td>Other Provinces</td>
<td>08-7502027</td>
</tr>
<tr>
<td>Sweden</td>
<td>08-7502028</td>
</tr>
</tbody>
</table>

Also in this issue

Introducing the Hayes Smartmodem 1200
**Computer Groups price changes effective January 1, 1984**

These prices, effective January 1, 1984, appear on the Corporate Price List on that date, available in your office. Prices are US List unless otherwise noted. Orders at old prices will be honored at the factories for 30 days (or 60 days in the case of government quotes, see exception, III. GSA) after the effective date of an increase. All quotations, either verbal or written, shall be made at the new prices upon the effective date of the new price list. The customer should be notified that his order will be honored at the lower price if it is received within the 30-day grace period. Price decreases are effective immediately and in-house orders shipped 5 working days prior to the announced decrease date will be billed at the new lower price.

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Description</th>
<th>Current Price</th>
<th>New Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>12061A</td>
<td>32 CH MUX; L-M&amp;C</td>
<td>955</td>
<td>885</td>
</tr>
<tr>
<td>12062A</td>
<td>4 CH DAC (L-SER)</td>
<td>1.820</td>
<td>1.295</td>
</tr>
<tr>
<td>12063A</td>
<td>DIGITAL I/O</td>
<td>1.820</td>
<td>1.645</td>
</tr>
<tr>
<td>2563A</td>
<td>OPT. 002 CHARACTER SETS</td>
<td>150</td>
<td>-0</td>
</tr>
<tr>
<td>26415A</td>
<td>DISPLAY STATION</td>
<td>4.600</td>
<td>5.100</td>
</tr>
<tr>
<td>26417F</td>
<td>INT GRAPHICS TERM</td>
<td>9.950</td>
<td>10.500</td>
</tr>
<tr>
<td>26418A</td>
<td>GRAPHICS TERMINAL</td>
<td>7.150</td>
<td>7.650</td>
</tr>
<tr>
<td>2649A</td>
<td>TERMINAL</td>
<td>3.215</td>
<td>3.715</td>
</tr>
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<td>32219A</td>
<td>RAPID/3000 PROC.</td>
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<td>500</td>
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<td>322901FA</td>
<td>FRN PM10/20 UPGD</td>
<td>15.000</td>
<td>12.000</td>
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<td>32506R</td>
<td>MPS COPY</td>
<td>6.300</td>
<td>4.900</td>
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<td>32913Z</td>
<td>PM CRP MNL SET</td>
<td>365</td>
<td>40</td>
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<tr>
<td>7970EN</td>
<td>7970E RTN CREDIT</td>
<td>-3,000</td>
<td>-1,000</td>
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