Computer News

For HP Field Personnel
July 1, 1983

HP 3081A WORKSTATION TERMINAL

HP 3081A INDUSTRIAL WORKSTATION TERMINAL
- Rugged
- Small
- Bar Code Capability
- Low Cost

For Internal Use Only

HP Computer Museum
www.hpmuseum.net

Karen Campbell, Editor
Tracy Wester, Assistant Editor
Linda Uno (Phone 408-996-9800, ext. 2894), Circulation

On the Cover:

The HP 3081A, introduced by GPCD on July 1, is a rugged data collection terminal designed specially for use in the factory environment. See article beginning on page 17.

Computer News has a new look!

Beginning this issue, articles are listed by product families instead of Division headings. There are five major categories: Computer Marketing, Personal Computers, Technical Computers, Business Computers, and Computer Peripherals. Each of these major categories begins with a Group Update section containing information of interest to the entire category.

Look for articles on Major Accounts, Support, and Third Party in the Computer Marketing category. Personal Computers covers Calculators, the HP-75, Series 80, Series 100, Series 200, and Terminals. Technical Computers has stories on the 1000 Series and the 9000 Family. Articles on the HP 250, 3000 Series, Manufacturing, and Office Systems may be found in Business Computers. And Computer Peripherals offers information on Datacomm, Graphics, Mass Storage, Plotters, and Printers.

I am most interested in your comments about this new format and *Computer News* in general. The 1983 Readers' Survey (inserted in the middle of this issue) is your chance to let me know what you think — so let's hear from *you!*

—The Editor

Computer Marketing

GROUP UPDATE

Competitive sales financing update

Steve Pavlovich/Corporate Sales Financing and Bill Vinnicombe/CMG

IBM has just announced that Investment Tax Credit (ITC) passthrough will be available on Rentals and Operating Leases *only* if the customer commits to purchase the equipment within six months. Most Rental and Operating Lease customers are not able to make such a commitment, so IBM has effectively eliminated ITC benefits for these customers. IBM's objective is to drive customers toward their "term lease" programs (which are very similar to HP's Lease with Option to Purchase) where ITC is still made available without a purchase commitment. HP *continues* to make ITC available on our Operating Leases, which gives us a competitive edge over IBM. Make sure your customers are aware of this.

By now everyone should be aware of HP's below market financing rates which are effective until August 31, 1983. Using lease order volume as an indication, the lower rates have hit the mark.

Financing upgrades

Steve Pavlovich/Corporate Sales Financing and Bill Vinnicombe/CMG

Many customers who have financed HP equipment through non-HP related funding sources are expressing concern over the difficulty they are having with the financial aspects of the upgrade process. Depending upon the type of the original lease, the upgrade process through a non-HP related funding source can be cumbersome and expensive. On the other hand, HP is committed to providing a well-defined "financial" upgrade path which is typically not available through non-HP related funding sources. This is because these funding sources are interested in individual "deals" and not in total customer or "account" satisfaction. The following scenario will illustrate this point.

A customer in your territory "purchased" an HP 3000 in 1979. While HP was paid for the equipment, it was in fact financed by ABC Leasing. In order to offer the lowest lease rate possible, ABC Leasing retained the tax benefits of the Investment Tax Credit (ITC) and depreciation. These tax benefits subsidize the lease rate offered your customer. The only catch is that for ABC Leasing to "earn" the full tax benefits, the equipment must stay in place for five years. If the equipment is upgraded prior to the fifth year, a portion of the tax benefits is lost, and must be repaid by your customer.

Now it is 1983 and your customer is a prime candidate to upgrade the original system. You have spent a considerable amount of time determining and selling the appropriate upgrade path for your customer, all the while assuming that your customer actually owns the equipment. Late in the sales cycle you find out that ABC Leasing actually owns the equipment and that your customer may be contractually obligated not to upgrade the equipment. Or, that the upgrade will trigger the repayment of lost tax benefits to ABC Leasing which significantly raises the net cost of the upgrade. How much control do you have over the sales situation now? What about customer satisfaction? So you can see how the "sale" in 1979 comes back to haunt you in 1983.

What is the message behind this scenario? The answer is to know about the financial needs of your customers and educate them upfront as to some of the financial pitfalls which may occur with non-HP financing. HP, as manufacturer and lessor, is committed to providing competitive lease programs which meet the customer's initial financial needs, as well as at the time of upgrade. Your local Contracts/Sales Finance Rep is your ready resource to use in evaluating your customer's needs as well as solving the type of upgrade problem outlined in the scenario.

Computer Advances goes four-color

Canice McLaughlin/BDG

There will be a new look for *Computer Advances* starting with the July/August 1983 issue. Customers will receive it between July 5 and 15; sales office copies will ship on Friday, July 8. The major change will be four-color photos instead of black and white.

I am interested in your reactions. Please let me know how you and your customers like the new look. You can contact me by phone at TELNET 1-196-2874 or call 408-996-9800, ext. 2874, or use COMSYS code 5000.

The EE wish list promotes software solutions for HP systems

Bojana Fazarinc/BDG

A new, one-page ad to continue increasing the awareness of HP as a major supplier of solutions for EE applications will begin appearing this month.

Stacks of software titles for a range of HP technical systems (from HP Series 80 and Series 200 to HP 1000) speak for themselves so this ad has minimal copy. It's a slight revision of an ad that appeared last year, generating many inquiries and winning several reader awards.

Look for it in the next few months in *Electronics, EDN, EE Times* and *IEEE Spectrum.*

An updated EE Solutions Listing of HP and third party software will be the response piece.

## More sales aids for training

Mickey Friedman/CSD

Get ready for an onslaught of professional sales literature for our customer training program. During the first week in July, all sales offices, training centers and customers will receive six new training brochures.

The new brochures describe specific courses, and they are styled after the brochure on the very successful *Intro to DataComm* course (P/N 5953-8813). The brochure topics are the *Professional Programmer Series* (covering *A Programmer's Introduction, IMAGE/3000, and VPLUS/3000), Application Design, System Operator, System Manager* on the HP 3000, and *Context MBA* on the Series 200. The sixth brochure will be a reprint of the *Intro to DataComm* Course without dates, locations, and prices to allow for more flexible usage.

More brochures are to follow. We will have one brochure on the three UNIX courses being introduced at the end of August; one on the *Intro to Personal Computers* course for prospective customers, also in August; and one on the A-Series courses being introduced at the end of September.

To make the job of providing customers with information about our courses easier on both SRs and SEs, we are revising the *Customer Training and Consulting Planning Guide,* at the end of July. This guide will act as an easy to read, comprehensive guide to choosing a training path for all customer types. The *Guide* is one you can be proud to give to any customer, from a programmer analyst to the president of a company.

We hope these tools will be helpful in presenting HP's customer training program and in selling more systems. The two go hand-in-hand — the more things customers can do with their systems, the more systems they will buy. Use these tools to help win system sales.
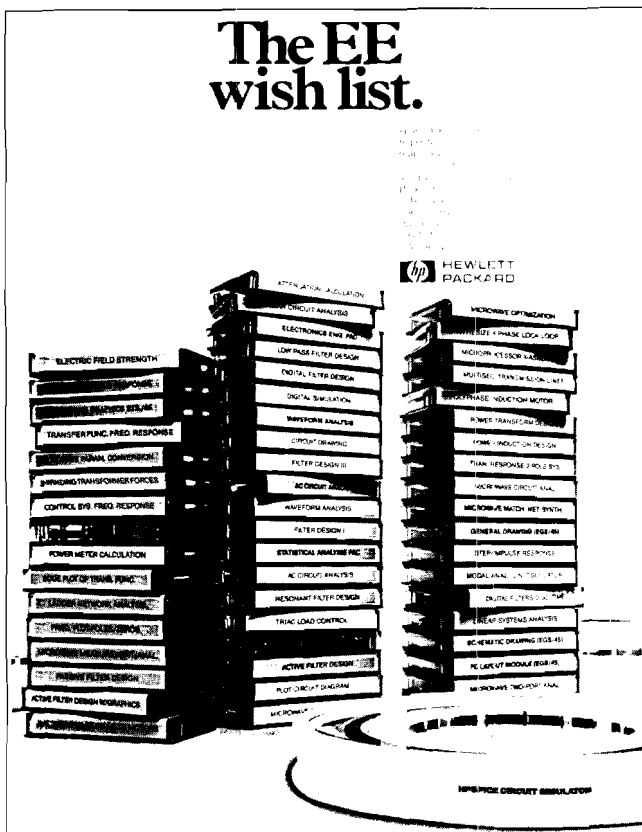
Remarketed disc drives are a real bargain

Diane Leeds/SRO

Are some of your customers finding that they require additional mass storage and yet are constrained in terms of how much they can spend? Why not suggest a remarketed HP 7920SR or HP 7925SR disc drive from SRO. Remarketed products can meet the needs of price-sensitive customers. The amount of money saved on remarketed disc drives is greater than ever, thanks to a price reduction introduced earlier this year. HP 7920SR disc drives are only $9,825 (US list) and can store up to 50Mb of data. For customers with larger storage require-ments there is the 7925SR disc drive with a capacity of 120Mb at $13,725. This can be a savings of up to 56% over similar new drives.

Also, consider the addition of either of these drives when quoting an HP 3000 Series 39. For the price sensitive customer the total system cost can be reduced by utilizing remarketed 7920SR and 7925SR disc drives.

In these times of tight budgets, remember remarketed peripherals keep system costs down and help you close that sale!

MAJOR ACCOUNTS

Major Account sales message from GLD

Al Herder/GLD

Greeley Division announces a high priority to promote and support Major Account business for its Personal Mass Storage Products (PMS). John Hettrick has been named Major Account Manager for the PMS products and will focus on the support and development of Major Account business for GLD.

Initial GLD Major Account strategy will be to:

- Inform you that John Hettrick is the factory contact of Major Account issues on PMS products at GLD.

- Increase our contact with Major Account customers by encouraging customers to visit the Greeley factory as well as participating in field visits at customers' sites. If you or your customer plan to visit the Fort Collins Systems Division (FSD) in Colorado, we invite you to come see us in our new Greeley site and we will share our business and new product strategy with you. We need to get to know each Major Account and get feed-back on our current and new product developments.

- We want to help close more system sales by providing our sales teams with competitive system performance and reliability benchmarks, mass storage loaners for customer evaluation, and putting together promotional programs such as the current HP 9816/9121/MBA bundled incentive.

We also want to provide our sales teams with the tools and incentives to sell mass storage system upgrades and add-ons to the installed base in all major accounts, such as the current 10Mb Winchester incentive.

Please give John Hettrick a call at 303-356-9103, ext. 3185, and let us know how we in GLD can help develop more Major Account busi-ness for HP.

SUPPORT

Free calculators and training, too

Mickey Friedman/CSD

Productivity plus. That's the message customers should get during HP's "Back-to-School" calculator giveaway. We are combining increased productivity which customers get from classroom training with the time-saving benefits from HP's powerful calculators.

Beginning August 1 through September 16, all US and Canadian Training Centers will be giving customers an HP 12C calculator for every $1000 spent on customer training classes. Customers must attend class during this time period to be eligible, but this promotion applies to *all* classes scheduled, no matter which system or application.

Flyers describing this promotion are being mailed directly to your customers. But don't wait for that to happen. Let your favorite customers know right now. Each sales office will be supplied with flyers giving you further details on this offer. If you have any questions regarding this promotion, please call your CSD Sales Development contact.

1983 DataPro: HP retains the title
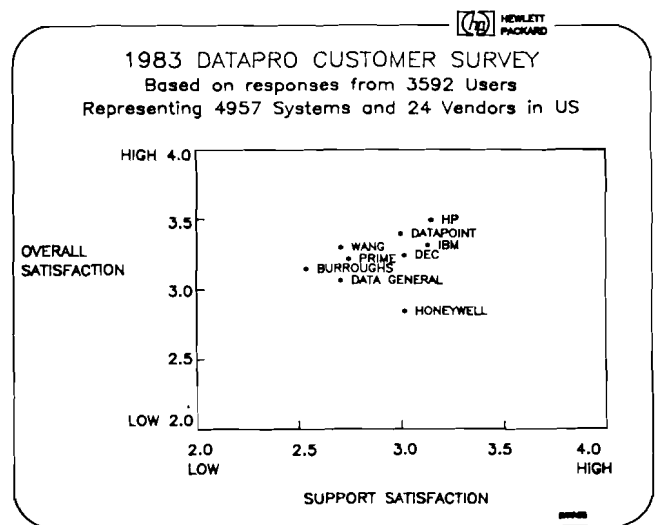
Kathy Humphrey/CSD

For the third year in a row, HP has come out on top in DataPro Research Corporation's annual user survey of mini-computers and small business systems. The survey results were published in the May 23 issue of *Computerworld*, and HP rated first in "support satisfaction" and "overall satisfaction" when compared to our typical competing vendors represented by more than 90 responses.

Not only did HP beat the competition in both categories, we beat our own record of 1982. "Support satisfaction" is measured by averaging the ratings on five parameters:

- Maintenance effectiveness
- Maintenance responsiveness
- Trouble-shooting
- Education
- Documentation.

In each of these categories, with the exception of maintenance responsiveness, we improved upon our 1982 scores. Thus, the composite "support satisfaction" rating improved over last year.

It is HP's objective to provide the best support in the industry, and the DataPro survey is solid evidence we're meeting that objective. HP support is a major reason to purchase HP computer products — and our leadership reputation can be a major sales asset for you!

1983 DATAPRO CUSTOMER SURVEY
Based on responses from 3592 Users
Representing 4957 Systems and 24 Vendors in US

Computer Marketing

We're #1 in education

Mickey Friedman/CSD

DataPro's 1983 survey is out and Hewlett-Packard is rated #1 in customer education. Congratulations to everyone involved in helping keep our customers the best trained in the business. That includes you — the SEs and CEs who train our customers, the SRs who represent our program and the administrative people who make it all happen.

Individually, customer training on the HP 250, HP 3000, and HP 1000 is rated 1, 2, and 3 in the microcomputer business, ahead of all others. That means it outshines IBM, DEC, Data General and a host of others. The chart shows how HP has improved since last year compared to our competitors.

We can all be proud of this achievement. Remember that a well-trained customer is a satisfied customer. And satisfied customers come back and buy more systems. Focus on the high quality of our education to bring in more system sales.

DATAPRO SURVEY — CUSTOMER EDUCATION 1983

Comparison of 1982 to 1983
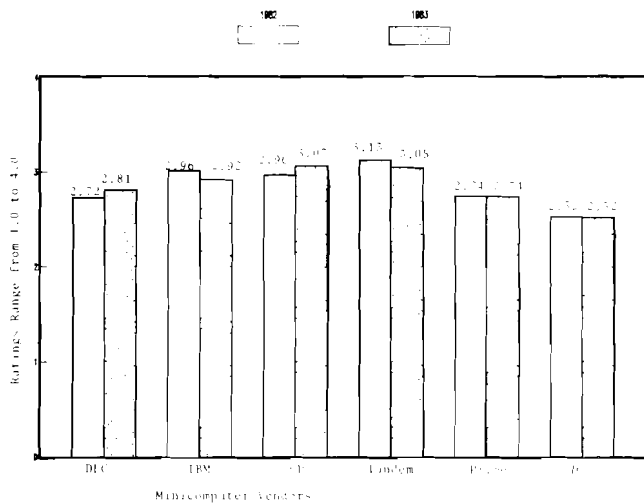
New cancellation policy for customer training courses

Deborah Nelson/CSD

Effective July 1, a new cancellation policy for Customer Training Courses has been implemented. The new policy is as follows:

> "Hewlett-Packard reserves the right to cancel a training class anytime up to 14 days prior to a class's starting date. If a given class is cancelled, we *guarantee* that the next offering of that class in the same Training Center will take place as scheduled."

This new policy will alleviate some of the frustration our customers have encountered with the repeat cancellation of certain courses — especially low volume courses.

The Training Center registrar is responsible for notifying the customer both by phone and written correspondence of the course's cancellation. The registrar must also copy the sales rep on this notification to insure proper communication. If you have any questions, please call your CSD Sales Development contact.

Support services for speech products now available

Tom Nakamura/RND

CSD is now providing support services for 27203A SOM Speech Library/1000 and 27205A SOM Speech Library/3000. Monthly charges are as follows:

CSS (Customer Support Service, 27203T and 27205T) $20

SSS (Software Subscription Service, 27203S and 27205S)   10

MUS (Manual Update Service, 27203Q and 27205Q)   5

THIRD PARTY

Additional HP 250 OEM products available

Ray Cebold/BDG

The current issue of the *OEM Capabilities Guide* inadvertently omitted two HP 250 products offered by Mini Computer Software Specialists, Inc. of Milwaukee, WI. These products are offered in addition to the two MCSS products already listed in the *OEM Capabilities Guide*, the Materials & Order Management System and the Service Call System. The omitted products are:

Commercial/Public Utility Billing System

This product simplifies the entry of meter readings, speeds the calculation and printing of bills, and streamlines the accounting of cash receipts. Features include a user defined billing cycle, rate/step tables, fixed fees, and receivables/cash tracking. MCSS will customize this product to meet a particular user's needs.

Maintenance Agreement/Work Ticket System

This system tracks and controls service/maintenance agreements, including preventative maintenance. Inventory control, billing, and accounts receivable functions are included. Features include a wide range of immediate 'on screen' information retrievals, as well as standard and user-defined reports.
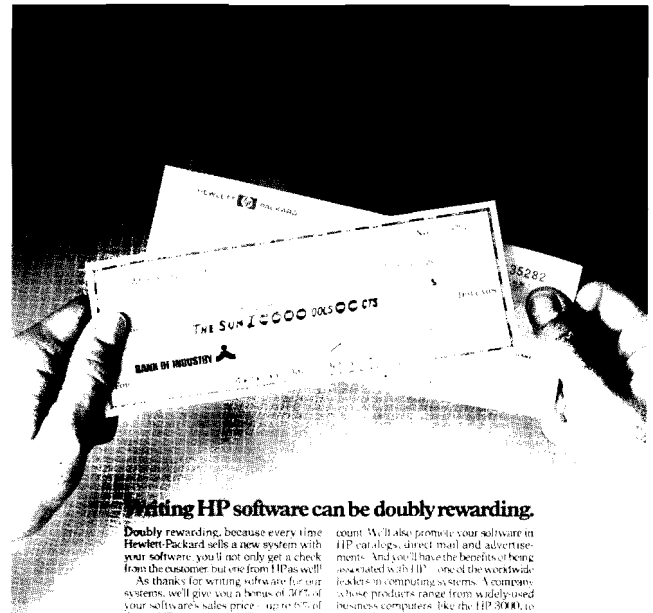
Both of these products are available on all HP 250 models and require a 64Kb partition of memory. For pricing information, please contact Larry Lanx, Director of Marketing, at MCSS 414-774-6277.

New ad recruits software suppliers

Bojana Fazarinc/BDG

This new ad focuses on the advantages of the HP PLUS Software Supplier Program which offers generous incentives for software written for HP systems.

It is designed to generate leads from interested third parties and will be appearing in *Computer Systems News, Mini Micro Systems, Software News, Datamation, Systems & Software* and *Computerworld.*

GROUP UPDATE

Introducing the HP 82906A printer

Mike Steed/PCD

The HP 82906A is a new low-cost general purpose printer for personal computers. This dot-matrix impact printer features a maximum print speed of 160 characters per second, and has a long list of features which make it an exceptionally versatile printer. With a US list price of $995, the 82906A fits between the low-priced HP 82905B and the heavy-duty HP 2631B.

A few of the favorite features of the 82906A are:

- High speed (160 cps) for faster throughput
- Friction feed for single sheet paper
- HP standard raster graphics
- Six different character spacings
- Nine different line spacings
- Four levels of boldness
- Superscripts and subscripts
- Proportional spacing
- Automatic underline
- User-definable characters (or 2K print buffer).

For a complete description of features, refer to the HP 82906A Sales Guide which was distributed in June.

The 82906A is available with HP-IB interface only, in four voltage options:

- Option 001, 100 Volts
- Option 002, 120 Volts
- Option 003, 220 Volts
- Option 004, 240 Volts.

All options will be available for shipment in July, although quantities for Options 001, 003, and 004 will be limited until September.

The 82906A is recommended for applications which require fewer than 40 pages per day on average. For high volume applications, consider a heavy duty printer from Vancouver Division. If the extra speed and features of the 82906A are not required, the HP 82905B is a more economical alternative. And if typewriter-like quality is essential, choose the HP 2601A or 2602A printers. But if you are looking for a printer which combines high speed, multi-application versatility, and a reasonable price, look into the new HP 82906A.

Software update ordering made easier

Mark Smith/CSO

HP Computer Supplies Operation provides software updates for Series 80, 100, and 200 computers.

Previously, US customers were required to prepay with a cashier's check or credit card. To make ordering easier, any customer with an open HP account may also order with a purchase order number. The method of payment is noted on the software update Mail Order Form by the customer, and sent along with the master disc for the update ordered.

To obtain update order forms for US orders:

- Use the form in the back page of the *HP Series 100 Communicator*, or,
- Call 800-538-8787 or 408-738-4133 for residents of CA, AK or HI.

The procedure for international orders will remain the same. They are transmitted from the HP sales office after the sales office receives the customer's original master disc for each update ordered.

Generic personal computer slide show

Mark Priestley/PCG

In response to your enthusiastic response to the Spring Seminar Program held throughout Canada and the US, we have made the generic portion of the Personal Computer Slide Show available to sales force 02, 12, 22 SRs and their dealers through the Sales Promotion Catalog. The slide package includes slides and script for five separate sections. Section one is terminology used in the Personal Computer marketplace. Section two is the evolution of the personal computer. Section three is benefits you obtain from ownership of a personal computer. Section four shows business applications for personal computers. Lastly, section five is HP's personal computer and strategy. The slide show has P/N 6069, is priced at $24 to $50, and can be ordered through the Corvallis (800) promotion number. Dealers can even apply their co-op funds toward this slide package.

HP-75

SERIES 80

New math software for the HP-75

Sandy Canning/PCD

The HP-75 Math Pac (00075-15015) is a powerful and extremely versatile software pac that solves a wide range of mathematical problems. From simple numeric functions and base conversions to sophisticated mathematical capability, the Math Pac provides performance unprecedented in a portable computing product. With the Math Pac's powerful and sophisticated algorithms. the HP-75 can tackle complex problems and provide accurate answers quickly and efficiently.

The Math Pac's comprehensive function set is useful for engineers, scientists, and mathematicians in many applications. The function set includes:

- Real scalar functions
- Base conversions
- Convenient input and output of arrays
- Explicit and implicit array redimensioning
- Extensive real and complex matrix operations
- Complete set of complex functions
- Sophisticated polynomial root finder
- Solution to $f(x)=0$
- Definite integrals
- Finite Fourier Transform.

These functions are provided as a set of BASIC statements or keywords. With the Math Pac ROM plugged into the HP-75, these keywords are instantly available to be used in programs or may be executed directly in calculator mode. Users can also select integer or decimal precision or full-floating decimal to display results in the format that is most convenient for them.

The Math Pac's ROM is coded in machine language, ensuring optimal speed, numeric accuracy, and reliability.

The list price for the HP-75 Math Pac (00075-15015) is $145 (US), available through CSO. For more information, see the Series 70 Data Book (P/N 5953-5549).

The new electronic disc capability for the HP-85B

Keith Marchington/PCD

By now you've probably heard about the new electronic disc capability for the HP-85, but may not know what it is all about or how to make the best use of it. Well, what follows may shed a little light on the subject for you.

What is it?

Electronic disc is just what its name implies — using electronic RAM to imitate a disc drive. When the HP-86 and HP-87 were introduced and they had the capability to address all of that RAM, many people asked why we could not do the same thing to the HP-85. We could have, but at the cost of compatibility with currently existing software. But we hit upon the idea of using the extra RAM as a mass storage device — specifically, a disc. In this way, the user can speed up applications considerably, particularly mass storage intensive applications, without serious modifications to the software. And here is why.

Electronic disc transfer rates

HP-85	TAPE	EDISC
Allocated Program	660 b/s	46000 b/s
Unallocated Program	660 b/s	17500 b/s
Data (Numeric)	80 b/s	3400 b/s
Data (String, best case)	80 b/s	13000 b/s
Data (string, worst case)	80 b/s	600 b/s

This is a considerable improvement in speed. For example, if the Graphics Presentation Pac were run and it had to CHAIN (as it frequently does), it would chain about 20Kb. Off of tape this would take about 20,000/600 = 30 seconds. Off of Electronic disc it would take 20,000/17,500 = 1 second. Quite a difference.

It also makes data logging faster. With a memory of only 32K, the 85 had to write to tape frequently. But with the Electronic Disc, writing to mass storage is so fast that it becomes almost negligible. This can make a big difference in a speed critical application.

Personal Computers

How to get the most from EDisc

A careful look at the Transfer Rate chart above will reveal that the EDisc can be very fast, but can also be quite slow in the case of string transfers. This article won't go into the reasons for the vast difference in speed, but will tell how to get the most from Electronic Disc.

The only place there is a real change in speed is in string data transfers. The speed of this type transfer can range from .6Kb/s to 13Kb/s. This is quite a difference. Here are some examples of how certain speeds can be obtained.

If a program is written like this:

```
10  DIM A$[10000]
20  ASSIGN#1 TO "DATA"
30  A$ = <something>
40  PRINT#1;A$
50  ASSIGN#1 TO *
60  END
```

the transfer rate to the EDisc will be about 600b/s. Not very fast. If the program was written like this:

```
10  DIM A$[10000]
20  ASSIGN#1 TO "DATA"
30  A$ = <something>
40  FOR I = 1 TO 10000/252
50  PRINT#1,I;A$[I*252-251,I*252]
60  NEXT I
70  PRINT#1,A$[I*252-251,10000]
80  ASSIGN#1 TO *
90  END
```

the transfer rate would be about 7Kb/s. A significant improvement! But to really get the most out of a string transfer, here is how it is done:

```
10  DIM A$[250],B$[250],C$[250]. . . X$[250]
20  ASSIGN#1 TO "DATA"
30  A$,B$,. . . ,X$=<something>
40  PRINT#1;A$,B$,. . . ,X$
50  ASSIGN#1 TO *
60  END
```

The transfer rate here is 13Kb/s. Very fast indeed for data of any kind.

That's all there is to it. Electronic disc can be very beneficial to your application, particularly if used to its fullest capabilities.

Series 80 now supports 10Mb disc drives

Mike Steed/PCD

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

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

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

New literature for Series 80

Marian White/PCD

Let us help simplify your life. How? With some of the great new literature that's been published for Series 80 products!

First of all, there's the *Series 80 Personal Computers brochure* (P/N 5953-7853) (we call it the "Databook"). In 80 pages it covers hardware (from personal computers to printers, plotters, and mass storage), enhancements (such as interfaces, ROMs, and programming development aids), optional operating systems, communications products, software, and more. This information, which was formerly provided in three separate brochures, is now more complete than ever! For example, new comparison charts let you see the differences among products at a glance. Plus, there's extra configuration information.

The new format makes it easy to go immediately to the sort of information you want about a specific product. Most products are discussed on data sheets which consist of several sections, including:

- Discussion
- Features and benefits
- Specifications (including system requirements where applicable)
- Customer support
- Ordering information (consisting of part numbers and what the product includes).

But best of all, each page is modular and printed on high-quality paper — so you can extract whatever you need from the brochure to stand alone. You can photocopy a few, or have larger quantities printed, and use them to prepare individual data sheets for mailings or proposals.

There's also a brand new *HP-85B Personal Computer data sheet* that tells you just about everything you could ever think to ask about the new HP-85B (P/N 5953-7856). It includes a features and benefits section, specifications, and so on.

Two range pieces are available that cover Series 80 products along with the rest of the HP personal computer line.

The popular *"Right Tool For The Job" brochure* (P/N 5953-7836 Rev. B) has been updated, and includes products, applications, and selection factors for products ranging from Series 10 to Series 200.

The new *Series 70-200 flyer* (P/N 5953-7854) provides brief descriptions of all HP's personal computers, plus a comparison chart covering the HP-75, HP-85B, HP-86A/B, HP-87XM, HP 120, HP 125, and Series 200 Model 16. It's ideal for customer mailings and first-level inquiries on HP personal computers. It measures 8¾" x 22.5" and folds to fit business envelopes.

The new *HP 82905B/HP 82906A data sheet* (P/N 5953-7861) provides comparative information on these two low-cost printers. It also includes features and benefits, specifications, and illustrations of various fonts that are available on both printers.

And last, there's the *Series 80 price list* (P/N 5953-7860D).

To order any of these pieces, you may contact:

- Corporate Literature Depot
- 800-547-3400 *toll free*
- Marcom Department
  1000 N.E. Circle Boulevard
  Corvallis, OR 97330.

SERIES 100

Accessing a plotter from Series 100/BASIC

Curt Gowan/POD

HP graphic plotters have a powerful instruction set built into their firmware. You can access this HP-GL (HP Graphics Language) capability from Series 100/BASIC with the aid of a small assembly language subroutine.

It's in the *Communicator*

An article by Pete Almeroth of HP Dayton in Issue #4 of the *Series 100 Communicator* gives the subroutine and other data about this subject.

Back issues are carried by Computer Supplies Operation (Division A5):

Issue	Cover	P/N—US Edition	P/N—Intl. Edition
#1	Blue	5955-3930	5955-3937
#2	Blue	5955-3943	5955-3947
#3	Blue	5957-6203	5957-6213
#4	Green	5957-6204	5957-6214
#5	Orange	5957-6205	5957-6215

BLACK BODY RADIATION
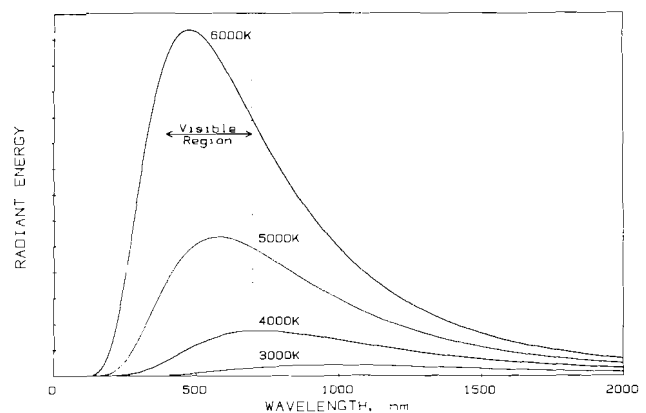
Personal Computers

How to subscribe

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

- Customers: call the nearest HP office and ask for "Computer Products Order Processing"... the price for 45530N is $24.00 per year.

- HP field personnel: if you are not on either the Series 100 SE or CE subscription service, order 45530N through the SE Administrator for your Area... $19.20 per year.

- HP factory personnel: have your purchasing department follow the procedure used to order software support for the other HP systems in your organization... $19.20 per year. (Your division sends a HEART order for 45530N to the Area SEO. For assistance, call the HP Sales Office nearest to your location — ask for the SE Administrator.)

SERIES 200

HP EGS/200 introduced

Aland Adams/EPD

Effective July 1, 1983, the long-awaited HP Engineering Graphics System/200 (EGS/200) appears on the Corporate Price List.

This product is more than just a conversion of the EGS/45 software to the Series 200 hardware. The speed and power of these computers allowed us to significantly improve EGS's price/performance; we estimate a 10-to-1 increase over a similarly configured EGS/45 workstation. Also, a full implementation of Shared Resource Management (SRM) capabilities will allow you to configure single or multi-workstation systems that provide an excellent growth path for your customer.

While the basic features of EGS/45 were directed toward the electrical engineering market, our experience with that product showed that it had a more widespread appeal. For this reason, we have provided major enhancements for users who wish to create other kinds of technical drawings. Examples of these features are geometric construction facilities, cross-hatching, and automatic dimensioning.

Listening to inputs from users who create electrical artwork, we added the features they most frequently requested. The most important of these is the ability to generate a connection list from EGS/200 artwork, i.e., electrical schematics. Many customers need this information so they can pass it on to analysis software they are currently using or wish to use.

Considerable effort went into improving the EGS user interface. New capabilities include dynamic component tracking (e.g., rubber-banding), a second drawing viewport, fully user-definable menus, and greatly expanded macro command capabilities. These improvements make EGS/200 more powerful, and easy to learn and use.

The only EGS/45 capabilities not present in EGS/200 are the generation of photoplotter and magnetic tape output used to create PC boards. These features are not included now chiefly because the Series 200 hardware does not support a magnetic tape drive. This is a major concern; however, we decided to introduce the product now, based on our experience with EGS/45 customers. Most of these customers use the HP 7580 to produce their PC board artwork, which leads us to believe this to be a viable alternative.

EGS/200 includes four "personalities" to help customers create technical (mechanical) drawings, schematics, PC board artwork, and general drawings. These personalities consist of tailored screen and tablet menus, macro commands, layer definitions, and parts libraries for each of these applications. The general drawing personality is of particular interest, since it is highly interactive and can be used as a learning tool to get new users up to speed quickly.

To help you sell EGS/200, we are providing three important tools:

- A demo video tape — Will allow you to make presentations to small and large groups of customers and help qualify them for further personalized demonstrations.

- Technical data sheets — Provides detailed information on EGS/200 capabilities in a high-quality format.

- The product includes a set of demo drawings and a basic set of parts. An EGS/200 Operator's Manual appendix explains the commands to call up, manipulate, and plot each of these drawings.

Typically, your customer will initially be interested in buying a single workstation. A minimum system includes a Series 200 computer with 1.4Mb of memory, the Pascal operating system, an HP 9111A Graphics Tablet, an HP 913xB Winchester Disc, and an HP 7580B Plotter. With software, this comes to approximately $50,000, a very attractive price. You'll find that as your customers learn about the SRM system's capabilities, they will convince themselves that they need more workstations.

Incidentally, each of the two EGS/200 beta test sites bought three new EGS/200 workstations and an SRM in their initial installations.

EGS/200 is configured as a single software product, HP 98305A, priced at $10,000 US. A 98305M Volume End User Right-to-Copy product and a 98305R OEM Right-to-Copy product have been configured to provide additional discounts for multi-workstation purchasers. Important note: EGS/200 will use the ID PROM in the Series 200 hardware for software security. Consequently, the right-to-use (or copy) products are limited to an individual machine. We will provide you with more information soon on how this security system will be implemented. The important point to know now, however, is that EGS/200 will not be compatible with Series 200 hardware that lacks ID PROM hardware.
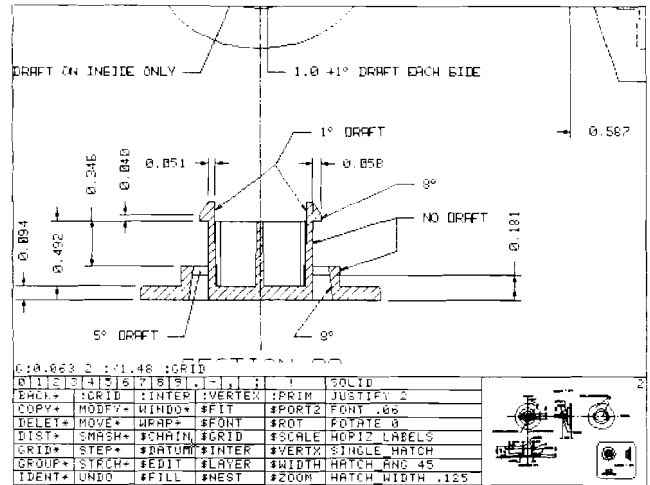
Screen dump of mechanical design

If your customers react to EGS/200 in the same way as those who have visited the factory, you should be very successful in selling this new product.

If you do not already have an EGS/200 Video Tape, you can get one by sending a written request to Marvel Ross, FSD, 3404 E. Harmony Road, Fort Collins, CO 80525. This request must have your name, sales office or division, address, phone number, entity number, account number, and an authorized signature to cross-charge.

Context MBA "quote" folder
Mark Priestley/PCG

A PWSR in the Neely Palo Alto sales office developed a very nice application demo for the HP 9816s and Context MBA. The Demo serves two purposes. First it demonstrates the capabilities of the MBA Electronic Spreadsheet; second it can be used by a PWSR to create a budgetary quotation for your customer. If you are interested in a copy of this demo file, just call your Sales Center contact at PCG to request a copy.

Personal Computers

MBA/9816S summertime special announced

Dennis Vetter/EPD

The Personal Computer Group announces a new, aggressive campaign to help you sell more Model 16s this summer. Effective immediately, through September 15, your customers can purchase the Model 16, the powerful MBA software (HP 97038JA), the 9121D Micro Floppy Disc, and the twivel feature, at a discount of $1000 US.

And there's more! Orders placed between May 20 and July 20 are eligible for a 9-month FMMC (return to HP) service contract absolutely free. This actually equates to a full year of free service, since the standard 90-day warranty period is converted to FMMC when the service contract is purchased with a system.

The summertime special applies to systems purchased in the following configuration only:

- 9816S
- 9121D (3½-inch disc)
- 97038JA (Context MBA)
- 92171V (Tilt)
- 92171W (Swivel).

The list price for these products is $8230 US. But thanks to this hot summertime discount, customers can purchase them all for just $7230 US — a savings of $1000.

For ordering information and stipulations, consult a memo sent recently by Srini Nageshwar of the Personal Computer Group.

HP SRM cable prices reduced

Sue Bodoh/CNO and Meg Weaver/CSO

Effective July 1, 1983, your customers can purchase some of the SRM cables from CSO at substantially reduced prices. Here is the new pricing information:

Cable P/N	Old US Price	New US Price	Corresponding cable options to be discontinued on 98629 and 98029
97061A	$225	$165	Opt. 001
97061B	405	280	Opt. 002
97061C	830	570	Opt. 003
97061D	805	550	Opt. 004

To avoid duplication and confusion, we are discontinuing the cable options for the 98629 and 98029 Resource Manager interfaces as shown above. Please order all SRM cables using the 97061A, B, C, or D numbers, rather than the cable options. Cables can be ordered using a standard HEART order. Your customer can order them just by picking up a telephone.

CSO DIRECT ORDER

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

Location	Telephone Number
United States	800-538-8787
California	408-738-4133
United Kingdom	0734-792868
	0734-792959
France	(6) 928 32 64
Belgium/Luxembourg	(02) 762 32 00
Switzerland	(057) 31 22 54
	or 31 22 59
Canada	(514) 697 42 32
West Germany	07031-142829
	07031-223133
The Netherlands	020-470639
South Africa	802-5111
	53-7954
	28-4178

Reprints of HP/TI joint ad available

Gretchen Tobin/FSD

Reprints of the Texas Instruments ad on HP and TI teaming up to improve quality are available. This ad, featuring the Hewlett-Packard Series 200 Model 16, promotes the way Texas Instruments integrated circuits have helped HP improve the quality of its technical computers.

This ad has already appeared in *Electronic Design, EDN, Electronics, Electronic News, EE Times,* and *Electronic Buyers News.* It will also appear in *EDN* and *Electronics Business* this month.

If you would like reprints of the ad, please contact Gretchen Tobin at FSD, 303-226-3800, ext. 2945.

When Texas Instruments
and Hewlett-Packard team up,
quality in technical computers goes up.

TERMINALS

HP 3081A industrial workstation terminal: a sensation in data collection marketplace

Claudia Devaux/PCG
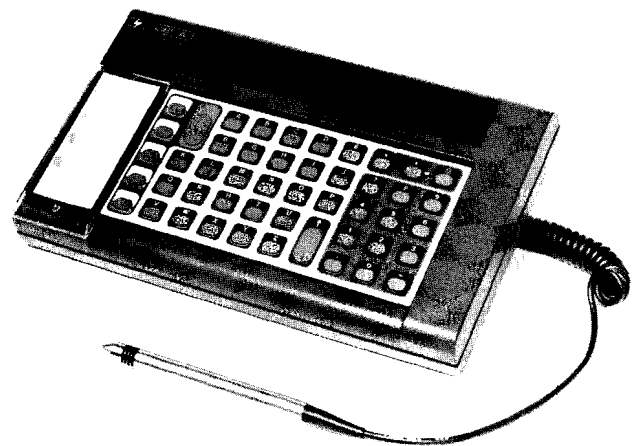
The 3081A with alphanumeric keyboard and industrial bar code wand.

The HP 3081A industrial workstation terminal is a reality:

Offered by GPCD in response to market needs for a low cost, compact, easy-to-use, reliable and rugged data collection terminal, *the 3081A represents a major breakthrough for HP.* The product is unique in the marketplace today.

# Personal Computers

Where are the needs?

The needs exist in industrial environments like automobile manufacturing plants (where there are nearly a million parts) and aircraft maintenance operations (where every transaction must be recorded), in laboratories (where chemicals are analyzed), in libraries, videotape clubs, mail order houses — anywhere small fields of data must be available to an online system in vast quantities.

How does the 3081A meet the needs of the marketplace?

At a US List Price of $740, it is HP's lowest cost terminal (average cost per workstation is $1,200 including bar code reader, accessories and datacomm).

Small in size, it doesn't take up a lot of space on a work-bench, counter or desk. Also a bracket can be ordered to mount the terminal on a flat surface (wall or bench) when space is at a premium.

Completely sealed, the 3081A is protected against dust regardless the particle size, and it can be washed with soap and water. In fact, it can withstand accidental immersion in water, and the only effect hosing it down will have is to clean it. Also most chemical vapors and droplets cannot hurt the terminal.
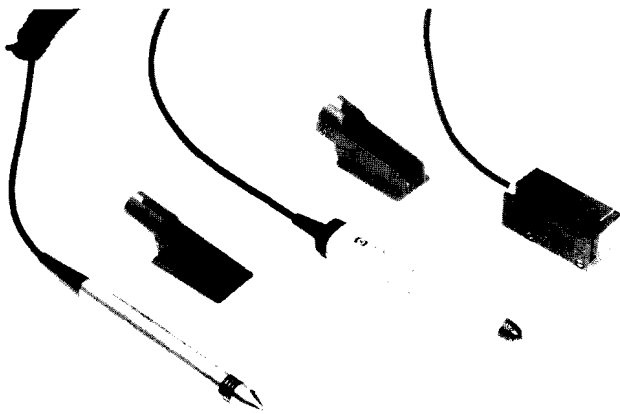
Industrial bar code wand and holder, general purpose bar code wand and holder, bar code slot reader. For more information on the bar code slot reader, see "Just What Is a Bar Code Slot Reader?" Computer News, April 1, 1983, page 27.
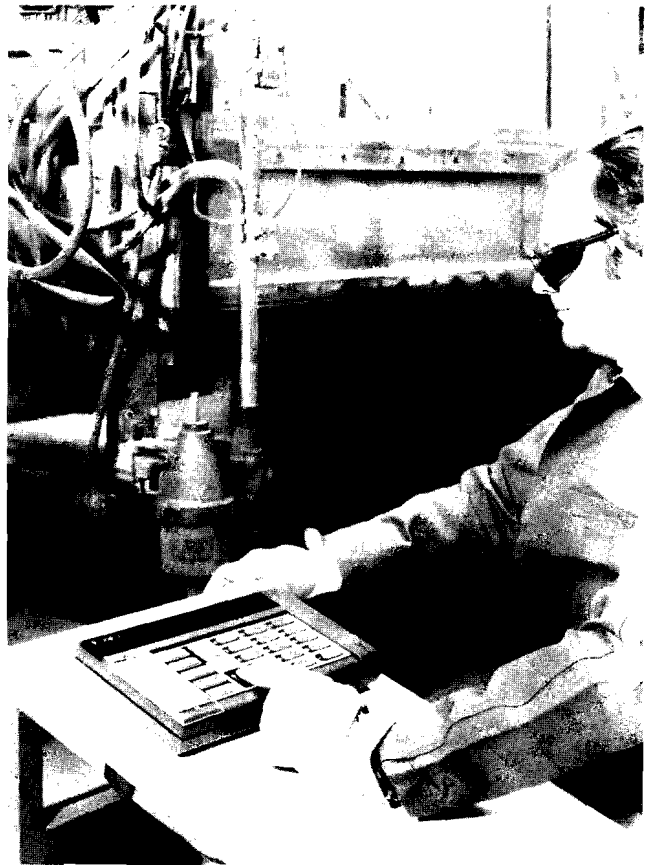
Large keys allow operation with work gloves.

The easy-to-read one-line display can send prompting messages to users and allows them to review input data. Its bright 32 alphanumeric characters offer excellent readability in both bright and dim light environments.

Customers can choose from six bar code readers (two general purpose wands, two industrial wands and two industrial slot readers).

The 3081A can read the two most popular industrial bar codes (codes 3 of 9 and Interleaved 2 out of 5). Data accuracy is further enhanced by an optional check digit and/or a field length verification.

"Black-on-black" security labels can be used with the bar code slot reader, offering an alternative to the magnetic stripe technique for personnel identification.

Computer News

1983 Readers' Survey

To:

Karen Campbell/BDG
Hewlett-Packard Company
19320 Pruneridge Avenue
Cupertino, CA 95014

STAPLE HERE

Please check *only* one: ☐ **Commercial** ☐ **Technical** ☐ **Personal** ☐ **Division:** _____

1. How often do you usually read
   Computer News?

   _____ Every issue
   _____ Occasionally
   _____ Almost never

2. How much of *Computer News* do you
   usually read?

   _____ Cover to cover
   _____ Only certain sections
   _____ Scan for articles of interest

3. Does the product-oriented format of this
   July 1 issue make it easier for you to find the
   information you need?

   _____ Yes   _____ No

4. How often do you refer to back issues
   of *Computer News?*

   _____ Often
   _____ Occasionally
   _____ Almost never
   _____ Don't save back issues

5. Do you use the *Computer News
   Sales Aid Catalog?*

   _____ Yes   _____ No

6. Do you use the 6-month indexes?

   _____ Yes   _____ No

7. Do you use the *Computer News Organization
   Chart Supplement?*

   _____ Yes   _____ No

8. How much of the information in
   Computer News do you receive from other
   sources also?

   _____ 100%   _____ 25%
   _____ 75%   _____ None
   _____ 50%

9. This duplicated information best fits
   which following topics?

   _____ New Product Information
   _____ New Literature/Sales Aids
   _____ Applications
   _____ Competitive Information
   _____ Product Tutorial
   _____ Obsolescence Announcements
   _____ Backtalk/Sales Success Stories
   _____ Price Changes

10. How often does an article you read in
    Computer News prompt you to take direct
    action?

    _____ Often
    _____ Occasionally
    _____ Almost never

How useful are articles on the following topics?

	Very Useful	Useful	Not Useful	Never Read
11. New Product Information	_____	_____	_____	_____
12. New Literature/Sales Aids	_____	_____	_____	_____
13. Applications	_____	_____	_____	_____
14. Competitive Information	_____	_____	_____	_____
15. Product Tutorial	_____	_____	_____	_____
16. Obsolescence Announcements	_____	_____	_____	_____
17. Backtalk/Sales Success Stories	_____	_____	_____	_____
18. Price Changes	_____	_____	_____	_____

19. The best article in this July 1 issue of *Computer News* is on page _____ entitled _____

    _____ because _____

    _____

20. *Computer News* would be even better if _____

    _____

    _____

The 3081A comes standard with a numeric keyboard and five function keys (10 with shift). An optional alphanumeric keyboard is available. With audible and tactile feedback, the keyboard provides a way to enter small quantities of information and is especially appreciated when a defective bar code is encountered.

Data (like a part number) is entered directly by the person doing the job (like updating a printed circuit board), a method that eliminates the need for batch data entry operators, improves accuracy and maintains the database in real-time.

It is easy to maintain and service the 3081A whose MTBF is on the order of 12 years. All parts are throw-away items.

The 3081A uses high noise immunity current loop datacomm, an asset in factory environments.

The 92922A four-channel RS-232C-to-current loop adapter, which also supplies DC power to the terminals, is available for point-to-point applications.

For larger scale applications, up to 32 terminals can be connected to the 2333A Multipoint Cluster Controller.

The opportunities for the 3081A Industrial Workstation Terminal are vast. It's the terminal that will sell a system!
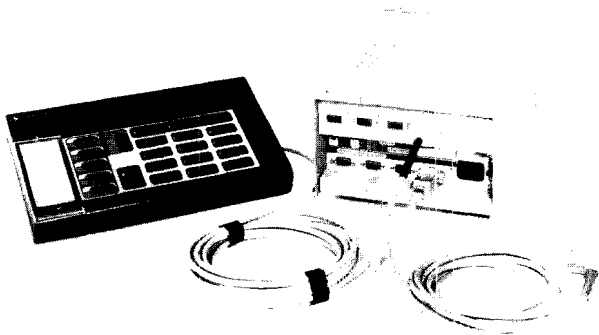
The 92922A Four-Channel Adapter is used with the 3081A in point-to-point configurations.

HP 3081A industrial workstation terminal literature

Claudia Devaux/PCG

The HP 3081A Field Training Manual (P/N 5953-5921) is expected to arrive in the field in mid-July. Included in a distinctive envelope, which will be mailed to you, will be the data sheet (P/N 5953-5919) and a promotional flyer (P/N 5953-5920). The data sheet and flyer will be generally available toward the last week in July.

HP 3081A-related documentation is as follows:

● 03081-90001
3081/92922A/40253A/2314A
Operating and Service Manual

● 92922-90001
92922A Installation Note

● 40253-90001
40253A/2314A Installation Note.

There are a couple of other booklets available from Corporate Literature to help you in a data capture sale:

● P/N 5953-0199
Machine Readable Encoding Techniques for Data Capture Applications

● P/N 5953-7732
Elements of a Bar Code System (application note).

Personal Computers

New improved features on HP 307X data capture terminals

Claudia Devaux/PCG

What's to become of the HP 307X Data Capture Terminals? You may think that with the advent of the HP 3081A, these pioneers in data capture will be obsoleted. Just the opposite is true!

A major 307X enhancement program has been underway in Grenoble. The rationale behind this program is that a large sector of the data capture market requires the special peripheral capabilities provided by these faithful veterans. Many of our customers still use 80-column punched cards and magnetic stripe cards, for example, and we are not going to abandon them. Moreover, optional electrical interfaces are available with the 3075/76 model.

The following enhancements have been made and will be delivered with incoming orders:

- *New Printer*
  - Twice as fast
  - Easy maintenance

- *New bar code readers*
  - Super decoding algorithm dramatically improves hit rate
  - New light wavelength more tolerant of worn out labels
  - Wider reading angle makes wanding easier

- *New adjustable beep* — Loud beep can be heard in noisy factories

- *New multifunction reader*
  - Improved mechanism
  - Superior performance

- *New cooling mechanism* — Reduces internal temperature by 10°C (18°F) resulting in longer component life.

These features have been tested by some of our customers whose enthusiasm is overwhelming. We know that potential sales exist, and we expect that our enhancement efforts will help you get them.

HP 2703 A-5 discounts give free HP 2623A

Gene Lee/PCG

The HP 2703 Color Graphics terminal carries six functional units on the A-5 discount schedules. This means if a customer buys more than one HP 2703 he already qualifies for a discount. For example, a customer purchasing two HP 2703 color terminals receives a 7% discount. And if he purchases three HP 2703 Graphic Terminals, a 10% discount applies.

But, the real bargain comes when he buys four Model 65 HP 2703s. When a customer buys four HP 2703s, he first of all will get that nifty 10% discount, but you can also give him a *free* HP 2623A Graphics terminal. Here's how it works.

The HP 2703 gets six functional units, so that buying four of them puts the customer at 24 functional units, which is right at the top of the 10% discount bracket. One more functional unit carries the customer to 25 which pushes him into the 13% discount bracket. That's an additional 3% discount on the entire purchase. So:

HP 2703 Model 65	$28.000 each
4 of them	x4
TOTAL	112.000
Less 10% discount	11.200
Cost to customer	$100.800.

But, if he also buys an HP 2623A:

4 HP 2703 Model 65	$112.000
Plus HP 2623A	3.250
TOTAL	115.250
Less 13% discount	14.983
Cost to customer	$100.267.

So, when your customer buys four Model 65 HP 2703s, you can always *give* him a *free* HP 2623A and still can save him $533. too.

GROUP UPDATE

Ad introduces three-in-one HP 1000

Bojana Fazarinc/BDG

The latest in a long series of HP 1000 ads to OEMs and system designers, this new ad on the A-Series microsystem is intended to continue building preference for HP's powerful and flexible A-Series Family. The ad focuses on the compact microsystem package with 3

levels of power. It should have a strong appeal to readers of *Electronic News, Mini Micro Systems, Computer Systems News* and *Computer Design,* where it will be appearing starting in late June.

1000 SERIES

Introducing CONTROL/1000

Brian Beasley/DSD

You will find a new software product, CONTROL/1000, on the July 1 CPL. Control/1000 refers to both a hardware configuration and a software package designed to bring the power of the HP 1000 A-Series processors to factory and plant automation.

To achieve this, we took the HP 2250 measurement and control capabilities and combined them with the A600

microcomputer, RTE-A, and DS/1000-IV to give our customers true computer processing and networking capability in their process or machine control application. The previous L-Series CPU with its MCL/50 compiler is replaced with the A-Series machine and RTE-A. The HP-IB 2250 link to a host computer is functionally replaced with DS/1000-IV hardware and software. Initially, we will

Technical Computers
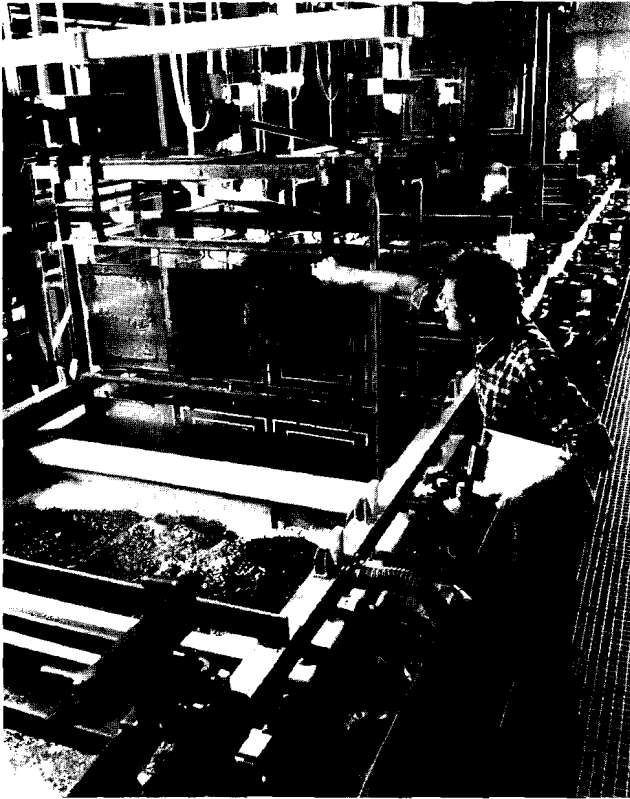
only offer the DS node version of Control/1000 as a supported system (a host is necessary). Watch *Computer News* for announcements of standalone configurations planned for the future. Field Training Manuals for Control/1000 should be in your hands now. If you haven't received yours, it will be arriving shortly. Product and ordering information and a comparison of the HP 2250 to the Control/1000 configuration is included. Control/1000 brings the following benefits to measurement and control applications:

High level languages for process control such as FORTRAN 77 or Pascal. Now your customers can write their process control programs in the high level languages of FORTRAN 77 and Pascal and run them on the A600. With Control/1000, we've taken some of the best features from MCL/50, the HP 2250 measurement and control language. We've converted the MCL/50 I/O statements to subroutines capable of being called from high level languages running on the A600. Now, program control, computation, and data manipulation can be performed using the high level language, but measurement and control card I/O calls still retain the user friendliness of MCL/50. For customers needing maximum speed, we've created a mode which allows the user to talk directly to the M&C cards without the overhead of these calls.

All the benefits of the Real-time Executive operating system such as true multi-tasking and high level languages. Up until now a user of the HP 2250 that used an HP 1000 as a host had to deal with MCL/50 and RTE. Now we've eliminated MCL/50 and replaced it with easier-to-use subroutines which users can call from application programs. They need never know that they're using anything other than a high level language. Multiple tasks can be run as background programs in the Control/1000 A600 processor, while at the same time the processor is running the primary automation application program.

A large memory space of 512 kilobytes. This provides a substantial increase in ease of writing application programs once the unit is up and running. Customers can now write their application programs without worrying about constant segment passing to the HP 2250 because of lack of memory. For those number crunching intensive processes the user no longer has to pass the data to the host – the A600 can do it in real-time, in the HP 2250!

True networking performance. Now process control or machine control computers can benefit from all the features of the DS/1000-IV network. This can be used to pass information to the right people at the right time, including everything from maintenance information to process efficiency data. Imagine what this can do for your customer's productivity.

Control/1000 components and software will be available 12 weeks ARO. For more information, contact your Sales Development Engineer to help you close that important deal.

HP wins turbine business

Randy Englund/DSD

Recently, a COMSYS went to SR Jim LoScalzo and SE George Zimmer in Albany. It read:

YOU ARE A WINNER!!!!!!!!!!

So what's the story behind this exciting news?

A large market exists for retrofitting over 1,000 large steam turbine/generators with a Supervisory Monitoring system that interfaces with the customer's own control systems. After a one-and-a-half year sales cycle,

numerous calls, factory involvement, and an in-depth technical/vendor evaluation, HP was selected as having the best overall solution.

The HP solution consists of A-Series computers with HP 2250 front-ends in a configuration called Control/1000*, process monitoring and control software, high availability, proven product reliability in design and field failure rates, vendor reputation, and a high level management commitment to provide products that meet the customer's needs and timeframes.

The competition lost the battle for a variety of reasons including: limited software offering, fewer support resources than HP, higher priced hardware, and front-end subsystems that had to be purchased from an outside party. The customer opted for a one-vendor solution from Hewlett-Packard. We beat the competition on reliability and price/performance, in addition to organizing a more effective factory visit.

With clear objectives provided by the field team, key managers at the factory were mustered to build upon, reinforce, extend, and support the sales plan developed in the field. The accuracy of Industrial Automation as the HP 1000 target market was reconfirmed as DSD's Marketing Manager Greg Gillen said, "The product needs of your application fit precisely with our product plans." A final presentation, onsite, outlined the Implementation Plan. DSD General Manager Franz Nawratil sent a telegram personally reinforcing our commitments.

We at Data Systems Division want to express a big THANK YOU to the major account team for adding new OEM business to the established end-user business being done with the account. We are already experiencing increased OEM activity and interest from other departments based upon winning the turbine deal. Jim, George, and DM Bill Messieri have set a new standard for pursuing and winning systems for large projects based upon HP applications software.

For additional information please refer to the article "Introducing Control/1000" in this edition.

RTE-4B primary will not run on 128Kb systems

Jeff Chamberlain/DSD

Any new RTE-4B systems sold after the C.83 PCO, coming up this Fall, must have at least 256Kb of memory to run the primary system which will be provided with it. This decision was made in lieu of removing DS or some other capability from the primary system. We will still ship systems with 128Kb of memory, however the customer must already have a development system with more memory to develop a system for the 128Kb system.

Mature phase for SIGNAL/1000

Esther Vasick/DSD

The status of SIGNAL/1000 has been changed from active to mature. SIGNAL/1000 (92835) is a signal processing package for F-series systems operating under RTE-6/VM or RTE/IVB. The change in status reflects the fact that no future enhancements are planned for SIGNAL/1000.

Important changes to HP 1000 ordering information

Ted Proske/DSD

To avoid mistakes in budgetary quotes, please make the following changes in your reference copy of the HP 1000 System Designer's Guide (5953-8737):

On page 14, 2179C Option 101 actually is provided on 1600 bpi magnetic tape, *not* on 7908/11/12 compatible cartridge tape, as indicated.

On page 23, the 92083-RTE Profile Monitor *cannot* operate under RTE-A, as indicated in the second line of description. Program profiling under RTE-A must be done with Symbolic Debug/1000.

Technical Computers

A-Series diagnostics enhancements

Jeff Chamberlain/DSD

There have been many changes over the past few months regarding the A/L-Series diagnostics. The first, which was announced on the A.83 PCO, was the updating of the 24612A System Diagnostics and 24613A Measurement and Control Diagnostics for the A-Series so they could be used on the L-Series. (Refer to *Computer News*, March 15 issue.)

On the July 1 CPL, there are more additions and changes. First, the 24613A product has been added into the 24612A product, combining the diagnostics into one package. Consequently, the price of the 24612A Diagnostics has been increased to include the measurement and control diagnostics value. The 24613A Diagnostic Package will remain on the price list through August '83, at which time it will be removed. The purpose of this combination is to increase the ease of ordering and the use of diagnostics. The fewer products and options there are, the less the confusion.

Additionally, there are two new media options for the 24612A Diagnostics: 1600 bpi mag tape (Option 051) and 3½" microfloppy (Option 044). This will provide support for the Micro/1000 products as well as the stand-alone 3½" microfloppy products.

9000 FAMILY

LAN 9000: HP's entry into high-performance local networking

Nick Ordon/CNO

July 1 marks the introduction of a substantial product achievement, HP LAN 9000. Representing the culmination of an enormous R&D effort compressed into approximately a 12-month period, LAN 9000 provides high-performance local area networking of HP-UX based HP 9000 Series 500/600/700 computers via an Ethernet - compatible 10Mbps link. LAN 9000 is transparent to its users and provides multi-user, multi-service, multi-connection capability.

Here is how the linking occurs:
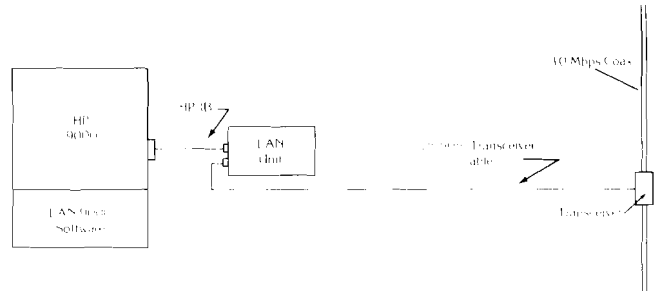
The Series 500/600/700 is connected to the LAN Unit through a dedicated HP-IB interface. The LAN Unit is then connected to the 10Mbps Ethernet coax by way of a transceiver cable and transceiver that taps directly into the Ethernet coax. The LAN Unit is microprocessor based and is downloaded from the host HP 9000 with networking link software, which in turn allows the Series 500/600/700 to connect to the local network. (A compatible LAN I/O card currently under development will replace the HP-IB and LAN Unit in 1984.) The host resident networking software provides a full complement of services:

- Remote File Access (RFA) allows access to directories, data files, special files, and peripherals across the network

- Network File Transfer (NFT) lets the user transfer files within the network

- Remote Process Management (RPM) provides the capability of starting or stopping processes on systems throughout the network

- Interprocess Communication (IPC) is a means by which simultaneously running processes can communicate.

With LAN 9000, Hewlett-Packard provides a complete networking solution, with a user interface prepared such that little data communications knowledge is needed to obtain all the networking benefits. Compare this with the numerous vendors that provide the hardware connection only, leaving the networking software for the user to write, and the advantages are obvious. Additionally, this solution is complete with a user executable diagnostic that provides both single node verification as well as loop back testing of other nodes, all of which can be conducted without disruption of activities on other systems on the network.

The networking software is substantial, unlike that of some competitors, in both features and implementation. The networking code physically measures in excess of 200Kb, and has been prepared in a layered approach following the ISO Open Systems Interconnect model. The transport implementation follows the US Government standard ARPA specification, though it has not yet been verified for total compatibility.

This provides reliable end-to-end communication through creation of a virtual circuit connection, and allows the multiplexing of both services and users. Also, this networking software is designed around an architecture that is easily expandable and will provide a natural path to future protocols and capabilities such as internetting (access to other local networks). Finally, this LAN 900 software will be valid for future solutions, as it provides a foundation for compatible communication with the HP 1000, HP 3000, and Series 210 (HP-UX based Series 200).

Performance characterization of LAN 9000 is not yet complete, but initial indications are that our file transfer capability is highly competitive. All this combined with a $5000 US Factory Base Price for networking capability of a system, with the power and functionality of the Series 500/600/700, say that LAN 9000 is a winner!

Ordering information*

Product Name/No.	Description	Price US
LAN 9000/ HP 2285A	LAN 9000 Software, HP-IB interface with 2m cable, 15m transceiver cable, transceiver and N-Type connectors, and manuals.	$5035
Opt. 001	Delete HP-IB	— 700
Opt. 015	230V 50Hz operation	NC
Opt. 022	CS-80 Disc compatible cartridge tape (MUST SPECIFY Distribution media)	NC

Note: As a consideration in configuring systems for LAN 9000, one-half Mbyte of RAM should be dedicated to network operation.

Order product 2285A from Roseville Networks Division (Div. 52). More in-depth pricing and configuration information is presented in the appropriate HP 9000 sales literature.

HP 9000 adds LAN, RJE, and SRM support

Nick Ordon/CNO

With the additions to the July 1 CPL, the HP 9000 Series 500/600/700 Data Communications capability expands substantially. The new products are LAN 9000, Remote Job Entry, and Shared Resource Management.

LAN 9000 provides high-performance local area networking capability of HP-UX based Series 500/600/700 computers over an Ethernet-compatible link. The network services provided are Network File Transfer, Remote File Access, Remote Process Management, and Interprocess Communication. The required user software, firmware, and hardware needed to connect to the Ethernet coax are bundled as P/N 2285A. This product can be ordered from Roseville Networks Division (Div. 52), and is competitively priced at $5035 US.

Remote Job Entry (RJE) features both IBM 2780 and 3780 terminal emulation. These are industry standard terminals supported on most mainframe computers, and RJE provides a reliable link for file transfer capability. HP 9000 RJE is supported on the Series 500/600/700 operating in the HP-UX environment. The RJE software is available from Fort Collins Systems Divison (FSD, Div. 40). The single-user version, P/N 97077A, is priced at $2020 US, with M and R discounts available. The multi-user version, P/N 97087A, lists for $5045 US, and again M and R discounts are available. The required RJE I/O card is ordered from Roseville Networks Division (Div. 52) as P/N 27122A at $2115 US.

Shared Resource Management (SRM) support on the Series 500/600/700 is designed for the PRO-BASIC operating system at this time. This gives the capability of conveniently linking the entire HP 9000 family as well as the HP 9835 and 9845. Initial services provided for the Series 500/600/700 are file sharing and printer spooling. The SRM software, P/N 97058A, is ordered from FSD (Div. 40) at $200 US; M and R discounts apply. The SRM I/O card, P/N 27123A, is provided by Roseville Networks Division (Div. 52) at $2115 US. Standard SRM configuration techniques apply.

This is a brief sketch of the new HP 9000 Datacomm capabilities. More in-depth articles will appear in future *Computer News* issues. Please refer to the HP 9000 Pricing Guide and Configuration Guide for complete information on pricing and options.

Business Computers

Datacomm ad shows HP #1

Orrin Mahoney/BDG

A new ad currently running in *Computerworld* and scheduled to run in *Datamation* magazine clearly shows that HP scored the highest when users rated their systems datacomm performance. The response pieces are the DSN Brochure 5953-0669 and a report of the Data Decisions survey.

Ad shows HP Financial Accounting and HP 3000 as a winning combination

Orrin Mahoney/BDG

A new ad currently running in *Barron's, Dun s Business Month, Computerworld* and several accounting magazines shows how HP Financial Accounting and the HP 3000 provide the information needed by a company's financial officers when they need it, not when it's too late. Response pieces are the HP Financial Accounting Brochure 5953-6600 and the new HP 3000 Family brochure 5953-7532.
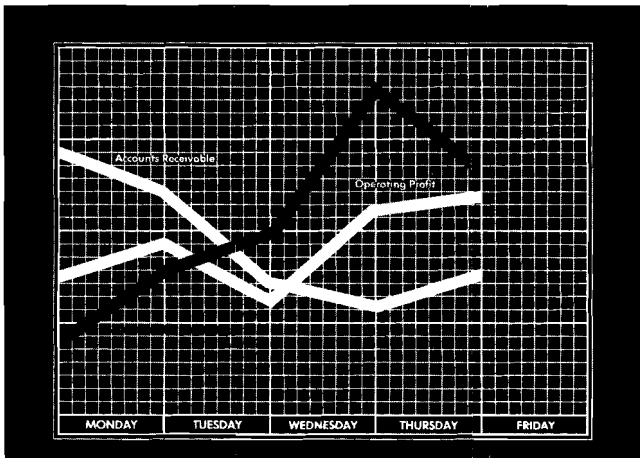
In these fast-changing times, it pays to know where you stand.

HP Financial Accounting is a success at CSY

Leslie Kriese/FSO

Recently we received this memo from CSY about how HPFA has been able to really help them with their General Ledger reporting. HPFA can do this for *your* customers too.

HP 250

Lower availability for HP 250 products and systems

Edward Smith/CSY

CSY is now offering all HP 250 products and systems with a maximum availability of six weeks. In most cases, products and systems can be shipped four weeks after receipt of an order.

If you already have an order placed and would like an earlier ship date or if you have any questions about the availability of specific HP 250 products or systems for new orders, please call your factory Order Processing contact at CSY-Roseville.

Business Computers

HP 250 cable number changes

Tracy Crowe/CSY

In reviewing some of the HP 250 documentation, a couple of errors were found in the specification of cable part numbers.

The first error is on page 11 of the *HP 250 Communicator* (Issue 7, March 1983) in the article titled "New Low Cost Printer Support." The article incorrectly lists the part number for the cable that connects the printer to the HP 250. The article specifies: 8120-1358. It should specify: 8120-3258. This is the only place this error occurs.

The second mistake is in regard to the internal 1 meter HP-IB cable needed to upgrade the HP 250 Models 20 and 25 to add the external HP-IB capability. The product number for this cable is incorrectly listed on pages 7, 8 and 15 in the *HP 250 Small Business Computer System Configuration Guide.* The configuration guide lists the cable product number as: 45529A. It should specify: 31389A.

Please note these two changes in your copies of the aforementioned documentation. If your system already has these cables incorporated, then use this information for future reference only.

3000 SERIES

Tell your upgrade customers that their satisfaction is guaranteed

Larry Russell/CSY

To help you close those Value '83 box swap upgrade deals, HP will offer your customers a return guarantee.

If your customer is not completely satisfied with the performance of any HP 3000 box swap upgrade ordered before October 1, 1983, he can return it by December 31, 1983. Furthermore, if your customer needs to keep their current system beyond the normal 30 days to ensure a smooth transition, he may do so for up to 90 days.

This return guarantee applies to any *box swap upgrade* to the Series 42, 48, or 68 and to *box swap upgrades* to the Series 40, 44, and 64 when the disc caching field upgrade product is also ordered.

If your customer requires the guarantee in writing, please contact your BDG Computer Marketing Center sales development representative. To extend the period of time that your customer can retain their old system contact SRO.

Questions you may be asked

Q: How does this program relate to the Series 64 Upgrade Satisfaction Guarantee that was introduced during the Success '83 field tour?

A: This performance satisfaction guarantee is the same except that it now also applies to all the systems with disc caching listed previously in this article.

Q: Will my customer receive the same computer back if they are not completely satisfied with their upgrade system performance?

A: No. Your customer will receive a system which is functionally equivalent to the one they returned. This will probably not be the same machine.

Q: Is the usual HP 3000 warranty affected by this offer?

A: No. Your customer will receive the normal HP 3000 90-day warranty.

Q: Will HP pay site preparation expenses if my customer is not satisfied with the upgrade?

A: No. Costs incurred by the customer as part of the installation of the new system will not be reimbursed by HP.

Q: Can my customer withhold payment on their system until the guarantee expires December 31, 1983?

A: No. Normal payment terms and conditions will apply.

Q: How will SRO handle the extended three-month transition period?

A: All upgrade return contracts will continue to specify a one-month period unless you specifically request SRO to extend the period to three months.

HP 7976A configuration newsflash

Kathryn Hoshor/CSY

Just a reminder, the HP 7976A Tape Drive is only supported on the Series III and IIIR as an *add-on* drive. It cannot be purchased to replace the existing HP 7970 system tape drive.

The Series III and the Remarketed Series IIIR each require a 7970E (1600 bpi) or 7970B (800 bpi) Magnetic Tape Drive. This requirement can also be satisfied with the HP 7971A Option 470 or 480. The 7976A, however, is not allowed as the only system tape drive because CPU diagnostics cannot be loaded and memory dumps cannot be performed.

In summary, Series III/IIIR customers should not be allowed to trade in their only 7970 tape drive for a 7976A. They may, however, want to purchase the 7976A as an add-on device. In this case it can provide an excellent solution for those customers who will benefit from its increased performance.

For more information please refer to pages 1-8 and 1-18 in the "HP 3000 Configuration and Upgrades Guide for Series 30, 33, III and Pre-Series III systems," and pages 8 and 11 in the "HP 3000 Configuration Guide for remarketed systems Series 30R, 33R and IIIR."

Remanufacturing phase for Series II/III/30/33 systems

Bob Stamps/CSY

This is a reminder that all Series IIILC (32435B), Series 30, and 33 systems are now in Remanufacturing Phase. Basically, this means that:

- These systems will continue to receive full hardware and software support

- These systems will not receive all new enhancements for existing operating system, application, and data communications software

- New application software, data communications products, and peripherals may not be supported on these systems.

Copies of the Field Training Guide for this new level of support for these systems have been sent to all commercial District Sales Managers. If you have any questions about the Remanufacturing Phase, please consult this guide.

Additionally, copies of a customer letter explaining the Remanufacturing Phase have been sent to DSMs for distribution to Series III, 30, and 33 customers. A copy of this letter is included with this article. If your customers have not yet received a copy, please copy the letter and distribute it to them, so that their expectations may be properly set.

Business Computers

HP 300 being discontinued

Dennis Mitrzyk/CSY

The HP 300 is scheduled to be removed from the CPL as of September 1, 1983. Before discontinuing the HP 300, customers must be notified of our intentions. At the request of the field, we have mailed customer letters directly to Area Sales Managers to be personalized and distributed to customers on an area by area basis. This letter is the "official" customer notification of discontinuance, so each ASM should insure that every HP 300 customer in his or her area receives a copy.

The discontinuance of the HP 300 is a perfect opportunity to sell these customers upgrades to an HP 3000 Series 42 or 48. With Value '83 and generous return credits, now is the best time ever to upgrade your HP 300 customers. Remember, Value '83 expires on July 31, 1983; so move quickly to take advantage of this great upgrade offer.

MANUFACTURING

HP order processing solution update

Beth Eikenbary/MPD

HP's complete manufacturing order processing solution is now available — and for under $60K! The combination of HP Order Management/3000 and HP Materials Management/3000 provides a powerful solution for your customer's application requirements, from processing customer orders to building the right product and shipping it out on-time. And it's available June 1 as part of the standard released feature set for HP Order Management/3000.

HP Order Management/3000 pricing changes

HP Materials Management/3000 customers can now purchase HP Order Management/3000 for $24K. This reflects an unbundling of the OM-ASSIST services for the OM/3000 software. Although these services have been unbundled from the purchase price of this OM/3000 solution, we recommend that your customers purchase OM-ASSIST to ensure successful implementation. OM-ASSIST is unbundled only when purchased with HP Materials Management/3000.

Existing HP Materials Management/3000 customers are eligible for a 10% discount off the $24K software price. Customers who purchase prior to September 1, 1983 will receive a powerful application product for under $22K. What an incentive for those 600 HP Materials Management/3000 customers worldwide!

How the interface works

The interface between Order Management/3000 and Materials Management/3000 is designed to translate sales order information from the Order Management/3000 system into product demand information in HP Materials Management/3000. This information transfer includes all sales order data as well as any changes or deletions to regular sales orders and future sales orders.

A specified available-to-ship date is often required as part of the order processing function. The off-line available-to-promise report available with HP Materials Management/3000 can be used by order processing personnel to attach a specific ship date to the order. This interface works well in both the "build to stock" and "build to order" environments.

After the products have been manufactured, shipment of the order is handled automatically by HP Materials Management/3000. When the order is shipped, the billing information is passed directly to HP Order Management/3000 for invoicing and collection. All of the accounts receivable functions within Order Management/3000 as well as other standard product features, function as part of the standard HP Order Management/3000 product.

If you have a prospect interested in this solution, please contact your Application Sales Rep for more product information and additional qualification assistance.

(hp)

GROUP UPDATE

PEP customer successes

Craig Fix/DMD

As most everybody is probably aware, the PEP firmware for the 7933 and 7935 has been released, and is now being shipped in all 7933s and 7935s. PEP is a firmware enhancement for the CS-80 discs which is designed to improve I/O performance. The amount of improvement depends on the user's application; however, a 15-20% improvement on single disc applications is typical.

Prior to the release of PEP, this firmware enhancement underwent extensive alpha and beta testing. The beta tests were conducted at five HP major accounts on HP 3000 Series 64s, 44s and IIIs, as well as a 1000F. The results to date have been very positive.

For example, one customer has reported an increase of 10-15 I/Os per second improvement measured with OPT/3000 on their Series 64 which has three 7933s. In addition, they noted that a batch operation which took nearly five hours. now takes only four — nearly a 20% improvement!

The successes don't stop there. Other DMD beta test sites reported performance improvements ranging from 10% to 20%.

PEP has been a huge success at the beta test sites, and has made a significant contribution to their data processing needs. None of the alpha or beta sites have reported a problem which is related to PEP.

PEP for the HP 7911/12/14 is still scheduled for release in June. The sales offices have been sent information on PEP; however, if you have any further questions, call your DMD Sales Development contact.

SRO quick to ship add-on peripherals

Russ McBrien/SRO

Faster than a locomotive, quicker than a speeding bullet, deliveries up tall buildings in a single bound. Well we can't promise that, but we can promise some of the quickest deliveries you've ever seen. As of today, SRO is reducing the availability of add-on peripherals to 2*4. That's right, we're shipping add-ons in two weeks! There's a wide range of remarketed peripherals, including HP 7920 and 7925 disc drives and some HP 7970E tape drives ready for fast shipment. Use this well known and proven equipment to turn some fast order dollars. Now you can meet those sudden and unexpected customer demands at a very low price. For full order information just call your sales development representative at SRO.

MASS STORAGE

Linus software problems being resolved

Dave Gerhart/DMD

The Linus Taskforce at DMD has been actively collecting all your inputs on the ¼" tape drive (Linus).

Most of the hardware and software problems have been resolved and the rest are being addressed.

The following major improvements have been implemented:

RTE-6

The 2301 release of RTE-6 operating system corrected all known software concerns associated with Linus.

RTE-A

The May 15 issue of *Computer News* contained an announcement by DSD of new software for the A-Series. This system software greatly enhances backup and verify utilities.

3000 Series

Q-Mit and later released software also have made utilities much friendlier for the Linus users.

Disc drive firmware

The PEP firmware scheduled for release mid-summer will provide enhanced error reporting from Linus.

System crashes

Through improved operator awareness, system crashes during Linus head cleaning can be eliminated. A warning has been added to the head cleaning swabs instructing the operator to "momentarily" press the switch to start the capstan motor. If the switch is held for more than one second, an RTE-6 system may crash.

Tape mechanisms

All tape mechanism problems have been corrected. We are still monitoring warranty and failure reports on a maintenance basis.

Media

A media problem is still under investigation and should be resolved soon.

Troubleshooting

Inputs from the CEO about Linus being "difficult to troubleshoot" have led to the preparation of a troubleshooting guide which will be released soon.

A detailed status report on all known software and hardware problems is available in the current issue of the Linus taskforce newsletter that will be on your DM's desk soon.

If you have any additional concerns, please call Greg Norton 208-376-6000, ext. 3530 or your sales development contact.

Ad for HP 7976A tape drive promotion

Sandy Hansen/IPG

Watch for our ad in the July/August issue of *Interact*. If sales of the HP 7976A tape drive are any indication, this promotion is already successful. Customers who order three HP 7933/35 disc drives between now and July 31, 1983 have the opportunity to order a 7976A tape drive at a 33% discount. We want to make sure that installed base customers are aware of this opportunity to move up to faster backup at a lower cost. Use this ad to close sales now.

Save Dollars
Reduce Backup Time
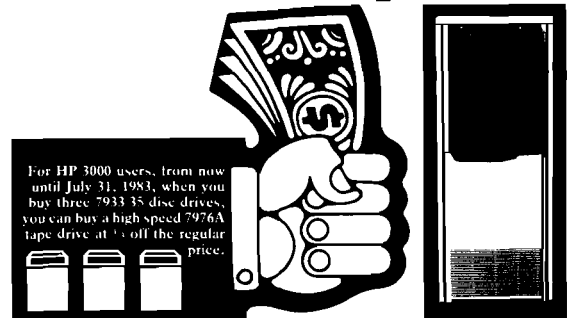
For HP 3000 users, from now until July 31, 1983, when you buy three 7933 35 disc drives, you can buy a high speed 7976A tape drive at 33 off the regular price.

The 7976A tape drive is your answer to big disc backup

800 Mbytes stored in one hour
In a recent customer benchmark, 800 Mbytes were backed up in one hour with a 7976A. This time included rewinds and unloads and was a full restructured backup.

Increase your system availability
Decreased backup time using the 7976A means increased system availability to your users.

7976A features
- Dual density formatting 6250 (GCR) and 1600 (PE) cpi
- Large capacity Up to 140 Mbytes on each 2400 foot reel
- Operating mode Both start-stop and streaming
- Auto tape load Enhances operator efficiency and reduces physical tape handling

For further details, contact your local HP Sales Office

HEWLETT PACKARD

PLOTTERS

HP 7580/7585 relay is dead

Manuel Rivas/SDD

On February 1, 1983, SDD introduced the HP 7580B and 7585B, replacing the A versions of these plotters. Shipments began in mid-March. Environmental testing procedures identified a major reliability problem with a relay used for the eavesdrop mode of operation. The plotters have been shipped without the relay since mid-March. The effect of shipping without the relay is the deletion of the Power Off Mode in the eavesdrop operating environment. A manual change sheet for the Interfacing and Programming Manual describes the deletion of the Power Off Mode feature and has been shipped with every plotter since first shipment.
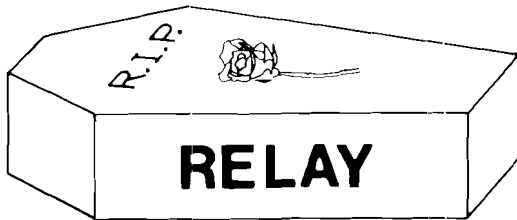
On March 21, 1983, a telex was sent to all SRs, FEs and SEs worldwide describing the problem and proposing a solution. The proposal was to ship without the relay for 3 months, then offer a new board with the yet-to-be-qualified relay to RS-232 eavesdrop customers who really required the Power Off Mode feature. After the 3-month period, we proposed that all plotters would have the relay. On April 8, 1983, the Product Support group sent a telex to all CEs reiterating this proposal.

Because of the inherent unreliability of relays and the possible adverse effect on all of our customers for the marginal benefit of just a few eavesdrop customers, we will **not** proceed with the relay proposal. **We will continue to ship without the relay.**

If this causes your customers any problems, or if you have any input on the situation, please telex your RSE or me.

Graphics software guide for HP 7470 and IBM PC

Mary Zoeller/SDD

The "HP 7470A Graphics Plotter & The IBM Personal Computer" Graphics Software Guide is now available to assist you in selling the 7470A Graphics Plotter. This brochure describes ten applications software packages which support the 7470A on the IBM PC. The graphics software packages and suppliers are:

Boardroom Graphics© from Analytical Software

BPS Business Graphics™ from Business and Professional Software

Business Graphics Systems™ from Peachtree Software

ChartMaster™ from Decision Resources

Giraf™ from Data Display

GrafTalk™ from Redding Group

GraphPlan™ from Chang Laboratories

GraphPower™ from Ferox Microsystems

Graphwriter™ from Graphics Communications, Inc.

pfs®**: Graph** from Software Publishing Corporation.

These 10 software suppliers are participants in the San Diego Division's third party software program under the listed category.

The full color brochure will assist you in selling the customer a complete system solution, including software support. The customer can refer to the brochure for the software available and contact the appropriate supplier for additional information on the software product. In addition to the HP field selling force, the software guide has been distributed to the HP dealers and to IBM dealers to stimulate interest in the HP product line. It is also being used as a direct response piece for HP plotter advertisements directed at non-HP personal computer systems.

So continue your excellent work in selling HP graphics systems, but when you see an IBM Personal Computer. . . sell an HP plotter.

For additional copies of the Graphics Software Guide [P/N (11)5953-4162] contact the Corporate Literature Center or Mailmark.

PRINTERS

Dataquest: HP 2680 is reliability leader

Alan Armstrong/BOI

Dataquest, Inc., an independent computer market research company. has recently completed a telephone survey of 30 North American HP 2680 customers. The preliminary results we have received from Dataquest indicate that the 2680 reliability compares very favorably with the results from three earlier non-impact printer surveys that Dataquest conducted on the Xerox 9700, IBM 3800 and Sperry Univac 0777.

At the Dataquest Electronic Printer Industry Service Conference, held in March 1983, Dataquest summarized the 2680 survey by saying HP had "astounded the marketplace with the reliability of the 2680." Listed below are some of the reliability responses quoted by Dataquest.

The Dataquest survey confirms that the 2680's reliability is a key selling point against other non-impact printer competition.

DATAQUEST SURVEY RESULTS

Question:	HP 2680	IBM 3800	Xerox 9700	Sperry 0777
1) What ·· of uptime do you estimate you are experiencing with your ___ (excluding PM time)?	94.3··	94.5··	92.2··	78.4
·· of respondents who felt this was acceptable	93.0··	91.0	83.0···	20.0·
2) How many unscheduled vendor maintenance events (excluding paper jams and PM) do you estimate you experience on your printer each month?	1.7	3.8	10.6	12.8
·· of respondents who felt this was acceptable	83.0··	75.0·	58.0···	21.0·
3) MTBF (operating days)	27	11.7	4.2	2.8

56Kb MRJE/RJE for the HP 2685-40 print station

Steve Simpson/BOI

The IND lab has completed the testing of MRJE/3000 and RJE/3000 at 56 kilobaud data transmission rate on the HP 2685 Model 40 Laser Print Station. Further, this testing has been verified in a customer installation by the SEO. The support of this configuration opens up many more opportunities for the 2586 as a remote printing station.

Following is a brief description of the performance, configurations, and restrictions. More detail is provided in "The 2685-40 Print Station Sales Reference Manual — Datacomm Update" which you will receive shortly.

Performance

The throughput of one 56 kilobaud line is adequate to keep an HP 2680A busy. In some instances, two printers can be kept busy. This depends upon the mix of multiple copy output and 2 to 1 and 4 to 1 reduction. Details on this will be forthcoming in the 2685 Sales Reference Manual. At this high data rate the SPU overhead of MRJE can approach 100% with RJE close to 70%, thus it is expected that the only application program running on the 3000/40 will be MRJE or RJE when full throughput of the datacom line is desired.

Configuration

The supported configuration consists of a 2685 model 40 print station with one INP, one or two 2580A laser printers, any supported disc, and MRJE/3000 or RJE/3000 datacomm software. Note, full 45 page per minute throughput from both printers simultaneously depends upon the print applications. The INP communicates with the host mainframe at 56 kilobaud through either Bell DDS circuits for remote locations or DSUs (GTE) for short haul "direct connect" situations.

Future directions

Testing of other configurations such as multiple INPs on the 3000/64 will be occurring and future announcements will be made as soon as the additional configurations are tested and supported.

Bottom line

With 56 kilobaud now available for the 2685, and our aggressive second half pricing packages, the print station is an even better solution for high speed, high throughput printing applications in mainframe environments. It has also given us more opportunity to crack one vendor shops with an HP solution!

"HP 2608A upgrade credit" correction

Artie Stone/BOI

In the June 1 issue of *Computer News*, it was stated that HP-IB extenders are supported up to 1000 meters.

Please note that HP-IB extenders are supported up to 500 meters.

We apologize for the inconvenience this may have caused you.

[hp]

REINHARDT, HELMUT
 FRANKFURT (REGION HQ)
HPGR 8300

**HEWLETT
PACKARD**