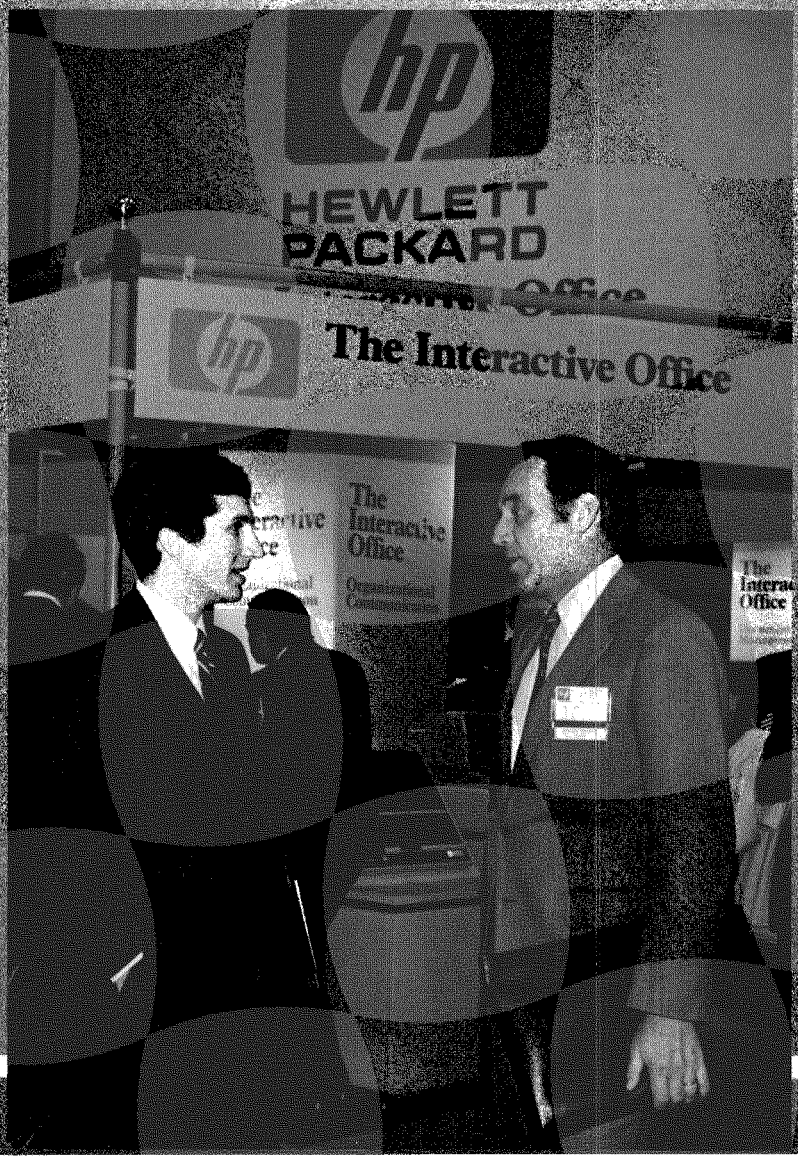
Computer News

For HP Field Personnel
May 15, 1982

Hewlett-Packard Honored At The OAC



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Karen Campbell, Editor
Tracy Wester, Editorial Assistant
June Wedding, Circulation

Computer News

Vol. 7, No. 13

Computer Marketing

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HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

CMG

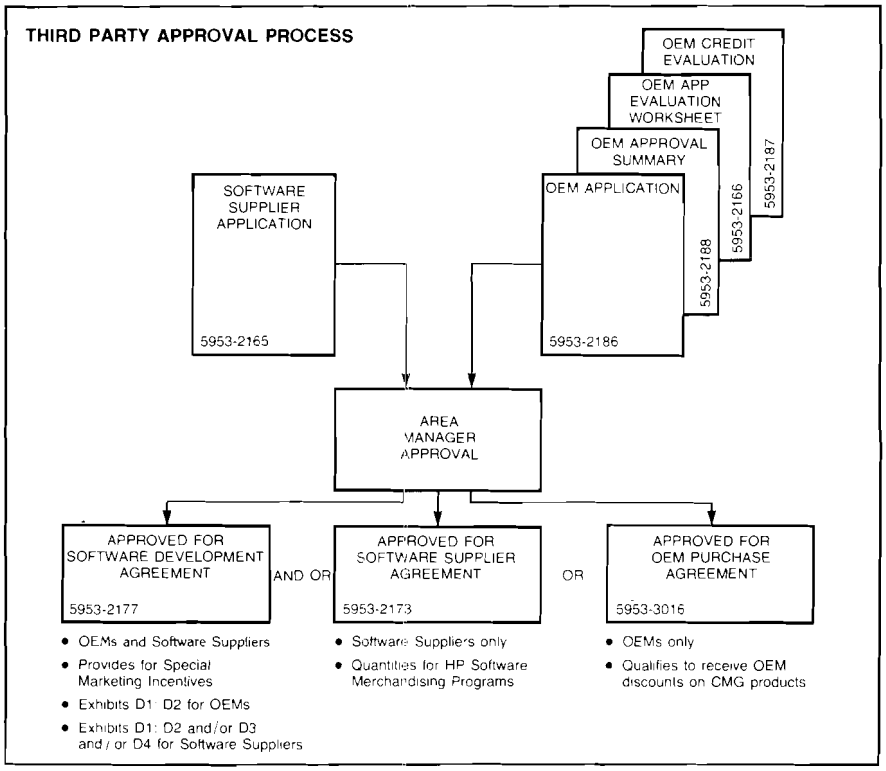
OEM Approval Forms

By Joe Rodgers/CMG

Since introduction of the software OEM credit policy in August of last year, there have been considerable suggestions from the field for improving the four forms used in the OEM application/approval process.

These changes have been incorporated into the first revision to the forms which can be identified on the bottom left hand corner of Page 1 of each form as "REVISION NO. R4-82". Bulk distribution of the forms to every US sales office will be done during the last week of April. Please use the newly revised forms for the OEM application process after May 1,1982.

The names and numbers of the revised forms and a summary of the changes follows:



NAME	NO.	CHANGES
Computer Marketing Group OEM Application	5953-2186(50)D Rev. No. R4-82	—Pages numbered —Personal Credit Authorization —General format improvements —Clearer instructions
OEM Marketing Evaluation Worksheet	5953-2166(50)D Rev. No. R4-82	—Pages numbered —Marked 'For Internal Use Only'
Software OEM Credit Evaluation Worksheet	5953-2187(50)D Rev. No. R4-82	—Pages numbered —Marked 'For Internal Use Only' —*Additional systems (125, 1000, Desktop, Etc) —General format improvements —Expanded recommendation guidelines
OEM Approval Summary	5953-2188(50)D Rev. No. R4-82	—This has been redesigned.

*Average system prices are no longer on the new credit evaluation worksheet. Corporate Credit will advise the sales office credit departments of the system prices to be used for calculating the required credit limit.

As a refresher, we are reprinting an abbreviated version of the approval process diagram for your information.

The prospective Third Party candidate is presented either the Software Supplier Application or the OEM Application forms to execute and return. After completing the necessary OEM Evaluation Worksheets (for business computer OEMs only) and Approval Summary, the entire package is submitted to the Area Manager for approval. The result of the Area approval will be a decision for HP to consider the Third Party for one of three programs:

- Software Development Agreement
- Software Supplier Agreement
- OEM Purchase Agreement.

New Software Development Discounts Effective June 1, 1982

By Joe Rodgers/CMG

Since the introduction of the Third Party "Development Systems" Program, HP has offered a discount of 28% on all products except for the Series 64 central processor and memory which are discounted at 18%. The Basis for discounting on this program has now been changed. Effective June 1, the Software Development System Discounts for qualified demo development systems will be as follows:

System Type	% Discount
Series 64 SPU and memory	18
All demo Systems which are subject to either OEM schedules "A" or "B" from CMG Purchase Agreement Exhibit A-1.	28
All demo Systems which are subject to OEM schedule "C" from CMG Purchase Agreement Exhibit A-1.	33

The net result of this change will be to increase the Development System discounts on the Series 80 and 125 from 28% to 33%. The discount on peripheral and interface products will be either 28% or 33% based on qualifying for either OEM schedule "B" or "C" discount for the products listed in A-1.

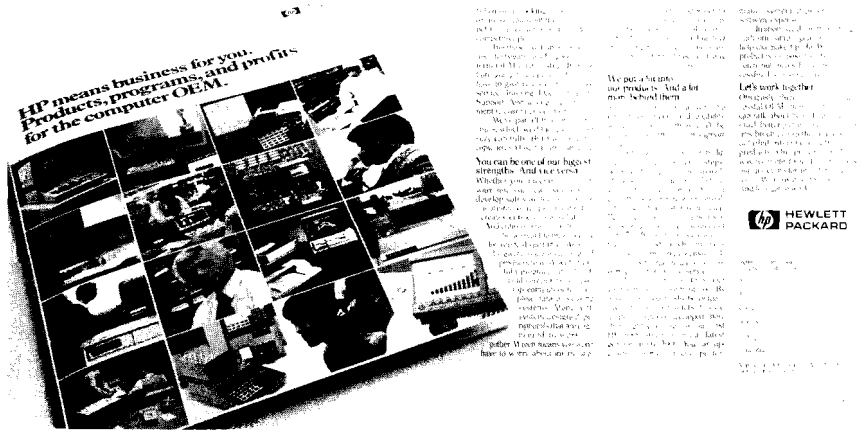
Third Party News

HP Launches New OEM Recruitment Campaign

By Sheri Bebb Godshall/CMG

Hewlett-Packard on OEM profitability

Leading-edge products are just the beginning. We'll put everything in the book to work for you.



Pictured above is the new OEM recruitment ad which is designed to increase awareness of HP as an OEM vendor and to create preference for HP — in other words, to place HP on an OEM's "short list."

This ad is intended to emphasize the relationship an OEM has with HP — including its policies and support — instead of being "product specific." Divisions and product groups will still be responsible for producing ads that are targeted to OEMs for specific product lines, such as the A700 or HP 250.

People who fill out the ad coupon will receive the brochure, "HP means Business . . . for you. Products, policies and protection — Hewlett-Packard computers and the OEM," (P/N 5953-2220), which was featured in the April 15 *Computer News* (pg. 4). They will also receive the four-color folder shown in the ad, a letter from Bob Kresek, and a reply card requesting information on a specific product line.

All the leads from the ad will be sent to the field through the prospect management system (the 3 x 5 cards going out from CMG). We are now in the process of developing a qualifying system so you know when the lead is from the first or from the Business Reply card that the prospect sent back to us (a more qualified lead). When that system is in place, we'll let you know.

The ad is scheduled to appear in the following magazines/newspapers on the following dates:

Publication	Dates
Computer Business News	4/26, 5/3, 5/10, 6/28 (COMDEX issue)
Computer Systems News	5/10, 5/24, 6/28 (COMDEX issue)
Mini-Micro	5/1, 6/1, 71
Datamation-OEM Edition	5/1, 7/1
Electronic News	4/26, 5/10, 5/24

Europe is planning to run translations of the ad in fourth quarter. We are interested in your response to the ad and any feedback you get from prospects.

SRO

Quick Close with Remarketed System

By Andy Tasnady/SRO

With the aid of an HP 3000 Series IIIR, another system sale was brought into Hewlett-Packard! An alert HP representative quoted an HP 3000 Series IIIR to a customer unable to afford a new HP 3000 Series 44, thereby bringing a long ongoing sales situation to a quick, successful close.

Jan Arnold, an experienced sales representative working out of Palo Alto, realized how remarketed systems can make the difference with price sensitive customers. Originally, an HP 3000 Series IIIR was quoted but no results were obtained for months because of the price sensitivity of the account. Then Series IIIR was quoted.

Purchased for running manufacturing applications, the HP 3000 Series IIIR will also use RJE communication to a local mainframe and a D.S. line to an existing HP 3000 Series III in Salt Lake City. One of the important reasons cited by the customer for choosing the HP 3000 Series IIIR is the continuing success and reliability of their existing HP 3000 Series III. This strong reputation, coupled with the new low prices of the HP 3000 Series IIIR, enabled the quick close of the sale.

contact us here at SRO, 408-738-8858 ext. 446, to find out how we can help you too!

Upgrade Returns to SRO

By Hal Eubanks/SRO

The number of customers participating in the Upgrade Program is increasing thanks to your sales success. To help insure the success of the entire program, to include de-installation and return of the used equipment, there are a few points you should be aware of. The Customer Engineering District Manager receives a packet for each system to be de-installed from SRO Order Processing. The packet provides complete instructions and responsibilities for the CE as well as information on returning the equipment. Also enclosed is a check list of the equipment to be returned and a Notice of Return Form.

Thanks for your help and success in selling.

Re-Marketed Systems Now Available Through GSA

By Russ McBrien/SRO

The Re-Marketed HP 3000 Series IIIR and Series 33R were included on the recent quarterly submission to the General Services Administration contract. The GSA has accepted these products and included them in the current agreement, effective April 15, 1982. The following products are now available to a wide variety of government agencies under GSA terms and conditions at the GSA discount level.

Product No. Option No.	Description
32412CR	HP 3000 Series 33R (Re-Marketed)
507	Expands memory to 1024Kb
920	7920M Disc Drive (Re-Marketed)
925	7925M Disc Drive (Re-Marketed)
970	7970E Tape Drive (Re-Marketed)
32435BR	HP 3000 Series IIIR (Re-Marketed)
008	Software on 800 bpi Tape
507	Expands memory to 1024Kb
509	Expands memory to 1524Kb
511	Expands memory to 2048Kb

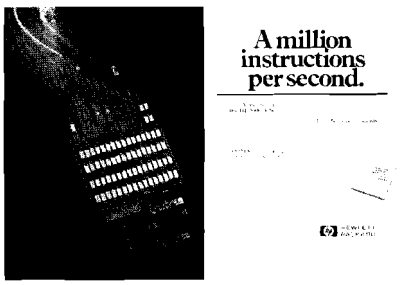
If your US government customer would like to add to their installation or replicate an existing system now they can have the low cost of Re-Marketed systems and the convenience of ordering under the GSA contract. If you have further questions call SRO sales development at 408-738-3227.

TCG

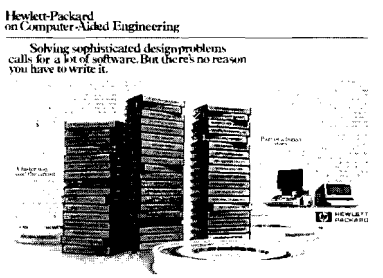
Three New ads from TCG

By Bojana Fazarinc/TCG

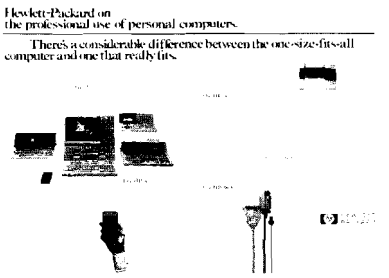
TCG has recently launched three new advertisements designed to position our computers in some new markets, as well as the traditional ones.



The first of these ads introduces DCD's HP 1000 A-Series microcomputers to our traditional OEM market. You'll be seeing this 3-page ad in *Electronic Design, Electronic News, Mini-Micro Systems* and *Computer Design* through August.



The second of these ads is intended to increase awareness and interest in the many software solutions HP offers for electronic engineers. Featuring an extensive line of software packages that run on HP's 9800 Series, HP 1000 and HP-85 computers, this 2-page ad will appear in *Electronic Design News* and *EE Times*, also through August



The third ad positions HP's range of technical personal computers (41C, HP-85, HP-87, 9826 and 9836) for technical applications. Because of its broad appeal, this 2-page ad will be promoted to an audience of engineers and scientists in a wide variety of industrial companies, engineering firms and research organizations. A special network of 19 *McGraw-Hill* publications in engineering, aviation, chemistry, architecture, plastics, metal etc., will carry this advertisement, in addition to insertions in the *Oil and Gas Journal*. Look for this ad throughout the summer.

A few reprints are available — while they last. Contact TCG Marcom Dept. in Cupertino.

DSD

Problems With HP 9111A Graphics Tablet and A/L-Series Computers

By Phil Walden/ESO

There is a recently discovered problem with the HP 9111A Graphics Tablet on the A/L-Series HP-IB bus which impacts 9111A support under GRAPHICS/1000-II on these computers. Erroneous data may be returned if the tablet stylus is positioned over certain areas on the tablet platen. The correction requires a change to the 9111A. San Diego Division hopes to correct the problem in six to nine months.

GRAPHICS/1000-II support for the 9111A on A/L-Series computers is suspended until the problem is corrected.

If you have already sold a 9111A graphics tablet for use on an L-or A-Series computer using GRAPHICS/1000-II, have your HP 1000 SE contact DSD on-line support for more technical details.

HP 1000 AID Workshops

By Kent Ferson/DSD

The first group of HP 1000 AID workshops were recently held in Cupertino. The workshops are available to both HP 1000 SEs and to DSD's technically sophisticated customers. The AID trained SEs are:

1000 SE	Office	Specialty
Nick Copping	Canoga Park	PSI
Bob Curtis	Albuquerque	PSI, A700
Ron Hammer	St. Louis	A-Series I/O
Kevin McDonnell	Palo Alto	PSI
Alan Tibbetts	Santa Clara	PSI, A700
Erik Winters	Amstelveen	PSI, A700, A-Series I/O

An SE attending AID training has typically completed RTE internals, has a hardware background, and can provide in-depth software or hardware consulting in their specialty area.

Schedule of Classes

Class Name	Date	Product No.
PSI Programming	May 17 (5 days)	22975B
A/L-Series I/O	May 24 (5 days)	22977B
A700 Microprogramming	June 7 (5 days)	22976C
A/L-Series I/O	June 14 (5 days)	22977B
PSI Programming	Sept 13 (5 days)	22975B
A700 Microprogramming	Sept 20 (5 days)	22976C
A/L-Series I/O	Sept 27 (5 days)	22977B
A/L-Series I/O	Oct 4 (5 days)	22977B

Customer Prerequisites

Customers should have a good working knowledge of HP 1000 assembly language, digital hardware, and RTE as a prerequisite for all three AID workshops.

Ordering and Registration

Product Number	— 22976C (A700), 22975B (PSI), or 22977B (I/O)
Sales Force	— 02
Marketing Div	— 22
Supplying Div	— 2200
Product Line	65
Cost	— $2000 per student

Joan Feeley (x2003) is the training registrar at DSD for both the AID design classes and the ATS customer classes. SRs should contact Joan with the following information: customer name, company name, and sales order number. Also, a "Training Registration Request" should be filled out and mailed to Joan. The AID workshops will appear in the North American Training Calendar under the Cupertino site and in DSD's Customer Training Handbook.

If you have any questions, please contact me at TELNET 257-2496.

CPU ROM Changes

By Jim Pinsky/DSD

Starting June 1, 1982, all E-/F-Series CPUs will be shipped with the 2645 loader ROM, saving the customer $105. The paper tape loader ROM, which is presently shipped with the E/F CPUs, will no longer be included. Any E/F customers who need the paper tape loader ROM must now order the 12992K ($105) with their CPU. Note that this change does not apply to the M-Series CPUs.

HP 12555B Obsolescence

By Jim Pinsky/DSD

The 12555B Dual D-to-A Converter for the M-Series Computer, will be obsoleted as of November 1, 1982. This is necessary because a certain part is no longer available from our supplier. Customers who want this product should order a lifetime buy as soon as possible to ensure delivery.

Remember AGP . . . Is Not Just 3D

By Phil Walden/ESO

The GRAPHICS/1000-II Advanced Graphics Package (AGP) is not just a 3D graphics programming tool, it is *the* flexible, general purpose graphics programming tool. If you survey SEs who know their graphics, they almost universally recommend AGP over DGL and GPS for most applications, because AGP's powerful features make it generally more versatile.

For example, only AGP provides run-time device independence, the ability to operate several different graphics display devices without reloading the application program. DGL, on the other hand, requires a different copy of the application program for every different device operated. AGP saves the inconvenience of multiple loads and the problems of system management of several program copies. AGP's error reporting feature also makes graphics application development much easier. In some situations, AGP even aids program development because the error reporting feature provides checkpoints in the program's progress. Don't forget that in some situations the customer may also need multiple-font software-generated text as well as interactive picking. AGP is too expensive you say! It's only $2400 on the L-Series and $3600 on the A600 for both AGP and DGL with the new software pricing scheme.

Conversion Success on RTE-6/VM

By Jim Williams/DSD

When RTE-6/VM was introduced in November, 1981, there was little data available on the large program capabilities of RTE-6/VM. As the number of system installations increase, and more experience is gained in creating or transporting large programs to the HP 1000 executing RTE-6/VM, successes and tips for selling will be reported here.

The first success story involves a request from a large, mid-western aircraft corporation for a benchmark comparison of an F-Series with RTE-6/VM against a VAX 11/780 using one of about 50 application programs which were currently running on both a CDC 750 and an IBM 360. They were considering converting to a smaller computer and wanted a specific example of the price/performance advantage HP claimed in advertising RTE-6/VM. The largest and most complex of the 50 application programs was selected for the benchmark.

Ron Hammer, an SE in the St. Louis office was trained on RTE-6/VM and undertook the task of getting the benchmark converted and running on an F-Series. Ron made a couple of minor source code changes to facilitate our "path length" restriction (put data into EMA) and our MLLDR areas of concern (changed BLOCK DATA subroutine to assignment statements). He then successfully compiled the code the first time using FORTRAN 77. The EMA transparency option was used since the program was converted from machines with 32-bit addressing capability.

Ron then ran the SGMTR on the compiled relocatables and produced 20 memory resident nodes in the segmentation tree, requiring a 250-page memory partition for execution.

The resulting command file was used successfully from MLLDR the first time, completing the load in 15-20 minutes. The object code was executed in 18 minutes, producing the correct results. The comparison time for the program executing on the VAX was about 15 minutes, although not a true comparison since two UNIGRAPHICS sessions were simultaneously active on the VAX during the execution of the benchmark. The time for execution on the CDC 750 was three minutes.

Total conversion time for this benchmark was two days; the size of the program was 124K words. The application was oriented heavily toward floating point operations. No effort was made to optimize the load after segmentation, and VIS was not used so, conceivably, the execution time could have been significantly reduced.

The ease of transporting this large program to our low cost machine, facilitated by FTN77, VMA/EMA, SGMTR, and MLLDR, clearly demonstrates the price/performance advantage that can be achieved by moving large programs from more expensive computers to the HP 1000. The customer was extremely impressed with the results and it is anticipated a large order will be forthcoming.

Data Link Manager's Manual

By Gary Sanborn/DSD

A Data Link Manager's Manual is available that describes the Data Link for the HP 1000. The manual is intended for use by the Data Link manager or anyone with the responsibility of Data Link planning, installation, or troubleshooting.

The manual contains a general description of the Data Link, an overview of the Data Link communication capability, including its physical description and specifications, as well as a reference guide for planning, installing, and using the Data Link. The manual also includes performance criteria and troubleshooting tools.

The Data Link Manager's Manual (P/N 91730-90006) has been bundled with the 91730 Multipoint product as of PCO 2213.

RVD

Qualifying HP 2250/CDA Software During the Presale

By Brice Clark/RVD

While monitoring HP 2250 sales over the last year, we have noticed a great deal of the sales have required the feature of high speed continuous data acquisition from the 2250 to disc. The 2250 Automation Library contains the Continuous Data Acquisition software that allows up to 50,000 samples per second (CDA, GRAB, and GRAB1).

The software that executes in both the 2250 (CDA) and the host HP 1000 (GRAB, and GRAB1) is very sophisticated and the performance of the software is extremely dependent on the particular data acquisition application. For example, GRAB and GRAB1 operate at the highest priority within the HP 1000 and they require a great amount of system resources. Also, to assure the highest possible transmission rate, no other tasks may operate in the 2250 while CDA is executing and high speed analog and digital data cannot be collected simultaneously.

We want to make certain that you are successful when selling into future continuous high speed data acquisition applications, and we don't want you or the account SE to be burdened with all the required knowledge for qualifying the application. Therefore, we at Roseville are prepared to individually help you when working on sales requiring high speed acquisition to disc. Simply contact us during the presale, describe your application, and we will help you decide if CDA is qualified to meet your customer's application.

The regional sales engineers at Roseville Division (916-786-8000) are Pete Stine at ext. 4732 for Eastern offices, Duncan Campbell at ext. 4731 for Midwest and Canadian offices, Paul Accampo at ext. 4750 for Neely and ICON, and Randi Iten at ext. 4758 for Southern offices.

A-/L- Series Measurement and Control Cards

By Dave Kuntz/RVD

12060A High Level Analog Input
12061A 32 Channel Analog Multiplexer
12062A 4 Channel Analog Output DAC
12063A Isolated Digital Input/Output.

There may be some confusion as to the support of these cards. Even though the instrument sales group receives credit for the measurement and control cards, support responsibility resides with the 02 Computer Group.

The cards are set up on the CSD Exchange Program and have the following Exchange part numbers:

12060A	12060-69001
12061A	12061-69001
12062A	12062-69003
12063A	12063-69001

DSD On-line Support (TELNET 257-3385) is structured to address questions from the field and will refer to Roseville Division in cases where Off-line hardware support is needed. Diagnostics for these cards are available in the 24601A M&C Diagnostic package.

Manuals for these cards are set up at the Computer Supplies Operation

(CSO), and they have the following part numbers:

12060A/12061A	12060-90001
12062A	12062-90001
12063A	12063-90001
L-Series Automation Interfaces User Info	12060-90003

Diagnostic Manuals

12060A/12061A	24601-90001
12061A	24601-90002
12063A (preliminary)	24601-90003

RTD Measurements a Snap with the HP 2250

By Pete Stine/RVD

One of the more commonly used temperature sensors in industry today is the RTD or resistance temperature detector. All that is required for extremely accurate RTD measurements with a 2250 is an ADC, a DAC (as the current source) and if there are many RTDs to measure, a digital output card for switching the current source to the various RTDs. Doing a 4-wire measurement instead of using a 3-wire bridge is the preferred method because it alleviates many of the problems associated with the bridge. The output voltage read by the ADC is directly proportional to the RTD resistance, so only one conversion equation is necessary. The three bridge completion resistors are replaced by one reference resistor. The ADC measures only the voltage dropped across the RTD and is insensitive to the length of the lead wire. Much of the inaccuracies associated with the DAC and ADC are nullified since a precision resistor is used to obtain the calibrated current. By knowing the value of calculated current and measuring the voltage drop across the RTD, we can calculate the resistance of the RTD. Linearization software consists of an out-of-the-textbook curve fitting equation which can be written as a downloaded FORTRAN subroutine and run in the 2250. For more detailed information, check out automation brief AB-2550-6.

HP 2250 Automation Library on LINUS

By Randi Iten/RVD

The HP 2250 Automation Library software is now available on the CS80 (LINUS) cartridge. This product comes from the specials group at DSD. Here are the details:

Product No.: 93575N

Description: This special product supplies the 25581A, Automation Library, on a LINUS cartridge tape.

Price: Each unit, $1100 plus two engineering units (engineering unit is product number 93285A)

Delivery: eight weeks

Please keep in mind that no discounts are applicable to this special product.

DCD

HP 9826/36 No-Language Option

By John Abegg/DCD

The HP 9826A and 9836A are now available in a "minimum" configuration by specifying a "no-language system" option. Option 099 provides a 9826 or 9836 without a language system and without additional memory. The recently-introduced FORTH language system from Creative Solutions, Inc., can take advantage of this configuration. The 64Kb that reside on the CPU board is more than adequate to use the FORTH language system.

Ordering information is:

9826A Desktop Computer, Opt. 099 No Language System $7950 US

9836A Desktop Computer, Opt. 099 No Language System $10,950 US Availability is eight weeks ARO.

Note that since current systems are priced to provide the language at no charge, presently there is no price advantage trying to configure a system with this option.

HP 9826/36 HPL FFT Binary

By Annette Seagraves/DCD

A new HPL Fast Fourier Transform binary program (P/N 09836-10050) is available for the HP 9826/36 at $75 US.

The new FFT program is structured exactly like the HP 9825 FFT binary program included in the 9825 Waveform Analysis software. The 9826/36 FFT program, which is 40% to 50% faster than the equivalent 9825 version, supplies the following three keywords:

sft —specifies the size of the transform

fft — transforms time domain data to frequency domain data

ift — transforms frequency domain data to time domain data

Both transforms are done in place. Some example execution times for the 9826/36 HPL FFT binary are:

No. of pairs of points	Time in seconds fft	ift
4	.04	.04
32	.43	.41
256	4.28	4.05
1024	19.90	18.97

The requirements for running this program are an HP 9826A or 9836A with Option 004, 014, 704, or 714 (HPL language system).

Integrated Efforts Spell Success

By Al Sperry/DCD

Taron Baker, SR in the Southern Sales Region, recently landed the first sale in a series that may total as much as $2 million. This success, following a 1-1/2-year effort, placed

Taron among the top ten North American salespersons in March.

The customer supplies down-hole oil-well testing and analysis, using systems in trucks for on-site data acquisition and processing. Originally based on HP 9825s, the systems are being converted to HP 9826s, with some using the 9836. In addition to the desktop controller, each system includes an HP 1351 CRT Display and a backup, plus an HP 7245 Printer/Plotter for hard copy output. The customer makes the balance of the sensing and measuring equipment, so there is just one outside vendor, an important factor in the buying decision.

Competition in this case was very interesting, because it involved the customer's own in-house development group that often outbids outside suppliers. The group was considering the DEC 11-23 as a controller, but HP's offer won, chiefly because of:

- Equipment friendliness
- Attention to customer
- Software available
- Single-vendor solution.

The customer was impressed with the HP 9826's friendliness, as it was with the HP 9825, compared with the competitive equipment's ease of use.

Of considerable importance to the customer was the attention HP paid to being hospitable, as well as solving problems and answering questions. Taron received positive feedback about the customer's earlier visit to DCD. Also, DCD's Piper Aune and Colorado Springs' Vince Hamm visited the customer's rather remote site this February to demonstrate our equipment, bringing home many complex questions that were all answered. As Taron Baker puts it, "The customer wasn't always happy with our answers, but they certainly appreciated our responding to all the queries."

Availability of software the customer had developed on the 9825 was another important reason for the purchase decision, reducing software development time on the updated systems to a minimum.

Finally, the single-vendor solution for non-customer-furnished equipment meant that when trouble occurred in some remote location, there would be no disclaiming of responsibility and finger-pointing to another supplier.

EGS/45 Customer Slide Show Available

By Christel Kiefer/DCD

DCD now has a slide show to help you present the HP 9845 Engineering Graphics System (EGS/45) to your customers. Complete with illustrated storyboard, the show includes 122 slides. It can be presented by anyone who has read the EGS/45 Sales Training Manual.

The show is modular in design and includes the following sections:

- Introduction — Discussion of 'Productivity' and development of our CAE formula
- EGS/45 Description
- EGS/45 Demo using screen shots
- EGS/45 Benefits
- EGS/45 Flexibility & Extensibility
- EGS/45 Support

All, some, or none of a particular section can be used, depending on your audience.

The slide show, priced at $75 US, is available from Marvel Ross at DCD. Call in requests *will not be accepted.* Get an Audio/Visual Material Request Form, similar to the one pictured here, from your DM. Fill out the form completely, including signature and the account to be charged. Your order cannot be processed without this information.

In addition to making this slide show available to the field in general, DCD is mailing a complete EGS/45 slide show to each of the following worldwide EGS/45 SE specialists. These people will be glad to assist you with in-depth demonstrations and specific application discussion for your qualified prospects.

EGS/45 SE Specialists

EASTERN
Al Halvorsen — Lexington
Bob Koob — Paramus
Dan Thomas — Hanover
Al Silverman — King of Prussia

NEELY
Joe Gates — Santa Clara
Chris Lamoureux — Santa Clara
Ed Grimes — Airport
Ron Johnston — Brookhollow
El Brown — Bellevue
Thomas Krantz — Englewood
Nolan Hayward — Salt Lake City

SOUTHERN
Don Jordon — Atlanta
George Harrison — Orlando
Daryl Taraba — Richardson

MIDWEST
Don Hill — Farmington
Jon Moore — Dayton
Craig Rode — Milwaukee

EUROPE
Hans Jurgen Petter — Frankfurt
Dick Adaway — Maidenhead, UK
Stuart Ritchie — Thornton Heath, UK
Kevin Walsh — Manchester, UK
Annie Bouchez — Orsay
Michel Nadaud — Lyon
Frank Schaap — Amsterdam
Frits Van Ede — Amsterdam
Luc Desmedt — Brussels
Pino Mosca — Milano
Robert Palmquist — Stockholm
Peter G. Anderson — Copenhagen
Daniel Corday — Geneva
Jon Pablo Rubio — Madrid

ICON
K. Yamamoto — YHP Factory
Philip Greetham — Melbourne
David Lee — Taiwan

Desktop Computer Division Audio/Visual Material Request

Name _____

Sales Office or Division _____

Address _____

Phone _____

Location or Department _____

Account _____

Cost per each _____

Total _____

Description of A/V material _____

Quantity _____

Authorized signature to cross-charge

_____

The above information must be completed and returned to Marvel Ross, Hewlett-Packard DCD, 3404 E. Harmony Road, Fort Collins, CO 80525. Please allow 4–6 weeks delivery.

HP 9845B/C Advanced Graphics Course

By Ed Brovet/DCD

The Advanced Graphics Course is available for all desktop customers who want to use their systems for fancier graphics applications. The course, P/N 98505A, is on the May 1 Corporate Price List.

This course covers topics such as 2D and 3D object manipulation, graphics workstation design, animation, data representation techniques, and a discussion of hidden surface removal techniques. External plotters are *not* covered.

The four-day course is scheduled to be taught next at DCD the week of June 21. Openings are still available in that class. A potential student should have taken the System 45 O&P course, or have equivalent programming experience.

For teaching the course in the field, you need to order the Instructor Pack, P/N 98505-19000, and one student pack per student, P/N 98505-19020. The course price is $840 for the four days.

The IBM Personal Computer

By Jim Sheppard/DCD

IBM accomplished a major milestone on August 12, 1981, when it introduced its personal computer (PC), bringing the allure of the IBM's name to this market. The well-executed machine for home and small business applications will be sold through Computerland stores, Sears Business Machine Stores, three IBM Product Centers, and to major accounts by the IBM sales force.

Two example configurations are:

Typical Configuration

System unit and keyboard (with 64Kb RAM)	$1535
1 disc drive	570
Monochrome display	345
Printer	810
Appropriate I/O cards	555
DOS and extended BASICs	40
Total	$3855

Full-blown Configuration

System unit and keyboard (with 128Kb RAM)	$2075
2 Disc drives	1140
Color monitor (13-in Amtek 2)	1000
Printer	810
Appropriate I/O cards	820
Async Communications SW	40
DOS and extended BASICs	40
Total	$5925

A host of add-ons from independent system designers are available or planned. These include an I/O and memory-expansion chassis, 256Kb RAM boards, an EEPROM card, an IEEE-488 bus adapter, a 16-channel 8-bit A/D and D/A converter with 3 ports and 5 timer/counters, a digitizing pad, a speech output card, a video digitizer, and a stepper-motor controller.

Let's compare the PC with the HP 98XX computer series. Kilobaud benchmark results are shown below (using real variables on HP and single precision on the PC; times are in seconds, accurate to about 5%).

	Kb 1	Kb 2	Kb 3	Kb 5	Kb 7
IBM PC	1.2	4.8	11.7	13.3	37.3
9845B #1XX	1.3	1.9	4.6	5.4	21.2
9826A	0.17	0.60	1.41	1.75	4.31
9845B #2XX	0.13	0.29	0.76	1.04	2.70

Compared with the IBM PC, the 9845B #1XX is about 2 times as fast, and the 9826A is about 14 times as fast, and the 9845B #2XX is about 14 times as fast.

The PC's Advanced BASIC includes some high-level features such as multidimensional arrays, some structured programming, variable names to 40 characters, multiple statements per line and multiple lines per statement, ON event GOSUB, error and key trapping, soft key labels, and program chaining. Yet, there are some deficiencies such as no line labels or BASIC subprograms, and Assembly programming is said to be difficult, and may even cause hardware damage!

The PC editor does not check syntax at line entry, can only display one page with no true scrolling and there is no line insertion into a screen of lines. Also, the maximum memory that BASIC programs and data can use is 64Kb (larger memory is usable by the other languages), and I/O programming is highly device dependent (e.g., Easy-writer works with the monochrome display but not over the color monitor interface).

The PC keyboard has many nice special functions, but they are poorly marked or not marked; the shift key is misplaced; there is poor correspondence between the soft keys and

their labels, and no other keyboard is compatible.

The PC does not support external disc drives of any type, which can be a problem with only 160Kb storage on an internal floppy. There is no hard copy graphics capability, and no letter-quality printer available. Also, the light pen will not function with IBM's monochrome display; the timer reads only the seconds, and there are no clock interrupts.

The large computation speed difference between the PC and the 9826A or the 9845B #2XX, the lack of hard copy graphics output, and the PC's difficult device-dependent I/O virtually eliminates it as a viable contender for most of the markets into which the HP 98XX series is sold. More than 50,000 PCs have been ordered as of March 1982, and 200,000 are expected to be installed by the end of the year.

IBM Personal Computer Features

System Unit & Keyboard Processor	$1265 Intel 8088 (16-bit instructions and 8-bit memory access)
ROM	40Kb BASIC operating system written in FORTH
R/W Memory	16Kb (can address 1 Mbyte)
Expansion slots	5 (I/O adapters or memory)
Attachment jacks	2 (for keyboard and cassette)
Time-of-day & date clock	Built-in, no interrupts
Speaker	Built-in, programmable tone and duration
Keyboard	83 keys; 10 soft keys (4 functions each), numeric pad, 256 ASCII characters, auto repeat on all keys, type ahead; 6-ft cable; adjustable typing angle
Internal Diskette Drive	$570: (up to 2); stores 160 Kbytes on 5.25" floppies.
Disk drive adapter	$220: (only 1 needed)
Monochrome Video Display (uses adapter below)	$345: 11.5", 720 × 350 dots, 80 columns ×25 lines, green phosphor; normal or high intensity, inverse video, underlined, blinking, and invisible; 7 × 9 characters in 9 × 14 cells
Monochrome-adapter display and printer adapter (uses adapter below)	$335: 4Kb of screen memory, no dot graphics $300: 16Kb of screen memory; interfaces for B/W or RGB color monitor, for RF modulator (to connect to color or B/W TV), and for a light pen; in Text Mode: 16 foreground colors, 8 background colors, 40 or 80 columns × 25 lines; in dot graphics mode: 8 colors (2 sets of 4 colors, 1 set displayable at a time) with 320 × 220 dots, 640 × 200 dots in B/W text can be added.
Printer	$755: 132 column, 80 char/sec bidirectional, 9 × 9 dot-matrix, impact, 12 character styles, screen to printer dump command (alpha only, no graphics)
Printer adapter	$150
Printer cable	$ 55
Asynchronous Communications adapter	$150: RS-232C and current loop, up to 9600 baud
Game-control adapter	$ 55: 2 joysticks or 4 paddles
R/W Memory, on system board in I/O slots (64K/slot)	+ 48Kb ($ 90/16K) +192Kb ($325/32K) ($540/64K)
Software Cassette BASIC	Included in system ROM; all of Microsoft BASIC plus load and store data and programs with cassette tapes, dot graphics, speaker control; can edit any line on screen.
Other available software	3 accounting packs, games, and educational programs.

PCD

Series 80 Mass Storage Transfer Rates

By Tim Mackey/PCD

Many inquiries concerning Series 80 transfer rate on various HP mass storage peripheral and inquiries regarding differences between 83/85 and HP-87 transfer rates have prompted this article.

The HP-87 operating system has had its mass storage functions "optimized" over the 83/85 and some performance increases were achieved.

An identical set of benchmark programs were run on all the mainframes listed below, driving all the various mass storage peripherals that are available to them. The resulting chart should help in qualifying customer applications and identifying which mass storage peripheral will be most appropriate for them.

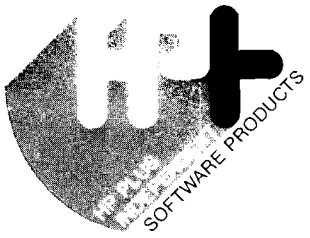
Series 80 Transfer Rate Chart (Kbytes per second)

	HP-83/85/9915		HP-87	
Mass Storage	**Data**	**Programs**	**Data**	**Programs**
Internal Tape	.08	.66	N/A	N/A
82901	.37	2.7	.62	2.9
9895	.45	3.9	1.1	4.1
9134	.5	5.7	1.25	6.2

BCG

Spotlight on HP PLUS Software Packages

By Gwen Miller/BCG



(This is the first of a regular series of articles which will highlight selected software packages which have been accepted into the HP PLUS program for Business Computers. If you would like any additional information on these or other third party software, please call the vendor or the BCG Sales Center, and we'll be glad to help!)

Personnel/Payroll Systems

PASS/ACCU-AYY from Personnel Data Systems Conshohocken Pennsylvania 215- 828-4294.

PASS is a comprehensive system for creating and maintaining an employee data file. Modules include:

- Employee data base and maintenance
- EEOC Affirm. Action
- English Language report writer
- Benefits administration
- Skills inventory
- ERISA reporting
- Wage administration
- Absentee accounting
- Staffing control
- Applicant flow
- Interface to ACCU-PAY payroll module.

Special features of *PASS* include its parameter and table driven design, which reduce input requirements; automatic employee life-to-date chronological records; acceptance of narrative comments; standard reports as well as flexible, easy-to-use retrieval and reporting.

PASS/ACCU-PAY costs $75,000, which includes installation and initial consultation by PDS. Also included is training on the package and how to implement custom modifications, as well as ongoing support and maintenance in the Eastern US Over 200 packages have been installed since 1972.

ACCU-PAY is the optional Payroll module which offers multi-company, multi-division, multi-state, city, and local taxes, and multi-deductions. Hourly and salary pay types can be intermixed, as can many pay periods. Produces all required tax reports and forms. Handles automatic deposits as well as advances and special payments. With PASS, the user has a single entry point for all employee and payroll information.

PROFILES/3000 from Comshare In., Ann Arbor, Michigan 313-994-4800

PROFILES/3000 is a total personnel record-keeping and reporting system which requires minimal support from the user's DP staff. Record updating is performed by user prompts for transactions such as applicants, hires, address changes, salary increases, promotions, rehires, terminations, etc. All records and reports are supported for benefits administration, wage and salary, skills inventory, position control, EEO/AA, lost time, human resource planning, applicant flow and administrative reporting. A powerful inquiry capability is provided for ad-hoc requests. Special features of *PROFILES/3000* include audit trails, an extra level of password protection for increased confidentiality, online HELP, and automatic data validation.

PROFILES/3000 costs $20,000, plus installation charges of $2000 which includes three days of training. Support is available throughout the US at an annual cost of 12%. The first installation was June 1981.

PAYROLL from MCBA, Montrose, California 213-957-2900

PAYROLL is a system which handles both salaried and hourly workers through menu-based online data entry and retrieval. Standard reports include:

- Employee lists
- Attendance and timekeeping reports
- Check registers
- Deductions registers
- Payroll history
- Overtime and sick time reports
- Job distribution report
- W-2 forms.

Additional customization may be performed by the user, since MCBA provides COBOL II source code. *PAYROLL* may be automatically integrated with MCBA's General Ledger system.

PAYROLL costs $4,500. Training is provided at the customer's specification for $200 per half-day. Programming and consulting support is available worldwide for $50–75 per hour; one year's support is included in the basic license fee. There are 25 sites since August 1981.

Sales of Business Systems Software Directory Exceed Expectations!

By Marilyn Moore/BCG

The Business Systems Software Directory was introduced in February; with final figures for April not yet available, sales exceed 600 volumes! The directory is available internally from CSY's manuals distribution center and customers can purchase the directory from CSO. In either case, place orders through the HEART system for product number 30000-90251.

The BCG Sales Center is currently updating the Directory and will send, upon request, these updates to owners at no charge. These updates will be available in the first part of June.

Ongoing updates to the catalog are planned, and an online, data base version of the catalog will be made available to the HP Field.

The Business Systems Software Directory is designed to be a sales tool for HP end user sales reps, third party specialists and software suppliers themselves. With such volume sales so early in the Directory's life, Hewlett-Packard's image as a supplier of total solutions will grow rapidly!

CSY

HP 7976A Support on the HP 3000

By Rich Pearson/CSY

Testing has been completed and CSY now supports two HP 7976A high speed tape drives on the following 3000 series: 40, 40sx, 44 and 64. MPE was enhanced to insure maximum performance when accessing the 7976. The enhancement requires the use of extra data segments and as a result the following minimum memory configurations must be observed:

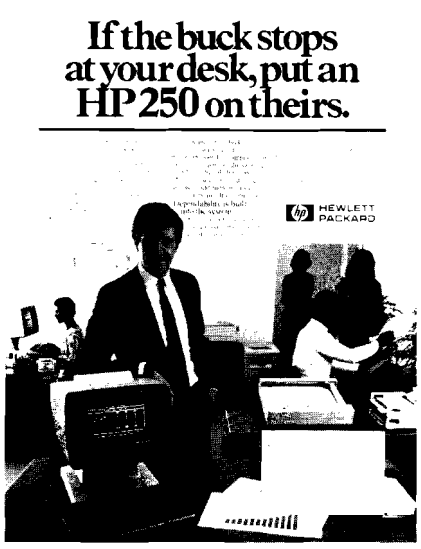
- One 7976A—512Kb of memory
- Two 7976As—768Kb of memory

The 7976A must be connected to a high speed GIC, a GIC designated for high speed peripheral support. If two 7976As are desired, they can be connected to the same GIC or configured on separate GICs.

New HP 250 Ad Campaign

By John Whitesell/CSY

We're spreading the word! A new HP 250 advertising campaign starts in the US in May, aimed at the owners, partners, and managers of small to medium-size businesses. The following end-user-oriented ad will run each month for the next several months in Inc. Magazine and Nation's Business, the two premier publications in the US aimed at chief executives of smaller businesses.



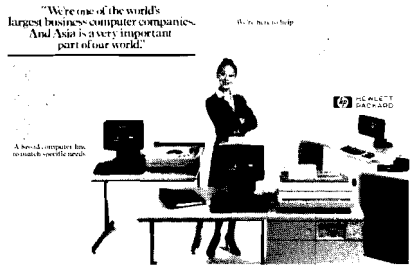
This full-color ad emphasizes the HP 250's ease of use, powerful performance, and dependability.

The coupon inquiry leads will be distributed by Computer Marketing Group to HP sales reps to pass on to HP 250 OEMs.

HP 250 Advertising in Asia

By John Whitesell/CSY

To help keep ICON running well above target for HP 250 sales, the ads shown here are appearing in some of Asia's leading trade publications. The first ad promotes the HP 250's ease of use, low cost, versatility, and data communications capabilities. The second ad is designed to help establish HP's presence in Southeast Asia and build awareness for HP as a major computer manufacturer.



These ads are appearing in *Asian Computer Monthly* and *Asia Computer Weekly*, aimed at the MIS departments of larger firms, and in *Asian Business*, aimed at business executives. All three publications are widely circulated throughout Southeast Asia.

Congratulations, ICON, on your outstanding HP 250 order performance!

IND

Hewlett-Packard Honored At The Office Automation Conference

By Alma Rodoni/IND

More than 18,000 people attended the third annual Office Automation Conference held April 5–7 in San Francisco. This conference is one of the leading office systems conferences in the United States.

Hewlett-Packard's debut at the OAC was highlighted by the announcement of HPMAIL, HP's Electronic Mail System for the Interactive Office.

All of the office products were operating concurrently on an HP 3000 Series 40 using the HP 2680 Laser Printing System for document output and the Fiber Optic Multiplexer for terminal connections. Many other products were shown at the three day conference including the new HP 7470 two-pen graphics plotter, the HP 125 and INFORM/3000.

On the last day of the conference, Hewlett-Packard was honored by *Today's Office,* a prominent magazine in the area of office systems, with their award "Promoting Productivity with Integrated Office Systems."

The 1982 OAC was an overwhelming success. We appreciate the enormous cooperation and thank everyone involved. For those of you who didn't attend the OAC, you'll have a chance next year, as plans have already begun for OAC '83, which will be in Philadelphia.

DSN/DS for the HP 1000 Price Change

By Suzanne Hernandez/IND

DSN/DS for the HP 1000 pricing has been restructured to match DSD's processor option software pricing scheme. The new pricing structure makes DS/100-IV significantly more competitive, especially in the microcomputer marketplace, and will provide new sales opportunities for you!

The following prices for DS/1000-IV will be effective as of the June 1 CPL:

In addition, your customers will now be charged $250 for the minicartridge media opition (Opt. 020).

Orders may be placed as of *May 1* via HEART override to qualify for these new prices. Contact DSD Sales Development if you have any questions.

	91750A	91750R
Option 300 (L, XL)	$1700	$1190
Option 301*	1020	714
Option 600 (A600)	2500	1750
601*	1500	1050
Option 700 (M/E/F/A700)	4200	2940
Option 701*	2520	1764

*Designates standard upgrade discount option.

Self-Paced Training Update

By Suzanne Hernandez/IND

With the release of the HPWORD and RAPID software products, IND also introduced three new self-paced training courses. This brings the total number of available self-paced training courses to six:

- A Guided Tour
- Learning COLBOL II
- Using DSG/3000—Interactively
- Using HPWORD
- Programming in Transact/3000
- Using Dictionary/3000

"Programming in Transact/3000" and "Using Dictionary/3000" are preliminary versions; both will be updated and completed by July 1982. "Using HPWORD" is available now in its final form. Data sheets which completely describe each course are available from the Corporate Sales Literature Distribution Center or your local sales office.

All of these courses are designed for use by more than one student. Additional sets of the self-paced instructional booklets can be ordered with the following part numbers:

A Guided Tour booklets	22835-60001
Learning COBOLII	22832-60001
Using DSG/3000	22833-60001
Using HPWORD	22839-60002
Programming in Transact/3000	22842-60001
Using Dictionary/3000	22843-60001

These part numbers can be found on the box that contains the booklets.

You can order these self-paced training courses and additional copies of the booklets through HEART or through Computer Supplies Division (see their Spring 1982 catalog for ordering information).

COBOL/3000 Discontinuance

By Dick Wong/IND

On May 1, 1982, COBOL/3000, HP's implementation of the 1968 ANSI COBOL standard, enters the 5-year inactive period of its software product life cycle. Since the successful introduction of COBOL II/3000 two years ago, the majority of new COBOL sales are for COBOL II, Hewlett-Packard's implementation of the 1974 ANSI COBOL standard.

COBOL/3000 (product number 32213C) will be removed from the May 1, 1982 Corporate Price List, and will be available to new customers only as a special. All sales activities should be discontinued for the "A" product, product number 32213C. Current customers will continue to be able to order the Right-to-Copy products (32213M, and 32213R) until May 1987. Both CSS and SSS will continue to be available during the 5-year period.

Copies of the COBOL/3000 product discontinuance plan were forwarded to area and district sales and SE managers last January. All COBOL/3000 support customers were sent notification letters on January 29, 1982. See your district manager for a copy of the COBOL/3000 product discontinuance plan and the customer notification letter.

Update on Pascal/3000

By Ann Tse/IND

With the introduction of Pascal/3000, BCG has taken the first step towards implementing a long term language strategy focused on "HP Standard" languages which are compatible across HP computer systems. HP Standard Pascal is implemented on the HP 1000 and HP 9826/36 computers, and was introduced on the HP 3000 in October 1981.

Where does Pascal fit in the family of HP 3000 languages? Pascal is intended to displace SPL as the language of choice for much, if not most, subsystem software development on the HP 3000. The Pascal compiler itself is written in Pascal, and many new software projects at IND are also being written in Pascal.

Pascal has more capability, at a higher level, than SPL (for example, user-defined data types, record and pointer data types, sets and set operations), and yet it yields execution performance comparable to SPL and FORTRAN. More importantly, since SPL is a machine dependent language, Pascal, rather than SPL, will be available to customers on future generations of BCG computers. (SPL *will* be supported on future systems, but most likely only in a "compatibility mode" — an environment which will ensure backward compatibility with the HP 3000, but might not be able to take advantage of the architectural features of a new processor).

Therefore, all potential SPL sales in the future should be evaluated critically to determine whether Pascal would be a better choice. Even if your customer does need SPL capabilities such as stack manipulation, which Pascal/3000 does not provide, they still would be well advised to use Pascal as much as possible, and use SPL subprograms only where really needed.

Performance should not be a concern where high level SPL is concerned. Our performance tests showed that the execution performance of high-level SPL, Pascal, and FORTRAN programs were comparable on the three systems tested. Assembled SPL, written by an expert, naturally gave the best performance, and was taken as the base-line performance measurement. Your SE product champion for Pascal should be able to give you more details on the performance tests done for Pascal. They are included in the SE notes that are available to every Pascal product champion.

Price and Availability

32106A — $5000

32106M, 32106R — $2500

Availability: 2 weeks

Pascal/3000 Reference Manual, 32106-90001 — $43. Manual is available through CSO.

Sales Aids

Data Sheet (P/N 5953-0691)

Computer Advances Article, November 1981

Pascal/3000 Demo — interactive, instructive, entertaining, self-paced. Can last from five minutes to one hour. All Pascal SE product champions should have a copy.

MSO

CST Entries and HP Manufacturing Applications

By Beth Eikenbary/MSO

Confusion abounds concerning the use of CST entries by Materials Management/3000 and Production Management/3000. It appears everyone, HP, our customers and even our competition, all share a misconception about the availability of Code Segment Table entries when using HP Manufacturing Applications.

30 CSTs Available

Materials Management/3000 and Production Management/3000 can run successfully on a single CPU, leaving an additional 30 CST entries available for other uses. There are a maximum of 192 CST entries available on HP 3000 computers. The MPE IV operating system uses up to 110 of these entries depending upon specific subsystem configurations. The following table delineates the number of CST entries used by HP Manufacturing Application Systems.

Subsystem or Application	CST Usage
1. MPE IV Maximum	110
2. IMAGE	11
3. VPLUS/3000	9
4. Materials Management/3000 or Production Management/3000 Application Support Modules	5
5. Materials Management/3000 (Maximum incremental usage)	18
6. Production Management/3000 (Maximum incremental usage)	9
MAXIMUM CST ENTRIES USED FOR HP MANUFACTURING APPLICATIONS ON A SINGLE HP/3000 CPU	162

Materials Management/3000 and Production Management/3000 both utilize the Application Support Modules. These modules provide the basis for the customization and daily operation features available with HP Manufacturing Applications.

Multiple Applications on a Single CPU

If multiple copies of either Materials Management/3000 or Production Management/3000 are being accessed on the same CPU, no additional CST entries are required for the Application Support Modules. Similarly, adding additional copies of Materials Management/3000 or Production Management/3000 do not increase the application requirements for CST entries.

General Accounting/3000

For those customers wishing to run General Accounting/3000, in addition to an HP Manufacturing Application, an additional three CST entries are required; one each for General Ledger/3000, Accounts Payable/3000 and Accounts Receivable/3000.

In summary, there are no CST resource constraints for running multiple HP Manufacturing Applications on the same CPU. In fact, a customer can run multiple copies of both Materials Management/3000 and Production Management/3000 on any single HP 3000 without "running out of CST entries." Today the only known resource constraint on CPU performance with HP Manufacturing Applications is disc I/O. Performance data sheets are available for both products to help evaluate the impact of this constraint on a specific customer configuration. Please contact your MSO Sales Development Representative if you have any further questions.

Running MM/3000 and PM/3000 on the HP 125?

By Dan Kaplan/MSO

Well, not quite. But GSD's new Block Format Software Utility allows an HP 125 to support V/3000 applications such as MM/3000 and PM/3000. A joint team of GSD and MSO R&D engineers recently tested both MM/3000 and PM/3000 using the HP 125 as a block mode terminal to ensure that the HP 125 (with the Block Format Software Utility) fully supports all of the V/3000 needs of both application products and can run all of the SAI (Systems Administrator) and User functions.

Limited Video Enhancement

One main difference between the HP 125 running the Block Format Software Utility and a normal HP 262x terminal is the video display enhancements including half-bright, inverse video, blinking, and underlining, while the HP 125 only supports half-bright inverse. For that reason all other display enhancements defined on V/3000 forms are converted to half-bright inverse.

Availability

The Block Format Software Utility is currently released and is being distributed to new customers with the Utilities Disk. Existing trade customers who have purchased LINK will be sent this disk, while other customers will need to exchange their current operating system through CSO for the updated Operating System (a.01.20) to receive this utility. For more information see GSD's article in the May 1 *Computer News*.

Contact GSD Sales Development for more information concerning the HP 125 and Block-Mode. For information concerning running Materials Management/3000 on the HP 125 (as a terminal) please contact MSO On-Line Support.

Manufacturing Sales Specialists Positioned in Field

By Juan Montermoso/MSO

As indicated by Bill Richion in the February BCG teleconference, manufacturing sales specialists will be providing specialized support to the field force on selling Materials Management/3000 and Production Management/3000 solutions. An initial set of nine manufacturing sales specialists (covering nine sales areas in the US) are now in place after recently completing an intensive five day seminar in Cupertino.

The seminar covered MSO manufacturing applications product strategy, an analysis of key competitors, other quadrants of MPN, and the MPN-ASSIST process. Armed with this information, these manufacturing sales specialists will be establishing a manufacturing applications sales plan for their specific area. They expect, as part of that plan, to work

closely not only with Application SEs and Application Specialists but also with the general purpose sales representative to achieve both a good application fit and full customer satisfaction.

Since these specialists will be the sales focal point for MSO manufacturing applications in the field, they provide an additional resource of manufacturing sales expertise. So feel free to contact the assigned person in your area (see accompanying list) for support in qualifying and selling to manufacturing applications prospects.

Manufacturing Systems Sales Specialists

Eastern Region	**Don Bacastow, Rockville** **Carl Nessen, King of Prussia** **Ken Souza, Lexington**
Southern Region	**Sam Phillips, Atlanta**
Midwest Region	**Dick Liszka, Cleveland** **Dave Sturm, Rolling Meadows**
Neely Region	**Bram Dykstra, Fullerton** **Stan Merrill, Bellevue** **Kim Muinch, Los Angeles**

CSP

New HPSLATE Release Supports HP 2382A and HP 262x Terminals

By Tom Stokes/CSP

At the end of April, Release 01.00 of HPSLATE was delivered to the Software Distribution Center in Cupertino for distribution to all Field Software Coordinators throughout the world. This release includes the following enhancements to the HPSLATE products:

- HPSLATE now supports not only HP 264x series terminals (with at least 8k of terminal memory as opposed to the previous requirement of 12k), but also the HP 2382A and the HP 262x terminal series (except for the HP 2621A/P).
- A new softkey function has been added to HPSLATE's CREATE/EDIT mode keyset: a CENTER key, which centers a line of text between the right and left margins.
- HPSLATE's file structure has been modified so that HPSLATE documents now require considerably less disc space than before. The conversion to the new HPSLATE document format from the old format is performed automatically.
- Whenever users created new documents with the old version of HPSLATE, they had to specify a maximum document length in terms of pages. Then, if their initial estimate was too small, increasing the maximum size of the document was awkward and time consuming. Now, in the new version of HPSLATE, the maximum document length is automatically set at 500 pages, so the user never has to worry about this issue anymore. A one-page document, however, still requires less disc space in release 01.00 than in release 00.00.
- Terminals configured for DSN/MTS are now supported by HPSLATE. The list of terminals which *can* be configured for DSN/MTS operation with HPSLATE release 01.00 is as follows:

  HP 2624B HP 2626A/W
  HP 2641A* HP 2645A*
  HP 2648*

*These terminals must have 12k terminal memory for DSN/MTS to operate correctly with HPSLATE.

Virtually every business office has a requirement for a word processor which is easy to learn, easy to use and which offers simple functionality. This new release of HPSLATE, which supports a much wider range of HP terminals than in the past, satisfies this need for both support personnel, who do not require the features of a full-function word processor (like HPWORD), and for business professionals who have an occasional need to create simple documents. With a factory base price of $3,000, HPSLATE should be on every HP 3000 system quote! Sell HPSLATE—it's a price/performance winner!

. . . And New HPSLATE Trial Offer Software

By Tom Stokes/CSP

On the new HPSLATE release 01.00 product tape which has been distributed to each Field Software Coordinator, we have included not only the enhanced HPSLATE product, but also a trial offer version of the new HPSLATE program which you can "lend" to any of your HP 3000 accounts so that they can evaluate the product in their own environment. Functionally, this trial offer version is identical to the new HPSLATE release. The differences are as follows:

- Once it is installed, the trial offer version can be used by only *one* user at a time

- The trial offer version will time out 30 days after it is first executed
- The trial offer version's main menu screen has been changed to reflect the fact that it is trial offer software which is the property of Hewlett-Packard.

Complete installation instructions are provided on the new HPSLATE product tape. Contact either your Field Software Coordinator, Alma Rodoni at IND or Tom Stokes at Pinewood if you have any questions.

Old HPSLATE Manuals Available Cheap!

By Tom Stokes/CSP

The new version of HPSLATE (release 01.00) has meant that both the HPSLATE Reference Manual (36576-90001) and the HPSLATE Using Guide (36576-90002) have been reprinted.

While both of these manuals have changed to incorporate the new features of HPSLATE release 01.00, the old manuals are still very functional, especially to experienced HPSLATE users. So, while they last, both of these old HPSLATE manuals will be available on a first-come, first-served basis, in quantities of 50, for a price of $50.

To order, use the following information to override the HEART/COCHISE/YAMATO order processing systems:

Product Number: 36576-90010
(50 HPSLATE Reference Guides)

Product Number: 36576-90011
(50 HPSLATE Using Guides)

MK Div : 16
SP Div : 1600
PL : 85
SF : 02
Price : $50.

Contact Alma Rodoni at IND or Tom Stokes at Pinewood if you have any questions.

BGD

Executive Seminar in Boeblingen

By Harry Amphlett/BGD

Several of the top IBM users from the North of England recently attended a 2-day seminar hosted by HP Boeblingen. Escorted by Roger Cooper, Mike Twigg and Bob Kaderauch, the group was flown over by private jet to Stuttgart. From there they were taken to the "Schloss Weitenburg" where the first day's discussions were held.

Weitenburg is an old castle overlooking the Neckar valley on the edge of the Black Forest. It offers conference, hotel and dining facilities in traditional surroundings. The seminar included presentations by Klaus-Dieter Laidig, Werner Gamm and Jef Graham and the day was rounded off with a dinner, at which Ed McCracken, Don Schultz and John Metcalf were present helping the UK Northern District in their sales effort.

The second day of the seminar, held in the factory, was geared more to practical matters. These included various demonstrations and an open discussion, where views were frankly exchanged. We were also able to successfully fulfill an unusual request — one of our guests wished to make an impromptu dial-up link to his personal electronic mail system which runs on UK mainframes. A first for HP we are told!

BGD plans to hold more of these seminars, aimed at specific groups, in the near future. If you have prospects within a similar user, trade or management grouping, contact Harry Amphlett in Boeblingen — let's bring them in!

HP 125 Success in Europe

By Mike Barlow/BGD

There is an official competition in the US to locate the salesman who can sell the most HP 125s this year. Whilst there is no official competition in Europe, this is not stopping the salesmen from being highly successful in selling the product! A good example is Larry Austin, from the HP Midlands Sales Office, who has sold eight systems in the last month.

Larry has had a lot of inquiries about the HP 125 in his area, and there is a demo center set up in his local sales office. However, Larry has observed that these demos do not directly lead to orders, and he has been making short loans (typically two to three days) to prospects he has qualified. After having had the chance to use the system with some of their own data, a high proportion of people are buying pilot units, which in turn leads to multiple sales.

One example of this is an electronics company who ordered six systems last month following an initial loan and the purchase of a pilot unit. Their requirement was to standardize on micros, but ensuring access to their central systems (HP 3000s) was also a prime concern.

Larry's other two orders were for pilot units, following loans. With these he has sown the seeds for further multiple sales.

You may not make all your quota selling HP 125s, but it's good base business that tends to multiply quickly.

Contact the European Sales Centre at BGD if you have any cases which beat this; we hope you do!

DTD

HP 2623A — When Flexibility Must Be Measured By Results!

By David Akers/DTD

When the Engineering Center of an HP major account needed a graphics terminal to be connected to a Honeywell mainframe, the choice was made to go with the HP 2623A.

In this application, engineers use the mainframe to design integrated circuits. The computer is also used to simulate circuit operation. Output from this simulation is displayed graphically on the HP 2623A.

The flexible datacomm configuration was a definite asset in this situation since the application runs on a foreign mainframe.

The engineers are particularly pleased with the availability of quick hardcopy. The 2623A is a natural!

HP 2623 Video Training Tape Available

By Gene Lee/DTD

DTD's new video training tape entitled "2623A Graphics Terminal", is now available from the Corporate Video Center. Intended for internal HP viewing, the training tape provides an excellent summary of the key graphic features and benefits of the HP 2623A. Viewing the tape will benefit new or experienced SRs and SEs alike.

If you want to preview the tape before ordering it, DTD has given one copy to each sales region for circulation. See the previous issue of *Computer News* for the contact in your region.

The tape can be ordered from the Corporate Video Center with a HEART 12 order and the following entries:

Product Number:	90488RZ
Sales Force:	09
Product Line:	95
Marketing Division:	07
Supplying Division:	0700
Price:	$57.50

HP 2623A and Plot/10

By Jim Schrempp/DTD

Some questions have recently surfaced regarding the HP 2623A, PLOT/10 software and the May 1 *Computer News* article entitled "HP 2623A and Tek4010 Compatibility." Some of our customers have been losing the top line of their text. Here is why: the Tek4010 has effectively two resolutions! Tek4010 graphic resolution is 1024 × 780 (0-1023, 0-779). The 2623A is 1/4 of the Tek4010 graphic resolution, 512 × 390 (0-511, 0-389). In scaled compatibility mode, all of the Tek4010 picture space will appear on the 2623A screen. Users who draw two lines next to each other to show one "thick" line may lose this effect on the 2623A. For example, with a 2623A in scaled compatibility mode, two lines drawn from (1000, 400) to 1001, 400) to (1001-500) will both be drawn on the 2623A as (500, 200) to (500, 250) (see example 1). However, two lines drawn from (999, 400) to (999, 500) to (1000, 400) to (1000, 500) will be drawn on the 2623A as (499, 200) to (499, 250) and (500, 200) to (500, 250) (see example 2).

Text on the Tek4010 uses a different resolution. The Tek4010 text resolution is 1024 × 781. This extra vertical resolution does not bother the vector oriented 4010; however, it causes problems with the raster oriented 2623A. What should the 2623A do with graphic text that would require writing on line 781? Well, the 2623A cannot display any characters that will not fit entirely on the screen. In PLOT/10, this text problem exhibits itself whenever the application program prints text after calling the init or erase subroutines. These subroutine calls leave the cursor positioned too high on the 2623A to display the top line of text. To get around this, Tektronix has told us that the newpage routine does the same function as the erase routine, but will not position the cursor too high if the left margin is set to 0. So, if your customer is losing the top line of his text in compatibility mode against a PLOT/10 application, we recommend trying two things:

- Insert a newpage call after each init, call in the application
- Replace erase calls with newpage calls.

Tek says these substitutions may only cause a problem if the application program begins graphic command sequences with a draw. We feel most applications programs will always move first and then begin drawing: in this case there should be no problems with the substitutions.

HP 13238A and 13250B Printer Interfaces

By Gary Evans/DTD

The HP 13238A is our terminal 8-bit duplex register interface. This product is an HP 8-bit parallel interface. Please note that it is not an industry standard. Present product that supports this interface includes the HP 2671A Option 044, the 9871A and the 2631A/B Option 044. The 13232J cable is required for the 13238A. This interface is supported for up to 1.8 meters/6 ft.

The 13250B is our serial printer interface. This product is an RS-232 industry standard. This product presently supports the 2631B, 2635B and Option 40 of the 2671A, 2671G, and 2673A and most RS-232

printers. The 13232G or 13232H cables are required for the 13250B (see DTD cabling manual). This interface is supported for up to 15 meters/50 ft. Note: Device support firmware (13261A see DTD price guide for correct Options) is also required. If you have any questions, please give DTD sales development a call.

HP 1000 Point-to-Point Terminal Configuration

By Mark Priestley/DTD

The HP 2623A, 2382A, 2622A, 2621B, and the 2nd port on the HP 2624B and 2626A terminals do not have an external clock. The standard configuration of the HP 12966A requires an external clock from the terminal. A hardware support article was published last May explaining the modification a CE must make in order to have the above terminals work with the 12966A I/F card. These changes are done standardly when the CE installs these terminals as part of a system installation. If one of the above terminals and the 12966A I/F card are bought as an add-on to existing system, the cost of doing the modification is not included in the purchase price.

The directions to make the change are in the *HP 12966A Installation, Service and Reference Manual*, pg. 4-2. The customer has the choice of paying to have a CE do the installation or using the documentation to do it himself/herself.

GSD

HP 125 Third Party References

By Sam Boot/GSD

As many of you know through the bi-monthly GSD COMSYS, Sales Development is keeping a Third Party Reference Library. This library consists of software and hardware products which people in the field have reported running on the HP 125.

The library does not contain any information as to how well the products work. In addition, HP does not warrant or recommend these products. The GSD HP PLUS Program does that! However, if you see a possible customer need mentioned in the GSD COMSYS, call Sales Development. We will provide you with a name to call to find more information.

If you have a third party software package or hardware component running on the HP 125, please inform GSD Sales Development. We will add this to the library.

GSD Software Policy Reminder

By Sam Boot/GSD

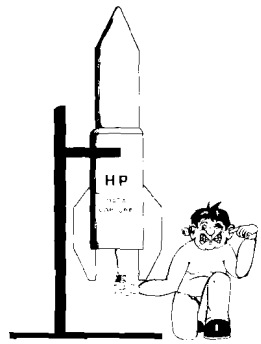
Many of the software packages sold through Hewlett-Packard on the HP 125 are purchased under license from third party vendors. Typical industry practice and vendor terms and/or conditions require one copy of software for each system sold. Many reps have been calling to ask whether a user may buy multiple systems and only one copy of the software.

Unlike the larger systems such as the HP 3000, there is no "Right To Copy" software for the HP 125. Customers who do so are liable to be sued not by HP, but by the original software vendor. Please convey this to your customers, and remember that software is what makes the HP 125 worth having!

HPG

The Fastest Growing Company in Data Capture

By Brian Holmes/HPG

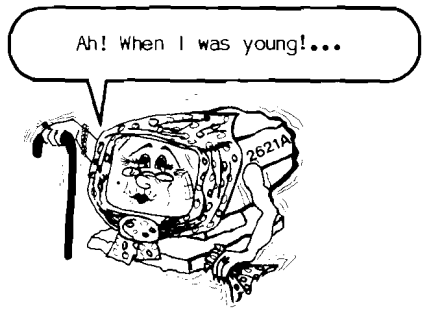


In the field of Data Capture, a recently published brand recognition survey has shown HP to be the fastest growing company — its recognition by users having expanded from 2% in 1978 to 20.5% in 1981; an amazing tenfold increase in four years!

Such sensational growth is due to the popularity of the 307X terminals, and the efforts of the sales force— keep it up gang, you're doing great!

HP 2621A Replaced by HP 2621B

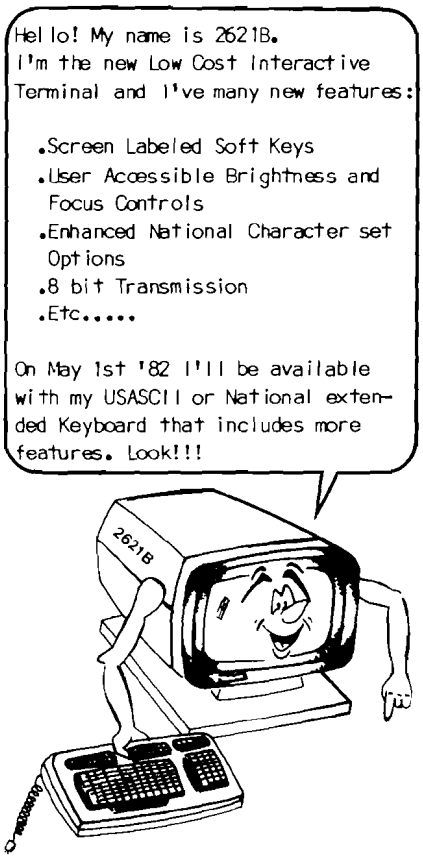
By Jean-Charles Dubuis/HPG



The old lady is about to retire. She has been very popular; but new technology, providing improved reliability and more features at lower price, has caused her to gladly give way to a new Low Cost Interactive Terminal.

Let him introduce himself . . .

Computer Terminals



EXTENDED KEYBOARDS (available as of May 1, 1982)

- USASCII as Option 100
- National Character Sets as Options 101 to 106 and 110 (Option 110 provides the firmware for all the National Character Sets, but retains the USASCII extended keyboard)

These new options provide:

- Memory-Lock
- Soft Reset
- Keyboard Enabling/Disabling
- Configuration Locking
- Remote Strap Configuring
- Identity Status (2621B)
- Parity Check Enabling/Disabling

Furthermore, to simplify the SR's task, an updated (blue) "2621B/2629L Configuration and Cabling Guide" has been distributed to all Sales Offices; this describes in detail the configuration and connection of the 2621B with all HP compatible computers.

In addition, in May 1982 a 2621B demo will be available, either on HP system 3000 or HP 85 for standalone demo. These demos will be recorded on cassettes for loading:

- Through a 264X for system 3000
- Directly for HP 85

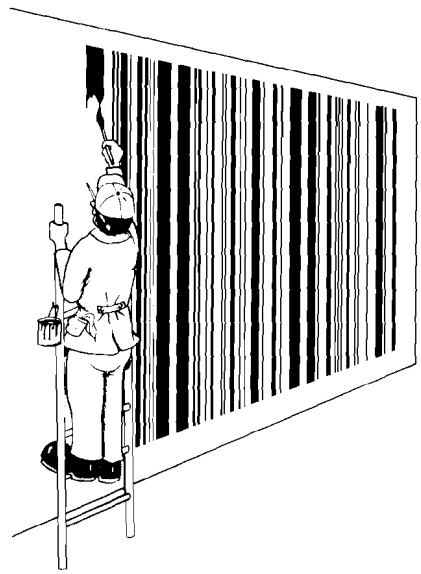
Some Guidelines for Data Capture Media

By Francis Scarella/HPG

The most common reason why customers encounter problems in their Data Capture applications is because they do not respect the media specifications. However, by following the recommendations detailed below, the ordinary pitfalls can be avoided.

Badges/cards used with the Multifunction Reader (3075A/3076A Option 007 and 3077A Option 001):

- In order to ensure a good guidance through the reader (thereby avoiding tracking errors and card rejection), the width of cards and industry type III badges must correspond to that of standard size punched cards; namely 82.55 +0.18/−0.42 mm (3.250 +0.007/0.017 inches).
- Handwritten data marks (made by a soft lead pencil) must be vertical and at least 4 mm/0.16 inches high; see the 307X Reference Manual (P/N 03075-90011) for details.
- When using punched cards, it is highly recommended to use clock marks to avoid both data loss and data misreading.



Labels used with the Bar Code Reader (3075A/3076A Options 010, 054 and 055) can be printed on paper (normal or self-adhesive), metal or plastic, in a range of sizes, with or without accompanying text. This can be done using traditional printing techniques, or photographic techniques, or specialized printers, or dot matrix printer. In addition, the labels can be resistant to acids, heat, humidity, light and wear. However, all types of labels must conform to the following rules:

- The code's bars must have a good contrast with label background. This can be achieved using OCR quality paper and carbon based ink.
- There must be no voids in the bars and no smudges in the spaces. Dot matrix printers must be good quality and allow overlapping of the dots, to ensure completely dark bars (2631G Option 200).
- The ratios of the widths of elements (i.e., bar or space) is extremely important. This is especially so for poorly formed bars

(i.e., from a matrix printer), and high density labels where the element width is close to the wand's resolution (i.e., 0.19 mm/0.007 inches for Option 055, 0.305 mm/0.012 inches for Option 010 and 0.38 mm/0.015 inches for Option 054). The best trade-off is to make the wide elements three times the width of narrow elements (e.g., a wide bar three times the width of a narrow bar).

Forms Management on the HP 1000

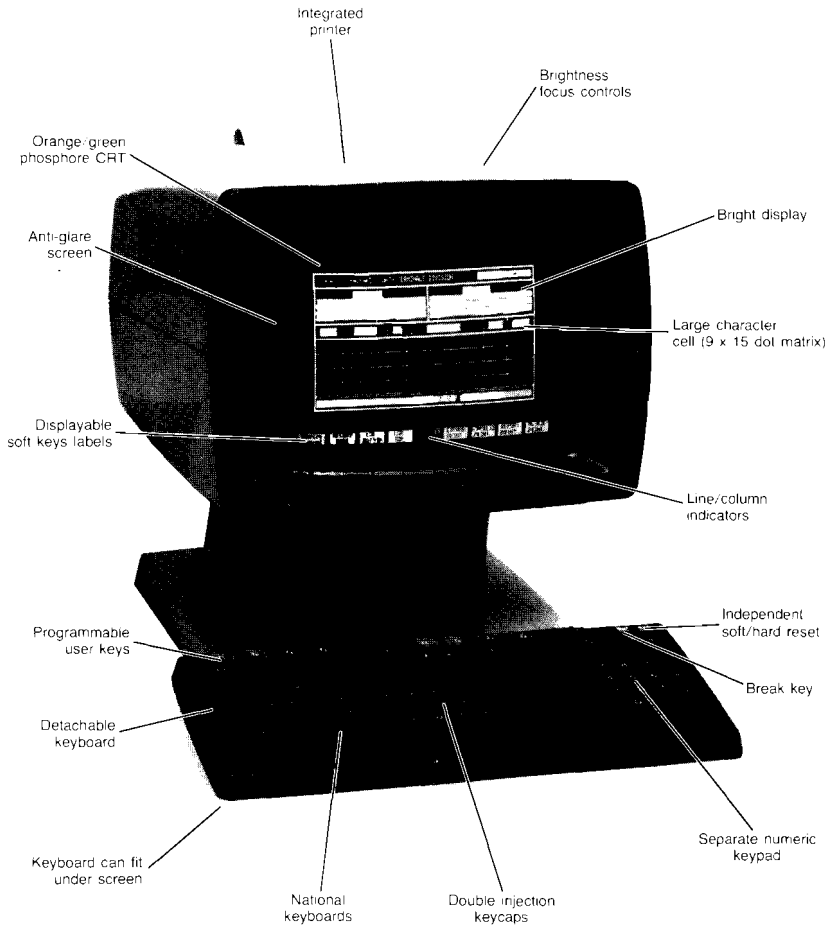
By John Willett/HPG

During recent months I have had a number of comments from HP 1000 Salesmen that they could sell a lot more terminals if only they had something like V/3000 on the 1000! But it exists already, as a package called SCREEN available from a Third Party Software supplier in Europe.

SCREEN is a forms management system that manages any 26XX terminal regardless of whether or not it has format mode. It allows the user to easily create, maintain or modify forms using all normal terminal functions including the editing keys. Edit checks can also be defined by the user to validate input data. Forms design capabilities that are already built into such terminals as the 2626A and 2642A may still be used. SCREEN supports the 12966A, 12792A and multipoint interfaces, is compatible with IMAGE, and runs under RTE-IV A/B, RTE-VI or RTE-XL. This product is not yet supported under HP PLUS, but for further details, and the address of the Non-HP European supplier, contact John Willett, Terminals Sales Development, HP Grenoble.

HP Answers to Ergonomics

By Marc Nodier/HPG



BSE

New Options Reduce Price of HP 2685

By ScottWald/BSE

Effective June 1, two new options are available which each reduce the price of HP's 2685 Print Station by $10,000.

Option 099 deletes IDS, IFS, and the 2648 terminal from the print station. Option 098 replaces the 7971 Magnetic Tape Drive with a 7912P with cartridge tape. Both new options have been created as a response to field requests from customers who have purchased print stations.

Option 099 is especially suited for customers who use the print station as a line printer replacement, where there may be little need for forms.

Option 098 is designed for customers who use a data communication link to another computer or who have a tape drive which can be used in conjunction with the print station.

Both options eliminate equipment which is unnecessary for some applications.

Combined with the new service price reductions, these options make the print station even more competitive for customers who are looking for a cost-effective alternative to line printers.

A standard 2685 Print Station lists for $160,000. Either option reduces this price to $150,000.

Fashion Footware Selects Laser Printer

By Ed Pavlinik/BSE and DeLona Lang Bell/BSE

Use of the HP 2680 Laser Printer will save clerical and transaction processing time for a large shoe manufacturer and retailer.

This company uses the 2680 Laser Printer to print identification tickets for the outside of their shoe boxes. The 2680 prints a drawing of the shoe, a bar code, the model number, and the shoe size on the ticket. This information helps clerks to scan hundreds of shoe boxes and quickly identify the desired size and style for waiting customers. The bar codes are used not only for sales transactions, but also for inventory control and accounting records.

This customer estimates a savings of approximately $90,000 a year in labor expenses by using the laser printer. The 2680 eliminates the need for five operators who were previously needed to operate conventional drawing equipment. As new shoe styles are created and old styles obsoleted, electronically stored sketches can be modified quickly and easily without the use of cumbersome mechanical printing equipment. Drawings, bar codes, and text can be updated as needed.

By providing a cost-effective solution, the 2680 Laser Printer helps to improve this customer's bottom line performance.

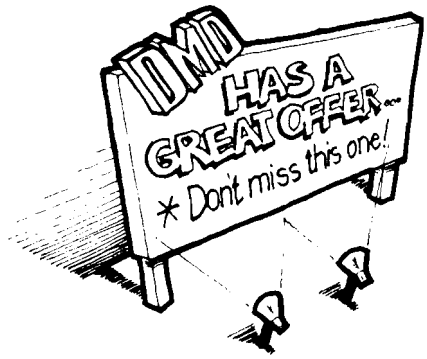
DMD

A Great Deal on HP 7910 Disc Drives

By Kent Sager/DMD

The HP 7910 12Mb Winchester disc drive is a great product only recently removed from production due to advances in mass storage technology and competitive pressures from the marketplace. However, for a limited time only, your customer can order refurbished 7910 drives in rackmount or stand-alone versions directly from DMD at the special reduced price of only $5,000.* The drive is fully configured with a cable and controller integrated into the drive's package.

How does the special 7910 price compare to present products? Figure 1 shows how the 7910, at



$5,000, stacks up against the 16.5Mb 7908 ($7,900), or the 4.6Mb 9134 ($4,500). As indicated, the 7910 fixed disc offers an alternative low cost mass storage solution for users requiring modest storage capacities.

	GLD	DMD	DMD
PRODUCT	9134	7910	7908 OPT.140 (POD VERSION)
FORMATTED CAPACITY (Mb)	4.6	12.0	16.5
AVERAGE ACCESS (ms)	173	80	50
AVERAGE TRANSFER RATE (Kb/s)	50	409.6	538
ROTATION RATE (RPM)	3600	3000	3600
TECHNOLOGY	WINCHESTER (3350)	WINCHESTER (3340)	WINCHESTER (3350)
PHYSICAL SIZE (mm/in) HEIGHT WIDTH DEPTH	130(5.1) 425(16.7) 476(18.7)	237(9.31) 483(19.0) 686(27.0)	720(28.4) 354(14.0) 712(20.0)
PRICE	$4,500	$5,000	$7,900 (EXCLUDES TAPE)
BMMC	$18	$33	$35

FIGURE 1

DISC DRIVE COMPARISON

Now that you are convinced that the 7910 is a great deal, where can you sell the 7910? The 7910 is supported on the HP 1000 L-Series, 9835/45, and 64000 systems. These refurbished drives will be subject to standard warranty and installation services, and are commissionable and quota accountable.

DMD is offering quick availability, so don't delay — place those orders

now. Please contact Kent Sager at 208-376-6000, ext. 3389 for ordering information.

*This offer is restricted to US Sales Regions only and is on a first come, first served basis. The price is non-discountable.

The HP 7933H Demo

By Greg Hite/DMD

The 400Mb HP 7933H is the most powerful disc drive ever offered by Hewlett-Packard. Its intelligent controller uses an "operating system" of over 50Kb. That is larger than the operating system used by most microcomputers. But that doesn't mean a lot of overhead to slow down the host system. Nearly two-thirds of the controller's ROM contains over 80 diagnostic routines and utilities (such as automatic head alignment and filter checks) which run when the disc drive is first powered-on or during "disc idle time," when the SPU is not requesting data transfers. These same diagnostics may be executed without the aid of the SPU by using the 7933H's front panel 16-key keypad and alphanumeric display. Up to 10 steps may be programmed to allow the operator to create the desired conditions needed to isolate faults. Hundreds of test errors and conditions can be displayed to inform the operator of what may be the cause of a drive failure.

Here are a few command sequences which will enable you to show a small sample of the 7933's diagnostic capabilities. This first sequence allows you to check the status of the various sensors which measure the temperature and pressure of air passing through the drive.

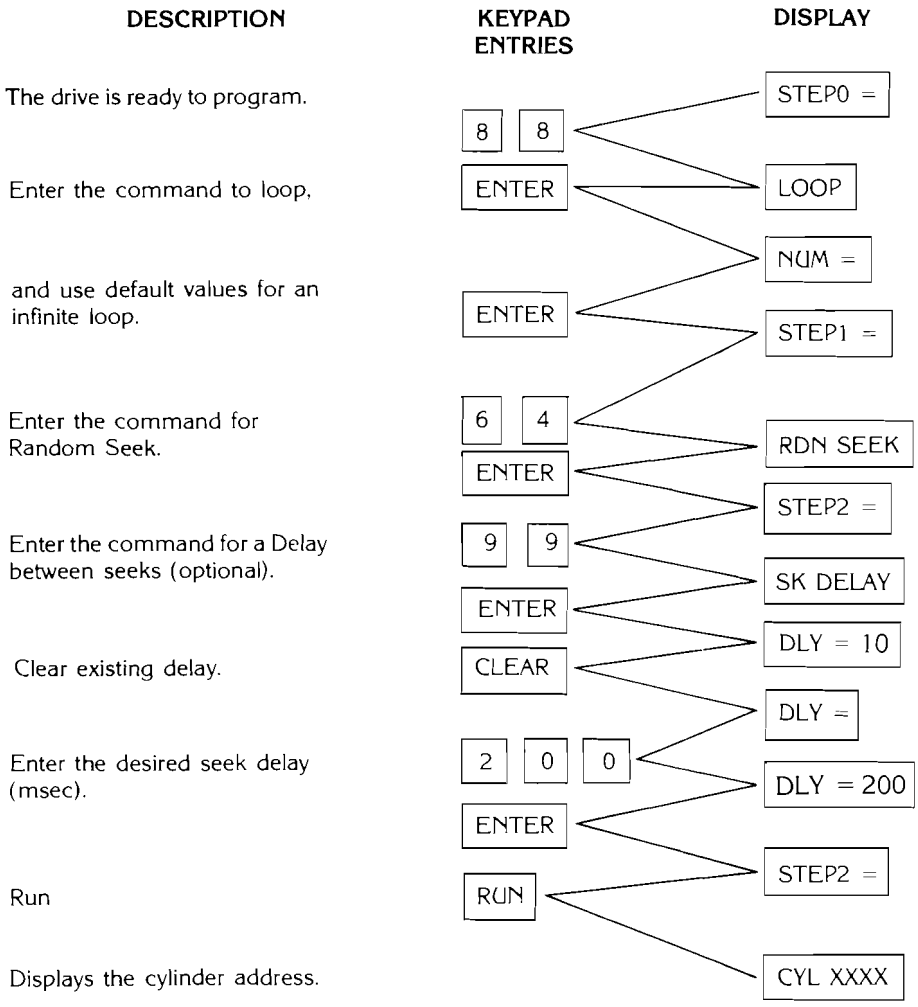
First, power-on the drive and make sure the LOAD/UNLOAD button is not depressed.

DESCRIPTION	KEYPAD ENTRIES	DISPLAY
After the drive is powered-on, several self-tests will occur.		STOPPED
Get front panel control by pressing ENTER key.	ENTER	
The drive is ready to program.		STEP0 =
Enter the command for Display Sensors.	8 6	DSP SENS
	ENTER	
Select a sensor (0–3), the display will show which one you selected. If a different sensor is desired, press CLEAR.		SENSOR =
	0	BLOWER
	CLEAR	
		SENSOR =
Enter the desired sensor number.	1	FILTER
	ENTER	
		STEP1 =
Press RUN and the results are displayed.	RUN	1 GOOD

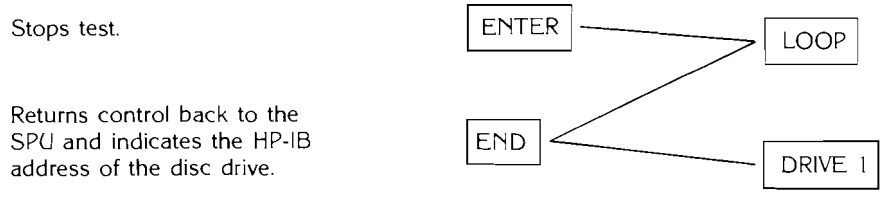
Now, to clear that command sequence and begin a new one, perform the following steps:

To get front panel control, press ENTER.	ENTER	DSP SENS
Enter the command to clear the program entered.	9 8	CLEAR
	ENTER	STEP0 =

In the next sequence the drive will peform random seeks continuously until stopped. Depress the LOAD/UNLOAD button. While the drive spins up to 2700 RPMs, more self-tests are performed.



To return control of the drive back to the SPU:



The 7933H Service Manual (P/N 07930-90903) contains a description of all commands and error messages. Pick up a copy and have some fun showing your customers how we have eliminated scheduled preventive maintenance and lowered the MTTR significantly.

SDD

HP 9111A Graphics Tablet Not Recommended for Use with HP 1000 L- and A-Series Computers

By Cheryl Rudolph/SDD

Under various circumstances, the default Binary Data Transfer mode of the HP 9111A will disrupt HP-IB data communications. This is most apparent on the faster HP-IB interfaces on the HP 1000 L- and A-Series computers. Consequently, the HP 9111A (including 9111T and Option 050) is incompatible with and *should not be sold* with any HP 1000 L- or A-based software that envokes the Binary Data Transfer mode. This includes all GRAPHICS/1000-II DGL based software like AGP-3.

There is no quick fix. We hope to have the problem resolved in six to nine months. Have your HP 1000 SE contact DSD Online Support for technical details regarding GRAPHICS/1000-II support on L- and A-Series computers.

There is no problem with HP-GL based software, unless the 9111A remains unaddressed on the HP-IB. The HP 9111A may be used effectively with all HP 1000 M/E/F-Series computers as well as HP 9826, 9836, 85 and 87 computers.

HP 9111A/9826/9836 Software — Enhanced Graphics Input Capability Now Available

By Bill Fuhrer/SDD

Customers who order the HP 9111A Graphics Tablet with Option 026 or 036 (indicating they have an HP 9826 or 9836 computer) now also receive, at no cost, the HP 98627A "Binary" Software which contains additional language features to help program the graphics

tablet using BASIC 2.0 (won't work with BASIC 1.0).

This software is currently provided only with the HP 98627A Color Video Interface, which includes the interface card necessary to control a color monitor with an HP 9826A or HP 9836A. This binary includes the following BASIC statements that are useful for the 9111A tablet:

- DIGITIZE returns the X, Y coordinates of the stylus location when pressed
- GRAPHICS INPUT IS defines the input device
- READ LOCATOR returns the X, Y location coordinates of the stylus without requiring the stylus to be pressed
- SET ECHO moves the cursor or pen of the output device defined in the "PLOTTER IS" statement to a specified location
- TRACK IS ON/OFF causes the output device locator (pen or cursor) to track the tablet's stylus until the stylus is pressed.

This software (without the HP 98627A Color Video Interface Card and color monitor) is being included with all HP 9111A Option 026 and 036 orders shipped after May 15, 1982. At least 16Kb of user RAM are required to load this software.

Included with this software are related supplements for the "BASIC Programming Techniques" and "BASIC Language Reference" manuals. A half-page explanation is attached to the supplements to distinguish this offering from the HP 98627A product.

This is a temporary measure to provide 9111A software support on the HP 9826 and 9836 computers until these BASIC language extensions are included in the standard BASIC language on these computers.

SDD — giving you the Graphics Edge!

Winning the Second Half

By Bruce Woolpert/SDD

We've developed some *tried and proven sales strategies for the second half.* There are *five sure winners!* Three are ready to go now and are described below. Two more will be included in future issues of *Computer News.*

1. HP 9826 and 9836 Graphics . . . A Technical SR's Sure Winner!

Sales strategies that have been successful in the past always seem to produce better results. And why wouldn't they, they've benefited from many years of field selling experience. Plotter sales on the 9826 and 9836 graphics desktop computers are a sure, yet easy, way to brighten your (and our) order performance.

What should you do?

Make the following "second half 'new year' resolution": "To show a 9872C with every 9826/9836 demonstration."

Why should you do it?

Because these new desktops are becoming big sellers and HP has traditionally sold 50% (or more) of its desktops with plotters! In fact, the proven and most effective way to make a desktop sale is to *let the plotter deliver the 9826 and 9836 graphics capability message!*

What is SDD doing to make it happen?

We've made your job easier by supplying each technical SE with a free 9826/36 demonstration disc (P/N 09872-18012) for the 9872C/T and 7470A. The demonstration discs were mailed worldwide on April 22. Also, a demo disc for the 9826/36 and 7580A (P/N 07580-18007) will be available in mid-May. The May 1 issue of *Computer News* included a complete 9826/36 Configuration Guide on graphics support from PASCAL, BASIC, and HPL high level languages, as well as significant software support from the various application software packs. The demos are real attention getters and, with the graphics language support from all 9826/36 languages, your customer will really understand how truly advanced the 9826/36 desktops are!

2. HP 7470A Low Priced Alternative . . . A Technical and Commercial SR's Sure Winner!

On March 1, 1982, SDD announced its latest invention in low cost, high quality and high performance plotting . . . the HP 7470A Graphics Plotter. This new Hewlett-Packard unit offers a four-times improvement in speed and resolution (line quality) over competitive units at a very reasonable $1550 price (that's for a complete unit including I/O!).

What should you do?

With the 7470A, "HP" couldn't mean *H*igh *P*rice. You've now got a low priced alternative for those customers who don't need the larger paper size, 8-pen automatic multicolor operation, or automatic paper changer available on HP's C/T plotters. The 7470A is a great solution for customers who may not have had an interest in graphics in the past or have limited budgets.

Why should you do it?

The 7470A is already supported on just about every computer HP makes. In the third quarter, support will be announced on the HP 3000 and HP 250, making the 7470A another "totally supported graphics peripheral" from HP. You'll quickly come to appreciate the advantage of having a low cost, performance winner in the line. You'll want to see that every HP Series 80 and HP 125 demonstration includes a 7470A (or 9872). You will also want to keep a 7470A data sheet available when a price objection requires a quick solution. Low cost graphics is now available to help you sell HP computers.

The 7470A is a worldwide price/performance leader in its price range (even in Japan against our tough Japanese competitors!)

What is SDD doing to make it happen?

New demonstration software is available for the HP-85 (P/N 07470-18001), HP-87 (P/N 07470-18002), and HP 9826/36 (P/N 09872-18012). The 7470A Field Manual includes a complete Configuration Guide on page 21. Data sheets are already available in your sales office. You'll want to order a copy of the "HP 7470A Plotter" videotape ($50; P/N 5957-2643) for future customer presentations and seminars. The videotape not only highlights the features and benefits of HP's newest plotter, but also surveys business graphics applications in all the functional areas of a manufacturing company.

3. HP 7580A More Sales Advantage in a Recession . . . A Commercial and Technical SR's Sure Winner!

We've discussed the HP 7580A's competitive advantages many times. But in these difficult economic times, our customers seem to be paying a whole lot more attention to HP's message: "The 7580A offers the performance and quality of plotters costing twice as much." Through ISPP and other software, we've tried to minimize the effort required to transport software from a competitor's plotter to the 7580A. But what's changed is that the $16K difference between the 7580A and competitive units has become very important in a time of tight end-user capital budgets. Like the field, we've needed to exercise greater control over our expenses this year. But we think the "smart money" will be on the 7580A for direct mail and advertising . . .

What is SDD doing to make it happen?

In April, SDD will be conducting a large direct mailing in the US to carefully selected lists of 75,000 computer and plotter users. Our successful 7580A ad program continues to provide highly qualified leads which will be appearing in your in-basket in our distinctive lime green sales lead envelopes. The 7580A, along with other SDD and HP products, will be shown at six US trade shows during the second half. Show participation is also planned in Europe and Japan.

System '82	June 10–11	Chicago
National Computer Graphics Association	June 14–17	Anaheim
International DSS	June 14–16	San Francisco
SIGGRAPH	July 26–30	Boston
Int. Machine Tool	Sept. 8–17	Chicago
Info '82	Oct. 11–14	New York City

What should you do?

Watch for those green envelopes that contain those SDD qualified leads! We send them out to you within 24 hours of their receipt. We've already sent the customer a sample plot in order to get the sales process rolling. You'll want to follow-up on these leads just as soon as they arrive in your sales office.

Why should you do it?

Because if someone is in the market for a drafting plotter, there's no better answer than the 7580A. When it comes to software support, GRAPHICS/1000-II, HP desktop computers, HP personal computers, DSG/3000, and the 2647A all support the 7580A. If the customer is looking for a "complete solution," don't forget HP PLUS design and drafting software! For non-HP computer end-users, SDD's Industry Standard Plotting Package (ISPP) makes it quite easy for most existing plotter software to use the 7580A.

Ready . . . Get Set . . . Go

So there you have it, three ways to make the second half of FY'82 a strong success for you and SDD. But since the results we achieve are always a combined effort, don't let us stop here. Let us know how they're working and which *sure winners* you've identified!

HP 9111A Graphics Tablet Helpful Hints

By Bill Fuhrer/SDD

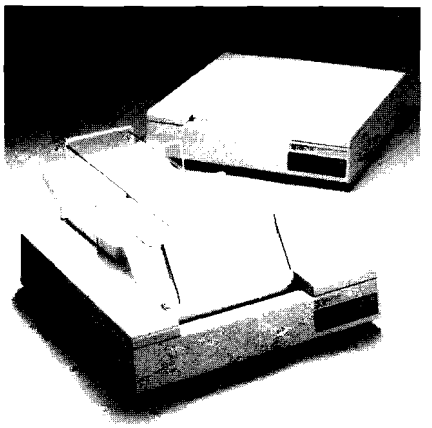
When using acetate menus on an HP 9111A, be sure to use a Lexan Overlay (P/N 4040-1748 individually, or 7121-0988 for a package of three) to avoid erroneous input data. Acetate or similar material can interfere with the electrostatic environment of the tablet, causing the tablet to misinterpret stylus position. Menus on paper cause no such problem, and can be used effectively without an overlay.

As the 9111A documentation indicates, pencil lead and some inks also interfere with the electrostatic environment of the tablet. We have found that erasable ink pens cause no such problem. For those who want to generate menus by hand, use the Paper Mate Eraser Mate (US), Replay (Europe), or Kelbo (Japan), or Scripto Erasable (US, UK, Spain, Greece), Pelican (Italy, Germany), Reynolds (France) or Pilot Kessel (Japan).

VCD

Thermal Printer Discounts

By Mike Polansky/VCD



The 2670 Series Printers appear on Exhibit A-43 entitled "OEM Products Subject to Discount, HP Printer Products." The 2671A and G models earn 0.1 functional units while the 2673A earns 0.15 functional units. All three printers are asterisked items and can earn up to a 38 percent discount when purchased in substantial quantities.

The 13287A Thermal Print Mechanism also appears on A-43, Revision No. R3-82 and earns 0.05 functional units. It is also an asterisked item and can earn up to a 38 percent discount with a volume of 200 functional units.

Each of the above products earns at least a 15 percent discount with one functional unit.

The Making of a Quiet, Clean Room

By Mike Polansky/VCD

All of us are aware of the consequences that even the smallest particle can present to a disc drive. As technology pushes ahead, the tolerances for scientific applications continue to grow smaller and smaller. The 2670 Series Printers seem to be the ideal output device for "clean room" environments. Thermal printing is a non-impact technology that simply means nothing is striking the paper on which the characters or graphics are being formed. The print head rides on the surface of the paper which is coated with a chemical that dries to a smooth, glossy finish. Dots are formed on the paper by 15 tiny resistors embedded in the head. The resistor heats up as the head moves across the paper and somewhere between 110 and 120 degrees a dot is formed by the resulting chemical reaction. This process significantly reduces particles being torn away from the paper as is the case for most impact printers.

Another advantage of thermal printers like the 2670 Series is the low sound level that results from the non-impact process. Clean rooms are usually technically oriented and the absence of noise is undoubtedly a major benefit.

The only mistake one could make in considering a 2670 Series Printer would be in assuming you have to give something up. A wide variety of interfaces (RS-232C, HP-IB, 8-Bit Parallel and Centronics), fast output (120 characters per second) and a low price underscore the fact that nothing has been sacrificed.

HP 2601A, What Cable Do I Use?

By Bob Weis/VCD

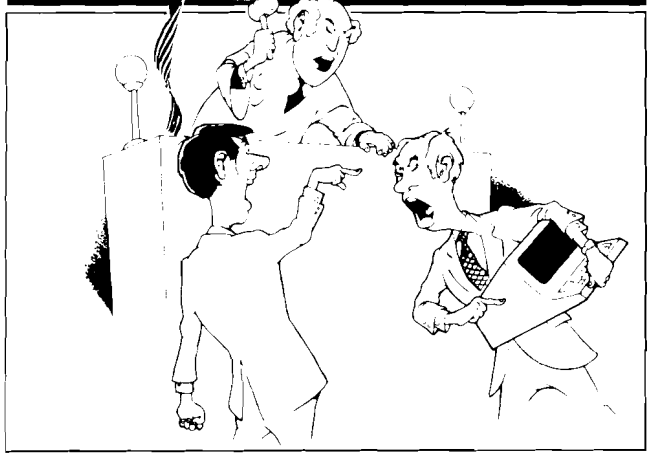
When your customer receives a HP 2601A, they receive a standard cable. This standard modem cable is supplied by Diablo and shipped with every 2601A. The standard cable (which is a Diablo cable, can be ordered from CPC as P/N 32055-02-DIA) is needed for the 250, 1000, Series 80 and 3000 Series when the 3000 interface is an ATC or ADCC.

Refer to the chart below for configurations which require other than standard cable:

Host	Cable	Supplying Division
HP 125	13242G	DTD
ATP with HP 3000 Series 30, 33, 40, 44, 64	13242X	DTD
262X	13242G	DTD
264X	13232G	DTD

Also keep watch for an update on this topic. A current move is afoot to offer additional options on the 2601A that will allow you to select which cable is shipped with the unit.

How to stay out of TROUBLE



Competitive Selling

By Marcia H. Adams/Corporate Legal

Competition is at the heart of your job. Given the highly competitive marketplace, it is impossible for you to ignore HP's competitors. To be successful you need to outsell the competition every chance you get. The goal of this article is to help you learn how to sell against the competition without getting HP in trouble. The comments will first discuss the best strategy in any competitive sales situation and then deal with what to do when you feel the other side is competing unfairly.

Positive Selling

Emphasizing HP's strengths during a sale is HP policy as well as good business strategy. Techniques like the team approach to selling that highlight HP's strong points are your key to success in most competitive situations. If the SR, CE and SE work together on getting the sale, each member of the team will contribute their own expertise so that your customers will be sold because they are convinced that a good long term working relationship is likely with HP.

Customers will be more impressed by a company with a positive selling approach than by a company which spends its time defensively trying to discredit the competition. Because of HP's satisfied installed base, you can encourage prospects to check with the competition's customer references and compare them to HP's.

The Standards of Business Conduct booklet (SBC) states HP's general rule on commenting about competitors as follows:

"It is HP's policy to emphasize the benefits of its products and to abstain from making disparaging comments or casting doubts on competitors or their products. If statements (oral or written) are made concerning a competitor or its product, they must be factual, fair and complete."

There are good business reasons for this policy. If you take cheap shots to get a particular sale, you are likely to find that the next time around the same type of remarks are aimed at HP (and you). Comments that would make *you* see red if directed at HP are the kind you should avoid making about other companies.

In addition, there are legal risks to a strategy based on negative selling. Taking cheap shots may constitute disparagement under the law. Disparagement is defined as a statement about a competitor's goods which is untrue or misleading and is made to influence or tends to influence the public not to buy. The guidelines provided in SBC list specific practices HP personnel should avoid.

The best way to avoid disparagement when you have to talk about the competition is to restrict your comments to the competitive product rather than the competitive company's financial situation or business or moral conduct. The latter type of comments are especially risky because they are often based on unfounded rumors. The key to fairly commenting about a competitor's products is set out in SBC as follows:

"Do not make any statement about the specifications, quality, utility or value of a competitor's products unless such statement is based on the competitor's published information or other factual data. However, even statements based on factual data must be complete."

Because computer products are constantly being improved, it is also important to use the competitor's *current* data sheets as the basis for your comparisons.

"But the Other Side Does It . . ."

When HP is on the receiving end of unfair trade practices, you may be tempted to ignore the policy guidelines discussed above and adopt the competition's behavior. For the sake of HP's reputation and your career at HP, you need to resist that temptation. Because HP acts through its employees, your conduct can affect the company's legal position and reputation.

When you are confronted with unfair competitive conduct, remember that most of our competitors are ethical companies like HP and have not adopted the particular practice as part of their business strategy. Rather, individuals may have become overly zealous without the knowledge of the company's management. As the discussion of unhooking and benchmarks will show, HP may be able to correct these situations simply by calling them to the attention of the company involved.

Unhooking

For a sales rep, having a booked order "unhooked" is particularly upsetting. Legally, unhooking involves inducing a breach of contract between a competitor and their customers. When this happens, your job is to collect the facts and document the sales lost due to unhooking. If there is a consistent pattern of unhooking by a particular competitor, it should definitely be called to the attention of sales management who can evaluate whether to talk with the company themselves or contact the General Legal Department for further advice. HP has been successful on an informal basis with this approach.

Given that an account is effectively off limits once an order has been placed with a competitor, what should you do if a customer *asks* you to talk with them because they are concerned that they did not make the right decision? In that situation, you can meet with the prospect but must be especially careful in what you say about the competition. You may also want to put something in the file stating when and why the customer contacted you.

Benchmarks

What if a competitor misrepresents the capabilities of HP's products? Benchmarks can be very subjective and may need to be explained to prevent confusion.

Positive selling is the best strategy overall, but to do your job right you also have to know the competition so you can respond if a customer presents you with a competitor's benchmark that is unfair or detrimental to HP. If there are errors in the results or in the way the benchmark was done, or if HP's product has capabilities that were not covered in the benchmark, be sure to point that out to the customer, without disparaging the competition.

The factory can be a key resource for you in these benchmark situations. They may already have additional performance information that can help you close the sale despite the competition's benchmark. If you find a competitor's benchmark has been done unfairly and is being widely distributed, you certainly should bring it to the attention of the appropriate group or factory so they can consider contacting the competitor.

Conclusion

Hewlett-Packard's sales strategy emphasizes positive selling on the basis of the strengths of HP's products. We want to make sure the customer understands how *our* products work.There will be times when you have to talk about the competition. It is important to give the customer facts which clarify the meaning and significance of a competitor's performance claims. Just remember to stick to the *facts*, information which is publicly available in the competitor's most current data sheets. Getting into a spec for spec comparison can be counterproductive because you are more likely to win the sale based on the overall high quality and performance of HP products and support.

HP 1000 Price Change Correction

The price changes for the HP1000 Model 40 and 45 Systems (2176 C/D and 2177 C/D), reported on page 31 of the May 1, 1982 Computer News, were not truly price decreases. They simply reflect the removal and netting out the price of the mandatory Option 019 as reported on page 6 of that issue. The net price to the customer remains unchanged.

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