Computer News

HP's New ColorPro Plotter

Computer News

Vol. 11, No. 1

On the Cover

HP's new ColorPro plotter is perfect for the business professional who needs quality multicolor graphics for reports and presentations. See page 45 for details.

MARKETING & INTERNATIONAL SECTOR
US Field Operations
European Operations
Intercontinental Operations
Major Accounts Marketing
Corporate Marketing
MIC	Marketing Information Center
FRD	Finance and Remarketing Division
PRSD	Product Support Division
ASD	Application Support Division
DMK	Direct Marketing Division
DMO	Direct Marketing Operation
CPC	Corporate Parts Center
TPM	Third Party Marketing
FMO	Federal Marketing Operations

COMPONENTS, MEASUREMENT & DESIGN SYSTEMS SECTOR
Microwave & Communications Group (MCG)
SPD	Stanford Park Division
NMD	Network Measurements Division
SAD	Signal Analysis Division
SPK	Spokane Division
CTD	Colorado Telecom Division
QTD	Queensferry Telecom Division
MWTD	Microwave Technology Division
QMO	Queensferry Microwave Operation

Electronic Instruments Group (EIG)
NJD	New Jersey Division
SCD	Santa Clara Division
BID	Boeblingen Instrument Division
YID	YHP Instrument Division
YCD	YHP Computer Operation
ICD	Integrated Circuits Division

Design Systems Group (DSG)
FSD	Fort Collins Systems Division
FEO	Fort Collins Engineering Operation
LSD	Logic Systems Division
LDO	Logic Design Operation
COL	Colorado Springs Division
BCD	Boeblingen Computer Division
LSID	Lake Stevens Instrument Division
BEO	Boeblingen Engineering Operation
TSC	DSG Technical Software Center
CWO	Corvallis Workstation Operation

Component Group
MSD	Microwave Semiconductor Division
OED	Optoelectronics Division
OCD	Optical Communication Division
SAO	Southeast Asia Operation

Corporate Engineering

INFORMATION SYSTEMS & NETWORKS SECTOR
Information Systems Group (ISG)
ISM	Information Systems Marketing
CSY	Computer Systems Division
OSD	Office Systems Division
PSD	Personal Software Division
OPD	Office Productivity Division
BGD	Boeblingen General Systems Division
GCO	Guadalajara Computer Operation
APD	Administrative Productivity Division
IRO	Information Resources Operation
APO	Administrative Productivity Operation
FSO	Financial Systems Operation

Information Networks Group (ING)
RND	Roseville Networks Division
IND	Information Networks Division
GND	Grenoble Networks Division
CNO	Colorado Networks Operation

Information Technology Group (ITG)
CID	Cupertino IC Division
FID	Fort Collins IC Division
NID	Northwest IC Division
IHO	Information Hardware Operation
ISO	Information Software Operation

Personal Computer Group (PCG)
RTD	Roseville Terminals Division
HCCO	Handheld Computer & Calculator Operation
PCD	Portable Computer Division
GPCD	Grenoble Personal Computer Division
POD	Personal Office Computer Division
PCDO	Personal Computer Distribution Operation
PCGO	Personal Computer Group Operation
HPPR	Puerto Rico Operation
PCS	Singapore Operation
BPC	Brazil Operation

Peripherals Group (PG)
BOI	Boise Division
DMD	Disc Memory Division
GLD	Greeley Division
CPB	Computer Peripherals Bristol Division
SDD	San Diego Divison
VCD	Vancouver Division

MANUFACTURING, MEDICAL & ANALYTICAL SYSTEMS SECTOR
Manufacturing Systems Group (MSG)
DSD	Data Systems Division
AMSO	Advanced Manufacturing Systems Operation
MPD	Manufacturing Productivity Division
SPNO	Semiconductor Productivity Network Operation
LID	Loveland Instrument Division
PAO	Panacom Automation Operation
MTD	Manufacturing Test Division
LMSO	Lyon Manufacturing Systems Operation

Analytical Group
AVD	Avondale Division
LASO	Laboratory Automation Systems Operation
SID	Scientific Instruments Division
WAD	Waldbronn Division

Medical Group (MED)
AND	Andover Division
BMD	Boeblingen Medical Division
MCM	McMinnville Division
WAL	Waltham Division
HCP	Health Care Productivity Operation
MSC	Medical Supplies Center

Corporate Manufacturing

HP Computer Museum
www.hpmuseum.net

Table of Contents

Computer News is organized into market-focused categories to help you sell integrated solutions.

In This Issue

GENERAL

The HP News Network airs in November

Gina Grieco/PCG

The HP News Network is an innovative new way to bring information on HP personal computer products and peripherals into dealer stores, quickly and easily.

By using specially-written software, HP dealers can view customer leads, look up prices, and read the News. And since this information will reside on the personal computer's hard disc, it's always available for use.

A database of prices, product numbers, and descriptions will be available. Using the keyword search capability will make it easy to locate specific information.

News items will range from technical documentation to promotional information. Each news item will be dated and have a convenient headline for browsing purposes.

A dealer can join the lead program and receive leads for prospective customers within the local area. Expect a lead, on average, to be available for a dealer within two days after HP receives it. The lead program will begin in November after a month-long sign-up campaign.

A dealer connects to the Network only to receive new and updated information. It's recommended that dealers connect to the Network at least twice each week.

MAJOR ACCOUNTS PROGRAM

GSA award schedules help make computer sales

John McGowan/FMO

This is the first of a series of articles on special aspects of doing business with the Federal Government.

HP presently has eight GSA multiple award schedule contracts and has sold almost $200 million during FY85 under these contracts. These are managed and negotiated by Federal Marketing Operations (FMO), with the exception of Medical/VA products. They provide for a blanket set of fixed terms and prices for use by any federal government customer and also other agencies or companies with written, government-buyer authorization. Although there is no fixed commitment, the government treats the schedules as catalogs, which include all ordering instructions.

When Congress rewrote the rules for government purchases in 1984, it forced buyers to obtain competition for many products but defined GSA contracts as competitive awards. Because of this, GSA orders are easy for agencies to place; consequently, they are much easier sales to make. All our GSA contracts contain a maximum order limit (MOL) designed to assure competitive bids on large buys. These are typically $300,000 to $750,000 per order. Because of the ease-of-order placement and the fixed negotiated terms, both HP and the government benefit when GSA contracts are used.

Sales reps should be aware of several basic rules when selling GSA to their customers. First, prices are fixed for a period of a year; they may go down, but never up. The government gets the benefits of promotions and special deals, but need not worry about price increases. Second, only listed or authorized products are eligible. Non-standard options or specials should not be included, since inclusion in GSA requires special certification of commercial prices. Finally, HP may not negotiate special exceptions and discounts within the range of GSA orders, since we are committed to a uniform administration for the entire United States. (We are hopeful of adding international releases during 1986.)

We have two computer agreements, one for our system families (Schedule A) and one for personal

computer products (Schedule C). The computer system contract runs from November 1, 1985, to September 30, 1986, the federal fiscal year, and includes products and support services. We expect to add 48 month lease terms for 1986 and will continue offering the maximum end-user discounts to the government. Where standard products provide a solution, for sales under the MOL, our GSA schedules allow sales reps to pursue business opportunities on terms nearly equal to commercial agreements.

Our GSA systems contract also provides for *liquidated damages and standard of performance warranty* at a three percent reduction in discount (from 24 to 21 percent). For customers requiring these, they receive the right to system price reductions of 1/10 percent per day for late delivery, and 90 percent *up time* for 30 days before they accept the system installation. Should your customer have questions about these options, your field contracts people can explain the details.

The use of GSA Schedule Contracts allows both HP and our customers to reduce the time and effort involved in a sale or purchase; all sales reps should become familiar with the basic provisions of the applicable agreements so that a sales opportunity involving the government can be converted to a firm order with a minimum of *red tape.* Field suggestions regarding desired improvements in GSA agreements should be forwarded to Teresa O'Neill for computer products, 415-857-5911, or Ann Cummings for instrument products, 415-857-2962, at Federal Marketing Operations.

Federal sales training calendar

Jenny Gispen-Schultz/FMO

Now is a great time to get a fresh start on Federal sales by planning your FY86 training. To help you do this, we have compiled information on upcoming seminars that is geared to helping you sell in the federal marketplace or better understand the contracts end of federal procurement.

If, after using the contact numbers listed, you still have questions about a particular course, John McGowan, federal procurements manager, can discuss contracts training with you, 415-857-3460; further sales course details can be obtained by calling Jenny Gispen-Schultz at the Federal Sales Center, 408-725-8111, ext. 2317.

This list is for your convenience and is not intended as an endorsement of any of these programs. If you decide to attend a course, we would really like your assessment of it. Your honest inputs will help us identify the most useful programs for future HP use. In addition, if there is a particular course you know about and would recommend, tell us about it at the Federal Sales Center, 408-725-8111, ext. 2317.

Course	Dates	Location	Cost	Host	Telephone
SALES					
ADPE Procurement	Nov 4-7 / Feb 4-7	Arlington VA / Arlington VA	$395	National Graduate U	(703) 527 4800
Federal Acquisition Process	Nov 7-8 / Dec 2-3 / Jan 6-7 / Feb 11 12	Arlington VA / Arlington VA / Arlington VA / Arlington VA	$325	National Graduate U	(703) 527 4800
ADP Procurement Workshop	Nov 13-15 / Jan 6 8 / Feb 12 14	Chicago IL / Washington DC / Atlanta GA	$795	Potomac Forum Ltd	(703) 883 2260
Federal ADP & Telecommunications Procurement	Nov 14-15	McLean VA	$695	Inv Data Corp	(703) 893-0833
Selling to the Federal ADP Market	Nov 4-5 / Nov 12-13	Springfield VA / San Francisco CA	$545	Gov't Computer News	(301) 445 4400
CONTRACTS					
Tech Marketing & Proposal Preparation	Dec 12 13	San Francisco CA	$725	H Silver (TMSA)	(213) 534 1911
Proposal Win Strategy	Nov 18-19 / Nov 25-26	Orlando FL / Sunnyvale CA	$625	R N Close	(617) 358 4744
Proposal Preparation	Dec 4 6 / Jan 13-15	Boston MA / San Francisco CA	$475	Proc ement Assoc	(818) 966 4576
Contract Management & Administration DETAILED	Nov 19 22 / Dec 16-19	Los Angeles CA / Washington DC	$495	Procurement Assoc	(818) 966 4576
Fundamentals of Contracting	Nov 7-8 / Nov 13-14	Atlanta GA	$425	Center for Public Mgmt	(301) 340 1610
Working with the FAR	Nov 12-13 / Nov 25-26	Washington DC / Las Vegas NE	$750	Federal Publications	(202) 337-7000
Practical Negotiation in Government	Nov 4 6	San Diego CA	$750	Federal Publications	(202) 337 7000
Contracts	Nov 18-20	Washington DC	$750	Federal Publications	(202) 337-7000
Fundamentals of Government Contracting	Nov 18 21	Atlanta GA	$750	Federal Publications	(202) 337 7090
Competitive Negotiation Workshop	Dec 2 4	Washington DC	$625	National Law Center	(202) 676-6815
Administration of Government Contracts	Dec 16-20 / Feb 10-14	Honolulu HA / Washington DC	$725	National Law Center	(202) 676-6815

THIRD PARTY PROGRAM

HP 3000 National Program update

Sandra Brandon/ISG

An update to the Value-Added Solutions Marketing HP 3000 National Program binder has just been mailed to the commercial sales force. It includes valuable information such as company background, product description, target market, lead qualification criteria, data sheets, brochures, a new contact listing, and much more.

Three new companies are highlighted in this update:

- Boeing Computer Services is a software supplier and offers several solutions for the manufacturing marketplace.

- Distribution and manufacturing solutions are provided from software supplier Satellite Computing, Inc. (SATCOM).

- Smith, Dennis & Gaylord (SD&G) is a value-added reseller with packages for the manufacturing and distribution areas.
- A manufacturing solutions chart is also included. Please see "New manufacturing solutions chart available" in the October 15 issue of *Computer News* (page 26) for more details.
- Jurgovan & Blair, Inc., (JBI) has been selected as HP's newest member of the HP 3000 National Account Program. JBI is a value-added reseller with applications for insurance and health care, specializing in health maintenance organizations (HMOs). Look for JBI to appear in the next update of the National Account binder.

If you did not receive your update, please send an HP Desk message to Sandra Brandon at HP5050/02 with the following information: name, sales office, COMSYS code, and complete address.

Third party compensation program restructured
Aaron Mills/USFO

Effective November 1, 1985, third party software suppliers and value added resellers participating in the six percent compensation program will benefit from a new policy designed to provide payments based on the shipment of the end-user CPU.

In the past, payments were made only after HP had collected all invoices for each product on the end-user order. It is felt that the new program will allow HP to make third party compensation payments in half the time previously required.

Compensation will now be made at the time the CPU product on the order is shipped. The amount of payment will be six percent of the "compensatable products on the order at the time the CPU has shipped, up to a maximum of 30 percent of the selling price of the software sold to the end-user by the third party. (Software sale must be at least $10,000.)

Note:

Compensatable products may be defined as those listed on HP's Computer Products Exhibit A-1.

Compensation requests submitted previously under the old version of the program will be converted to the new method of payment. If the CPU on the order has shipped, HP will generate a payment to the third party as outlined above.

As existing third parties will need to amend their contracts (Exhibit C) with Hewlett-Packard to benefit from the new program, please contact your area contract/sales finance representative for a copy of the amendment.

CUSTOMER SUPPORT

New PC software services available November 1
Sharon Stricker/PRSD

The November 1 introduction of Workgroup Coordinator Assistance and PC User Assistance adds a critical dimension to the services included under the PC Assistance Program.

Workgroup Coordinator Assistance (WCA) provides software support for a group of HP-supported software products that may be used with a variety of personal computers and peripherals. Under this service, a designated coordinator receives unlimited telephone assistance for questions regarding software usage and operation, hardware configurations, and manual clarifications. A subscription to the *HP PC Communicator* is also included.

Workgroup Coordinator Assistance is ideally suited for customers who 1) have groups of PC users, 2) are located in a non-system environment, and 3) are supported by centralized support staff. For workgroups using office application software on HP business PCs, HP offers PC Business Software coverage (P/N 99062A+D00). PC Technical Software coverage (P/N 99063A+D00) provides support to workgroups using application software on their technical PCs. Large groups of users requiring additional access to Response Center support specialists may purchase Additional Caller options (P/N 99062A+P00 and 99063A+P00).

PC User Assistance (PCUA) provides an end-user with unlimited telephone assistance for software supported on a single personal computer and a *Communicator* subscription. This service is designed for

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isolated professionals or small businesses whose heavy reliance on their PC productivity requires timely assistance, made possible by direct access to Response Center support specialists. PC User Assistance is available for most current HP personal computers (see table).

The two new services are complementary to the existing Personal Computer Assistance services. PC Applications Family provides application software support for HP 3000, 1000, or 9000 system customers who have Account Management Support (AMS) or Response Center Support (RCS) system coverage. HP 3000 customers operating in a Personal Productivity Center (PPC) environment cover their PC subsystem ·software through PC System Utility category. At the other end of the spectrum, customers requiring assistance on a per-call basis utilize the HP HelpLine service through pre-purchased Call Certificates* or by charging the call to a personal or company credit card.

The PC Assistance Program also includes a unique sales tool — the HP Executive Card* (P/N 35359A+H00). This internally orderable product provides the cardholder with six months of unlimited access to the Response Center for PC software assistance. It is intended to provide leverage with key decision makers in large PC sales situations.

Sign your PC customers up for the software support service that best fits their needs. Complete information regarding the software supported under each service can be found in the latest PC Assistance Program field training manual (P/N 5958-4629), or is available from your sales development representative.

Personal Computer Assistance Program

Support Service	P/N	US list price (cost per month)
Workgroup Coordinator Assistance (WCA)		
WCA - PC Business Software	99062A+D00	$150
Additional Caller Option	99062A+P00	100
WCA - PC Technical Software	99063A+D00	150
Additional Caller Option	99063A+P00	100
Personal Computer User Assistance (PCUA)		
PCUA - Vectra PC Model 25	72425A+E00	45
PCUA - Vectra PC Model 35	72435A+E00	45
PCUA - Vectra PC Model 45	72445A+E00	45
PCUA - Vectra PC secretarial workstation	72475A+E00	45
PCUA - Vectra PC secretarial workstation	72485A+E00	45
PCUA - HP 150A	45650A+E00	45
PCUA - Touchscreen I	45650B+E00	45
PCUA - HP 150A with hard disc	45660A+E00	45
PCUA - Touchscreen MAX	45660B+E00	45
PCUA - Touchscreen II	45851A+E00	45
PCUA - Portable	45710A+E00	45
PCUA - Portable PLUS	45711A+E00	45
PCUA - Series 80	85A/B/F*	45
PCUA - Series 80	86A/B*	45
PCUA - Series 80	87A/XM*	45
*Each model covered separately		
Response Center Support (RCS)		
The Integral PC	9807A+H00	120
PC System Utility Category/3000	99088B+C00	45
PC Applications Family/3000	99111B+H00	185
Additional Caller Option	99111B+P00	125
PC Applications Family/1000	99111D+H00	185
Additional Caller Option	99111D+P00	125
PC Applications Family/9000 Series 200	99111F+H00	185
Additional Caller Option	99111F+P00	125
PC Applications Family/9000 Series 500	99111E+H00	185
Additional Caller Option	99111E+P00	125
HelpLine Call Certificate Packs*	35159A	220/pack of five
HP Executive Card* (internal orders only)	35159A+H00	648/six months

Call Certificates and the Executive card are available in the US only.

SALES SUCCESSES

Sales Successes *reports on successful sales strategies and HP solution installations.* Computer News *welcomes contributions for this column from the field and divisions alike. Articles should be brief, informative, and contain the following information: (1) A description of the customer and the problem, (2) the competition's answer to the problem, (3) HP's solution and why the customer chose HP, and (4) who to call for more information about the sale. Also welcome would be some information about the amount of the sale and the solution's implementation date.*

Long's Drugs chooses HP Desk
Richard Gamblen/OPD
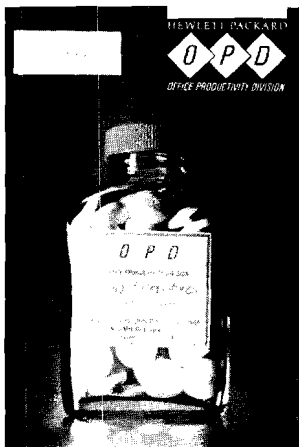
Long's Drugs currently operates 200 retail drug stores in seven of the western United States. Each of these stores is managed in a decentralized manner with store data processing consisting of two main applications — HP DeskManager and a custom pharmaceutical package. Although Long's stores are operated in a decentralized manner on a day-to-day basis, data processing functions are maintained from a central location. All remote HP 3000s, including 100 Series 37s, run in an environment where there is no full-time system operator. HP Desk gives the centrally-based systems administration group a way to update the remote systems with pharmaceutical application data and code.

Making Long's an HP major account meant convincing CEO Bob Long that HP Desk could truly enhance company communications. A free trial copy of HP Desk was installed on Bob Long's HP 3000 system, and Long himself learned to use the product

via its interactive training facility. Long soon realized that HP Desk would improve communications to his retail outlets: having a network of Series 37s running HP Desk meant that Long could send messages to every store manager and minimize the expensive nightly courier service to all stores. As a result of using HP Desk himself, Bob Long also increased his understanding of HP's Personal Productivity Center. This resulted in HP becoming Long's office automation vendor over Wang, NBI, and Xerox.

The message behind the story: HP DeskManager is now selling hardware and is being used in application areas outside the traditional area of electronic mail.

Long's goal by mid 1986 is to have 200 copies of HP Desk running on 200 remote HP 3000 systems. They are currently installing two Series 37s with HP Desk every week.

If you would like additional information on Long's Drugs, please contact Bob Johnson or Joann Tarantino in the Pleasanton, California, sales office, 415-460-1553. If you would like additional copies of the Long's Drugs poster pictured at the top of this article, please contact Heather Wilson, OPD, via HP Desk 1600/02 or COMSYS 1600.

HP Transform/3000 helps recruit IBM third party
Jim Pinsky/ISG

Don McAvoy, HP third party sales rep from the Valley Forge, Pennsylvania, sales office, made only three sales calls — including a Transform/3000 demo — and recruited an IBM System/34/36 third party in less than thirty days. Only four weeks later, they participated in a week long series of seminars, co-sponsored by the Valley Forge sales office, and found several hot prospects.

The company offers construction industry financial software, including standard financials plus contract and job estimation with equipment costing.

They had been evaluating alternatives to IBM for years because they were dissatisfied with the resources they had been getting from IBM. They felt IBM was only interested in corporate accounts and large third parties. Don had spoken to them three years previously, but, while liking HP and the HP 3000, they didn't want to rewrite their software. After

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reading the March *Mini* magazine article on the HP 3000 and HP's Transform product, they contacted Don. The demo, sale, and conversion went quickly and smoothly. The president of the company was extremely impressed with Transform and how well it worked. He also related that working on the seminars with the Valley Forge office was an enjoyable experience. Once again HP Transform/3000 beats IBM.

Xerox Waste Water Treatment System uses HP A700

Anne Bonaparte/DSD

In May 1985, the California Water Pollution Control Association awarded Xerox Corporation the 1985 Industrial Waste Water Control Award. Xerox attributed its award to the redesign of its Pomona Printed Wiring Board Manufacturing Facility and their Waste Water Treatment System (WWTS), which was designed and installed by Systems Integrated. WWTS is based on an HP A700 computer system with savings estimated to be $63,000 per year as a result of labor savings.

Systems Integrated's WWTS solution had to meet three long term objectives for Xerox: improve and stabilize quality, reduce waste, and reduce operational manpower requirements. Judging by the award, Systems Integrated succeeded in providing Xerox with an excellent solution.

Prior to the installation of the WWTS, Xerox technicians hardwired loops, and flicked switches on a manual control panel to manage the waste water treatment facility. Xerox realized that the lack of automation was inefficient and carried high material costs. The WWTS took Xerox from a completely manual system to an over 70 percent automated system.

Systems Integrated used an A700 system as the cornerstone for the WWTS system. The WWTS controls and monitors water flow, pH levels, tank levels, and plant processes. Alphanumeric and graphic displays provide information about plant operations. These include batch processes for the treatment of spent acid dumps and aqueous stripper and developer and also continuous processes for the disposal of non-metallic and metallic bearing rinses, and sand filtrations. On a daily basis, the waste water monitored by the WWTS hits 200 gallons in some processes and

200-300 gallons per minute in other processes. All functioning inputs to the system are tracked by the WWTS.

Safety is of prime concern to Xerox. Systems Integrated stresses safety by alerting operators of abnormal conditions, such as high copper levels, low pH levels, or dysfunctional equipment. Using audible alarms and flashing messages, the WWTS alerts operators of unsafe conditions. Also, the WWTS uses color-coded symbols to show operators the valves, pumps, and tank level indicators under automatic system control. The alphanumeric displays provide diagnostic data and allow Xerox to meet city waste water regulations more easily.

A block diagram of the system is shown below. The HP 2621 serves as the system console and an HP 2627 color graphics terminal is used for operator monitoring.
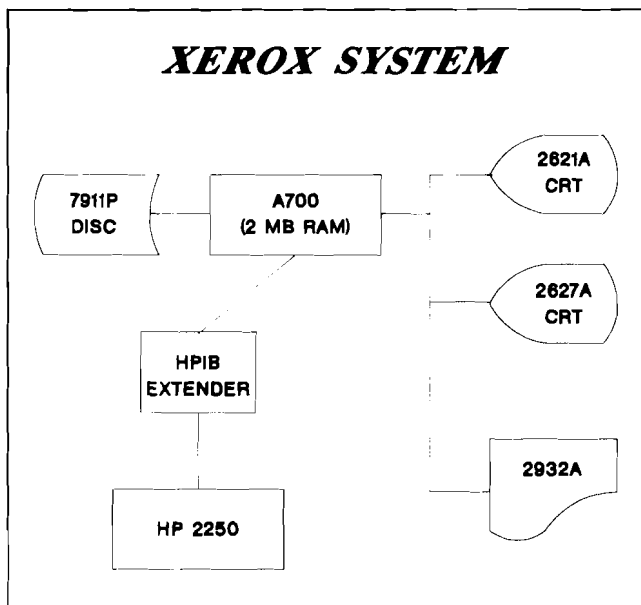
Thanks to the teamwork of Systems Integrated and HP, Xerox not only increased the efficiency of their plant, but also contributed positively to the environment. Systems Integrated is an HP third party that designs and implements custom solutions based around HP's technical computer products with offices in Anaheim and San Diego, California.

If you are interested in making successes like this happen for you and your customers, call Joe Wilhelm at Systems Integrated at 714-634-0600.

Agfa-Gevaert sold on enhanced PMC/1000

Erik Segers/Brussels Sales

Agfa-Gevaert is the third most important photo and film manufacturer in the world. Active in the complete area of image reproduction, they recently took control over U.S. Compugraphic. They are also active in photo copiers and laser printers.

Agfa-Gevaert was a potential major account for HP. They were interested in PMC/1000, but found out that PMC/1000 was too slow for their application. However, several enhancements have been made to the standard product, which allowed us to increase our sales to Agfa-Gevaert (28 HP 1000s and 4 HP 3000s are already installed on that site):

• New blocks have been added; they increase the performance for the execution of standard loops by 400 percent and the configuration by 700 percent.

• The inputs of the analog and digital trend blocks can now be modified on line.

The new blocks contain new features such as feasibility check of inputs, direct start-up of programs on alarm, rate-of-change alarms allowing to monitor the signal increase and decrease per second, error term alarming in a PID block, use algorithm with 16 parameters, and a whole amount of minor additions.

The PMC/1000 product is now also translatable. All texts have been removed from the sources. Using specially developed and forms-driven programs, the local software center can translate PMC/1000 without having to enter the sources or use the PMC specific formsbuilder.

So, you can have the PMC/1000 you like. *If you want to know more about it, contact Erik Segers, marketing manager, Belgium.*

HP 2689A laser print station succeeds in wire product industry

La Von Collins/BOI

Recently, a Chicago sales representative sold the HP 2689A laser printing system to Belden Electrical Wire and Products. Belden was so pleased with the HP 2689A laser printer's affordability, reliability, and easy implementation that they have installed a second HP 2689A and an HP 2685B remote laser print station.

After one month of printing on the HP 2689A laser printers, Belden saved over $2,000 in lease and maintenance costs and over $1,000 in paper. This will represent a $36,000 savings the first year of operation.

Belden fully replaced their Xerox 1200 printer with the HP 2689A laser printer and plugged it directly into their Amdahl mainframe. To make the printers operational, all Belden's programmers had to do was plug them in. The HP 2689A laser printing system is also IBM-mainframe-plug compatible.

Belden's success story is now available from the Literature Distribution Center to help you sell the HP 2689A laser print station to your customers and prospects. You can order the application story from HP's Literature Distribution Center (P/N 5954-2282).

Sales & Customer News

SPECIAL OFFERS

> *Promotion programs and special offers announced in* Computer News *may not be valid outside of the US. Before promotions are valid in other countries, they must be announced by the Country Marketing Organization.*

Educational discount on HP Portable

Pat Fobes/PCD

Would you like to sell quantities of HP Portable computers to your educational institutions? From November 1, 1985, until January 31, 1986, Portable Computer Division (PCD) is offering The Portable to educational institutions that are signed up on the A-11(E) contract for a net price of $995. That's an HP Portable with bundled productivity software (Lotus® 1-2-3®, MemoMaker, Terminal Emulator, and Personal Time Management), built-in modem, and 272 Kbytes of RAM for only $995. There are no limits on the quantities purchased during this time period. All standard terms and conditions of the A-11(E) contact apply.

Because the discount granted on the contract is either 38 or 45 percent, the additional discount to get to a $995 price will vary. Use the appropriate ordering instructions listed below.

P/N	Description	US list price
45710A	HP 110 Portable Computer	$2,995.00
M93	Educational discount (38%)	−1,138.10
M07	Additional discount	− 861.90
Net Price		995.00
or		
45710A	HP 110 Portable Computer	$2,995.00
M93	Educational Discount (45%)	−1,347.75
M07	Additional discount	− 652.25
Net Price		995.00

1-2-3® and Lotus® are US registered trademarks of Lotus Development Corp.

HP Portable sale for HP employees

Pat Fobes/PCD

For a limited time, from October 1 to December 31, 1985, HP employees can purchase the HP Portable computer for more than two-thirds off the regular list price — only $995. The value of the bundled software alone (Lotus® 1-2-3®, MemoMaker, Terminal Emulator, and Time Management) is worth that price. And as an added bonus, you get a copy of Rags to Riches Ledger™ software to do personal accounting for free.

Imagine, an HP 110 Portable Computer, bundled productivity software, personal time management, and accounting all for under $1,000. We have also changed the limit on the number you can purchase from one to five, even if you've purchased one in the past. All other terms and conditions of employee purchasing apply.

For details and ordering instructions, see your site Information Center contact today.

1-2-3® and Lotus® are US registered trademarks of Lotus Development Corp.

Rags to Riches Ledger™ is a trademark of Chang Laboratories, Inc.

HP ThinkJet printer Christmas gift offer

Erin McClelland/VCD

Coupon ad in five US newspapers

A very big, "can't-miss" ad is sure to attract Christmas shoppers. The promise— "A quiet gift for your ears!" and a free gift for buying an HP ThinkJet printer between November 15, 1985, and January 15, 1986. Smart shoppers will have their choice of a free printer pack, or a free JetStart™ driver for the Macintosh® personal computer, or free Sideways™ software in either HP- or IBM-compatible versions.

The ad will run on November 27, December 5, and December 17 in the following newspapers:

- *The Daily News* in Dallas, Tx.
- *The Chronicle* in San Francisco, Calif.
- *The Mercury News* in San Jose, Calif.
- *The Tribune* in Chicago, Ill.
- *The Times* in Los Angeles, Calif.

Coupon flyer for your customers

We have a three-fold, two-color flyer describing the Christmas offer and three gift choices for your customers. They can use the coupon in the flyer if they buy an HP ThinkJet printer between November 15, 1985, and January 15, 1986. Your customer sends the coupon and ThinkJet printer sales receipt (or other similar proof of purchase) to Vancouver Division (VCD). We'll take it from there. Call VCD for your coupon flyers (P/N 5954-6965).

JetStart™ is a US trademark of Softstyle, Inc.

Sideways™ is a US trademark of Funk Software, Inc.

New graphics organizers for HP ColorPro and HP 7475A plotters

Audrey Carlson/DMK

Plotter users can save space and keep plotter supplies close at hand by using DMK's Graphics Organizers, which have been specially designed for the ColorPro 7440A (92177W) and the 7475A (92177X). The translucent gray acrylic organizer is a plotter stand as well as compartmentalized drawer for supplies. Store and protect pen carousels, paper, transparency film, and fiber-tip pens in the high density foam-lined drawer.

With the special introductory offer, your customers can save up to $30 until January 31, 1986.

Product	Description	US list Until 1/31/86	2/1/86
92177W	ColorPro Graphics Organizer (also works with the 7470A)	$95.00 ea.	$115.00 ea.
92177X	7475A Plotter Graphics Organizer	145.00 ea.	175.00 ea.

□ Information Systems

GENERAL

Printing enhancement for IMF and SNA IMF

Steve Seminario/IND

A much requested printer handling enhancement for IMF and SNA IMF will be available on T-Delta-III MIT. The enhancement allows spool files created when emulating IBM printers to be closed and flushed to a line printer without ending the Pass Thru session.

An operator can now set a timer in the PTCONFIG file to a value anywhere from 0 seconds to 8 hours. If the timer runs out before more print request data is received from the host, the spool file is closed, flushed to a line printer and a new spool file is created by Pass Thru to continue receiving data from the host.

Prior to this enhancement, the Pass Thru session had to be shut down before the spool file's contents could be sent to the printer. With the new timer feature, print data collected in a spool file can be printed out periodically without interrupting the Pass Thru session.

For more a more detailed description, see the October 25 issue of *Support Update.*

Correction

In the October 1 issue of *Computer News,* the article entitled "Entry-level Series 37 now easier to order" (page 12) reported the wrong media product for the 32449L system bundle. The new 32449L bundle includes the media product 51450A, Options 22, 200, and 600; not the 32449Z, which has been obsoleted.

Also in this issue

HP Transform/3000 helps recruit IBM third party   9

SMALL BUSINESS COMPUTING

New workstation cables for the HP 260

Helen Harbin/DMK

Now your customers can assemble their own cables for the HP 45263D personal workstation. Because this workstation can be placed as far as 100 meters from the HP 260 SPU, your customers may want to pull cables through raceways or create custom lengths.

Connector kits and cable are now available from Direct Marketing Division (DMK). A simple call to DMK's Direct Order phone numbers will fill your order fast.

P/N	Description	Factory base price	US list price
92232B	Connector kit — contains all connector parts to complete one workstation cable.	$ 24	$ 25
92232A	Unconnectored cable, 275 meters.	780	825
92232C	Unconnectored cable, 100 meters.	330	350

COMMERCIAL EDP

HP 2647F still available as HP 3000 Series 68 system console

Todd Richman/CSY

A supply of HP 2647F system consoles for the HP 3000 Series 64/68 remains available from Computer Systems Division (CSY). The HP 2647F console, which is fully compatible with the new Series 68C, will be supported at least through 1995.

The HP 2647F was replaced in July as the Series 68 system console by the lower-cost HP Touchscreen II (HP 150 II) personal computer, but still offers some advantages to end users. The HP 2647F provides more screen memory than the Touchscreen II (up to eight virtual pages versus two pages), and in many

console applications will exhibit higher performance. To keep this option available to customers, we will continue to accept orders for the HP 2647F system console until our supply is exhausted.

Since the HP 2647F is no longer on the Corporate Price List, you will have to override the normal order entry procedure. Please order using the following information:

Product	Description	US list and factory base price
HP 2647F	Interactive display terminal	$11,500
Opt. 890	Series 64/68 console	−1,750
One of the following cables:		
Opt. 301	US modem cable	89
Opt. 302	European modem cable	89
Opt. 304	Direct connect RS-232 cable	79
Opt. 306	Direct connect RS-422 cable	79

Sales force 15; product line 61; marketing division 4700; supplying division 4700; purchase agreement discountable; leave check digit blank; TAC orders should be placed with price = PLSADVIS.

All of the available HP 2647Fs are configured as system consoles (no graphics capability), so Option 890 must be specified on the HP 2647F order. If you have any questions about how to order the proper configuration, please contact your order processing coordinator at Computer Systems Division (CSY) or Bob Letsinger, CSY order administration manager.

The supply of HP 2647F system consoles is limited, so if your customers' requirements indicate an HP 2647F console solution, please place your order soon.

OFFICE SYSTEMS

HP office product overhead slide presentation available
Jo Naylor/OPD

The Office Productivity Division (OPD) announces a new overhead slide presentation which covers all the products available today from OPD and future directions. The OPD Product Presentation binder contains 34 overhead slides, hard copies, and script.

This presentation kit offers the same high quality as the Personal Productivity Center (PPC) seminar kit

to ensure a consistent and unified office automation message. It is available now for $150.

To order the OPD presentation kit (P/N OPD6-6001), call Helene Cranstoun, TELNET 125-7617 or 408-973-7617. Or send a message to Helene via HP Desk HP6646/01 or COMSYS 6650. Specify your name, mailing address, telephone number, manager's name, COMSYS code, department/location code or sales office, account or I/O number, and desired shipping method. Your office will be billed for the cost of the kit ($150 for the complete kit) and freight charges.

Printer Sharing System for HP LaserJet printer available
Cathy Lyons/BOI

If you have HP LaserJet printer prospects or customers who need a system sharing solution, there is now an answer. Up to 15 computers (CRTs), of almost any brand or combination of brands, can share HP LaserJet printers, plotters, ThinkJet printers, and existing printers.

"Systemizer Printer Sharing System" from Applied Creative Technology (ACT) allows your customers to share printers and provides flexibility in configuring new and existing equipment. The Systemizer Printer Sharing System is already a great success and has been installed in many major US corporations and universities.

The strategic approach to a competitive situations is: Why buy several lower-quality printers that take up valuable office space, make a lot of noise, and require maintenance and service contracts when you can buy one high-speed, letter-quality HP LaserJet printer?

Here's how it works
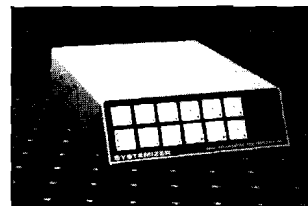
The Systemizer Printer Sharing System is made up of individual control boxes, called Systemizers, that link together using inexpensive "modular" telephone cables. Each computer that accesses the LaserJet printer must be equipped with a Systemizer box (see photo) connected to either the existing parallel or RS-232 serial printer port. No special adapters are required. For a LaserJet to be shared by all the users, it must be connected to one of the Systemizers in the system. Each

Systemizer has a printer connection and can be set for parallel or serial operation. Since all printers will be accessible by all users and each Systemizer can handle parallel or serial operation, the customer has printer placement flexibility. See Figure 1 for an example configuration.

To additional Systemizers
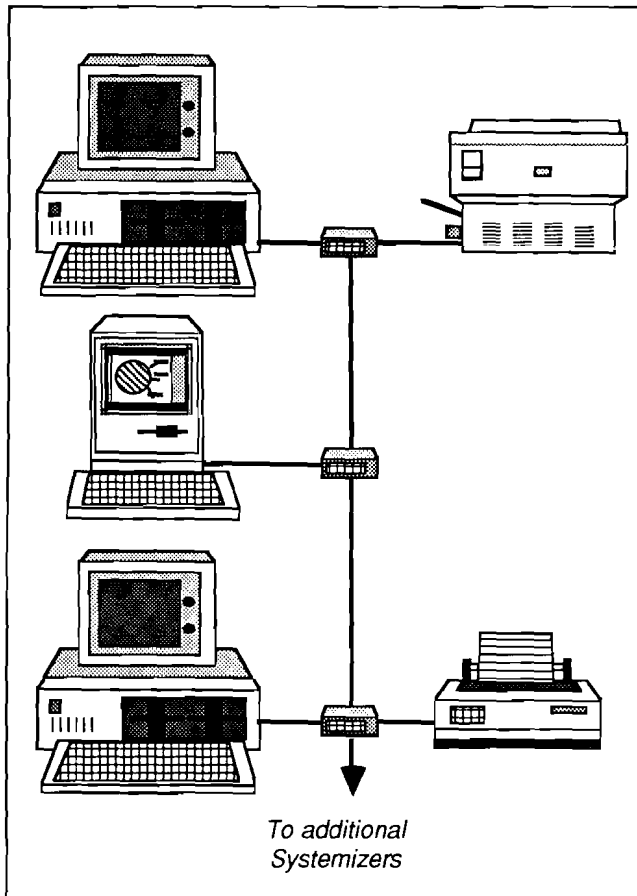
Figure 1

This system offers several benefits to the user:

- The Systemizer connects to the computer's existing printer port. Almost any brand or model computer will work with the system without any alterations.
- Without leaving their workstation, the users select a printer by pressing a button on the front of the Systemizer.
- Each Systemizer has a 64-Kbyte spooler inside so that the computer can continue to send data regardless of the ready status of the printer. The system monitors printer requests and automatically handles the queuing of print jobs.

- No central control unit or printer server is required. If only two computers need to share the printer, then only two Systemizers are required. When a new computer is added, installation is cheap and easy because the "network" cables are merely modified telephone extension cords.
- If the LaserJet printer is heavily used, an optional unit called the "Printer Optimizer" can be incorporated into the printer sharing system, providing up to 1 megabyte of spooling and pushbutton controls to select fonts and format features.

The Systemizer's suggested retail price is $439. For more information, please contact: Applied Creative Technology, 2156 Northwest Highway, Suite 303 Dallas, Texas 75220. Or call 800-433-5373. For calls within Texas or from outside the US call 214-556-2916.

New forward collator for the HP LaserJet printer
Debbie Litle/DMK

HP LaserJet printer users no longer need to arrange documents in their original order. Direct Marketing Division's (DMK) new forward collator will get the
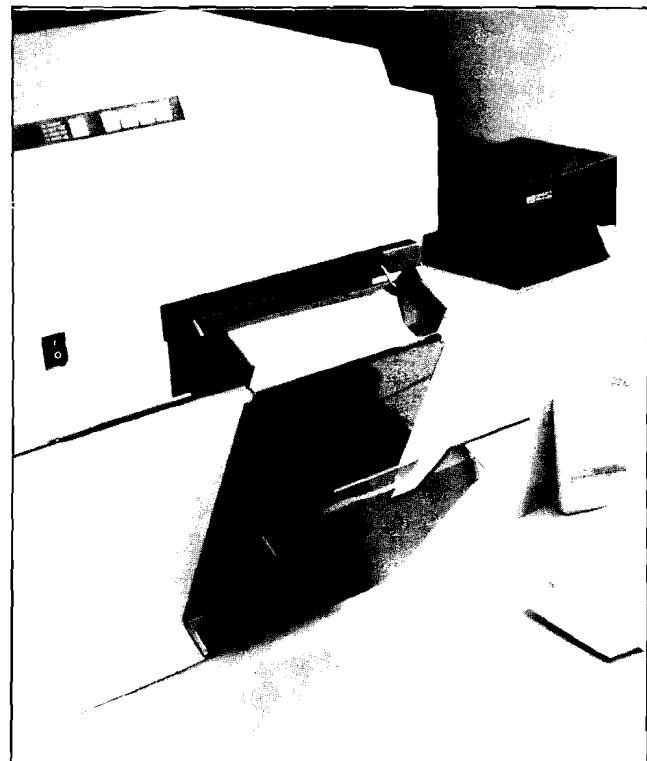
job done. Installation is simple. Just remove the output tray and attach the collator into the slots (where the output tray is normally in place).

Made of durable lightweight plastic, the collator can hold up to 200 pages. To refill the paper tray, the collator conveniently pivots for easy loading.

P/N	Description	US list price
92285F	LaserJet forward collator	$49.95 ea.

For faster service, customers should call DMK's Direct Order phone numbers listed in the Computer Supplies section.

Introducing the HP 2603 letter-quality printer

Duane Schulz/VCD

Introducing a new low-priced, high-performance daisywheel printer — the HP 2603A letter-quality printer, priced at just $1,495 US list. Along with triple-bin sheet and envelope feeder ($845 US list), tractor accessories ($205 US list), the HP 2603A letter-quality printer offers affordable, hands-free printing for your office and administrative customers.
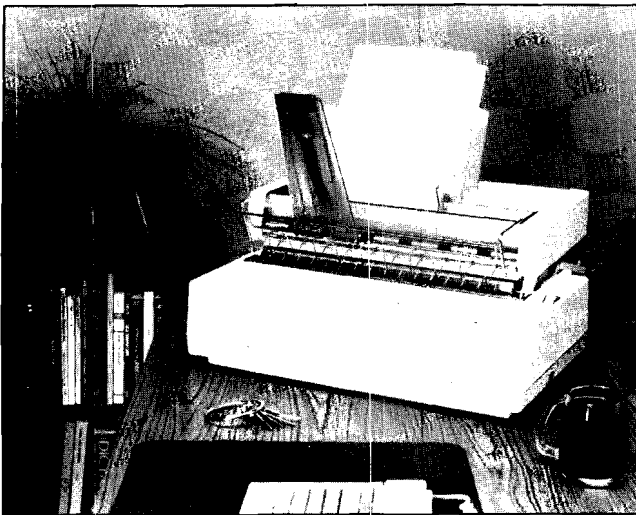
Now you have a "full-service," 48cps, daisywheel printer that satisfies low-cost-of-ownership requirements. The HP 2603A printer's strong capabilities, coupled with its low price, will make it easier for you to sell complete office printing solutions.

New features and greater flexibility

Two of the new features your customers will appreciate are new drop-in print wheels and an easy-to-use front control panel. Forms length, print pitch, and feeder are selected without raising the cover. Single sheets and envelopes can be fed and automatically aligned on the first print line at the touch of a button. In addition to proportional spacing and 10- and 12-pitch, the HP 2603A offers 15-pitch print wheels, suitable for spreadsheet and forms printing, which works well with the printer's ability to print multipart forms.

You'll also find that the noise level is lower. It has been engineered for quieter operation and a sound dampening carpet is included at no extra charge. As a result, the printer can work without a sound cover in most environments, with a sound level of only 58.5 dBA with the sheet feeder installed.

Software compatibility/simplified language support

The HP 2603A works with HP Vectra and Touchscreen personal computers, HP 3000, and the HP 260 computers as well as IBM and IBM-compatible personal computers. Since the HP 2603A uses the Diablo 630 API2 command language, it works with most standard word-processing packages, usually with no modifications.

At introduction, nine typefaces are available in HP Roman8 printwheels. Multilanguage support is offered through "composition printing," a technique that uses a combination of overstrikes and platen motion to construct characters used in international environments. Because of this, a single daisywheel supports many languages. A special "North Atlantic" wheel offers excellent support to customers in Iceland. All consumables are available worldwide from Direct Marketing Division (DMK).

Hands-free printing

Now you can offer your customers a sheet feeder that does the whole job. With the HP 26030E triple-bin sheet and envelope feeder, your customers can automate their correspondence and document printing. Because the sheet feeder has three input bins, two bins for sheet paper of all sizes (from 4 inches to 16.6 inches) and one for envelopes, it produces complete documents and correspondence, including letters requiring a combination of letterhead, bond paper, and envelopes.

The HP 26030E offers the latest in simple and reliable cut-sheet feeding. It uses a gear-driven mechanical

assembly for paper and envelope selection. It's light-weight, user installable, non electrical, and accommodates a range of paper and envelope sizes in either portrait or landscape mode.

Product	Description	US list price
HP 2603A	Letter-quality printer (RS-232-C standard)	$1,495
HP 2603A	Bidirectional forms tractors	205
HP 26030E	Triple-bin sheet feeder	845

Also in this issue

DISTRIBUTION SYSTEMS

Also in this issue

VERTICAL MARKETS

Advantage '85/'86 seminar pilot program kick-off

Sheri Stafford/IS&N

Advantage '85/'86 is a new seminar program for commercial products that will be implemented in the field in November.

Earlier this year we contracted an agency to conduct a telemarketing survey with HP field management, internal managers, and attendees of past Productivity and Answers programs to determine what type of program would meet everyone's needs. Since the program belongs to the field, we analyzed the information and developed the Advantage program. This program was designed to generate highly-qualified attendees through a series of vertically-oriented seminars at no cost to the attendee. The program was presented to Information Systems Group's (ISG) regional market development managers, and their commitment was received.

Information Systems and Networks (IS&N) Marcom will develop the seminars and trial each one in a one-city pilot program with field involvement. From this test seminar we will develop a seminar kit that you can implement within your area. Availability of the final kit, as well as cost and logistics, are forthcoming.

For each pilot seminar, IS&N Marcom will purchase the appropriate mailing lists; design, print, and mail invitations; conduct telemarketing, provide an 800 number (registration), and design, print, and mail a response package.

Our first Advantage '85 pilot seminar is Wholesale Distribution which is scheduled for November 14, in White Plains, New York.

The keynote speaker will be Gordon Graham, a well-known expert on inventory management and author of *Automated Inventory Management for the Distributors*.

Three additional presentations will be given:

- "Computerized Profit Management Tools," presented by Don Kirkpatrick, marketing support manager/HP Information Resources Operation.
- "Selecting the Right Distribution Management Systems," presented by Mary Lowden, director of sales and marketing for Technalysis Corp.
- "Implementation — The Keys to Success," presented by Steve Dennis, director of marketing for Smith, Dennis and Gaylord.

The inputs we receive from the pilot seminar will help us put together a complete seminar kit which will contain a brochure/invitation (camera-ready art), registration software and configuration requirements, response package (camera-ready art), lists of recommended mail lists that the field can purchase, and timelines and checklists.

The next pilot seminar will be Financial Services, tentatively scheduled for February, 1986. If you have any questions regarding the Advantage Program, please call Sheri Stafford at 408-865-6583.

PORTABLE

Portable PLUS video interface now available

Jim Martin/PCD

Portable computer users have demonstrated considerable interest in the ability to connect a portable computer to a video monitor for use as an alternate display when the computer is being used at a desk as well as for classroom demonstrations, training, and for sales and business presentations.

On November 1 the Portable PLUS Video Interface was introduced. This product consists of the interface module, a video-out replacement panel (replaces the Portable PLUS battery door), interface cables, and a battery recharger. To accommodate the Video Interface, the battery door of the Portable PLUS must be replaced by the Video Out receptacle panel. This is easily accomplished by the user. Once done, the Video Interface functions as a stand-alone companion to your monitor, connected to the Portable PLUS by an interface cable, and powered by a standard Portable PLUS recharger.

The Video Interface has been designed to support the most popular low cost monitors. As such, it supports standard monochrome composite video monitors (the video input of the monitor will have an RCA phono jack that accepts a single pin-connector coaxial cable). Examples of supported monitors include NEC monochrome monitors, HP 82912A, HP 82913A, AMDEK 300a, Zenith ZVM, Leading Edge, or any other monitor compatible with an HP-86 or Apple II. Monitors not supported include the HP 150 (no video input), Vectra (high resolution), and standard IBM (not composite video), monitors.

The Video Interface is available in two configurations: P/N 82985A, a US version with US recharger for $425, and P/N 82985AK, an international version with no recharger for $405. Also available separately, is the video-out receptacle panel, P/N 82985-60006, available December 1 from Direct Marketing Division (DMK).

YTERM software links Portable PLUS to IBM mainframes

David Latimer/PCD

US and Canada only

YTERM, a data communications software package capable of linking the HP Portable PLUS to IBM mainframes, is now available. Originally developed by Yale University, YTERM enables the Portable PLUS to communicate and exchange files with IBM mainframes, as well as to run full-screen applications designed for IBM 3278 terminals. At a US list price of only $95, YTERM provides an economical means of gaining access to mainframe-based applications and data.

YTERM is intended for use with one of three IBM protocol converters: 1) IBM Series/1 running the Yale ASCII Terminal Communications System, 2) IBM 4994 running the 4994/Host Loaded Yale ASCII Communications System Program Offering, and 3) IBM 7171 ASCII Device Attachment Control Unit.

These protocol converters enable the Portable PLUS running YTERM to emulate an IBM 3278 Display Station, and attached printers to emulate an IBM 3284 printer.

YTERM is capable of connecting to the host mainframe via the asynchronous communications ports of the Portable PLUS (modem or RS-232-C direct connect) at 300 to 9600 bits per second. Both the internal modem (HP 82983A) and external modems are supported.

In addition to IBM 3278 emulation, YTERM provides comprehensive error-correcting file transfer services for both ASCII and binary files. Use of these services requires the corresponding host command PCTRANS which is available from the Yale University Computer Center for a nominal fee for the IBM VM/CMS and MVS/TSO, as well as the DEC VAX/VMS, operating environments.

YTERM includes five sample keyboard definition tables including DEC VT100, Datamedia 1520, and three others suitable for use with the IBM protocol converters. In addition, a utility is provided to enable users to create custom keyboard definitions.

YTERM is shipped on a 3½-inch diskette along with user documentation and license agreement. YTERM can be stored in the electronic disc of the Portable PLUS, requiring less than 32 Kbytes for storage.

Personal Computers

Ordering information

Product	Description	US list price
HP 82867K Opt. 630	YTERM for the Portable PLUS	$95

New HP-41 Math/Stat application pac

Pete Lawson/HCCO

For North America only

Handheld Computer and Calculator Operation (HCCO) has combined two of the most popular HP-41 application pacs into one module. The new Math/Stat Pac combines all the programs found in the Mathematics and Statistics Pacs in one 12-Kbyte module. And because production costs are lower, the new module makes owning those programs even more economical.

The Math/Stat Pac is priced at $45, a considerable savings over the $70 combined cost for the old application pacs.

The pac includes two manuals — one for math programs and one for statistics programs. Keyboard overlays for numerical integration and coordinate transformation programs are also included.

The Math/Stat Pac is currently available in the US only. Order it through the Direct Marketing Division (DMK).

P/N	Description	US list price
00041-15049	Math/Stat Pac	$45

New selling guides for Series 10 and HP-41 calculators

Pete Lawson/HCCO

Two new retail selling guides are now available for HP calculators. These attractive, easy-to-read guides are written with the sales clerk in mind. They include information on potential customers and key selling points of Series 10 and HP-41 calculators.

The selling guides also include useful keystroke instructions for demonstrating the calculators, and question-and-answer sections to help sales people respond to customers' questions.

Please follow your local internal ordering procedures when ordering these products. There is no charge for either selling guide.

P/N	Description
5954-1288D	Series 10 selling guide
5954-1289D	HP-41 selling guide

Also in this issue

DESKTOP

HP Vectra PC training materials now available

Bill Mitchell/PCG

The Vectra PC training materials are now available from Personal Computer Group (PCG) Training. The following items are available: overhead transparencies, instructor notebook (laser printed copy of slides including instructor notes for each), student notebook (laser printed copy of slides including a space for the students to take notes), and workbook (laser printed hands-on tutorial).

All of these items are available free of charge, except the overhead transparencies ($65/set). To order the overhead transparencies, have your district manager send an HP Desk message to Sue Golden/HP6646/02 with the following information: 1) location code to be charged, 2) account code to be charged, and 3) name/ address of person who is to receive material. If you are not on HP Desk, you can COMSYS the information to Sue Golden/HP4701.

To order the other three items, just send an HP Desk message or COMSYS to Sue Golden. (The district manager need not send in the request and we don't need your location/account code for the free items.) Please be sure to supply your full mailing address, or your request will take longer to process.

For those of you who conduct training, we can COMSYS you a master file that can be printed on an HP 2680 laser printer (will not work properly with the HP 2688 laser printer). This will allow you to print as many copies as you wish, whenever you want them. To get the COMSYS file, just contact Sue Golden.

We hope that this new training material will assist you in training on the HP Vectra PC.

HP IRMA provides IBM 3278/79 terminal emulation for HP Vectra PC

Steve Martin/CNO

Colorado Networks Operation (CNO) is pleased to announce HP IRMA, providing IBM 3278/79 terminal emulation and file transfer capability for the HP Vectra PC. HP IRMA is an HP-distributed and supported solution based on the popular IRMA 3278/79 terminal emulator from DCA (Digital Communications Associates).

With the HP IRMA Terminal Emulator and the Vectra PC, your customer is not only getting a powerful personal computer, but also a terminal to the IBM mainframe. It's truly the best of both worlds — personal computer versatility and mainframe power in a single package. The HP IRMA/Vectra PC combination is an all-HP solution, with HP quality in sales, service, and support.

The HP IRMA/Vectra PC combination will allow you to sell into many accounts that were previously unapproachable, accounts that have been IBM only. As a part of the AT-Attack program you get the power and compatibility of the Vectra PC and peripherals, plus the power and recognition of a leading name in PC-to-mainframe communications — a truly winning combination.

With HP IRMA, your customer gets the following benefits:

- Personal computing power and IBM 3278 and 3279 terminal emulation functionality, all in one package.
- On-line access to common IBM databases and software for timely information.
- Mainframe access when it's convenient, no waiting for an available terminal.
- The ability to transfer text or binary files between Vectra, Touchscreen, or IBM personal computers through the host computer.

Specific features of HP IRMA include: IBM 3278 (monochrome) Model 2, 3, and 4 support, IBM 3279 (color) Model S2B and S3B support; true reproduction of IBM 3278/79 status messages; support of a variety of IBM keyboards; and file transfer (uploading and downloading) of text and binary files in VM/ CMS or MVS/TSO operating environments.

Personal Computers

Watch your mail for more information on HP IRMA including a sales guide, data sheet (P/N 5953-9589), and direct mail flyer (P/N 5953-9588).

HP IRMA is available through the direct and dealer channels. It can be ordered immediately. Products will be in stock at Personal Computer Distribution Operation (PCDO) by December 20.

HP IRMA (P/N 50920A) sells for $1,195 US list price.

Symphony for the HP Vectra PC
Kathryn MacMurray/PSD

In the last issue of *Computer News,* we introduced Symphony® for the HP Touchscreen personal computer. In this issue, we are pleased to announce that Symphony for the HP Vectra PC will also be available through HP.

Symphony, a versatile business tool for managers and professionals, integrates five powerful functions — spreadsheet, graphics, word processing, database management, and communications. Symphony offers advantages for novice users, like a comprehensive, on-line tutorial, and complete help screens, as well as capabilities for advanced users, such as the Symphony Command Language, window management, and powerful macro abilities.

For both the HP Vectra and Touchscreen PCs, HP is offering Lotus' second version of Symphony, Release 1.1. This latest version of Symphony incorporates many powerful new features, such as:

- A more efficient memory management system, so that you can build larger, more complex spreadsheets.
- An improved installation procedure that is designed to get you up and running quickly
- Intel 8087/80287 co-processor support for faster mathematical calculations
- The capability to address up to 4 Mbytes of random access memory (RAM)
- A new electronic tutorial designed to let users practice while they learn
- All new documentation that takes a step-by-step approach
- A built-in Macro Library Manager Add-In for storing commonly used macros with any Symphony file.

For more information, you may order Symphony for the HP Vectra PC data sheet (P/N 5954-2573D). Also, the October issue of the *Series 100 Communicator* (Issue #13) has an extensive article on Symphony's features and benefits, and differences with 1-2-3®. Please note, however, that Symphony for the HP Vectra PC will not utilize the proprietary HP Touch feature.

Symphony supports a wide variety of printers, plotters, modems, and monitors. However, your customers must tell Symphony which devices they would like to use with Symphony by following the Install procedure. The Install and Utility disc, included with Symphony, will lead them through this process step by step, giving lists of peripherals and monitors to choose from. If your customers are using Symphony and an HP Vectra PC with a color monitor, they should select the IBM color card and color monitor choice. This selection will allow them to view Symphony in color, but without text and graphics on the screen together. If your customers have a Vectra PC and a black-and-white monitor, they should also select the IBM color card and color monitor choice, which will enable them to view text and graphics on the screen simultaneously.

Symphony for the HP Vectra requires 384 Kbytes of RAM.

Ordering information

Product	Description	US list price
68339F	Symphony for the HP Vectra PC	$695

Symphony® and 1-2-3® are US registered trademarks of Lotus Development Corp.

MultiMate for the HP Vectra PC

Kathy Weiler/PSD

HP is proud to offer MultiMate® and MultiMate Advantage™ word processing software for the HP Vectra PC.

MultiMate Professional Word Processor has been named the primary choice for office word processing by some of the largest businesses in the US, according to a copyrighted study conducted by Software Access International, Inc. The study found that MultiMate holds a commanding lead over its competitors in both the number of current and planned installations.

MultiMate is currently in use at 41 percent of the companies interviewed by Software Access. Fourteen percent of the companies included in the survey use MultiMate exclusively for their word processing needs. MultiMate also leads the industry in the number of planned word processing installations at major corporations. Twenty-three percent of firms responding to the Software Access survey reported plans to purchase MultiMate for their companies.

HP's MultiMate offering includes MultiMate 3.3 Series product as well as the recently introduced MultiMate Advantage.

MultiMate 3.3 Series is the culmination of extensive product development by MultiMate International beginning with the original MultiMate Professional Word Processor three years ago. Targeted to the corporate user desiring the power of a dedicated word processor on a 256-Kbyte microcomputer, MultiMate 3.3 Series combines Wang-like operation with personal computer flexibility.

- Menu-driven, self-prompting system includes 130 text-editing features and document-handling functions.

- Merge utility allows use of lists created by almost any database or other software.

- 80,000-word Merriam-Webster spelling checker.

- Powerful file conversion utilities exchange data with databases and other software. DCA and WPS conversions available for document interchange between MultiMate and IBM or Wang dedicated word processors and computers.

MultiMate Advantage is aimed at corporations with extensive word processing requirements. It combines the features and ease of operation of the Wang dedicated word processor with the flexibility of the personal computer and the ability to complement IBM architecture. MultiMate Advantage is designed for the microcomputer configuration likely to be found in the corporate environment, an HP Vectra PC with a minimum of 32 Kbytes of RAM and a hard disc. Among its advanced features are automatic footnoting, forms generation and fill-in, table of contents generation and section numbering, line and box drawing for charts and tables, and includes MultiMate On-File information manager. MultiMate Advantage also includes more than 150 other text editing features and document handling functions, including all features found in MultiMate 3.3 Series.

P/N	Description	US list price
68338F	MultiMate for the Vectra PC	$495
68343F	MultiMate Advantage for the Vectra PC	595

MultiMate® is a US registered trademark of Multimate International Corporation.

MultiMate Advantage™ is a US trademark of Multimate International Corporation.

Lotus 1-2-3 for the HP Vectra PC

Kathryn MacMurray/PSD

Recently, Lotus Development Corporation began shipping a new version of 1-2-3® for the IBM PC XT, PC AT, and IBM PC compatibles. HP is now offering this new product for use with the recently-announced HP Vectra PC.

The new version of 1-2-3, Release 2.0, hosts a number of improvements over the original version of 1-2-3, Release 1A. One of the most beneficial changes is its expanded spreadsheet, which is now 8,192 rows by 256 columns. A more efficient memory management scheme allows users to build larger spreadsheets. This program supports the Intel Above Board (or compatible), allowing users to access up to 4 Mbytes of RAM, and the Intel 80287 co-processor, which enables 1-2-3 to perform mathematical calculations much more rapidly. In addition, 1-2-3 now has the powerful macro capabilities that are included with Symphony® from Lotus.

Release 2.0 of 1-2-3 has 39 new @ functions. Its date and time functions will return the date and time by the hour, minute, and even second. Financial functions calculate a compounding term (@CTERM), a

double-declining balance (@DDB), interest rates (@RATE), straight line depreciation (@SLN), sum of the years digits depreciation (@SYD), and the period of an investment (@TERM). Several new special functions and string functions have also been added.

An exciting new feature in 1-2-3 is data regression. This capability allows users to compute a regression line for a series of observations, and if desired, predict the value of the next data point in the series. 1-2-3 determines the rate of change between the various data points by calcuating the slope and the constant of a line with the R-squared method. It also determines the variance between an actual data point and its estimate by calculating the standard error and the degrees of freedom. This information can then be used for further analysis on the spreadsheet or for charting various types of graphs.

The original 1-2-3 menu still appears, for the most part, with the new version of 1-2-3. Although some commands have been added to the menu, Lotus has attempted to preserve as much of the original menu as possible. 1-2-3 now has an easier install procedure, which allows for single drivers to be added to the driver library and support of new printers and plotters and multiple driver sets. The tutorial included with 1-2-3 is now a book, and provides for a self-paced approach to learning about 1-2-3's features and functions. Context-sensitive help screens have also been added so that users can gain only the relevant information that they need.

Users who have been working with Release 1A of 1-2-3 will be able to use data files with Release 2.0 of 1-2-3. The new 1-2-3 will read .WKS files, but when it saves files, it will turn them into .WK1 files. To convert a .WK1 file back to a .WKS file, you simply use the Translate utility that is included with the new 1-2-3. The new 1-2-3 will also read Symphony (Release 1.01 and 1.1), Jazz™, dBASE II™, and DIF files. Again, you can change these files back into the desired format with the Translate utility disc.

Ordering information

Product number	Description	US list price
68340F	Symphony for the HP Vectra PC	$495

Lotus®, 1-2-3® and Symphony® are US registered trademarks of Lotus Development Corp.
Jazz™ is a US trademark of Lotus Development Corp.
dBASE II™ is a US trademark of Ashton-Tate.

WordStar and WordStar 2000 for the HP Vectra PC
Marc Lowe/PSD

HP's direct sales customers can now purchase the industry leading WordStar®, WordStar® Professional™, WordStar® 2000, and WordStar® 20000 Plus products directly from Hewlett-Packard. The packages operate on the HP Vectra PC, as well as IBM PC/XT/AT.

WordStar, the best known word processor in the world, is an old favorite which has become the standard word processor for today's business. HP is shipping the latest version of WordStar, Version 3.31. Version 3.31 includes a built-in tutorial, improved documentation, an even friendlier installation program, and user-definable function keys. WordStar offers simultaneous editing and printing, flexible formatting, automatic search and replace, word wrap, and right-margin justification shown on screen. Special print effects include: boldface, underlining, strikeout, superscripts, and subscripts.

WordStar Professional for the Vectra PC, just as on the Touchscreen PC, includes WordStar with three additional productivity programs: CorrectStar®, MailMerge®, and StarIndex®. WordStar Professional is ideal for customers who require more than word processing alone.

All new from MicroPro International is the WordStar 2000 family of word processors. WordStar 2000, a revolutionary advance in word processing software, offers advanced features with a new, easy-to-use human interface. Simple menus and easy-to-remember mnemonic commands help the user locate and learn needed commands quickly. Help is context sensitive and available every step of the way.

WordStar 2000's advanced features include: full HP LaserJet printer support, windows, format sheets, keystroke glossary, five-function math option, typewriter mode, onscreen boldfacing and underlining, and automatic footnoting. In addition, WordStar 2000 includes a built-in spelling checker that corrects as you edit and a mail-merge program that allows for conditional printing of mailing list and form letters. WordStar document files can be translated easily to WordStar 2000 format using a conversion utility included with the package.

WordStar 2000 Plus provides all of WordStar 2000's advanced features along with telecommunications capability, an advanced mailing list management
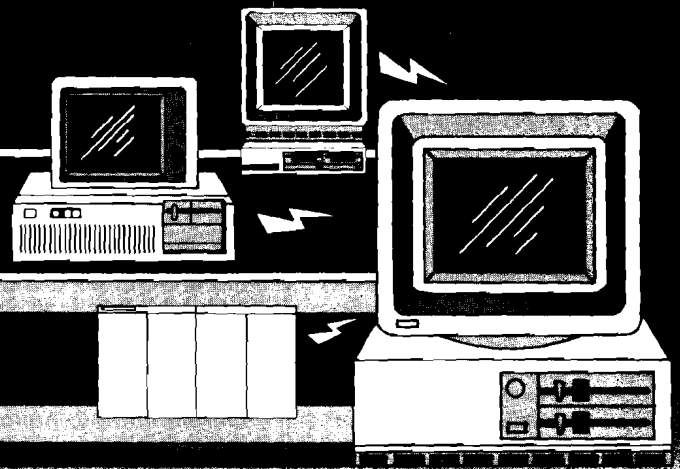
AdvanceLink 2392 – The Superior Data Communication Solution
For Your Customers' HP Vectra PCs, and IBM PC/XT/ATs

Sales Guide

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What is AdvanceLink 2392?

AdvanceLink 2392 is powerful, easy-to-use
communications software for your HP Vectra PC or
IBM personal computer. AdvanceLink 2392 provides
the solution your customers need to integrate their PC
as part of an overall office solution.

AdvanceLink 2392 includes the features your
customers need most:

- HP 2392 block mode terminal capabilities*
- VT100® terminal capabilities*
- File transfer (using Monitor or XMODEM for
  reliability)
- Command files for automating and simplifying
  communications

– all this, along with the advantages of:

- AdvanceNet compatibility – works with the
  OfficeShare LAN
- AdvanceLink and DSN/Link compatibility
- Superior terminal display, keyboard use, and
  performance

Where to Sell

Most of your accounts with Vectra or IBM personal
computers will need the superior capabilities found in
AdvanceLink 2392. Some facts:

- A large majority of Touchscreen PCs are connected
  to HP 3000s or other computers – half of these PCs
  also use AdvanceLink due to its integrated file
  transfer and command file capabilities

- Industry figures show that half of all general-
  purpose PCs are used to communicate with
  mainframes and minis – and the trend is UP

Unlike the Touchscreen PC, Vectra and IBM personal
computers do NOT include terminal capabilities. To
talk to an HP 3000 or other computer, a Vectra PC
needs some kind of terminal emulation software.
Many accounts will want to include AdvanceLink 2392
on many of their Vectra PCs. You should encourage
them to purchase it for other PCs that they already
own. AdvanceLink 2392 is the best software for HP
major accounts that want to standardize on a single
solution for their Vectra and IBM PCs.

Sell AdvanceLink 2392 in the following situations:

Situation:
Customer uses block mode terminals (like the
HP 2392, 2622, or Touchscreen) to connect to an
HP 3000. Probably a heavy user of data entry, data
inquiry, and program development applications. Use of
HPDESKMANAGER or internally developed
VPLUS/3000-based applications is also likely.

Answer:
AdvanceLink 2392 lets the customer use their PC as a
multi-purpose workstation, by giving their PC
HP 3000 terminal capabilities. This means that the
customer will not have to buy both a PC and a
terminal. In fact, the availability of AdvanceLink 2392
may act as an inducement for some customers to
purchase PCs rather than terminals – meaning
higher sales volume – since they would be able to gain

the functionality of a PC, and still get the terminal they need.

Situation:
Customer wants to hook PCs to an HP 3000 for gathering or distributing data files (with sales figures, bulletins from headquarters, etc). May wish to communicate day or night, and with the PCs running unattended.

Answer:
AdvanceLink 2392 is the perfect solution with its file transfer and command file capabilities.

Situation:
Transfer files or act as a terminal over the OfficeShare LAN without additional point-to-point connections.

Answer:
AdvanceLink 2392 is the only product available that is AdvanceNet-compatible, and that can do this. This feature will be important to accounts that anticipate installing a LAN. AdvanceLink 2392 will also support point-to-point AdvanceNet connections, so that customers without OfficeShare will still be able to benefit from the increasing variety of AdvanceNet-compatible products. AdvanceNet compatibility will be an important selling feature to accounts that want to stay compatible and consistent with HP's datacomm strategy.

Other selling opportunities include customers that need ANSI-speaking (DEC® VT100®-type) terminals, or easy access to public information services. In fact, AdvanceLink 2392 includes several command files to get customers going quickly with popular services like CompuServe™, Dow Jones®, and The Source℠.

Decision Makers

The most likely decision maker for data communications products may be found in a large company's MIS department. To these people, stress AdvanceLink 2392's:

- AdvanceNet compatibility — works with the OfficeShare LAN, keeps you in step with HP's strategic datacomm offerings — no one else can offer this!
- Powerful, extensive command language (compatible with previous versions of AdvanceLink and DSN/Link)

- Tens of thousands of satisfied AdvanceLink customers, including extensive use within HP
- Rigorous testing and quality assurance
- Excellent HP support

Competition

AdvanceLink 2392's primary competitors are other terminal emulation software packages. For most HP accounts, the key need will be integration with HP 3000s and other software solutions. Most of the "big-name" datacomm products can be safely ruled out as competition here: these include Crosstalk, Smartcom, PFS:Access, etc. The main reasons here are lack of HP terminal capabilities, and lack of reliable file transfer to the HP 3000.

AdvanceLink 2392's main competition comes from Walker Richer & Quinn's product PC2622® (soon to be marketed as part of their Reflection Series). WRQ is a small company located in Seattle, Washington, with a number of data communications products. PC2622 is available for the IBM PC, Touchscreen PC, and the Portable Plus. AdvanceLink 2392 has many advantages when compared to PC2622:

Advantages of AdvanceLink 2392 over PC 2622

= KEY advantages

Superior terminal emulator

- Higher display throughput — recent tests showed AdvanceLink 2392 to be over TWICE as fast — 8100 baud vs. 3500 baud at 9600 baud line speed**
- Produces a 26-line display rather than 25 lines for a truer emulation — you get the full 24 lines of screen display plus 2 lines of softkeys with AdvanceLink 2392
- Terminal features are built on the code of the time-tested HP 2392 terminal

Superior integration with HP solutions

- AdvanceNet-compatible — important advantage! — PC2622 will not work over the OfficeShare LAN as part of HP's datacomm network — and you can be sure that future AdvanceNet developments will appear in HP's datacomm products first
- Important part of Personal Productivity Center — products like HP Word/150 and AdvanceWrite

are distributed with AdvanceLink command files to make it easier to tie PC-based solutions to the HP 3000 — HP will be concentrating on smooth integration between PCs and hosts more and more — look for AdvanceLink 2392 to be a central part of our integration
☆ Compatible with command files developed for AdvanceLink and DSN/Link for the Touchscreen and IBM PC

Superior ease of use

☆ Better use of Vectra keyboard (fewer multiple keystroke functions)

Includes function key overlay for commonly used functions

Simplified file transfer interface lets you learn just one way of transferring files, whether using an HP protocol, XMODEM, or exchanging text files

Can create and edit command files within AdvanceLink 2392, rather than with a separate editor, as with PC2622

Easy to save command files so they can be installed in PAM

AdvanceLink 2392 is NOT copy-protected; PC2622 is

And More...

High quality and reliability — many of the datacomm and terminal functions have been time-tested for years in previous AdvanceLink products and the HP 2392 terminal

Tens of thousands of AdvanceLink and DSN/Link customers; used extensively within HP, too

Extensive, well-trained support organization stands behind AdvanceLink 2392 and its use as part of an overall system solution.

A solid value — AdvanceLink 2392 has many advantages over PC2622, but is priced the same at $295

Overcoming Common Objections

Objection: PC2622 allows dozens of pages of display memory; AdvanceLink 2392 allows up to 10.

Answer: The main use of such large amounts of display memory is if you do not support good methods of file transfer, so that you can log data coming in to your screen. Question whether the customer needs a large display memory and what they are using it for. Frequently, there are better solutions. Most of our customers have found the four to eight pages provided with most of our hardware products to be sufficient for their needs.

Objection: PC2622 supports faster file transfers.

Answer: Recent testing here at PSD has found PC2622 to be approximately 15% faster than AdvanceLink 2392 in transferring binary files on Vectra**. ASCII files are also transferred about 15% faster, though the results for ASCII files can vary more widely. Your customers probably transfer binary files most often (spreadsheets, documents, etc.).

Stress the features which PC2622 can't match, like AdvanceNet compatibility. Remember that our display throughput is much higher than PC2622. And we are working to improve our file transfer speed.

Objection: PC2622 is on the Portable Plus, but AdvanceLink 2392 isn't.

Answer: HP recognizes the advantages to our customers of having one product running on all our PCs. We are currently investigating moving AdvanceLink 2392 onto the Portable Plus.

You may occasionally get questions about other terminal emulation software packages such as VDTE (Inner Loop Software) or PC2624B (a combination hardware/software product at twice the price of AdvanceLink 2392, from Direct, Inc.). The advantages of AdvanceLink 2392 over PC2622 will hold true here, as well: HP provides a superior terminal emulation package with excellent integration with other HP solutions; strong performance; ease of use; and strong support.

Ordering Information

AdvanceLink 2392 is currently undergoing quality assurance testing; customer shipments will begin by the week of January 20, 1986. Placing your order now will help ensure early availability for your customers of this very popular product. For customers who have our current AdvanceLink/IBM PC product (with character mode, rather than block mode terminal emulation), an upgrade to AdvanceLink 2392 will be available from Direct Marketing Division (DMK) at a reduced price.

AdvanceLink 2392	#68333F	$295
Upgrade from AdvanceLink/IBM PC to AdvanceLink 2392	#68333-65001	$125
AdvanceLink for the Touchscreen PC	#45431A	$295

Data sheets for AdvanceLink 2392 are available from the Literature Distribution Center in Palo Alto or Corvallis, part #5954-2567.

Your customer may also be interested in HP communications cards, cables, and modems, including:

Serial/Parallel Interface Card	#24540A	$150
Dual RS-232/422 Interface Card	#24541A	$195

Check the Vectra Accessory Guide for complete information.

Questions and Answers

Q: Does AdvanceLink 2392 support graphics?

A: No. AdvanceLink 2392 provides block mode alphanumeric terminal features. While we are investigating the technical feasibility of providing graphics emulation and listening for customer inputs, at this time we feel that the high performance graphics desired by our customers are best provided by one of our graphics terminals, or the Touchscreen.

Q: Is it true that WRQ offers a terminal emulator with graphics capabilities?

A: Yes. Check with your customers to learn their expectations of this type of product. Our experience indicates that customer expectations for graphics are best fulfilled by PC-based software, or graphics hardware terminals. Also, make sure your customers know that we do not support WRQ's software. A third party product may not be in the best long-term interest of the account.

Q: If I can use my Vectra as a terminal with AdvanceLink 2392, why would I ever want to buy a Touchscreen PC?

A: The Touchscreen PC, with over 2200 software solutions available worldwide, excels as a lower-cost, lower-performance workstation when compared to HP's Vectra PC. Additionally, it provides built-in graphics terminal capabilities and can act as an HP Word terminal, features not included in AdvanceLink 2392 on Vectra.

Q: What are the differences between AdvanceLink 2392, HP Access and HP Message?

A: AdvanceLink 2392 combines block mode terminal emulation, general purpose file transfer, and comand file capabilities for automating and simplifying communications. HP Access is a query and translation tool used for extracting information from HP 3000 and PC-based databases: results may be used by a variety of PC databases and applications. HP Message provides an easy-to-use interface to HPDESKMANAGER's electronic mail capabilities on your PC. HP Message does not have terminal emulation or command file capabilities, and can only be used with HPDESKMANAGER.

* Terminal emulators do not support smooth scrolling, double-high characters, double-wide characters, or 132-column mode. Half-bright display enhancement is substituted for bold, and there is no reverse screen mode. VT100 capability is provided through ANSI specification X3.64.

** Performance testing was done using a Vectra PC with a 9600 baud direct connection to an HP 3000 Series 44 with no other users. A preliminary version of AdvanceLink 2392 was used, along with PC2622 version 3.14. A variety of sizes and types of ASCII and binary files were used in the tests. Results presented here should be used for rough comparison purposes only. Precise results may differ depending on machine load, and files used.

system, and automated indexing/table of contents generation. WordStar 2000 Plus is MicroPro's most complete and elegant word processor.

HP ordering information

P/N	Description	US list price
68341F	WordStar 2000	$495
68342F	WordStar 2000 Plus	595
68345F	WordStar	350
68346F	WordStar Professional	495

WordStar®, WordStar® Professional™, WordStar® 2000, WordStar® 2000 Plus, Correct Star®, MailMerge®, and StarIndex® are US registered trademarks of MicroPro International Corporation.

The difference between WordStar and WordStar 2000

Marc Lowe/PSD

Two questions often raised about MicroPro's word processors are: What are the differences between WordStar® and WordStar® 2000? and who are the products' intended users or target customers?

What's the difference?

In answer to the first question, WordStar and WordStar 2000 are two distinctly different approaches to word processing. To use automobiles as an analogy, WordStar can be compared to a vintage sports car — classic, efficient, responsive, no frills performance. WordStar 2000, on the other hand, can be thought of as a high-performance, luxury touring car — elegant, easy to drive, and packed with every accessory and feature available.

The real differences between the two product families can be boiled down to two areas: user interface and features. WordStar uses basically the same control character interface that it has used since its inception over five years ago. The interface is more difficult to learn, but once mastered is extremely fast and efficient. All commands can be accessed from the main keyboard.

WordStar 2000 buffers the user from control character commands by utilizing multiple layers of intermediate-level menu and mnemonic commands (commands which phonetically relate to the actual command name; for instance "P" invokes the print command). WordStar 2000's user interface, therefore, is less imposing than the WordStar interface.

From a features standpoint, WordStar offers everything most users would ever need for most word processing jobs. WordStar 2000, however, offers the user virtually every feature imaginable. WordStar 2000's added editing features include: recovery of accidentally deleted text, automatic text reformatting, proportional spacing, and on-screen display of printer enhancements. Other special features include windowing capability, format sheets, keystroke glossary (macros), arithmetic functions, sorting, and automatic footnoting. WordStar 2000 offers full support of the HP LaserJet printer.

Who's the target customer?

The choice of what word processor to use is either a matter of individual preference or governed by standards set within the user's work group. In either case, the following WordStar and WordStar 2000 target user profiles can help you guide your customers towards the MicroPro word processor which can best satisfy their needs.

WordStar target user profile

- Works with people who already know and use WordStar.
- Needs a word processor for writing and programming.
- Will use word processing up to several hours a day.
- Writes a lot and thinks at the keyboard.
- Is a fast touch typist.
- Thinks learning about computers and software is fun.

WordStar users requiring a spelling checker, automated index and table of contents generation, and mail-merge capability should choose WordStar Professional which includes these three added functions.

WordStar 2000 target user profile

- Wants the most extensive features available.
- Has to learn software at work during business hours.
- Wants the best output from a letter-quality printer or HP LaserJet printer.
- Is new to word processing, but will have major projects to do.
- Word processing projects include proposals, formal reports (often with footnotes), specially formatted documents, and documents with tables and columns of numeric data.

WordStar 2000 users requiring capabilities beyond word processing should select WordStar 2000 Plus which includes mailing list management and a data communications module. Both WordStar and WordStar 2000 include a spelling checker.

HP order information

P/N	Description	US list price
68341F	WordStar 2000	$495
68342F	WordStar 2000 Plus	595
68345F	WordStar	350
68346F	WordStar Professional	495

WordStar® and WordStar® 2000 are US registered trademarks of MicroPro International Corporation.

High-capacity/high-performance 40-Mbyte hard disc arrives

Barbara Bennett-Brown/GLD

HP's new line of 40-Mbyte Winchester hard discs are now shipping for both business and technical systems. The 40-Mbyte family offers three different solutions for today's applications — an external hard disc with 3½-inch microfloppy for the HP Touchscreen II and HP 9000 Series 200/300 systems; an external-hard-disc-only model for the expansion of the HP Vectra PC, Series 200/300, IBM PC, and IBM-compatible personal computers; and the internal version designed especially for the new Vectra PC.

Add sales dollars with external 40-Mbyte hard discs

When your customer needs lots of storage space, there are four key reasons for buying a 40-Mbyte hard disc:

- Jumbo capacity for accounting systems, CAD/CAM workstations, database management, LAN server, and ideal for UNIX™ on the HP 9000 Series 200/300 systems.
- Fast. Its 40-millisecond access time gets you to your data faster to meet high performance needs.
- Volume partitioning is important for Series 200/300 users to be able to install several different operating systems (such as Pascal, HP-UX, and BASIC) on the same hard disc. For these systems, you can partition the 40 Mbyte up to eight volumes, easily allowing the operating systems and data to reside on the 40 Mbyte.

- Expandability for those Vectra PC systems needing greater storage than the Vectra's hard discs provide. As Vectra users' needs grow, so can their system by adding an external 40-Mbyte hard disc via the HP 88500A disc/tape interface. You also have the opportunity for incremental sales to users of the Series 200/300, IBM PC, and IBM-compatible personal computers needing to expand their present system's storage.

Internal 40-Mbyte hard disc for the Vectra PC

If your Vectra PC customer is a "power user," the Vectra 40-Mbyte internal hard disc offers many advantages:

- Up to 25 percent better performance than the IBM PC AT's internal 20-Mbyte benchmarked in actual applications. We can achieve this because of the Vectra CPU speed, our 40-millisecond access time and our intelligent disc controller with onboard microprocessor.
- One-vendor solution/HP quality and support as evidenced by our one-year warranty for the Vectra PC and its data-storage solutions.

Host support matrix

Desktop computer	HP 9133L external 40 Mbytes/3½"	HP 9134L external 40 Mbytes only	HP 45817A internal 40 Mbyte
Vectra PC	No	Yes	Yes
Touchscreen II	Yes	Yes	No
Series 200	Yes	Yes	No
Series 300	Yes	Yes	No
Series 500	Yes	Yes	No
IBM PC/XT/AT	No	Yes	No
Compaq Portable	No	Yes	No
Olivetti M24	No	Yes	No
AT&T 6300	No	Yes	No
HP Integral PC	Testing	Testing	No

Please refer to the host configuration guide for specific operating system support information.

Data protection

Anyone using a 40-Mbyte hard disc in their system, whether business or technical, can't afford to be without a method of backup for their critical data in case of media or operator failure. Let your customer know about the recently introduced low cost ¼-inch tape backup (HP 9142A). It's easy to use with simple function key operation, error protection system and in case of hard disc failure, it emulates the disc for file access. It's easy, reliable, and low cost.

Ordering information

P/N	Description	Factory base price
HP 9133L	40-Mbyte hard disc with 3½-inch microfloppy (710 Kbyte formatted capacity)	$4,400
Opt. 001	1024-byte sectors (44.7 Mbyte formatted capacity, for Touchscreen II and HP-UX operating systems)	N/C
HP 9134L	40-Mbyte hard disc standalone	4,000
Opt. 001	1024-byte sectors (44.7 Mbyte formatted capacity, for Touchscreen II and HP-UX operating systems)	N/C
HP 45817A	Vectra internal 40-Mbyte hard disc subsystem (for Vectra PC only)	3,150
HP 9142A	¼-inch tape backup	1,650
HP 88500A	Disc/tape interface (order for use with hard discs or tape backup on HP Vectra PC and non-HP hosts)	199

UNIX ™ is a trademark of AT&T Bell Laboratories.

Vectra PC internal hard disc performance

Debbie Williams/GLD

Since the introduction of the Vectra PC, there has been a great deal of interest regarding how Vectra's internal hard discs are able to achieve the same or greater performance when compared to the IBM PC AT's hard discs. The following description of hard disc performance and positioning is provided to aid you in selling HP's hard discs to your Vectra customers.

Hard disc performance parameters

In comparing the overall performance of the HP Vectra PC to the IBM PC AT, some people have noted that the 85-millisecond access time (obtained from the data sheet specifications or from a program which measures simple random access times such as the one put out by CORE International) is twice that of the IBM AT disc drives, at 40 milliseconds. They conclude that the Vectra PC's overall 20-Mbyte performance is half that of the IBM PC AT's.

Access time is only one of several measures that determine the system performance of a hard disc. Performance in actual MS™-DOS applications depends upon many factors, among them: overall CPU speed, hard disc controller design, the hard disc mechanism transfer rate and access time.

There are types of applications which do, however, emphasize access times over the other parameters of disc performance. Examples of these include:

- Non-MS-DOS environments such as Xenix or UNIX™, which have a highly-fragmented disc file structure.
- Multiuser environments where multiple users are accessing the disc at one time as with a LAN file server.
- Disc intensive applications like CAD/CAM where multiple files are being accessed at the same time.

The Vectra difference

With the Vectra PC, HP has concentrated on providing a system oriented solution by optimizing the entire subsystem software and hardware. By focusing on the two aspects of the system that have a greater effect on performance in real MS-DOS applications — the CPU speed and the hard disc controller design, we are able to provide comparable performance to the IBM PC AT disc with our 20-Mbyte disc and up to 25 percent faster performance with our 40-Mbyte hard disc on the Vectra PC. Here's how:

1) 8 MHz CPU Speed: Executes software 30 percent faster than a 6 MHz CPU.

2) Hard Disc Controller Design:
   - By utilizing sector staggering when crossing track boundaries the rotational waiting period of the disc (latency) has been reduced. Sector staggering allows the appropriate sector to be physically located under the read/write head when the software requests it.
   - The dual processor architecture (with a 6809 processor located on the hard disc controller and the Vectra PC's 80286 system processor) can make multitasking and windowing applications much faster on the Vectra than the IBM PC AT. This is dependent upon the multitasking software being able to utilize this feature. Dual processing will offload the 80286 to handle user applications while the 6809 handles disc I/O processing.

Additionally, the speed of certain applications that perform a large number of random reads and writes

Personal Computers

on a data file may be increased by using additional buffers. Examples include many BASIC and data base applications. MS-DOS allows you to increase the number of disc buffers that the system allocates in memory on power up. Testing has shown that by editing the CONFIG.SYS file and setting the buffer size at 20 from the default of 3, an increase in random read/write performance will be seen. Please refer to the Vectra MS-DOS Reference Manual (pages 7-4 and 7-5) for a more complete description of this feature.

The bottom line — benchmarking

There are several benchmarking programs available which judge the value of the disc subsystem on a single parameter such as track to track or random access time. This type of program can be misleading if evaluating disc performance with MS-DOS. Rather than looking at a single parameter of disc performance, a user's perspective is required. Any judgment of disc performance when using MS-DOS needs to include benchmarking during typical user applications.

HP has conducted benchmark tests using popular MS-DOS applications such as Wordstar®, Lotus® 1-2-3®, dBASE II™ and dBASE III™. These tests revealed that the 20-Mbyte disc in the Vectra PC performs comparably with the IBM 20-Mbyte drive. When applying those same benchmarks to the HP 40-Mbyte drive, results show the 40 Mbyte runs up to 25 percent faster than the IBM 20-Mbyte hard discs. Please contact the sales centers if you would like to obtain copies of these benchmarks.

Positioning Vectra with hard discs

The 20-Mbyte internal hard disc subsystem has been designed for the single-user MS-DOS environment where daily tasks are not as data intensive. When design began on Vectra's 20-Mbyte disc subsystem, the voice coil positioning technology being used in the 20-Mbyte 40-millisecond drives was unreliable. A lower cost, 85-millisecond drive with proven stepper motor technology was chosen for the subsystem. This allowed for comparable performance to the IBM 20-Mbyte drive in target applications, with increased reliability at a lower cost.

HP's 40-Mbyte internal hard disc subsystem with its 40-millisecond access time has been targeted for the high-performance segments of the personal computer market that can utilize its higher capacity and faster access time. Introduction of the 40-Mbyte hard disc

with the Vectra PC was delayed until its reliability had been verified. The 40-Mbyte hard disc will begin shipping in November.

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WordStar® is a US registered trademark of MicroPro International Corporation.

Lotus® and 1-2-3® are US registered trademarks of Lotus Development Corporation.

dBASE II™ and dBASE III™ are US trademarks of Ashton-Tate.

External disc and tape drive support added for AT&T and Olivetti personal computers

Steve Ivy/GLD

On July 1, 1985, Greeley Division (GLD) introduced the HP 88500A disc/tape interface, which allows external discs and tape drives to be used with the IBM PC, PC XT, and PC AT and the Compaq portable. On October 1, 1985, Version 2 of the product became available. In addition to Vectra PC support and other enhancements, support for the AT&T 6300 and the Olivetti M24 has been added.

The disc and tape drives supported on the AT&T 6300 and the Olivetti M24 are the following

Product	Description
HP 9134H	20-Mbyte hard disc
HP 9134L	40-Mbyte hard disc
HP 9142A	Tape backup

Selling HP personal data storage with AT&T and Olivetti personal computers

The AT&T 6300 and Olivetti M24 are IBM PC-compatible personal computers manufactured by Olivetti and sold in both the US and Europe. Both products were introduced in 1984 and are sold through direct and retail channels.

In the US, AT&T is making a strong move toward becoming the number two IBM-compatible supplier; recent surveys have shown that AT&T is commanding as much as 6% market share (in units), making the 6300 the number two IBM PC-compatible behind Compaq. Both retail chains and major accounts have made it clear that support for the AT&T 6300 is extremely important. HP's 20-Mbyte list price (including the disc/tape interface) is about 10 percent

less than the list price for AT&T's internal 20-Mbyte solution; thus, the HP 9134H is a strong add-on candidate for floppy-based 6300 systems. Additionally, the 9134L and the 9142A provide you with unique sales opportunities since AT&T offers neither a 40-Mbyte hard disc nor a tape drive.

In Europe, the Olivetti M24 is a strong seller. Current market share (in units) is conservatively estimated at 10 percent, making the Olivetti M24 the number one selling PC-compatible in Europe; there are even rumors that it is outselling the IBM PC. HP's 40 Mbyte has strong sales potential since Olivetti offers no 40-Mbyte solution. The 20 Mbyte can be viewed mainly as an add-on to installed floppy-based M24s. Just like AT&T, Olivetti does not offer a tape drive, so there are substantial opportunities to sell the 9142A as the tape backup solution for the Olivetti M24.

The bottom line

Hewlett-Packard has already established an excellent reputation in providing LaserJet printers and plotters for today's popular personal computers. Similar sales opportunities now exist in the area of personal data storage. The added support for discs and tape drives on the AT&T 6300, the Olivetti M24, and HP's Vectra PC further establishes Hewlett-Packard as a leader in supplying high-quality peripherals for the entire personal computer market.

Microsoft Spell now available for HP Touchscreen and Portable personal computers
Craig Artherholt/PSD
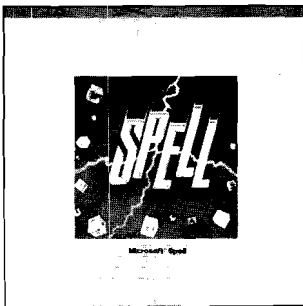
Microsoft® Spell, a spelling correction program for Microsoft Word, is now available for the HP 150A, Touchscreen, Touchscreen II, Portable, and Portable PLUS personal computers. Microsoft Spell locates misspelled words, displays the context in which they occurred, and proposes alternative spellings. Once a spelling choice is made, Microsoft Spell makes the correction automatically.

In addition to the main dictionary of over 40,000 words, the users can create their own dictionary for unique words and technical terms used in their writing.

Microsoft Spell also provides the following features for making your writing easier:

* Looks up words in the dictionary before you use them.
* Determines the number of words in a document.
* Counts the number of times words are used in a document.
* Creates a list of words using the letters in a particular word (anagrams).
* Looks up words that match a particular pattern of known and unknown letters (cross words).

Microsoft Spell is a very affordable productivity enhancement tool for users of Microsoft Word. Microsoft Spell is P/N 45556D with a US list price of $80.

Remember to order tape drive Option 150 with the Touchscreen personal computer
Dave Martz/GLD

A tape drive for the HP Touchscreen personal computer without Option 150 is like a car without wheels. Several customers have bought a tape backup product (either an HP 9142A or HP 9144A) to use with a Touchscreen computer and have not specified Option 150. They were disappointed to discover that the tape drive won't work without the appropriate utility. Some of the dealer price lists fail to mention this no-cost option so you'll need to keep it in mind to avoid unhappy customers. Remember, if your customer needs a tape drive for their Touchscreen personal computer, be sure to order Option 150.

This option works with both the Touchscreen and Touchscreen II personal computers and now supports all your HP 9133, 9134, and 9154 data storage hard disc drives. If you did not order this option with your HP 9142A or 9144A tape backup, it is available separately through the Corporate Parts Center under P/N 09142-87910.

Personal Computers

Touchscreen memory accessory price decrease

Judi Sakowski/POD

As of November 1, HP Touchscreen personal computer customers will find it more attractive to expand the memory capacity of their systems when the following price decreases take effect:

P/N	Description	Previous US list price	New factory base price	New US list price
45630A	128 Kbyte Memory Accessory	$440	$364	$365
45631A	256 Kbyte Memory Accessory	670	439	440
45632A	384 Kbyte Memory Accessory	910	519	520
45636A	128 Kbyte + Language Accessory	530	364	365
45637A	256 Kbyte + Language Accessory	750	439	440
45915A	384 Kbyte + HP-HIL Accessory for HP 150A and B	930	554	555

The new pricing should encourage international customers to purchase the language plus memory combination accessories. The "language" capability on these boards translates the HP 150 firmware messages and terminal softkeys into the language selected in the configuration menu.

Since more than half of all HP Touchscreen personal computers are sold with a memory accessory, this memory price decrease translates into a lower total system cost for most of your customers.

HP 2603A demonstration diskette available

Debbie Bell/VCD

A demo diskette is available from Vancouver Division (VCD) for the HP 2603A daisywheel printer. This comprehensive demo makes it easy for you to show your customer the features of the HP 2603A printer. For maximum flexibility, you're given the option of loading paper manually or automatically using the triple bin sheet feeder or tractor feeder accessories. The demo will print your choice of a friendly business letter, data sheet, or spread sheet. Several hosts may be used to run the demo including the Vectra PC, IBM PC, Touchscreen PC, and Portable Plus. If you didn't receive a copy of the demo in your intro package, and want one, send a mail message to Debbie Bell/HP5400/PE. Please specify the type of diskette required for the host you will be using.

Correction

In the September 15 issue of *Computer News,* the article on page 21 entitled "New HP LaserJet printer drivers for MultiMate and MS Word on the HP Touchscreen personal computer" incorrectly states that MultiMate[®] now supports proportional spacing. MultiMate does not support proportional spacing.

MultiMate[®] is a US registered trademark of MultiMate International Corporation.
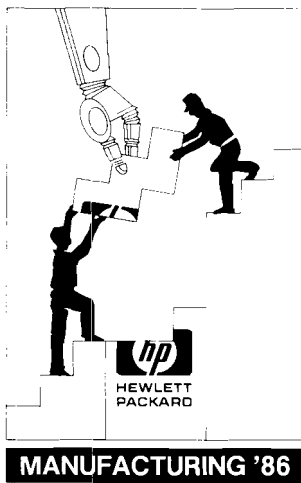

Also in this issue

GENERAL

Manufacturing '86: New Market Training for manufacturing market

Carole Louie/MSG

Beginning November 4, the Manufacturing Systems Group (MSG) will be presenting a new training program — the first of its kind — New Market Training for the Manufacturing Marketplace. You are probably used to New Product Training (NPT); MSG's New Market Training, however, will help you learn how to sell *solutions,* as opposed to products, into the manufacturing environment. Please join

HEWLETT PACKARD

MANUFACTURING '86

use for this information-filled program, and let us help you make 1986 a very successful year. If you are involved in selling or supporting Manufacturing accounts, read on for more information.

Manufacturing '86 general description

Objectives: To train the field sales force to sell successfully in manufacturing markets. To share experiences on what strategies and tactics have proven most successful in selling in a manufacturing environment. To use information presented as a tool for sales reps' 1986 sales plans.

Prerequisite: Manufacturing Basics Telecourse (viewed October 8 via HP-TV).

Products: Training will be provided on three kinds of products: Third Party, System Integrators, and HP. In the latter case the training will focus primarily on positioning of HP products in the manufacturing marketplace. The training of MSG's third party products and system integrators will be presented to the field for the first time. The program has been under development for the past 10 months. It is a critical ingredient for success.

Audience: All sales reps that call on manufacturing accounts, plus supporting Project Centers, Application Engineering Operations (AEO), and Field Management. Sales reps — commercial, technical, third party, instruments and board test.

November 1, 1985

Content:

1) Manufacturing Basics Telecourse — shown October 8 on HP-TV. Designed to provide a basic understanding of the manufacturing environment from equipment control to financial control.

2) New Market Training — November to December in 19 area offices both in the US and Canada.

   • *MSG Management Video.* Management commitment to the manufacturing business by Lew Platt and Brian Moore.

   • *CIM Fundamentals.* Definition, technologies, framework, phases, and major industry suppliers.

   • *MSG Strategy.* Definition of the group's strategy.

   • *HP CIM Successes.* Videotape of internal HP accomplishments in manufacturing using advanced methodologies and CIM solutions.

   • *Product Program.* Stages, Global CIM Model, Networking, existing products, and first-half '86 products, and Vertical Markets (Process, Aerospace, Electronics, Automotive, Semiconductor).

   • *Third Party Program.* Categories utilized in the sales and delivery of manufacturing solutions, process in delivering solutions through third parties, and *key HP* third parties in the manufacturing hierarchy.

   • *Sales Management Video.* Bill Richion and Don Schoeny describe the new manufacturing sales organization and quota credit system for FY86.

   • *Selling Strategies.* Strategies used to sell HP into "islands of automation or a complete CIM solution," description of the manufacturing customer, understanding, qualification, and using the solutions approach in selling.

   • *Solutions Delivery.* Address methods of delivering CIM solutions to our customers by the use of different channels, such as HP direct sales, and Systems Integrators.

Participating field, divisions/operations, and group: MSG Group Marketing, Manufacturing Productivity Division, Semiconductor Productivity Network Operation, Manufacturing Test Division, Loveland Instruments Division, Data Systems Division, Advanced Manufacturing Systems Operation, and US Field Operations MDMs.

Manufacturing Systems

Agenda: Management Message Video (15 min); CIM Fundamentals (1½ hours); CIM Vendors (30 min); HP Internal CIM Successes Video (20 min); MSG Marketing Strategy (30 min); Sales Force Organization Video (15 min); HP Product Programs (1 hour); Third Party Product Programs (45 min); Selling Strategies (1 hour) - Case Study (30 min); Solutions Delivery (45 min); Local Sales Rep Success Stories (30 min); plus . . . informal dinner and discussion.

Dates and sites:

November		December	
Date	Site	Date	Site
5	Bellevue, Wash.	3	Atlanta, Ga.
6	Pleasanton, Calif.	4	Raleigh, N.C.
7	Fullerton, Calif.	5	Valley Forge, Pa.
8	Lawndale, Calif.	6	Rockville, Md.
12	Englewood, Colo.	10	Lexington, Mass.
13	St. Paul, Minn.	11	White Plains, N.Y.
14	Novi, Ill.	12	Paramus, N.J.
15	Chicago, Ill.	TBA	Canada
19	Cleveland, Ohio	TBA	South Bay
20	Dallas, Tex.		
21	Houston, Tex.		

Also in this issue

MANUFACTURING APPLICATIONS

New flyer sells A-Series real-time minicomputers
Mary Ann Gustafson/MSG Marcom
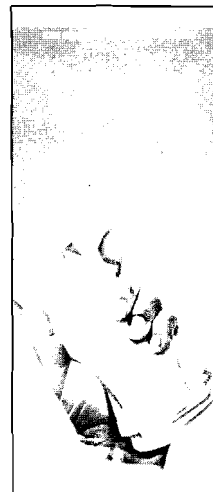
Have you tried to sell an A-Series computer to a customer recently, only to be told they'd use personal computers to fill their manufacturing needs? A new flyer titled "Guaranteed Real-Time for Guaranteed Savings" explains why manufacturers need "real real-time" from a minicomputer, not a personal or batch computer.

The colorful flyer tells why A-Series real-time minicomputers can save money, offer a growth path, and outperform a personal computer. It also says why multitasking and priority interrupts are important in an industrial environment.

The flyer fits into a number 10 envelope for direct mailing or promotions and can be used with the other recently introduced A-Series selling tools, an OEM brochure and flyer. To get your copies, contact the Literature Distribution Center and request P/N 5954-6752.

New SPN sales aids available
Kathy Colombo/SPNO

Semiconductor Productivity Network (SPN) Market Development has several new sales aids available. The articles will ensure our customers and potential customers that HP knows the semiconductor manufacturing business and what is required to manage it. The aids include:

- *PC-10 article* — "Remote Monitoring and Control of Semiconductor Processing." SPN's PC-10 acts as a supervisory host computer for IC processing equipment, providing remote control monitoring and data collecting for fabrication personnel. This

article is a reprint from the *HP Journal*, dated July 1985, P/N 5953-8537.

- *TC-10/EA-10 article* — "Automated Test Data Collection for IC Manufacturing." Collecting and analyzing data from a variety of test equipment and CPUs that use different formats, languages, and protocols is made possible by the TC-10 module for HP's SPN. This article is a reprint from the *HP Journal*, dated August 1985, P/N 5953-8538.

- *"The Paperless Factory."* An article that explains the problems encountered in semiconductor manufacturing (contamination, process inconsistency, rework processing) and recommended automation solutions (what functionalities are necessary) for solving the problems. Note: this is a non-technical article written by Kim Muinch, HP SPN systems engineer; Kim is presenting it at the APICS National Conference

- *SPN Survival Kit.* A set of basic materials to enhance your SPN sales efforts including: an article introducing the semiconductor manufacturing process, brief introduction to the SPN product line, basic slides, selling information, a guide to SPN's factory and field teams, and last but not least, ordering information for SPN sales aids and products.

To receive copies of these sales aids, contact Kathy Colombo, or Bill Leavy, SPNO Market Development, TELNET 1-559-5307, 1-559-5595, or HP Desk HPC700/20.

New MRP brochure for manufacturing managers
Karen Campbell/MSG
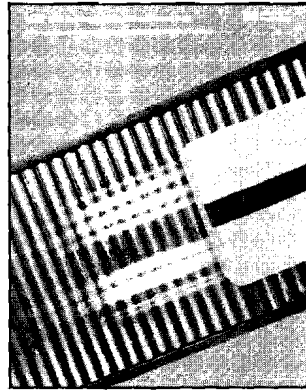
A new brochure, "MRP with maximum gain and minimum pain, HP's manufacturing management applications delivers the goods," (P/N 5954-6753) is now orderable through the Literature Distribution Center in Palo Alto, California. It is targeted to senior manufacturing managers in discrete manufacturing companies that have over 500 employees and do over $25 million in sales.

This 12-page brochure offers the reader guidelines for developing a successful MRP plan and highlights HP's modular MRP applications:

- HP Materials Management
- HP Production Management
- HP Lot Control and Traceability
- HP Financial Accounting/Cost Accounting
- HP Just-In-Time

Three pages of HP MRP customer case histories feature General Electric, American Cyanamid, McDonnell Douglas, and HP's own Stanford Park Instrument Division and Vancouver Division.

This sales aid is being sent to all prospects who call Manufacturing Systems Group's toll-free 800 number in response to the currently running MRP solutions ad.

FACTORY AUTOMATION

12040C A-Series MUX design change explained

Dave Wood/RND

In the past, there has been enough confusion and misinformation surrounding the new A-Series 8-Channel Multiplexer to warrant a description of the changes that occurred. The 12040B MUX was rolled to a 12040C due mainly to a change in the 8-port break-out panel. Changes to the panel also affected the cable, mounting bracket, and extension kit. Outlined below are the differences at the part level.

12040B		12040C	
12040-60003	MUX Interface Board	12040-60004	MUX Interface Board
12828-60001	8-Port Panel (J-Box)	28658-60005	8-Port Panel (Synapse)
12040-60002	MUX-to-Panel Cable	28658-63005	MUX-to-Panel Cable
12040-90020	Manual	12040-90022	Manual
12040-90021	Performance Note		
12828-60004	36-Pin Extend Kit	1252-0508	50-Pin Extend Kit
12828-00004	Mounting Bracket	5001-5278	Mounting Bracket
5061-4944	Mounting Screw Kit	5061-4944	Mounting Screw Kit
12040B		12040C	
Opt. 001	5180-7227 firmware only		No firmware only option (New f/w is 5180-7228, available at CPC)
Opt. 002	Deletes panel, cable, mounting bracket and kit. Adds 12828-60002 cable for connection to 37214A modem box.	Opt. 002	Same as for 12040B
Opt. 003	Deletes panel, cable, mounting bracket and kit. Adds 5061-3467 Edge Conn.	Opt. 003	Same as for 12040B

The board assembly number changed due to the new firmware, although some hardware changes took place. The new design includes denser memory components, CCITT V.28 compatibility, improved line receivers, and overall simplified design.

The firmware changed from 5180-7227 to 5180-7228. The only difference is that the new firmware defaults Baud Rate Generator (BRG) zero to 9600 baud versus 2400 baud. The main reason for this is to support the system console on the MUX. The new cable (see next paragraph) connects port zero to BRG 0 instead of BRG 1. The system console must be on port zero and come up at 9600 baud, thus the change.

Some customers may still be running the original 12040B firmware (5180-1970). The 5180-7227 firmware allowed an X-on to be sent from one port to another, and fixed three bugs in the 5180-1970 firmware. For details of those changes, see Service Note 12040B-08.

There are several differences between the new cable (28658-63005) and the 12040-60002. The new cable connects to the new panel with a 50-pin male connector. The old cable used a 36-pin connector. Both cables use 34 conductors, so the change in connectors is insignificant. In fact, the new cable wires two fewer signals than the old cable. These are the positive and negative 12-volt power signals, which are no longer provided to the junction panel. (See explanation below concerning the new panel.) Finally, the new cable has changed the BRG-to-port assignments:

28658-63005		12040-60002	
BRG 0	BRG1	BRG 0	BRG 1
Port 0	Ports 1-7	Port 7	Ports 0-6

This was done because of a bug on the 12040B which disappears when port zero is isolated on its own BRG.

There are physical changes from the old 8-port panel (12828-60002) to the new panel (28658-60005), as well as differences in the signals provided to each of the 25-pin connectors. The new panel is rectangular (4¼″ wide x 8⅞″ long x 1¼″ high), connects to the MUX with a 50-pin connection, and has a plastic housing. Subsequently, a new mounting bracket was required. It requires slightly more vertical space (width of the panel), and extends deeper in the rack (5½″). The lack of the 12-volt signals causes the following differences in each of the eight 25-pin connectors (differences only are shown):
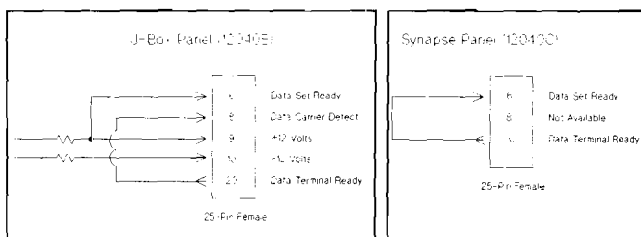
Any further questions should be addressed to the Network Marketing Center, at 408-725-8111, ext. 4748.

A configurator program for the HP 1000

Andy Meyer/MSG

For North America only

Trouble configuring the HP 1000? Confused by which cable goes where for what? Well, help is on the way. Data Systems Division, together with the Manufacturing Systems Group Sales Center, has developed a program to aid you in configuring the complex HP 1000 systems. Named the "HP 1000 Configuration Assistant," the program allows you to specify the system components you wish to use and then determines the cabling, interface cards, and options required for a total hardware configuration.

The program utilizes the tremendous power of the Lotus® 1-2-3® spreadsheet running on either an HP Touchscreen personal computer with 640 Kbytes of memory or the handy Portable PLUS with 512 Kbytes of memory. It will be sent via HP DeskManager from US Field Operations to your area field marketing managers. From there it will be distributed to your local office.

Think of the time saved, when in minutes you can print out a summary of the hardware needed, together with budgetary pricing for an A-Series system. Gone are many of the customer-satisfaction problems

caused by missing media options or other incomplete hardware configurations. Of course you will still want to confirm the system summary with your local systems engineer to insure its completeness and appropriateness for your customer's situation. However, the result is more time on your hands to close new sales and exceed your quota. Watch for the program in your area beginning November 1.

Lotus® and 1-2-3® are US registered trademarks of Lotus Development Corporation.

Also in this issue

□ Design Systems

Announcing System V for the Integral PC

Bill Hodges/CWO

The Corvallis Workstation Operation (CWO) proudly announces introduction of the System V plug-in ROM operating system for the Integral PC. The new ROM is based on AT&T's UNIX™ System V release. The Integral PC's ROM provides the unique ability for the operating system to run application software without requiring a hard disc.

Benefits of this revised ROM operating system for the Integral PC are:

- Source code compatibility with programs written for the AT&T System V standard.

- Performance improvements in graphics speed (up to 35 times) and hard disc performance (2 times).

- Improvements in measurement automation capabilities:

  - DIL (Device I/O Library) allows easy interfacing with instruments, combined with the speed of compiled languages.

  - HP-UX Tech BASIC in ROM (optional) provides improved performance and conserves memory.

  - Real time extensions are now provided in ROM.

- Object code compatibility with previous Integral PC software.

The earlier Integral PC operating system was based on AT&T UNIX System III. The new operating system has added all AT&T System V run-time enhancements.

New features

Kernel — Additions include shared memory, semaphores, and message control. In addition, real-time extensions have been added. These include: real-time priority, reliable signals, process locking, interval timers, time of day, and file synchronization. Also process accounting, profile, trace, and advisory record locking (library) features have been added. Nothing has been removed from the previous System III Integral PC operating system.

PAM — The Integral PC Personal Application Manager has been enhanced to include command line pattern matching (i.e. *.*) iconic borders, and control of scripting from other shells.

Windows — The window system has been enhanced to include user control over an iconic window border

and special iconic functions. In addition, a window library (WINDEX subset) for programming "window smart" applications has been added. There is also a program status indicator in the window banner to show whether a program is still running or not.

Graphics — A new window type is provided for mixing alpha and graphics and provides a dramatic improvement over the plotter window type. For example, line drawing speed has increased up to 35 times depending on the complexity of the drawing. The HPGL graphics window driver has been retained.

Instrumentation — The DIL (Device I/O Library) provides for both HP-IB and GPIO instrumentation and can be used in conjunction with real-time extensions from compiled languages, such as HP-UX "C".

Compatibility with other HP-UX systems

The Integral PC's HP-UX operating system is source-code compatible with both the HP 9000 Series 300 and Series 500 desktop computers. In addition, source compatibility is preserved for windows by using the Window and Fast Alpha Libraries, and for instrumentation by using the DIL instrument I/O library. Graphics under the Integral PC's HP-UX operating system are not compatible with Series 300 or 500 computers or with Starbase graphics.

Although source compatibility is maintained for programming, file systems are different on HP-UX machines. The Integral PC uses the AT&T System V file format, the Series 300 uses the Berkeley (BSD 4.2) file structure, and the Series 500 uses the SDF format. Both Series 300 and 500 provide utilities (BIF) to read and write System V files. In addition, other utilities such as tar and lif are also available for data interchange on all HP-UX computers.

Programming tools

New compiled languages (FORTRAN 77, Pascal) will be available along with HP-UX Tools in January 1986. HP-UX Technical BASIC is also scheduled to be available on ROM in January. The current HP-UX "C" compiled will work on both System III and System V. HP-UX Tools and the HP-UX "C" compiler are being enhanced for System V. A symbolic debugger (CDB) is also being added to HP-UX "C". The enhanced version will be available in January.

Availability

The 9807A Integral PC HP-UX System V revision will be available for delivery the first part of December, 1985. Since the product is already on the Corporate Price List, orders can be placed now. A free System V

upgrade plan will apply to units ordered now, but delivered before December (see the following article on the 82991A System V Upgrade Kit for details).

Availability of products is planned as follows:

P/N	Product	Availability
82991A	System V Upgrade Kit	December 1, 1985
82856J	HP-UX Tools (revised)	January 1, 1986
82857J	'C' Compiler (revised)	January 1, 1986
82858J	FORTRAN 77	January 1, 1986
82859J	Pascal	January 1, 1986
82869J	DIL	January 1, 1986
82989J	HP-UX Tech BASIC ROM	January 1, 1986

UNIX™ is a registered trademark of AT&T Bell Laboratories.

82991A System V Upgrade Kit available for System III Integral PCs
Bill Hodges/CWO

The Corvallis Workstation Operation (CWO) announces the availability of the 82991A System V Upgrade Kit. This kit contains the new user replaceable ROM package which supports additional software ROMs, such as HP-UX Technical BASIC, various system discs (i.e., Tutor), and two Integral PC manuals. The kit allows original Integral PC System III owners to easily upgrade to System V. The 82991A Upgrade Kit is available in December 1985 and will be priced at approximately $400.

Free upgrade kit

In order to protect recent purchasers of Integral PCs, HP will provide free upgrade kits, based on proof of purchase, for all Integral PCs ordered October 1, 1985, or later.

New software products for the Integral PC
Dick Siegel/CWO

Along with the introduction of the Integral PC System V operating system, we are pleased to announce the availability of six new software packages and a valuable programmer's documentation package.

Picture Perfect™ is a data driven charting package that offers the highest quality output combined with extreme flexibility over the appearance of the pie, horizontal bar, vertical bar, or combination bar/line chart.

Diagraph™ is a presentation graphics charting package optimized to help the user illustrate ideas and concepts. Among the types of charts produced are word charts, flow diagrams, organization charts, signs, and presentations aids. Over 1,500 symbols consisting of icons, geometrics, pictorials, components, and signs are included.

Note: Both Picture Perfect and Diagraph require the new Integral PC System V operating system in order to run on the Integral PC. They will not run on the original System III Integral PC.

PlotTrak™ is a companion product to the MicroTrak™ project management package with plotting capability for MicroTrak schematics. Where MicroTrak aids you in planning and creating schedules, PlotTrak enables you to produce colorful, visual representations of the schedule. Output is optimized for HP plotters.

Programmer's Documentation is a product which will help anyone interested in software development on the Integral PC. It consists of five manuals: Programmer's Guide, Alpha/Graphics Window Reference Manual, Terminal Level 0 Reference Manual, HPGL Reference Manual, and the Window Manager Reference Manual. These manuals, along with the HP-UX C Compiler (P/N 82857J), will allow your customers to extend the capabilities and performance of their Integral PCs. The Programmer's Documentation package will be available December 1.

P/N	Description	US list price	Available
45462J	Picture Perfect	$595	January 1986
45463J	Diagraph	695	January 1986
98800G	PlotTrak	500	January 1986
82865J	Programmer's Documentation	TBA	December 1985

The HP 2622/2392 block mode terminal emulator, providing the capabilities of the popular HP 2622/HP 2392 terminal, is now available from P2/i. P2/i is a quality independent software vendor with a proven track record. They have been successfully selling VT/E, a DEC VT100 emulator on the Integral PC since April 1985. We are pleased that P2/i has added these HP terminal capabilities to their product line. Ordering information can be obtained from: P2/i,

Design Systems

1704 Moon N.E., Suite #3, Albuquerque, NM 87112; phone: 505-292-1212.

The FORTRAN 77 Compiler is a full implementation of the ANSI 77 standard with no limitation on code or data size. It is currently being used with excellent success on the Integral PC by several customers.

The 68000 Macro Assembler includes linker, loader, 'C' interface, and disassembler and is well documented. It can be used with the 68010, 68020, etc., as well as the 68000.

Both the FORTRAN 77 Compiler and the 68000 Macro Assembler are available from: Absoft Corporation, 4268 N. Woodward, Royal Oak, MI 48072; phone: 313-549-7111. The price of each product is $495 and demonstration copies are available to HP sales reps for $95.

Picture Perfect™ and Diagraph™ are US trademarks of Computer Support Corp.
PlotTrak™ and MicroTrak™ are US trademarks of SofTrak Systems.

HP makes artificial intelligence debut

Debbie Feig/FSD

The International Joint Conference on Artificial Intelligence (IJCAI) provided the forum for Fort Collins Systems Division (FSD) and HP Labs to make a pre-announcement of our new artificial intelligence (AI) program, and to give a sneak preview of our upcoming AI products.

The first product to be introduced is a Common LISP software development environment which, when combined with an HP technical workstation, greatly accelerates the development of LISP-based applications. All the tools software developers need are at their disposal within this environment including the editor, interpreter, compiler, debugger, file manipulation, access to HP-UX, and many more. We expect this product to be on the December 1985 Corporate Price List with shipments in early 1986.

This product is unique in that it provides a rich development environment and a cost-effective delivery vehicle. It is hosted on the Series 300, a highly modular family of HP 9000 technical workstations, and therefore provides users with a wide range of hardware from which to choose. Running on the HP-UX 5.1 operating system gives users access to LAN, graphics, and windowing.

US prices range from approximately $20,000 for the delivery system to $50,000 for the development system.

HP Labs demonstrated a wide range of AI prototypes currently under development. Many of these prototypes will be moved to HP divisions for further enhancement and development in the future. HP internal applications developed using AI software include: chemical organic compound analyzer, medical monitoring, photolithography advisor for IC production, peripheral fault diagnosis, and natural language systems.

HP has made a corporate-wide commitment to AI. John Young, president and chief executive officer of HP; Joel Birnbaum, vice president and director of HP Laboratories; and Bill Parzybok, vice president and general manager of Design Systems Group (DSG) were featured during the press conference which attracted over 40 editors from major publications across the country.

In fact, the press has given us tremendous coverage since the introduction. We have appeared in more than 10 electronics publications, plus *Time* magazine. And, a flight simulation demo from HP Labs was part of an AI series broadcast by a CBS affiliate out of Boston, Massachusettes.

We also received over 700 leads, qualified by HP factory and field personnel at IJCAI. Of those, 65 were "hot" leads which have already been sent to the appropriate people within our sales organization for immediate follow-up. The remaining leads will be sent to the field in the near future. We will be sending literature to people requesting only additional information.

We are working with other companies, universities, and a variety of HP divisions through a number of programs to ensure the continued research, development, and delivery of our AI tools and applications.
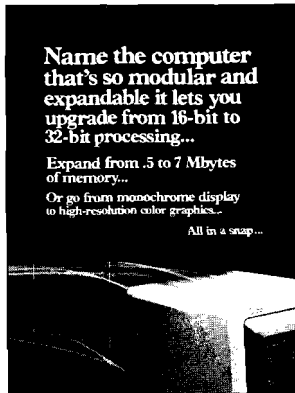
Future plans include a January teleconference, videotapes, test marketing, extensive training, and support programs, plus an ad campaign with supporting literature.

You will be receiving additional materials and information as they become available.

New ad for HP 9000 Series 300

Debbie Kalin/FSD

For North America only

Name the computer that's so modular and expandable it lets you upgrade from 16-bit to 32-bit processing...

Expand from .5 to 7 Mbytes of memory...

Or go from monochrome display to high-resolution color graphics...

All in a snap...

A three-page ad introducing the HP 9000 Series 300, the computer "that loves changes" began running in September. The ad, which will run through November in the 14 publications listed below, showcases the Series 300's modularity and expandability, features that appeal to our targeted OEM/ISV audience.

Introducing the HP 9000 Series 300

The computer that loves changes

hp HEWLETT PACKARD
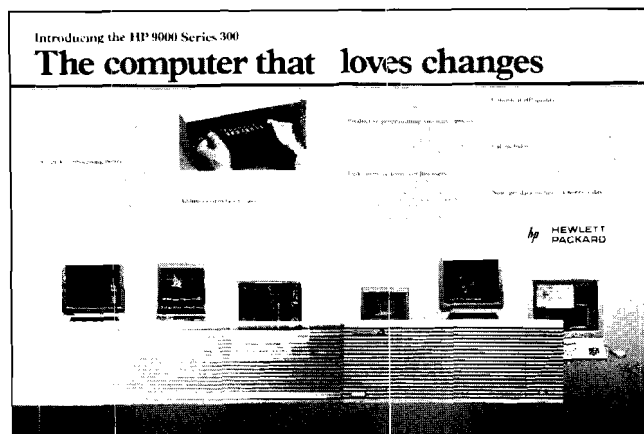
Customers can receive further information through two services provided in the ad. An 800 number is included for use in locating their local HP sales office. A unique aspect of the Series 300 ad is the first known use of Kwik/Quest™, a computerized information retrieval system. By using a computer and modem and following instructions in the ad, readers can receive immediate on-line information on the Series 300, 24 hours a day.

The system prompts readers for their name, address, title, company, and area of interest. It then provides general information, tracks the reader's "browsing" path, and asks for comments. The leads that result are checked daily and forwarded to the field. The service should result in timely response to customers, better qualified leads for the field, and market information. Reader interest and use of the system following the ad's introduction has been high.

The Series 300 ad schedule

Publication	Issue date(s)
EDN	October 17, November 14
IEEE Spectrum	November
CAE	October, November
Machine Design	October 24, November 21
Computer System News	September 23, October 7, November 11
Mini-Micro Systems	November
Systems and Software	November
Aviation Week & Space Technology	September 30, October 21, November 18
Chemical Engineering	October 14, November 11
Electronics	September 30, October 14
American Laboratory	November
Research & Development	November
Science	October 25, November 25

Single copies of the ad were distributed in the October Momentum mailing.

For a limited time, individual copies of the ad will be available first come first served by contacting Sarah Moya, HP Desk 4000/10 or COMSYS 4000. Please provide your name and mailing address with your request.

Kwik/Quest™ is a US trademark of Tallant/Yates Advertising, Inc.

Design Systems

HP 9000 Series 300 upgrade program — additional credit
Que Foor/FRD

For North America and Intercon only

In response to your feedback, a video card return credit for the HP 9817A is now added to the HP 9000 Series 300 (Bobcat) upgrade program. Customers ordering a Series 310 or 320 and returning a 98204A or B Video Interface with their 9817 will receive an additional credit of $150. The complete 9817AN credit information is detailed below:

Product/ Option	US list credit	Must return
9817AN	$1,250	Base 9817
Opt. 002	500	Two 98256A memory boards (512 Kbyte)
Opt. 004	100	46020A keyboard and cable
Opt. 005	150	35721A/B/C monitor and 35722A display twivel
Opt. 006	150	98204A or B video interface

For complete information about the Series 300 upgrade program, please refer to your field training manual. Please give us a call at TELNET 720-4156 or 408-720-4156 if you have not received your copy or need further information.

HP 9000 Models 217 and 237 to be removed from CPL
Mike Forman/FSD

With the introduction of the HP 9000 Series 300 line, we now have much-lower-cost, totally-compatible alternatives to the HP 9000 Models 217 and 237. Therefore, we plan to remove the HP 9817A, 9817H, and 9837H from the Corporate Price List on May 1, 1986. Please notify your customers of this plan. If you have any concerns, please let us know, so that we can work with you to solve any unforseen problems.

Please note that we have no immediate plans to obsolete the remaining products in the Series 200 line. These products are selling well, and they are not directly replaced by the Series 300. As always, we will give adequate warning before any action is taken.

HP 17090B software with BASIC 4.0 on Series 200 computers
Virginia Pollack/SDD

HP 17090B software can be used with BASIC 4.0, as well as BASIC 3.0, on the HP 9816, 9826, and 9836 computers. Since the software requires 10 softkeys and a knob, it cannot be used with the HP 9817 and 9837.

As yet the software has not been tested with Series 300 computers. We will let you know the results of that testing as soon as we have them.

The HP 17090B software package allows non-programmers to easily set up the HP 7090 plotter with a controller (HP 9816 shown) for performing measurements and plotting data.

Also in this issue

[hp]

HP 3852S product structure and list prices

Jim Wall/LID

The HP 3852S system consists of an HP 3852A Data Acquisition and Control Unit, a selection of accessory plug-in cards, optional system software and a system controller. The product numbers and US list price for major system components are shown below. Consult the *HP 3852 Ordering and Configuration Guide* or call Loveland Instrument Division for more information.

P/N	Description	US list price
HP 3852A	Data acquisition and control unit	$3,600
Opt. 001	Mainframe extended memory — 256 Kbyte	600
Opt. 002	Mainframe Extended Memory — 1 Mbyte	2,000
HP 3853A	Extender	2,400
Opt. 001	4-meter cables instead of 1-meter	76
Opt. C01	Add specified length analog cable (delete standard cable)	
Opt. C02	Add specified length digital cable (delete standard cable)	
HP 44701A	5½-digit integrating voltmeter	1,500
HP 44702A	13-bit high-speed voltmeter — 100 kHz (8 kReadings memory)	2,500
HP 44702B	13-bit high-speed voltmeter — 100 kHz (64 kReadings memory)	3,000
HP 44703A	Mainframe extended memory card — 256 Kbyte	600
HP 44703B	Mainframe extended memory card — 1 Mbyte	2,000
HP 44703C	High-speed voltmeter extended memory card — 56 kReadings	550
HP 44705A	20-channel relay multiplexer	750
HP 44706A	60-channel single ended relay multiplexer	900
HP 44708A	20-channel relay MUX with thermocouple compensation	850
HP 44709A	20-channel FET multiplexer	800
HP 44710A	20-channel FET multiplexer with thermocouple compensation	900
HP 44711A	24-channel high-speed FET multiplexer	900
HP 44712A	48-channel high-speed single ended FET MUX	1,050
HP 44713A	24-channel high-speed FET MUX with thermocouple compensation	1,000

P/N	Description	US list price
HP 44715A	5-channel counter/totalizer (200 kHz)	950
HP 44721A	16-channel digital input with totalize and interrupt	650
HP 44722A	8-channel AC digital input with totalize and interrupt	650
HP 44724A	16-channel digital output (open drain)	650
HP 44725A	16-channel general purpose switch	750
HP 44727A	4-channel voltage DAC	1,200
HP 44727B	4-channel current DAC	1,200
HP 44727C	2-channel volts; 2-channel current DAC	1,200
HP 44728A	8-channel relay actuator	600
HP 44729A	8-channel power controller	900
HP 44736A	Breadboard	350
HP 447xxxT	Extra terminal module (xxx=suffix for function card)	
HP 44495A	Field wiring terminal panel (not installed in rack)	595
HP 44456A	BASIC system software on 3½" flexible disc	1,750
HP 44456B	BASIC system software on 5¼" flexible disc	1,750
HP 44456R	One-time license to reproduce BASIC system software	1,000
HP 44744A	2-meter GPIO cable for high-speed voltmeter	250
HP 44744B	4-meter GPIO cable for high-speed voltmeter	300

Navy uses HP equipment in clothing tests

Chris Colona/LID

For North America only

Have you ever wondered how the US Navy decides between different manufacturers when they need a new type of uniform (i.e., a firefighting suit) or when they need a modification to an existing uniform? In these days of bad purchases frequenting the headlines, it is comforting to know that HP equipment is helping the Navy make the decision.

Whenever the Navy needs a change in uniform or a new kind of protective clothing, it receives samples from up to one hundred different manufacturers. Using HP equipment, the Navy first runs a preliminary screen to cut the possibilities to approximately ten. The ten finalists are then run through more detailed tests which also involve HP equipment. These more detailed tests are the subject of this article.

The test system consists of an HP 9816, HP 3497A, HP 3456A, Kepco JQE55-5 power supplies, heaters, and a mannequin. The system uses both measurement control capabilities. One hundred signals are multiplexed through the HP 3497A.

Conceptually the test is simple. Monitor the power required to keep the mannequin at 36 degrees Celsius (96.8 degrees Fahrenheit). Sixty thermistors provide feedback to the HP 9816 to control power supply levels. The power supply levels drive the heaters and thereby control the amount of heat applied to the mannequin.

By dividing the mannequin up into ten different regions, with six thermistors and one heater per region, uniform temperature is maintained throughout the body. To calculate the power being dissipated, two voltage levels from each heater must be measured. The "heater voltage" represents the voltage level input to the heater and the "shunt voltage" is proportional to the current input.

To implement the multiplexing of the one hundred channels, the HP 3497A has one model 44421A and four model 44422A plug-in assemblies. A model 44421A is a bare twenty channel relay multiplexer while the 44422A is the multiplexer with thermocouple compensation. The reason the Navy bought four options with thermocouple compensation is for versatility. Although no thermocouples are read in this test, the Navy has other tests requiring compensation and they can then use the cards in this system as back-ups.

There are two parameters that the Navy uses to qualify their clothing. The first is called a "clo" value which measures clothing's ability to insulate. Second is the "vapor permeability index" which is the clothing's ability to dissipate heat through evaporation. This quality is important when a sailor perspires and needs clothing which has the ability to dissipate heat through evaporation.

Performing the test which collects the proper data to calculate these two parameters is where HP comes in. Once data is gathered a formula cranks out the two parameter values and gives the Navy the hard statistics from which the best choice can be made.

With the purchase of the mannequin, the Navy received its original data acquisition system made by DEC. Needing better control of their system, they decided to switch to HP on a suggestion from the Army Institute of Environmental Medicine. According to Joe Giblo, biomedical engineer at the Navy Clothing and Textile Research Facility, the HP system has "improved our data collection rate from approximately two minutes to five seconds. This allows us to process our data and print it in the time we've saved."

NETWORKS

New regulation for HP 2334A in Germany

A lic Rakhmanoff/GND

The HP 2334A data sheet specifies that the HP 2334A data communication approvals are pending. Data communication approval in Germany has been given by the German PTT with a requested modification for the HP 40220A cable when used with asynchronous modem.

Customers who have bought HP 40220A cables *used with asynchronous modem* need to modify one pin assignment of their cable. The HP 40220A connector on the modem side should be opened and pin 5 should be unplugged and moved to position 6. All new orders for HP 2334A cables in Germany should be done with the new HP 40221A cable, which follows German regulations.

Please note that the HP 2334A data sheet mentions that "some datacom regulations may restrict the use of all possible HP 2334A connections." In Germany terminal connection via async modem over dial-up line is authorized only if a leased line is used on the sync side. Dial-up line or DATEX-P connection on the sync side of the HP 2334A is *not authorized with* dial-up connection on the async side of the HP 2334A.

We apologize for these restrictions which are imposed by the German PTT.

MASS STORAGE

Price reductions on HP 794X disc drives

Rick Boss/DMD

Whether it's on the Series 37 or HP 260, desktop workstations from Fort Collins Systems Division or A-Series computers, it will now be easier for you to put together cost-competitive solutions using the HP 794X family of high-performance mid-range disc drives. Effective November 1, 1985, Disc Memory Division (DMD), Computer Peripherals Bristol and

Guadalajara Computer Operation have reduced prices on these products by as much as 20 percent.

Recognizing the intense competitive climate, there have been extensive efforts at DMD to lower the cost and improve the manufacturability of the HP 794X family since its introduction in August, 1984. These efforts have resulted in significant cost reductions, and the savings are being passed along to the customer.

So, for capacities of 24 or 55 megabytes combining the benefits of high performance, small size, and quiet operation — the HP 794X is your answer. And now your solution costs up to 20 percent less.

	US list price		Factory base price		Change
	Old	New*	Old	New*	$
7941 (24 Mbyte disc)	$ 5,500	$4,500	$ 5,385	$4,385	−1,000
7942 (24 Mbyte disc + cartridge tape)	8,500	7,700	8,320	7,520	− 800
7945 (55 Mbyte disc)	7,500	6,000	7,340	5,840	−1,500
7946 (55 Mbyte disc + cartridge tape)	10,500	9,200	10,280	8,980	−1,300

*Please check Corporate Price List before quoting.

Great Half Off Sale success

Lil Blankinship/DMD

To date, the Great Half Off Sale has been an outstanding success. As of the first of October, 247 HP 7933 discs and 32 HP 7935 discs have been sold through the program. Approximately one fourth of the orders in the program have been from customers who were thinking of buying three discs. However, since the program offers a fourth disc for such a reasonable price, these customers decided to purchase the additional fourth disc and a tape drive at the same price.

Several sales reps have called Disc Memory Division to congratulate us on an excellent promotion offered at just the right time. We have witnessed several situations where the Great Half Off Sale has allowed a sales rep to make a sale they might not otherwise have made.

Of course, since the program continues through December, there is still plenty of time to approach your account with an outstanding opportunity.

Networks & Peripherals

Furthermore, don't forget the Movin' On Up programs that allow smaller capacity disc drives to be credited toward the purchase of HP 7933 and 7935 disc products. These two programs may be just what you need when your customers are watching their budgets.

PRINTERS

PCLPak ordering information

Larry Haley/BOI

On September 1, Boise Division introduced PCLPak, a simple software utility which provides a menu-driven interface to the HP LaserJet and HP LaserJet PLUS printers.* PCLPak is now available in two versions, one for the HP Touchscreen personal computer (3½-inch disc format) and one for the IBM PC (5¼-inch disc format). The product numbers are:

- HP Touchscreen — P/N 33406A
- IMB PC — P/N 33406B

The HP PCLPak can be ordered through Personal Computer Distribution Operation or Direct Marketing Division.

*For more information, refer to "Introducing HP PCLPak" page 36 of the September 1, 1985, Computer News.

## HP 2687A laser printer discontinued

Steve Berube/BOI

As of February 28, 1986, the HP 2687A laser printer will be discontinued. The HP 2687A was HP's first medium-speed, medium-priced laser printer targeted into the office environment. However, the LaserJet and LaserJet PLUS printers are now supported on the HP 3000 and are viable printing solutions for the HP 2687A laser printer's target audience.

Please notify your customers of this discontinuance and urge them to enter their last-buy orders by February 28, 1986.

New sound enclosure cabinet for HP 293X printer family

Jim Kinney/DMK

DMK has added a sound enclosure cabinet to the HP Design Plus Furniture System. Designed for the HP 293X series printers, it features: a top that opens with smooth gas cylinder lifts, four heavy duty casters (two are braking), easy paper access and storage through front opening door, viewing window for printer monitoring, outside rear panel paper catcher, and cabling and ventilation ports in cabinet bottom.
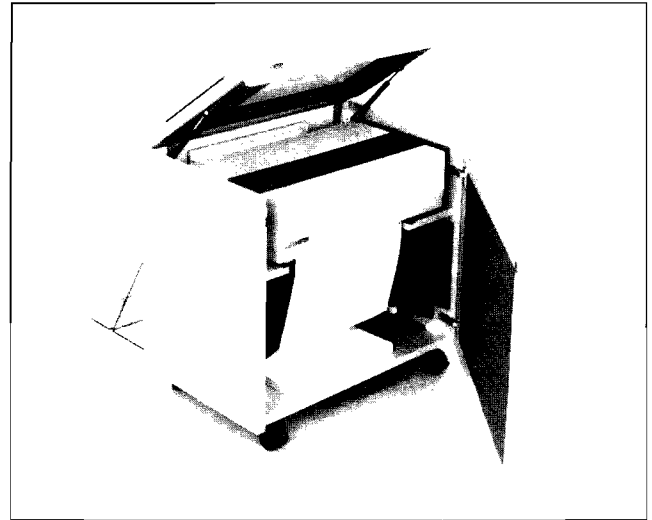
This sound enclosure cabinet has the same height and color as all HP 92214 Series Design Plus System tables and is compatible with HP standard furniture as well. Dimensions: 28.4 inches (720mm) H X 29.5 inches (750mm) W X 19.7 inches (500mm) D; with rear-mounted paper catcher in place the depth is 31.5 inches (800mm). Easy assembly with one screwdriver (included).

P/N	Description	Quantity	US list price
92211A	Mobile sound enclosure cabinet	1-2	$595 each
		3-9	560 each
		10+	540 each

For fast service, customers should call DMK's Direct Order phone numbers listed in the Computer Supplies section.

Also in this issue

PLOTTERS

HP's new ColorPro plotter for business professionals

Suzanne Tylka/SDD

HP's new ColorPro plotter is the ideal solution for your business professional customer who needs colorful overhead transparencies for presentations. The HP Color Pro eight-pen plotter quickly creates high-quality graphics on 8½ x 11 inch (210 x 297 mm) transparency material for presentations, or on paper for reports and handouts. For just $1,295 (US list), your customer can make truly professional presentations.
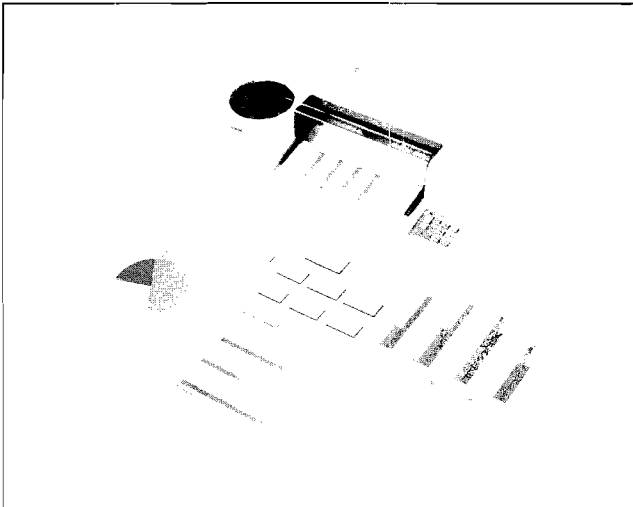
The ColorPro plotter was especially designed for business professionals — they work for a Fortune 1000 company, have access to a personal computer, work comfortably with software, and probably already own a printer. Their job may be in finance, production, sales, or marketing. Whatever the job, they are professionals who make decisions from numbers, and presentations with numbers. In fact, your customer will make a business presentation at least once a month to an audience of up to a dozen people.

When prospecting for the ColorPro plotter customer, ask these three key questions: Do you make presentations? Do you use an overhead projector? Do you want to make better presentations? Once you've qualified your prospect, the sale is easy. Just present these HP ColorPro plotter features to your prospect.

Quality plotting. Quality shows, especially when projected on a screen. ColorPro plotter graphics will show smooth circles, straight diagonal lines, and crisp characters.

Compatibility. Chances are excellent that whatever your customer's personal computer might be — from HP to IBM to Apple — the ColorPro plotter will fit neatly into the system.

HP reliability. With 15 years experience in plotter technology, HP's reputation for quality and reliability will build your customers' confidence before the sale and reassure them after the sale.

Lots of software. The ColorPro plotter is supported by popular integrated and graphics-only software packages. At introduction, the ColorPro plotter is supported by more than 100 packages — with more in progress.

Ease of use. An easy-to-read and easy-to-understand manual comes with every HP ColorPro plotter. Your customers can make colorful, professional presentation graphics almost as soon as they open the box.

Variety of media. Your customers can choose from three types of 8½ x 11 inch (210 x 297 mm) media — regular and glossy paper for reports and handouts, plus quick-drying overhead transparency film for those all-important presentations. Of course, pens come in an assortment of colors and two widths for bold and fine lines.

Demos sell plotters, and to make it easy for you, the Color Pro plotter has its own built-in demo. Check your ColorPro Plotter Sales Guide (P/N 164) for more information.

By studying our current customers, San Diego Division knows that more than one-third of those

customers learned about plotters through their business associates. Sell one HP ColorPro plotter and create a satisfied customer, and that customer will send several more potential customers your way.

HP ColorPro Plotter specs at a glance

Media sizes: 8½ x 11 in. (ANSI A)
      210 x 297 mm (ISO A4)

Media types: Paper, glossy presentation paper, fast drying overhead transparency film

Pens: Eight pens with automatic pen changing and capping

Resolution: 0.025 mm (0.001 in.)
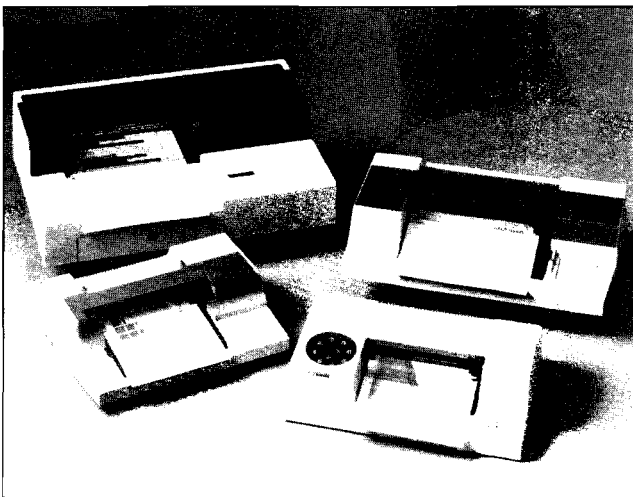
Pen speed: 40.0 cm/s (15.7 in./s)

Pen acceleration: 1.2 g's

Interfaces: RS-232-C/CCITT V.24 or HP-IB (IEEE 488-1978)

Plotters repositioned to fit customers' needs

Suzanne Tylka/SDD

With the current introduction (November 1) of the new HP ColorPro plotter, San Diego Division is repositioning the HP 7475, 7550, and 7470 graphics plotters to more closely parallel customers' needs.

Clockwise from front left: the HP 7470A, HP 7550, HP 7475, and HP ColorPro graphics plotters.

ColorPro plotter

- For business professionals who make presentations.
- Produces A4/A-size text and graphics on transparency film and paper.
- Eight pens and high quality — the most demanded plotter features.

HP 7475

- For the technical professional.
- Low-cost CAD plotter.
- Large format business applications (project schedules, organization charts).
- B/A3-size capability.

HP 7550

- For shared environments.
- High-volume business and technical applications.
- Ultimate speed and convenience.

HP 7470

- Industry standard for scientific applications.
- Available for specific OEM and scientific/measurement markets.

OEMs respond to HP 758X price drop

Jane Kelly/SDD

Large-format plotter OEMs have increased HP 758X purchases in response to the recent price decrease. Sales reps report that the new prices have won back customers who had "defected" to competitors' products. With its new low price, the HP 758X is now a viable alternative for the users in the fast growing PC CAD market.

Sales rep Bob Richardson reports from OEMs reactions such as the following: "HP is A-1." "Customer cries for CalComp have ceased." "We predict HP 10-1 over CalComp."

Sales rep Bob Braham described a similar reaction on the part of one of his key OEMs. That customer bought approximately $600,000 worth of HP 758X plotters last year. The customer switched to CalComp late last year after the introduction of the 1040 line. When Bob came back to the OEM armed with news of a 25 percent price reduction, the customer was eager

to resume purchases of the HP 758Xs — for both price and reliability reasons.

OEM sales have shown a strong steady rise since the price reduction was announced in May/June. Thanks to all the sales reps who have recommended HP plotters.

HP 7550A plotter sales tools

Stuart Schaffer/SDD

To help you sell more HP 7550 automatic sheet-feed plotters, San Diego Division has many sales tools to help develop prospects, overcome objections, and present the benefits of HP's plotter solutions. Check the literature shelves in your sales office or contact the Literature Distribution Center in Palo Alto, California, to get copies.

P/N	Description
HP 7550A	
5953-9794	Small Brochure (mailer)
5953-9829	Technical Data Sheet/Brochure
5953-9831	Supplies Data Sheet
5953-9801	"The Fastest Plotter In The. . . " (*Microcomputing* reprint)
5953-9859	Graphics Software Matrix
Set-Up Instructions	
5953-9803	HP 150 - HP 7550A
5953-9804	IBM PC or PC/XT - HP 7550A
5953-9805	IBM AT - HP 7550A
5953-9806	AT&T 6300 - HP 7550A
5953-9807	Apple IIe - HP 7550A
Protocol Converters:	
Linking HP Plotters and IBM Networks	
5953-9874	Plotter Note #11
5953-9800	Sales Amplifer
Sample Plots	
5953-9744	Saw Mill Production (paper)
5953-9745	Root Locus (paper)
5953-9813	Trend Technologies (overhead)
Demonstration Discs (order via HEART; not available from LDC)	
07440-18001	HP 9826/9836 (5¼")
07550-18002	HP 9816 (3½")
07550-18004	IBM PC/XT/AT (5¼")
07550-18005	Apple IIe/c (5¼")

Also in this issue

New graphics organizers for HP ColorPro and HP 7475A plotters   13

TERMINALS

HP-HIL cable is now a product

Evan Neptune/RTD

As of November 1, 1985, the 92241A HP-HIL Cable (US list $20) is on the Corporate Price List. The 92241A cable must be ordered along with the HP Touch accessory (P/N 35723A) when the accessory is to be attached to the HP Monochrome Monitor (P/N 35731A/B) or the HP Color Monitor (P/N 35741A/B). The 92241A cable can also be ordered as a replacement for the HP-HIL cable supplied with any other HP-HIL accessory.

Please note that the 92241A cable is *not* needed when the 35723 HP Touch accessory is to be attached to the Touchscreen II personal computer, which has an integrated monitor. The products that require the 92241A cable when the HP Touch accessory is attached include the following: Vectra PC, HP 9000 Series 300 System, HP 2393A Graphics Terminal, and HP 2397A Color Graphics Terminal.

□ Computer Supplies

HEWLETT PACKARD

DMK DIRECT ORDER

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

Location	Telephone Number
Australia	(03) 895-2645
	(03) 895-2615
	(03) 895-2815
	(03) 895-2861
Austria	(0222) 2500-615
	(0222) 2500-616
Belgium/Luxembourg	(02) 762 32 00
Canada	
Toronto Local	416-671-8383
Ontario	1-800-387-3417
Quebec	1-800-387-3417
British Columbia	112-800-387-3154
Other Provinces	1-800-387-3154
Denmark	(02) 816640-258
Finland	(90) 887 2361
France	(1) 692 83 264
	(1) 690 77 825
Greece	(01) 6471673
Italy	(02) 9236 9437
	(02) 9236 9478
	(02) 9236 9585
Middle East	
Athens	(01) 6828811
Norway	(02) 171180
South Africa	
Johannesburg	(011) 8025111
Cape Town	(021) 537954
Spain	91-6374013
	91-6370011
Sweden	(08) 7502028
	(08) 7502027
	(08) 7502204
Switzerland	(057) 31 22 54
	(057) 31 22 53
	(057) 31 22 59
The Netherlands	(020) 547 6606
United Kingdom	(0734) 697201
United States	800-538-8787
California	408-738-4133
West Germany	(0130) 3322

hp

REINHARDT, HELMUT
  BAD HOMBURG — GERMANY HDQTRS
HPGR   8300