

Computer News

For HP Field Personnel
July 15, 1983



The NEW HP-86B gives you more computing power for less money.



HEWLETT - PACKARD 86B

For Internal Use Only



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COMPUTER MARKETING GROUP

CMG Computer Marketing Group
3PP Third Party Program
CSD Computer Support Division
CSE Computer Support Europe
CSO Computer Supplies Operation
MA Major Accounts
SRO Systems Re-Marketing Operation

COMPUTER PRODUCTS GROUP

CPG Computer Products Group
BCD Boeblingen Computer Division
BEO Boeblingen Engineering Operation
CSY Computer Systems Division
DSD Data Systems Division
EPD Engineering Productivity Division
FSD Fort Collins Systems Division
YCD Yokogawa Computer Division

PERSONAL COMPUTER GROUP

PCG Personal Computer Group
GPCD Grenoble Personal Computer Division
HPPR Hewlett-Packard Puerto Rico
PCD Portable Computer Division
POD Personal Office Computer Division
PSD Personal Software Division
RTD Roseville Terminals Division
VCD Vancouver Division

BUSINESS DEVELOPMENT GROUP

BDG Business Development Group
AMD Applications Marketing Division
BGD Boeblingen General Systems Division
FSO Financial Systems Operation
GCO Guadalajara Computer Operation
IRO Information Resources Operation
MPD Manufacturing Productivity Division
OPD Office Productivity Division

INFORMATION PRODUCTS GROUP

IPG Information Products Group
BOI Boise Division
CNO Colorado Networks Operation
CPB Computer Peripherals Bristol
DMD Disc Memory Division
GLD Greeley Division
GND Grenoble Networks Division
IND Information Networks Division
RND Roseville Networks Division

INSTRUMENT GROUP

COL Colorado Springs Division
SDD San Diego Division

Computer Marketing

4 GROUP UPDATE

Bigger and better Summer '83 Computer Users Catalog

The calls keep coming. . .

HP Documentation Index

The HP alternative to the broker jungle

6 SUPPORT

Escalation brochure available for your new customers

Personal Computers

7 GROUP UPDATE

10Mb Winchester special now available for the HP-86B as well as Series 200

7 HP-75

Surveying software for the HP-75C

7 SERIES 80

Introducing the HP-86B

WORD/80 now speaks your language

The HP-86B is getting into training

Memory price reduction

9 SERIES 100

HP 2602A configured with the HP Series 100

Series 100 Communicator — did you miss issue #5?

10 SERIES 200

HP Series 200 Breadboard Card available

HP Series 200 computer backplane power limitations

New HP Series 200 PROM allows securing software

HP Series 200 purchase specification available

HP-NC Revision C available

13 TERMINALS

Photocopying of blue-image thermal paper

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.



Technical Computers

14 1000 SERIES

- Ordering MAC/1000 products
- New access to loader ROMs
- New revision of DEBUG/1000 requires FFP firmware
- New HP 1000 International Users Group brochure
- Contributed software library
- Lexico's Atlas 10 Editor videotape
- Self-paced datacomm course for HP 1000 users
- Terminal multiplexer prices lowered
- A-Series MicroSystems value packs

17 9000 FAMILY

- Mechanical Engineering software now in US
- Variation design with HP-DESIGN
- When desktop computers help design themselves
- BEO ME software sales aids
- Workstation tables and detached keyboards available
- HP ME software kicks off in Spain
- HP 9000 Series 500 introduces new graphics products
- FSD announces availability of multiple CPUs and I/O processors

Business Computers

23 GROUP UPDATE

- OSP becomes OPD
- \$1 million HP Financial Accounting sales
- HP Financial Accounting update

On the Cover:

PCG introduces the new HP-86B, which features built-in capabilities that allow for more performance and expandability — all for less money. See article beginning on page 7.

23 3000 SERIES

- "Test Drive" program to begin August 1
- Open call for competitive benchmarks
- Information management brochure available again
- RAPID enhancements
- Rental brochures now available
- No job too large for SRO Rental
- Reconditioned memory to round out your configuration
- SFD/3000 user: "Why we chose Hewlett-Packard"

28 OFFICE SYSTEMS

- Printing the HPWORD document catalog to a local or slaved printer

Computer Peripherals

29 GROUP UPDATE

- Worldwide information exchange network
- Using HP 27201A with other computers

30 MASS STORAGE

- Update on the HP 7910 Trade-Up program
- HP 7933 and HP 7935 are success at General Electric

Backtalk

- 31 Atlanta hospital anesthesia department chooses HP 9826 system

Price Changes

- 32 Computer Groups Price Changes Effective July 1, 1983

GROUP UPDATE

Bigger and better Summer '83 Computer Users Catalog

Scott Anderson/CSO

Just what the customer ordered! More pictures, pages and products. All focused on projecting a stronger image of HP's after-market products — and on making it easier-than-ever to locate and order from our selection of almost 2000 items.

The Summer '83 edition introduces three new product categories:

- Personal computers and software
- Peripherals and terminals
- Books and learning aids.

Personal computer customers will find products of interest on over half of the catalog's 100 pages.

Regular readers will notice several improvements to the catalog's organization and design. More photographs punctuate the pages and more products are now featured in easy-to-read charts.

How to get our catalog

Use the catalog as a pre-sales promotional piece and as a post-sale benefit.

All major sales offices will receive an initial bulk shipment. Copies will also go to CSO's customer mail list and to sales management and staff.

The international edition is stocked in Europe and at the Corporate Literature Center in Palo Alto. The UK edition is available only in Winnersh. Receive the US version by sending a Sales Literature Order to the Corporate Literature Center, Bldg. 9B.

US	5953-2450(D)
International	5953-2450
UK	5953-2450(UK)



Summer '83 Computer Users Catalog. *One hundred and sixty new products — almost 2000 in all. Publication No. 5953-2450(D) (UK).*

The calls keep coming. . .

Nancy Hittinger/CSO

The Computer Supplies Operation is receiving 37% more orders over the direct phone lines than last year at this time. In fact, over 65% of the total orders are being processed over our direct phone lines. To keep ahead of the ever increasing activity we have increased our incoming phone lines by 50%, and made similar increases in manpower.

The key to our business is customer service, and we have been concentrating on being as responsive as possible. On the average, 98% of our customers' calls are answered in one minute or less. This compares favorably with the industry average of 96-97%. Even in peak periods most calls are answered within 10-20 seconds.

We ensure that our order takers are knowledgeable about our products and services by regularly involving them in product training. These internally prepared courses enable them to be even more responsive to our customers.

While our telemarketing phone staff was busy taking orders and keeping up-to-date on our products, they were also learning how to work with our new software package — SFD (Software For Distributors).

This new system has many positive implications for customer service. It is an interactive, real-time system

which automatically decrements inventory, so we always know if products are in stock. SFD allows us to keep a permanent database so we can retain valuable customer information. Another real benefit of the system is that it retains credit information and minimizes accounts receivable problems.

Keep those orders coming. With our new SFD system, responsive order takers, and even more phone lines — we're ready!

HP



CSO's online order processors are kept busy responding to a 30% increase in incoming calls.

CSO DIRECT ORDER

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

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

HP Documentation Index

John LaCava/CSO

A road map through the manual maze

To help your customers answer their documentation inquiries, make sure they have a copy of the *HP Documentation Index* (11/82). It provides a quick, easy way to locate documents using either a product or part number approach. And to make things even easier, manuals introduced since the last Index are clearly flagged for user convenience.

Two ways to locate manuals

The Index speeds documentation referencing by providing two ways of locating HP computer or peripheral manuals. The first two sections, Computer/System Type and Peripheral Type, list manuals under the computer or peripheral to which they belong. These sections are helpful if the part number is not known. It also allows readers to browse through all the manuals that are available for their equipment. The third section lists all publications in numerical order (by part number) and allows quick numerical referencing.

In all cases, the listing includes part number, title, latest print date, and latest update (if any). The US version lists the current US prices at the publication date of the Index.

Availability

Copies of the Index for sales offices or HP personnel are available from the Corporate Literature Center on a controlled basis. Order P/N 5953-2460D or 5953-2460 (International).

Customers can obtain copies through sales offices or by calling our special fast order phone lines. Of course, orders may be placed in the regular way through local HP sales offices in those areas not already served by these special phone lines.

The HP alternative to the broker jungle

Rhonda Livingston/SRO

What do you do when your all-time favorite customer comes to you and asks for a 2640A, a 9815A, a 7580A or some other unavailable older computer product? You don't want to send them into that jungle of brokers to find what they need, but up to this time you haven't been able to offer an HP alternative. Well, now you can! If you have a customer who requests an older piece of equipment or who just wants to save by buying second-hand, HP can now help. There is a wide variety of hard-to-find, inexpensive equipment now available. The following is only a partial list:

Used Lease Equipment

2621A	45500A
2621P	7221B
2624B	7225A/B
2631B	7580A
*2640A	9815A
2640B	9825A
2645A	9836A
2647A	9885A
2671G	9895A

**Non-Supported*

So, the next time you have a request for an obsolete computer product, don't reach for your machete. Just call Rhonda Livingston, the Coordinator for Used Lease Equipment, at TELNET 1-720-2482 for a product reservation. In addition, Rhonda will be distributing a regular listing of used products inventory with quantities and pricing to North America and Canada to help in matching this used computer equipment with your customers' needs

SUPPORT

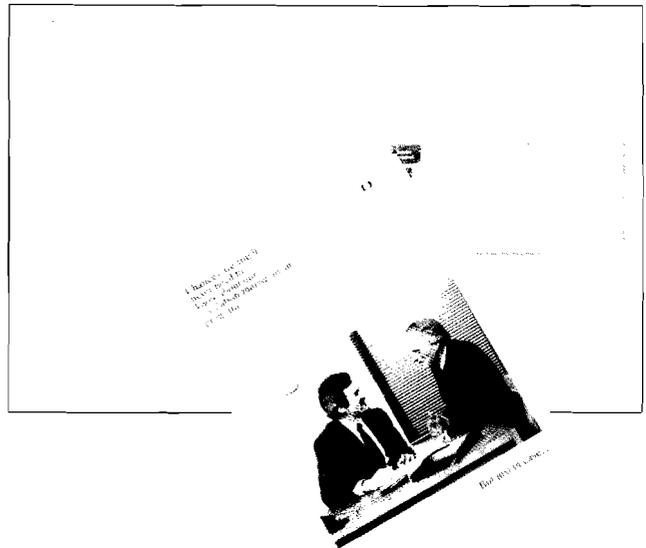
Escalation brochure available for your new customers

Peter Hausknecht/CSD

The need for an attractive piece of literature explaining our worldwide escalation program has been filled. We now have a colorful new brochure to aid you during customer presentations. The brochure defines, in simple terms, how HP goes the extra step to ensure that customers get the top quality support they need — when they need it most.

Customers concerned about HP's capability for calling in the necessary resources to resolve complex problems will appreciate learning about the solid plan we have in place. Use the brochure to close those sales!

Full bulk distribution was completed in May. You can get additional copies from the Literature Distribution Center in Palo Alto by ordering P/N 5953-8817.



GROUP UPDATE

SERIES 80

**VALUE
35**

10Mb Winchester special now available for the HP-86B as well as Series 200

Kathy Kimball/GLD

(US only) The HP-86B installed base and original orders can now purchase a 10Mb Winchester for \$500 off the list price. Customers who order an HP 9133B or HP 9134B between July 1 and August 31, 1983 will receive this special price.

For 10Mb capacity your customer can choose between the 9134B, a standalone Winchester, and the 9133B, the same Winchester drive combined with a 3½" microfloppy. The 86B needs only an HP-IB cable to support the 9133B or 9134B.

This offer is still effective for the HP Series 200 installed base and original orders through August 31, 1983. Incentive rules and sales aids are in the mail to you now! July and August are the best months to purchase a 10Mb Winchester, so get those orders in soon.

HP-75

Surveying software for the HP-75C

Sandy Canning/PCD

The HP-75 Surveying Pac is a portable tool to aid surveyors and engineers in solving many common surveying problems. The Pac consists of one integrated program (rather than a collection of individual routines), to provide a versatile and powerful tool for use in the field.

Traverse, inverse, curve layout and radial staking calculations are made quickly and easily. The unique data entry system allows selection of one of a variety of input modes, regardless of the output mode desired. The program prompts the user for data entries until enough data has been gathered to compute the answer. This friendly, menu-driven system is easy to learn and easy to use.

The HP-75 Surveying Pac (00075-15019) is available through CSO at a US list price of \$295. For more information, see the Series 70 Data Book, P/N 5953-5549.

Introducing the HP-86B

Don Becker/PCD

The new HP-86B offers *more* to your customers for *less*:

- *more* Memory — 128K RAM built-in
- *more* Performance — Electronic Disc (E-Disc) built-in
- *more* Expandability — HP-IB interface built-in
- *more* Options — Support for 10 local languages
- *less* — \$1595 List price for the HP-86B which includes all the above.

The HP-86B is PCD's newest addition to the Series 80 line of Personal Computers. We've added lots of features to the product and reduced the cost to your customers from \$1795 to \$1595.

The price reduction on the HP-86B is only part of the story. With the added capabilities, your customers save over \$1650 for a comparably configured HP-86B. A direct comparison of the HP-86A to the HP-86B, shows the tremendous savings your customers receive.

Description	HP-86B	HP-86A
System	\$1595	\$1795
64K RAM added	built-in	450
HP-IB Interface	built-in	395
E-Disc ROM	built-in	195
Monitor	325	325
HP-9130A	—	1700
HP-9121D	\$1275*	—
Local Language	N/C	not available
Total	\$3195	\$4860

*Disc price when ordered with an HP-86B as a system.

The user RAM has been expanded from 64K to 128K. With this extra memory, users can execute all of our Productivity Software such as WORD/80, FILE/80, VisiCalc® Plus and Graphics Presentations without purchasing additional memory. Customers wishing to write their own programs can now do so without feeling the pinch of memory constraints. This is a \$395 value your customer receives with the HP-86B at no extra cost.

Electronic Disc

We've improved disc performance on the HP-86B by building-in the Electronic Disc ROM. Disc transfer rates for reading and writing string data will be two times faster; loading and storing programs will still operate at the same speed as the HP-86A.

Personal Computers

More importantly, your customers can now *supercharge* their software by using the Electronic Disc capabilities. RAM memory can be configured with one simple command to operate as disc. From that point on, your customers can run their programs without accessing the disc drive. This will greatly improve throughput for almost any program. As an example, WORD/80's disc operations run 12 times faster on the HP-86B using Electronic Disc. To receive the full benefits of Electronic Disc we recommend users purchase an 82909A, the 128K RAM module, to insure plenty of RAM is available to function as E-Disc for data storage.

Customers with an HP-86A or HP-87 can order the Electronic Disc ROM to plug into their ROM drawers if they wish to use this capability.

Built-in HP-IB

The disc and printer interface on the HP-86A has been replaced on the HP-86B with an HP-IB interface. Customers will also receive a one-meter HP-IB cable with each HP-86B. The expandability of HP-IB allows your customers more freedom with their personal computer. San Diego plotters and Greeley disc drives can now be added to the HP-86B without ordering an additional interface. The HP-9130A disc drives will not work on the HP-86B; these only work on the HP-86A.

A big feature for our European friends is the additional support of 10 local languages. We've redesigned the keyboards to match typewriters used in the local countries so customers will be familiar with the keyboard layout. The display will show the local characters on the screen as they are typed, and all current HP printers will support the printing of local characters.

To get our European customer up and running, WORD/80 has been translated into German, French and Italian. WORD/80's screens, prompts and reference manual have been translated into these languages for customer use. System messages will still appear in English.

The HP-86B is orderable with the following languages as no charge options.

Language	Option Number
001	Swedish
002	Norwegian/Danish
004	German
006	Spanish
008	French
009	Italian
010	Dutch
011	Finnish
020	Swiss/German
021	Swiss/French

The best part of all this is that your customers can now order an HP-86B and receive all of the above for \$1595.

HP's new low cost Personal Computer offers your customers *more for less*.

VisiCalc® is a US registered trademark of VisiCorp.

WORD/80 now speaks your language

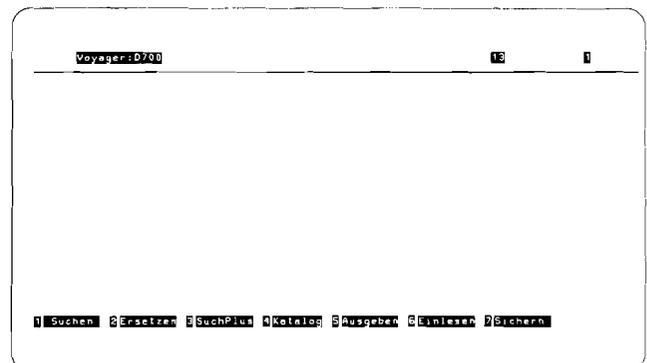
Jim Martin/PCD

WORD/80, which was recently reviewed as the "Software of the Month" in *Personal Computing* magazine, is now available in German, French, and Italian versions. Software message files, user prompts, and error messages, as well as printed documentation, have all been translated to take advantage of and fully support the HP-86B with national keyboards.

All of the original friendliness of WORD/80 is fully supported in the national language versions. And several features added to further enhance the product include:

- Enhanced support for letter quality printers
- Greater output flexibility
- General speed improvements.

For dramatic speed improvement of file functions, WORD/80 may be used with the built-in Electronic disc of the HP-86B or the E-disc ROM available for the 86A or 87XM.



WORD/80 Rev B requires 128K of memory and is available now for the price of \$250 in the following configurations:

- 82823A English
- 82823G German*
- 82823F French*
- 82823T Italian.*

*Supported on the 86B only.

Each of the above are available in both 3.5" (Option 630) and 5.25" (Option 650) media. English versions of WORD/80 are also available bundled with FILE/80 and VisiCalc-Plus (the Personal Productivity Pac — 82846A) for the promotional price of \$495.

Product update kits are available from CSO (P/N 82823-17301 for 3.5" media and P/N 82823-17501 for 5.25" media). Contact CSO for details.

The HP-86B is getting into training

Robin Garthwait/PCD

PCD is offering a videotape for training computer newcomers on the HP-86B. This 15 minute tape shows you how to set up and operate the HP-86B. It also features the 86's versatility and strengths — a great tool for training new sales reps and new dealer sales people!

We are offering an initial free distribution to all FMMS, and SF12 and SF02 DMs. This videotape is available in 1/4" (#6098), VHS (#6097), and Beta (#6099) formats for \$50. Dealers use co-op funds to purchase videotapes. Sales reps may call in orders to 800-547-3400 or mail in orders to:

Hewlett-Packard Company
1000 NE Circle Blvd.
Corvallis, OR 97330
Attn: Marcom Department

Memory price reduction

Don Becker/PCD

On July 1, PCD will lower the price of the 82908A (64K memory module), and the 82909A (128K memory module). The new prices are \$395 and \$595, respectively. This is a price reduction of \$55 on the 82908A, and \$200 on the 82909A.

PCD's new products, the HP-85B and HP-86B, come standard with Electronic Disc capabilities. Your customers can better utilize their HP-85Bs and HP-86Bs by adding extra memory. Both the HP-85B and HP-86B are very competitively priced. With the new memory prices, your customers can now afford to take full advantage of their Series 80 computers.

SERIES 100

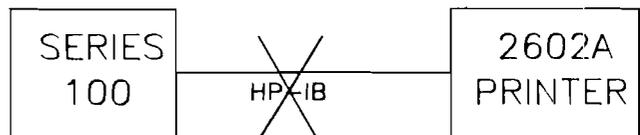
HP 2602A configured with the HP Series 100

Harold Fast/VCD

The HP 2602A and the HP Series 100 personal computers make an unbeatable combination for single-user word processing applications.

A word of caution is in order, however. *The 2602A is supported on the Series 100 only using the RS-232 interface.* When ordered with a 13242G cable, the two work very well together.

A comment worth mentioning to your customer is that the HP-IB interface on the 2602A is an extra cost option. The RS-232 interface is a no-cost interface. Therefore RS-232 will save your customer money.



Series 100 Communicator — did you miss issue #5?

Curt Gowan/POD

In May, issue #5 of the *Series 100 Communicator* was mailed to customers, SRs, SEs, CEs, and TSEs on the various Series 100 SDC subscriptions. This issue, edited by Eunice Yan, is easily recognizable by the orange cover.

How to get back issues

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

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



How to subscribe

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

- Customers: call the nearest HP office and ask for "Computer Products Order Processing"... the price for 45530N is \$24.00 per year.
- HP field personnel: if you are not on either the Series 100 SE or CE subscription service, order 45530N through the SE Administrator for your Area... \$19.20 per year.

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

SERIES 200

HP Series 200 Breadboard Card available

John Abegg/FSD

The HP 98630A Breadboard Card is available for customized prototypes of interfaces and memory type cards that plug into the HP Series 200 backplane. The card provides 15 square inches of circuit layout area with plated-through holes. An extender card that allows the breadboard card to extend outside the back of the computer is available as Option 001. This is useful for troubleshooting the card in operation.

People interested in using this card should be familiar with the Pascal Workstation, and should have read the Pascal 2.0 System Designer's Guide, P/N 09826-90074. Since the card is accessible only through the Pascal Workstation (including Assembly Language), the CSUB Utilities, P/N 09800-10X40*, provides BASIC Language access to the Pascal or Assembly routines.

The breadboard card, the System Designer's Guide, and the CSUB Utilities will appeal to the expert programmer. Casual programmers will find these tools difficult to use.

Ordering information

HP P/N	Description	US Price
98630A	Breadboard card	\$315
Opt. 001	Backplane extender card	100
09826-90074	Pascal 2.0 System Designer's Guide	200
09800-10X40*	CSUB Utilities	300

*The X indicates the media size:

3 for use in 3½" external flexible disc drives

5 for use in 5¼" external flexible disc drives

6 for use in 5¼" internal flexible disc drives.

HP Series 200 computer backplane power limitations

Bart Bobbitt/FSD

HP Series 200 computers have multi-slot backplanes that can use 2 to 16 accessory cards, each type of which draws different amounts of power. Because each of the computers has a different capacity to provide power to the backplane, here's some information that should ensure you don't overload your computer's power supply or damage one of the accessory cards.

Caution

If the power for required accessories exceeds the power available at the product's backplane, damage to the product and/or the accessories may occur. Hewlett-Packard does not support configurations of accessories that require more power than is available at the product's backplane.

To determine the suitability of a given set of accessories for an HP Series 200 computer or Bus expander, follow these instructions:

1. Determine the total power required by adding up each accessory's power requirements for each voltage and accessory maximum using the data in Table 2.
2. Compare the power required for the accessories to the amounts of power available for your Series 200 product in Table 1. If the total power required is greater than that available at the backplane, or the power drawn at any given voltage exceeds the value for that voltage level, you must:

- Change the type and/or reduce the quantity of accessories, or
- Add a 9888A Bus Expander (4 max. per system), and
- Recalculate the power required vs. power available.

Table 1. Typical Backplane Power Available in Series 200 Products

P/S Voltage	9816	9826	9836A/C	9888	9920
+5 Vdc	10W	38W	38W	106W	93W
+12 Vdc	3W	11W	11W	36W	36W
-12 Vdc	2.4W	7W	7W	36W	36W
Backplane Max.	15W	42W	42W	148W	135W

Table 2. Series 200 Accessories Typical Power Requirements

P/N	Description	Typ. Max Watts each P/S Voltage			Typical Max Watts per Acc.
		+5	+12	-12	
9888A	Bus Expander	5.0			5.0
13265A	Data Link Pod	0.2	1.9	0.3	2.4
13265A	Modem	0.5	0.5	0.5	1.5
13266A	Current Loop Pod	1.0	1.0	1.0	3.0
98028A	Resource Mgt. Multiplex	2.2	6.4		8.6
98201A	Custom Keypad Card	0.1			0.1
98203A	Standard Keyboard	0.4			0.4
98203B	Large Keyboard	0.4			0.4
98204A	Comp. Vid. w/o Graph	5.2	0.1		5.3
98204A	Comp. Vid. w/Graph	6.5	0.1		6.6
98253A	EPROM Prgm. Assy.	5.7			5.7
98254A	64Kb RAM	3.0			3.0
98255A	EPROM Card	2.8			2.8
98256A	256Kb RAM	4.1			4.1
98259A	128Kb Bubble Memory	2.4	2.9		5.3
98601A	BASIC 2.0 ROM*	2.4			2.4
98602A	BASIC 2.1 ROM*	3.6			3.6
98604A	HPL 2.0 ROM*#	1.5			1.5
98620A	DMA Controller	6.0			6.0
98621A	Opt. 001 BASIC ROM*	2.3			2.3
98621A	Opt. 004 HPL 1.0 ROM*#	2.0			2.0
98622A	GPIO Interface	3.8			3.8
98623A	BCD Interface	2.5			2.5
98624A	HP-IB Interface	2.4			2.4
98625A	Disc Interface	3.0	0.1		3.1
98626A	RS-232 Interface	2.0	0.6	0.6	3.2
98627A	Color Video Interface	5.5			5.5
98628A	Datacomm	3.6	0.5	0.7	4.8
98629A	Resource Mgt. w/o 98028A	3.7	0.5	0.5	4.7
98629A	Resource Mgt. w/98028A**	5.9	6.8	0.5	13.2
98630A	Breadboard Card (unloaded)	1.3			1.3
98691A	Programmable Datacomm	3.6	0.5	0.7	4.8
98206-66501	Series 200 Test Card	4.2			4.2
09920-66533	Keyboard/HP-IB Intfc.	2.6			2.6
09920-66534	Kbd/HP-IB Intfc. w/beep	2.6			2.6

*Not supported on the HP 9888A Bus Expander.

**A 9826/9836 SRM system configured with two 98629A-98028A cards and one 98625A card will exceed the +12 Vdc power limit. The unique characteristics of the SRM system permit this exception. When this configuration is used in a 9826/9836, no other cards taking power from the computer's +12 Vdc power supply may be used.

#Not supported on the HP 9920A/S Computer.

A system consisting of up to four 9888A Bus Expanders and a computer can contain up to:

- 24 I/O cards

and either of the following sets of RAM boards:

- 29 RAM Memory 98256A boards
- 30 RAM Memory 98254A boards.

Series 200 computers using both 98256A and 98254A boards should not exceed 2Mb of total RAM. This includes the RAM present on the CPU board. Using more than 2Mb of RAM in a Series 200 computer system containing 98254A (64Kb) boards may cause memory errors.

New HP Series 200 PROM allows securing software

Dave Deane/FSD

All HP Series 200 Model 20 and Model 36 computer systems, as well as Model 26A and 36A systems ordered after April 1, 1983, include a new processor board. On this new board resides a PROM that contains the computer's serial number. A project is underway to add this feature to the Model 16. Our "best-guess" schedule indicates shipments may start toward the end of this year.

This feature was included to help third-party suppliers implement software security mechanisms.

Access to this feature from BASIC is provided by a function that is part of the AP 2-1 binary included with BASIC Extensions 2.1. The syntax of this function is: SYSTEM\$("SERIAL NUMBER"). If the PROM is present, an 11-character string is returned containing the serial number. If no PROM is present, a null string is returned.

Access to this feature from Pascal is shown in the following program segment. (This is fully documented in the System Programmer's Guide, HP P/N 09826-90074.)

```
$sysprog$
```

```
Program serialnumber(input,output):
```

```
Const
```

```
  Sernumloc = hex ('5f0007'); (address of ID PROM's  
  Serial Number)
```

```
  productloc = hex ('5f001D'); (address of ID PROM's  
  Product Number)
```

```
var
```

```
  sernum[sernumloc] : array[1..7,1..2] of char;  
  prodnum[productloc] : array[1..7,1..2] of char;  
  i : integer;  
  printer : text;
```

```
begin  
  rewrite(printer, '#6:');  
  write (printer, 'Serial Number: ');  
  for i := 1 to 11 do  
    write(printer,sernum[i,1]);  
  writeln(printer);  
  write(printer, 'Product Number: ');  
  for i := 1 to 7 do  
    write(printer,prodnum[i,1]);  
  writeln(printer);  
end.
```

Output:

```
Serial Number: 2314A000000  
Product Number: 9920A
```

Here is a simple example of how this feature might be used to ensure software security. The first time the software is used on a given machine, read the serial number of the machine and store the number on your program disc. Then with each successive use of the software, the serial number of the computer can be read and checked against the stored number.

HP Series 200 purchase specification available

Bill Szmyd/FSD

Did you ever need a purchase specification on an HP Series 200 product to help a customer effectively sole-source it as an engineering workstation? We finally have one — a basic technical specification for each of the Series 200 desktop computers that customers can incorporate in their RFP or RFQ.

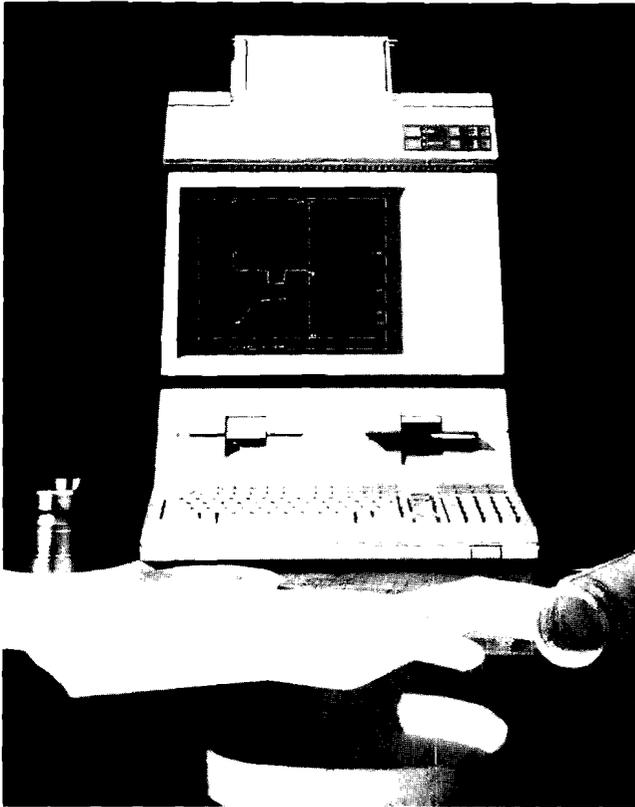
The specifications have enough detail about our desktops to effectively lock out any other products. If any or all of these specifications would be useful to you, contact me at FSD, ext. 2060, or COMSYS 4000, and tell me what you need and where to send it.

HP-NC Revision C available

Wolfgang Kappler/BEO

Do you have a customer who wants to run HP-NC on an HP 9836C? This is no problem with HP-NC Revision C, now available.

This is compatible with the HP 9836A and the HP 9836C — but that's not all! It also makes excellent use of color. It



can show geometric elements, part contours and patterns more distinctly on the HP 9836C color screen, simplifying the representation of complex parts. Note that the graphics binary is required for this; consequently, three 256Kb memory boards must reside in the HP 9836C.

HP-NC provides other important enhancements.

You are probably familiar with the situation in which your HP-NC customer wants to continue using the paper tape reader from a former NC programming system. With HP-NC Revision C, this is possible, even for tape readers with a serial interface. The compatibility of the interfaces themselves must, of course, be verified in each individual case.

When reading a paper tape from an NC machine tool, the proper code conversion environment for this specific NC machine tool can be easily restored. This is because, with HP-NC Revision C, the machine specific code conversion table (EIA, ISO extensions) can now be included in the format file.

NC part programs generated with HP-NC Revision C can be saved with the same code format as used on the program tape that is fed into the NC machine tool controller. The paper tape header information is also saved. These NC part programs with the correct header can then either be punched onto paper tape using HP-NC, or they can be used externally.

TERMINALS

Photocopying of blue-image thermal paper

Kent Moffat/VCD

At last, information on an annoying question: Why do some copying machines detect and reproduce blue ink satisfactorily while others do not? The problem is important because many HP 267X customers are opting for the lower contrast black-image paper over blue-image due to photocopying concerns.

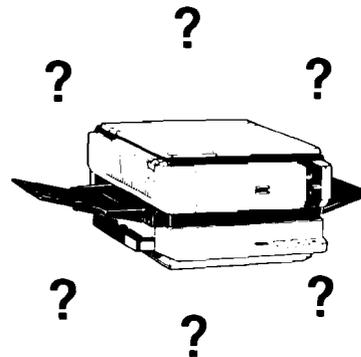
The two most important factors affecting the blue-image performance of a copier are:

- The type of photoconductor used to produce the image
- The generation of the machine.

The older model copiers that use a Selenium photoconducting drum are most likely to experience difficulty in copying the blue-image paper. These machines are blind to the color blue and cannot distinguish blue print from white paper.

Some machines to be wary of are Xerox models 660, 2300, and 3100, and any made by Royal or Savin. Machines which tested favorably include the Xerox 10XX Series and 2830 Desktop, as well as the current product line from Kodak, IBM, Cannon, and Sharp.

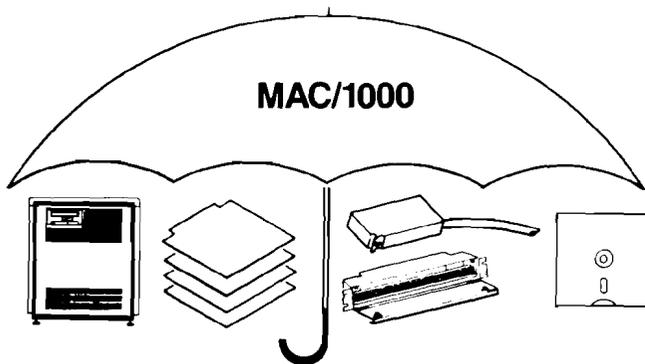
If you have customers experiencing blue-image copying problems, have them call their photocopier service representative. Most copiers can be adjusted to improve their blue-image copying performance. Also, remind your customer that photocopying usually isn't necessary to preserve the shelf life of a thermal print document. Stored properly, i.e., in a file drawer at room temperature, thermal documents will remain legible for five years.



1000 SERIES

Ordering MAC/1000 products

Paul Oliverio/DSD



Thanks to your efforts, we have been receiving numerous inquiries concerning how to order MAC/1000 products. The following will serve as a reminder/summary of how to order the various items.

MAC/1000 begins with any combination of the 1206X family of measurement and control cards plus any compatible HP 1000 A-Series processor, including the new microsystems. Add to this your customer's choice of interface cables, termination strips, and MAC/1000 software. The 1206X cards and processors are available through the HP Corporate Price List. The other products are described below.

Cabling and termination strip description

All cables have one unterminated end for user configurable connection to termination strips.

- 93571A: 2.4m (8 ft.) cable with assembled connector for 12060A High Level Analog Input Card
- 93571B: 2.4m (8 ft.) cable with assembled connector for 12061A Expansion Multiplexer Card
- 93571C: 2.4m (8 ft.) cable with assembled connector for 12062A Analog Output Card
- 93571D: 2.4m (8 ft.) cable with assembled connector for 12063A Digital Input/Digital Output Card.
- 93571 Option 001: Rack Mounting Termination Strip with self-stripping, snap-on connectors for easy connection to 93571A/B/C/D cables. Industrial screw connectors accommodate up to 10 gauge wire for clean, straightforward field wiring.

Price

93571A and 93571C: \$160 plus 1 93285A Engineering Unit

93571B and 93571D: \$210 plus 1 93285A Engineering Unit

Option 001: \$120

These prices are applicable through October 31, 1983.

Delivery is 8 weeks ARO. No discounts are applicable for this product.

The 93571A/B/C/D can be ordered by using a HEART override.

MAC/1000 Software description

A comprehensive set of subroutines and programs that provide an easy-to-use interface between application programs and measurement and control I/O using the 1206X cards. An optional continuous data acquisition capability is available.

Price

MAC/1000 software: \$1000

Option 001. Continuous Data Acquisition: \$500

Delivery is 6 weeks ARO. Available only in US at the present time. Order from: Demand Systems Inc., P.O. Box 8887, Calabasas, CA 91302, phone 213-706-2147.

New access to loader ROMs

Randy England/DSD

Problem: In order to access two of the four loader ROMs on M/E/F CPUs, the board must be removed from the box. This operation was awkward and time-consuming. Also, some OEMs and government accounts who were accustomed to the paper tape or CRT loader ROMs in specified locations were impacted when the paper tape loader ROMs were removed from standard shipments.

Solution: Thanks to input from the field and a re-evaluation by manufacturing, a larger hole was cut in the universal deck sheet metal. Now easy access is provided to all four loader ROM locations just inside the front panel. This change has been made with new stock manufactured in early '83.

New revision of DEBUG/1000 requires FFP firmware

Jeff Chamberlain/DSD

Changes made to the DEBUG/1000 product at the B.83 PCO allow its use with large programs under the new VC+ product with RTE-A. Due to this enhanced capability for the HP 1000 A-Series, DEBUG/1000 will not load on an M- or E-Series computer unless the FFP firmware is present. For your existing M- or E-Series customers, we advise them not to update DEBUG/1000 at this revision unless they have this FFP firmware. For new sales, be sure your customers also purchase the FFP firmware. This firmware greatly increases the performance of user applications. We are currently investigating this problem and plan to correct it by the next update.

New HP 1000 International Users Group brochure

Chris Carney/DSD

The HP 1000 International Users Group Brochure, P/N 5953-8742, is now available from the Literature Depot. The brochure is an attractive 4-color, 6-page fold out which details the features and benefits of the International Users Group. The brochure also contains convenient cards for you and your customers to use in order to join the IUG. Also included within the brochure is a letter from John Young endorsing the IUG. This impressive brochure gives your customers a better understanding of the benefits they can enjoy by joining the International Users Group.

For further details regarding the Technical Computer International Users Group, contact Chris Carney, 408-257-7000, ext. 3502, 1-157-3502 or the International Users Group Office, 289 So. San Antonio Road, Suite 205, Los Altos, CA 94022, 415-941-1943.

Contributed software library

Chris Carney/DSD

Have you or your customers developed programs on the HP 1000 intended only for in-house applications? If so, consider submitting the program to the HP 1000 International Users Group Library, which is coordinated by Jack McAlister of the International Users Group Board of Directors. The programs are not supported by Hewlett-Packard,

but they sure have helped many sales reps sell the HP 1000s.

There are over 500 programs which have been contributed to the Contributed Software Library, CSL/1000. If you or your customers would like to contribute a program, contact Chris Carney, Technical Computer liaison, Systems Marketing Center, COMSYS 2200. If you would like to join the IUG and receive a copy of the Contributed Software Library Listings, contact Chris Carney or the International Users Group at the following address:
289 So. San Antonio Road, Suite 205,
Los Altos, CA 94022
Phone: 415-941-1943

Lexico's Atlas 10 Editor videotape

Chuck Ernst/Corporate

A new, one-hour videotape that demonstrates the features of Lexico's Atlas 10 Editor to HP 1000 computer prospects is now available.

The Atlas 10 Editor speeds Atlas program development, provides for error checking without compilation, and improves the management of test products.

To order: Transmit a HEART (COCHISE) I-2 order for 90729RZ to obtain a 3/4" Umatic videocassette.

Product type: 02

Product line: 65

Division: 0000

This program is focused on the HP workplace. It is not intended for sale to customers.

Self-paced datacomm course for HP 1000 users

Jill Wilk/IND

DSN/MRJE 1000: A Study Guide For New Users is hot off the press for HP 1000 customers who need to access a remote IBM or IBM plug-compatible mainframe. To help these HP 1000 users to be satisfied customers, here's the solution that provides that all-important product training.

To simplify the learning process for operating a Multileaving Remote Job Entry subsystem, this course offers clear and concise, step-by-step instructions along with practice

exercises for review. Being self-contained, it can be studied at the customer's own pace. It is designed in modular format to accommodate those users who simply submit jobs for processing, as well as those who initiate and terminate the communications link with the host system.

A special feature of the course is an overview module which explains basic data communications concepts such as synchronous transmission, network components, data link control, and multileaving Bisync protocol.

One copy of the DSN/MRJE 1000 study guide is included with each shipment of the HP 1000 Multileaving Remote Job Entry software. Additional copies can be ordered through CSO (Part Number 91782-30001).

Terminal multiplexer prices lowered

Paul Accampo/RND

Good News! Roseville Networks Division has lowered the price of the 12040B multiplexer and junction box from \$2700 to \$2100. This change will make the system price of multi-terminal Micro/1000 systems even more attractive. Effective July 1, new prices for the 12040B and its options are:

12040B	8 Channel A-Series Multiplexer	\$2100
Opt. 001	Firmware Update	-1950
Opt. 002	Delete Junction Box (12828A)	-400
Opt. 003	Delete Junction Box and Cable	-500

Look what you can offer OEMs who are buying components:

2436A Micro A600	\$5600
Opt. 110 Winchester	3800
12040B 8 Channel MUX	2100
92077A RTE	
Opt. 600	2000
	<u>\$13,500</u>
	(less discount)

This configuration offers more I/O and more performance while cutting the price gap between A-Series micro-systems and comparably-equipped Micro PDP-11s (which have only six I/O ports).

All orders which ship from RND after June 23 will be invoiced at the lower prices.

Your OP departments are being asked to send change orders to RND Order Processing with "DELIT/ADDIT" codes on 12040B items and subitems. These change orders will not affect current shipping priorities.

A-Series MicroSystems value packs

Sulu Hegde-Rai/DSD

The attractive, new MicroSystem value packs (now available as options on the Micro 26, 27 and 29), announced on DSD's Teleconference in May, should be very well received by your customers. These value packs include additional memory, VC+, Image/1000, Graphics/1000-II and your choice of BASIC/1000C (Opt. 121), FORTRAN 77 and SYMBOLIC DEBUG/1000 (Opt. 122) or PASCAL/1000 (Opt. 123).

For the customer in a program development environment, we recommend a disc larger than the integrated Winchester (available as Opt. 110) in order that he may not be constrained by 10 Mb.

However, for customers who plan on using a MicroSystem with only the integrated 10Mb disc, here are some details to help clarify the disc space available to the customer, after the operating system and the value pack products have been loaded.

The numbers given below assume that all extra files (relocatables, link command files, transfer files, etc.) are purged from the hard disc, after the value pack products have been installed.

Value pack	% of 10 Mb disc available after the Op. Sys. and the value pack products have been loaded
Opt. 121 (BASIC/1000C, VC+, IMAGE/1000, GRAPHICS/1000-II)	Approx. 30%
Opt. 122 (FORTRAN 77, SYMBOLIC DEBUG/1000, VC+, IMAGE/1000, GRAPHICS/1000-II)	Approx. 44%
Opt. 123 (PASCAL/1000, VC+, IMAGE/1000, GRAPHICS/1000-II)	Approx. 40%

Compiler	% of 10 Mb disc available after the Op. Sys., VC+ and only the compiler have been loaded
BASIC/1000C	Approx. 46%
FORTRAN 77, SYMBOLIC DEBUG/1000	Approx. 60%
PASCAL/1000	Approx. 56%

More of the disc could be available with some careful disc management. This could be done by purging non-used programs from the integrated 10 Mb disc. NOTE: The programs that come with the primary are on a set of microfloppies that come with the system. Programs that are part of the value pack must be backed up before purging them. Some of the programs cannot be copied to floppy because the Type 6 files are too large (i.e., BASIC, RBEX, CBASC, QUERY, PASCOMP, PCL). These programs must be reloaded if the Type 6 files are purged.

An additional manual documenting the above in detail, as well as providing a procedure for loading the value pack subsystems from microfloppy to the hard disc will be shipped with every A-Series MicroSystem (with Opt. 110).

9000 FAMILY

Mechanical Engineering software now in US

Helmut Gneiting/BEO

We are now making initial shipments of our recently introduced ME software packages. This software was announced last fall in conjunction with the new HP 9000 32-bit Engineering Workstation Computer. This is HP's first software product offering in the ME market. The software has been designed to fit applications in the metal cutting industry; however, other applications for it are also feasible.

Note that at first, this software will only be available in selected areas where trained system engineers are in place. The first four software packages being sold in the US market are HP-DESIGN, HP-FE, HP-NC, and HP-DRAFT.

HP-DESIGN

HP-DESIGN is a 2D CAD system that produces optimum results when used for designing parts to be machined.

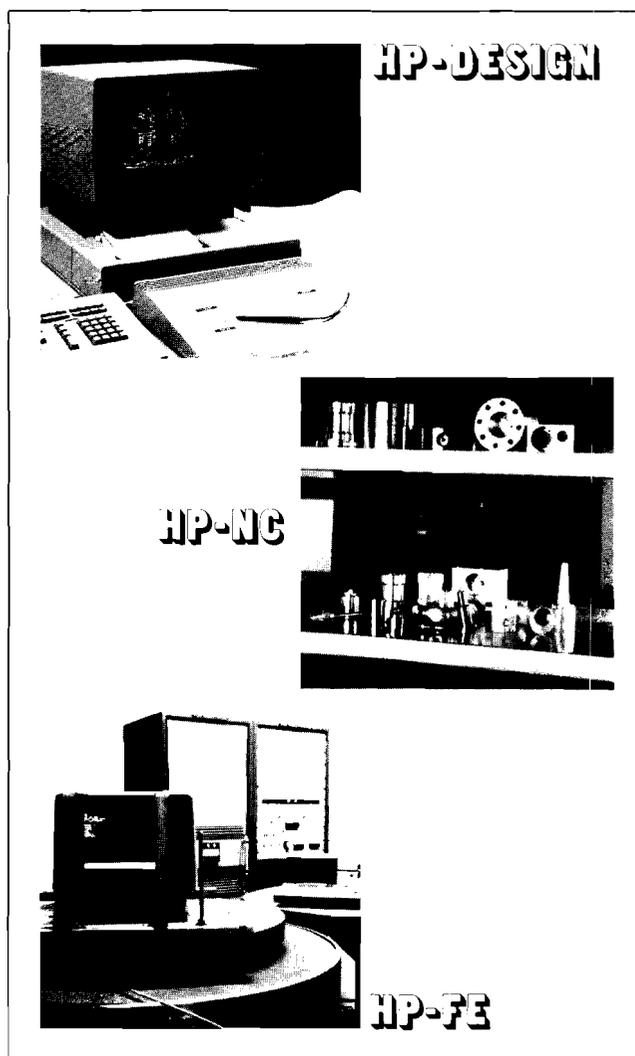
HP-DESIGN has a variation design capability well suited for applications requiring the design of families of parts. With HP-DESIGN, final part drawings can be generated. A classification scheme for parts can be defined by the user and then drawings can be stored and archived.

HP-FE

HP-FE is a finite element system for the analysis of 2D and 3D structures. The system performs analysis on linear static, dynamic, and heat conduction problems. HP-FE has the accuracy of a mainframe, but can be used interactively right at the engineer's desk. With this power, many of the mainframe analyses can be offloaded onto workstation computers.

HP-NC

HP-NC is an interactive NC programming workstation for 2½D applications, such as turning, milling, drilling, and



flame cutting. With its built-in processor generator, HP-NC can easily be adapted to new manufacturing requirements. Via the HP-DESIGNLINK program, part geometry created on HP-DESIGN can be easily transferred to HP-NC.

HP-DRAFT

HP-DRAFT is an all-purpose drafting system for mechanical engineers as well as architects. It can be used, for example, to produce parts and assembly drawings, proposal drawings, and ground and building plans. Comprehensive editing facilities allow drawings to be changed quickly and easily.

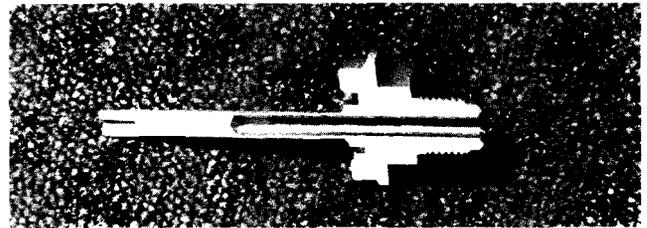
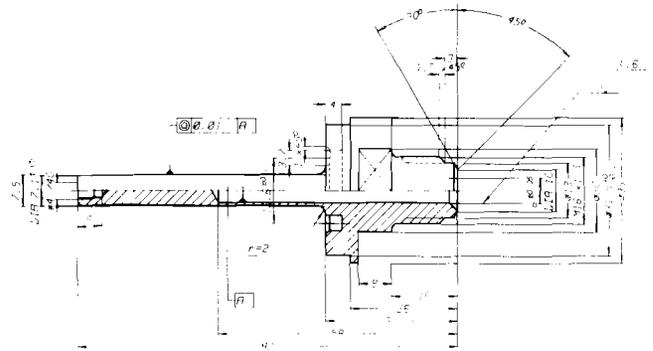
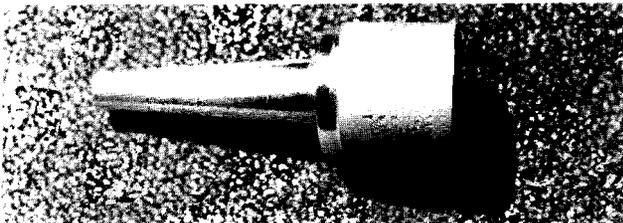
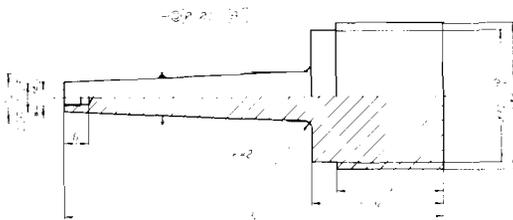
Variation design with HP-DESIGN

Dieter Roller/BEO

Only about 30 percent of designed mechanical parts are completely new designs. Seventy percent are just modifications of existing designs, and often only the dimensions have to be changed. That's why HP-DESIGN, with its powerful variation design capability, can save your customers time and money!

In the example shown here, HP-DESIGN's variation capability was useful even for a new part design. Figure 4 shows a sectional view of that part, which is a component for a pressure gauge.

A sensing coil will be placed on the shaft. In operation, the pressure of a fluid in the center hole on the right will cause the shaft to expand, and its movement can be measured via the coil. Therefore, there are strict accuracy and finish requirements for the shaft's inside and outside surfaces.



The main problem in manufacturing this part is as follows: If the shaft is turned on the lathe to the final diameter, you cannot then drill the hole because the surrounding material is very thin and will become deformed, giving poor accuracy and finish.

The solution is to manufacture the part in two steps. First, turn the part with a conical shaft, as shown in Figure 2, drill the hole, and then turn the part to the final shape.

The drawing of the part shown in Figure 1, as it looks after the first turning process, is a variation of the drawing shown in Figure 3. Note that only the dimension values have been changed: some of them are zero in Figure 1.

With HP-DESIGN, you can produce the second drawing just by typing in a few new values for the dimensions. The new geometric shape, including any annotation, is generated automatically.

When desktop computers help design themselves

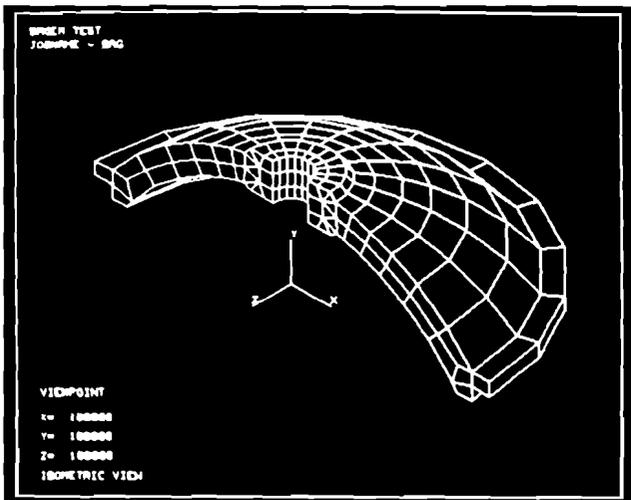
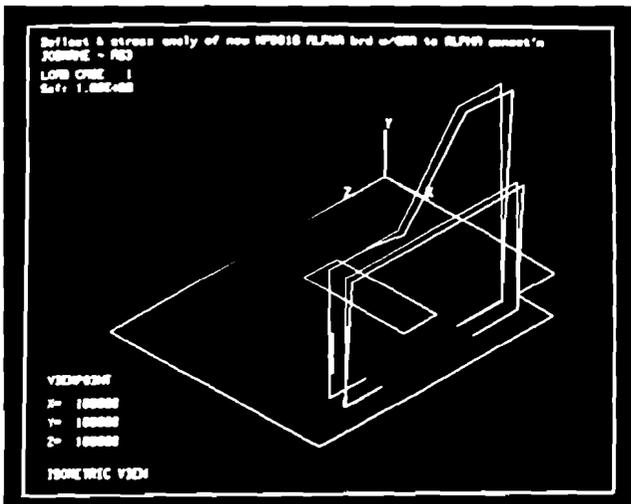
Jean-Pierre Mainguy/BEO

Even a low-cost computer such as the HP Series 200 Model 16 is designed with the help of the latest design technologies. Experimental dynamic measurements have

been coupled with a computer simulation using the HP-FE finite element software, in order to optimize implementation of the internal PC boards.

To quote Lloyd Benes, structural analyst in Fort Collins and the initiator of this study: "The alpha board in the HP 9816 was modified by lengthening and adding weight to the top of the board. Because of the board's cantilevered support, some concern was expressed as to what structural effect this would have."

To find the solution, the case was simulated on a computer by a finite element model of three boards: the alpha, graphics, and CRT boards. Figure 1 shows how these boards would vibrate (1st mode shape) according to the finite element mode. An experiment was also set up as shown in Figure 2, where an HP 3582A Dual Channel Spectrum Analyzer measured and displayed the boards' frequency response.



The experimental results agreed well with those predicted by the finite element model; large deflections were predicted during Class B shock test simulations. A fix to the alpha board was then modeled and found to significantly reduce the deflections. Implementing the fix in the real hardware helped reduce shock and vibration problems, as well as related warranty costs.

You can now sell these advanced design tools to your customers. HP-FE is a finite element package running on the HP 9836 or the HP 9020 computers, and developed at BEO. This package is an ideal complement to the dynamic analysis systems and instruments developed at LSID.

BEO ME software sales aids

Angela Suthurst/BEO

Here is a list of product numbers and sales aids for BEO mechanical engineering software.

HP-DESIGN (2D variation design on the HP 9020C)

- Software 98355 A/M/R
- Sales training manual
- Technical description, P/N 5953-4334
- 35mm slide show
- User operating guide, P/N 98355-90000
- Video demo (details to be announced shortly).

HP-FE I/II (Finite element analysis on the HP 9020B and HP 9836)

- Software HP-FE I 98352 A/M/R
HP-FE II 98354 A/M/R
- Sales training manual
- Technical description, P/N 5953-4330
- User operating guide:
HP-FE I, P/N 98352-90000
HP-FE II, P/N 98354-90000.

HP-NC (Numerical control tape preparation on the HP 9836)

- Software 98464 A/M/R
- Sales training manual
- Technical description, P/N 5953-4313
- 35mm slide show
- Brochure, P/N 5953-4312
- User operating guide, P/N 98364-90000.

HP-DESIGNLINK (To link HP-DESIGN to HP-NC)

- Software 98356 A/M/R
- Technical description, P/N 5953-4344
- 35mm slide show
- User operating guide, P/N 98356-90000.

A seven-minute video tape, which introduces all the above products, is available from the Corporate Parts Center (Order P/N 90730RZ). A general CAE/ME brochure, P/N 5953-4343, is also available.

Workstation tables and detached keyboards available

Hans-Ulrich Reichenbach/BCD

Boeblingen's Computer Products Division recently introduced an HP 9000 Model 20 32-bit computer with a detached keyboard. Known as HP 9020 Option G02, this new keyboard allows the HP 9020 to be configured as an integrated CAE workstation by using the specially-designed HP 92213K workstation table and accessories to meet current ergonomic requirements. The Option G02, available from BCD, will only appear on the European price lists.

The integrated HP 9020 Option G02 allows positioning the computer keyboard to suit individual tastes. This permits placing the display for increased user convenience, specifically for CAD.

Two workstation tables are available from CSO (Computer Supplies Operation Europe); one is for the HP 9020 (fixed keyboard), the other for the HP 9020 Option G02 (detached keyboard). Tabletops from both models are removable, and "service doors" can be opened for easy access to the HP 9020 side panels. A compartment is built into the rear of the table for storage purposes, and as a recess for the power distributor. Table dimensions are 900mm x 900mm (35.4 x 35.4 in), with a height of 720mm (28.3 in). The design is compatible with HP's furniture available from CSO.

Additional extensions let you expand your workstation on either side, and at the front. The front extension allows convenient placement of other instruments in near the computer. Channeling is built into the side extensions for convenient instrument cable routing. Also included is a

bottom cover plate for the HP 9111 Data Tablet; this extends over the rear panel connectors. A special extension plate for low cabinet products (all CS80 hardware and the HP 9040) is available under P/N 92213P. This plate extends the tabletop to a depth of 800mm (31.5 in).



For further information, see the data sheet, P/N 5953-4341, available in English, French, and German.

Ordering information

HP P/N	Description	Price US
9020		
Opt. G02	Detached keyboard	\$600
9836/26		
Opt. G02	Detached keyboard	300
92213K	Workstation table for HP 9020 Opt. G02	915
92213J	Workstation table for HP 9020	915
92213L	Extension table left	125
92213M	Extension table right	125
92213N	Front extension for 92213K workstation table	156
92213P	Extension plate for CS80 hardware	70

The workstation tables are orderable from CSO Europe. Please note that these table orders must be placed with "required date" at PCE to ensure that customers get both the table and the system the same day.

CSO DIRECT ORDER

CSO phones are the easy, direct way for customers to order supplies, accessories, media, furniture, and software. Here are the numbers:

Location	Telephone No.
France	6-92832/64
Belgium	02-7623200
Netherlands	020-470639
Austria	0222-2365110
Germany	07031-142829, 07031-223133
UK	0734-792868, 0734-792959
South Africa	802-5111, 53-7654, 28-4178
Switzerland	057-312254, 057-312259

HP ME software kicks off in Spain

Jose de las Heras/BEO

Spanish long-term sales strategy on application software is already showing a return on investment.

The following packs have been sold to four different customers:

- 2 HP-DESIGN systems
- 2 HP-FE systems, and
- 1 HP-NC system.

These are all new customers to HP, and represent total system sales of \$330K.

The three SRs involved agree about the following key steps to success:

1. Do a thorough customer qualification, and understand the company requirements precisely
2. Show customers exactly how HP's EPN strategy fits their needs
3. Talk the customer's language, and solve one of their problems
4. When doing the product demo, center the customer's working environment around the workstation.
5. Make sure you've got the proper support, and then sell it.

Spanish SRs obviously understood the importance of using the available resources to best advantage, and of

making the initial effort to get the first reference customers. As soon as these systems have been installed, it will be easier for them to continue selling and to achieve their goal, which is to become a leading supplier of turnkey solutions in Spain.

Why not follow this example?

HP 9000 Series 500 introduces new graphics products

Chuck Reese/FSD

The HP 9000 Series 500 is introducing a pair of new graphic display products to strengthen our offering in the computer-aided engineering market. These new products will provide medium-to-high performance displays that are suitable for both display and design graphics applications. They include the new 9020A CRT display for the Integrated Workstation and a new Color Video Interface for a modularly configured design graphics workstation.

Products to introduce color mapping

Common to both new display products is a feature called color mapping. Color mapping is a hardware implementation that increases the number of true colors which can be displayed simultaneously. Other displays, such as those on the 9845C and 9020C, must add three primary colors (red, green, blue) at fixed intensities. Thus, any one pixel can display only six true colors plus black and white. The 4,013 shades of area fill on these displays are obtained by mixing these eight true colors across a 4 x 4 pixel dither cell.

A "color map" is a small memory that can be read and written to by the CPU and serves as a "look up" table to determine which colors are available to be displayed on a picture segment. For example, a "4-plane" graphics raster has 4 bits of memory associated with each picture element. A color map system will use these bits of information to address a location in the color map memory. Thus, a 4-plane raster can address 16 locations and an 8-plane raster can address 256. This relationship between the planes of the graphics raster and the color map is the key to being able to display a larger number of true colors simultaneously.

The benefits of color mapping are two-fold: For imaging applications, the resolution of the display is increased significantly because the number of picture elements necessary to produce an area color has been reduced from 16 to 1. And since the number of displayable colors has been increased from 8 to 16, applications can use color to convey more information in a simple, concise format.

The 9020A standard color display

The new 9020A display is great for display graphics and low-end computer-aided design applications. It differs from the existing 9020B and 9020C High Performance displays in that they have an extensive VLSI chip set that allows them to achieve impressive vector generation rates. This results in a graphics display system in which performance is limited only by the system software.

The 9020A Standard Display does not have this high performance chip set and consequently has both a lower price and performance level. But since the HP 9000 CPU has plenty of computation and I/O bandwidth, a multi-user or multi-tasking system with this display can be running a graphics application on the 9020A and have a number of background tasks executing with a minimal degradation in performance.

The 9020A is the appropriate display for the casual graphics user who wants a moderate-performance, terminal-like display. It is suitable for color display graphics applications where the user needs to view graphical summaries of technical data before transferring the images to hard copy.

You will notice that much of the 9020A display hardware is identical to the 9836C. These similarities plus the HP-UX DGL and BASIC programming environments provide two products that, although they are different in price/performance, offer excellent transportability. The 9836C is a low cost color workstation for applications with moderate computation needs. The 9020A supports applications with moderate graphics requirements but substantial computational needs.

The 97062A color video interface

The 97062A is the Series 500's lowest cost solution for a 19-inch graphics monitor. This interface consists of two PC boards which plug into the I/O backplane and output RS-343 compatible signals across three coax cables. The software interface and functionality of the 97062A is identical to the graphics interface on the 9020A display.

Another way to view the 97062A is as a faster, more intelligent relative to the 98627A color video interface for the 98X6 desktop computers. The key differences are that the 97062A supports area fill and is four to five times faster. Also, the 97062A doesn't support the RS-170 output format for Matrix Cameras. (Note: Various Matrix models do support RS-343, however.)

The 97062A interface features color, flicker-free graphics with medium resolution which is suitable for graphics data entry and design applications such as drafting, PC board

and logic design. Such applications usually do not require high resolution or more than 16 colors and are extremely price sensitive. A multi-user HP 9000 Model 30 or 40 configured with two or three 97062A interfaces offers a low-end design graphics system with a competitive price-per-workstation.

Both new Series 500 graphics products are supported on the BASIC Language System and GRAPHICS/9000 AGP/DGL.

FSD announces availability of multiple CPUs and I/O processors

Carolyn Soberalske/FSD

FSD is announcing the availability of second and third CPUs and I/OPs for its line of HP 9000 Series 500 computers. Several part numbers and options are involved in ordering these additional capabilities. Each CPU is field installed only and is ordered under P/N 97043A for both the Model 20 and Models 30/40. Installation costs are included in the 97043A price.

The I/OPs can either be field or factory installed. The I/OPs are specific to hardware so there are different part and option numbers for the Model 20 and Models 30/40.

Additional I/OPs for HP 9000 Series 500

9020

Factory installed

Second I/OP
Opt. 241

Third I/OP
Opt. 242

Field installed

Second I/OP
97041A

Third I/OP
97042A

9030/40

Second or third I/OP
Opt. 244

Second or third I/OP
97044A

NOTE: All additional I/OPs require the 98098A I/O Expander.

See your Series 500 Price List or Configuration Guide for further information.



GROUP UPDATE

OSP becomes OPD

Steve Kimberley/OPD

Success of the Office Systems Pinewood operation in developing integrated computer applications for the office has resulted in a change to full division status. The new Office Productivity Division (OPD), will be responsible for development of HP's Word Processing and Office Communications products, and will no longer be responsible to the Information Networks Division, itself the subject of a substantial reorganization. OPD will now be part of the Business Development Group under Ed McCracken.

\$ 1 million HP Financial Accounting sales

Karen Bluel/APO

The May statistics showed that over \$1 million orders were booked during the first four months after the introduction of HP Financial Accounting.

To celebrate this tremendous achievement, APO invites all commercial sales reps and financial applications specialists who were responsible for these early orders to have a drink "on the house" the next time they are in Boeblingen.

The \$ 1 million represents sales from the following countries:

North America	\$ 465.0K
United Kingdom	243.2K
Germany	165.5K
Australia	<u>147.0K</u>
	\$1020.7K

Congratulations to all involved!

HP Financial Accounting update

Karen Bluel/APO

Organization

In the recent computer group reorganization, the part of BDG, which has worldwide responsibility for the development and marketing of administrative applications,

assumed an identity of its own with the formation of the new Administrative Productivity Operation (APO). The operation is headed by Werner Gamm, with Wolfgang Bayer as marketing manager, and reports to Klaus-Dieter Laidig, Business Development Group-Europe.

Localization

The customization technology used to develop HP Financial Accounting, plus the large upfront investment required to make the applications flexible enough to accommodate international accounting requirements are paying off. Localization efforts are underway in 15 countries, and 1984 will certainly be the year of international success in solutions selling.

Manufacturing release

On Friday, May 20, APO celebrated the long-awaited HP Financial Accounting manufacturing release. During the following two weeks, production mat tapes were sent to FSO and country application centers worldwide.

The first installations of HP Financial Accounting began in June and we should soon be having some success stories for you here in *Computer News*.

3000 SERIES

"Test Drive" program to begin August 1

Bob Bessin/BDG

Watch for a special campaign to start August 1. The "Test Drive an HP 3000" program will be a joint factory and field effort to get serious prospective business computer customers into your office for a demo.

Business Development Group is committing over a half a million dollars for the Test Drive program. This money will be used for local direct mail, local advertising, and promotional gifts worth over \$4500 per customer.

The campaign will generate leads via telephone calls and mailed replies directly to participating local offices.

Not all offices will be participating, so check with your DMs or FMMs for further details. Remember, here is a chance for you to substantially improve sales for the rest of 1983. . . and beyond. Take advantage of it!

Open call for competitive benchmarks

David Wertheim/BDG

If you haven't noticed, "HP's ON THE MOVE!" We have initiated a very aggressive marketing campaign, and now we're ready for a very aggressive technical one, too. Our products are *beating the competition* — what we want now is some live customer benchmarks that demonstrate this. If you have existing data on any competitive benchmark, please send it to us; we'll accept responsibility for disseminating the results.

To demonstrate this, *we're issuing an open call for competitive benchmarks* — particularly applications that demonstrate our strengths, heavy interactive transaction processing. Specifically, we're looking for benchmarks against the IBM 4300 (top end), IBM S/38 (Models 7 and 8), and Wang VS family. The Systems Performance Group will assist by providing expertise on the feature set to demonstrate in the benchmark, things to avoid, etc. The Performance Center will be available for the HP 3000 portion of the testing, and we'll work together on fine tuning the benchmark.

We know we can beat the competition — and with your help we can *demonstrate* this fact. Call us — we're ready and waiting to help close sales!

Information management brochure available again

Jerry Epps/BDG

Back by popular demand is the Information Management Systems brochure. Commonly called the pinstripe brochure, this management-oriented piece enunciates our

business software concept and presents the spectrum of software products we offer HP 3000 customers. Each software package is described briefly.

This brochure will help you respond to specific inquiries about our business software. You'll also find it extremely useful as a seminar handout or for personal presentation during sales calls.

Order the brochure from the Literature Distribution Center by P/N 5953-0671. Division limit is 75 copies.

Welcome back to an old friend and a super sales aid!



RAPID enhancements

Bart Coddington/IND

RAPID products had 40 SRs fixed in the Q-Delta-1 MIT release. This is a major investment in the stability of RAPID, representing over 1500 engineering hours to fix "bugs." Additional effort went into enhancements as outlined below.

TRANSACTION/3000

SHOW option on DATA(SET) verb — allows the user to see what the item's value will be if carriage return (default) is entered at the prompt.

INIT option on the DEFINE(ITEM) statement — named item is initialized to the specified value when a LIST statement is executed.

Local forms storage — support VPLJS forms download and storage in 2624B, 2626 terminals from a TRANSACTION program with a single verb.

INFORM/3000

Stackable user input — enables user to input responses to future prompts in a single string separated by commas.

Selection criteria efficiency improvement — the algorithm that automatically selects file access is now a little smarter and in some situations faster.

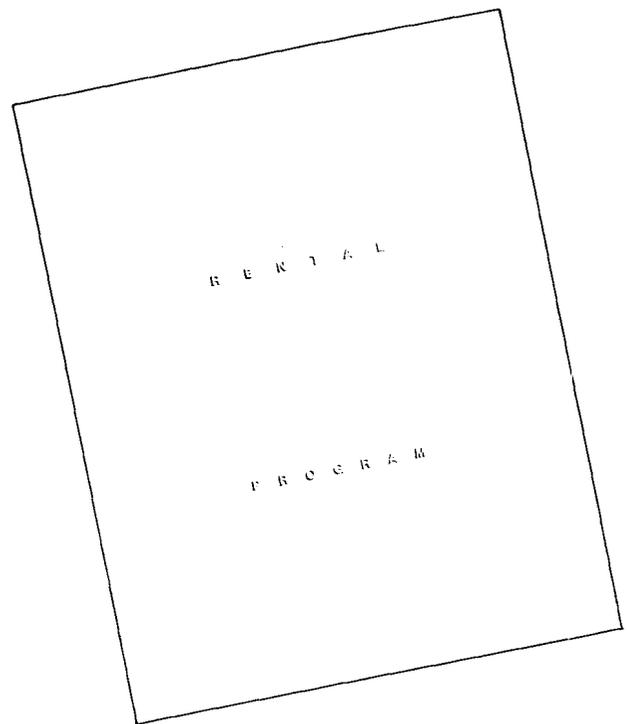
Programmatic file-equate — when opening a file or database, INFORM checks information in the dictionary (including name aliases) and, if necessary, forms a file equate to access the proper file.

The Lab has put in a great deal of effort to make A.01.01 release of RAPID a true quality release. To insure that the product was sound, additional testing was done before leaving the factory.

Rental brochures now available

Carol Robertson/SRO

With the addition of the Series 30R/33R to the Series III rental program, new sales literature has been created to help you sell HP's rental solution. A new brochure entitled "HP 3000 Computer Systems Series 30R, 33R, and III Rental Program" (P/N 5953-7544) was distributed in May to our Domestic Sales Offices.



The brochure discusses:

- Why rent?
- Month-to-month or 12 month plan
- Support
- Add-ons
- Purchase option credits
- Upgrade credits.

This can be a valuable asset to leave with your customers when they are considering renting, and it will help you close those rental deals!

No job too large for SRO Rental

Joe Albano/SRO

Configuring the total solution for a major account or other large customer? Don't forget SRO's Rental Program in your strategy. With its month-to-month and yearly rental terms, the Rental Program can give your large customer new flexibility in their planning.

The month-to-month rental term is perfect for special short term needs like a year-end crunch, special projects, or unforeseen system overloads. SRO can supply a system in four weeks and with just 90 days written notice your customer can have no further rental obligation to HP.

The Rental Program may be just the ticket for large customers with franchise operations. Now these operators can enjoy the power of an HP 3000 while minimizing their exposure. One fixed monthly rate covers standard installation, hardware maintenance, insurance, property tax and bundled freight, without any capital exposure. Don't forget, the Rental Program has the least stringent credit requirements of any HP financing program.

SRO offers a 6% savings over the month-to-month rental in exchange for a one year commitment from your customer. In addition, your customer may buy out at any time taking advantage of generous Purchase Option Credits (POC) or, after one year of renting, your customer may choose to purchase a more powerful system receiving the same upgrade credits available to the installed base.

To get the SRO Rental Program working for you, give your SRO Sales Development contact a call.

Reconditioned memory to round out your configuration

Jeff Young/SRO

SRO now offers factory reconditioned 4X memory boards to help you fill your incremental memory needs. We now have adequate supplies of 30171AR memory boards to offer on a HEART override basis. These modules are great for rounding out your S/39, S/40 or S/44 configurations. You can add them now in preparation for the memory needs of the disc cache facility. The 30171AR is priced at 15% below an equivalent product new. This savings can be a real boost in closing the deal with your price sensitive customers. You can order the 30171AR by overriding HEART. Call SRO for a product reservation. Quantities are

limited, so get your reservation in before they're all gone. Call SRO Sales Development at 408-738-8858.

Product	Description	US List	FBP
30171AR	256Kb memory module for S/39, S/4X systems	\$3,825	\$3,815

SFD/3000 user: "Why we chose Hewlett-Packard"

Kathy McKittrick/IRO

The following interview took place May 20, 1983. The vice president of Financial Administration at a wholesale distributor of office coffee products, discussed why they chose Hewlett-Packard hardware and software to manage their business needs. This company sells to suppliers of packaged products such as coffee, sugar, non-dairy creamer, and freeze-dried soups to business offices. The gross profit they realize on sales is relatively low. Therefore, close controls in inventory and receivables processing is crucial to them. Eighty percent of their assets are tied up in inventory and receivables. One of the advantages this company realizes as a distributor is exclusive contracts with their vendors for those areas in which they distribute.

Q. Were you using an automated system prior to your purchase of SFD/3000?

A. Yes, we were using a QUANTEL Model 965.

Q. What business functions did your QUANTEL system perform for you?

A. The usual range of business functions — general ledger, order processing, customer history, accounts payable and accounts receivable. However, everything was after the fact. Our orders were entered "post-bill," and we were lucky to be within a week of knowing what we had in inventory. Also, the link between receivables and general ledger was not automatic. We had to manually enter general ledger transactions.

Q. Why did you start looking for a new system?

A. We have experienced tremendous growth over the past few years, and we expect that growth to continue. We realized, because of this growth, that we needed real-time inventory control and good management reporting and controls for all aspects of our business. As a small distributor, we could afford to manage verbally to a large extent. Two or three key employees knew everything about the operation. That's no longer true. We have six distribution locations, and we need to know exactly what our inventory

and receivables situation is at each one of these locations at any given time.

Given this situation, we set three priorities in order to manage this growth. They were:

- Systems
- Hiring and keeping good management personnel
- Obtaining capital for growth.

Q. Why did you choose Hewlett-Packard?

A. One of the most important considerations was that the hardware had to be dependable. We can't afford to have even 5% down time when we're talking about operating our entire business on the computer. In general, HP has an excellent reputation when it comes to hardware reliability, service, and support.

Another large factor in our decision was the one vendor solution. With our QUANTEL system, every time there was a problem there was a lot of finger pointing between the hardware and software vendor. In the meantime, the problem didn't get fixed. With Hewlett-Packard hardware and software, we can rely on the fact that, although different organizations within HP provide hardware and software support, there's a common reporting at some level and, therefore, the problem will get fixed.

One thing which really impressed me was the fact that when I asked for references, Hewlett-Packard provided me with a full list of SFD/3000 users. I had trouble getting even a few references from the other vendors I was dealing with. When I called the SFD/3000 users, they were quite candid about the things that they did and didn't like about the system, but without exception, they felt that it provided them with the best business solution that was available on the market.

Q. What other vendors did you talk to?

A. We evaluated various hardware configurations and software solutions. We talked to QUANTEL, DEC, and IBM. Our original plan was to buy a minicomputer for our main office, and micros for each of the distribution locations. Our thinking was that the micros could download to the minis at the end of each business day for management reporting, with real-time inventory control and invoicing at each of the six distribution locations. At least in this manner, each location, in and of itself, would be real-time.

We talked to the people at QUANTEL first. We were looking at ALTOS micros to put in the distribution offices. The big problem here was software. There was virtually nothing close to what we needed for software available on the ALTOS.

The problem was very similar when we talked to DEC. We were looking at a VAX 750 for our main office, and the

software was not available for any micros that we might hook into that.

We looked at an IBM 34 for our main office using IBM Data Master micros. In this particular case, IBM found us software vendors that would develop software to our specs, but there were two different vendors: one for the mini software and one for the micro software. I saw the "finger pointing" problem becoming even bigger than before.

When we talked to Dave Macrae at Hewlett-Packard, he was able to show us how we could use a real-time distributed network that would process all of our business real-time and allow our distribution centers to talk to each other and the main office real-time. It turned out that, using X.25 technology for communications, this solution was price competitive with the mini-micro solution; and it offered us a lot more. We've already discussed the advantages to having one vendor provide us with hardware and software.

Q. What do you see as the biggest benefits you have/will realize by using SFD/3000 on an HP 3000?

A. Without a doubt, the flexibility of the software is the most significant benefit. It used to cost us a fortune whenever we wanted to change the smallest, most insignificant feature of our software. The consultant would come to our site, change the program, charge a lot, and then it wouldn't work.

The best example of this flexibility is the pricing available in the Sales Order Entry module. We use contract pricing, volume discounting by item and by product class, columnar discounts and amalgamated pricing. Since our business is purely buying and selling, pricing is a critical element in terms of realizing profits. When our business needs change, we can change the way our software processes without being charged for it.

Q. Would you advise other QUANTEL users to switch to Hewlett-Packard

A. Well, it depends on their needs. The QUANTEL we had was pretty old, so it's hard for me to say on a global basis, but if their objective is managing their business with reliable equipment, I'd definitely recommend Hewlett-Packard hardware and software.

Q. Why?

A. It works. It produces the invoices at our branch locations. I know what I have in stock and I can change the way it works for no extra charge. In addition, there's Hewlett-Packard's commitment to maintain and support the hardware and software and to allow us to upgrade our hardware and software, in the future, as our business grows.

OFFICE SYSTEMS

Printing the HPWORD document catalog to a local or slaved printer

Judy Gibbons/OPD

Many HPWORD users want to print the document catalog to their local daisywheel printer instead of the line printer as this may not be easily accessible to them.

This can easily be done without even leaving HPWORD. Basically, this is done by saving the catalog to an ASCII disc file and then converting it to an HPWORD document. It can then be sent to any HPWORD configured printer and edited just like any other document.

Here's how:

1. Be sure the HPWORD terminal is configured to have access to a line printer. Unless this is done the "PRINT CATALOG" key is not activated.
2. Log on to the group for which you want to generate the catalog.
3. Build a file as follows:
:BUILD Catname;
REC=- 128,2,F.ASCII;
DISC=1023,32,1
4. Enter a :FILE equation to link the catalog to this file:
:FILE CATALOG=Catname, OLD;
DEV=DISC
5. Run HPWORD and display and print the catalog.

You will now have an ASCII file containing the catalog. You can use SORT to sort the file into subject, author, creation date or any other field.

You can also convert this easily to an HPWORD document. In the DOCUMENT NAME field of HPWORD enter

the catalog name "Catname." Press OTHER KEYS and CONVERT DOCUMENT. Enter a new document name and press CONVERT. The document catalog will then appear on the screen as an HPWORD document and can then be edited, reformatted or printed to a local printer. (By default, it is 102 characters wide.)

A udc can easily be created which does all this and runs HPWORD, thus making it transparent to the user. One way would be:

```
HPWORD
CONTINUE
PURGE Catname
BUILD Catname;
      REC=- 128,2,F.ASCII;
      DISC=1023,32,1
FILE CATALOG=Catname. OLD;
      DEV=DISC
RUN HPWORD.PUB.SYS
*****
```

This can be made more robust by adding logic to refuse to run HPWORD unless the file Catname has been built.

Note: It is best to create the "Catname" file with 1023 records as this is the maximum number of files per group. If it is created smaller than the number of files actually present, HPWORD will abort when PRINT CATALOG is pressed.



GROUP UPDATE

Worldwide information exchange network

Hidematsu Kasano/YHP

As everyone is aware, data-communication networks throughout the world are growing day by day. Currently, DSN/X.25 gives HP the ability to interconnect many HP offices and divisions worldwide; however, many HP branches are not taking advantage of this new capability.

The datacomm team here at the YHP Shinjuku Office in Tokyo has configured a Worldwide information exchange network based on DSN/X.25 which is growing larger and larger. To date we have communicated with 10 HP branches through X.25 Public Data Network Services, including: IND, GNO/GTD, Fullerton, Paramus, Lyon, LeBlanc Mesnil, BCD, Frankfurt, Brussels and Geneva.

These HP 3000 connections have been used for applications like troubleshooting, product transfer, information exchange, message exchange, and customer demonstrations with great success. (The sales demos have been particularly successful — "Seeing is believing!")

If you have DSN/DS X.25 on your HP 3000 and would like to join the network, it is very simple to connect to our node here in Japan. You simply NETCONF our PDN address: X440820008 (where "X" is your outgoing ID, if it exists), connect to our system, and let us know your PDN address. Then you will see the world become very small!

We are looking forward to your news and welcome you to our HP 3000, the Shinjuku Office, Tokyo, and Japan!

Using HP 27201A with other computers

Tom Nakamura/RND

For the HP 27201A Speech Output Module to speak, data representing a word, phrase, or sound must be available. For the HP 1000 and HP 3000 computers, we provide data representing over 1500 words and sounds (along with software utilities which make working with that data relatively easy). These products are 27203A SOM Speech Library/1000 and 27205A SOM Speech Library/3000.

With other HP and non-HP computers, software compatibility is the major obstacle to overcome. Because the software utilities in 27203A and 27205A are written for an IMAGE data base, they are not easily transported to other systems. However, the word library data is usable on other HP and non-HP computers since this data is stored in an ASCII file (in hex ASCII format). The customer must strip the data off a SOM Library tape and reformat the library data on the new host. The software reference manual 5955-7644 provided with 27203A and 27205A contains information on how the library data is formatted. The customer can then write his own utilities for accessing and transporting word data.

If the application only requires a fixed vocabulary, an EPROM-based SOM system might be considered. Both standard library and custom words can be procured on EPROM from Texas Instruments Regional Technology Centers. The EPROM can be inserted into any or all of the six SOM sockets. By transmitting the proper commands from the host, the word data in a specified socket/phrase location can be passed through the speech chip and spoken. A full complement of EPROM can hold about 200 words.

Because the SOM is available with 262X 50-pin connectors and 1 1/2 VAC external power supply (Option 002) or standard RS-232 25-pin connectors and 1 1/2 VAC external power supply (Option 003), hardware configuration should not pose a significant problem. Due to a limited buffer size in the SOM, a computer interface which supports X-ON/X-OFF (DC1/DC3) handshake is recommended to avoid datacomm overruns (potential lost data).

Remember, speech can improve productivity, and HP has speech products. Keep us advised of market opportunities.

MASS STORAGE

Update on the HP 7910 Trade-Up program

Craig Fix/DMD and Scott Tuthill/DMD

The 7910 Trade-Up program which began last February has been a terrific success. As of May 1:

- 63 new discs have been ordered as a result of this trade-up program; this means significant incremental revenue for HP and incremental commissions for you!
- Our customers' satisfaction level has increased.
- Orders have come from every region, with 60% coming from Europe.

If you have customers with 7910's, why not suggest that they trade up to a newer CS-80 disc? They'll be able to receive the following credits:

Disc Drive	Credit
7908	\$2,500
7911	4,000
7912	5,000
7914	5,000

HP 7933 and HP 7935 are success at General Electric

Craig Fix/DMD and Ed Paulinik/DMD

GE's configuration

General Electric has two HP 3000s: one Series III and one Series 44. Two 7933s and two 7935s are installed on the Series 44.

GE's applications

The 7935's are configured as private volumes on the Series 44. The customer uses FCOPY from system to private domain, DSCOPY from system to private domain, and serial copy (STORE). Files are updated on the private volumes using internal applications software. VINIT (disc to disc image copy) and SYSDUMP are also used.

Success!

GE is going to buy the two 7935s that they have been Beta testing, plus they plan to buy another to add to their growing configuration. Their excitement for the product is being fueled further by higher performance PEP firmware upgrade for the 7935s.



Atlanta hospital anesthesia department chooses HP 9826 system

Becky Boyd/Southern Sales Region

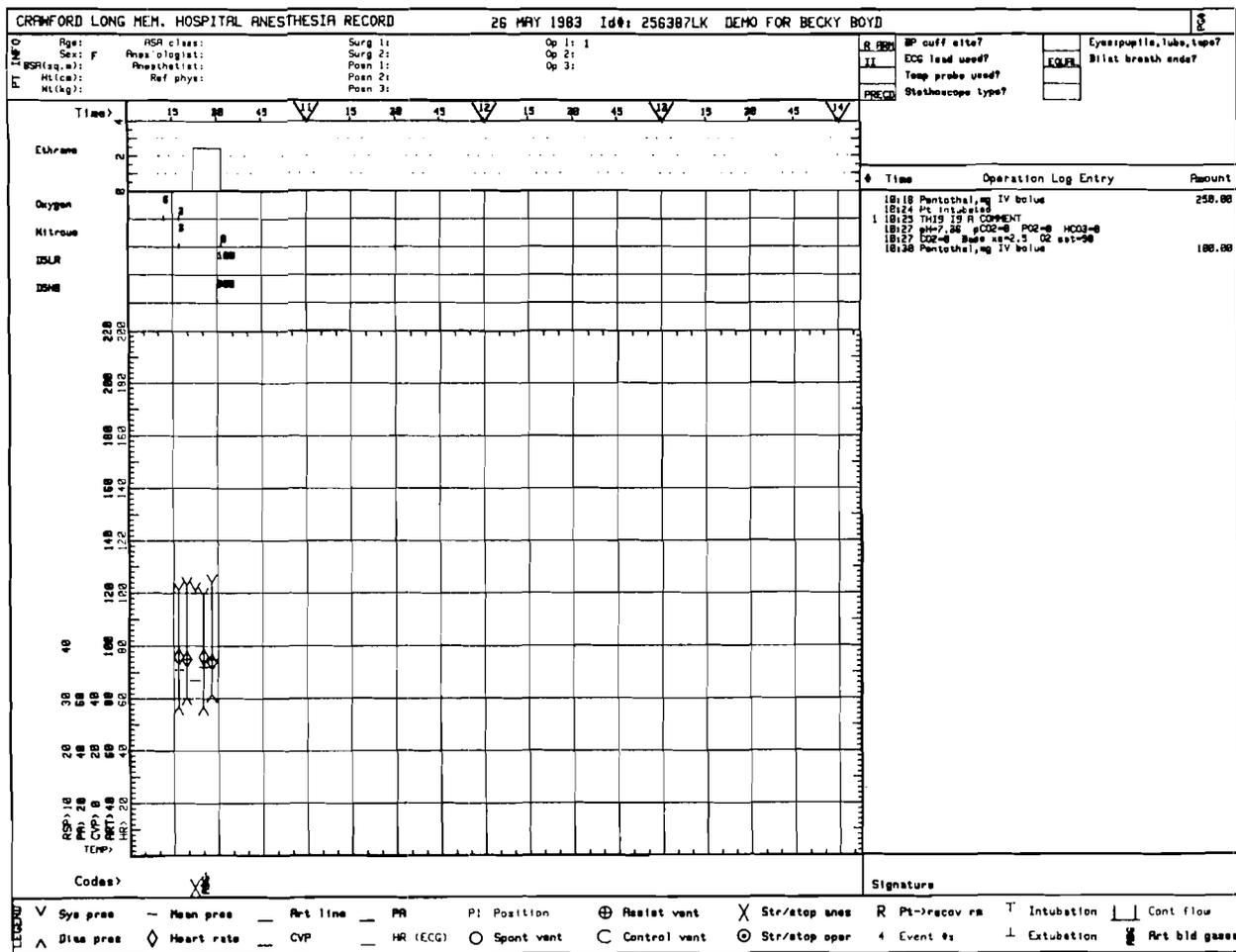
Marge Burrage in the Bioengineering Department at Crawford Long Hospital in Atlanta, GA, purchased an HP 9826A, 3497A, and 9872C to automate their Anesthesia Department records. During surgery Marge wheels her equipment, which is on a cart, into the operating room. The patient is then either hooked up to a Dinamap automatic blood pressure monitor interfaced to the 9826 or the patient may be hooked up to the 9826 system intravenously.

The anesthesiologist then inputs into the 9826 the amount and type of drugs administered. During surgery,

readings are taken every 60 seconds, or at a time decided by the anesthesiologist.

As you can see from the attached chart, blood pressure, heart rate, and arterial pressure can be plotted so that the anesthesiologist can graphically see how the patient is responding. At the top of the chart is a graph of the amount of drugs administered. Depending on the graphical output of the blood pressure, the anesthesiologists can instantly determine when and what type of drugs she needs to change or add. An operation log keeps track of time and events.

Marge has written the program in BASIC but is changing to FORTH because of its multi-tasking capabilities. Crawford Long Hospital has been an excellent customer for Hewlett-Packard in the past as they have hundreds of HP Medical Instrumentation. For this reason and because of HP's equipment quality and reliability, Marge chose the HP 9826 computer.



Price Changes

REINHARDT, HELMUT
FRANKFURT (REGION HQ)
HPCR 8300

Computer Groups Price Changes Effective July 1, 1983

These prices, effective July 1, 1983, will appear on the Corporate Price List on that date, available in your office. Prices are US List unless otherwise noted. Orders at old prices will be honored at the factories for 30 days (or 60 days in the case of government quotes, see exception, III. GSA) after the effective date of an increase. All quotations, either verbal or written, shall be made at the new prices upon the effective date of the new price list. The customer should be notified that this order will be honored at the lower price if it is received within the 30-day grace period. Price decreases are effective immediately and in-house orders shipped 5 working days prior to the announced decrease date will be billed at the new lower price.

Product No.	Description	Current Price	New Price
12040B	8 CH TERM MUX-A	2,730	2,130
12040B	OPT. 001 OPTION	-2,550	-1,950
12040B	OPT. 002 OPTION	-500	-400
12040B	OPT. 003 OPTION	-600	-500
2136A	A600 MODEL6 COMP	10,120	10,620
2136B	A600 MODEL6 COMP	6,880	7,220
2186A	A600 MODEL6 SYST	12,120	12,720
2186B	A600 MODEL6 SYST	8,780	9,220
2186C	A600+ MOD 6+ SYS	14,720	14,220
2186D	A600+ MODEL6+ SYS	11,220	10,720
2196A	A600 MODEL16 SYS	14,050	14,740
2196B	A600 MODEL16 SYS	13,400	14,060
2196C	A600+MODEL26 SYS	16,740	16,240
2196D	A600+ MOD 26 SYS	16,060	15,560
2197C	MODEL 27 SYSTEM	24,360	24,000
2197D	MODEL 27 SYSTEM	23,950	23,250
24612A	A/L-SER SYS DIAG	355	400
2487A	MICRO 27	13,600	13,100
2645AN	2645A RTN CREDIT	-1,000	-0-
2649CN	2649C RTN CREDIT	-1,000	-0-
92172L	ADAPTERS, BINDER	48	36
92172M	ADAPTERS, BINDER	48	36
92172N	ADAPTERS, BINDER	48	36
92178S	ABC SWITCH	270	250
98085K	SIS 9826 SHARED	40	45
82905B	OPT. 001 IMPACT PRINTER	50	-0-
82905B	OPT. 003 IMPACT PRINTER	50	-0-
82905B	OPT. 004 IMPACT PRINTER	50	-0-
82905B	OPT. 140 100V POWER OPT	-0-	100
82905B	OPT. 340 SERIAL INTR OPT	150	100
82905B	OPT. 342 PARALLEL INT OPT	50	-0-
82905B	OPT. 348 IMPACT PRINTER	50	-0-
82905B	OPT. 440 SERIAL INTR OPT	150	100
82905B	OPT. 442 PARALLEL INT OPT	50	-0-
82905B	OPT. 448 IMPACT PRINTER	50	-0-
82908A	64K MEMORY MODUL	450	395
82909A	128K MEMORY MODU	795	595

