Computer News

Introducing ... the HP 3000 Series 44 and the HP 2680 Laser Printing System

Computer News

Sections

In This Issue

HP Computer Museum
www.hpmuseum.net

Computer Marketing

CSD

Guaranteed Uptime Service
By Mike Torgersen/CSD

CSD previewed a new support program, Guaranteed Uptime Service, to the North American commercial sales force on the December NPT. This service will be available for HP 3000 Series 44s located within 100 miles of Primary SROs. Implementation is planned to coincide with initial Series 44 shipments in the US. A schedule is being developed for implementation in other countries.

This new hardware maintenance agreement service, the first like it ever offered in the computer industry, specifies an uptime of 99% and is available for coverage of the Series 44 system core — the CPU and one or two system domain discs. This specification is backed by a money-back service guarantee — if HP fails to meet the uptime specification in any month, the customer will receive one month of Guaranteed Uptime Service at no charge for the products covered.

The following article defines the availability of various literature pieces supporting this exciting new service program. Please keep in mind that Guaranteed Uptime Service cannot be quoted or sold until February 1 '81, the official price list date. In the meantime, use the flyer, available through literature distribution, to describe the essentials of Guaranteed Uptime Service to your potential customers to help sell Series 44s.

Your Area CE organizations are developing local implementation plans for providing this new service. By February, they will be ready to help you qualify your customers and properly set their expectations when you quote this service.

Guaranteed Uptime Service, which is a testimonial to the reliability and supportability of HP products, should also greatly enhance HP's reputation as a leader in support and therefore assist in selling all HP computer products.

Guaranteed Uptime Sales Aids
By Carolyn Stewart/CSD

Several new sales aids will be available to help you sell Guaranteed Uptime Service:

Guaranteed Uptime Flyer — This four-color, single-page flyer summarizes the contract features unique to Guaranteed Uptime Service. Remote-access diagnostics, regional availability, and eligibility requirements are also briefly discussed. Order P/N 5953-3326D from the Literature Distribution Center, Bldg. 9B, Palo Alto.

Guaranteed Uptime Service Data Sheet and Exhibit — Scheduled to become available in mid January '81.

Support Services Capabilities Brochure — A four-color management summary of Systems Support services, scheduled for publication in February '81, will also contain a description of the features and benefits of Guaranteed Uptime.

As availability of Guaranteed Uptime is extended to Europe and ICON, translations of these materials will be made available.

Remember — HP service sells HP computer products, so order now.

CSO

Wheels, Dust and Trees (2608A/2601A Supplies)
By Jim Kinney/CSO

Wheels, dust and trees? That's right! Supplies to support the new Boise printers have been a recent focus of activity here at CSO. We're ready to support the HP 2601A and HP 2680A Printers as customer shipments begin:

HP 2601 Daisy Wheel Printer

- Two Types of Ribbons — Fabric and Multi-Strike (92151-Series P/Ns)
- 17 Different Plastic Print Wheels (92152-Series P/Ns)
- Eight Different Metal Print Wheels (92153-Series P/Ns)

HP 2680A Laser Page Printer

- 92180A Toner (Dust!)
- 92181A Used Toner Disposal Bottles
- 92182A Carrier
- 92183A Splicing Tape
- 92184A Pallet of Special 12 X 8½ inch Non-Impact 18 lb. Printer Paper — Minimum one Pallet per Order (Trees!)
- 02682-60341 Developer (HP-Installed)

All supplies will be available to your US customers through our toll-free ordering system — (800) 538-8787; in California (408) 738-4133 collect. In-stock items are shipped within 24 hours ARO. (Note: Because of the large quantities and weight involved on Laser Printer paper, due to truck shipping transit times, a two to three week lead time should be quoted.) It is estimated that the HP 2680A will require 240,000 sheets of paper per month — that's 1½ pallets of paper (Trees!). Please help your customers plan in advance.

If you have questions or need information on these or other supply items, call us at (408) 738-8858. (The direct order "800" and California numbers are for customer use only.)

DSD

HP 1000 Price Changes

By John Moss/DSD

Since the HP 1000 Family was introduced in May '78, the manufacturing costs of all hardware have gone up, except for memory chips which have gone down. Most prices have stayed fixed, except for memory products which have gone down. As you might expect, some imbalances in the cost/price ratio have developed.

On January 1, '81, we are adjusting many HP 1000 product prices to correct these imbalances. Many base-hardware product prices are being increased, while many memory products are being decreased. The overall effect (exclusive of ATS) is about a 1% increase in DSD's list prices.

The effect on your customers will depend on their buying habits. Customers who buy "bare bones" CPUs with the minimum amount of memory will probably feel an increase. Customers buying computers with lots of memory will probably see a decrease. ATS customers will definitely feel an increase.

More specifically, the weighted average for Systems (excluding console and disc) and CPUs with the standard amount of memory and accessories increases about 5%. The memory delete options (Option 014, etc.) change as the equivalent memory products change.

The weighted average price of memory packages drops about 13% while the average price of individual memory modules (12747A, etc.) drops 17%; memory components without RAMs (controllers, MEM, MP, etc.) don't change at all. The overall weighted average for all memory products is a 13% decrease.

Software products do not change at all, while cabinets and their accessories go up an average of 7%.

We hope these changes will not cause you or your customers any major problems. Contact your DSD Sales Development Engineer with questions.

January 1 '81 CPL Changes to Major HP 1000 Products

Product/Option	Description	Current Price	Jan '81 Price
12747A	128Kb SP Memory Bd	$2,800	$2,300
12747H	128Kb HP Memory Bd	3,500	2,800
12786A	128Kb SP Mem Pkg	4,500	3,900
12786B	256Kb SP Mem Pkg	6,500	5,700
12786C	512Kb SP Mem Pkg	11,000	9,300
12786D	1Mb SP Mem Pkg	18,000	16,500
12787A	128Kb SP FC Mem Pk	5,500	5,300
12787B	256Kb SP FC Mem Pk	8,000	7,100
12787C	512Kb SP FC Mem Pk	13,500	11,500
12787D	1Mb SP FC Mem Pkg	23,000	20,600
12788A	128Kb HP Mem Pkg	5,500	4,500
12788B	256Kb HP Mem Pkg	7,500	6,700
12788C	512Kb HP Mem Pkg	13,000	11,100
12788D	1Mb HP Mem Pkg	22,000	19,900
12789A	128Kb HP FC Mem Pk	6,500	5,850
12789B	256Kb HP FC Mem Pk	9,000	8,050
12789C	512Kb HP FC Mem Pk	16,000	13,400
12789D	1Mb HP FC Mem Pk	26,000	24,400
12979B	I/O Extender	5,250	6,000
2108M	M-Series CPU, 64Kb	6,950	7,700
2109E	E-Series CPU, 64Kb	8,700	9,100
2111F	F-Series CPU, 64Kb	11,750	14,000
2112M	M-Series CPU 128Kb	9,700	10,600
2117F	F-Series CPU 128Kb	16,000	17,600
2174A/B	Model 20 System	22,000	22,500
2175A/B	Model 25 System	28,500	30,500
2176C/D	Model 40 System	38,000	39,500
2177C/D	Model 45 System	46,000	49,000
29402B	Cabinet, 56" rack	1,400	Off CPL
29402C	Cabinet, 56" rack	New	1,500
050	Hinged Front Door		500
051	Snap-on Front Door		500
200	115V Power & Fan		750
210	230V Power & Fan		750
400	115V Add-on Hardware		300
410	230V Add-on Hardware		300
91740A	DS/1000 M-Series	2,500	Off CPL
91740B	DS/1000 E/F-Series	2,500	Off CPL
91740P	DS/1000 Right-to-Repro.	1,000	1,600
91740R	DS/1000 Right-to-Repro.	1,000	1,600
91741A	DS/1000 to 3000	500	Off CPL

Technical Computers

ATS Price Increases

By Dawson Mabey/DSD

Higher costs have forced us to raise prices for ATS Integration Services and for the 94XX Switch products. The following prices are effective with the January '81 Corporate Price List:

9411A	$4,000
-002	500
-003	500
94120A	1,250
94120B	1,150
94120C	1,050
94120D	950
94120E	1,150
94124A	3,500
9412A	8,500
94130A	650
94130B	650
94136A	1,800
94137A	1,800
9413A	2,000
94140A	475
94140B	400
94140N	400
94145A	225
94146A	150
9414A	6,000
94143A	225
94144A	125
9415A	19,000
-001	4,400
-003	4,400
-008	1,400
-009	5,800
-010	5,800
-011	7,200
93283A	3,500
-001	2,000
-009	2,000
93284A	5,000

As usual, orders will be accepted at the old price through the end of January.

RTE-IVE: New Operating System

By Mark Beswetherick/DSD

RTE-IVE is a new member of the compatible Real Time Executive (RTE) family of operating systems. RTE-IVE is an execute-only, memory-based subset of the powerful RTE-IVB disc based operating system. RTE-IVE runs on HP 1000 M, E, or F-Series computers, and incorporates many of the powerful features of RTE-IVB, including:

- Management of up to 64 multi-user program partitions in up to 2.048 Megabytes of memory.

- Up to 54 Kbytes per partition for user's program code, independent of physical memory used by the operating system or drivers.

- Transparent user access to extended memory area (EMA) for data, with space limited only by available memory (nearly 2 Megabytes in a 2.048 Megabyte system).

RTE-IVE is essentially an RTE-IVB system without a system disc. Those RTE-IVB features that require a system disc are not available in RTE-IVE. Such features include program development and the Session Monitor user interface. Then how does one do RTE-IVE system generation and program development? On a host RTE-IVB system. The RTE-IVE system code can be loaded into the RTE-IVE system via a DS/1000-IV network link or via mini-cartridge. Once the RTE-IVE system is booted up, programs may be loaded into memory via a DS/1000-IV network link or from any supported input device on the RTE-IVE system.

RTE-IVE system generation and program development procedures are very similar to RTE-IVB procedures. This increases ease of use; the same set of procedures allows users to create both disc-based and memory-based applications.

This combination of features makes RTE-IVE a superior product to its predecessor, RTE-M. RTE-M will be placed in inactive status (removed from the CPL) in May, '81. Now is the time to upgrade to RTE-IVE! (See Ordering Information for upgrade options.)

RTE-IVE is particularly well suited for Distributed Systems environments. RTE-IVE supports *all* of the features of DS/1000-IV. Combine the powerful program and memory management capabilities of RTE-IVE, the extensive network capabilities of DS/1000-IV, and the processor throughput of an HP 1000 M, E, or F-Series computer. The result: a powerful, yet economical, *Nodecomputer*. The Nodecomputer is economical because it does not require a local hard disc. Other remote peripherals may be shared as well, further reducing the cost. The Nodecomputer's lack of a hard disc provides another benefit: greater environmental versatility. It may be impractical to maintain a hard disc in an environment that has a high concentration of particles in the air, or where significant vibration is present. In many cases a Nodecomputer can withstand such environments. This combination of features makes the Nodecomputer particularly well-suited to real-time monitoring and/or control in factory floor environments.

RTE-IVE systems can also function in stand-alone mode without network support. In this case, a disc-based RTE-IVB system must be available for doing program modifications or system generations for the RTE-IVE system, when necessary. In a stand-alone environment, RTE-IVE's prime application is to provide an environmentally rugged system. An example: Performing on-board aircraft testing. Here, environmental motion precludes the use of a disc and a network link is impractical.

Ordering Information

92068E: $1,500 License to generate and execute an RTE-IVE system plus EMA firmware.

Prerequisite — RTE-IVB purchased as a line item or in an HP 1000 system.

Option 001: -$600 Upgrade discount from RTE-M, no support services.

Option 002: -$900 Upgrade discount from RTE-M, if on support services.

92068V + Option 001: $40/month Extends RTE-IVB CSS to an RTE-IVE system.

92068W + Option 001: $25/month Extends RTE-IVB SSS to an RTE-IVE system.

By popular demand, we are making 92068E Option 002 available for 180 days (through May 31, '81) instead of 90 days as originally stated in the NPT.

2626A Supported on all HP 1000 Computers
By Steve Pomeroy/DSD

The HP 2626A Display Station has been tested and is now supported on all HP 1000 computers.

On the M, E and F-Series computers, the 2626A is supported both in point-to-point and multipoint configurations. In point-to-point mode, the terminal interfaces to the HP 1000 via a 12966A, 12531D, or 12880A interface. It is also supported by the 12792A 8-line multiplexer. In a multipoint configuration, the 2626A with a multipoint "pod" is supported by the 12790A interface and 91730A software.

On the L-Series, the 2626A is supported in point-to-point mode only via the 12005A Asynchronous Serial Interface. RTE-L uses interface driver ID.00 and device driver DD.00 to communicate with the 12005A interface.

For specific details on interfaces, cabling, or terminal configuration, refer to the *2626A Field Training Manual.*

Special Sale — HP 25002A Test Module Cards
By Dawson Mabey/DSD

We have a limited quantity of HP 25002A Test Module Cards available for sale to customers using the older 9500 TODS-based systems. If you have a customer with a 9500 system containing the HP 9401C Digital Test Unit, he/she may be interested in purchasing additional 25002A cards to use as spares, or to expand digital text capability.

These *new* 25002A cards are offered at a special price of $1,500 each (non-discountable), which is nearly 35% off their last published list price (1978). This special price is firm for 90 days. Orders will be accepted (subject to stock on hand) on a first-come first-served basis. HP guarantees these cards to work, but because they are obsolete products, we provide no other warranty. Orders should be transmitted to DSD (22/22) PL65 via Heart override. Quota credit is 02.

Response Pieces for New HP-DSN Ad
By Orrin Mahoney/DSD

Response pieces for the new Distriuted Systems Network ad discussed in Iona Smith's article "New Advertisements for Technical Computers" on page 4 of the November 1 issue of *Computer News*, are the new DS/1000-IV Brochure (5953-4267) and the recently released booklet "10 Questions to Ask Before Choosing a Computer Network" (5953-2853). The DS/1000-IV brochure has been updated to include a center foldout showing all HP computer products in a large network configuration.

DCD
Desktop Computer Field Handbook Reissue
By Al Sperry/DCD

A new issue of the *Desktop Computer Field Handbook*, P/N 11141-12873, will be available from the Software Distribution Center (SDC) in Sunnyvale, California, after January 15. SDC will handle distribution of the handbook and future updates.

You will want to order the new version as soon as convenient. Judging from your comments about the original issue, the new one should pay for itself the first time you use it.

To order the handbook, place a Heart 12 order, including the name, job code definition (see CSG Service and Sales Telephone Directory), and employee number of each person who will receive it. The employee number is needed to allow placing the names on the data base to receive updates as they are issued.

The following Heart override information should be included: Supplying entity 5006, marketing division 40, price "Please advise", sales force 02, product line 59. Under special instructions, include Subscription Service No. 5955-6077. The price will be about $25, subject to some variation according to the current SDC multiplier.

Some sales offices maintain separate data bases including their SEs. SEs on these data bases should give their SEA instructions to add them to the above subscriber list for updates.

We plan to update the handbook in June '81, and publish a new issue again in January '82. If you think of ways to further improve the handbook after seeing the reissue, please pass your ideas along to Al Sperry at DCD, (303) 226-3800, ext. 2255. The field handbook is intended to help you sell; we want to make it as effective as possible.

Technical Computers

New 9845C Color Output Capabilities

By Bonnie Dykes/DCD

Two new HP 9845C color output products are available: the 98776A RGB Interface and 98777A Camera Attachment provide the 9845C user with methods for creating high-quality 35mm slides or color prints of the 9845C screen image.

The 98776A is a general purpose Red, Green, and Blue interface which mounts to the 9845C CRT via a modified rear panel. It provides red, green, blue and horizontal and vertical sync signals which interface to some color output devices using compatible signals and supporting 60Hz non-interlace raster refresh hardware. Camera devices of this type usually produce very high quality photographic images. Option 776 is available for customers wanting this capability factory installed on their 9845C units. Signal specifications should be checked carefully to determine if a particular color output device is compatible with the 9845C via the RGB interface. The price of either the 98776A Interface or Opt. 776 is $300 (US).

The 98777A is a camera hood which attaches to the front bezel of the CRT screen. Many 35mm camera models and the Polaroid CU5 can be used with the hood attachment to produce excellent quality color prints or slides. The unit's hinged design allows the user to view the screen and set up the image properly without detaching the hood from the CRT screen. The camera attachment provides distortion correction and a light-tight environment, eliminating the need for a darkroom to produce very good quality pictures at a reasonable cost — the camera attachment hood lists for $1,000 (US).

Check the new technical supplement (P/N 5953-4577) describing both products for more details.

Matrix of Mass Storage Capability for DCD Products

By Phil Farley/DCD

With the recent release of the 9835 Mass Storage ROM (98331B) we have been getting several questions concerning the mass storage capabilities of all DCD products. The following chart describes mainframe capability, necessary interfaces, and device description.

9825A/B/S/T using the 98217A 9885 Flexible Disc ROM

Mass Storage Device	Interface	Device Description
9885M Opt 025	98032A Opt 185 and 98217A Mass Storage ROM included with Opt 025.	.5 Mbyte flexible disc
9885S	Must have 9885M Opt 025 Proper cable included with 9885S.	.5 Mbyte flexible disc

9825T using the 98228A Mass Storage ROM

9885M	98032A Opt 185	.5 Mbyte flexible disc
9885S	Must have 9885M. Proper cable included with 9885S.	.5 Mbyte flexible disc
9895A	98034A (HP-IB)*	2.36 Mbyte flexible disc

9835A/B using the 98331A Mass Storage ROM

9885M Opt 035	Included with Opt 035	.5 Mbyte flexible disc
9885S	Must have 9885M Opt 035 Proper cable included with 9885S.	.5 Mbyte flexible disc

9835A/B with 98331B Mass Storage ROM

9885M Opt 035	Included with Opt 035	.5 Mbyte flexible disc
9885S	Must have 9885M Opt 035 Proper cable included with 9885S.	.5 Mbyte flexible disc
9895A Opt 035	98034A (HP-IB)*	2.36 Mbyte flexible disc
9895A Opt 135	98034A (HP-IB)*	2.36 Mbyte flexible disc
7906M	98041A Opt 035	20 Mbyte disc drive (master)
7906S	Must have 7906M. Proper cable included with 7906S.	20 Mbyte disc drive (slave)
7906H	98041A Opt 035	20 Mbyte Integrated Controller
7910H Opt 035	98034A (HP-IB)*	12 Mbyte Winchester fixed disc
7920M	98041A Opt 035	50 Mbyte Disc Drive (master)
7920S	Must have 7920M. Proper cable included with 7920S.	50 Mbyte Disc Drive (slave)
7920H	98041A Opt 035	50 Mbyte Integrated Controller Disc Drive
7925M	98041A Opt 035	120 Mbyte Disc Drive (master)
7925S	Must have 7925M. Proper cable included with 7925S.	120 Mbyte Disc Drive (slave)
7925H	98041A Opt 035	120 Mbyte Integrated Controller Disc Drive.

*The 98034A card must be marked "revised".

Given the huge installed base of both 9845s and 9835s, many customers will want to add some mass storage device to their system. Look at this chart to determine which ROM and interface they need. If the customer has the wrong Mass Storage ROM, he/she will have to buy the correct one. The basic premise is, if we offer a new capability which requires a new ROM the customer must buy that new ROM.

When the CE installs a hard disc with a 9835 he will check the 35 for the modified backplane and the internal I/O cable, replacing them if necessary under warranty. The 35 modifications are necessary only when a greyhound (98041A) is used.

Notice that the 9835A/B with the 98331B Mass Storage ROM supports all the H series discs while the 9845 supports none of them. Also, there is an error in the 9895 FTM. It says a 98413B Mass Storage ROM is needed in order to use the 9895 on the 9845. This is incorrect. The necessary ROM should have been the 98413A.

All hard discs, with the exception of the 7910H, require a 98041A (greyhound) interface. When an Option 035 or 045 is ordered with the 98041A, the customer receives the Hard Disc Utilities software pack. See Greg Funk's article in *Computer News* November 1, page 11, for a complete description of these utilities.

The Options 035 and 045 included with either the 9885 or 9895 provide the Flexible Disc Utilities Software pack. See Greg's article. The option 135 and 145 ordered with the 9895 gives the IBM Flexible Disc Utilities Software pack. Again, see Greg's article.

You have all been informed that the 9895 must be dedicated to a single HP-IB card. Now, the 7910H and the 9895A can both be connected on the same HP-IB line, thus making the 9895 a suitable device for selectively backing up a 7910H while it can still be used for personal I/O!

9845B/C using 98413A Mas Storage ROM

9885M Opt 045	Included with Opt 045	.5 Mbyte flexible disc
9885S	Must have 9885M Opt 045 Proper cable included with 9885S.	.5 Mbyte flexible disc
9895A Opt 045	98034A (HP-IB)*	2.36 Mbyte flexible disc
9895A Opt 145	98034A (HP-IB)*	2.36 Mbyte flexible disc
7906M	98041A Opt 045	20 Mbyte Disc Drive (master)
7906S	Must have 7906M. Proper cable included with 7906S.	20 Mbyte Disc Drive (slave)
7920M	98041A Opt 045	50 Mbyte Disc Drive (master
7920S	Must have 7920M. Proper cable included with 7920S.	50 Mbyte Disc Drive (slave)
7925M	98041A Opt 045	120 Mbyte Disc Drive (master)
7925S	Must have 7925M. Proper cable includes with 7925S.	120 Mbyte Disc Drive (slave)

New Fluke 1720A Evaluation
By Larry Inman/DCD

We've just distributed the updated competitive analysis on the Fluke 1720A Instrument Controller. This report has been sent to all SF01 and SF02T sales personnel worldwide. It goes into much greater detail than the preliminary report sent out last August.

With the recent introduction of the HP 9915A Modular Computer, HP is in an excellent position to compete with the 1720A. The 9915 offers an excellent development system, great flexibility, a powerful language, and comparable performance to the 1720A — all at about one third the price.

If you haven't received a copy of the evaluation, please contact any of us in PL97 Sales Development at DCD and we'll forward one.

BDD
Local Language Manual List
By Mike Tupper/BDD

A list of all local language manuals produced at BDD, and relating to desktops, is available. The list gives print date and customer price for each manual. All European Area Managers should now have a copy. If you want a copy, or if extra copies are needed, just contact me at Boeblingen.

YHP
First BUC/YHP Conference
By Yuko Murayama/YHP

We are happy to announce the great success of the first BUC/YHP Conference, held October 30 and attended by 36 members.

The program included a demonstration of the HP 9845C and a presentation on data communications by our marketing staff. Four users discussed their applications and their impressions on using YHP desktops, which gave the users an opportunity to exchange information. A session on "Questions to YHP" brought a better communication between YHP and the users.

We are looking forward to having another conference like this in the near future to seek more "YHP fans".

Business Computers

Manufacturing Systems Operation

Materials Management/3000 Sales Success

By Michael Tarens/MSO

How do you dislodge IBM from one of their showcase accounts and convert it to an HP reference site? Very carefully? No! Very Aggressively!

The target company is a very successful manufacturer of large filtration and air purification systems, growing at approximately 30% per year, with sales of $300 million. Not only were sales growing, but, to meet manufacturing demands and satisfy customer commitments, the company was expanding to seven separate manufacturing facilities. This put a stress on the computing capability of existing EDP systems to manage multiple manufacturing locations. The company began exploring alternatives to EDP centralization.

Ken Souza of Lexington took the account for HP. It was a challenge; the company had been a test site for IBM hardware and software and was still an IBM showcase account for manufacturing applications. The key opportunity was that the new corporate systems strategy was to decentralize EDP operations and move toward distributed processing. The existing system was a 370/145 running batch MRP that had been developed years earlier and was no longer sufficiently responsive to user needs. The logical choice for a solution was IBM, but the customer wanted a viable on-line solution that would satisfy their requirements for distributed processing and that was at the same time, not too expensive.

Other vendors in the competition were Data General and DEC. Both were eliminated, however, because the customer felt they could not provide both the manufacturing package and system support required.

Our HP SR had proposed multiple Series IIIs and MFG/3000. He demonstrated distributed processing and extensive on-line capabilities. In mid-sales cycle, Materials Management/3000 was introduced and this provided the final incentive to purchase HP hardware and software. The customization capability of Materials Management/3000 (without jeopardizing HP support), was a key factor in HP's favor. On-line capability and ease of use also contributed to HP's success.

Two orders have been placed for the first two manufacturing sites. Both are terminal intensive and have Materials Management/3000 installed as their primary software system. Ken expects to sell five more sites within the next 18 months. Bottom Line: $450K sold to date. $1.5M prospect over 18 months.

Data Communications Operation

HP 3000 Series 44 Data Comm Capabilities

By Ron Fountain/DCO

Accompanying HP's newest and most powerful business computer, the HP 3000 Series 44, is computer networking facilities that will give users one of the broadest ranges of data communications capabilities in the industry.

Two HP networking products make it possible for any HP 3000 Series 44 to communicate with large mainframe systems in two ways, interactively through emulation of an IBM 3270 terminal (Interactive Mainframe Link/3000) or as a remote HASP or JES2/3 multi-leaving batch workstation (Multi-leaving Remote Job Entry/3000). A third data communications product, Multipoint Terminal Software/3000, makes possible multipoint terminal connections between an HP 3000 computer system and a mixture of many HP data terminals on a single communications line. MTS supports remote multi-drop terminal connections or in plant local connections up to 8 km (5 miles) from the HP 3000 system.

All three of these products function not only with the new HP 3000 Series 44, but also for the first time with earlier HP 3000 Series 30 and Series 33 Computer Systems. All three data communications products, for the first time in such applications, make use of the HP Intelligent Network Processor (INP) to reduce by as much as 50 percent the data communications overhead on the computer, allowing greater system thruput and higher applications workload. The INP is a separate, small plug-in computer with its own memory, and a number of built-in LSI input/output control devices, that has been offered previously with HP 3000 computers with other data communications products.

In addition to offering these three new data communications choices, the HP 3000 Series 44, like all HP 3000s, can function as a remote job entry station to a large mainframe computer via IBM 2780/3780 emulation (with RJE/3000), and can be linked to other HP 3000 and HP 1000 computers using HP's Distributed Systems/3000 (DS/3000) computer networking product.

Term Type Support on HP 3000s

By Ron Fountain/DCO

The introduction of new systems always generates questions regarding support of asynchronous terminals on the HP 3000. With the Series 44 introduction, I would like to update HP's position on this.

Asynchronous, point-to-oint, terminals are available on all HP 3000s. In the case of the Series III, the Asynchronous Terminal Controller (ATC) is used, and for the Series 30/33/44 the Asynchronous Data Communications Controller (ADCC) is used.

These provide either hardwired or modem connection to terminals via an RS-232C interface.

Although RS-232C is a standard interface, unfortunately it is not possible to simply connect any RS-232C compatible terminal to an HP 3000. This is because terminals respond differently to special characters, and can require different responses to certain characters, e.g., carriage return. To support these different requirements, a series of "term types" have been defined on the HP 3000. The term type is a number which is entered during the configuration dialog or "Hello" log-on sequence, and enables the terminal driver to correctly respond to the terminal. The available term types are detailed below, along with the terminals they were designed for:

Term Type	Available Series III	Available Series 30/33	Available Series 44	Terminal* Model
0	x			HP 2749B, ASR-33
1	x			ASR-37
2	x			ASR-35
3	x			Execuport 300
4	x	x	x	HP 2600A; Datapoint 3300
5	x			Memorex 1240
6	x	x	x	HP 2672A/B; GE TermiNet 300 and 1200
9	x	x	x	HP 2615A; Behive Mini Bee
10	x	x	x	HP 262X; 307X; 264X
11	x	x		HP 264X
12	x	x	x	HP 2645K
13	x	x	x	Telenet Psuedo Term
14	x	x	x	Multipoint Terminal
15	x	x	x	HP 2635B (8-bit word)
16	x	x	x	HP 2635B (7-bit word)
19	x	x	x	HP 2631B

*See HP 3000 Configuration Guide for full details on terminal support.

Only the terminals listed above are formally supported by HP. Most of the non-HP terminals were supported because there was no equivalent HP terminal at that time. We don't intend to drop any terminals from the lists although in the future we will use only HP terminals whenever possible.

An often-asked question is "What foreign terminals are supported on the HP 3000?" The answer is — only those terminals listed above. Other terminals can be connected to an HP 3000 and often work, but we will specifically support only the functioning of the term types listed. It is the customer's responsibility to ensure terminal compatibility with the term type. Supported HP terminals are, of course, the best option. We guarantee satisfactory operation, and if problems are discovered we will make whatever modifications are necessary.

IML Printer Emulation
By Jitendra Singh/DCO
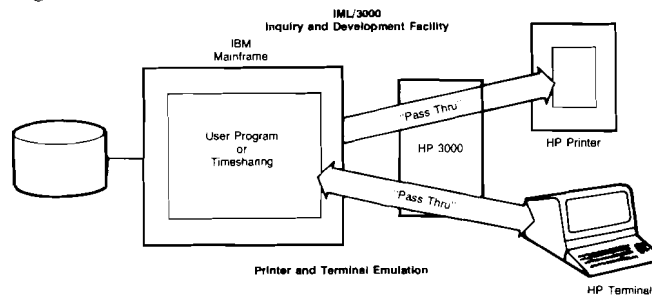
Interactive Mainframe Link/3000 (IML/3000) allows an HP 3000 to communicate interactively with a host mainframe. The Inquiry and Development Facility (IDF) of IML allows HP terminals and printers to be used in a "pass thru" mode. Using IDF, HP terminals and printers attached to an HP 3000 system emulate IBM terminals and printers attached to an IBM 3270 controller.

Support of HP terminals under IDF was announced at the time of product introduction, this announcement adds support of HP printers and the HP 2626 terminal to the existing matrix of terminals/printers supported. The complete matrix is:

Series II/III

Printers	Terminals
2608A	2640B/N/S
2613A	2641S
2617A	2645A/N/S
2619A	2647A
2631B	2648A, 2626

Series 44, 33 and 30

Printers	Terminals
2608A	2640B/N/S
2631B	2641S
	2645A/N/S
	2647A
	2648A
	2626

The IBM terminals and printers emulated are:

Printers**	Terminals*
IBM 3284 40 cps	IBM 3277-1 480 ch display
IBM 3286 66 cps	IBM 3277-2 1920 ch display
	IBM 3278-2 1920 ch display

Printers**	Terminals*
IBM 3287 Model 1, 80 cps	
IBM 3287 Model 2, 120 cps	
IBM 3288 Model 2, 120 lpm @ 64 ch/line	
IBM 3288 Model 2, 80 lpm @ 120 ch/line	
IBM 3289 132 ch/line 40-400 lpm	

*See data sheet for non-emulated features
**Program Application Keys on these printers are not emulated.

Business Computers

Note: The HP 2613, 2617 and 2619 printers are not currently supported under IDF on Series 44, 33 and 30 systems. Testing will be performed to verify their proper operation with IDF. Supportability or non-support- ability will be announced at the completion of testing.

MTS/3000 Available on the INP

By Ron Fountain/DCO

Multipoint terminal communication between all models of HP 3000 computer systems and multipoint HP 264X, 262X display stations, and/or 307X data capture terminals is now available on the HP Intelligent Network Processor at speeds up to 9600 bps.

Multipoint Terminal Software/3000 (MTS/3000) is a software package which enhances the terminal communications capabilities of HP 3000 systems by:

- Allowing multiple remote or locally attached terminals to share a single communication line.

- Providing a cost savings by means of shared resources (modems, phone lines, etc.)

- Providing for automatic error checking and retransmission of corrupted data.

MTS/3000 will use the previously available Intelligent Network Processor (INP) as a hardware/software network interface into the HP 3000 system thereby freeing the 3000 system to do other tasks. The INP handles all multipoint Bisync protocol handling and handshaking, data buffering, error checking, retransmission of corrupted data, and terminal polling. The net result is an up to 50% reduction in CPU overhead in comparison to MTS/3000 on the SSLC (See performance charts).

This new release of MTS/3000 will be distributed (in December/January) on a data comm product tape and requires installation of the "B" MIT.

Multipoint display terminals supported locally and remotely by MTS/3000 are the HP 2641A, 2645A/N/S, 2647A, 2648A, and 2626A with Program ROMs date coded 1818-1477 2030 and above. In addition, the HP 3075A, 3076A, and 3077A data capture terminals are supported in local hardwired environments.

TDP/3000, DSG/3000, IDS/3000 and IFS/3000 are not supported over a multipoint line.
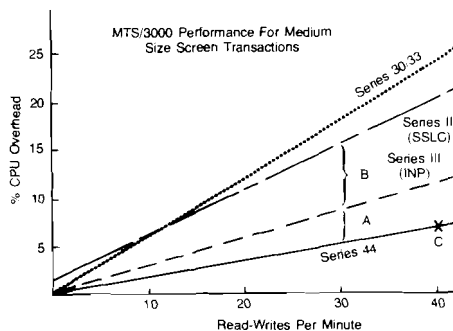
Figure 1

Test Conditions and Conclusions For Figure 1

750 Character Writes, 250 Character Reads, 9,600 bps asynchronous hardwired line.

- Up to 50% reduction in CPU overhead in comparison to MTS/3000 on the SSLC.

- Range A = the increased processing power of the Series 44.

- Range B = the reduction in CPU overhead due to the INP.
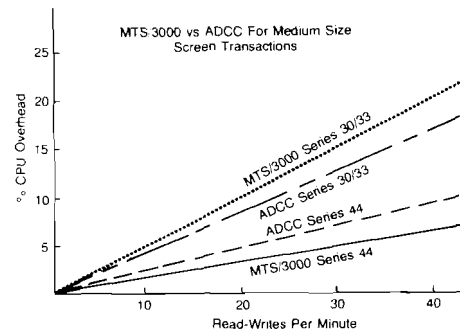
Figure 2

Test Conditions and Conclusions for Figure 2

750 Character Writes, 250 Character Reads, 9,600 bps asynchronous hardwired line.

- MTS/3000 incurs *slightly less* CPU overhead than the ADCC on a Series 44.

- MTS/3000 incurs *slightly more* CPU overhead than the ADCC on Series 30/33.

Conclusions

- For remote sites sell MTS/3000 — lower data comm costs; higher speeds; data integrity.

- For local sites, make MTS/3000 vs. ADCC choice based on cabling costs, terminal location, and data integrity.

For Internal Use Only

Computer Systems

The HP 3000 Series 44, shown here in its base configuration, provides up to twice the on-line transaction throughput of the Series III.

Introducing ... the HP 3000 Series 44

By John Chisholm/Computer Systems

It supports up to four megabytes of main memory ... nearly two GIGA-bytes of disc storage ... and provides transaction throughput up to *twice* that of the HP 3000 Series III with MPE-III ... It's the **HP 3000 Series 44!**

Known by the code name "Grizzly" at the factory, the HP 3000 Series 44 is the new high-performance member of the HP 3000 family. It has a new CPU whose speed is 60% faster than that of the Series III; uses new, faster memory, and supports twice the amount of memory supported in the Series III! Including both point-to-point and multipoint, it supports up to 96 terminals! And it uses a new version of MPE — MPE-IV — which provides an improved memory manager and a more efficient MPE file system. But most of all, the HP 3000 Series 44 provides the best price/performance of any HP 3000 system we have offered yet. The base system sells for the low price of $108,445 (US list) including 1 Mb memory and two General I/O Channels (GICs) bundled into the system, with one 50 Mb disc, 1600 bpi tape drive, ADCC-Main and 2621A console ordered separately.

Software Compatibility

The Series 44 comes with the same Fundamental Operating Software — including MPE, IMAGE, QUERY, V, and KSAM — that is bundled with every HP 3000 system. It runs any of the five HP 3000 languages — COBOL (II), FORTRAN, Basic, RPG, and SPL — and is fully compatible with HP-Distributed Systems Network (HP-DSN). DS, RJE, MRJE, IML, and MTS are all supported on the Intelligent Network Processor (INP) on the Series 44 — meaning high performance data communications, especially for Multipoint. In addition, TDP/3000, DSG/3000, Materials Management/3000, and Flexible Disccopy (used with the standalone 9895A flexible disc drive from Greeley Division) are all available on the Series 44.

The Series 44 is software compatible with the Series 30, 33, II, and III. Programs developed on other HP 3000s can be transferred to the Series 44 with recompilation rarely being required. This means your customers' investment in HP 3000 software will be preserved as they expand from a single system to a network including one or more Series 44s.

Highest Reliability

Series 44 System Processor Unit reliability is so high that SMMC's are actually lower than those of the Series 30! This high reliability is made possible by a diagnostic subsystem built into the Series 44 mainframe called the Control and Maintenance Processor (CMP). The CMP performs all of the same functions of the 2649E System/Maintenance Console on the Series 30 and 33, and then some! Its self-tests and diagnostics are not only more thorough than those of the 2649E, they're also easier to use! The CMP means that *any* HP terminal — including the 2621A — can act as Series 44 system console ... a real savings to customers!

The Series 44's high reliability has enabled us to offer an industry first: Guaranteed Uptime Service. (See article in Computer Marketing section). This new service guarantees up to 99% uptime for the Series 44. Guaranteed Uptime Service, available only with the Series 44, is ordered through the GMMC (Guaranteed Monthly Maintenance Charge), a new alternative to SSMC or BMMC. GMMC is priced at less than 7% of the Series 44 System Processing Unit price — a small premium for guaranteed 99% uptime!

Series 30/33/II/III Growth Path

The Series 44 provides a compatible growth path for Series 30, 33, II and III users. For the Series 30 and 33, a simple field exchange of System Processor Units is required to upgrade to the Series 44. All peripherals are directly transferable. Regardless of how long ago your customer bought a Series 30 or 33, we'll give up to a 50% return credit to him on his Series 30 or 33 System Processing Unit towards the purchase of the Series 44. Series II/III users who need the added performance of the Series 44 can also return their System Processing Units

Business Computers

to HP for credit. See your *HP 3000 Series 44 Upgrades Field Training Manual* for details of the Series 30 and 33 upgrades; details of the Series II and III upgrades will be available later.

Competition — We've Never Looked So Good!

The power of the Series 44 brings the HP 300 into a whole new arena of competitors: the IBM 4331-Group 2, the Prime 650, and — time will tell — possibly even the Wang VS-100. The Series 44 price/performance is equal to or better than any of these competitors — and the price of a typical configuration is 40% less than that of the 4331-Group 2.

So You'll Know Where to Look ...

You'll receive a lot of new literature on the Series 44. Here's a guide:

HP 3000 Series 44 Field Training Manual — The "Configurator" in the back will help you transmit that first Series 44 order without a single mistake!

HP 3000 Price Guide — Series 44 will appear on the December 1 Corporate Price List, but you can begin transmitting orders immediately! Availability: 16 weeks from December 1.

HP 3000 Configuration Guide — It's full of goodies, e.g.: 2613/17/19A printers and full data communications supported on the Series 30, 33, and 44! In addition, remote spooled printing on every HP 3000 with the 2631B! And the Series 30 supports a third INP!

HP 3000 Competitive Notebook — The Series 44 vs. the competitors you're up against: IBM System/38 and 4300 Series, Prime, and Wang.

HP 3000 Upgrades Field Training Manual — Everything you need to know for customers ready to upgrade their Series 30 or 33!

HP 3000 Series 44 Summary — Management-oriented brochure for your customers and prospects.

You've made the Series III one of the most successful products in the history of Hewlett-Packard. Now, in 1981, you're going to be even more successful with the Series 44!

HP 3000/30 & 33 Systems: Expanded Capabilities

By Wayne Hong/Computer Systems

The capabilities of the HP 3000 Series 30 and 33 systems have been expanded to support an additional General I/O Channel (GIC). The additional GIC will provide more flexibility in configuring the Series 30 and 33 systems. It can be used for those peripherals which require a dedicated GIC or to distribute line printers and other peripherals away from the system disc drive.

The following guidelines apply to the Series 30:

- The Series 30 without a built-in flexible disc drive can have up to three GICs and three INPs, for a total of six for the combination of GICs and INPs.

- The Series 30 with a built-in flexible disc drive will typically allow up to a total of five for the combination of GICs and INPs.

The following guidelines apply to the Series 33:

- The Series 33 without a built-in flexible disc drive can have up to four GICs instead of three. The fourth GIC is to be used for a peripheral that requires a dedicated GIC, i.e. the 7970E magnetic tape drive and the 2680A Intelligent Page Printer. Should a system need four GICs and two or more INPs, then the fourth GIC must be placed in the second card cage, which can be ordered as the I/O Expansion Kit (30416A).

- The Series 33 with a built-in flexible disc drive will also be able to add a fourth GIC for use with a 7970E or 2680A. The 30416A I/O Expansion Kit will typically be needed on a system having four GICs and one INP.

See pages 12-14 of the new December edition of the *HP 3000 Configuration Guide* for more details on these new capabilities.

GSD

More Quota $ For Your Sales Efforts

By Chris Sauer/GSD

Welcome to FY'81 from GSD! It should prove to be an exciting year for HP 250 sales.

First, there's the resolved reliability issues. The HP 250 is only sold now as a hard disc based system. In addition to this, the floppy reliability issues have been addressed with the new harder media giving longer media life.

Availability is presently only six weeks! That's for the complete HP 250 including disc, printer and terminals. Slightly better delivery is available in a "pinch" for everything but remote consoles (2649Ds).

Campaign '80 was so successful that we're extending the bundled HP 250/HP 3000 III offer for end-user customers. Note: the offer is HP 250 with 12 Mb hard disc $15,333.

A number of HP 3000 customers have become HP 250 customers because of this offer. Consider placing HP 250s in branch offices for sales order entry or inventory control with data communications to an HP 3000 or IBM mainframe.

Remember, the HP 250 belongs in large companies too.

ISD

Introducing Character & Forms Design Software on HP 2680

By Chris Kocher/ISD

On December 4, Information Systems Division proudly announced two new software packages available on the HP 3000 for use with the HP 2680A Intelligent Page Printer. Interactive Formatting System (IFS/3000) and Interactive Design System (IDS/3000) were jointly introduced with Boise Division as part of the HP 2680 Laser Printing System.

HP 3000 users who need high quality output will be extremely interested in the unique capabilities of the 2680 Laser Printing System. The combination of hardware and software will provide an integrated solution to a wide range of printing applications that have traditionally required retyping, reformatting, copying, and photo reduction of computer-generated output.

These two software packages will allow a wide range of HP 3000 users to easily take advantage of the features of the 2680 Intelligent Page Printer. This is part of ISD's long term strategy to provide users in the office, as well as in the DP environment, with more powerful and productive solutions to their document management requirements.

The 2680 Laser Printing System has unique capabilities not provided with any other competitive laser printers such as interactively designing characters, logos, symbols, forms and even signatures at an HP 2647A or 2648A terminal. In any selling situation, you should have a significant advantage.

The IDS/3000 and IFS/3000 software allows users to create and modify their own printing formats. Now, instead of being limited to the capabilities of a line printer, your customers can enhance their printing applications by positioning logos, letterheads, symbols, forms, and even signatures anywhere on a page.

They can use multiple character sets to highlight information. They can even design forms that reduce or eliminate the need for inventories of expensive preprinted forms. Although these packages do not have graphics capabilities, they do allow images, defined in a 255 x 255 dot cell to be positioned anywhere on a page. These features and many others are described in the *HP 2680 Laser Printing System Data Sheet*, and *Field Training Manual*.

This exciting new product offering should generate a great deal of interest from many existing customers and open doors into many new accounts. Furthermore, this added capability will provide you with a competitive advantage over other minicomputer vendors who do not have similar systems.

Another Graphics Package To Run On HP 3000

By Jutta Kemke/ISD

The October issue of the Anderson Report noted under the heading, Software and Services, that *"Computer Services, Gaithersburg, MD, is introducing a presentation graphics package for engineering charts and graphs. The software is fully prompting, relieving the user from having to learn special syntax or keyboard usage. Artistic decisions for the layout, spacing, position, and scaling of the final graphs are made by the software. This system currently runs on a Hewlett-Packard HP 3000 and additional releases for Honeywell, DEC and IBM computers are in the works. One time price for end user license is $15K.*

Presentation graphics by Arens features automated composition modules which prompt the user for key words and parameters. It includes modules to produce text, line and shaded area charts, bar charts, pie charts, and milestone charts. The Interface module presently supports 17 different character sets and math and Greek symbols are provided as well.

The product interfaces the computer to output devices such as multi-color flat-bed and drumm plotters, color cameras, color copiers, and color or black and white graphics terminals".

Please contact me or your Sales Development engineer with any competitive information you come across. We are also very interested in DSG/3000 success stories.

Compilers Survey Results

By Kathy Weiler/ISD

Thanks to all of you who responded to the questionnaire which appeared in the August 15 '80 issue of *Computer News*. The results are tabulated below. Although the number of respondents (17) was less than I had hoped, I believe they reliably reflect our customers' needs. If you would like to add your vote (and have an impact on lab priorities), please dig out your August 15 issue and respond.

Results

1) Only six of the 17 respondents answered the first question. Between them, they lost 20 system sales due to the deficiencies in our compiler offerings. The culprits, in this order: FORTRAN, Basic, Pascal, PL-1, COBOL, Algol, and APL.

2) & 3) Interpret as follows: "Mentioned By" means how many of the 17 respondents listed each compiler, and "weighted average" refers to the importance (or ranking) they gave it. A "1" indicates higher priority than a "3."

The current compilers which you would like to see updated are:

Language	Mentioned By	Wtd. Avg.
Basic	13	1.5
FORTRAN	12	2.4
COBOL	7	1.7
RPG	5	3.2
APL	3	5
SPL	3	3.7

Business Computers

The new compilers which you would like to see on the HP 3000 are:

Language	Mentioned By	Wtd. Avg.
Pascal	12	1.2
PL-1	3	2
Editor/ Symbolic Debug	2	1.5
FORTRAN	2	1.5
Code Generators	2	2
Business Basic	1	2
COBOL	1	2
Mumps	1	2
APL	1	2
RPG	1	1

4) The only notable reported problem besides what can be extrapolated from the above concerns the 64Kb stack limitation. (This one is not news!)

Again, thank you for your response. Remember, you *can* influence lab priorities and you are welcome to send in late responses.

HP 300 Real Estate Application
By Pat Wilcox/ISD

Keeping track of real estate transactions and financial data for a real estate company in a resort area is a big job! The HP 300 is doing just that in Honolulu, Hawaii. The system performs all the basic accounting functions needed for a large real estate company and makes the agents' job easier.

The sales application can keep track of agents and their listings and even print commission vouchers. This company has its own detailed listings printed weekly — the local multiple listing service only provides the service monthly. The agents in their various offices can also inquire with CRTs into the status of a piece of property by listing number, agent number, type of property (residential or condo), complex name or tax map key.

If you have a real estate company prospect in your territory, contact me for details on this application.

BGD

ACCELERATE '81 ACTION ITEMS

Boblingen General Systems Division

BGD Launches Accelerate '81
By Dave Iuppa/BGD

A new marketing effort began at BGD in October. Called "Accelerate '81," it is an intensified program designed to give the European sales force the extra help necessary to get orders in the first half of FY'81.

In addition, the program will help reinforce HP's basic sales strategy in Europe through FY'81.

For Our Major Accounts

Under Accelerate '81, top management at BGD will visit or host each of the 26 European Major Accounts as early in the first quarter as possible.

These visits are designed to help you establish high-level contacts between HP and each major account, speed up work to resolve any problems, and reassure each account that HP is a company with whom they can build a long-term partnership.

BGD Sales Development is now reviewing each major account ASAP to make sure the factory provides the support necessary to make these plans successful.

For Our OEMs and Software Houses

BGD also will visit or host the top 10 HP 250 and the top 10 HP 3000 OEMs. In addition, we want to work with the European Third Party Reps to help the OEM generate a solid business plan for selling HP computer systems.

BGD Product Management and Marcom will generate merchandising tools to help OEMs sell HP products. BGD Sales Development is also compiling the first European-wide OEM and Software House Area List. We will need your help to actively maintain it.

For Our Horizontal Sales

Our philosophy in supporting horizontal selling is to give the field the basic tools necessary to help them do their job. In addition to the OEM and Software House list (which will help make software more easily available to end users), BGD Product Management and Marcom will review our presentation material and put together updated local language seminar kits. And BGD Marcom, together with Geneva, will generate advertising materials and an upgrade mailer.

Newsletter

To help bring this message to the European field, BGD is producing a newsletter called "Accelerate '81 ACTION ITEMS." Each issue translates aspects of our new program directly into sales actions that will bring results. Four issues have been distributed to the European sales force, and new issues will appear about every other week throughout the first half.

Through this combined effort, our objective is to make or exceed quota in FY'81.

DTD
2640B Amplifier
By Eric Grandjean/DTD

With it's new price of $2,300 US, the HP 2640B is enjoying a renewed success with our customers. Don't let any of your customers miss this fantastic offer! Remember for $2,300 the customer gets:

- 2640B Terminal (without slot extender)
- 13231A Display Enhancement Accessory ($250 value)
- 13232A Standard Communication Cable ($50 value)

Note that all 2640Bs with Option 015 automatically get the 13232M cable instead of the 13232A (an additional value yet).

So the effective terminal price really comes down to only $2,000 US!

A few other things to remember:

- For this low price, we can only offer a fixed (single) configuration, no swapping allowed.
- If you need one or several additional accessories, you need to order a 13240A slot extender/fan ($150). We will install the accessories if the 13240A is ordered. If not, the accessories will not be installed.
- If you want the optional Large Character or Math Sets, you must order the parts from CPS or PCE (sorry about that).
- If you need a different communication cable, you must order it separately (i.e., 13232N). Your customer will receive the standard cable in addition to the 13232A (or 13232M).

All unshipped orders received before November 1, will automatically be invoiced at the new price.

Last but not least, even at $2,300 — all discounts apply i.e., a single order for 15 2640Bs brings the price down to $2,070 per unit.

Try to find an equivalent terminal feature-for-feature and quality-for-quality. You won't! Your time can't be better spent than telling your customers about the new 2640B deal.
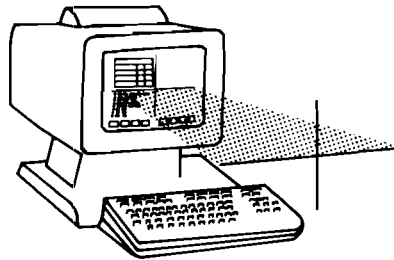
### 2626A Applications: Weidner Communications
By Jerry Erickson & Linda Lazor/DTD

Weidner Communications Company is a language translation and software vendor located in Provo, Utah. The documents they translate are typically engineering, diplomatic, or government related, and require technically precise and accurate translation. The HP 2626A fits perfectly into this application due to features such as multiple windows and workspaces, dual data-communication ports, and foreign language character sets.

In Weidner's application, the 2626A display is divided into three independent windows and workspaces — two side by side, and a third horizontal window across the bottom of the display. The vertical window on the left is connected through one port of the terminal to the CPU, and displays the text to be translated. As the cursor is positioned under a particular word to be translated, synonyms for that word appear in the bottom window in the language into which the text is being translated. (This workspace is connected through the second data comm port on the terminal to access an on-line translation dictionary

which is stored on disc.) The operator can then move the cursor to the window on the right and type the translated word or phrase. System software automatically configures each workspace with the appropriate language character set each time the cursor is moved from one workspace to the other. The translated document can then be stored at the host computer to be referenced later or printed out.

Weidner has contracted with HP for more than 200 2626s to date for use in this application. If you would like further information on the application, please contact Paul Meyers, HP Salt Lake City, Utah, sales office.
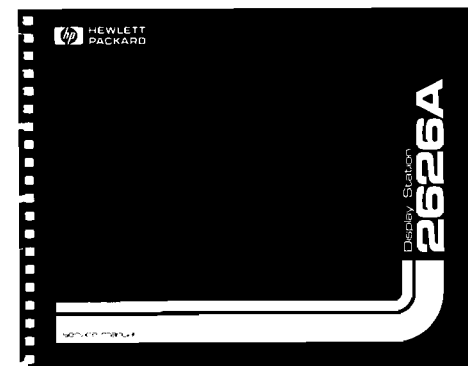
2626A Service Manual
By Larry Bricker/DTD

The 2626A Service Manual now available (P/N 02626-90003) follows the format of the 2621A Service Manual and has an orange cover. Status and Configuration information have been included in this manual.

Terminals
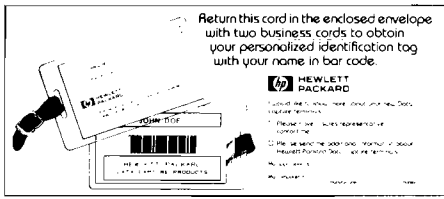
Data Capture Direct Mailer
By Mike Covert/DTD

During the week of November 17, we sent an exciting mailer to 50,000 manufacturing line managers and data processing managers across a wide spectrum of industries in North America. The purpose of the mailer is to generate qualified data capture terminal sales leads for the field sales force.

We are offering each respondent who sends us his business card a free personalized luggage tag with his/her name in "Bar Code". We anticipate this free offer will generate a high percentage of responses and will create increased awareness of data capture terminals in our targeted marketplace.

This mailer is the first major promotional effort undertaken in the data capture terminal area and we are very excited about it. We will soon have more information concerning how we plan to distribute the luggage tags to the prospective customers who respond. Watch for this information and please help us help you make this exciting campaign a success for all of us.

New Demo ROM Kit for 2621A/P
By Jill Glashow/DTD

DTD is now offering a demo ROM kit intended as a standalone demonstration of the HP 2621A/P for customer visits and terminal/computer shows. The demonstration can be run automatically for unattended demos and manually for sales presentations.

The demo kit includes installation and demoing instructions. The kit's product number is 93986D and its price is $250. A Heart override is required when ordering. The division is 42 and the product line is 67. Availability is currently six weeks.

Call your friendly sales development contact at Data Terminals if you have any questions.

2626A Prints up to 132 Characters
By Bill Mitchell/DTD

One of the key selling features of the HP 2626A is the ability to define workspaces more than 80 characters wide and to be able to horizontally scroll the contents in memory. This feature is greatly enhanced by the integral thermal printer (Option 050) which prints up to 132 characters per line.

This feature must be seen to be appreciated. Here is a simple demo you can perform for your customers:

1. Set the workspace/window configuration menu to the following values: page width: 132, rows of workspace #1:72. All other values are default values

2. Select the integral printer as the "To" device

3. In the device modes branch, enable "Log Bottom" and "Compress Print"

4. Place the terminal in remote mode, press the CAPS key and log onto any HP 3000

   Type:
   : FILE WIDE= $STDLIST; REC=
   − 132; CCTL
   : LISTF @ .@ .@ ; * WIDE

This results in a listing of the files on the system in 132-column format.

HPG
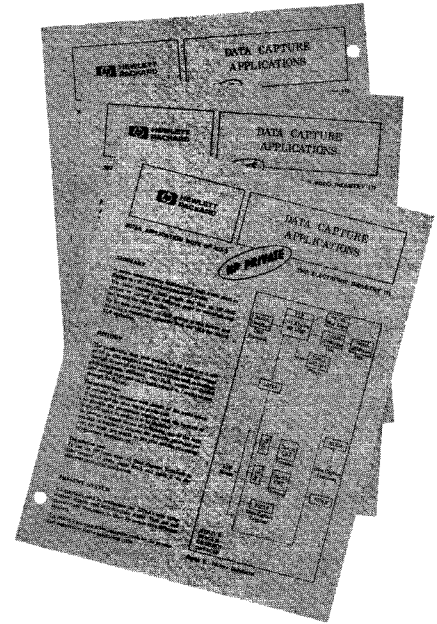
## Data Capture Application Notes
By Michel Jourdan/HPG

To increase the knowledge of data capture applications we have prepared some write-ups on existing installations. They explain how data capture problems have been solved in certain large manufacturing companies by using HP 3075A terminals.

The first three describe:

- production control and manpower tracking in the food industry;

- product tracking in the semiconductor industry;

- production control in an aerospace industry manufacturing radar systems, missiles and computers.

These application notes have been distributed and more are on the way. If you are not on the list or find it difficult to obtain copies, please contact Ron Lange at DTD (for US) or your Sales Development contact in Grenoble (for Europe). These application stories are ongoing and your feedback and suggestions for new stories will be welcome.

Boise
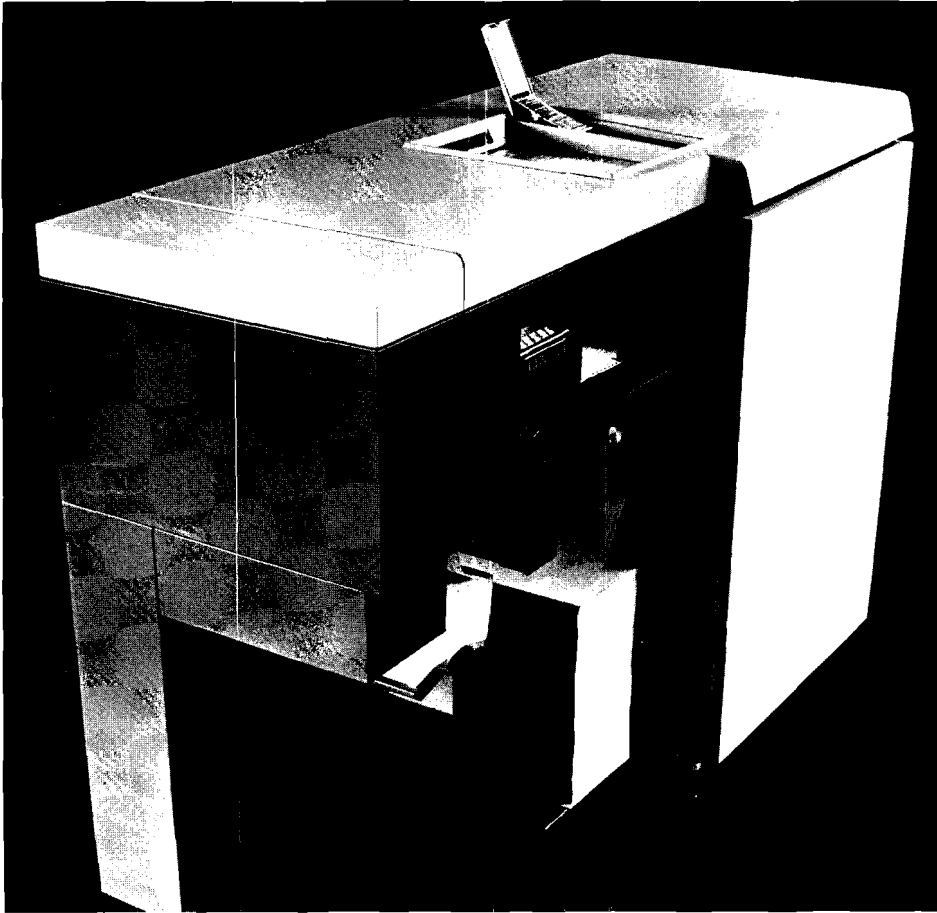
HP 2680 Laser Printer System: Product Overview
By Dave Melin/Boise

The HP 2680 Laser Printing System consists of the 2680A Intelligent Page Printer and two interactive software packages: the Interactive Design System for use in the on-line designing of forms, logos, and special characters; and the Interactive Formatting System used to format the information on the page.

Key Contribution

The key to the 2680 LPS is the integration of powerful interactive software and innovative, state-of-the-art hardware. This combination provides high quality, versatile, cost-effective output which is unique in the computer industry.

What Does It Provide?

Fully integrated into the HP 3000 family of computers, the 2680 LPS provides:

- direct computer output with exceptional print quality and versatility.
- electronic forms generation, storage and management resulting in significant cost savings.
- output produced directly for users on 8½ x 11 or A4 paper which can be rotated, reduced, and otherwise tailored for individual needs. In this manner, the need to copy and

reduce computer-generated output is eliminated (along with the labor required to do it).

- real dollar savings such that most installations can replace conventional printers with the 2680 LPS and get quality and flexibility at a reduction in operating cost.

Marketing Strategy

The 2680 Laser Printing System will be sold in conjunction with the HP 3000 to provide flexible, high quality, cost-effective output for use in on-line distributed data base management applications.

Price and Availability

2680 Laser Printing System
Consisting of:

2680A Intelligent Page Printer	$108,500
Interactive Design System	7,500
Interactive Formatting System	5,000

The 2680 LPS was introduced in North America, Germany, France and the United Kingdom December 4, '80. Initial deliveries will begin in selected service areas in February, '81.

2680 LPS Introduction Information
By Dave Melin/Boise

On December 4, the introduction date for the 2680 Laser Printing System, SRs in Germany, France, the UK, Canada and the US began selling one of HP's most sophisticated systems.

Who Will Receive the First 2680 Laser Printing Systems?

Initial customer installation sites will be driven by the orders Boise Division receives. However, we would like to prioritize shipments by geographical area. Using this plan, areas that have multiple 2680As on order would be among the first to receive their systems. This way customers have access to a backup 2680 and the field support organizations will be able to economically support the installed units.

Peripherals

What About Sales Office Installations?

Actually, our first planned customers will be several HP sales offices. They will be using the 2680 LPS for internal administrative output and internal training. These early units will also be used to assure early trade customers that a backup 2680A is available should a critical situation develop.

What is the Availability?

For availability, consult Boise Division. However, we do not expect to be able to acknowledge early orders sooner than 30 days after their receipt. Shipments could be slow at first, and may exceed six months after receipt of the order, due to the support training that needs to take place prior to installation.

## Boise "Wheels Out The Daisies"
By Ed Pavlinik/Boise

Boise Division proudly announces the letter quality printer your customers have been asking for! An OEM product form Diablo, the 2601A Daisywheel Printer is highly suitable for text processing and office output applications.

Enhancements such as proportional spacing, automatic underlining, automatic centering and right justification have been designed into the 2601A firmware to provide greater throughput and ease of use. Bold and shadow print modes are available for use as highlighting tools to accentuate key words and phrases in reports.

The 2601A operates at 40 cps with a plastic print wheel and 32 cps with a metal print wheel. A variety of print wheels can be ordered from Computer Supplies Division. The 2601A accepts both fanfold and single sheet paper for letter output. Bidirectional forms tractors are available and are easily installed by the user.
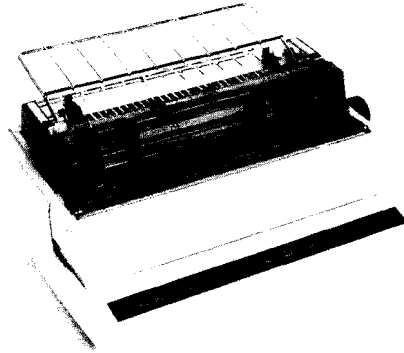
The 2601A uses an RS-232C interface for maximum communications flexibility. See the Boise configuration sheets for the system support summary. TDP/3000 will support the 2601A in February. HP offers a single vendor solution to its customers, including HP service and support.

The US list price of the HP 2601A Daisywheel Printer is $4,500. First deliveries are expected in January. Refer to the January Corporate Price List for detailed ordering information.

2619A & 7970B Price Increases
By Ron Whiteleather/Boise

Base Prices for the 2619A and 7970B from Boise will increase with the January Corporate Price List. The 2619A will increase approximately 6.5 percent to $24,500 US factory base price. The 7970B will increase 7 percent to $7,870 US factory base price. Option pricing on these products will remain unchanged. Again, these increases will not be effective until February 1, after a 30-day grace period.

Greeley

Greeley Price Increases
By Paul Maybaum/Greeley

Greeley Division will increase the prices of several products, due to rising costs of parts and production, on the January 1, '81 Corporate Price List. The new prices, effective February 1, '81, are:

Product	Old Price	New Price
9874A Digitizer	$7,900	$9,500
9876A Thermal Graphics Printer	3,950	4,500
11479A Thermal Graphics Printer (9876A without case)	3,750	4,250
98041A Disc Interface	2,550	3,000
9885M Flexible Disc Drive (master)	3,250	3,500
9885S Flexible Disc Drive (slave)	2,500	2,750
9878A I/O Expander	1,500	1,700

This is the first price increase on the 9885M/S Flexible Disc Drives since their introduction in 1976.

While the new $9,500 digitizer cost represents a 20% increase, it is our hope, since sales history data indicates that the digitizer is usually part of a complete system sale, that this 20% increase will translate into a much smaller percentage.

HP-IB Cable Not Available!
By Paul Maybaum/Greeley

The HP-IB cable needed to connect the 9874A Digitizer or 9875A Tape Cartridge Unit to the 9830A/B Desktop Computer is no longer available. We will be removing this HP-IB cable, P/N 59405A or "Opt. 130", from the price list. In the meantime, however, we cannot accept any further orders for this option as the supplying HP division has obsoleted a part needed to produce it. We hope no one is inconvenienced as Opt. 130 is a low-volume product. Call or TWX Juanita Rose or Arlene Hemby at Greeley Order Processing if this causes any problems. Greeley is Division 58.

9895A HP-IB Interfacing

By Frank Carau/Greeley

The 9895A Flexible Disc Memory is a fully compatible HP-IB device. As such, it can be used on the same interface bus as other peripherals, depending upon the mainframe. The HP 9825T Desktop Computer and the HP-85 Personal Computer can drive the 9895 and other peripherals on the same HP-IB card.

The 9895A can be used as a unified mass storage device with the 9835 and 9845 Desktop Computers by using the 98034A HP-IB interface card. Because of certain operating system limitations in the 9835 and 9845, however, no other HP-IB device should be connected to the 98034 interface while using the 9895. Under certain conditions, data can be lost if other devices besides the 9895 are connected on the interface.

The HP System 1000s also require dedicated HP-IB interfaces, termed "Mass Storage Interfaces", for use with mass storage devices.

DMD

7925T Now Offered With Option 250

By Jim Vogeley/DMD

DMD is pleased to announce the offering of Option 250 with the HP 7925T (previously offered only on the 7925S). Option 250 is a controller upgrade kit which allows the use of the 7925 disc drive on older systems. You may now order the 7925T Opt. 250 through a Heart Override. If you are unsure whether you need Option 250 or not, consult the accompanying flow chart or your DMD Sales Development contact. Feedback from the field prompted this move.
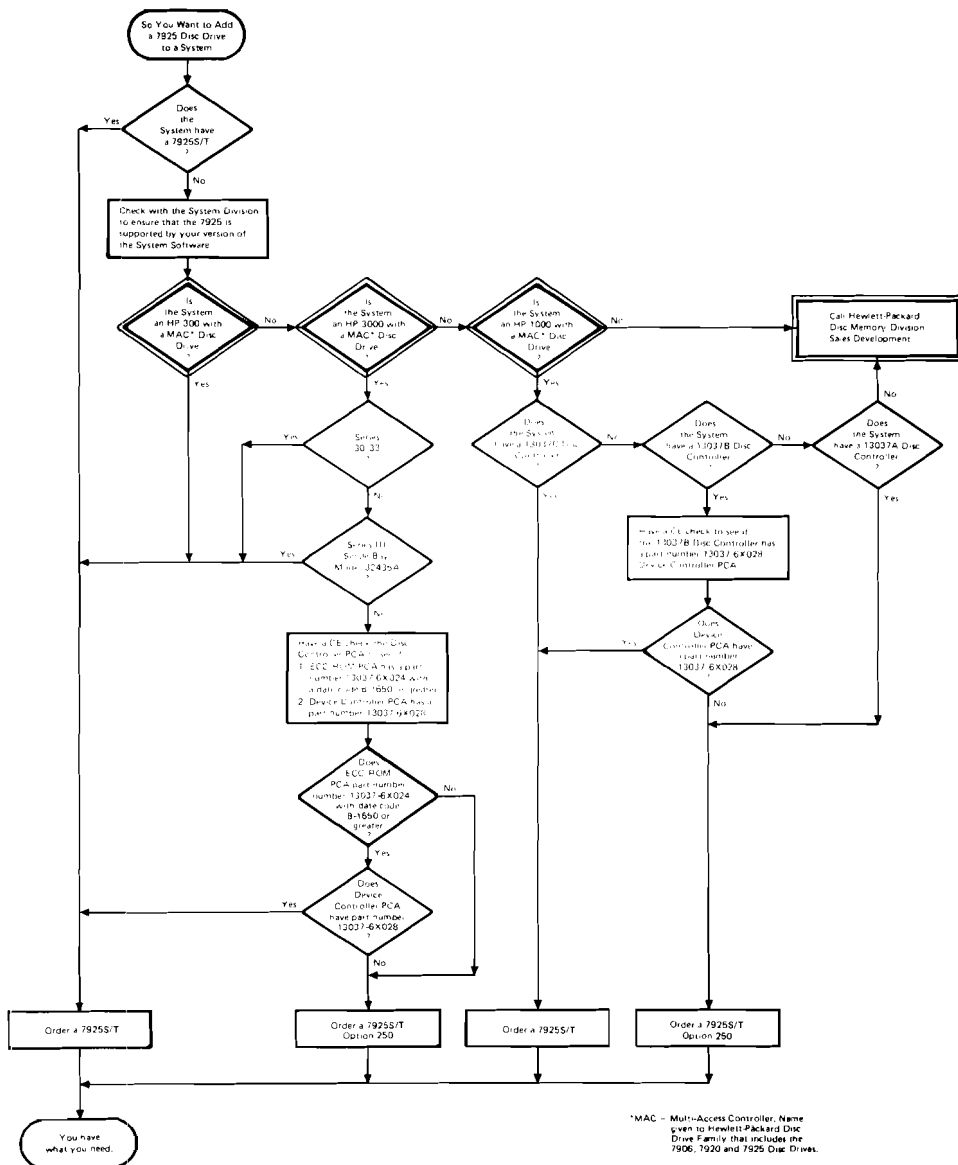
DMD Price Increases

By Therese Margevicius/DMD

Recent price increases in vendor supplied parts and increased overhead rates have caused the price of some of our disc products to be raised. These price increases are effective January 1, '81. The affected products are:

Product	Old Price	New Price
7906H	$13,000	$14,000
7906HR	12,000	13,000
7906M	15,000	16,000
7906MR	14,000	15,000
7906S	11,000	12,000
7906SR	10,000	11,000
7920H	16,000	17,000
7920M	18,000	19,000
7920S	14,000	15,000

*Note the 7925M, 7925S, 7925T, and 7925H prices have not been increased.

San Diego

Which Plotter Does PLOT/21 Support?

By Vern Hudson/SDD

There is only one plotter which our PLOT/21 software package is usable on, and that's the 7221A/B/S. PLOT/21 is a FORTRAN language package that only the 7221A/B and S can understand. No other plotter from San Diego will recognize the PLOT/21 commands. For answers to more questions about PLOT/21, or what to use on other plotters, contact your SDD RSE.

Everything You Want to Know About Carrying Cases and Transit Cases

By John Koon/SDD

Basically we provide two kinds of cases for your graphics plotters:

1. Carrying Case (soft) — Made of vinyl and designed for carrying. It is not suitable for shipping.

2. Transit Case (hard) — Made of fiberglass or equivalent materials and designed for transportation. There is foam padding inside the case to protect the plotter from shock during transportation.

How are they ordered?

Carrying Case Only — Order all carrying cases through Corporate Parts Center (1500) with the exception of the cases for the 7240A and 7245A & B (P/N 1540-0558) which are supplied by SDD (1100).

Transit Case only

1. When ordered with a plotter — The option should be used if the transit case is ordered at the time of the plotter sale.

2. When ordered separately — If a customer wishes to order a transit case after he/she has purchased the plotter, the 8-digit part number must be used. The following information must be entered:

Product Line = 30, Market Division = 11, Supply Division = 11, Sales Office = 09.

What is the delivery time?

Carrying case (soft)	3 weeks
Transit case (hard) for:	
9872 A & B	
7221 A&B	3 weeks
7220A	
Transit case (hard) for:	
7240A/7245A & B	10 weeks
7225A	add-on*

*10 weeks plus the current plotter delivery e.g., if the delivery of plotter is six weeks, the delivery for transit case will be 16 weeks after order is received by SDD.

Reference Guide
Plotter Carrying and Transit Cases

Graphics Plotters	9872S/ 7221S/ 7220S	9872A&B/ 9221A&B/ 7220A	9245A&B/ 72440A	7225A
Carrying Case Only				
Part Number	N/A	1540-0480	1540-0558	1540-0560
Supply Division	N/A	1500 (CPC)	1100 (SDD)	1500 (CPC)
Lead Time	N/A	3 weeks	3 weeks	3 weeks
Price	N/A	$180 ($220 effective Feb. 2 '81)	$220	$220
Transit Case Only				
Part Number	N/A	1540-0658	1540-0648	Call your RSE
Option Number	N/A	Opt. 107	Opt. 101	Opt. 115
Supply Division	N/A	1100	1100	1100
Lead Time	N/A	3 weeks	10 weeks (add-on)	10 weeks (add-on)
Price	N/A	$350	$350	$350

For additional details, please call your RSE at the San Diego Division.

Vancouver

Enhanced Printing Capability for 2635B
By Ron Forster/VCD

All HP 2635B Printing Terminals ordered after January 1 '81 will have high density printing and line drawing capability. Now, in addition to normal printing for fast (180 cps) text printing, program editing, or form completion, the 2635B has high density (90 cps) for printing final copies of reports or memos in USASCII or any one of six national languages. Line drawing is the same character set as on the 2631G Printer; however, horizontal lines are segmented. No special ordering is required for these new standard features. Just note that high density USASCII Option 020 will become a standard feature and will no longer appear on the price list.

Auto Dialing With the 2675A
By Gene Morel/VCD

The HP 2675A's modem auto dialing capability provides unique features through the terminals power-on capability. The auto-dialer works using the "pulse" technique, similar to rotary dial phones. All Bell System equipment supports both pulse and the newer tone dialing equipment.

Other phone system vendors such as Rolm or GTE may install, per customer requirements, systems that only support tone dialing equipment. The 2675A auto dialer will not work on these systems. To successfully dial a host CPU, the HP provided T-connector must be used to couple the 2675A and the tone dial phone for a manual dial. This procedure is explained in the operators manual.

When using the terminal in conjunction with either a "Princess" desk or wall mount phone, instruct your customer to plug the T-connector directly into the wall and run separate phone cords to both the terminal and the phone, to assure proper operation of the phone during manual dial and answer operation.
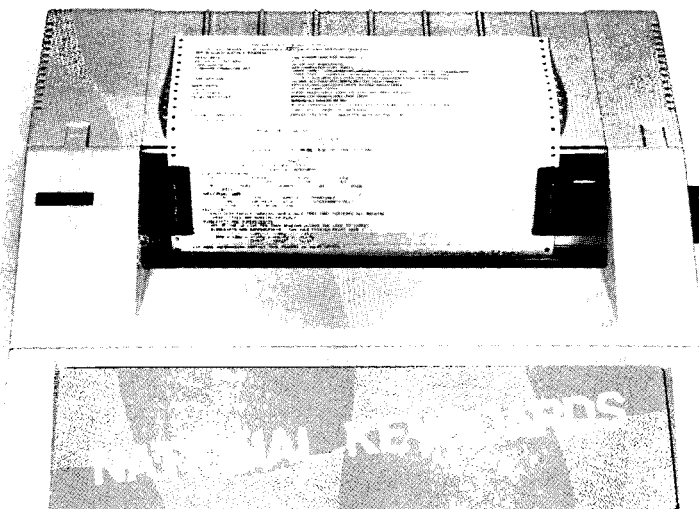
2635B National Keyboards
By Ron Forster/VCD

Beginning in January, the HP 2635B Printing Terminal can be ordered with any one of six national keyboards: Swedish/Finnish, Norwegian/Danish, French, German, United Kingdom, and Spanish. Each option will provide keycap placements and character sets familiar to the national user, making the 2635B well-suited for interactive text printing, forms completion, and data entry around the world.

In keeping with the multilingual capabilities of the 2675A, each 2635B can communicate in any of the alternate languages, regardless of the keyboard ordered. Simple escape sequences can redefine the primary and secondary character sets to any of the alternate languages, including line drawing and math symbols. For clear, highly-readable text printing, high density printing is now a standard feature for all character sets.

To maximize data comm flexibility, the 2635B now operates via either 7-bit or 8-bit data comm codes. With this new feature, the terminal may be used with systems that support either the 7-bit ISO substitution set or the 8-bit Roman Extension code.

Please note that line drawing and high density printing are now standard on the 2635B (Option 020 will therefore be removed from the price list).

Ordering information:

2635B Printing Terminal Keyboard Options

Option	Description	Price
001	Swedish/Finnish	$100.
002	Norwegian/Danish	100.
003	French	100.
004	German	100.
005	United Kingdom	100.
006	Spanish	100.

Vancouver Price Increases
By Gene Morel/VCD

Continued price pressures on electro-mechanical devices is forcing a price increase on 263X family members and the 9871A effective January 1, '81.

The 2631B will increase $300 to $3,900 for the base unit. The 2635B Printing Terminal will increase $350 to $4,300. The 2631G will increase $350 to $4,900. The 9871A Daisy Wheel Printer will increase $300 to $4,400 with Option 001 increasing to $100.

REINHARDT, HELMUT
FRANKFURT
HPSA

CM Group

| Editor | Kerin Henderson |
| Circulation | Francine Tarmina |

Computer Marketing

Computer Support Div. (CSD)	Editor	Carolyn Stewart
Cupertino, California	Technical Editor	Olen Morain
Computer Supplies Operation (CSO)	Editor	Fran Jeffries
Sunnyvale, California	Technical Editor	Carl Anderson

Technical Computers

Data Systems Div. (DSD)	Editor	Carol Quinton
Cupertino, California	Technical Editor	Dick Lovlien
Roseville Div.	Editor	Duncan Campbell
Roseville, California		
YHP Computer Div. (YHP)	Editor	Yoshie Hashima
Tokyo, Japan		
Desktop Computer Div. (DCD)	Editor	Chris Stumbough
Fort Collins, Colorado	Technical Editor	Al Sperry
Boeblingen Desktop Computer Div. (BDD)	Editor	Dave Arrowsmith
Boeblingen, West Germany	Technical Editor	Brigitte Almaschi
Corvallis Div. (Calculator Products Group)	Editor	Carmen West
Corvallis, Oregon	Technical Editor	Tycho Howle

Business Computers

Business Computer Group (BCG)	Editor	Eli Zabor
Cupertino, California		
Manufacturing Systems Operation, Cupertino, California		
Commercial Systems Pinewood, Pinewood, U.K.	Editor	Steve Zalewski
Data Communications Operation, Cupertino, California.		
Computer Systems Div. (CSysD)		
Cupertino, California		
Information Systems Div. (ISD)	Editor	Sheri Costa
Cupertino, California	Technical Editor	Tom Stokes
General Systems Div. (GSD)		
Cupertino, California		
Boeblingen General Systems Div. (BGD)	Editor	Stephanie Brown
Boeblingen, West Germany	Technical Editor	Geoff Kirk

Terminals

Data Terminals Div. (DTD)	Editor	Louise Hart
Sunnyvale, California	Technical Editor	Carl Flock
Grenoble Div. (HPG)	Editor	Blandine Genin
Grenoble, France	Technical Editor	Francis Marc

Peripherals

Boise Div.	Editor	Sue Brault
Boise, Idaho	Technical Editor	Linda Crozier
Colorado Springs Div. (CSO) (Instrument Group)	Editor	Joe Hunter
Colorado Springs, Colorado		
Disc Memory Div. (DMD)	Editor	Cathy Salinas
Boise, Idaho	Technical Editor	Steve Germain
Greeley Div.	Editor	Rosemary Kramer
Fort Collins, Colorado	Technical Editor	Al Herder
San Diego Div. (SDD) (Instrument Group)	Editor	Jan Craven
San Diego, California	Technical Editor	Scott McClendon
Vancouver Div. (VCD)	Editor	Lynne DiVittorio
Vancouver, Washington	Technical Editor	Gary Peck