COMPUTER SYSTEMS NEWSLETTER

For HP Field Personnel

[hp] **HEWLETT PACKARD**

Vol. 5, No. 7
Feb. 15, 1980

What?
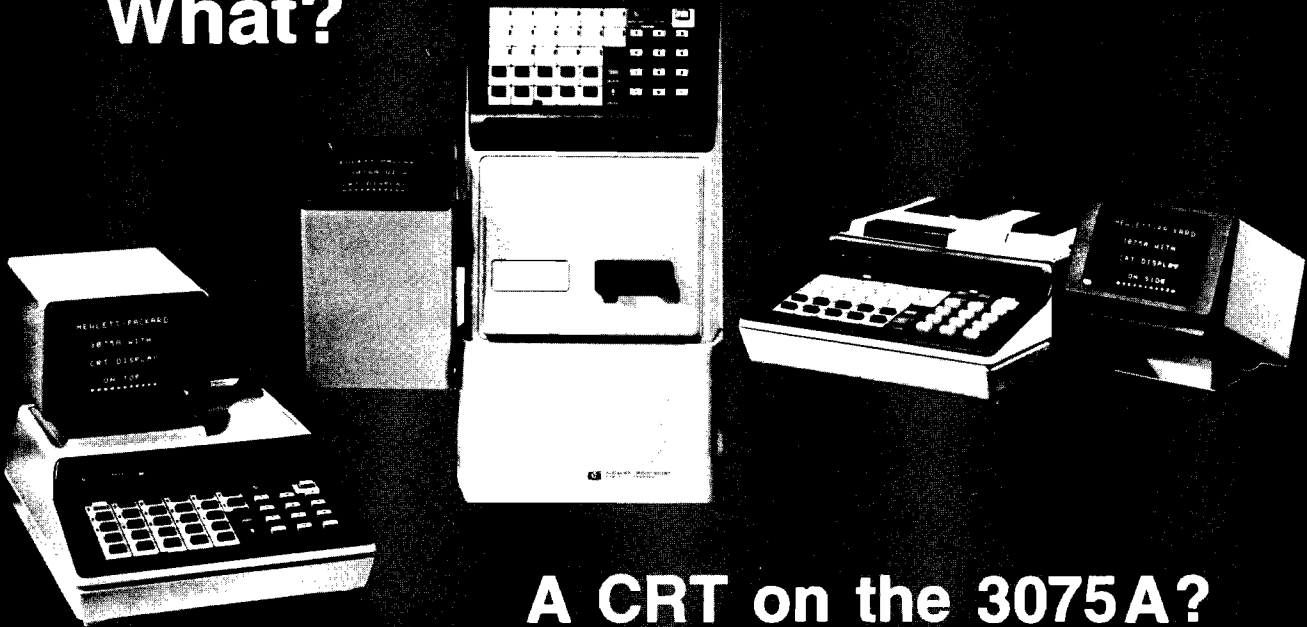
A CRT on the 3075A?

The H-Series Disc Drives From DMD

7906HR

7925 | "H" SERIES | 7920

7906
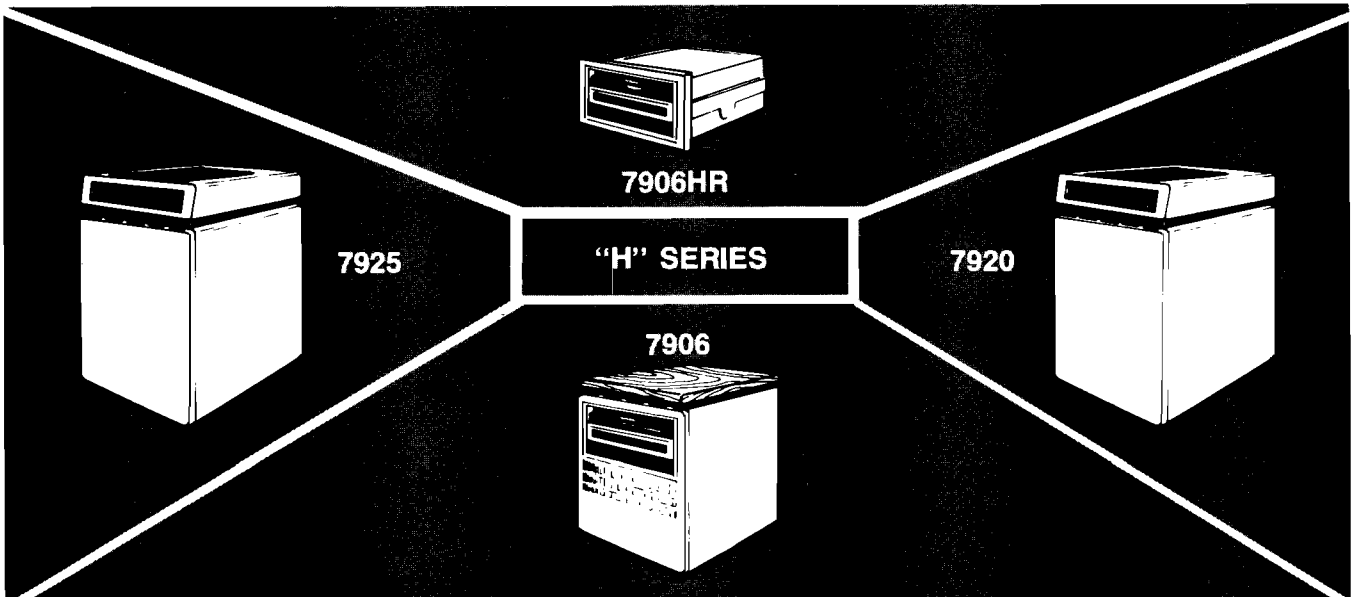
CRT Option on HP 3075 Family .. Page 29

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Drives .... Page 8

In This Issue...

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

BOISE DIVISION NEWS

Division News

New Sales Support for Southern Region
By: Thad Webster/Boise

The latest addition to Boise Sales Development is *Dick Wilhelm*. A native of South Dakota, *Dick's* background includes 10 years with HP Technical Publications plus five years as an electronics instructor in the USAF. He enjoys skiing, racketball, amateur radio, and lots of fishing.

Look for a complete update of the Boise Division Sales Development team in future issues and in a separate Field Communication Guide to be mailed to you shortly.

Product News

500 Ft. Maximum for 2619A Cable
By: Jim Skog/Boise

The maximum length of cable currently available to the HP 2619A printer is 500 feet. If you reference the long cable matrix published in the *CS Newsletter*, June 15, '79, please correct the maximum length cable for the 2619A from 1500 feet to 500 feet.

Any 2619A printer cable longer than the 500 foot standard is considered a "special" and should be quoted through your Boise Division Sales Department contact.

Sales Aids

Answers to Common Questions on VFC
By: Gary Sherwood/Boise

Boise Division now has an application note that explains everything about VFC's (vertical format control) that you've always wanted to know but were too embarrassed to ask:

1. What is VFC?
2. Why VFC?
3. How does it work?
4. What is the difference between programmable, fixed and computed VFC?
5. How do I define one for my unique application?
6. How do I download a programmable VFC from HP 1000, HP 3000 Series II, III and 98XX systems?

This application note is for SR's, SE's, CE's, and all HP personnel (some of your customers might like a copy too). For your free copy, contact your Boise Division Sales Development Engineer.

COMPUTER SUPPORT NEWS

Division News

Sales Development Reorganization
By: Olen Morain/CSD

Effective immediately, CSD Regional Sales Engineers have been reassigned to include specific US Sales Regions as part of their responsibilities. International assignments remain the same. Assignments are:

Ken Hunt — ESR plus ICON, except Latin and South America and South Africa.

David Garcia — SSR plus ICON, Latin and South America and South Africa.

Chris Kryzan — MSR plus Europe.

Roger LeMay — NSR and CSR.

The main reason for this reassignment is to allow us to focus on our major account program. Each Regional Sales Engineer will be responsible for each major account with a project headquarters sales team within his assigned region or countries.

Where the install site is located in major US and Western European cities, the development of the ISP and subsequent implementation plan is straightforward because it's all standard. However, when the install site is a small ICON country or a country without HP presence, considerably more planning is required to assure the availability of resources sufficient to meet our major accounts needs. CSD Sales Development can make a contribution here by having a clear picture of our abilities in these smaller countries, recognizing the needs of our major accounts, as expressed by our headquarters teams, and working with the appropriate support managers in resolving the differences and preparing the "specials" required. We will work closely with our major account sales managers to refine this process as the year goes on.

This change will also allow us to increase our professionalism in handling customer visits to the Bay Area. We have developed a customer presentation package and organized factory tours. Now we want to get involved with each of you early in planning your customer's visit, to assure that our support capability is positively presented as a sales asset and major strength of HP.

Finally, we will be able to increase the time available for field office visits to discuss the relative merits of our software and hardware support products with you, including application tips and gathering your ideas for new support services.

Roger, Ken, Chris and *Dave* have a thorough understanding of our support products, and the capabilities of our offices internationally. You should find them a valuable resource in assisting your sales effort.

Product Assurance at CSD
By: Mike Ward/CSD

L to R: CSD Product Assurance Group — *Mike Ward, Dana Packard, Peter Hausknecht, Bob Youden, Rosemary Sanfilippo, Shirley Heinsen* and *Caroline Wong.*

The Product Assurance Group at CSD performs two major functions. First, like most divisions, we administer the divisional warranty program. As you know, when Hewlett-Packard fixes an HP product we guarantee the parts, labor and workmanship to the customer for 90 days. If the repair used exchange assemblies from CSD, then our division backs up that repair warranty. Thus re-repairs using exchange assemblies are billed to division 50 (in Europe they are billed to Grenoble, 6372). Also, the factory gives a 90 day DOA warranty to the field service organizations on exchange assemblies.

Our Warranty Administrator, *Shirley Heinsen,* keeps track of these bills, making sure they've been sent to the proper division and that there is adequate information to analyze the problem.

The second major function is reliability analysis of the exchange assemblies themselves. Our team here is — Reliability Engineer, *Peter Hausknecht,* Programmer Analyst, *Dana Packard,* and Product Assurance Engineer, *Bob Youden.* These folk look at information on assemblies that fail in the field, the components used here in the factory to repair those assemblies and the "no-trouble-founds" when the factory can't verify the problem as reported in the field. From these data, key assemblies are selected for closer scrutiny to see why they are a particular problem: is their design marginal? Are we using them properly? Is training adequate? Are we repairing them right? etc. Working with the production engineers, we may propose changes or further investigations to the divisions with design responsibility, work with the trainers to modify course work or propose safer packaging, (or like true analyticals, we'll look for more data!).

In summary, our job is to analyze field repair data and the factory rebuild data to locate weak areas and fix them so CEs can be more successful in providing service to HP's customers that is second to none.

Product News

Clarification: Software Services and the Service Contract Act
By: Roger LeMay/CSD

In the *CS Newsletter,* Jan. 14, '80 I stated that charges for software services on the Customer Support Services Agreement could not exceed $2,500 for government customers because of the restrictions of the Service Contract Act. In fact, the $2,500 restriction only applies to hardware maintenance services. The legal department informs me that this is because SE services are considered "professional" in nature while CE maintenance services are deemed "personal". Therefore, charges for software services are not affected.

Please call CSD Sales Development for the latest on the Service Contract Act.

DESKTOP COMPUTER DIVISION NEWS

Division News

ICON Graphics Promotions
By: Al Sperry/DCD

Jerry Byma, ICON, presents HP computer graphics at the Sheraton, Hong Kong, last November.

Jerry Byma, ICON product/sales support manager, conducted 17 graphics seminars attended by 955 customers and prospects during a three-week trip to Taiwan, Hong Kong and Singapore. The theme of the presentations was "Think GRAPHICS — Think Hewlett-Packard!" This series was part of ICON's effort to catalyze integration of PT06 and PT02 in the Far East.

The seminars were conducted in hotels, HP offices and customer facilities, whichever was the most effective means of gathering an optimum audience.

Each of the seminars featured the graphics slide show, tailored to the specific audience. This was followed by hardware demos, questions and answers, and hands-on time. Three computer systems were used in a typical seminar, with at least one showing the System 45T interfaced with a flexible disc drive, a digitizer and a plotter. Wherever possible, an HP-1000 was included to show more of our broad computer range. In Hong Kong, SR, *John Wu,* presented a slide slow on the HP 2647A Intelligent Graphics Terminal. Typically, a presentation took 2½-4 hours.

One item of special interest, particularly in Hong Kong and Singapore, was an impressive surveying software demonstration using programs generated by a software house in Texas that had previously worked with one of our competitors. ICON is searching for software houses in the local countries that can arrange to support the surveying package locally.

After the seminars, discussions with each SR pointed out desirable follow-up actions, including:

- Follow-up letters to customers who attended the sessions, as well as the invited non-attendees;
- Hardware demos and prospective customer visits;
- Mailing additional graphics-related data sheets, brochures and papers to keep customers interested in HP graphics.

As part of the follow-up, equipment is gathered in each country to allow demonstrating the System 45T with a 9885 Disc Drive, a 9872A Plotter and a 9874A Digitizer. A 9874 is being circulated among the countries involved to round out the equipment during the specified follow-up period.

Several orders have already been received as a result of the seminars, and more are in process. The progress toward sales force integration is helping SRs and customers alike in matching equipment purchases cost-effectively to the prospects' specific needs.

Product News

HP 9845B Mass Storage ROM
By: Rick Scherer/DCD

The 9845B Mass Storage ROM, 98413A, was turned from Rev. A to Rev. B to correct a bug in which several hard discs on one controller got confused. After releasing bits in December, another bug was found, where FREAD sometimes does a check read when it should not. Consequently, the ROM was updated again, and shipment will commence in April. At that time anyone owning a 7905, 7906, 7920 or 7925 will be eligible for a Rev. B ROM from Service.

HP-85 to 9835/9845 Data Utilities Library
By: Martin Nielsen/DCD

During the November-December HP-85 NPT Tour, we promised the field a software pack which would provide a way for the 9835 and 9845 to read data from a tape generated by the HP-85.

This pack has been released to production and will be distributed to the field through Software Distribution Center (SDC) at the end of March, when it will start shipping to customers.

The Part Number is 09835-10050, and the price is $250.

Used Equipment Exchange
By: Al Sperry/DCD

Here is the current listing of used HP desktop computer equipment for sale or wanted by customers. Note that the Opt. 888 is merely an internal code, and does not physically affect the equipment.

For sale: 9896A Opt. 888 with 9871A Opt. 888 and software.

Wanted: 9830A (several); 9867B (several); 9878A (several); 9885M/S (several).

For further information, please call *Chris Stumbough* or me at DCD.

Sales Aids

New HP 9845B Flyer
By: Doug Newlin/DCD

We have reprinted the System 45B direct mail flyer, Publication Number 5953-1039, and now have a limited quantity available for field use. Please send your requests by COMSYS to *Marvel Ross*, DCD, Fort Collins. We will fill orders on a first come, first served basis.

Desktop Computer Field Handbook
By: Al Sperry/DCD

A supplement to update the *Desktop Computer Field Handbook*, P/N 11141-12873, will be available to present handbook owners on or before March 15. It consists of reprinted and added printed pages, plus instructions for making minor hand changes to other pages. This will make your original issue as up-to-date as possible.

Because there is no complete list of handbook owners, please let me know by memo or COMSYS (not telephone) if you have a copy so I can send you a supplement. Do not request supplements if you have no handbook. A complete new handbook covering desktop computer products will be available later this year, so if you have been unable to obtain the original version, please bear with us.

DISC MEMORY NEWS

Product News

H-Series Disc Drives — The Competitive Edge for the Single Disc User

By: Kevin Magenis/DMD

The Feb. 1 issue (Vol. 5, No. 6,) of the *CS Newsletter* introduced the new H-Series Disc Drives from DMD. As you know, the H-Series disc products will equip you with very appealing mass storage solutions for the single disc user. These new drives incorporate interface flexibility and greater reliability and serviceability all at a *reduced cost* to the customer. As a result, HP now enjoys new pricing advantages for an entire range of single disc systems. Furthermore, the H-Series products are the fastest disc drives in their class, offering the same great performance found in the MAC Disc Drive Family.

When compared to our major competitors, the H-Series family offers virtually the lowest priced disc solutions for the 20-120 megabyte range. The following competitive information compares list price versus capacity, performance and overall specifications. Figures 1, 2, 3 and 4 compare H-Series price versus capacity against DEC, DG,

TI and WANG. Figure 5 compares transaction time (the time necessary to seek and transfer a 4K block of data). Figure 6 compares overall specifications and pricing information. In general, the H-Series Drives are among the most attractive in all categories.

H-SERIES COMPETITION

FIGURE 2

H-SERIES COMPETITION

FIGURE 1

H-SERIES COMPETITION
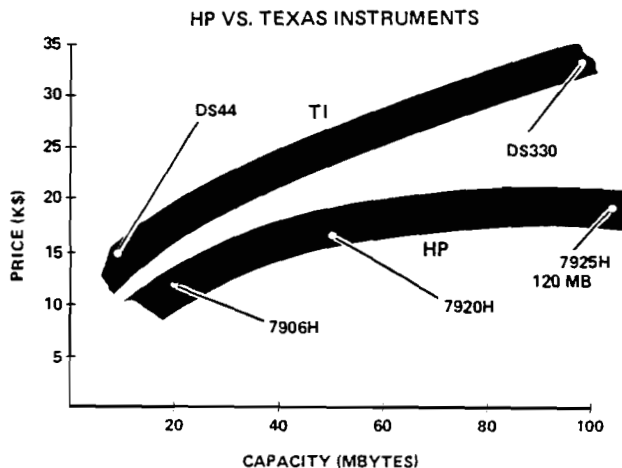
FIGURE 3

H-SERIES COMPETITION
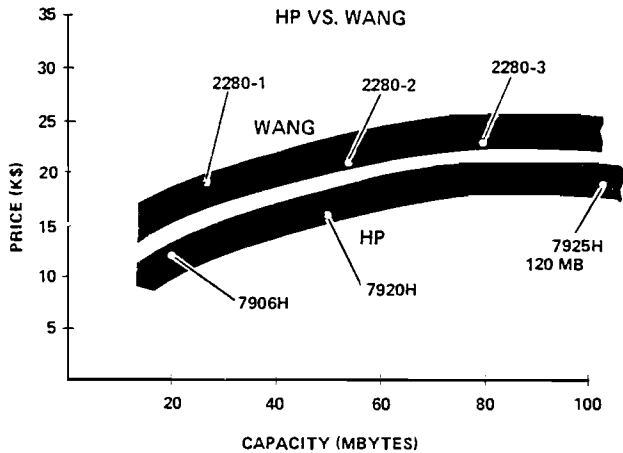
FIGURE 4

AND PERFORMANCE...

H-SERIES COMPETITION – PERFORMANCE
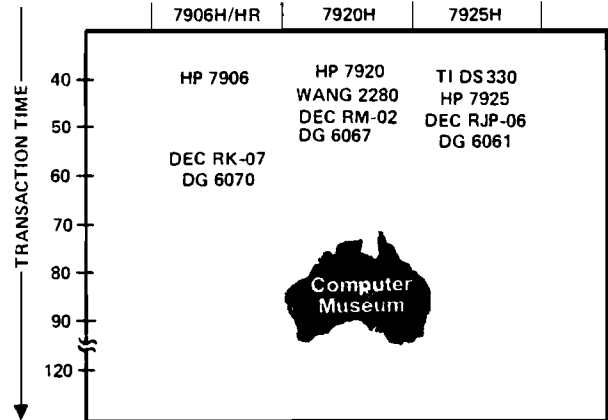
FIGURE 5

MANUFACTURER DATA		PERFORMANCE DATA					PRICING		
MARKETED BY	MODEL	FORMATTED STORAGE	AVERAGE SEEK	AVERAGE LATENCY	AVERAGE ACCESS	DATA TRANSFER RATE (KB/SEC)	1ST DRIVE AND CONTROLLER	LIFE CYCLE COSTING	BMMC
DEC	RK07	28	38	12.5	50.5	538	$14,500	$11,508	$145
	RM02	67	30	12.5	42.5	· 809	$23,000	$17,092	$170
	RJP04	88	30	8.3	38.3	806	$36,750	$26,310	$220
DG	6070	20	38	12.5	50.5	625	$13,500	$10,812	$140
	6067	50	35	8.3	43.3	806	$21,800	$16,760	$190
	6060	95	35	8.3	43.3	806	$25,800	$19,741	$220
HP	7906HR	19.6	25	8.3	33.3	937.5	$12,000	$ 8,594	$ 72
	7906H	19.6	25	8.3	33.3	937.5	$13,000	$ 9,252	$ 75
	7920H	50	25	8.3	33.3	937.5	$16,000	$11,013	$ 73
	7925H	120	25	11.1	36.1	937.5	$19,000	$12,658	$ 65
IBM	3310A-01	64	27	9.6	36.6	1030	$13,600	$ 9,234	$55.50
TEXAS INSTRUMENTS	DS44	9.1	38	12.5	50.5	312	$14,800	$11,591	$140
960 - 980B System 16 - 128K RAM	DS330	100	27	8.3	35.3	806	$33,600	$25,583	$280
WANG 2200 System 16 - 256K RAM	2280-1	27	30	8.33	38.3	1200	$19,000	$14,886	$180
	2280-2	54	30	8.33	38.3	1200	$21,000	$16,474	$200
	2280-3	80	30	8.33	38.3	1200	$23,000	$18,061	$220

FIGURE 6

7900 Disc Drive Obsolescence Notification
By: Cathy Salinas/DMD

Disc Memory Division intends to withdraw the HP 7900 disc drive from production the end of FY '80. As you know, for the past seven years the 7900 has been a popular mass storage choice because of its high reliability and performance under severe environmental conditions. However, because of the availability of our newer technology products, demand for the 7900 has dwindled to the point where continued production is no longer practical. We plan to accept orders for the 7900 disc subsystem (12960A) and related accessories through Aug. 31, '80. The additional time during which the 7900's are available should allow customers to make a smooth transition to one of our alternate products.

When assisting your customer in choosing a replacement product, the merits of the H-Series 7906 20Mb cartridge drive should be considered. The HP-IB version, employing our new integrated controller, is available now and will be supported on the HP 1000 (M/E/F), effective Feb. 1, '80. Priced at $13,000, the 7906H is one of the most inexpensive cartridge disc products on the market today within its capacity range.

If the obsolescence of the 7900 presents a particular problem to your customer, please contact me at extension 2439. Your inputs are necessary to construct an accurate forecast for our production schedule so that we may accommodate your customer's needs.

DATA SYSTEMS NEWS

Division News

First Prize Awarded for Model 10 Challenge
By: Orrin Mahoney/DSD

Sol Asbagh, winner of the Model 10 Challenge with 19 Model 45 Systems to his credit, receives his prize, an HP 1000 Model 10 System, presented by *Orrin Mahoney*, L-Series Product Manager. *Sol* was presented with the system and an award at the recent Neely Santa Clara stop on the January NPT Tour. He also took the Northern Neely Area MVP award. Congratulations to *Sol* for a fine performance.

Service Note Subscription Service
By: Jim Gruneisen/DSD

To make it easier for your customers to service their HP 1000 Computers, DSD initiated the Hardware History Library and the Hardware Notification Service (see *Chuck Morgan's* article in the July 1, '79 *CS Newsletter* or p. 9-0 of the HP 1000 Computer Hardware Data Manual, 5953-4202, for a complete description). As a result, we have decided to stop sending service notes to customers since service notes are now included as part of the HNS.

A letter has been sent to all customers on the Service Note Subscription Service notifying them that the service will end March 1, '80. The letter describes the HHL and the HNS and directs them to the sales office to order the products.

The HNS provides supplemental information to the Service notes to make it easy to follow engineering changes plus additional in-depth information on HP 1000 Computers, all for only $6/month. Feedback has been good from several large OEMs that recently began the HNS. If there are any questions, please contact me.

Competition

PDP 11/44, S/140 Whetstone Benchmark Results
By: Mark Beswetherick/DSD

Whetstone benchmark results for DEC and DG's new midrange CPUs, here for your edification:

	HP 1000 F-Series	DEC PDP 11/44	Data General Eclipse S/140
Single Prec. Whetstone (B1)	.40* (417)**	.53 (33% slower) (314)	.37 (8% faster) (450)
Double Prec. Whetstone (B2)	.58 (287)	.72 (24% slower) (231)	.44 (24% faster) (380)
System Price	$43,385	$47,800	$45,850

*time in minutes
**thousands of Whetstone Instructions/sec

The table shows execution times in minutes for the Whetstone Single Precision (B1) and Double Precision (B2) Floating Point Benchmarks. The relative performance of the 11/44 and the S/140 versus the F-Series is also shown in percentage terms. The numbers in parentheses below the benchmark times express benchmark performance in different units, namely Thousands of Whetstone Instructions per Second, or KWIPs. DEC and DG typically use KWIPs rather than absolute times so you may encounter these numbers in competitive situations. The relationship between KWIPs and benchmark times in minutes is:

$$KWIPs = 10,000/(60 \times time)$$

The higher the KWIPs, the better the performance.

As the table shows, HP is less expensive than both the 11/44 and the S/140 in similar system configurations. The HP 1000 Model 45 quoted is equipped with the 180 cps 2635A Printing Terminal as the system console, one 7906H 20Mb Integrated Controller disc, and the 12789B 256Kb hi-speed fault control memory package. The Model 45 also includes cabinet, friendly and powerful RTE-IVB operating system, GRAPHICS/1000, and the Vector Instruction Set.

The 11/44 shown includes 256Kb of error correcting memory, 20Mb disc subsystem, 120 cps console printer, hardware floating point, cabinet, and RSX-11/M operating system software. The S/140 compared has a similar configuration, including 256Kb ECC memory, 20Mb disc subsystem, diskette, 180 cps console printer, hardware floating point, cabinet, and license to AOS operating system software.

Not only are we less expensive than the 11/44, but we are substantially faster — 33% in the Single Precision benchmark! The benchmarks show that the S/140 is slightly faster than the F-Series in raw floating point speed. However, the Model 45 includes the Scientific Instruction Set and the Vector Instruction Set as standard equipment. These two give us a significant performance advantage over the 11/44 and S/140 in transcendental and matrix operations. This should put us way out in front in many scientific and engineering applications.

It is evident that we are still in an excellent competitive position with the powerful Model 45 and the F-Series processor. We are superior to the 11/44 in both price and performance, and we surpass the S/140 with our price-performance combination.

This configuration includes the 2635A to facilitate an apples-to-apples comparison . Customers must have a terminal with mini-cartridges on site to load software updates and diagnostics. See the HP 1000 Computer Systems Configuration and Site Preparation Guide, p. 7, for more information.

Product News

No More FAB for F-Series
By: Mark Beswetherick/DSD

As of approx. April, '80, 2111F and 2117F computers will no longer contain 13304A Firmware Accessory Boards (FAB). Instead, a 12791A Firmware Expansion Module (FEM) will be supplied as standard equipment.

Why? Mainly because of the scarcity of 1K and 4K PROM integrated circuits. Because of high demand and short supply, we are not able to get enough of these parts to satisfy our needs. Hence, we are switching to the more available 8K PROMs where possible. What does this have to do with anything? We currently supply Dynamic Mapping Instructions, the Fast Fortran Processor, and the Scientific Instruction Set on the FAB, which accepts only 1K and 4K PROMs. The FEM can utilize 4K, 8K, and 16K PROMs, hence the change.

Benefits

This change will actually benefit customers in a number of ways:

- More reliable operation (FAB generates a lot of heat under the CPU board, FEM is in the I/O backplane).
- Customers that buy 2111Fs and 2117Fs as line items can take advantage of the Vector Instruction Set for less money, now that the FEM will be standard.
- Customers and CEs will be able to update/repair firmware much easier, as all firmware, including the base set, can be accessed without having to unrack the computer and remove the CPU board and FAB.

Drawbacks

However, there are some minor drawbacks:

- There will be one less I/O slot available to the customer.
- Under the new scheme, an F-Series configured with all possible firmware (Base set, DMI, FFP, SIS, VIS, EMA, DS/1000) has 1.0 less amps of current available at the +5 power supply voltage.

Either of these problems can be resolved by adding an I/O extender to the system if no other workaround can be found. However, if this is not a viable alternative to the customer, *now is the time to tell us!* Spread the word, and call Sales Development if there are problems.

We will eventually implement this change in the E-Series as well, but not for at least six months.

One final note: we are already shipping E-Series CPUs with 8K base set PROMs. This change took effect at Serial Prefix 2003 for 2109E computers and at Serial Prefix 1952 for 2113E computers. This should only affect OEMs who do their own maintenance. They will now need to stock 8K base set PROMs as well as 4K base set PROMs. The 8K PROMs are orderable by the following part numbers:
02113-80003, 02113-80004, 02113-80005

This should be an easy change to sell to your customers in general as it provides two very real benefits: increased reliability and easier serviceability.

I/O Cards Removed from CPL
By: Mark Beswetherick/DSD

Due to lack of demand, the following I/O cards will be removed from the CPL as of Aug. 1, '80:

    12978A 1/4K Writable Control Store
    12936A DOS Privileged Interrupt Fence

The 12978A has been replaced by the 13197A 1K WCS card. The 13197A has four times the storage of the 12978A and uses only one-half the current. The 13197A is obviously a better choice for microcode development.

The 12936A does not have a direct replacement. Those customers who anticipate an ongoing need for the 12936A should place a one-time order for all of their future requirements.

We will accept orders for these cards through Aug. 31, '80 to honor outstanding quotes made in July. Quotes made from Aug. 1 on should be handled as specials through Sales Development.

These obsolescence plans shouldn't have a major effect on customers but let Sales Development know if insurmountable difficulties exist!

A New Exclusive Sales Force for HP 2240A!

By: Howard Bain/DSD

Since Nov. 1, '79 full commission and quota credit for selling the HP 2240A Measurement and Control Processor has been given exclusively to the expanded Computer Sales Force (02) — which now includes the Desktop Computer (06) Sales Force. Prior to that date both the Computer (02) and Instrument (01) Sales Forces received credit for selling the 2240A.

The 'Welcome' letter (see below) was sent to the worldwide Desktop Sales Force notifying them of the change and introducing them to the sales literature on the 2240A.

If you did not receive your letter and enclosed sales literature please send me a telex and I will correct the oversight.

For those of you who have requested demo tapes already, you should receive your copies during the first two weeks of February.

HEWLETT [hp] PACKARD

DATA SYSTEMS • 11000 Wolfe Road, Cupertino, California 95014, Telephone 408 257 7000

FROM	Howard Bain, Product Management Data Systems Division	DATE	December 1979
TO	Distribution	SUBJECT	Welcome to the New Technical Computer Group's Sales Force

We at Data Systems Division are extremely excited by the new opportunities created by the combining of the 02 and 06 sales forces into a new technical "Super Group."

Now that you can sell both computer and desktop product lines, we expect a quantum leap in sales of the 2240A Measurement and Control Processor.

In the same way that the 2240A has been leveraging HP 1000 Computer sales over the past two years, you will now be able to leverage 9800 Series AND get quota credit for the full package.

During the next six months you will be receiving cross training on the full line of DSD products, including the 2240. However, to help you avoid missing any opportunities in the interim, enclosed with this letter are two items of 2240 sales literature:

• **Overview Brochure** featuring application photos of the 2240A with a variety of controllers including the 9825 Desktop Computer.

• **Technical Data Book** featuring
  – Performance data of the 2240A with both the 9825A and 9835A Controllers. (See Section 7.)

  – Ease of programming the 2240A using HP-MCL, HP's Measurement and Control Language. (See Section 2.)

Support

Sales support for the 2240A will be provided by DSD Sales Development. For your convenience I have attached a current organization chart.

Demos

A motor generator demonstration unit was distributed to the field sales offices at the time the product was introduced. Cartridge tapes are available to run the demo unit with a 9825A or 9835A Controller. Software is also available for running the demo with the HP 1000 series computer. Should you have any problem in locating a demo unit or associated software do not hesitate to contact your appropriate Sales Development Engineer.

Good luck in your selling efforts – and remember, you get full quota credit for every 2240A you sell.

2240A Price Changes

By: Howard Bain/DSD

As originally announced in the Dec. '79 *CS Newsletter*, on Jan. 1, '80 the prices of the 2240A Measurement and Control Processor and Function Cards were increased an average of 10%. These increases, the first since product introduction nearly 2½ years ago, were necessitated by escalating labor and material costs.

See the Jan. 1, '80 price increases below. Note prices are in US dollars, FOB Roseville, California.

Product Number	Description	Old Price	New Price
2240A	Meas. & Control Processor	$ 2750	$ 3000
2241A	Extender	1500	1650
22900A	Analog Input Card	1600	1750
22901A	Analog Output Card — 10 bit	900	1000
22901B	Analog Output Card — 12 bit	1200	1320
22902A	Digital Input Card	310	350
22893A	Common Interrupt Card	450	460
22904A	Digital Output Card	480	550
22905A	Counter/Stepper Card	800	900

RTE Support for ICD Disc Drives
By: John Koskinen/DSD

RTE-IVB now supports the ICD disc drives. As of Jan., '80, 92068A has been updated to handle the 7906/20/25H disc controllers, as well as the 9895A floppy (as a data disc). The additional software options are:

92068A Option   **Grandfather Media**

-026	7906H Disc Plotter
-037	7920H Disc Cartridge
-038	7925H Disc Cartridge
-056	800 BPI Mag Tape for 7906/20 Image
-057	1600 BPI Mag Tape for 7906/20 Image
-058	800 BPI Mag Tape for 7925 Image
-059	1600 BPI Mag Tape for 7925 Image
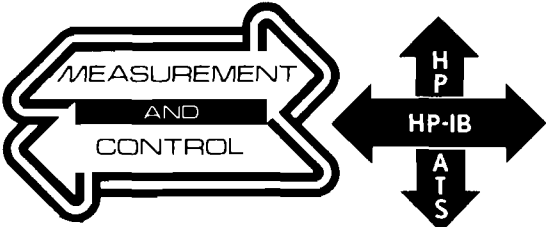
The basic difference in the software product offering is the disc driver generated into the Grandfather system. The ICD disc uses a different I/O card as well; the 12821A handles the interface to the H drives.

A customer can do cross gens, (MAC to ICD, etc.) but must plan to have back-up procedures well defined prior to making the switch between a MAC disc and an ICD disc. Both MAC and ICD disc drivers are supplied with the Grandfather software.

Correction to "Questions and Answers About DATACAP", CS Newsletter Jan. 14, '80
By: Steve Richard/DSD

On p. 23 of the Jan. 14, '80 CS Newsletter: Under Multi-point HP 13232R Brand Rex 2448 is incorrect. It should read: Brand Rex POSS4P22 (U.L. Style 2448).

Automated Measurement News

ATS/1000 Available in RTE-IVB!
By: Dawson Mabey/DSD
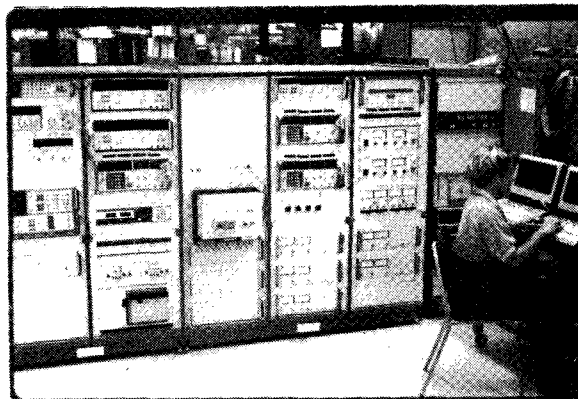
Typical ATS/1000 System

ATS Integration Services are now available with RTE-IVB! All new orders for ATS/1000 systems will be delivered with RTE-IVB software. The following are the major features of ATS/1000 that are different from earlier RTE-IVA systems:

• 93282A Consolidation Service eliminated
• RTE-IVB session monitor replaces special ATS version
• Full software compatibility at the user level
• Revised Configuration Guide to include the latest instruments
• Simplified order processing procedures
• Improved documentation and support

New Configuration Guide

The new Configuration Guide is in distribution now and should be used immediately. Please discard old guides immediately as they are out of date. With the exception of 93282A Consolidation Service which has been eliminated, the new guide is similar in format to the previous one. In addition to new instruments which have been added, some changes have been incorporated to make the procedure clearer and the guide easier to use. The Integration Services Technical Data Sheet defining the services is now included in the back of the Configuration Guide.

Integration Services

ATS/1000 now consists of two integration services:

HP 93283A Racking and Cabling Service
HP 93284A Integration/System Test Service

These are essentially the same as in the past except that the consolidation service is now bundled into HP 93283A Racking and Cabling Service, saving you a step in figuring out what to order.

Sales Forces

ATS/1000 Systems are sold along with HP 1000 Systems primarily by SF02 with help as needed by SF01 on detailed instrument applications. Quota credit and commission are split with the instruments going to SF01 and the HP 1000, Integration Services and 9411 Series switch products to SF02. In most cases the lead should be taken by SF02 as they already call on the major ATS/1000 customers and will usually get the bulk of the quota credit and commission on these systems.

Pricing

One of the first things you'll notice in the ATS/1000 Configuration Guide is a significant increase in the number of 93285A Engineering Units required for each instrument and for the basic integration services. This increase reflects two factors. The first is the elimination of a flat 10% charge on list price of instruments/computer which was the Consolidation Service. The labor associated with Consolidation Service (ordering, coordinating, freight, etc.) has been added to the engineering units required per device for Racking and Cabling Service. The second factor is based on actual experience over the last two years in building systems. This experience shows that the previous units per device is just too low. At the bottom line, the selling price to your customer has increased about 10% for a typical ATS/1000. This 10% increase also includes recent price increases for the 9411 Series switching and HP 93285A Engineering Units. Since its been more than two years since prices have increased for ATS systems, compared to inflationary effects, this is very reasonable.

HP 1000 Computer System

The recent unbundling of peripherals from the HP 1000 will require some deviation from normal HP 1000 ordering procedures for ATS/1000 Systems. Because ATS/1000 Systems are integrated at DSD rather than at the customer's site, the HP 1000 and specific peripherals (CRT, disc, line printer) are required on DSD's manufacturing floor during

the integration of the ATS/1000 System. For this reason, Option 019 to the HP 1000 system does not apply to ATS/1000 orders. Additional peripherals can also be ordered, although these will be handled in normal HP 1000 fashion (direct shipped) and installed on-site. If you list these additional peripherals in the ATS/1000 Configuration Guide, we will include them in the configured software for the ATS/1000 System. Refer to the new ATS/1000 Configuration Guide for more details.

Sales Literature

The ATS/1000 Integration Services Configuration Guide (HP P/N 5953-4247D dated 2/79) is in distribution now and should be used immediately. Note the new Configuration Guide now includes technical data for ATS/1000 Integration Services. The old data Sheet P/N 5952-8531 dated 1-78 should be discarded. Also recently updated and distributed in December was a new Technical Data Sheet for the HP 9411A-9414A Switch products (HP P/N 5953-4235 dated 11/79).

Existing Orders

As we announce the availability of RTE-IVB in ATS/1000, there are a number of systems presently on order based on RTE-IVA software. These systems are in various stages of integration and converting them to RTE-IVB may impact both price and delivery. If your customer wants to change his order, call your DSD Sales Development Engineer, and he will check the status of each order to determine what impact the conversion will have. If the order is more than 60 days old you can expect some impact on delivery date at the very least. If your customer cannot stand later delivery, the RTE-IVB Upgrade Kit described later may be the best solution. In any event, we'll do the best we can to satisfy your needs.

Upgrades for Existing Systems

An ATS/1000 Upgrade Kit will soon be available for existing ATS customers who have systems using RTE-III or RTE-IVA, and will give customers a fully supportable operating system. The Kit will be field installed and include an ATS Grandfather Disc and detailed step-by-step instructions to simplify installation.

Full details on the ATS/1000 Upgrade Kit will be announced in early April, with first shipments expected about three months later.

TESTAID in ATS/1000

Loveland Division's (LID) TESTAID software (HP 91075B) is now compatible with RTE-IVB. ATS/1000 systems ordered after Feb. 15 that include HP 91075B will be shipped with RTE-IVB compatible software.

TESTAID upgrades for existing ATS systems will be included in the ATS/1000 upgrade kit. DTS-70 users may order TESTAID upgrades directly from LID as 91075B Rev F with special Option P01 on 7906 Disc at $225, or P02 on 800bpi Mag Tape at $75.

New ATS Training for SRs
By: Greg Gillen/DSD

DSD is preparing a new ATS/1000 training course for SRs. This course is designed to cover the pre-sales configuration process as well as the features and benefits of the ATS — unique hardware and software. A detailed agenda for the 1½ day course follows. The course will be given in the sales regions and is scheduled to be presented during the second quarter of FY80 when a new Configuration Guide and RTE-IVB will be available. First stops will be in ESR with subsequent courses given on demand. Contact *Greg Gillen* at DSD (x2418) if you are interested in attending, and a convenient schedule and location will be determined.

Agenda

1. Overview of ATS
   a. What is it? (examples)
   b. Where it fits in HP?
      — HP-IB vs 3060/9571 vs ATS
      — DSD CAM strategy
   c. Who buys it?
      — Complex UUT testing vs simple
      — Programs

2. Elements of an ATE — Introduction
   a. Controller (also computer vs calc.)
   b. Instruments
   c. Switching
   d. Digital
   e. Software

3. 94XX Switching/Digital
   a. 9411, 9412, 9413, 9414, 9415
   b. Applications examples
   c. Selection

4. ATS Configuration
   a. The block diagram
   b. Using configuration guide (examples and exercises)

5. ATS Software
   a. RTE-IVB
   b. MTIS
   c. Device Subroutines
   d. TESTAID/FASTRACE
   e. ATLAS — Lexico
   f. Upgrades to IVB

6. Future ATS — DSD Investment
   a. Switch
   b. Device Subroutines
   c. Instr/1000
   d. Documentation

7. Software Support/Service

8. Wrap-up as required

New Switch Data Sheet
By: Dawson Mabey/DSD

The new HP 9411A-9414A Switch Products Technical Data Book (HP P/N 5953-4235 dated 11/79) was distributed to all offices in Dec. '79. This data book replaces the individual data sheets on each switch mainframe which should be discarded. The new data book provides expanded specifications in a number of areas to help your customer better evaluate these products for his intended application. Applications information is also included at the end of the data book to provide additional information for potential users in areas that should be considered when selecting and applying these switch products.

The ATS/1000 Manufacturing Team
By: John Brown/Leon Demar/DSD

This is most of the 37 people directly involved in the manufacture of ATS/1000 Systems at DSD. They perform ATS/1000 Integration Services you sell. Overall, they represent over 460 years of HP experience.

The six-bay ATS/1000 in the background is worth $1M! Wish you had been the one who sold it?

DATA TERMINALS NEWS

Product News

HP 2621 Current Loop
By: Wendi Brubaker/DTD

Have your HP 2621 customers been asking for current loop support? The 13266A has come to your rescue. This current loop converter connects to the 50 pin connector on the back of the 2621 and has screw terminators to attach the customer supplied cable.

Improved noise immunity and increased distance between the terminal and the computer are the primary advantages of a current loop interface. The 13266A is no exception. It can typically support a 1000 foot line.

The data sheet has been distributed to the field, and if you need more just order literature number 5953-2033. There is a mistake in the data sheet you should be aware of: in the second paragraph "reduced noise immunity" should be "increased noise immunity". This will be corrected in the next printing. The Current Loop Owner's Manual (13266-90001) provides additional information. We can ship 2621's and 13266's within a couple of weeks.

Thermal Paper Available
By: Bill Mitchell/DTD

Black imaging thermal paper for use in the HP 2621P is currently available from the Computer Group Supplies Operation, with overnight delivery.

The order numbers for both black and blue thermal paper have been changed from part numbers to product numbers to make it easier to handle freight charges. The old and new numbers are:

	Old Part No.	New Product No.
Blue Paper	9270-0638	92160A
Black Paper	9270-0656	92160B

Prices for the blue thermal paper recently increased. Prices for blue and black paper are:

Quantity*	92160A (blue)	92160B (black)
1-2	$100	$115
3-59	90	104
60-299	85	98

*Boxes of 24 rolls

2648 Device Support Firmware Gets Raster Dump ROM
By: Gene Lee/DTD

As of March, the Device Support Firmware for the 2648 (accessory 13261A, with Option 003) will come with the Raster Dump ROM included (P/N 1818-0746). This should simplify ordering. Device Support Firmware comes when you order either Opt. 7 of the 2648 for CTU's or accessory 13261A, Opt. 003. In both cases, the Raster Dump ROM will be included and need not be ordered separately.

Some sample orders:

1. 2648 with Opt. 007 (CTUs)
   - comes with device support firmware which includes raster dump ROM

2. 2648 with Opt. 007 (CTUs) and accessory 13296A (HP-IB)
   - Opt. 007 includes the device support firmware and includes the raster dump ROM
   - Opt. 048 on 13296A need *not* be ordered

3. 2648 (without CTUs) and accessory 13261A, Opt. 003 (device support firmware) and accessory 13296A (HP-IB)
   - The device support firmware includes the raster dump ROM
   - Opt. 048 on 13296A need *not* be ordered

4. Accessory 13296A Opt. 048
   - Opt 048 includes the raster dump ROM making it available for retrofitting a 2648 in the field

Thus the only time Opt. 048 on 13296A needs to be ordered is when you are retrofitting a 2648 already in the field.

Sales Aids

Can I Connect my HP 264X Terminal to a Standard TV Monitor?
By: Kalli Louis/DTD

The Video Output Interface (13254A) available on the HP 264X terminals, cannot be connected to a standard TV monitor. There are a number of reasons why this is so. First, I will list the interface problems associated with connecting a standard TV monitor to our terminals. Next, I will discuss these differences and last, I will list all the monitors that meet our requirements.

The interface problems are readily noted:

	Std. Monitor	264X Specifications
Horizontal Scan Rate	15,750 Hz	22,500 Hz
Vertical Retrace Time	1300 μsecs	<600 μsecs
Interlaced Composite Video Level	RS170	
Non-Interlaced Composite Video Level		Not-RS170
Number of Horizontal Refresh Lines	262.5	375

These are the major differences which make the interfacing of the HP 264X terminal to a standard monitor impossible without substantial modification. The terminals are designed for high resolution, character crispness and display stability. To achieve this, the above specifications were built into the HP 264X terminals. Note that the resolution of the terminal is 2-3 times better and the vertical retrace time is twice as fast as the standard TV monitor. Also, since there are more horizontal lines (375 vs. 262.5) on the terminal, some data would be lost in going to a standard monitor. Thus the factors that provide us with a superior product are also the factors that inhibit our interfacing with a standard display monitor.

To maintain the quality of the display, you must use the CONRAC QQA series SNA series monitors . . These monitors have high resolution display and they complement our data terminal display. These are the model numbers and screen size for the CONRAC monitors.

Model No.	Size
SNA 9/C*	9"
SNA 14/C*	14"
SNA/17/C	17"
QQA	21"

*When ordering the SNA series for use with our terminal, you will have to order the "High Line Rate" option and the 20 MHz video amplifier option.

Multiple Unattended Linear Charts
By: Peter Taylor/DTD

As promised in the Feb. 1, '80 issue of the *CS Newsletter* (p. 25), here is what you need to generate multiple copies of a linear chart.

To utilize the paper advance feature of the S version plotters, do the following:

1. Make sure you are using REV C-1945-42 of the BASIC multiplot tape.

2. Copy the following program statements to a tape file.

```
9068 ON ERROR GOTO 9552\ PRINT Cmnd$&"clo w#5"&C$;\N2=2\ GOSUB 9560\ Y9=A9
9069 GOSUB 9031\ NCOPY=A9
9070 N2=3\ GOSUB 9560\ L9=A9\ IF UPC$(J$[1;1])<>"S" THEN 9078
9218 PRINT "    PLOTTER ?     ";X$;"    ";Y$
9219 PRINT "  Y IS COLUMN(S)  ";X$;"              ";Y$;"              !";
9220 PRINT "     NO.OF COPIES ";X$;"    ";Y$
9221 PRINT "  PEN & LINE TYPE ";X$;"              ";Y$;"              !"
9256 WAKEUP\ COPY=0
9257 LET DMODE=NOT DMODE\ IF DMODE=0 THEN 9259
9258 PRINT CMND$&"DI W#1"&C$\ PRINT Z$&"h";
9259 PRINT CMND$&"CLO W#5"&C$;
9260 PRINT Cmnd$&"DI W#2"&C$;\ PRINT Z$&"W";\ GOSUB 9035
9261 PRINT Cmnd$&"DI W#1"&C$;
9262 PRINT Z$&"*dE";\ ON KEY #135 GOSUB 9548\Atmnum=0
9263 IF Dmode=0 THEN GOTO 9467
9480 PRINT Cmnd$&"di w#5"&C$&"Axes finished"&C$;\ GOTO 9257
9498 PRINT Cmnd$&"di w#5"&C$&"Plotting finished"&C$;\COPY=COPY+1
9499 IF VAL(OUTDEV$)=0 THEN ON KEY #135 GOTO 9557\ SLEEP
9500 ASSIGN "H#"&VAL$(VAL(OUTDEV$)) TO #2\ PRINT #2;"EC;"\ PRINT #2;"AF;"
9501 IF COPY<NCOPY THEN 9257 ELSE PRINT #2;"AH;"\ ON KEY #135 GOTO 9557\SLEEP
```

3. Load the Multiplot Linear Chart Program

4. Break from Program (Control A)

5. Clear Workspace #2 (Old Menu)

6. Incorporate statements on tape using the merge command.

7. Run

Correction to Screen Data Transfer Program, *CS Newsletter,* Jan. 14. '80
By: Jerry Erickson/DTD

Oops! I goofed! It became immediately obvious from the calls I received concerning the program listed on p. 41 of the Jan. 14 *CS Newsletter* (Vol 5, No. 5) that somewhere I'd run amok! Apparently, a preliminary draft was sent to the printer. Apologies are hereby extended to any of you who tried to make it work to no avail.

Now, to set the record straight, the following thoroughly tested and demonstrated program is hereby submitted. This one really does work! It's pretty handy for getting alphanumeric data from the CRT to a plotter device. The results look pretty sharp too!

```
10  PRINT "*******************************************************************"
20  PRINT "* THIS PROGRAM WILL INPUT DATA DISPLAYED ON THE TERMINAL SCREEN  *"
30  PRINT "* AND TRANSFER IT TO THE PLOTTER WITH HP-IB ADDRESS#5. TO USE THE*"
40  PRINT "* PROGRAM, DISPLAY DATA ON THE SCREEN FIRST. THEN START PROGRAM  *"
50  PRINT "* AND SPECIFY HOW MANY LINES OF DATA YOU WANT TRANSFERRED BY     *"
60  PRINT "* MOVING THE CURSOR TO THE START OF THE DATA BE TO TRANSFERRED.  *"
70  PRINT "* MOVE THE PLOTTER PEN TO THE POSITION WHERE YOU WANT IT TO START*"
80  PRINT "* THEN PRESS CARRIAGE RETURN AND THE TRANSFER WILL BEGIN.        *"
90  PRINT "*******************************************************************"
100 PLOTR (5,1)
110 INPUT "INPUT THE NUMBER OF LINES TO BE TRANSFERRED  ",N
120 DIM L$[80].
130 INPUT "WHAT SIZE CHARACTERS DO YOU WANT?  (1<SMALL> - 8<LARGE)) ",S
140 CSIZE (S)
150 INPUT "INPUT PEN NUMBER (PEN#1,2,3,4 = LINE#0,2,3,4 ON PRINTER)",P
160 PEN (P)
170 PRINT
180 PRINT "PUT PLOTTER INTO DESIRED POSITION"
190 LINPUT "PUT SCREEN CURSOR IN 1ST LINE TO BE READ - PRESS RETURN",L$
200 PRINT MOVCR(-1,0);
210 FOR I=1 TO N
220 L$=TRIM$(DSPIN$(-80,X))
230 PRINT #0;L$
240 PRINT MOVCR(1,-1);
250 NEXT I
260 END
>
```

Correction to Making HP 2647/9872 Multiplot/Slide Better, *CS Newsletter,* Jan. 14, '80
By: M. Chin/DTD

See p. 40 of that issue.

Solution #1: Line #9362 should read: 9362 IF (J MOD 10)=7 THEN Y1=Y1+1

Solution #2: Line #51 should read: 51 IF PF=0 AND Dir=1 THEN 141 ELSE LIMIT (13.5,393,9.6,259)

GENERAL SYSTEMS NEWS

Division News

User's Group Meeting Promises an Outstanding Week
By: Elias Zabor/GSD

The HP General Systems User's Group will hold its 1980 North American Meeting at the San Jose Convention Center, Feb. 25-29.

This should be only a reminder, not the first news you've received of this event. We've tried to nofity the GSD Computer field force by mailing brochures. When quantities for some mailers were insufficient, the material was sent to field managers, hoping that dissemination would take place when interest existed.

The pre-registration deadline has passed, but registration is available at the door: $240 for the week, or $60 daily. Fees include admission to seminars, a continental breakfast, and lunch; the $240 full week registration also includes a copy of *the presentation proceedings.* About 100 technical sessions will be presented dealing with 20 subject areas.

On Wednesday Feb. 27, 90 booths will be occupied by some 75 companies displaying their products or services (including seven booths from HP, representing GSD, DSD, CEO, Computer Supplies and Grenoble Division). Regular technical sessions will not be held that day to ensure complete attention to the exhibitors.

Bring your prospects/customers on Wednesday. For a fee of $10 each, you may purchase complimentary tickets at the door for yourself (if you don't attend as a week-registrant), or for any of your prospects/customers who are not otherwise registered. The fee includes continental break-fast and a buffet lunch.

From 8:30-9:30 a.m., HP will present a New Product Update. From 9:30-noon, an HP management round table will answer questions collected from attendees on the previous days, plus questions from the floor, if time permits.

Vendor exhibits will be in full swing from noon. Computer power for vendors will be provided by two HP 3000 Series III's, an HP 3000 Series 30, one HP 300 and one HP 250, all of which will be on display and available for "hands on"

experience. In addition, HP's CE Organization from the Neely Santa Clara Office will be available to answer technical questions.

If you need additional information, contact me at GSD, X3049, or the User's Group International Headquarters at Glen Burnie, Maryland, (301) 768-4187.

We anticipate 1200 attendees. If you plan to attend but have made no arrangements, please note that shuttle buses will be provided free by the San Jose Chamber of Commerce to transport attendees between the Convention Center and the following hotels — all within a 3-mile area:

Holiday Inn-Airport
  1355 N. Fourth St.
  (408) 287-5340

LeBaron Hotel
  1350 N. First St.
  (408) 294-8138

Holiday Inn-Park Center Plaza
  282 Almaden Blvd.
  (408) 998-0400

Vagabond Motel
  1488 N. First St.
  (408) 294-8138

Hyatt House-San Jose
  1740 N. First St.
  (408) 298-0300

Advance accommodation arrangements are recommended. Hope to see you there.

Product News

MFG/250 Is Solid!
By: Stacy Plemmons/GSD

MFG/250 almost performed the impossible. After 5½ months on the market no bugs were reported. The software pack, developed in Fort Collins, has now been sold to 10 OEMs in the US and seven overseas including OEMs in Hong Kong, Venezuela, England, Ireland, and Australia. Estimated installed customer base is 35.

To achieve such a feat of excellence, project engineer, *Loyd Nelson* (now with DCD) and product manager, *Bill Sandras* (now materials manager at Vancouver Division) put MFG through rigorous QA. After approx. seven months of lab and marketing designer QA, MFG/250 was turned over to a team of internal "experts". During the next three weeks this team of HP accountants, material managers, storekeepers,

engineers, and data processing personnel performed intensive user QA and stress tests on the software.

After these tests, it was on to test site. The results? MFG/250 was at test site for four months with no new bugs being reported! And as of Jan. '80 the site has been using MFG/250 for one year, still without a bug.

But, even Camelot had to end. On Jan. 4, '80 two minor bugs in forms were reported. Neither bug destroyed data,

and each required a one line code change to fix. The fix is currently being distributed to the field.
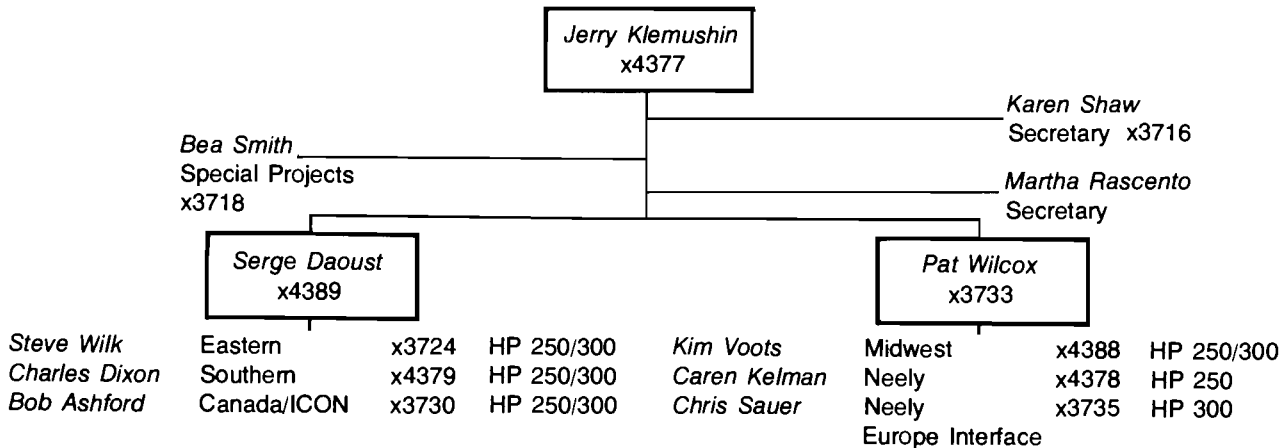
The development team, *Sam Solt, Bill Sandras* and *Stacy Plemmons* in marketing, and *Loyd Nelson, Mike Bacco, Dave Stalmo, Marty Wong* and *Larry Bruns* in the lab, is to be commended.

Congratulations Fort Collins, for an outstanding job of software development.

Strengthening BSP/Sales Development
By: Jerry Klemushin/GSD

BSP Sales Development
HP 250/300

Jerry Klemushin
x4377

Karen Shaw
Secretary x3716

Bea Smith
Special Projects
x3718

Martha Rascento
Secretary

Serge Daoust
x4389

Pat Wilcox
x3733

Steve Wilk	Eastern	x3724	HP 250/300
Charles Dixon	Southern	x4379	HP 250/300
Bob Ashford	Canada/ICON	x3730	HP 250/300

Kim Voots	Midwest	x4388	HP 250/300
Caren Kelman	Neely	x4378	HP 250
Chris Sauer	Neely	x3735	HP 300
	Europe Interface		

The merging of the HP 250 and HP 300 programs has given us the chance to strengthen support for the growing number of 3rd party representatives and their OEMs. Join me in congratulating *Serge Daoust* and *Pat Wilcox* on their promotion to Regional Sales Development Managers. *Serge* and his people will concentrate on growing the 250/300 business in the I.C.E.S. regions — ICON, Canada, Eastern, Southern. *Pat* and her people will focus on Neely and Midwest. Check the organization chart to see who is assigned to your region.

Pat has been with HP for seven years and has worked with most of HP's computer products. A graduate of the University of San Francisco, *Pat* had lots of commercial data processing experience using IBM equipment before joining HP, then worked in the 2100 Lab, 3000 Sales Support, 300 SE support and BSP sales development. Customer visits are *Pat's* strength; take advantage of it.

Serge Daoust is a Math graduate of University of Waterloo in Ontario, whose background includes DP operations manager at a junior college, and three years as an HP SE in Montreal. *(Serge* supported every system and peripheral except the HP 1000 while an SE). At Data Terminals Sales Development he specialized on the 2649 OEM program, then in 1978, took over the product management responsibility for Data Capture Terminals in North America. *Serge* joined the dynamic BSP team last November.

Chris Sauer is on *Pat's* Neely/Midwest Team. She joined HP three years ago after completing a B.S. degree in Computer Science at Chico State. Her first assignment was in the 3000 lab working on data communications microcode. Some of

you might have met Chris last summer during the Summer Seminar Spectacular shortly after she joined the HP 300 team. Her product management experience on the "RPG Engine" will be an addition to the group.

Serge Daoust and *Pat Wilcox*, new BSP Regional Sales Development Managers.

Chris Sauer, HP 300 Sales Support for Neely.

We had good order performance in the first quarter, and you saw our commitment and plans for the small business products on the Area Blitz last month. A lot of new HP 250 OEMs are signed up (more than 100 now in North America & ICON), and there are about 70 SRs with OEM responsibility in North America and 10 in ICON. Seminars are now being planned to find additional OEMs and get leads for those signed up. We are ready for a high volume 2nd quarter: ask for help.

GSD Announces High Level Implementation of the COBOL 74 ANSI Standard ... COBOL II/3000

By: John Santeler/GSD

COBOL II/3000 ... What is it?

COBOL II/3000 is Hewlett-Packard's latest contribution to a line of products designed to improve the overall efficiency of the applications programmer. Through its implementation of the 1974 ANSI COBOL Standard, many extended features and microcoded instruction set, COBOL II makes a complete and extensive set of program development tools available for efficient application design.

Features and Benefits

Hewlett-Packard's Introduction of COBOL II/3000 makes the HP 3000 one of the best COBOL systems in the market today. Why? ...

- **COBOL 74 ANSI Standard ...**

  COBOL II/3000 provides a wide range of features by offering the most complete implementation of the 1974 ANSI Standard for systems in the price range of the HP 3000.

- **Surpassing the ANSI Standard ...**

  COBOL II/3000 offers a set of extended features which surpass functions defined by the COBOL 74 ANSI Standard in their contribution to programmer proficiency.

- **Data Management/Data Communication Tools ...**

  COBOL II/3000 offers complete interfaces to the data management and data communication tools available on the HP 3000.

  Direct Access to ...
    MPE File System
    KSAM/3000

  Access through Procedure Libraries to ...
    IMAGE/3000
    V/3000
    DS/3000

  Additional Facilities to Allow ...
    Simplified Free Format Data Entry
    Simple Combining and Dividing of Data Fields

- **Run-Time Performance ...**

  COBOL II/3000 was implemented on the HP 3000 using a microcoded instruction set. (The COBOL Extended Instruction Set) This optimizes run-time performance for applications frequently accessing subroutines, as well as those doing extensive data manipulation or editing.

- **A Complete Set of Debugging Aids ...**

  DEBUG/3000 allows a programmer to interactively trace through and debug COBOL II programs.

- **Coding Efficiency ...**

  COBOL II/3000 offers extended features which reduce the overall program size and coding effort by elimination of redundant code.

- **Access to MPE Operating System Features ...**

  COBOL II/3000 provides direct access to MPE System Intrinsics. This simplifies the coding of general system functions not directly available through the ANSI Standard implementation of COBOL.

- **Ease of Conversion ... The Competition**

  By implementing the highest level of the COBOL 74 ANSI Standard, providing the widely used Packed Decimal Data Format and most programming features which are available on other COBOL systems, conversion from competitive systems to the HP 3000 becomes easier than with COBOL/3000.

- **Ease of Conversion ... Existing COBOL/3000 Users**

  COBOL II enables simplified conversion from COBOL/3000 through:

  *Upward compatibility of features supported by COBOL/3000.

  *A Conversion Guide (32233-90005) and conversion program, which flags any necessary changes for the customer, are provided at no extra cost to the user.

  *A support package which offers CSS for COBOL II/3000 and COBOL/3000 simultaneously at a reduced rate!

The level of implementation of the 1974 ANSI Standard, the many language extensions and the microcoded instruction set of COBOL II/3000 reaffirm Hewlett-Packard's on-going commitment to provide tools which optimize not only system performance but also maximize programmer productivity.

Ordering ... An Overview

COBOL II consists of two parts — compiler software and an Extended Instruction Set (implemented in microcode) for run time execution.

This table gives information on the product requirements for implementing COBOL II systems.

Product Requirements

Date of Shipment	Product		
	COBOL II Compiler	COBOL EIS	KSAM/3000
After 12/26/79	For development systems only	STD. in Base System	STD. in Base System
Shipped between 7/1/79 and 12/26/79	For development systems only	Order separately	STD. in Base System
Shipped before 7/1/79	For development systems only	Order separately	Order (if system is development & customer does NOT have KSAM)

For complete details on pricing, see the COBOL II/3000 Field Training Manual.

COBOL II/3000: More Features, Greater Performance than COBOL/3000

By: John Santeler/GSD

The question being asked by the installed base is . . .

Why should I convert?

COBOL II/3000, as implemented on the HP 3000, can give the current customer a much wider range of programming capabilities than available under COBOL/3000. These capabilities have been implemented in order to simplify the coding effort, thereby, reducing the program development time.

The features which a current customer may benefit from are:

● Compactness of Code:

COBOL II has a series of features which allow a user to place frequently used code in a single file or a section of the program. Whenever this code is needed, the programmer simply references the file or section of code with an identifier. During compilation, each identifier is replaced with the associated code. The compiler does the redundant coding instead of the programmer!

● Easy Access to General Systems Capabilities:

COBOL II is designed to take advantage of the capabilities available to the user through the operating system and other languages. One of the new features of COBOL II which accomplishes this is the capability to directly access the MPE System Intrinsics. The customer no longer needs to generate SPL subroutines to access the capabilities of the MPE operating system. It can be done directly!

● Increased Data Management Capabilities:

In addition to the ability to access MPE Files directly and to indirectly access both IMAGE and V/3000 subsystems through CALL statements available with COBOL/3000, COBOL II provides several other capabilities to simplify data entry.

Indexed I/O:

The 1974 ANSI Standard defines direct access to Indexed Files in the INDEXED I/O Module. This eliminates the need for CALL statements to reference KSAM files as required by COBOL/3000.

The CALL statement format for accessing KSAM files, however, is still available with COBOL II. This provides upward compatibility of existing applications written in COBOL/3000.

Other Data Management Tools:

COBOL II/3000 provides a variety of tools not available with COBOL/3000 to allow for simple data manipulation.

Free formatted data entry through the "ACCEPT FREE" statement.

Simplified data combination and separation through the STRING/UNSTRING verbs.

● Sort/Merge Capability:

COBOL II provides a more complete SORT facility by now allowing the sorting or merging of multiple input files.

COBOL/3000 placed restrictions on a user of sorting only single input files.

● Compatibility with COBOL/3000 Capabilities:

In order to provide upward compatibility, COBOL II supports all features which the user had available through COBOL/3000. The definition of some features of the 1968 COBOL ANSI Standard has been changed in implementing 1974 ANSI Standard. COBOL II provides these features as defined within the 1974 Standard but also supports the COBOL 68 implementations as extensions to minimize the conversion effort.

● Conversion:

Conversion can be accomplished through a conversion program, COBCNV, which is standard with COBOL II. This program scans COBOL/3000 source code and flags statements that do not conform to the 1974 Standard. The statements are marked with WARNING if they were supported under the COBOL 68 ANSI Standard but not under the 74 Standard. (These statements are supported by Hewlett-Packard, however, as extensions.) An ERROR flag indicates that the customer is using some new reserved words (not defined under COBOL 68 ANSI Standard) as labels or data names. Only the Error statements need to be changed in order for the program to compile under COBOL II/3000.

● Performance Impact:

The execution speed of programs which utilize PERFORM or MOVE statements or contain extensive computation and editing will benefit from the COBOL II Extended Instruction Set. The overall impact of these microcoded instructions on the customer's system can vary depending on the application.

Presenting HP's 3,000th HP 3000

By: Kathryn Hoshor/GSD

Matt Schmutz, HP 3000 Program Manager, presents the 3,000th HP 3000 System to Elmer Gates, General Manager of General Electric Large Motor & Generator Dept.

Fiscal '79 was an outstanding sales year for GSD. A major milestone was reached in October, when the 3,000th HP 3000 System was shipped to General Electric in Schenectady, New York.

A press release was announced in January, and the following article was distributed to 93 magazines, newspapers and television stations.

CUPERTINO, Calif., Jan. 24 - The 3,000th HP 3000 Computer System was delivered recently to the General Electric Large Motor and Generator Department in Schenectady, New York.

Present at Schenectady to note the occasion were Matt E. Schmutz, manager of Hewlett-Packard's HP 3000 Operation, David Sohm, HP applications product manager, Alan Schallop, HP area manager, William S. Kaiser, HP's national account manager for General Electric, and Richard F. Green, HP sales representative to the G.E. Large Motor and Generator Department.

Representing the G.E. Large Motor and Generator Department (LM&G) were Elmer D. Gates, LM&G department general manager, James V. Russell, LM&G manager of information and operational planning, and Philip A. Mercurio, LM&G manager of manufacturing systems.

Said Schmutz, "It is a real pleasure for me to take part in this presentation. Our two companies share similar challenges in our needs to continue to increase productivity while we improve the management of our inventories. I am especially happy that General Electric has chosen the HP 3000 and HP MFG/3000 manufacturing applications software to help meet these challenges."

Elmer D. Gates, speaking for the General Electric Company's Large Motor and Generator Department, said "We are happy to accept Hewlett-Packard's three-thousandth HP 3000 Computer System. This is the 23rd HP 3000 installed in the General Electric Company and the second here at LM&G. This investment when fully implemented will improve the department's productivity by over 60 positions and will support effective cash management thus saving our department over $2 million annually. All of us at G.E. extend congratulations to Hewlett-Packard on this occasion."

The HP 3000 distributed systems network at the General Electric Large Motor and Generator Department will be used for engineering and data control, and for on-line maintenance of inventory order.

Congratulations to HP SR, *Ric Green,* and to all those who have helped to make HP 3000 sales successful!

Datapro Awards:
IMAGE/3000 a Three-Time Winner!
By: Jutta Kernke/GSD

IMAGE/3000 has won the Datapro/Datamation survey of proprietary Software Users' Honor Roll Award for the third time.

In 1976, it was the first vendor supplied database management system elected to the Software Honor Roll; it won that honor again in 1978 and 1979.

The aims of the 1979 survey were to poll the largest number of software users and then report their attitudes toward packages implemented at their facilities. Results are reported in an easy-to-understand manner for the general reader, making no attempt to interpret the data.

Software packages that met the Honor Roll criteria had to receive a weighted average rating of E+ in the overall satisfaction category and 2.8 or better in all other categories and had to be rated by at least 10 individual users. User ratings: 3.5-4.0 Excellent Plus (E+); 2.5-3.4 Excellent (E); 2.1-2.4 Good; 1.5-2.0 Fair; 1.0-1.4 Poor. IMAGE/3000 was acknowledged by 49 users this year, a 60% increase over 1978.

Hewlett-Packard ranked:

- Overall satisfaction   E+
- Throughput/efficiency   E
- Ease of installation   E+
- Ease of use   E+
- Documentation   E
- Technical Support   E
- Training   E

Other vendors who made the Honor Roll for database management software were Cullinane Corporation for IDMS and Software A.G. for ADABAS.

We are very proud to receive the Honor Roll award for IMAGE/3000 for the third time. It will be a challenge not only to maintain the reputation of our software in 1980, but to improve it.

Sell a 3-time winner, sell IMAGE/3000!

HP 3000 Data Entry and Forms Management System (V/3000)

Also, in the 1979 survey, V/3000 (formerly HP VIEW/3000) was mentioned by seven users and received excellent ratings in all categories: (see these listed above).

For the first time, HP 3000 users responded to other than database management systems software and may encourage others to do so in the future.

We can all help improve not only the quality of our software product, but overall customer satisfaction during 1980.

HP 3000's MPE Earns Datapro Award of Merit
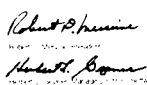
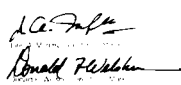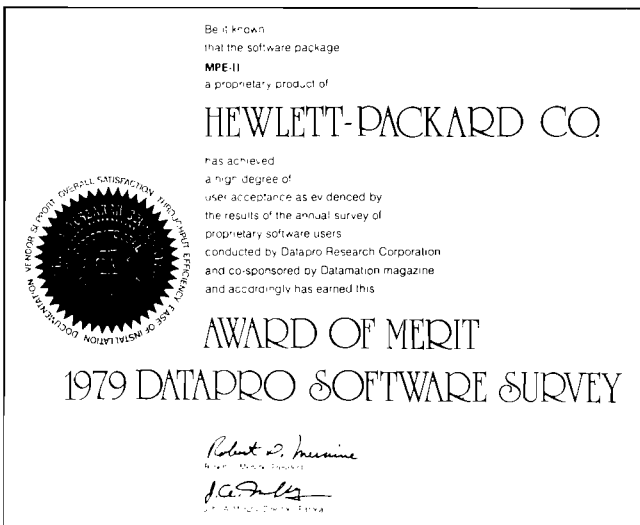*By: Pete Sinclair/GSD*

Be it known
that the software package

MPE-II

a proprietary product of

HEWLETT-PACKARD CO.

has achieved
a high degree of
user acceptance as evidenced by
the results of the annual survey of
proprietary software users
conducted by Datapro Research Corporation
and co-sponsored by Datamation magazine
and accordingly has earned this

AWARD OF MERIT
1979 DATAPRO SOFTWARE SURVEY

The HP 3000's MPE Operating System has earned the 1979 Datapro Software Survey Award of Merit. MPE was the only vendor Operating System to receive an award in this year's competition. This award graphically illustrates the high level of user acceptance that MPE has achieved since its introduction and highlights why it is one of the HP 3000's strongest selling points. The MPE ratings were:

Overall Satisfaction	E+
Throughput Efficiency	E+
Ease of Installation	E+
Ease of Use	E+
Documentation	E
Vendor Technical Support	E
Training	E

("Excellent +" (E+) was the highest rating possible)

The only higher award offered was the Honor Roll (which IMAGE/3000 won again this year). The ratings given MPE by the respondents were more than high enough to put it on the Honor Roll. The only reason that MPE did not get this highest award was that we only had 5 respondents for MPE in the survey. A minimum of 10 is required to get the Honor Roll. So please encourage your customers to respond to the Datapro questionnaire on MPE when it is distributed this summer and together we can get MPE the top software award in the industry.

Go sell MPE and the HP 3000 . . . the ONLY Computer System in the industry whose Operating Software earned a Datapro Award for excellence.

A New Name for HP VIEW/3000

By: Jutta Kernke/GSD

Due to a legal complication, HP VIEW/3000 is renamed:

**HP 3000 Data Entry and Forms
Management System (V/3000).**

This new name will be used on all documentation, literature, procedures and policies as of March 1, '80.

Tell your customers about this name change so they can start looking for V/3000 in their Software Status Bulletins and other support literature. An article will appear in the February Communicator. Please begin immediately to replace the name VIEW/3000 in your correspondence and daily usage so we can quickly and smoothly make this transition.

Note: We are currently updating the VIEW/3000 course to reflect the name change. Watch for a TWX in mid-February with details on how to order the new materials.

Multi-point Support of Remote HP 2631A Printers

By: Ron Fountain/GSD

We have received numerous inquiries on the operation of HP 2631A printers under MTS/3000. Users desiring remote printing are attempting to get it by slaving HP 2631A's off remote HP 264X terminals. The terminals are used to transfer data to the printer through the use of escape sequences. Although an adequate technique for many applications, there are operational problems which must be kept in mind. They are:

1. It is difficult for the HP 3000 to obtain printer status on paper outs, paper jams, data overruns, and user interrupts.
2. In some cases, data transferred from terminals to printers may be lost or inaccurate with no indication being sent back to the CPU.
3. Long printer listings have (in the past) seriously degraded terminal response times.

Because of the first two problems, HP 2631A's are not supported as remote devices on either the ATC or ADCC. In addition, they should not be used at remote multi-point sites requiring high data integrity (remote printing of payroll checks for example). Steps are being taken by Boise and GSD to correct and enhance the HP 3000 printer capabilities. These enhancements will be made available to you and your customer as soon as possible.

It should be mentioned that the inability to ensure printed data integrity is not an MTS/3000 deficiency. MTS/3000 uses a sophisticated Cyclical Redundancy Checking algorithm to guarantee data integrity between HP 3000's and terminals. However, the transfer of data from terminals to printers is beyond the control of MTS and is accomplished with only limited parity error checking. This allows even numbers of errors to cancel each other thereby degrading overall data integrity.
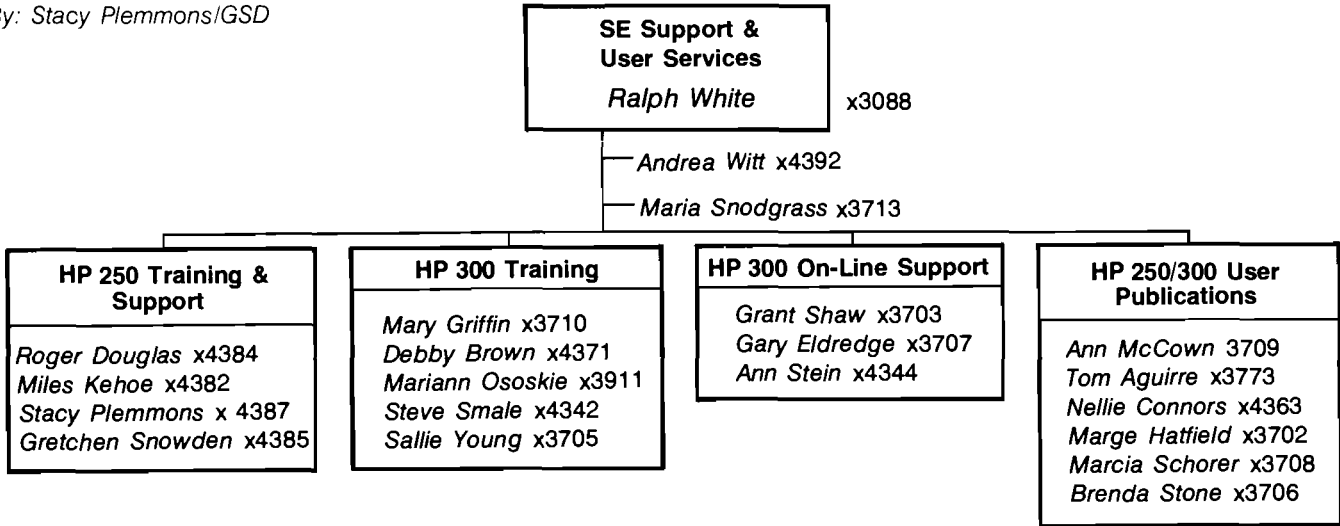
The problem of long printer listings tying up communication lines has been addressed on the new 1918 Datacomm MIT. Users should find this less of a problem in the future.

If there are any further questions regarding multi-point operation, please contact us. We are committed to making MTS work for you.

Sales Aids

HP 250 SE Support Group Arrives
By: Stacy Plemmons/GSD

SE Support & User Services
Ralph White   x3088

— Andrea Witt x4392

— Maria Snodgrass x3713

HP 250 Training & Support	HP 300 Training	HP 300 On-Line Support	HP 250/300 User Publications
Roger Douglas x4384 Miles Kehoe x4382 Stacy Plemmons x 4387 Gretchen Snowden x4385	Mary Griffin x3710 Debby Brown x4371 Mariann Ososkie x3911 Steve Smale x4342 Sallie Young x3705	Grant Shaw x3703 Gary Eldredge x3707 Ann Stein x4344	Ann McCown 3709 Tom Aguirre x3773 Nellie Connors x4363 Marge Hatfield x3702 Marcia Schorer x3708 Brenda Stone x3706

The HP 250 SE support group has finally arrived in California. For answers to your HP 250 questions, call:

Future product, FIN/250 — Roger Douglas. Roger previously supported the HP 250 as a field SE in the Neely Santa Clara office. In addition to FIN, he will have responsibility for the 9896 marketing support.

OM/250 — Miles Kehoe. Miles is a former HP 1000 SE and also worked for an HP OEM before joining the support group in Fort Collins.

MFG/250 — Stacy Plemmons. Stacy received his manufacturing training at Eastman Kodak before joining the HP 250 team in 1978. Since then, he has worked on the development and support of MFG/250.

BASIC, IMAGE, QUERY, FORMS and REPORT WRITER — Gretchen Snowden. Gretchen is also responsible for the operating system and HP 250 communications.

Ralph White. Ralph joined the HP 250 team from HP 3000 sales development. Recently he was given the additional responsibility of merging the HP 250 and HP 300 groups into one smooth running operation.

That's our 250 team; now let's review the 300 team. The 300 training group, led by Mary (Griffin) Salomaki is currently working on new SE and customer courses for the next release of the HP 300 operating system. That group consists of Debby Brown, Mariann Ososkie, Steve Smale, and Sallie Young. The on line support group, led by Grant Shaw consists of Gary Eldredge and Ann Stein. The user publications group is led by Ann McCown and consists of Tom Aguirre, Nellie Connors, Marge Hatfield, Marcia Schorer and Brenda Stone. Watch for future articles on these groups' activities.

That's our team. We're anxious to support your SE questions in 1980. Give us a call and let us know how we can help you.

A Free CE Visit?
By: Kim Voots/GSD

Did you know that a site inspection visit is included in the HP 250 system prices? This service is provided to the end user by the HP CE organization. The site preparation visit is usually done around four weeks prior to system delivery, but check with your local CEO to find out when it will be done for your customer.

In addition, the HP 250 Site Selection Guide, mailed to the end user prior to shipment, outlines how to prepare for the arrival of an HP 250. The end users' responsibilities are clearly explained along with what should be expected from the HP CE. The guide can also be ordered as P/N 45251-87903.

HP 300 Site Preparation Guide
By: Kim Voots/GSD

That's right! The HP 300 Site Preparation and Planning Guide is here to assist your customers in preparing for installation of the HP 300. Site preparation for the HP 300 system is the responsibility of the customer and this guide gives him/her the "How To" information. Written in layman's language, the guide covers: carrier selection and shipping, site planning, unpacking, and HP installation services. An electrician would be able to work directly from the new guide in preparing the AC power.

The P/N is 31000-90046, and it's available from Software Distribution Center. Why not order a supply so you can place a copy in your customer's hand at the time of sale!

Training News

Ordering Course Materials
By: Carol Ramsay/GSD

We have just completed a *new* edition of the HP 3000 Customer Training Course Materials Booklet which contains course descriptions, parts lists, prices and ordering information.

All orders for course materials should be transmitted through the HEART system (using ID code 25) and sent directly to GSD (4700) as supplying division. For internal use, transmit an I2 order; if the materials are being ordered for a customer to teach the course, use I1. Separate Instructor Kit and Student Kit numbers are provided so that you do not have to order each part of the kit individually.

Listed below are part numbers for Student and Instructor Kits for HP 3000 customer courses — if you would like more detailed information, please request a copy of the Course Materials Booklet from *Carol Ramsay* at GSD (x3852).

Course	Student Kit	Instructor Kit
22801B — HP 3000: A Programmer's Introduction	22801-60002	22801-60001
22802B — System Management and Operation	22802-60002 (for Series II/III) 22802-60003 (for Series 30/33)	22802-60001
22956A — IMAGE Database Management	22956-60002	22956-60001
22828X — KSAM	22828-60002	22828-60001
22830A — HP 3000 Data Entry and Forms Management System (V/3000)	22830-60002	22830-60001
22805A — MPE III Special Capabilities	22805-60002	22805-60001
36900E — Distributed Systems/3000	36900-60002	36900-60001

IMAGE Transaction Logging and Recovery Customer Training Course
By: Joan Martin/GSD

IMAGE Transaction Logging and Recovery is now part of the IMAGE/QUERY customer training course. Most of the new slides cover logging and recovery from the Database Administrator's point of view. This new material is planned for Friday when the DBA's functions are discussed.

A few slides in Tuesday's material have been modified and a few added. Slides on the Utilities now cover the new DBUTIL options and also DBRECOV; one new slide has been added to the DBMS section to provide the syntax for DBBEGIN, DBEND, DBMEMO.

If you already have copies of the course, order only the updates as follows:

IMAGE DBMS Instructor's Guide Update #2, Feb. 1980 22956-90004
IMAGE DBMS Student Workbook Update #2, Feb. 1980 22956-90001
IMAGE DBMS Overhead Slide Update Set #2, Feb. 1980 22956-90010

If you do *not* have copies of the course, order the entire course as follows:

IMAGE DBMS Instructor's Guide 22956-90004
IMAGE DBMS Student Workbook 22956-90001
IMAGE DBMS Overhead Slide Set 22956-90002

Updates are included automatically when you order the course material and do not specify an update. Note that the Slide Update Set has a different part number than the entire slide set, but the Instructor's Guide and Student Workbook have the same part number for the update and complete manual.

CSB News

HP 250 Demo's to Large Audiences
By: Mike Barlow/CSB

You frequently may have to demo the HP 250 to a large group of people, but to have more than about four people actually see what's happening on the display is very difficult. If you have a remote console and a video monitor you can now solve the problem.

The 2649D remote console has a standard 264X card cage so you can fit the 13254A video interface in the R/250. For our recent GSD product training we used the two video monitors in our classrooms at CSB and did all our presentations with the aid of these and the remote consoles.

When you open the 2649D you'll need to move the cards a little to get the video interface to work. The order below worked for us so it should work for you:

Original Order	New Order
02640-60123 K/B I/F	02640-60123 K/B I/F
02640-60086 ASYNC	02640-60086 ASYNC
02640-60088 DISPLAY TMG	02640-60124 DMA
02640-60124 DMA	02640-60122 DISPLAY CNTL
02640-60112 DISPLAY CNTL	02640-60024 DISPLAY ENH
02640-60024 DISPLAY ENH	02640-60088 DISPLAY TMG
02640-60209 PROCESSOR	13254A VIDEO I/F
02640-60192 CONTROL MEMORY	02640-60209 PROCESSOR
02640-60101 8K RAM	02640-60192 CONTROL MEMORY
	02640-60101 8K RAM

When you finish the demo and want to take the video card out, you must reconfigure the cards to ensure there are no spaces in the card cage.

Good luck with your big demo's on the HP 250.

HP 250 Local Language Documentation

By: Geoff Kirk/CSB

The HP 250 small business computer is aimed at the first time user, and to make this first encounter a pleasant one we have translated HP 250 user-level documentation into local language.

Today, we offer an impressive array of local language documentation to support the HP 250:

- HP 250 Quick Reference Cards
  US   P/N 45251-62500
  French   45252-62500
  German   45253-62500
  UK   45254-62500
  Swedish   45255-62500
  Spanish   45256-62500
  Italian   45257-62500

- HP 250 System Operators Guide
  US   P/N 45251-90000
  French   45252-90000
  German   45253-90000
  UK   .45254-90000
  Spanish   45256-90000

- HP 250 Site Selection Workbook
  US   P/N 45251-90041
  French   45252-90041
  Spanish   45256-90041

- HP 250 Operators Guide
  US   P/N 45251-90005
  German   45253-90005
  French   (Avail. later)

For those of you who noticed that we have UK as well as US versions of the Quick Reference Cards and Operators Guide, a word of explanation. The UK versions only reflect the English keyboard which differs from the US.

Successful Customer Visits

By: Luc Dussart/CSB

Customer visits are one of the most important responsibilities for factory marketing. They are a valuable tool in closing big deals, and they help to increase HP's visibility with large European OEMs and Major Accounts.

In 1979, Commercial Systems Boeblingen hosted more than 80 customer visits. In 1980, our main objective is to improve the efficiency and the return on investment of all the HP people involved.

Ensuring success for a factory visit requires gathering and managing many details related to the customer, the field sales organization and the factory. Each party has to qualify the opportunity and follow guidelines we have developed.

This series of articles will review the keys to a successful visit to Commercial Systems Boeblingen.

Customer Profile

1. The ideal candidate for a factory visit should be a major customer for HP in the long term. He should be an existing customer, large account or big OEM, or a new customer willing to invest in a substantial amount of HP equipment over a period of time. The more potential he represents, the more qualified he is.
   Potential is our first key word.

2. The customer should come to the factory with a clearly defined objective. His concerns may range from HP's direction for future product development to some detailed technical point that can only be answered by the factory. In any case these concerns must be determined by the SR before the visit so that the visit can be properly tailored. The customer must come for some specific reason: it should be to help him decide to buy HP, to see HP as a partner or to solve some specific problem, etc.
   Having an *Objective* is the second criteria.

3. Usefulness of the factory visit is a key point in its success. Try to forecast a long time in advance where in the sales process a meeting with factory people is necessary, especially compared with local management meetings. Factory is not the only resource at your disposal.
   Use properly a manufacturing and marketing facility.

4. Even if we show our willingness, a factory visit is most successful when there is a need for it. We are qualified to help you in special deals, deliveries and quotes. CSB represents GSD in Europe and can make factory commitments. Help us take care of your customer:
   If he has a special *Need,* let us know.

5. The last point will measure the effectiveness of the visit: CSB will clearly contribute to your success if the customer is really willing to go with HP for the long term. The factory visit should be scheduled just before a major commitment from the customer. This necessitates inviting the appropriate level of managers.
   A position *Decision* has to follow soon.

To summarize the five key points for customer qualification:

POTENTIAL	ℒ ℒ ℒ ℒ ℒ ℒ ℒ ℒ ℒ
OBJECTIVE	ℒ
USE	ℒ POUND is an easy mnemonic ℒ
NEED	ℒ for big business!
DECISION	ℒ ℒ ℒ ℒ ℒ ℒ ℒ ℒ ℒ

CSB Hosts European Business OEM Specialists
By: Dave Iuppa/CSB

Peter Rosenbladt, giving HP 300 update

In December, CSB conducted the first European Business OEM Specialist Seminar. Thirty European Sales Specialists participated in this Seminar, which will be held semi-annually. It consisted of presentations, workshops and an awards banquet.

Topics included a review of HP's OEM Sales Policy, Strategies for selling to OEM's, an exploration of new channels of distribution, and a product update. Much opportunity existed for two-way communication between Field and Factory.

New HP 300 Product Manager
By: Dave Iuppa/CSB

Mike Barlow . . . managing RPG Engine effort on the HP 300 in Europe

Mike Barlow has been named to replace *Peter Rosenbladt* as HP 300 Product Manager at CSB. *Mike* joined the UK Sales Force six years ago and spent the last year as Sales Development Representative in CSB for the UK.

In addition to *Mike,* there are four members of the CSB Marketing Team dedicated to supporting the HP 300. They are: *Lutz Hemmerich* in CE Support, and *Walter Hellweger, Wolfram Schöb* and *Michel Lafage* in SE Support.

Peter Rosenbladt will return to the US as a Section Manager in GSD/R&D. We congratulate *Peter* and *Mike* on their promotions and wish them every success.

International Business Show
By: Mike Barlow/CSB

GSD's products were the centre of attention at the recent big International Business Show (IBS), which is held every two years in the UK. It covers a wide range of products from furniture to mainframes, with the computers in a separate hall. The show was the UK debut for the HP 3000 Series 30, and also featured the HP 250 and HP 300.

The HP Stand used the "Hewlett-Packard ends the Computer Compromise" theme and was busy all day confirming the fact that there has been a quantum leap in the prospects' awareness of HP as a Supplier of Business Computers.
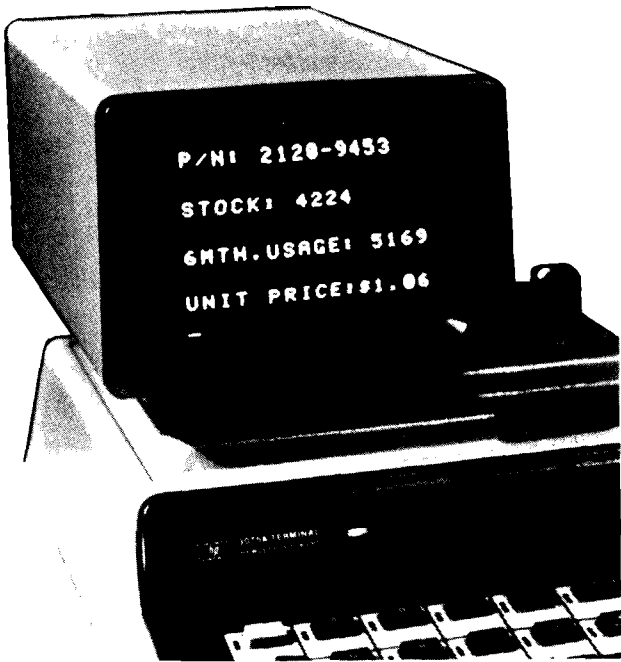
HP GRENOBLE NEWS

Product News

A CRT Option on the HP 3075 Family
By: Pierre Ardichvili/HPG


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P/N: 2120-9453
STOCK: 4224
6MTH.USAGE: 5169
UNIT PRICE:$1.06
-
```

One of the features which make our Data Capture offering so attractive to customers is the wide variety of input/output options on the HP 3075 family terminals.

Our lab is engaged in a continuous effort to provide more of these capabilities. On Feb. 1, we introduced a new option, the 5in. CRT. This significant enhancement provides a solution for customers who require either more than one line of display or more than 24 characters.

Applications in which the CRT may be used include:

- Menu for next job selection

  In a part manufacturing workshop, who better than a machine operator knows which task the machine can perform next, with a minimum change in the machine's adjustments? The CRT will display a list of jobs for the operator to select the most suitable.

- Recap of a transaction

  Whenever a transaction involves several replies through the keyboard, the operator may wish to review his previous entries before validating the transaction by hitting the appropriate special function key. The CRT will be more readable and faster for this purpose than the printer.

Applications are limited only by the imagination of you and your customers.

A word of caution. The CRT is equipped with cursor movement commands (through escape sequences, of course) and protected fields, much like an HP 264X terminal. However, in this respect, its capabilities are a lot more restricted.

If you are tempted to use the 3075 with the CRT, like a big CRT terminal, for mass data entry, you are probably selling the wrong equipment to the wrong customer.

Data Capture Terminals are meant to enable data capture, by non-computer trained personnel, to facilitate operation management in manufacturing industries, and in their distribution operations. Our terminals have already proved successful in that market, help them continue so and, gratify yourself with more systems sales.

Another Step Forward from Grenoble
By: Bernard Guidon/HPG

Yes, once again we are increasing the number of available modules on our HP 3075A and 3076A Data Capture Terminals. Today's exciting new feature is a compact, built-in 5in CRT for only $850 factory base price ($936 US List).

This CRT (Option 006) can be fitted on either the HP 3075A desktop or the 3076A wall mounted terminals instead of the one line display (numeric and alphanumeric).

The success of our 3075 family has been built on a combination of unique features such as MFR, removable Type V reader pocket, wall mounting cradle and Factory Data Link Communications. Now the CRT option makes it outstanding!

At $850 (FOB Grenoble), the new CRT is only $355 more than the one line 24 character alpha display. It brings the price per displayed digit down to $1.66 as shown below:

Display	Price	= of Characters	Character Cost
Alpha disp.	$495	24 digits	$20.00
CRT	850	512 characters (STD page)	1.66

The leverage of the CRT is tremendous. Selling the Data Capture CRT will help you in selling terminals as well as HP computer systems.

CRT Key Features
By: Jean Charles Miard/HPG


```
P/N: 2120-9453

STOCK: 4224
6MTH.USAGE: 5169
UNIT PRICE:$1.06

P/N?_
```
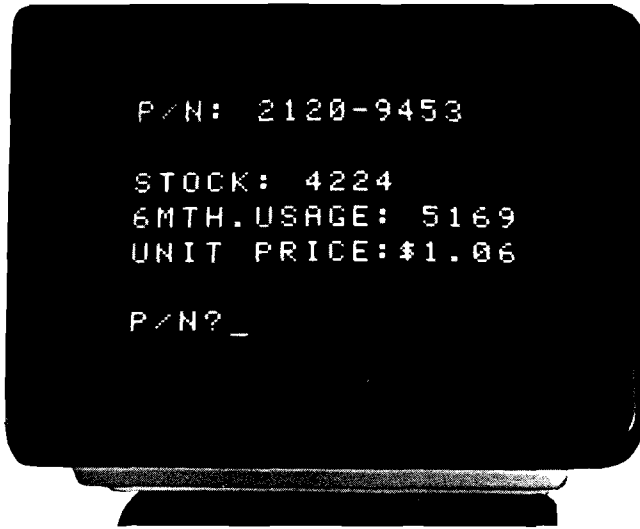
CRT in large character set mode

The CRT option of the HP 3075/3076 terminals consists of a compact module attached to the top or the side of the terminal. This module contains a 5in (diagonal size) CRT protected by an anti-reflective screen which offers the double advantage of increasing the letters/background contrast and limiting reflection of external light. This ensures good readability even in brightly lit environments.

It offers simultaneous storage of two completely independent screens of information:

- One screen of standard size characters (16 lines of 32 characters) with a 92 ASCII character set from octal 40 to 172 (this even includes lower case characters).

- One screen of large size characters (8 lines of 16 characters) with a 64 ASCII character set from octal 40 to 137. These characters can be read at distances up to 4 metres (13 feet).

The following features can be program controlled via escape sequences:

- Displayed character size (standard or large)
- Cursor movement — Home up

  Move cursor one position up, down, left and right.
- Complete display blinking to attract operator's attention.
- Clear display from cursor position to the end of line or to the end of screen.
- One protected field which prevents operator typing from overwriting question text.

From the terminal keyboard an operator can perform a backspace or delete completely his last entry. These operations are performed locally by the CRT. There is also an automatic scrolling of the standard size character page.

These exciting features should help you sell more Data Capture Terminals.

CRT Positioning
By: Bernard Guidon/HPG
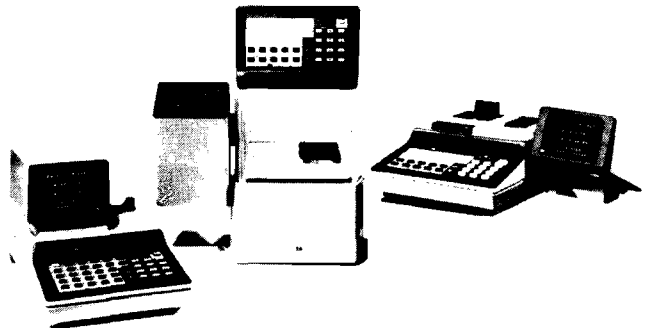
Since the CRT can be combined with numerous other options such as multifunction reader, strip printer and type V badge reader, it comes in different positions. Here is a photo of and conditions for the three basic positions: top left, top right and side.

3075 Top left	— When no peripheral, or only the strip printer or the type V badge reader, is fitted.
Top right	— Only the multifunction reader is fitted.
Side	— If two options among the multifunction reader, type V badge reader and strip printer, and fitted.

3076A

The CRT is always mounted on the left side of the 3076A terminal.

Building the 3075/6 to Your Exact Requirements
By: Bernard Guidon/HPG

How would you like to say YES 84 times to your customers? 84 is the number of combinations available on the 3075 and 3076 terminals.

Whether your customer wants:

Numeric keyboard Alphanumeric keyboard	Choice of one
1-Line alphanumeric display 1-Line numeric display → CRT	Choice of one
MFR Type V Printer	Choice of two
Wall mounted Desk top	Choice of one

Or any combination of these you can say YES.

The configuration of your data capture terminal is easy. Say YES to your customers with the 3075 terminal family:

Step 1: Do you need a desk top   3075A
                 or   or
         a wall mounted version?   3076A

Step 2: Do you need a numeric simple   STD
                 keyboard or   or
         an alphanumeric keyboard?   004

Step 3: Which type of display do you need?
                 one line numeric   STD
                 one line alpha   or   005
              → 5 inch CRT   or   006

Step 4: Which peripherals do you need?
                 None   STD
                 Multifunction reader   up   007
                 Type V reader   to   008
                 Strip printer   2   009

3075/3076 CRT Facts
By: Bernard Guidon/HPG

3075/3076
- Option 006 $850 Factory Base Price
  $936 US List Price
- Availability 5–6 weeks for 3075A
  7–8 weeks for 3076A
- On Corporate Price List Feb. 1, '80
- Data sheet P/N 5953-0130
- UL and CSA approved
- No field upgrade available
- Same support policy

HP Computer System Support
By: Bernard Guidon/HPG

Since the CRT is a 3075/3076 option, the basic HP system support is unaffected. Therefore, the 3075/3076 terminal, including the mere CRT option, is supported as shown:

HP 1000	Multi-terminal	Supported
HP 3000 II/III/30/33	Point-to-Point	Supported
HP 3000 II/III	Multi-terminal	Supported at MTS release time
HP 300 HP 250	Point-to-Point	Works but not supported

Note: Multi-terminal includes HP 264X daisy chain and factory data link set up.

Terminal control is easily realized at the application level through the use of escape sequences compatible with the 264X series.

Data Capture Terminal Goes to Hollywood!
By: Guenter Kloepper/DTD
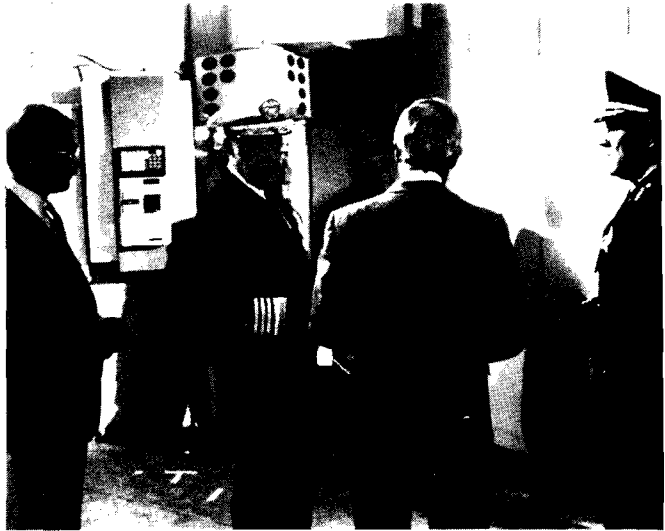
HP 3076A starring in "Raise the Titanic!"

An HP 3076A will make its film debut in the movie "Raise the Titanic!"

The terminal was used in a Pentagon scene (shot on location) which required a device to control access to a top security area. They loved the HP 3076A so much, they even expanded the particular scene over the original script!

Note: Don't go rushing off to sell security control systems based on Data Capture Terminals . . . in practical top security applications, a punched badge does not offer sufficient protection against forgery.

Used Equipment Available

By: Muriel Jean/HPG

A great savings on the following used equipment (Opt. 888) Serial Nos. 1814F00115, 1814F00116, 1814F00118, 1815F00130, 1825F00159 and 1839F00203 is available at $1750 each but *without any warranty*. Availability: approx. 2 weeks ARO.

Call *Muriel Jean* (ext. 221) for transmitting instructions or *Guenter Kloepper* at DTD for North American deals. Units are available on a first-come, first-served basis!

Sales Aids

3075/3076 CRT Data Sheet

By: Bernard Guidon/HPG

A new data sheet (P/N 5953-0130) has been bulk shipped to your office. It is now available for your customers and prospects.
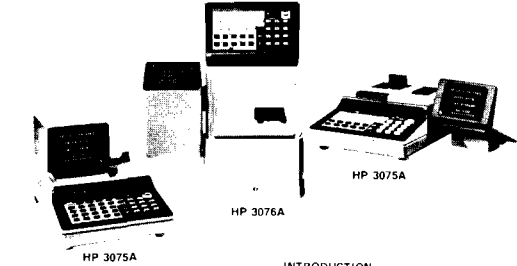
This CRT data sheet, with product features and programming details, could be a great tool for direct mail.

[hp] HEWLETT PACKARD

DATA CAPTURE TERMINALS
CRT OPTION

Models HP 3075A AND HP 3076A Option 006

HP 3075A

HP 3076A

HP 3075A

Features

- Compact 5 inch, high-resolution CRT display
- Simultaneous storage of two completely independent screens of information:
  - one screen of standard size characters (16 lines of 32 characters)
  - one screen of large size characters (8 lines of 16 characters)
- Anti-reflective screen
- Automatic wrap-around
- Automatic scrolling of the standard size character screen
- Local keyboard control of backspace and clear last entry
- Program control of:
  - displayed character size (standard or large)
  - cursor movement
  - complete display blinking (to attract) operators attention)
  - one protected field (prevents displayed data being overtyped by operator)
  - backspace and clear display

INTRODUCTION

The HP 3075A and HP 3076A form part of a comprehensive family of modular data capture terminals with a wide range of options. The range includes a CRT (option 006) for the many situations requiring several lines of information to be simultaneously displayed. This display replaces the one line displays.

The CRT may be mounted in one of the following positions on the HP 3075A terminal:
- Top right if a Multifunction Reader (option 007) is also fitted
- Top left if either no other options are fitted or a Type V Badge Reader (option 008) or a Strip Printer (option 009) is also fitted
- Right side of terminal if any two of options 007, 008 and 009 are also fitted

The CRT is always mounted on the left side of the HP 3076A terminal.

DISPLAY RESOLUTION

The CRT is fitted with an anti-reflective screen to ensure good readability even in brightly lit environments. The large size character screen is readable at distances of up to 4 m (12 ft).

Display area 76 mm H x 98 mm W (3.0 x 3.86 ins)

Display character set
- large size set of 64 ASCII characters (octal 040 to 137)
- standard size set of 92 ASCII characters (octal 040 to 172)

Both screens use the < symbol (to indicate that a special function key has been pressed) and the ' symbol (to indicate that a communications error has occurred)

CS GROUP NEWS

San Diego Division

Product News

HP 7221A and HP 9872A Retrofit to Paper Advance

By: Peggy Wyman/SDD

Do you have customers who bought HP 7221As or HP 9872As and who are asking whether HP can retrofit their existing units with paper advance? Tell them "yes"! San Diego Division is offering, for a limited time, a factory upgrade program to add paper advance capability to existing 9872A and 7221A plotters. Note: The upgrade is available for only the "A" version of these plotters. Customers for the "B" or "S" versions should order the "S" if they want paper advance, since the "B" versions *cannot* be upgraded later.

For a 7221A or 9872A unit to be retrofitted with the convenient paper advance capability, the plotter must be returned to the factory. Retrofit packages will *not* be supplied for field installation. The customer can send his plotter to either SDD, BID, or YHP, for upgrading. Turnaround time will be 2–3 weeks. When the customer orders the upgrade, the factory will give an acknowledge date — that is the date on which the customer's unit should arrive at the factory.

The 9872A upgrade kit is model number 17072A. The 7221A upgrade kit is model number 17073A. Cost for each is $2,750. Price includes all material and labor for the upgrade, modification and checkout, the operating and programming manual, and return shipping costs from the factory to the customer.

The 9872A upgrade includes all the 9872S features except the "listen only" switch. The 7221A upgrade includes all the 7221S features except the "modem/hardwire" switch. The absence of these features should not cause any problems

as software already running on the "A" will run on the upgraded models with no modification except, of course, to add the commands which allow for unattended operation — page advance, paper cutting, and stacking.

Please advise any customers who might require the paper advance capability at some future time to consider the retrofit of their "A", or to be sure to order the "S" initially. The retrofit will be available for a limited time only.

For more information, see the retrofit data sheet (P/N 5953-4018 from Corporate Literature Center).

HP 7240A and HP 7245B Plotter/Printers with Improved Paper

By: John Koon/SDD

The new HP 7240A and HP 7245B are now available. Along with their introduction we are offering new black and improved blue trace thermal paper for outstanding writing quality.

Perforated black English paper will be shipped as standard. The paper option specifying other than standard thermal paper when the order is placed has been eliminated due to low usage.

If your customers wish to order other thermal papers, they should use the following part numbers:

9270-0605	perforated black English
9270-0607	perforated black metric
9270-0609	continuous black
9270-0699	perforated blue English
9270-0700	perforated blue metric
9270-0659	continuous blue

From the user's standpoint, the old paper is interchangeable with the new; however, the quality of the printed copy is much higher with the new improved paper. For example, when the new perforated paper is used with the 7245B or the 7240A, a solid line can be drawn across the perforated holes without creating a gap.

This improved paper quality complements the new, enhanced capabilities of the 7240A and 7245B to help you sell graphics.

Confidence Test

By: Greg Elmassian/SDD

You *cannot* perform the Confidence Test on the HP 7221A Graphics Plotter using the Option 002 cable. You *must* use the standard cable (P/N 07221-60157) that is shipped with the unit for a correct test.

Division News

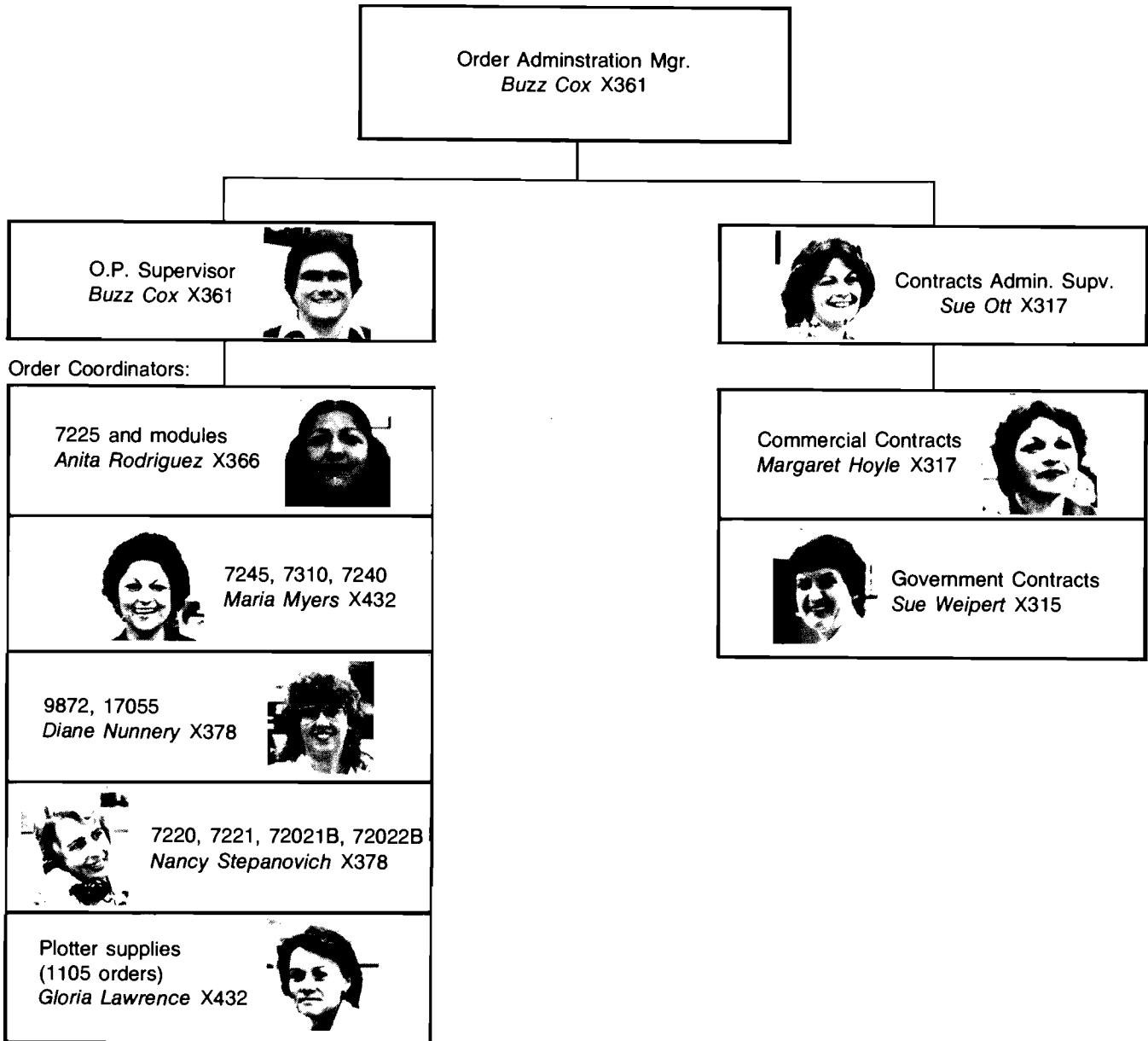## Support Plus: Order Administration

By: Al MacIlroy/SDD

The Order Admistration team works with you and your SDD Sales Support person to get those plotters into your customer's application in a timely manner. They can help you coordinate shipments and deliveries to make it easier for your customers, so use "no partial-CS", "special instructions" on the HP order to specify when your customer wants the plotter.

Even though SDD plotters are usually part of the Computer Group Contracts, SDD Contracts is willing to assist you with Government and Commercial Contracts questions regarding SDD products. In some cases, an SDD OEM/VEU contract may be your best deal.

Outstanding support for you is our business; give us a call at (714) 487-4100 or send a COMSYS to 1100.

Order Administration Organization

Order Adminstration Mgr.
Buzz Cox X361

O.P. Supervisor
Buzz Cox X361

Contracts Admin. Supv.
Sue Ott X317

Order Coordinators:

7225 and modules
Anita Rodriguez X366

7245, 7310, 7240
Maria Myers X432

9872, 17055
Diane Nunnery X378

7220, 7221, 72021B, 72022B
Nancy Stepanovich X378

Plotter supplies
(1105 orders)
Gloria Lawrence X432

Commercial Contracts
Margaret Hoyle X317

Government Contracts
Sue Weipert X315

Sales Aids

HP 7310A Documentation Available

By: Jan Craven/SDD

Documentation for the HP 7310A Graphics Printer gives you the scoop on San Diego's newest product, the first in a family of raster graphics printers which produce graphics, forms, and text. The full-color, 8-page data sheet, with features, photos, configuration with HP controllers, ordering information, and specs, takes a conservative approach to emphasize the clean-line design, simple, high-speed operation, and multiple, convenient features of the printer.

The 7310A User's Manual details the operation of the printer's 11 printer control commands, 17 text and forms printing commands, and 25 raster commands, the 31 available character sets, the programmable paper cutter, and the special text enhancement features. Details are provided in a controller-independent format for ease of use with any user system, yet special attention is given to interfacing the 7310A with HP 264X terminals and the HP 9835A desktop computer to assist this large group of HP customers.

The User's Manual is available from San Diego Division (Div. 11). Order P/N 07310-90001 (list price $35). The data sheet is available from Corporate Literature depot, Palo Alto. Order P/N 5953-4048D (domestic) or 5953-4048 (foreign). For faster raster, call San Diego Division Sales Support!

Computer Supplies Operation News

Static Control Floor Mats Available

By: Fran Jeffries/CSO

Static control mats often reduce data error or loss resulting from electrostatic voltages introduced to computer equipment when touched by operating personnel.

Static charges build up when personnel walk around (floor coverings such as nylon, acrylic or polyester carpets are the most troublesome). Even preferred floor coverings such as vinyl asbestos or high-pressure laminate can contribute to static buildup in very dry environments with low relative humidity.

Static control mats drain away static voltages when stepped on by personnel, before they operate the equipment. Mats are usually placed directly in front of the equipment, although they may also be placed at a computer room entrance from a carpeted area.

HP's Computer Supplies Operation offers two types of static control mats. Regular-duty mats, with a carpeted finish in two attractive colors, are suitable for most situations, and heavy-duty mats, which include grounding wire, are recommended for environments with severe and continuous static buildup problems.

Regular Duty Static Control Mats

Carbon-impregnated filiments are woven right into the carpet so static protection remains even after the carpet is washed or worn. Mats are edge-finished, and have non-skid backing for use on carpeted as well as hard-surfaced floors. Available in neutral and russet colors and sizes 4 × 6 ft (1.2 × 1.8m) — $110 ea. or $100 ea. for 3 +; and 4 × 8 ft (1.2 × 2.4m) — $160 ea. or $145 ea. for 3 + — US prices.

Heavy Duty Static Control Mats

These are grounded so they can never become overloaded with a static charge. They are especially suited for severe static environments and heavy foot traffic (as at a computer room entrance.).

The 92175A Hard-surfaced Mat (black) for office use, is shaped to fit most desks and terminal tables. Material is hard and rigid so castered chairs easily roll over it, even when mat is placed on plush carpeting — $180 ea. or $162 ea. for 3 + US prices.

The 92175B Soft-surfaced Mat (chocolate brown), with internal foam pad for comfortable stand-up use, measures 4 × 8ft. (1.2 × 2.4m) and may be cut to requirement without affecting performance. — $260 ea. or $235 ea. for 3 +.

Look for these and other new CSO offerings in our new catalog, available soon. Tell your customers!

Corporate Training & Management Development

NEW VIDEOTAPE
I N F O R M A T I O N

New Videotapes from Corporate Training
By: Chuck Ernst/Corp.

Title:	HP 1350S Graphics Display System
Audience:	HP SRs (Computer and Instrument) HP Computer Graphics Customers
Purpose:	To demonstrate actual or simulated applications for 1350S graphics.
Content:	This videotape examines the advantages of the 1350S Graphics System for general graphics. It features high speed and high resolution to permit the visualization of complex data for statistics, engineering design, medicine, numerical control and production test. The 1350S offers cost effective solutions to a wide spectrum of demanding applications.

Time:	7 mins.
Part Number:	90947Z
Date Released:	January 1980

Title:	RTE-L Software Demo
Audience:	SRs and SEs
Purpose:	To demonstrate the key features of the RTE software for the L-Series computer.
Content:	*Alan Housley* demonstrates and explains the features of RTE-L — the HP 1000 L-Series software. Key features explained are:

1. Real Time Multiprogramming
2. Modular System Design
3. HP 1000 Family of Development Tools
4. High Performance I/O Architecture

Time:	20 mins.
Part Number:	90825Z
Date Released:	January 1980

How To Order:	Transmit a HEART (COCHISE) I-2 order to Video Products, Palo Alto: Supplying Division 0700, Product Line 95, Sales Force 09, Marketing Division 07. Order number 90947Z or 90825Z videocassettes.
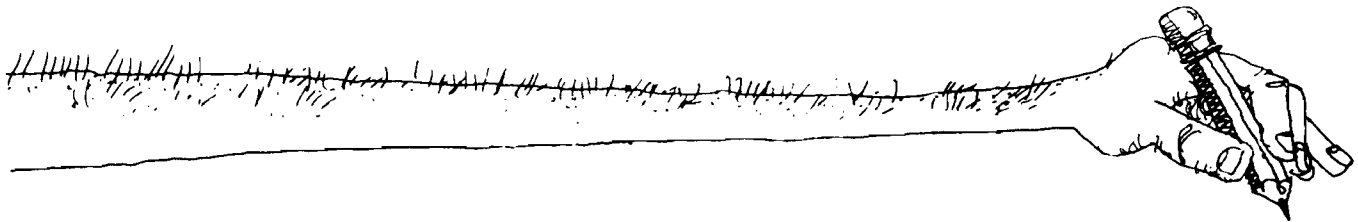
CS Newsletter Readership Survey

Don't forget . . . we want to know what you think of your Newsletter. Keep those responses to the Readership Survey in the Feb. 1, '80 issue coming in. Deadline for responses is Monday Feb. 25.

COMPUTER SYSTEMS NEWSLETTER