COMPUTER SYSTEMS NEWSLETTER

For HP Field Sales Personnel

HEWLETT PACKARD

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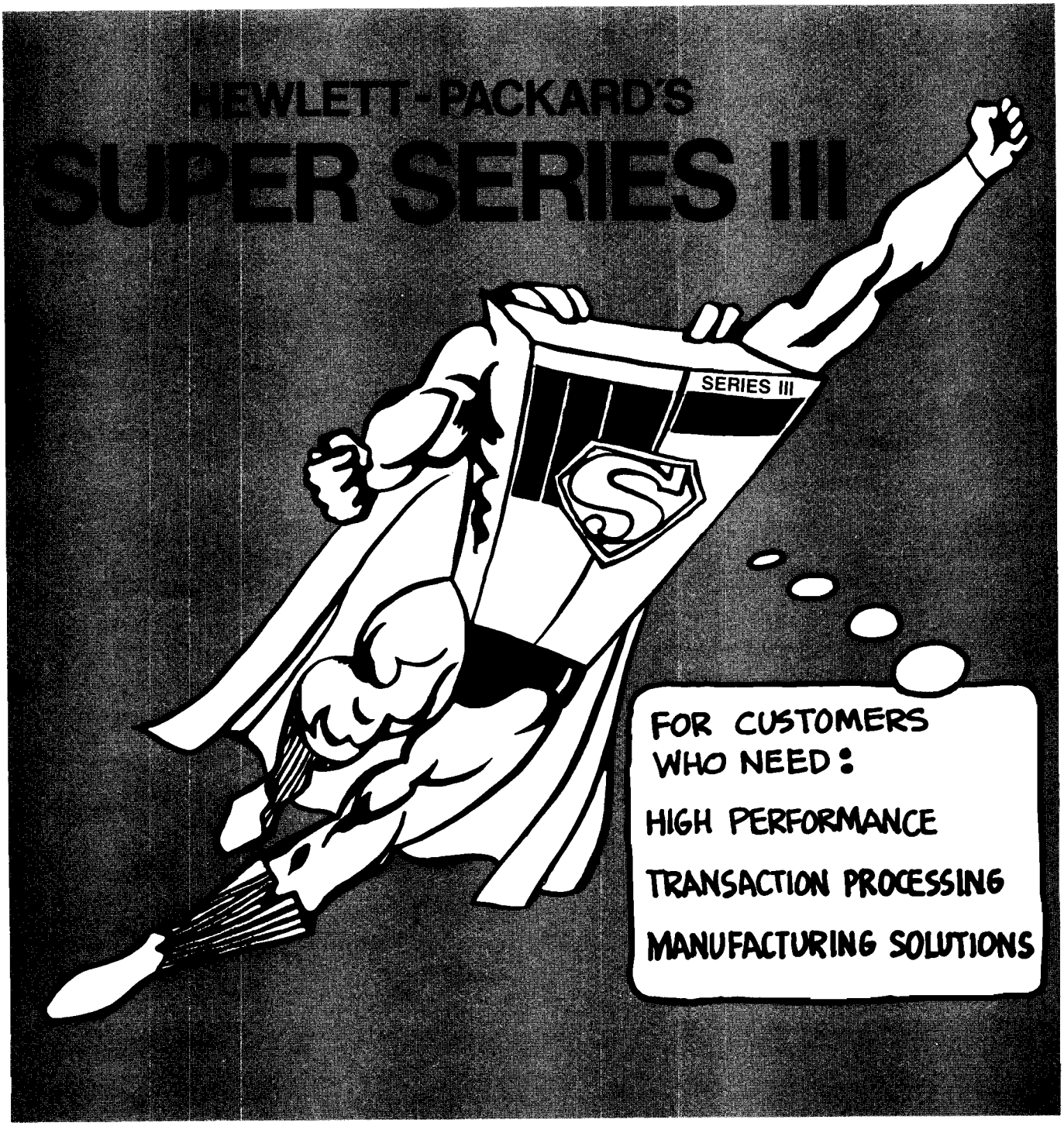

GSD Announces the HP 3000 Series III ..... Page 14

GSD Announces MFG/3000 In North America ..... Page 16

In This Issue...

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BOISE DIVISION NEWS

Product News

Is Your 263X Without a Leg to Stand On? Well. . . .

By: Thad Webster/Boise

Let's get friendly with the 2631/35 pedestal. You can find these diagrams (with part numbers) in both the 2631 and 2635 Service Manuals (Option 715). All parts are the same for both pedestals except for the leg assembly. The 2631 leg carries P/N 02631-60051; the 2635 leg is part number 02635-60005. It may not be apparent, but the easiest way to assemble the pedestal is upside-down. You should find your pedestal easy to assemble, very stable, and attractive. If your customer has a problem with missing parts, give your Sales Development Engineer a call.

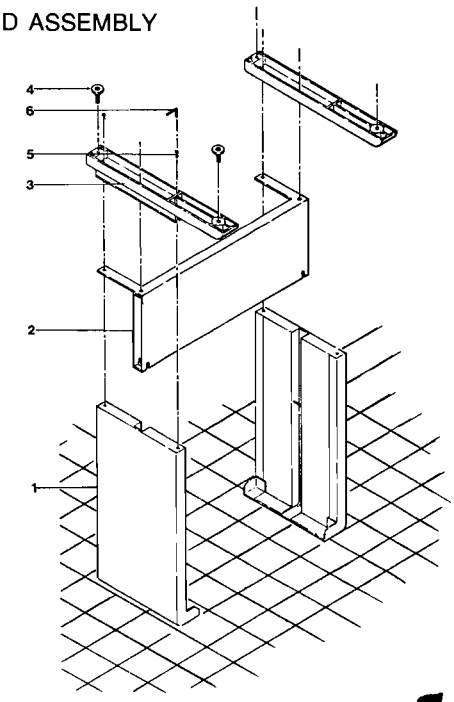
You are already familiar with the product numbers: 26098A (2631 pedestal) and 26097A (2635 pedestal). Each product has options for rolling casters (Option 001) and a paper shelf (Option 002). If your customer already has a pedestal but wants to add on either casters or paper shelf, order those parts from the Corporate Parts Center at the Customer Service Center, Mountain View, California.

The part numbers are: casters 1492-0045, paper shelf 26097-00001. Both of these parts will fit either 2631 or 2635 pedestals.

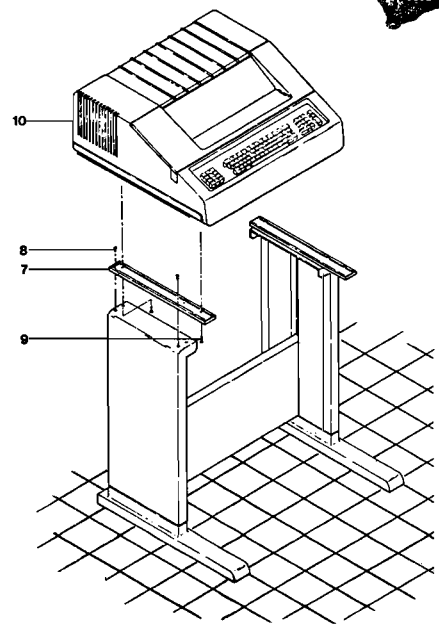
Parts List

Reference Number	Description	Part Number
1	2635 Leg Assembly	02635-60005
	2631 Leg Assembly	02631-60051
2	Skirt Assembly	02631-60052
3	Foot Assembly	02631-60058
4	Glide	0403-0260
5	Screw	0515-0094
6	Metric Skirt Screw Key	8710-1155
7	Mounting Arm	02631-00024
8	Screw	0515-0093
9	Screw	0515-0052
10	Terminal	

STAND ASSEMBLY



TERMINAL ON STAND



New Magtape Cabinets Available With HP 1000 Systems

By: Mike Harrigan/Boise

Boise Division proudly announces a new lo-boy cabinet for the HP 7970 digital magnetic tape drive. The lo-boy cabinet is styled for compatibility with HP 1000 desk type systems. The photograph shows the HP 7970 mounted in the new cabinet next to an HP 7920 disc drive and HP 2645 terminal.

The new cabinet is available only with mag tape subsystems for HP 1000 computers. The following table gives ordering information and prices for all mag tape subsystems available with HP 1000 computers. Note that the new lo-boy cabinet subsystems cost $1250 more than equivalent subsystems without a cabinet. This is a substantial savings over rack mounting when the HP 7970 is the only component requiring a cabinet.

Please remember, when ordering a mag tape subsystem, no add-on or substitution options are allowed. If your customer needs a speed other than 45 ips, for example, it is not possible to order as a standard subsystem. Please contact the factory for these special cases.

Mag tape subsystems for HP 1000 Computers:

HP 7970 X #2 X X

- X: 0—Mag tape drive, daisy chain cable.
- X: 1—Slave mag tape drive, daisy chain cable, (E drive only).
- X: 6—Mag tape drive, controller/interface
- #2: 2—Low-boy cabinet.
- #2: 3—No cabinet
- X: B—800 bpi, NRZI.
- X: E—1600 bpi, PE.

Prices:

7970B		$ 6780
	#220	+ 1830
	#226	+ 3880
	#230	+ 580
	#236	+ 2630
7970E		$ 8885
	#220	+ 1740
	#221	− 105
	#226	+ 3265
	#230	+ 490
	#231	− 1355
	#236	+ 2015

DATA SYSTEMS NEWS

Product News

When Is An RTE-IV Hardware Upgrade Needed?

By: Eric Isacson/DSD

The RTE-IV data sheet indicates that serial number prefixes of 1810 and 1812 are required on M and E series computers, respectively, for RTE-IV compatibility. During the NPT and in a May *CS Newsletter* article, it was indicated that all computers shipped after mid-March would be RTE-IV compatible.

A number of customers have received computers shipped after the NPT which do not have the serial no. prefixes required for RTE-IV compatibility. Must these customers purchase Upgrade Packages? The answer is *no*!

All E-series computers shipped after March 20 and all M-series computers shipped after March 6 are guaranteed to be RTE-IV compatible regardless of their serial no. prefix!

Immediately prior to March 20 and March 6, for E and M series computers, respectively, we examined all computers on the manufacturing floor to make sure they did not contain RTE-IV incompatible components. Hence, all computers shipped after that date, with very few exceptions, are RTE-IV compatible, regardless of serial number prefix. Computers which began production on those dates bear serial no. prefixes 1812 and 1810 and are clearly RTE-IV compatible. Hence checking the serial no. prefix is the simplest, quickest way to check for RTE-IV compatibility.

There is a small possibility that a few E-series computers may have slipped out after March 20 with DMS ROMs not RTE-IV compatible. This is due to the large quantity of work in process and difficulty of tracking down and examining computers in intra-plant transit, on loan, in Systems Integration, or undergoing certain kinds of tests.

If the shipping papers show that your customer's computer was shipped after March 5 for M's or after March 20 for E's, you can tell him that we guarantee RTE-IV compatibility. If you want to make absolutely sure his E-series computers has the correct DMS ROMs, either you or he can run a short program which tests them. The program is available either from your RSE or CE. It requires only that the computer contain more than 64 Kbytes of memory. It may be toggled-in from the front panel. If it indicates that the computer contains DMS ROMs not compatible with RTE-IV, then you may call in your CE to replace them under warranty as described in Service Note 13307A-02.

The probability that an E-series computer shipped after March 20 contains RTE-IV incompatible DMS ROMs is so small that you may simply wish to wait until a regular PM or until RTE-IV is installed to check. However, on exceptionally critical applications you may wish to use the program to check beforehand.

On M-series computers, the major change made on March 6 was to stop filling orders for the "A" version of the 12976 DMS. After that date, only the "B" version was shipped, as required by RTE-IV. If you're highly concerned, you may wish to check the shipping papers in Order Processing to verify that the "B" version was shipped to your customer.

All computers shipped *prior* to March 20 and March 6, for E- and M-series, respectively, must at least be checked for RTE-IV compatibility. *The cost of doing so must be borne by the customer*. There is admittedly a small possibility that a few computers shipped immediately prior to those dates may contain a full set of RTE-IV compatible components. The older the computer, however, the greater the probability that a substantial number of components will have to be changed.

We offer the 92852 Upgrade Packages as the simplest way to ensure RTE-IV compatility. On very recent computers (but prior to March 20 and March 6), there is a possibility that a component-by-component, piecemeal approach may be more economical. However, the customer must be charged on a time and materials basis to find out. Alternatively, you may wish to allow the customer to take his computer apart himself to find out what needs to be replaced. This latter should be done only *with caution*. Most customers, especially end-users, are qualified neither to service nor to dis- and reassemble their computers. Therefore, we urge you to follow this course only after discussing the task, and the customer qualifications, with your District CE Manager. He can also provide you with an up-to-date list of the component part numbers and date codes required.

If your customer upgrades his computer on a component-by-component or piecemeal basis, we will support RTE-IV operation the same as if he had purchased a 92852 kit. However, if a CE is called out on an apparent RTE-IV hardware problem, he will first have to assure himself that the computer has been properly upgraded. This requires checking the internal component part numbers and date codes, and of course charging the customer for the time involved. Alternatively, the 92852 kits include a label which is affixed inside the computer front panel showing that an RTE-IV upgrade kit has been installed.

2240A Low Level Analog Input Card Specification Change (22915A)

By: Peter Palm/DSD

The HP 22915A Low Level Analog Input Card Voltage Offset Temperature Coefficient (shown in 22915A Specification Table as "OFFSET T.C. (μv/°C) referred to input") should read "Typically" 5 microvolts per degree centigrade. Only 90% of the channels may meet this specification due to vendor amplifier parts variances. This temperature drift offset may be important to some of your customers.

DATACAP Update

By: Linda Siener/DSD

Just an update on what's going on with DATACAP. We've seen very good results in our alpha test site at our Palo Alto Manufacturing Division. They've got DATACAP up and have defined their system. They're now waiting for their 3070B's from Grenoble to begin using the system. We have our first DATACAP customer (Ohio) who should take delivery in September. About five FE's are currently investigating quoting DATACAP to their customers. We expect to have DATACAP on the CPL by August 1 as well as having performance statistics by around July 1. I'd like to remind you that since there's no customer training for DATACAP, it's necessary to get your SE's trained. They will then be able to help you qualify the applicability of DATACAP to your customer's data collection needs as well as help the customer install DATACAP. A course is scheduled July 31–August 4 and there's still room for a few more SE's. The next one is not until October. Please contact your Sales Developer with any questions you have.

Sales Aids

Have You Ordered Your Microprogramming Seminar Package?

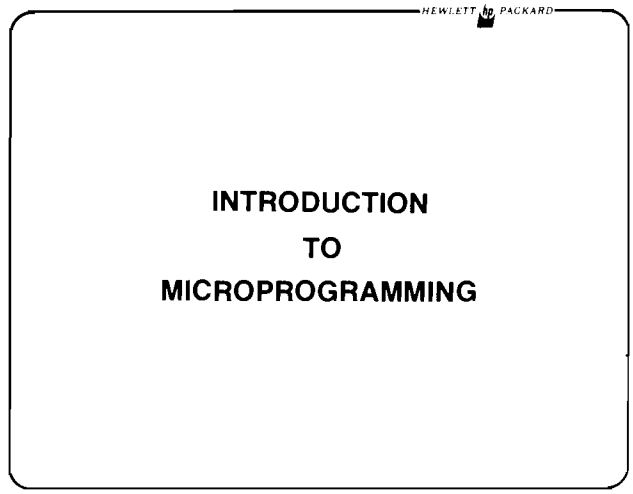
By: Dennis Haar/DSD

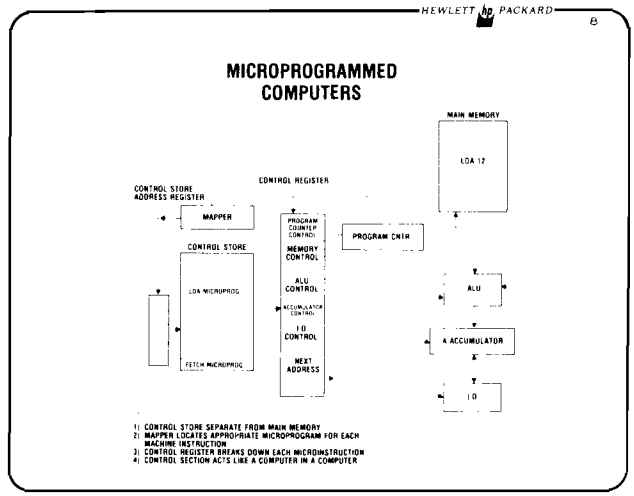
Although many orders have already come in, I have learned that many sales offices missed my May 1, 1978 *CS Newsletter* article on the new microprogramming seminar package. This technical seminar resulted from inputs received at last year's OEM Senior Sales Seminar. The package is flexible, designed to be given at the field office as a half-day seminar or just a short one hour overview.

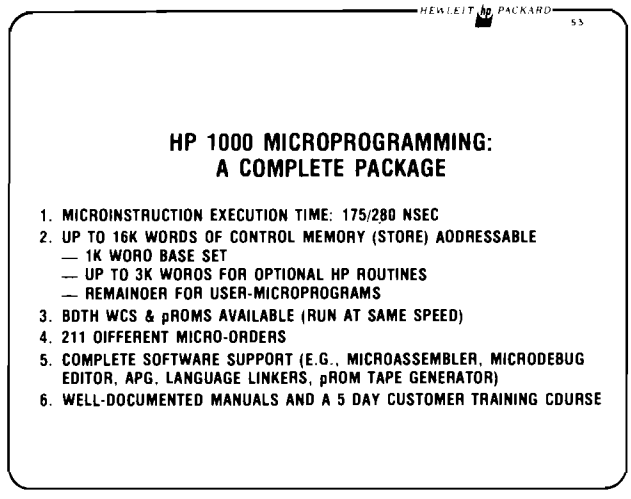
The package consists of 54 color overhead slides enhanced with graphics, like those accompanying this article, and a detailed script for the entire set. There is also a microprogramming demo featuring the "Shell Sort" example which can be obtained by sending me a blank magnetic tape (at least 200 ft.) at DSD.

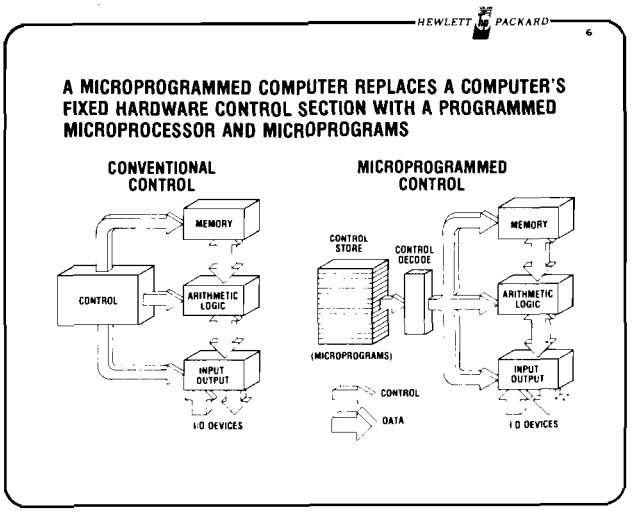
The slides and script can be ordered through the HEART System, attention *Sylvia Cohen*, Bldg. 42U, Data Systems Division. The kit number is BS-13, and the price is $105.00.

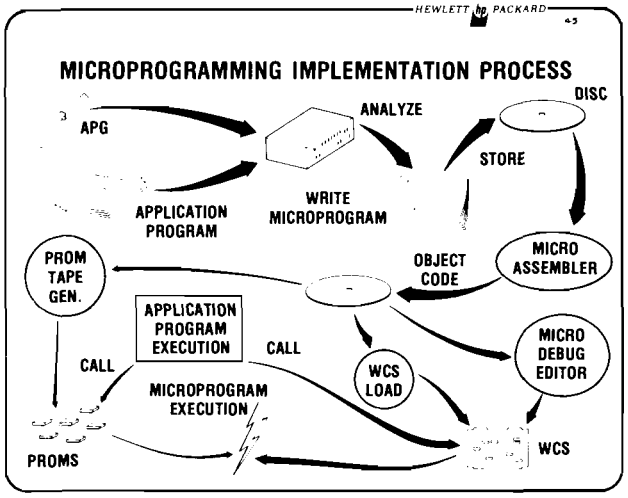
Order your package today and be ready for your next OEM Seminar!











Changes in 2240A Warranty and Installation Services

By: Pete Palm/DSD

Revision Due to New Computer Products Purchase Agreements

How is 2240A Ordered?	Installation Included	Warranty Period	Start of Warranty	Service During Warranty
With HP 1000 computer system	Yes! NEW!	90 days	Install date	On-site
Add-on to an HP 1000 System and maintenance contract	Yes! NEW!	On maintenance agreement	Install date	On-site
Stand alone, or with calculator	Only by special quote	30 days NEW!	Ship date	Return to HP (at HP's option we may repair on-site) NEW!

HOW TO EXTEND INSTALLATION AND MAINTENANCE SERVICES???

Short Term Maintenance Agreements are available from the Computer Service Division (*Olen Morain for North America)* to provide extensions of installation and maintenance services to 90 days, or more, up to one year.

RTE-IV/2313 Support Now Available

By: Pete Palm/DSD

The 92066A RTE Measurement and Control Software Package has been augmented on software revision #1826 to include RTE-IV compatible drivers for the HP 2313B, HP 91063A (HP 6940B), 9611R, 9603R, and the HP 91000A. RTE-M, RTE-II, and RTE-III upgrade customers can now get the 92066A RTE-IV update if they are on the 92066S subscription service; otherwise they can get the update for $250 by ordering 92066A after July 1, 1978.

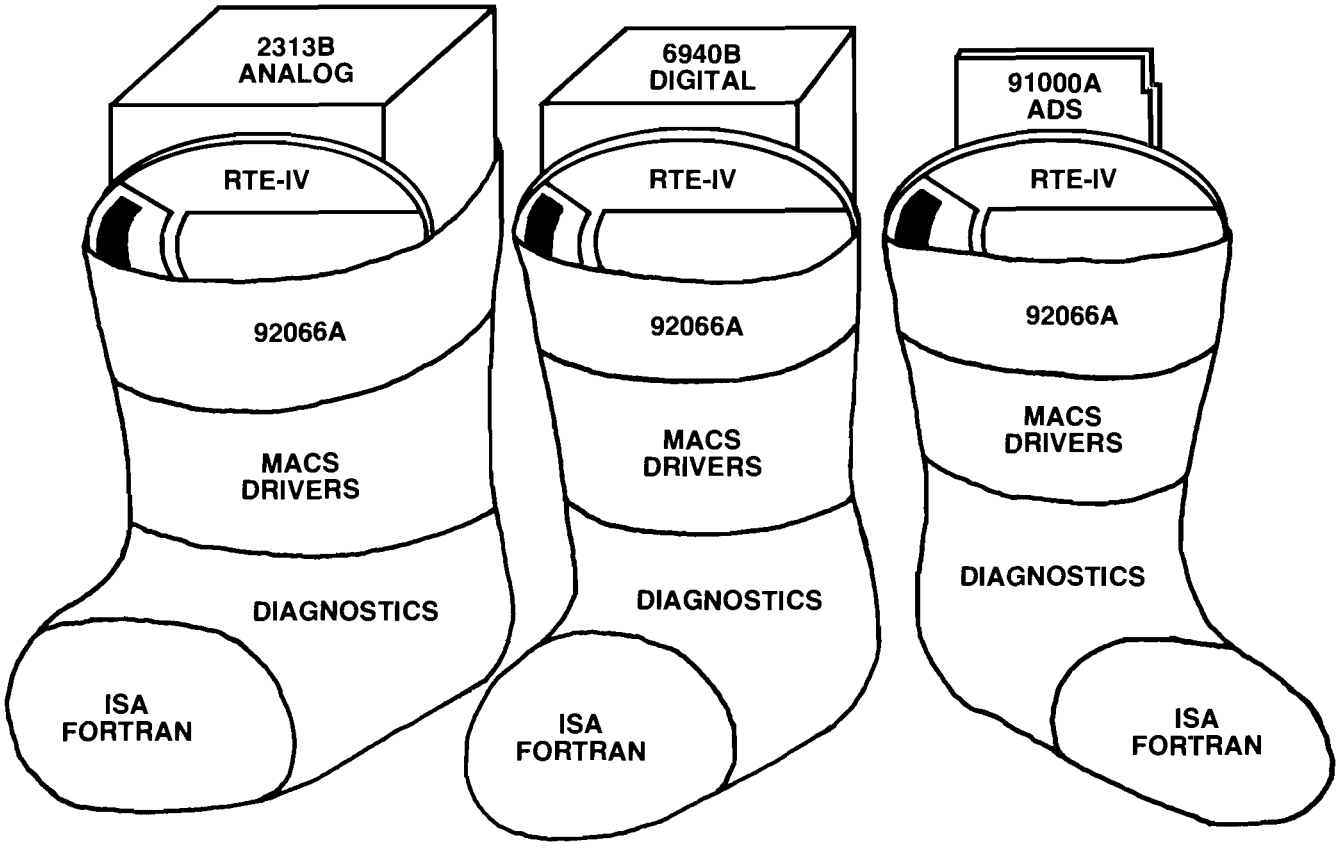
Data Sheets and Diagnostics Cleaned Up

A revised 92066A data sheet is in the mail to you (available July, 1978).

Old non-operational paper tape diagnostics have been removed from 2313, 91000A and 9611R subsystems. They are now consolidated and made operational for HP 1000 systems (and old paper tape systems) on 92066A. See table below for prerequisites and availability for 92066A.

Hardware Product	RTE-IV (III, II, M) Compatible Software
All HP 1000 Systems (including Models 40 and 45)	92066A-20 included in *all* HP 1000 systems
HP 2313B Analog I/O Subsystem	HP 1000 or 92066A (paper tape) or 92066A-020 (mini-cartridge) software pre-requisite
HP 91063A (6940B) Digital I/O Subsystem	92066A (paper tape) or 92066A-020 (mini-cartridge) software prerequisite
HP 9611R MACS Station	92066A (paper tape) or 92066A (minicartridge) software prerequisite
HP 91000A Plug-in ADC	92066A (paper tape) or 92066A-020 (mini-cartridge) software prerequisite

ONE SIZE FITS ALL!



DISC MEMORY NEWS

Division News

DMD Reliability Programs In Manufacturing

By: Doug Spreng/DMD

A specific objective at DMD is to provide to our customers the most reliable and serviceable disc drives in the industry. Clearly, this responsibility begins in Product Development with conservative design, selection of highest quality components, and rigorous testing. However, once a product is in production, there are many things that can be done in the manufacturing process, besides emphasis on good workmanship, to deliver a higher quality product to the customer. Here are some of the programs that DMD has instituted in the past year to help meet the above objective.

Component Burn-In

All above average failure rate integrated circuits are burned in before being stocked. Selection of the suspect IC's is made by looking at failures during our board burn-in tests (see below) and from Corporate failure rate data.

Board Burn-In

All loaded printed circuit boards, except power supply boards, are burned in at 75°C for 48 hours with bias applied. This is the equivalent to 500 hours operational at room temperature for each board. The cost of this procedure is not small. Aside from power consumption and longer lead times, the capital equipment and tooling costs over $10K for each setup. We currently have six in operation.

Drive Run-In

In addition to normal test time, all drives are operated for 48 hours, including power cycling. This stresses all the mechanical components and the power supply board. This run in is followed by 24 hours of long pass testing looking at data error rate. All new products will be introduced under the same conditions for IC burn-in, board burn-in, and drive run-in.

Reliability Teams

Each major DMD product has a reliability team assigned to it, comprised of representatives from Product Assurance, R & D, Production Engineering, Service Engineering, and the production line. These teams meet monthly to review the warranty data, production failure reports, and field inputs. These discussions then lead to design changes, vendor changes, or other improvements that enhance each product's reliability. The leader of each team then reports quarterly to the Division Manager and his staff on the specific actions taken during the preceeding three months.

Serviceability

When a DMD product does fail in the field, there are a number of other programs within DMD that are designed to allow it's rapid return to operation.

For new products, product support packages (PSP's) are built concurrently with the first production units and sent to the field. This way, no DMD instrument arrives in the field without a corresponding PSP.

Replacement parts and assemblies have priority over production requirements. This means that CPC and CSD have a very high service level and are rarely out of replacement assemblies for field stocking. When conditions don't allow for this, a hot line (HL) or downed instrument (DI) order takes immediate priority on the production line. DMD's record over the last six months averages less than two days turnaround time on HL and DI orders.

Another program within DMD designed to eliminate lead time altogether for these replacement parts is the incorporation of the two-level stock number. Ordinarily PC boards and other replaceable assemblies are stocked at only one level which has not been tested in the instrument. If a hot line order comes in, non-drive tested parts must be placed in drives and tested for 24 hours—or parts undergoing test-in-progress are robbed from the production line. This new program will allow us to drive-test a certain number of these assemblies on a planned basis, above and beyond production quantities so we have an inventory of drive-tested assemblies on hand to ship out immediately ARO.

The manufacturing team at DMD is always looking for creative ways of enhancing the reliability and serviceability of our products so your customers will come back for more and more and more. . . .

LAY THOSE ORDERS ON US!!

DATA TERMINALS NEWS

Product News

Options Are Standard

By: Larry Roth/DTD

Effective July 1, Option 001 of the 2645A and Option 202 of the 13231A will be made part of the standard product at no increase in price. Data Terminals Division is treating this as a price reduction which means that all of your orders shipped in the last five working days of June with these options will have to do a credit and rebill to give your customer the benefit of the increased features at standard price. Any orders still on the books after July 1 should have a Change Order done against them to eliminate Option 001 and/or Option 202 since we will be shipping those as part of the standard units.

If you have any questions, please contact *Larry Roth*, Order Processing Manager at Data Terminals Division.

Sales Aids

Multipoint

By: Wendi Brubaker/DTD

Since HP systems are starting to support multipoint, and there are many Terminal Specialists looking at multipoint on non-HP systems, it is a good time to take a second look at multipoint. First of all, why is multipoint an advantage? The most obvious saving is in the communication costs when terminals are located at remote sites. One telephone line can support up to 32 terminals per modem. One line for multiple terminals also means less I/O cards in the CPU.

Multipoint protocol also provides better data integrity because it has block checking and retransmission capability. Some applications, like banking, cannot live with those occasional errors that point-to-point may not see; thus, multipoint is the solution.

Another feature is that terminals in the multipoint daisy chain can be separated by up to 2,000 feet. This is especially useful in environments that need terminals at stations throughout manufacturing facilities, hospitals, etc.

Now that your appetite has been whetted, let me give you some ordering hints. Multipoint comes in two flavors, synchronous and asynchronous. The 13260C Data Comm I/F is used for asynchronous and the 13260D I/F is used for synchronous communications.

There are three cables used in multipoint. The first terminal off the CPU or modem uses the 13232P cable. Subsequent terminals are daisy-chained together by 13232Q or 13232T cables. The difference between these cables is that the 13232T provides power-protect capability, allowing a CRT to go down without cutting the communication link to the CPU. Customers with terminals spread throughout many work areas will find this added protection a great help.

It is also important to order at least one terminal with monitor mode capability. This allows the communication line to be monitored in both directions and to be displayed on the screen. Monitor mode makes installation, optimization, and trouble shooting much easier, because you can see exactly what is happening.

One final ordering point; be sure that the terminals have 8K of display memory. This is recommended because multipoint can use large data comm buffers and these are subtracted out of display memory. For example, a 2645A could have a 2K input buffer and also have 1K of overhead that comes out of display memory; that leaves about 1K for the user's screen. Eight thousand bytes of memory would eliminate the possible problem of not having enough user display memory.

In closing, don't be caught on the IBM bisync question. Our terminals are *not text compatible* with IBM. What this means is that a 2645A cannot replace an IBM 3270 (not plug compatible) without changing the CPU driver. In fact, our HP system computers are the only systems that support the 2645/2648 multipoint as a standard option. We do have a few customers that have undertaken the job to write their own drivers on non-HP systems, so it is possible.

We are looking forward to even more multipoint terminals, so keep up the good sales job!

"Swallow The Carriage Return"

By: Tim Haney/DTD

Ever have a customer ask how he/she can develop a demo tape for some special application where the objective is to position the cursor to some nifty location on the screen and then record it for later use? But when the tape is read the cursor ends up in the left hand column one row below where it belongs! Why? Because the terminal always inserts a "CR" "LF" at the end of each record when it is recorded onto the cartridge tape. So much for the bad news—here's how to get rid of the "CR." The following escape sequence will do the trick:

E_c&a40c12R E_c&f1k2a1L

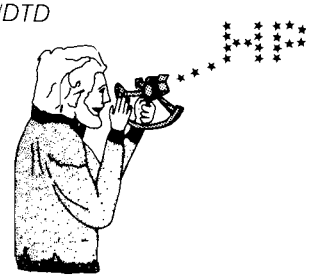
Where E_c&a 40c12R positions the cursor in column 40, row 12 (or any other column and row you may desire) and the E_c&f1k2a1L loads the softkey "f1" with the first character following the previous sequence. Since a "CR" is the first character, it is loaded into the soft key instead of being recorded onto the cartridge tape. If you're using a 2648, then you will probably want to use the CR softkey. That softkey already contains a "CR"; therefore, the whole operation costs you nothing! If you're using a 2645, then you must allocate at least one soft key to this operation.

Try it for yourself, doing it once helps you recall when you need to do it in six months for the "big" customer demo.

Service News

The CE Fix

By: Eric Grandjean/DTD

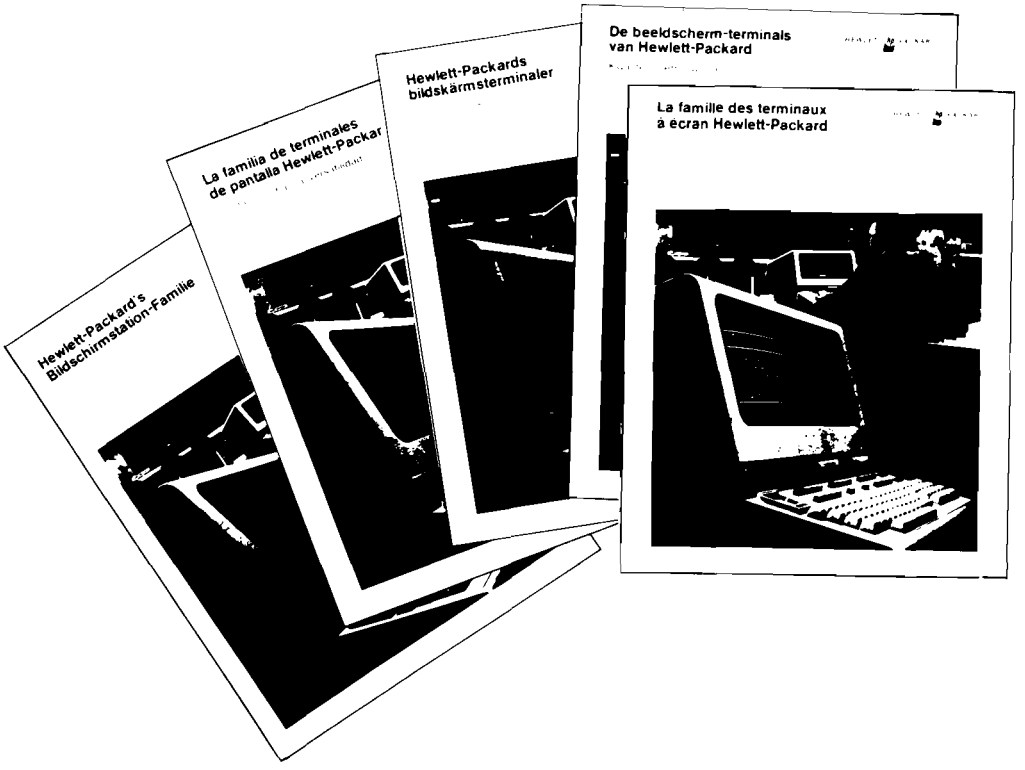


In astronomical navigation, a fix is a precise point on Earth which has been carefully calculated from heavenly body positions.

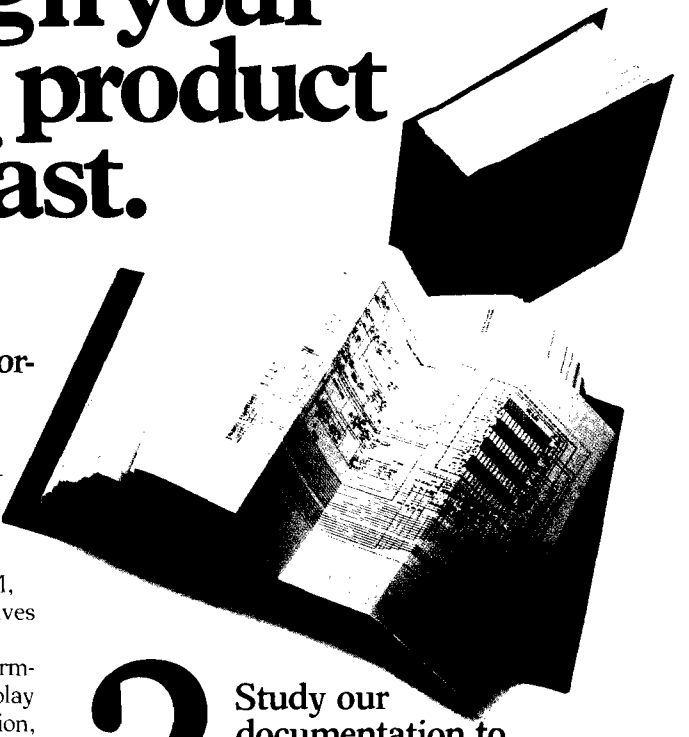
Getting a good "fix" on your problems so that they can be handled in the most efficient manner can save unnecessary delays. To come to the point, if your customer has a service problem, your direct and most efficient help will come from our CE group headed by *Jim Elliott*.

We understand that it is sometimes difficult to separate a problem which may have originated during a sale, from a problem which has occurred after the installation was made. If in doubt, call Sales Development and we will sort things out with you.

Remember—you can save your customer time and money by calling one of your expert problem-solvers in the factory.



Design your smart product fast.

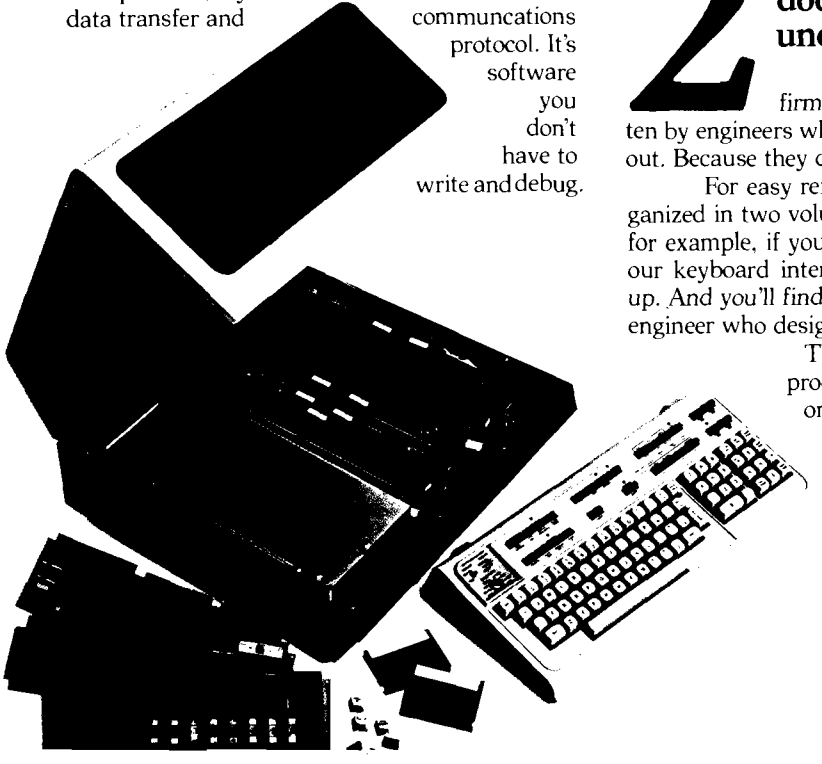


1 Start your microprocessor-based product with HP's 2649A.

It's an 8080 MPU, CRT display subsystem, power supply and 15-slot backplane, all in a good-looking case.

You choose the RAM, PROM, ROM, serial or parallel I/O, dual cartridge tape drives or keyboard you need for your product.

Then take advantage of our standard firmware, including utility subroutines for data display manipulation, keyboard switch translation, data transfer and communcations protocol. It's software you don't have to write and debug.



2 Study our documentation to understand the 2649A.

Our 2649A hardware and firmware documentation was written by engineers who know the 2649A inside and out. Because they designed it.

For easy reference, its 1,800 pages are organized in two volumes like an encyclopedia. So, for example, if you need the pin assignments for our keyboard interface module, it's easy to look up. And you'll find the details in the words of the engineer who designed it.

The more you know about our product, the less time you'll spend on yours.

GENERAL SYSTEMS NEWS

Product News

Introducing the HP 3000 Series III

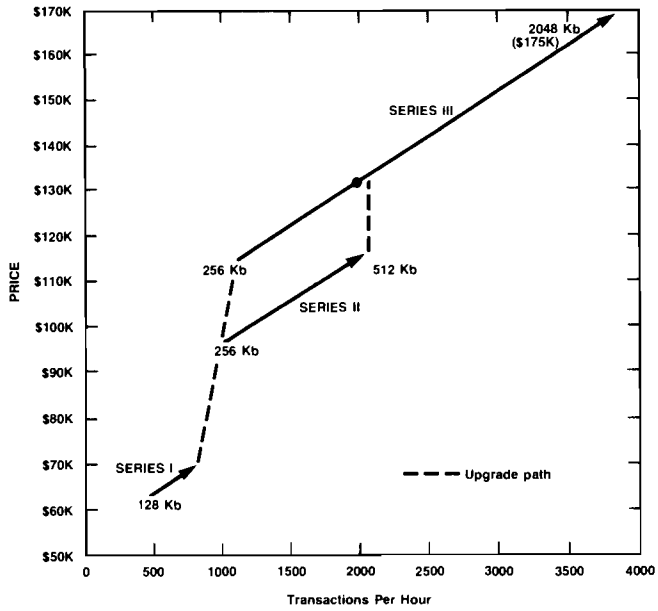
By: Fred Gibbons/GSD

During the evolution of the HP 3000 product line, two major trends in computing have emerged: terminal-oriented transaction processing applications and decentralized data processing. Evidence of this is the increasing number of HP 3000's sold to both large and small firms for dedicated applications such as accounting, materials management, or order processing. Almost all of these customers have a goal of giving more users in different functional areas of the firm on-line access to computing power and local data bases.

Designed for On-Line Transaction Processing

With the introduction of HP 3000 Series III, Hewlett-Packard is in a unique position to take advantage of this trend toward on-line transaction processing applications. The Series III with memory of up to 2048 Kb dramatically increases the price/performance range of the 3000 family.

Series III: A New High Performance Member of an Upgradable MPE Based Family



Price/Performance Range of the 3000 Product Line

The 3rd Generation of 3000's

The name HP 3000 Series III, was chosen to mark the beginning of a new 3rd generation of 3000's. It is a name which builds upon the broad awareness established by the Series I and II, and signifies the extension of a family of upgradeable MPE-compatible systems.

Expandable to 2 Megabytes

The Series III System is racked, powered, and configured identically to the base 2-bay Series II Model 6. The Series III CPU, MUX, selector, backplane, 16K RAM memory arrays and fault correction are new. The Series III will have the ability to address up to 2048 Kb of memory versus 512 Kb for the Models 6 and 8.

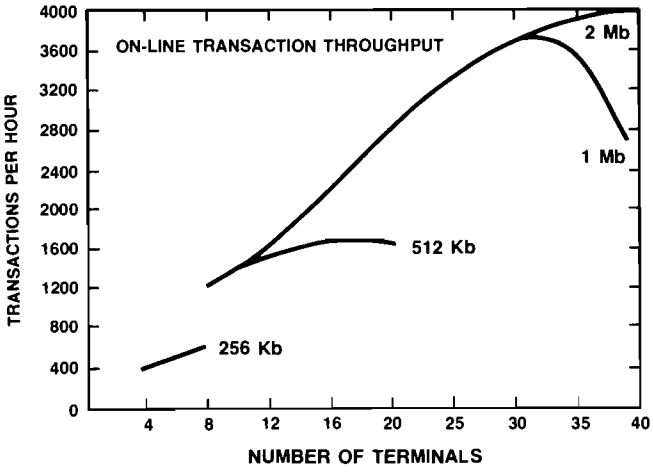
I/O Growth Path

The base system configuration is 256 Kbytes with options to increase this to 512 Kb, 768 Kb, 1024 Kb, 1536 Kb and 2048 Kb. As with the Model 6, the base Series III has 10 spare I/O slots and capacity to support 32 terminals. Option

200 of the Series III will add a 3rd bay, 13 extra I/O slots and capacity for an additional 32 terminals (64 in all). This configuration is identical to today's Model 8.

Increased Performance

From a performance point of view, the large memory capacity of the Series III can be used to: increase the number of on-line terminals while keeping response time constant, increase system throughput, or decrease response time for a given number of terminals. The following graph illustrates this:



Enhanced Operating System

In addition to the Series III, we are introducing several enhancements which augment significantly the transaction processing capabilities of the Series III. These enhancements are included in MPE-III, our latest version of the MPE Operating System, and are listed below.

- UNCL (Unified Command Language) (Friendlier, more powerful commands)
- Private Volumes capability on 7905 and 7920 discs (Faster back-up and data security)
- Tape labels (Tape Security)
- Serial Disc Interface (Faster back-up)
- Store/Restore Enhancements (Easier back-up)
- Disc Condense Facility (Better utilization of Disc File Storage)
- Generic Names (More powerful file manipulation) New Memory Manager (Increased system throughput)

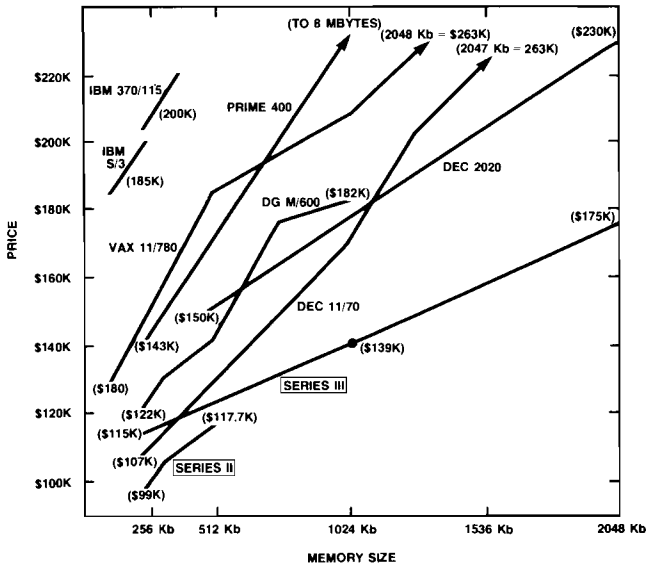
In addition two new hardware products will be supported by MPE-III. These are:

7925 Disc (As system domain disc)

2635 Terminal (As system console and local or remote application terminal)

Industry Leader in Memory Price

From a price point of view, the Series III is the industry leader in large memory configurations. Series III memory is priced at $8,000 per 256 Kb *including* error correction. That's $32,000/megabyte. Here is how we stack up against the competition on an apples-to-apples system basis.



Series III Pricing versus Competition

A Contribution to Communications

The Multi-point Terminal Software (MTS/3000) is our new data communications product which provides multi-point operation for HP 3000 Series II and III systems using the HP family of multi-point terminals (2645A/2648A/2641A). The terminals are supported as both log-on (interactive) and full page mode data entry devices. MTS/3000 makes a substantial contribution toward reducing communications costs for both local and remote terminal sites.

A Product Family: Series I, Series II, Series III

The Series III does not obsolete the Series I or the Series II. At $64,000 the Series I is still the lowest cost entry into the 3000 product line. Similarly, at $99,000 the 256 Kb Series II is the lowest cost entry system that can run MPE-III (that's right . . . the base memory of the Series II is now 256 Kb up from 128 Kb with no increase in list price). The Series III is priced at $115,000 for a basic 256 Kb configuration, a higher price for greater expansion capability.

A Growth Path for Every 3000

However, every HP 3000 customer, no matter which system he starts with can UPGRADE to the next series at only a small premium. Thus with the introduction of the Series III, Hewlett-Packard has significantly broadened the price/performance range and transaction processing capabilities of the 3000 product line to meet today and tomorrow's customer requirements.

Sooooo . . . GO YE FORTH AND PROMOTE YE THE SERIES III.

GOOD SELLING!!

HP Enters the Manufacturing Applications Market in North America

By: Pete Van Kuran/GSD

June 27th represented an important milestone in support of CSG's goal to become a major supplier of computer systems to manufacturing companies. In introducing MFG/3000 in North America, GSD announced HP's first application product designed specifically for manufacturing companies. Our entry into the manufacturing applications market with a product that can make a significant contribution to improving the method of managing inventory and customer deliveries represents a major step in increasing our penetration of the manufacturing industry. The press release that was sent to the business press (see below) emphasizes the benefits that can be realized with MFG/3000.

In addition to the business media and EDP press releases, a separate press release was especially prepared for the end-user customer of MFG/3000—the manufacturing professional. In all, over 300 periodicals will receive copies of the MFG/3000 press releases. Obviously, this will generate a lot of customer interest for this exciting new product.

To help you capitalize on this publicity and sell MFG/3000, two pieces of sales literature are available through standard literature distribution channels. They are:

MFG/3000 Data Sheet	5953-0540 (47)
MFG/3000 General Information Manual	5953-0548 (47)

A third piece of literature is the MFG/3000 Performance Brochure. This brochure has been printed in a preliminary version based on performance tests done on a Series II with MPE-II. A final version will be available with Series III/MPE-III based tests later in the summer. The preliminary Performance Brochure is available from your local Industry Specialist.

In addition to sales literature, the MFG/3000 manuals can be an important tool in the sales process. These manuals can be ordered by sending a HEART order to Corporate Parts Center (Div. 15) for the following part numbers:

32380-90001	EDC/3000	User's Manual
32380-90002	EDC/3000	Administrator's Manual
32380-90003	EDC/3000	Programmer's Manual
32384-90001	IOS/3000	User's Manual
32384-90002	IOS/3000	Administrator's Manual
32384-90003	IOS/3000	Programmer's Manual
32388-90001	MRP/3000	Administrator's/User's Manual
32388-90002	MRP/3000	Programmer's Manual

Another valuable tool to help sell MFG is your Industry Specialist. In addition to his or her in-depth knowledge of the product, this SE has seminar material including overheads and a demo that present the technical details of MFG/3000. The seminar, which has been given many times in the U.S. and Canada, has been well received by customers. Contact your local Industry Specialist for the schedule in your area. The sales literature, manuals, and seminar will be very useful in developing leads generated by the North American introduction into sales.

Thanks for your enthusiasm and participation in the GSD NPT. It's been motivational for us and we hope it was for you. We are very excited about MFG/3000 and it's ability to solve real customer problems. Let us know what we can do to help.

HP Enters Applications Market with On-Line Materials Management System For Manufacturing

By: John Kane/Corp.

"Palo Alto, June 27, 1978:

Hewlett-Packard Company, a leading supplier of small computer systems, today introduced its first applications software products for manufacturing companies.

Designed for use with Hewlett-Packard's HP 3000 computer system, the three new applications products enable manufacturers to improve inventory management, control costs, and obtain more timely and accurate information on which to base purchasing and manufacturing decisions.

The on-line materials planning and control system can benefit large or small manufacturing companies with some automated materials management experience now using traditional batch processing techniques.

"Until now, computerized materials planning and control software was available primarily from main frame computer companies and third party firms that specialize in developing and customizing software," said *William Krause*, marketing manager, General Systems Division.

The new MFG/3000 product consists of three modules offered singly or as a complete, complementary package:

- Engineering and Data Control (EDC/3000), which creates and maintains bills of materials and labor.
- Inventory and Order Status (IOS/3000), which processes material issues and receipts, maintains planned and released orders, manages planned issues, and provides current balances for all inventory items.
- Materials Requirements Planning (MRP/3000), which plans orders based upon projected demand.

"MFG/3000 is an outgrowth of HP's own experience in the use of HP 3000 computers in interactive applications in its manufacturing operations," said *Krause*. "The products have already been installed at several customer sites. Significant improvements in inventory control and manufacturing efficiency have been demonstrated."

The products, based on proven materials management techniques, are designed for use by materials and manufacturing personnel. The user can call up a variety of forms on an interactive CRT screen which simplify many of the tasks associated with materials planning and control.

On-line transaction "menus" are shown on the terminal screen to guide the user in making entries. If unsure of the proper entry to make, the user can initiate a "help" procedure which will display information on the screen to assist in making the correct entry.

An important advantage of MFG/3000 is the ease and speed with which the user can enter, retrieve and modify data via an interactive terminal. Easy-to-use HP 2645 CRT terminals are used to enter data on forms which resemble those typically used in materials planning and control departments. Terminals also are used to update information in the computer data base, and retrieve information needed to make materials management decisions.

In-house data processing professionals are not required to implement MFG/3000. The standard products are installed without the need for programming, greatly reducing customer development time and enabling the user to more quickly achieve improvements in materials management.

Access to information is easy, efficient and flexible through the use of HP 3000's IMAGE data base management system and QUERY facility.

"In support of this commitment to the manufacturing applications business HP has established an organization dedicated to developing, marketing and supporting the company's manufacturing products, including a team of industry specialists working with customers in the field," Krause said.

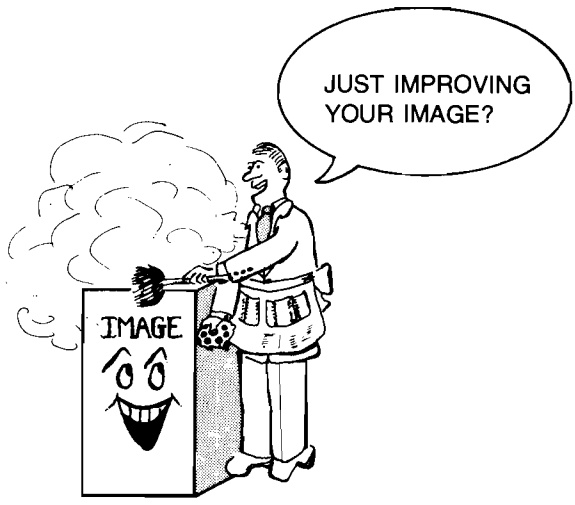
Each of the products includes appropriate documentation, on-site consultation by an HP manufacturing industry specialist, customer training, and support including a telephone consulting service and on-site software service when appropriate. This HP support saves the customer the ongoing maintenance and support costs normally associated with in-house development of complex applications systems.

Price of the software is $5,000 per product, plus $150 per month. HP 3000 computers capable of supporting MFG/3000 begin in price at $99,000. The applications products are available only in North America.

If you choose to review this item, fastest response to your readers' inquiries will be assured by mailing them to INQUIRIES MANAGER, Hewlett-Packard Company, 1507 Page Mill Road, Palo Alto, CA., 94304."

IMAGE/3000 — Improving a Great Product

By: Sam Boot/GSD



Most people in Hewlett-Packard, and many of our HP 3000 customers, agree that IMAGE is one of the most successful software products on the HP 3000 system. As part of GSD's continuing commitment to data management products, we have recently enhanced IMAGE and will continue to do so throughout calender year 1978! The five present or future enhancements are:

- Remote data base access
- Record Locking
- Performance enhancements
- Transaction logging
- Utility enhancements

Remote Data Base Access

IMAGE has been enhanced in conjunction with DS/3000 to provide remote data base access. Using RDBA, programs executing on a local 3000 may access data bases on a remote DS-linked 3000.

The application is coded identically regardless of where the data base resides. RDBA is on the MIT containing the first release of MPE-III. This enhancement and all other enhancements work on MPE-III only.

Record Locking

For multiple users accessing a data base on-line, locking at the record, set, or data base level can improve data base throughput while improving data integrity. Those users already locking at the data base level need not change their programs. To lock at the set or record level requires minimal recoding of programs.

Performance Enhancements

Two IMAGE features appearing this fall will help application throughput. They are shared I/O buffers and global control blocks. In the past, IMAGE maintained four buffers for each user opening the data base. If the user wished to access a record, IMAGE accessed the disc to place the record in his buffer regardless of whether the record already existed in another user's buffer. With buffer sharing, all users share a common pool of I/O buffers. If a user wishes to access a record, IMAGE checks the buffer pool. If the record already exists in memory, then IMAGE avoids a time-consuming disc access.

IMAGE combines buffer sharing with global control blocks to reduce IMAGE memory overhead by up to 75%. In the past, IMAGE created a copy of the data base root file for each user. The new version will use a single root file for all users. If ten users in the past took up a total of 100 Kbytes they now take a total of 25 Kbytes (not counting user application code and data stacks.)

Transaction Logging

A major feature desired by many data base users is transaction logging and recovery (sometimes called "journalling".) Transaction logging is useful for recovering crashed data bases where the pointers or data are suspect.

Users merely restore a good copy of the data base and run the HP supplied recovery utility against the tape. All of the transactions are restored to the data base without manual re-entry.

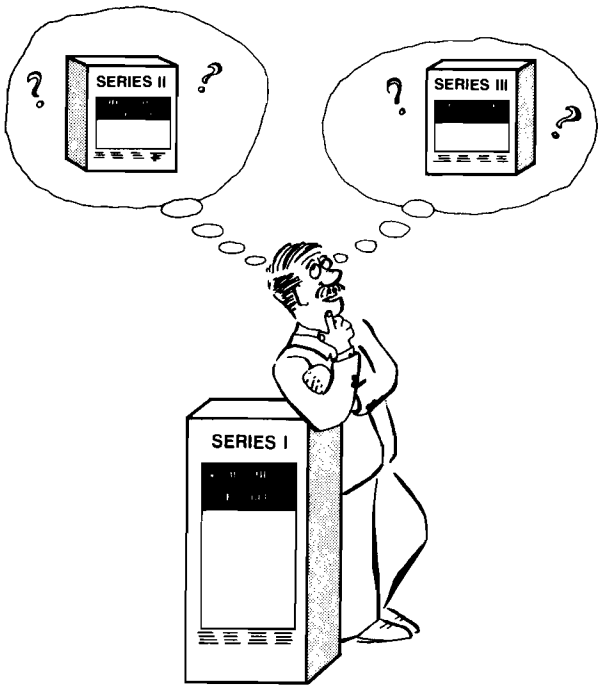
Utility Improvements

The final improvement is to the DBUTIL program. DBUTIL now uses an interactive command language. In addition, IMAGE has increased its vocabulary to support administrative functions for RDBA, record locking, and other soon-to-be-released enhancements.

Need to know more? Read the new *Sales Training Manual* for IMAGE/QUERY distributed at the New Product Tour in your region. Not only does it describe the coming enhancements, but it helps both the new and experienced HP salesperson understand what IMAGE is, and how we stack up to the competition. With GSD's continuing commitment to make a great product better, we compare very favorably indeed!

Series III Upgrade for Your Pre-Series II Customers

By: Jon Jacobson/GSD



Now that you've heard about the HP 3000 Series III, I'm sure there is a question on the tip of your tongue. "What about my pre-Series II customers? How do they get to Series III?" As of August 1, 1978 GSD will be offering a direct upgrade path to Series III for pre-HP 3000CX, HP 3000CX and the HP 3000 Series I. While we will still be offering the upgrade products to the Series II; we will now have a one-step upgrade to the expanded capabilities of the larger memory configurations on the HP 3000 Series III system.

The 30307A upgrade to a 256 Kb HP 3000 Series III will have the same options as the existing 30306A upgrade to the Series II Model 6. This means the same credit options will apply.

Pricing, Ordering, and Availability:

This upgrade product will be on the Corporate Price List August 1 and will be available for shipment after October 1. The following example illustrates what a typical HP 3000 Series I would have to do to upgrade to an HP 3000 Series III.

Series I to Series III:

30307A	Upgrade to Series III (256 Kb)	$58,000
-001	Power Supply	+5,000
-050	Delete Isolation Transformer	–2,100
-132	Selector Channel	+3,000
-200	Returned 128 Kb Parts	–10,000
-202	Return Sel Chan Parts	–500
	Net Total	$53,400

NOTE: Compare this to the current Series II upgrade.

30306A	Upgrade to Series II Model 6 (192 Kb)	$52,500
-001	Power Supply	+5,000
-050	Delete Isolation Transformer	–2,100
-132	Selector Channel	+3,000
-200	Returned 128 Kb Parts	–10,000
-202	Returned Sel Chan Parts	–500
-501	Expand Memory to 256 Kb	+3,700
	Net Total	$51,600
	NET DIFFERENCE	$ 1,800

Beyond 512 Kb of memory:

The $1.8K initial premium on 30307A over the 30306A can be best realized when expanding memory beyond 512 Kb.

30307A Upgrade to 1 Mb:

Net Total for Series I upgrade to a Series III with 256 Kb using the 30307A upgrade product.	$53,400
30307A-507 Expand memory to 1024 Kb	+24,000
Net Total	$77,400

30306A Upgrade to 1 Mb:

Net total for Series I upgrade to a Series II	$51,600
Model 6 with 256 Kb using the 30306A upgrade product.	
30417A Upgrade to Series III (512 Kb) from HP 3000 Series II.	+40,000
30417A-501 Credit for returned 256 Kb	–6,400
30008B (2 ea.) Expand memory to 1024 Kb	+16,000
Net Total	$101,200
NET DIFFERENCE	$23,800

Thus your customer will realize a substantial savings in the long run as his memory requirements grow. In either case, your customer can further expand to 2048 Kb using the 30418A memory expansion kit; with Opt 001 and 2 each 30008B memory array boards.

Additional I/O Capability:

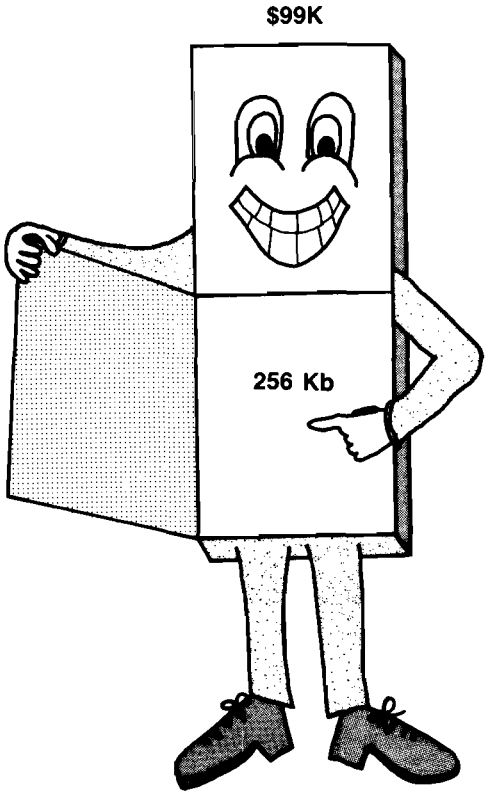
The 30307A comes with 10 open I/O slots. If more than 10 are required to support your customer's needs, contact GSD Sales Development and request a special order.

Additional Information:

The 30307A upgrade to Series III data sheet and price/configuration should have been made available to you with the Series III introduction. Please contact Sales Development if you didn't receive a copy. Installation time for the 30307A should be the same that you have been experiencing with the current upgrade to the Series II.

Series II Bundles 256 Kb Into Base System!

By: Chosen Cheng/Sharon Bradley/GSD



Effective July 1st, the Series II Model 6 base configuration will be changed from 128 Kb to 256 Kb and will continue to sell for $99K. This in effect is a $7.4K price reduction by the addition of two memory boards to the base system. The model 8 base system will remain at 320 Kb but will drop in price by a corresponding $7.4K, to $121.6K.

By the addition of two memory boards to the base system, fewer boards will be supplied with options 502, 503, 504 and 505 to the Model 6. This change results in price decreases on memory options to Model 6 only (see chart).

		Price Old	Price New
32416A	Series II Model 6 *(eff. 7/1/78 to include 256 Kb)	99	99
	Opt. 500 Expand memory to 192 Kb	3.7	N/A*
	Opt. 501 Expand memory to 256 Kb	7.4	N/A*
	Opt. 502 Expand memory to 320 Kb	15.0	7.6
	Opt. 503 Expand memory to 384 Kb	18.7	11.3
	Opt. 504 Expand memory to 448 Kb	22.4	15.0
	Opt. 505 Expand memory to 512 Kb	26.1	18.7
32418A	Series II Model 8	129.0	121.6

Thus, customers in the backlog will need to submit change orders.

1. Customer orders for a Model 6 system with options 502, 503, 504 and 505 require that the order be deleted and re-entered (HEART will apply new dollars to the re-entered order).
2. Customer orders for a Model 8 require that the order be deleted and re-entered (HEART will apply new dollars to re-entered order).
3. Customer orders for a Model 6 with option 500 (192 Kb) require a deletion and re-entry without option 500, as base system will now be supplied with 256Kb. This will give your customer a $3.7K credit plus an additional memory board.
4. Customer orders for a Model 6 with option 501 (256 Kb) require a deletion and re-entry without option 510 as base system includes 256 Kb. This will give your customer a $7.4K credit.
5. System orders shipped within the last five (5) working days of June will be eligible for the same terms as orders shipping after July 1st. You will receive requests for credits and re-bills on these orders.

Savings on Memory

Since customers will be getting more memory for $99K, we encourage your customers to take advantage of this savings and increase their memory in lieu of a credit for $3.7K for option 500 and $7.4K for option 501. This is an opportunity to save on separate field installation of add-on memory (30008A 64 Kb add-on memory costs $4000) and should be particularly attractive to a customer anticipating future Series II memory expansion.

It is most important that these Change Orders be processed as soon as possible after July 1. Order Processing is ready to work with you on each customer situation.

If you have any questions please contact *Sharon Bradley* on Ext. 3045 at GSD.

With this additional memory the Series II offers even more value to your customer and even more punch to your product pitch!!

GOOD SELLING!!!

IMAGE/3000 — New Versions, New Manuals

By: Sam Boot/GSD

As of July 1, IMAGE/3000 now comes in two flavors — one version for Series I and another version for Series II/III. The Series I version of IMAGE/QUERY is 32235A. Monthly Software Fee is 22823A option 008.

The Series II/III version of IMAGE/QUERY is 32235B. This version of IMAGE runs on the MPE-III operating system only. The monthly Software Fee is the same as Series I IMAGE — 22823A option 008.

Manuals for IMAGE and QUERY have changed also. For the Series I, the manual is the same as it has always been — 30000-90041. For Series II/III, order the new manual 32215-90003. This new manual includes information on Remote Data Base Access, which was released in conjunction with DS/3000 enhancements on the first release of the MPE-III MIT.

Remember to order carefully — avoid embarrassment!

Programmable Controller Discontinuance And Support Life

By: Richard Scott/GSD

August 1, 1978 is the beginning of the 5-year obsolescene program for the HP 3000 Programmable Controller products. On August 1, 1977 the following products were removed from our Corporate Price List:

- HP 30300A and HP 30300B Programmable Controller Subsystem C with BCS
- HP 30301A and HP 30301B Programmable Controller with RTE-C
- HP 30361A and HP 30361B Kits — Programmable Controller Interface
- HP 30403A Kit — RTE-C/3000 Software
- HP 30404A Kit — BCS/3000 Software

Support for current installations on maintenance contracts will continue for a maximum period of 5 years until August 1, 1983.

There are two major reasons for discontinuing this product line. First, the HP 2100, which was the standard processor for the Programmable Controller, is no longer actively marketed by Data Systems Division. Second, the hardwired serial interface link between DS/1000 and DS/3000 has been available since November. It provides a much more flexible solution to your customer's special interfacing problems. By distributing more processing to the new HP 1000 operating systems, your customer can more efficiently utilize his HP 3000 processor.

A letter has been sent to your District Manager with further details, along with formal notification letters from GSD that are to be sent to your customers.

If you need more information to advise your customers or if you have special customer requirements, first check with your District Manager and then if questions still exist, contact GSD Sales Development. Additional copies of the customer notification letter and the DS/3000 Enhancements Field Training Manual which covers the DS/1000 to 3000 communication capability, are also available.

Sales Aids

The System/3 Upgrade Program

By: Jim Kennedy/GSD

The System/3 Upgrade Program is a GSD marketing program designed to assist you in identifying, qualifying, and selling HP 3000 business. The program has several components:

- **Data Base**

  An International Data Corporation (IDC) data base of 46,000 entries describing S/3's and general purpose

computer (type A) sites of size 370/125 or smaller and minicomputer (type B) sites between $25,000 and $600,000 in value. This IDC data base was distributed to each regional manager (domestic U.S.) in February, 1978. An update to this data file will be provided in August, 1978 and February, 1979.

- Slide Presentation

  A set of seminar modules (slides) and script which describe the benefits of "GOING ON-LINE" with the HP 3000 as well as how to manage a successful S/3-to-3000 conversion effort.

- Support Plan

  A comprehensive S/3-to-3000 conversion support plan with the following components: (A) the IBM S/3 to HP 3000 conversion 3-day course for HP system engineers (#GSD SE 16, the next offering is 8/9/78). (B) the IBM S/3 to HP 3000 3-day course for customers (# 33816T, offered at technical centers for $300 per student or #22816B, offered on-site for $3000), (C) the IBM S/3 to HP 3000 Transaction Guide (#32104-90004) and (D) program and file conversion aids available through the Contributed Library and from Systems Engineering support.

GSD assistance will be provided, when desired, for organizing and presenting S/3-to-3000 upgrade seminars.

Key Benefits

These sales tools can help you locate and qualify high potential HP 3000 customers in your territory and customize your presentations to:

- Sell the customer advantages of HP CSG products and services
- Describe an easy S/3-to-3000 conversion process with comprehensive SE support
- Demonstrate HP 3000 software and systems

The Successful Seminar

Several sales regions have used the slides to hold local "GOING ON-LINE with the HP 3000" Seminars. The successful seminar requires four to eight weeks of planning and organization.

The typical calendar of events is (1) to interrogate the IDC tape for the name, address, and phone number of S/3's and other potential 3000 customer installations in your territory using the STANDARD METROPOLITAN STATISTICAL AREA (SMSA) and/or Zip Codes, (2) prepare a seminar agenda tailored for the expected audience and schedule the presentors, (3) reserve the seminar location, presentation and demonstration equipment, (4) mail announcement brochures with a cover letter specifying the location, date, time, seminar highlights, and return postcard which should be used to indicate the customer's interest level, (5) make at least one follow-up call to potential attendees to restate the benefits of the seminar, the time, date, and location and (6) prepare the final seminar agenda and handout materials (e.g., IBM S/3 to HP 3000 Transition Manual. HP 3000 Price/Configuration Guide, etc.).

Jack Green, sales representative in Paramus, recently coordinated several successful S/3 conversion seminars in the New York Metropolitan area with the assistance of GSD (*Larry Nalewak,* SE support and *Jim Kennedy,* Product Marketing). According to *Jack,* "we had three separate seminars with a total of 54 attendees. Of these there appear to be about 10 good leads. They were great. We felt that the seminars were well worthwhile." The HP 3000 "GOING ON-LINE" seminar has also been held in Houston, Texas, (*Ralph Godfrey,* District Manager), Los Angeles, California, (Airport) (*Joe Pifko,* District Manager), King of Prussia, Pennsylvania, (*Bill Moore,* Sales Representative), Long Island, New York (*Ange Colucci,* District Manager), S. Plainfield, New Jersey (*Maria Daniels,* Sales Representative).

You can give a successful S/3 replacement seminar also and expedite the development of this sales potential in your territory. To assist you in this effort GSD has made a comprehensive set of the S/3 seminar materials available. Order by submitting an IOS for Part Number 30000-90138 to GSD Marketing Communications, Attention: *Bob Hall.* The S/3 replacement seminar materials consist of:

- 50 color overhead transparencies
- Script describing the key points for each overhead
- Seminar preparation quidelines
- Sample S/3 seminar agenda

If you have any questions regarding this seminar or the S/3 upgrade program do not hesitate to contact me at GSD (X2760).

HP GRENOBLE NEWS

Sales Aids

Demonstrating the HP 3070B

By: Georges Ouin/HPG

The HP 3070B demonstration guide explains how to configure the terminal before making your demonstration. However, it does not specify the type of documents the reader can or cannot read.

Let's tell you what the reader cannot read to prevent you getting into trouble.

The reader *cannot* read:

- Documents without clock marks printed and:
  - punched with a fixed 40 column density (constant 4.42 mm/.174 inch column spacing);
  - marked with a fixed 80 column density (constant 2.24 mm/.087 inch column spacing);
- Documents with Clock On Data (COD) marks printed with a density greater than 40 column (column spacing smaller than 4.42 mm/1.74 inch).

Why not order your HP 3070B demo kit (40200A-G89 see *CS Newsletter* Vol. 3, No. 12) which includes a good selection of marked/punched cards and punched badges which the 3070B can read very well.

More Than Just a User's Manual— A Sales Aid as Well!

By: John Willett/HPG

Don't get hung up with nitty-gritty questions about the 3070B. Give your prospect the attractive 3070B User's Manual! This manual has been written with a separate section for each of the 3070B modules: keyboard, displays, multifunction reader and printer. It also tells you how to use the 3070B with a local HP-IB controller and with an HP 1000. Finally, it describes the built-in self-test facilities and how to use them.

You should be receiving your own copy of this manual soon. If you need further copies, order them from Grenoble as part number: 03070-90007.

Product News

Safety Approvals

By: Georges Ouin/HPG

U.L.:

The HP 3070B has been submitted to U.L. It passed all the tests. We plan to ship units with the U.L. tag to the U.S.A. starting July.

C.S.A.:

The HP 3070B has passed all C.S.A. tests. We are waiting C.S.A. request to submit the unit. We should have approval within 8 weeks.

V.D.E.:

The HP 3070B has been tested in HP Boeblingen. It passed all the tests. We are waiting for V.D.E. request to submit the unit. We should have approval within 12 weeks.

Order Processing

OOPS!

By: Georges Ouin/HPG

In the Peripherals Data Booklet (5953-3009), page 1-6, the options 002 of the 92900B and 3070B are described as delete printer options. They should be described as delete *reader* options.

Please read as follows:

92900B and 3070B options

002: Delete multifunction reader from 3070B terminal in Subsystem or in separate 3070B terminal.

Please correct your own data booklet accordingly.

CS GROUP NEWS

CSG News

Installation on Component Orders

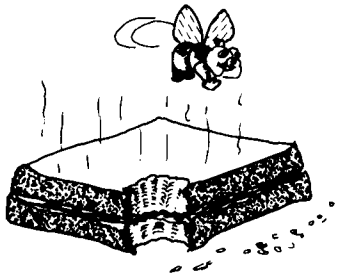
By: Sherry Harvey/CSG

If your customer is purchasing installation and/or warranty services, or if they get installation free because they are buying a service contract at the same time as the component, you must indicate ON THE ORDER that installation is required. Simply have the words "INST. REQ." entered in SPECIAL INSTRUCTIONS so that those monitoring the orders can schedule the appropriate action required.

"INST. REQ." should be used on all orders, *OTHER THAN SYSTEMS*, whenever the equipment is to be installed by HP. THIS INDICATION WILL INSURE THAT WE DON'T MISS INSTALLATIONS DUE OR PAID FOR BY THE CUSTOMER.

Stale Orders for Training and Consulting

By: Sherry Harvey/CSG



If you are quoting training and consulting services up front when you sell a system, GOOD FOR YOU! A word of caution, however, ORDERS FOR THESE SERVICES SHOULD NOT BE ENTERED TOO FAR IN ADVANCE.

Corporate policy and CSG quote terms and conditions state "PRICES ARE VALID ONLY IF BUYER'S REQUESTED DELIVERY DATE IS WITHIN 6 MONTHS OF DATE ON WHICH THE ORDER IS PLACED." The easiest way to avoid having to go back to the customer to inform them of a price change is to let them know up front that prices are subject to change and get the order only for appropriate periods. Training orders should never be entered too far in advance of system delivery because the customer should already be trained by the time the system arrives.

If you have any special circumstances where you can't follow the standard policy on this, be sure to contact the SE Administrator who will be supporting your customer.

Are Your Customers Getting Software Support Update Materials?

By: Sherry Harvey/CSG

We previously recommended (*CS Newsletter*, February 15, page 39) that you send input directly to the Software Support Data Base if you knew of a customer who should be but was not getting updates, Communicators, SSBs, etc. We now recommend that you direct all inputs, especially "Edit Sheets" and "Software Support Data Base Source Sheets" to the SE Administrator who supports your area. *Note that HP 1000 System orders and all software support or subscription orders (except HP 3000 SSS)* automatically *generate entries into the data base and require no field input other than the order with the supporting SEO plus the customer System Manager's name and address on it.*

Now that all software support is ordered via HEART (except 3000 Subscription Service via BMMC) and the SE Organization (SEO) is responsible for the integrity of the support data base, it is extremely important that all inputs be funneled through the SE Administrator. Sales secretaries and service coordinators should, likewise, coordinate any data base inputs through the SE Administrator.

Old Software Purchase Agreements Expire

By: Jim Kennedy/GSD

**** *REMEMBER* ****

Old Computer Systems Software Purchase Agreements (signed prior to August 1st, 1977) expire

JULY 31, 1978

START SELLING your customer *NOW* on the ADVANTAGES OF CONTINUING **COMPREHENSIVE SUPPORT SERVICE or SOFTWARE SUBSCRIPTION SERVICE** for IMMEDIATE RENEWAL of SERVICE CONTRACTS.

COMPUTER SYSTEMS NEWSLETTER

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