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COMPUTER SYSTEMS NEWSLETTER

For HP Field Sales Personnel

HEWLETT  PACKARD

Vol. 4, No. 6
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Introducing:

The New Series III



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HP Computer Museum
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BOISE DIVISION NEWS

Product News

2608A Success

By: Steve Richardson/Boise

Thanks to you, the 2608A has been selling extremely well! This great success has outstripped our ability to gear up manufacturing capacity to produce these units. Therefore, availability has gone out to eighteen weeks.

We will be doing everything possible to get our capacity up, and will fight to get back to twelve weeks availability as soon as possible. Until then, we thank you for your understanding and continued support in order to make the 2608A an even more successful product.

Better Availability for the 2639A

By: Mary McNally/Boise

Thanks to the efforts of our hard-working production line, the 2639A's have been rolling off the line in record time. As a result, 2639A availability, currently listed at ten weeks on the availability schedule, is actually in the neighborhood of four weeks. This faster availability should make it easier to bring those orders in!

Seven Track Tape Obsolescence Approaches

By: Gene Morell/Boise

As related in an earlier newsletter article, Boise Division will obsolete the 7970B 7-track tape unit in March of this year.

We have recently received a few orders for the 7-track and are concerned that some customers might still hope to purchase 7-tracks in the future. Please contact your 7-track customers and start them thinking about ordering 9-track units in the future. We will still offer the multi-format, 7-track/9-track, read only 7970E for use in needed 7-track applications. Please contact *Gene Morell* if you have any questions or comments concerning our plans.

2645A/2635A Application Note

By: Mary McNally/Boise

The recent introduction of the "NULL/DELETE TRAP" serial interface board has cleared the way for yet another 2635A application. The 2635A can now be used as a serial printer off a 2645A terminal. The only additional hardware needed is the 13250B serial printer interface card for the 2645A terminal, and a 13232G cable.

The key to this application is the fact that the new RS-232 serial interface in the 2635A strips both null and delete characters from the data stream. The 2645A inserts nulls after each control character, including escape characters. When the data was then passed on to the 2635A, the old interface would accept the nulls. The nulls caused buffer overflow, inhibited bi-directional printing, and terminated escape sequences prematurely. The NULL/DELETE trap strips the nulls from the data stream, thereby preventing them from entering the buffer, and consequently allowing the terminal to recognize and execute escape sequences.

The only hardware strap that needs to be set in the 2635A is the NULL/DELETE trap enable, labelled S2-4 on the RS-232 interface. It must be in the OPEN position.

To configure the 13250B follow the instructions in the Operating and Service Manual, (P/N 02640-90042) with the following recommended parameters:

1. Identify PCA switch groups S1 through S4 and OPEN ALL switches.
2. Close switches S4-A9, (switch group 4, switch A9), and S4-A11, (switch group 4, switch A11).
3. Set switches S1-FC0, S1-FC1, S1-FC2 for desired baud rate (1200 is recommended).

Baud Rate	S1-FC0	S1-FC1	S1-FC2
1200	closed	closed	open
2400	open	closed	open

If there is no handshaking between the 2645A and the CPU, operate the 2635A at 2400 baud, and the 2645A at a lower baud rate (i.e., 1200).

4. If two stop bits are required, close switch S4-2SB.

5. Parity Selection:

No Parity	Open S1-FC4
Even Parity	Close S1-FC4; Open S1-FC3
Odd Parity	Close S1-FC4; Close S1-FC3

6. Select the desired number of NULL characters. We recommend the use of 8 nulls, but it is operator selectable.

No. Nulls	S1-FC5	S1-FC6	S1-FC7
1	closed	closed	closed
8	open	closed	closed
16	closed	open	closed
24	open	open	closed

The recommended application is of course on an HP system to allow handshaking with the 2645A. Without handshaking, the baud rate on the 2645A must be lower than that of the 2635A to allow for the insertion of null characters by the 13250B.

Please remember that this application will not work on older 2635A's without the NULL/DELETE trap interface. These new interfaces are in series 1841 units (Options 041, 051), and above.

For the customer who wants that back-up remote terminal, this is the recommended configuration.

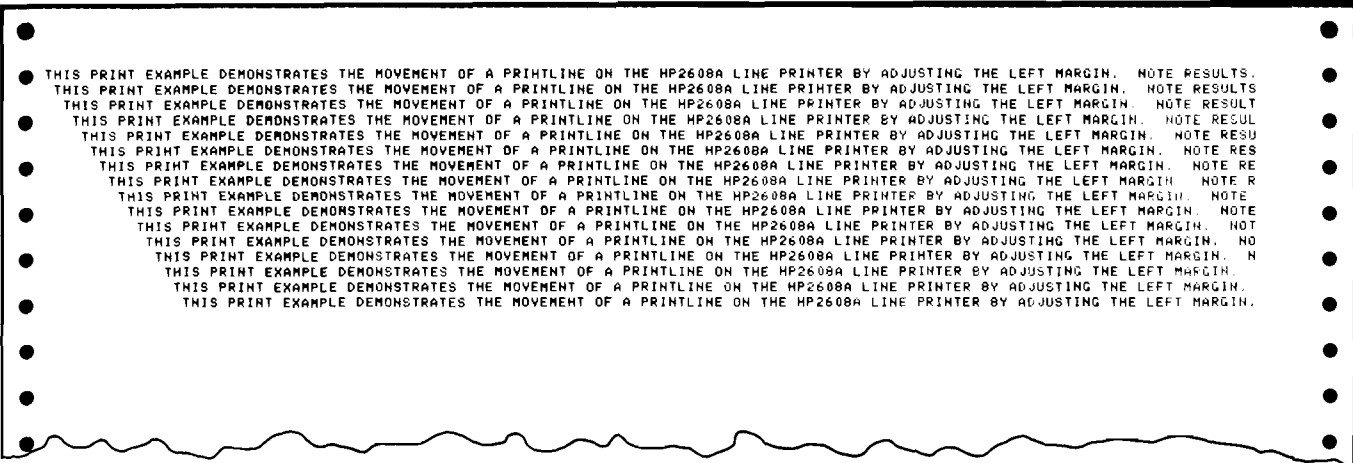
2608 Special Forms Consideration

By: Thad Webster/Boise

If you are selling a 2608 printer into an application that uses special forms, be prepared to discuss the method the 2608 uses to adjust the left margin.

When you adjust the left tractor to its left-most position, the maximum distance from the edge of the paper to the first print position is 1/2 inch. This margin allows plenty of space on standard computer printer paper to print a 132-column line between the pin feed holes. However, there is no room for adjusting the left tractor for special forms. Therefore, the 2608 uses a different technique.

The 2608 has implemented software control of the left margin. The Left Margin command (See 2608A Technical Reference Manual, 02608-90903) inserts blanks in front of your print line which, in effect, moves logical print position number 1 to the right. You can add as many as 15 blanks in front of a print line, but remember that the entire print line shifts to the right. If you move logical print position number 1, 4 spaces to the right, the end of your print line will be printed 4 columns to the right as well. This shifting effect on the print line will not be a problem with narrow special forms that require a print line far short of 132-columns. But remember that the Left Margin command, when used, will truncate a 132-column print line (when used) on the right edge of the paper. See the example below for a graphics explanation of the shifting/truncating effect.



Because customer requirements will vary depending on page width, print line length, special forms margin width, etc., call your Boise Division Sales Development Engineer to discuss special forms requirements on the 2608. The answer may not be intuitively obvious and there are some forms that the 2608 could not use.

For your information, the 1/2 inch left margin is a result of a design effort to keep the overall size of the printer as compact as possible and to minimize its weight. Additionally, to improve the reliability of the 2608, we changed tractors. The current tractor is larger and more reliable than its predecessor while, at the same time, responsible for reducing a 3/4 inch left margin to its current 1/2 inch. As with all of our products, our R & D lab is continually evaluating new sources of parts to enhance reliability and/or performance of the 2608. Other tractors are being investigated to increase the minimum size of the left margin.

DISC MEMORY NEWS

Sales Aids

DMD Sales Literature Round-up

By: Jon Bolt/DMD

In the coming year, a major goal of DMD Marketing will be to bring our sales literature to mature levels—so stay tuned. In the meantime, the list below contains all currently available sales literature (other than service and installation manuals).

Manual #	Title	Supplier
5953-3602 (48)	Multiple Access Controller Disc Drive Family Data Book	Corporate Marcom Support Group
5952-4689 (48)	12960A Cartridge Disc Subsystem Data Sheet (7900)	Marcom Support
5953-0849 (48)	Computer Advances—May 1977, Featuring the 7920	Marcom Support
Hewlett-Packard Journal	Featuring the 7920 August 1977, Vol. 28, Number 12	Marcom Support
07906-90901	7906 Disc Drive User's Manual	CPC
07920-90030	7920 Disc Drive Operator's Manual	CPC
07925-90901	7925 Disc Drive User's Manual	CPC
5953-3601 (48)	13037B Disc Controller—OEM Interfacing Guide	DMD Sales Development

Product News

Still More on the 7925 Opt. 250

By: Rich Bowles/DMD

Judging by the calls I've been getting, some folks may not understand the Opt. 250 "game plan." To avoid any more "fumbles" let me give it to you again.

There is only one rule; for the 7925 to operate on a 30229A controller, the following PC boards must be resident "in the trenches" of the card cage:

Description	Part Number	(Better Known As)	Min. Date Code
ECC/ROM	13037-60024 or 13037-69024	(#24)	B-1650
Device Controller	13037-60028 or 13037-69028	(#28)	—
Micro-processor	13037-60001 or 13037-69001		C-1530

If these boards are not there, don't "punt," just order the Opt. 250. You will receive a 13037-60028 board to replace the 13037-60002 (#2) board. "Pull" a 13037-60024 board from the CE's service kit and swap it for the 13037-60004 or old (pre B-1650) #24 board. The customer does not get a "penalty" for lacking a #24 board, so don't charge him. The quarterback must then "pass" the old boards on to CSD for a credit (HP scores another touchdown).

"Extra points" are awarded for a successful "conversion." For example, when a customer is only moving a 7925 from one system to another which has never supported a 7925, it is then necessary to "call a time out" to see which boards are there, and then order the appropriate #24 or #28 boards from CSD.

A good rule of thumb about when to order the Opt. 250 is to recall the date the system was shipped from GSD. If that was before June 1, 1978, the new boards are needed. But if in doubt, always check the card cage first!

GO GET 'EM TEAM!!

DATA SYSTEMS NEWS

Product News

Selling RTE-IV Software?

By: Rick Held/DSD

As a refresher for those old-timers around during the April NPT tour last year, and especially for all those new faces on board, let's review the current RTE-IV sales mechanisms.

The basic RTE-IV product is 92067A. This \$5000 list product package includes firmware, manuals and the software on the media of your choice. Some media options require additional payment to cover the cost of the media itself.

For those customers who wish to upgrade from RTE-II or RTE-III to RTE-IV, the 92067A plus 92067A-Option 001 is appropriate. Option 001 provides a \$2000 list credit against the full product price, helping your present customer upgrade to the power and convenience of DSD's latest operating system.

RTE-IV is also sold as a Type I Right-to-Copy product, 92067R for \$2000 list. This product consists of firmware and manuals and confers the right to copy RTE-IV software, currently owned by the customer, for use on an additional HP 1000 based system. In order to purchase this product, the customer, or any division of the customer's corporation, must have purchased the RTE-IV product 92067A at full price (less discount) at least once. Neither the purchase of the upgrade option (92067A-001) product, nor the 92067A product contained in a standard HP 1000 system fulfills this requirement.

If your customer has *no need for manuals*, Option-100 can be ordered with the 92067R product for a \$200 credit.

Does your customer need RTE-IV sources? If so, order them as 92067X for \$15,000 list. Right-to-Copy derived binary from these sources is the 92067Y for \$2000 list [customer must buy 92067A and sign License Agreement R11-78(22)]. Notice that these products are also discountable. Finally, Software Subscription Service for source code is 92067Z.

Does your customer need *several copies* of either the 92067R, 92067R Opt. 100, or 92067Y? If the order is for quantity 20 or more of any of these *on the same order*, we will give a 50% discount in lieu of the standard discount on the purchase agreement.

The net-net of all the above is that we are trying to make it easy for you to sell our latest and greatest operating system.

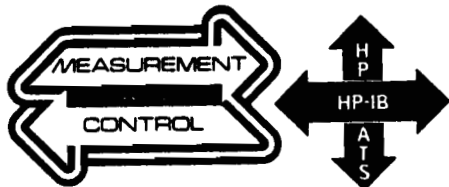
In summary:

Product	Description	List Price	Notes
92067A	RTE-IV	\$5000	
92067A plus 92067A-001	Upgrade from RTE-II/III to RTE-IV	-\$2000	Need RTE-II/III
92067R	Right to reproduce	\$2000	Must purchase 92067A first.
92067X	RTE-IV Sources	\$15000	Must purchase 92067A first and sign License Agreement
92067Y	Right to reproduce RTE-IV Sources	\$2000	
92067Z	SSS for RTE-IV Sources	\$100/mo.	

See your Corporate Price List for media options, etc.

Don't forget the possibility for a 50% discount for quantity 20 of the right-to-reproduce products.

Automated Measurement News



Automated Measurement News

AUTOMATIC TEST SYSTEMS & MEASUREMENT AND CONTROL PROCESSORS FROM DATA SYSTEMS DIVISION

VOL 2

JANUARY 1979

NO 2

HP ATS WINS F-15 ORDER

By: Dave Kline

Northrop Defense Systems Division recently selected HP ATS for the USAF depot repair of Northrop's F-15 electronic countermeasure equipment, an important new requirement. Congratulations to Midwest West for their good work.

There were several reasons for selecting HP. The main consideration was the availability of automatic microwave spectrum analysis, as provided by the HP-IB controllable HP 8566A. Additionally, the customer has had good experience with HP ATE, and Midwest West Sales did a fine job.

Two each of two types of testers are being provided to Northrop, digital (ADTS), and microwave (AATS), as shown in the sketch below.

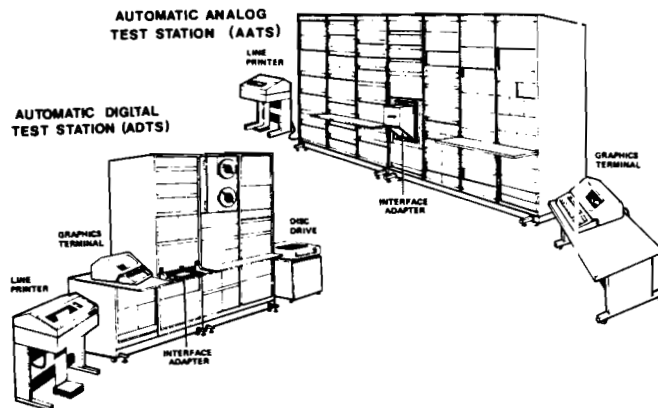
The ADTS has 300 pin capability of which 120 pins are multiplexed for analog. Analog capabilities in the ADTS include DC, pulses, voltage measurement, and frequency measurement.

The AATS, in addition to about the same capabilities as the ADTS, has functions, and microwave stimulus and measurement capability to 18 GHz.

An HP 1000 system controls each of the test systems for digital simulation and computing power. It also serves to provide ATLAS language capability.

The selection of HP ATS for this important application reminds us that there are still needs out there HP ATS can fill.

NORTHROP - DEPOT ATE



FOR HP INTERNAL USE ONLY

-2-

2240A FEATURE APPLICATION

ENGINE TESTING AND DATA ACQUISITION

By: Dave Hannebrink

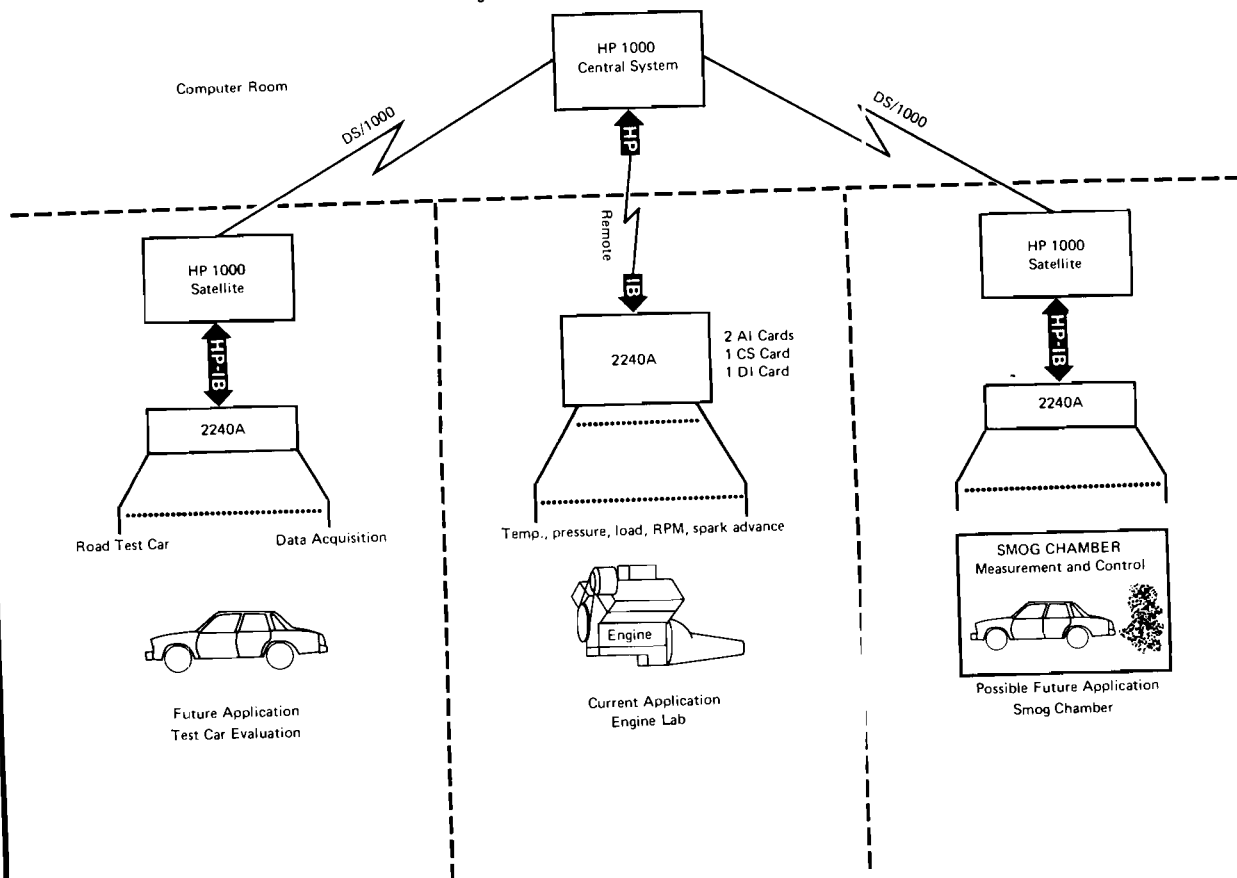
In this, the first of our 2240A Feature Application series, we take a brief look at the general area of Engine Testing. Applications of this type are widespread because test performance data is required by engine manufacturers, governmental agencies, and oil companies. For this reason, you're likely to find engine testing (for gasoline and diesel internal combustion engines and gas turbines) being done by all of these potential customers. In fact, the 2240A is now being used by (1) a large oil company to test the effects of new fuels and lubricants on engine performance, (2) large gas turbine manufacturers to provide both in-house and government required certified test data, (3) a well known company to test new designs of gas engine fuel injectors.

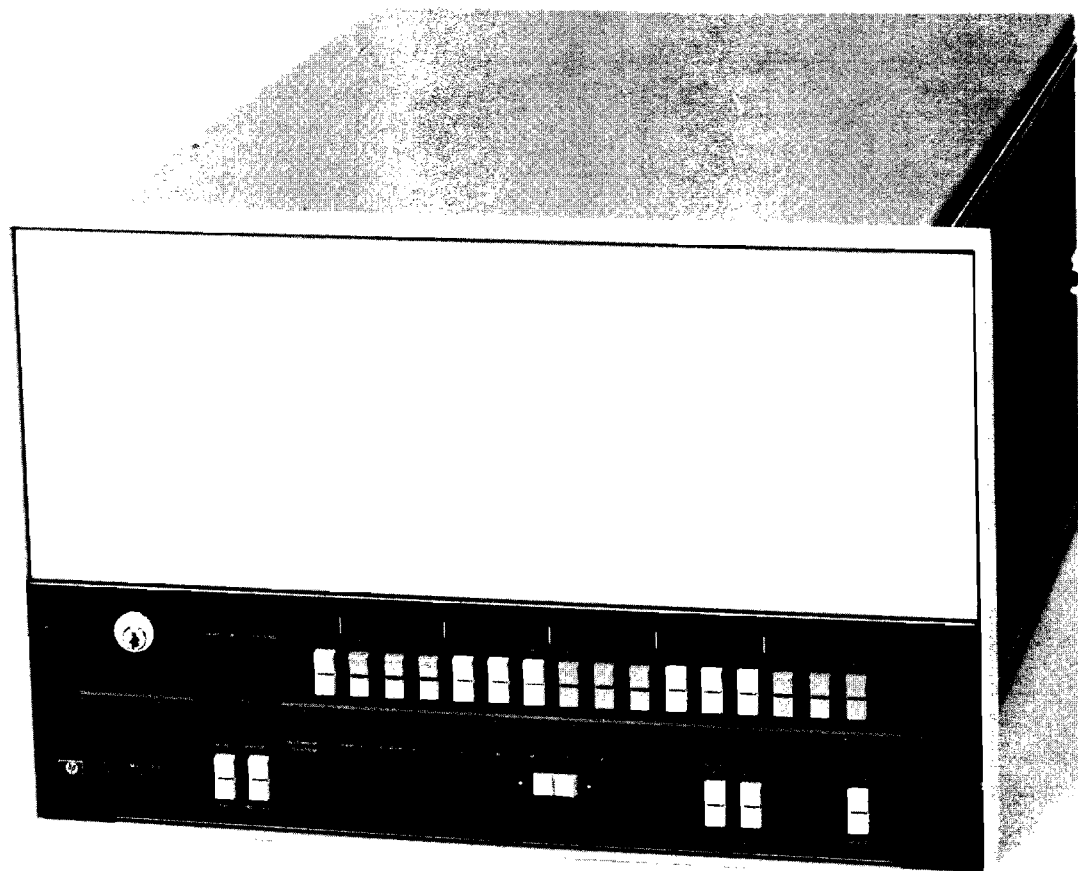
Below is shown the application block diagram for the large oil company mentioned above. One application is now up and running, that of the Engine Lab; the others are in the planning stages. In the Engine Lab, the 2240A analog input cards are used with transducers that provide inlet and exhaust pressures, temperatures, exhaust gas analyzer data, and drive train load information; the counter stepper card and digital input card are used for RPM and spark advance angle measurements. Ultimately the computer will be used to emulate various engine based microprocessor control strategies, identical to the ones being developed by the automotive companies. This data acquisition/control test bay will help in the development of the better fuels and lubricants for future sophisticated electronically controlled engines.

Why the HP solution? Well the HP 1000 offered the best combination of hardware and software (not to mention HP support) to minimize the applications work required of the customer. The 2240A influenced the sale because by offloading the HP 1000, it provided future computational capacity for control algorithms, data reduction and networking. Most importantly, the 2240A was EASY TO USE. The high level programming meant a great deal to the project team. In fact, since putting the system together, they've spent a great deal of time showing it off to other lab groups within their company. This has already resulted in add-on business and the system may become a standard for this company!

P.S. They've already upgraded their 2240A to the Extended Performance Option (22919A). Early results show a 2 to 1 performance improvement for their application!

Large Oil Company Engine Test Applications





HP 1000 E-Series

Competition



Data General Nova 4 Competitive Summary

By: Bill Elmore/DSD

Data General recently announced three new CPU's, which it called the Nova 4 computer family. The Nova 4 family is seen as the replacement for DG's successful Nova 3 computers, which are sold primarily to DG's OEM's and compete directly with the HP 1000 for many applications. The three Nova 4 computers are:

- Nova 4/C — A low cost version of the Nova 3 with approximately 80% of the computing power.
- Nova 4/S — 50% higher performance than the Nova 3 with a maximum 64 Kbytes of memory.
- Nova 4/X — Essentially a Nova 4/S that is expandable to 265 Kbytes.

Shown below are the specifications comparing the Nova 4 computers to the HP 1000 E-Series.

	Nova 4/C	Nova 4/S	Nova 4/X	HP 1000 E-Series
Maximum Memory Size	64Kb	64Kb	256Kb	2048Kb
Memory Cycle Time	← 400 ns →			350/595 ns
Multiply/Divide	← Opt \$750 →			Std.
Floating Point	← Opt \$3000 →			Firmware std. F-Series ~\$2K extra.
Microprogrammable	← NO →			YES
I/O rate	← 1Mb (input) .796Mb (output) →			2.2Mb/sec
Front panel	← "virtual" console →			YES
Performance	~M-Series	~E-Series	~E-Series	
Price (memory size) includes mult/div	\$4250 (64Kb)	\$7350 (64Kb)	\$12,350 (128Kb)	\$9250 (64Kb) 11,750 (128Kb)
Operating System	← RDOS RTOS → DOS			RTE-M RTE-II RTE-IV
DBMS	← NO →			IMAGE/1000
Graphics	← NO →			GRAPHICS/1000
Dist. System	← NO →			DS/1000
Multipoint	← NO →			YES

It is apparent that DG's strength lies in its low end, "bare bones" CPU offering. (The Nova 4/S with 64Kb memory sells for 20% less than the E-Series computer.) With any move away from the "bare bones" CPU, however, the competitive advantage shifts to HP. At 128Kb, the E-Series is priced lower than the Nova 4/X, and the gap widens for 256Kb. Above 256Kb DG is locked out, having exceeded the Nova's maximum memory size.

Note also, that the Nova 4 is not user microprogrammable, as is the HP 1000. Significant price/performance improvements can be achieved through microprogramming, and many of our OEM's have used this capability to obtain the performance of a more expensive machine with the HP 1000.

When one begins to consider total system capability, other HP strengths become apparent. Not only does RTE-IV provide more capability than RDOS, (the most powerful operating system available on the Nova), Data General has no offering in the areas of database management, graphics, distributed systems, or multipoint software. In addition, HP's hardware maintenance charges are significantly lower than DG's and the quality of HP support is excellent.

Overall, the Nova 4 seems to have the edge in low-end, "bare bones" configurations. HP, however, is very competitive for larger memory configurations, and is clearly the leader in operating systems, database management, graphics, and distributed systems. Compared to this latest introduction from Data General, the HP 1000 still appears to be very strong.

Sales Aids

New DSD Ad Series

By: Tom Freed/DSD

With the start of the new fiscal year, a new family of DSD ads is appearing in various publications. The first ad was published in December 1978 and will continue to run through the first quarter. It is a three pager (domestically) and starts off with "Why buy from a stranger?" Another ad will start this month focusing in on the HP 1000 Computer and disc capability. Other OEM ads and a DSN ad will be coming out shortly. Look for these first two ads in *Electronic News*, *Computer Design*, *Mini-Micro Systems*, *Electronics*, *Computer Systems News* (a new OEM publication) and *Industry Week*.

Dat is nu in uw voordeel rekenen: HP 1000 Model 45, f133.455;



Naar buiten op de HP 2648A terminal, kunt u nu grafisch op papier krijgen met onze nieuwste program meerkant 4 Microplotter de HP 9872A. Met maximaal 4 micropro cessoren en een werkafstand tot 200 mm op beide zijden.

De nieuwe HP 1000 Model 45 biedt wetenschapsmensen en technici een overvloed aan mogelijkheden, terwijl u er bij de aanschaf direct mee in uw voordeel rekt.

Een nieuwe "floating point" processor is in staat zeer grote getallen te reeksen te behandelen en omvangrijke rekenpro



blemen in korte tijd op te lossen. Daarnaast is de HP 1000 Model 45 ook voor complexe meet- en besturingtoepassingen, data base management en gedistribueerde gegevensverwerking eenvoudig te gebruiken. Toch is de HP 1000 Model 45 zeer betaalbaar.

Een zeer snelle processor doet laad- en opslagbewerking in 900 nanoseconden. De alzonderlijke hardware "floating point" processor doet snelle drijvende kommagewerkingen, bijvoorbeeld optellen in 630 nanoseconden, vermenvuldigen in 1,8 μ sec en delen in 3 μ sec.

Een unieke wetenschappelijke instructiest voert trigonometrische en logaritmische functies uit in minder dan 48 μ sec. En een snelle FORTRAN processor, die normaal gebruikte FORTRAN bewerkingen in hardware behandelt, verbetert de verwerkingsnelheid ook.

De RTE-IV, ons nieuwste "operating system" in een naar boven uitbreidbare serie, biedt u de mogelijkheid te werken met hoeveelheden data tot

1,8M bytes, door gebruikma king van eenvoudige FORTRAN commando's.

De levering van het Model 45 is inclusief een 20M byte disc drive en een grafische terminal, de HP 2648A, met ondersteuningssoftware. Model 45 kunt u uitbreiden met andere produkten, zoals de vlekkeurenplotter HP 9872 en de printer/plotter HP 7245A.

Gebruik van data base management bij dit systeem is even eenvoudig en economisch als het toevoegen van rand-apparaat. Onze IMAGE/1000 software brengt uw technische informatie in logisch verband samen, in gemakkelijk toegankelijke files. In een netwerk kunt u ook data van andere HP 1000 systemen samenbrengen met behulp van DS/1000 netwerk software. Natuurlijk werkt dit ook in een netwerk met onze HP 3000 computersystemen en IBM.

Model 45 is een voorbeeld uit onze computerserie 1000. Wilt u informatie over alle modellen, randapparaat en programmatuur van deze technisch-wetenschappelijk computers, vraag dan met de coupon onze uitgebreide brochure aan.

HEWLETT  PACKARD

Ja, ik ben geïnteresseerd in de technische-wetenschappelijke computers van Hewlett-Packard. Stuur mij gratis de brochure "de HP 1000 familie".

Naam _____

Functie _____

Bedrijf/Instelling _____

Adres _____

Plaats _____

Tel. _____

Stuur de coupon op naar: Hewlett-Packard, Benelux N.V., Postbus 667, 1100 AR AMSTELVEEN, Tel. 020-472021

Volume 4, Number 6, February 1, 1979

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FOR INTERNAL USE ONLY

DATA TERMINALS NEWS

Division News

Terminal Product Training

By: Rich Ferguson/DTD

The new schedule for Data Terminals Division product training courses, (formerly known as "Specialist Training"), will be held as follows:

WEEK OF MARCH 12
WEEK OF APRIL 23
WEEK OF JUNE 4

To reserve your place in destiny (namely, our class) contact *Soni Hogan* at DTD, Ext. 2820, where she will warmly greet you and take good care of you. SPECIAL NOTE: For those of you who have not yet taken the Boise training, contact *Lillian Blankinship* at Boise to register for their class. Generally, their class begins the Monday immediately following the DTD week and lasts three days.

GO GET 'EM TIGERS!

DTD'S Deliriously Delightful Demo Derby

By: Bill Swift/DTD

It's contest time again . . . brought to you by that same loveable division that gave you the 2647A. In the next couple of months, DTD will be working to ship the large backlog of 2647's that you've already sold. Now we're looking for new ways to show off the features of the terminal and sell even more. By combining AGL and a powerful BASIC interpreter in a graphics terminal, the range of capability is mind-boggling. We want to build a library of BASIC programs that can be used in sales situations to demonstrate different features of the 2647A. The programs can also serve as examples for anyone writing similar programs. We intend to reprint these programs and distribute them to the field and to customers.

Now, what about the contest rules? To enter, pick out one of the many features of the 2647A. It could be something in AGL or BASIC, or a combination of both. You could show how a program running in the 2647A can trade data with a program running in the host CPU. And the graphics output

possibilities are limitless. Write your program (no length limit except that of fitting in the terminal), test it, and send us a listing of the program (including output) *plus a tape cartridge containing the program*. We **GUARANTEE** that we will send you a tape cartridge the same day we receive yours. The contest ends April 30, 1979, so don't wait to get started!

The winner will be selected on the basis of the zoomiest, flashiest demo that best shows off the features of the terminal. With our zoomy-flashy sales force . . . this should be a SNAP!

Now, what about the prizes? Well, we have a super-colossal grand prize, (which is worth at least \$100) to be awarded for the program which best demonstrates the features of the HP 2647A. Furthermore, just as in selling terminals, everyone is a winner! DTD will also be awarding a special prize to each contestant simply for entering. And you'll just love the prize. Besides being the envy of your friends and neighbors, you will find it an indispensable personal accessory. In fact, once you've tried it, you'll want to use it always.

DTD DEMO DERBY ENTRY FORM

NAME _____

SALES OFFICE: _____

NAME OF PROGRAM _____

I hereby certify that my program is bug-free.

(signature)

Entries must be postmarked no later than April 30, 1979.
Send your entries to: *Bill Swift*,
DTD Sales Development

Names of winners will be announced in the May 15th issue of the *CS Newsletter*.

Product News

New 2647A HP-IB Peripheral

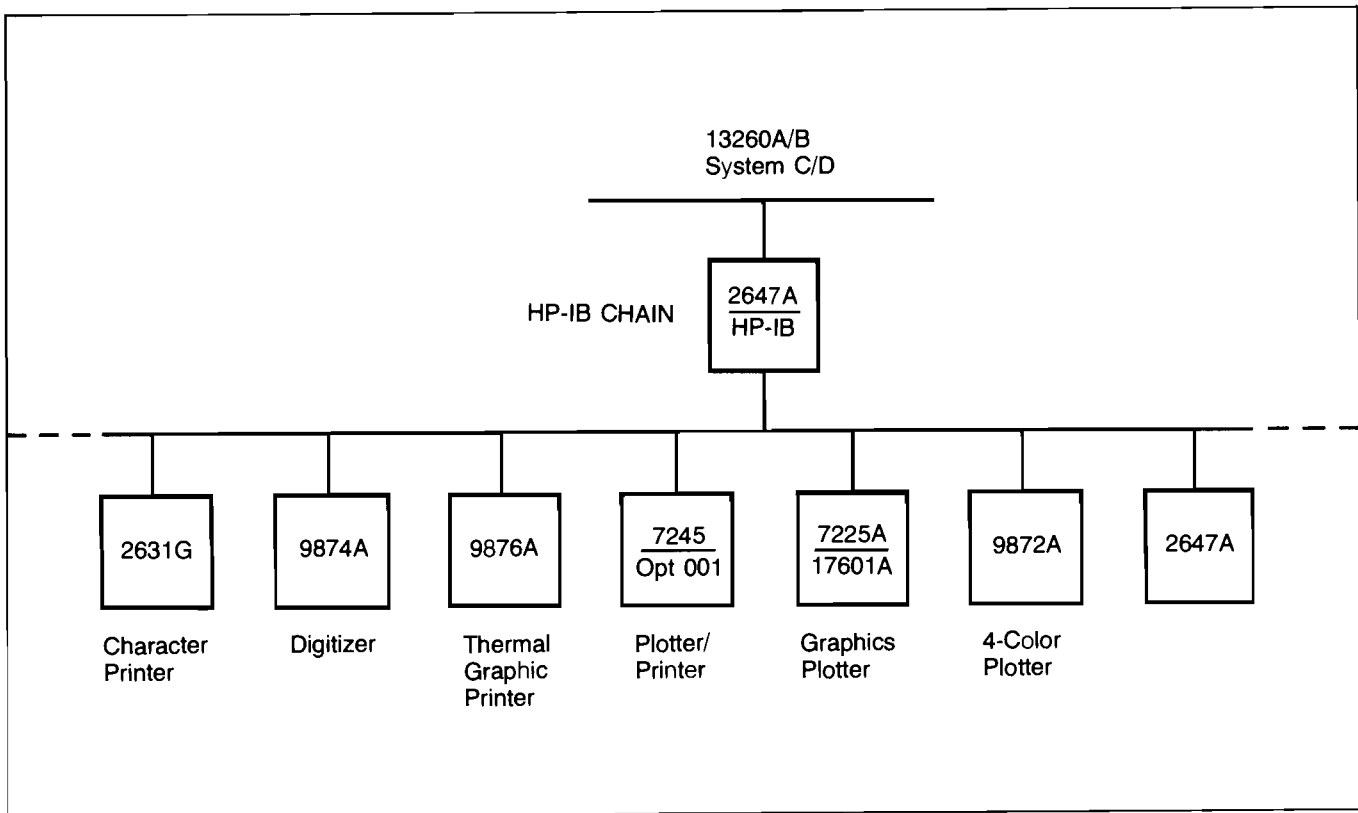
By: Eric Grandjean/DTD

Another four-star printer peripheral is now available from DCD. The model number is 9876A. It's a fixed head thermal printer/graphic dump device with an HP-IB interface; which, means that you can use it with the 2647A.

It provides the 2647A with fast, quiet alphanumeric printing capability. It can print 80-character lines at up to 480 lines-per-minute with selectable alternate character sets.

In addition, it can print graphics in dot-for-dot raster dump mode over an area of 360 by 580 dots. The area from dot column 580 to 720 on the right side of the 2647A screen therefore cannot be printed. (Small tradeoff for the price!)

For full-size graphic dump, the 7245A or the 2631G must be used. That would be the case for multiplot printing. Below is a synopsis of current HP-IB devices usable as 2647A peripherals:



The chart above is not exhaustive, but reflects an array of devices which DTD has had an opportunity to try out. If you have successfully interfaced other HP-IB devices to the 2647A for specific applications, we would be delighted to know about it.

We understand that DCD training and training material for SF02 is in preparation and will soon be available.

SELL TERMINALS, SELL PERIPHERALS

Sales Aids

9874A Digitizer Driver Makes Use of 2647A Rubber Band Line

By: Mark Willner/DTD

If you have ever tried to use the graphics keypad on a 2647A to draw a fairly complicated picture, you know it is no easy task. But, if you happen to have a 9874A Digitizer handy, this task can be greatly simplified. The following program runs on a 2647A and allows you to move and draw with the greatest of ease using the Digitizer cursor. It also makes a swell demo of how well the 9874A and the 2647A work together.

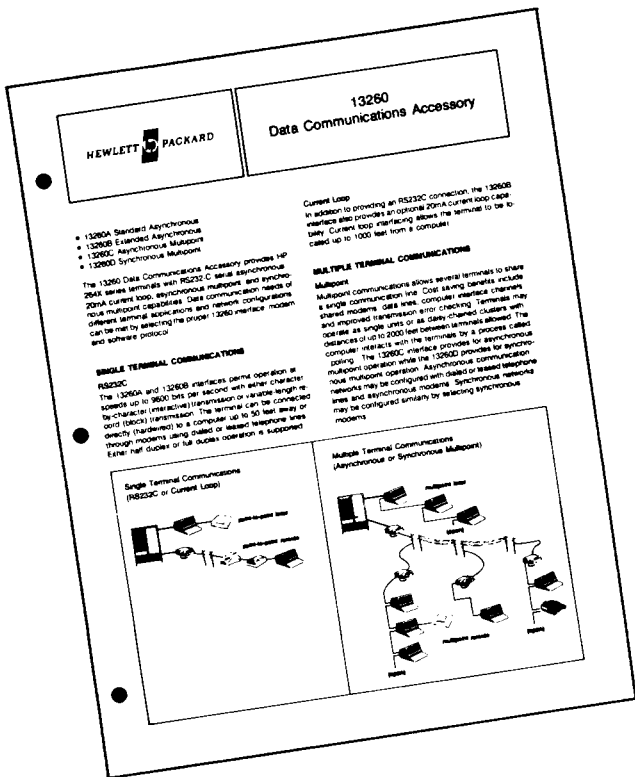
```

1000 REM *****
1010 REM *
1020 REM * 9874 DIGITIZER DRIVER USING 2647A RUBBER BAND LINE
1030 REM *
1040 REM * SETUP: 9874 MUST USE HP-IB ADDRESS 15
1050 REM *
1060 REM * OPERATION: MOVING DIGITIZER CURSOR WILL MOVE 2647 CURSOR
1070 REM * PRESSING DIGITIZER SWITCH WILL:
1080 REM * MOVE 2647 PEN TO CURSOR POSITION
1090 REM * PRESSING DIGITIZER SWITCH IN DRAW MODE WILL
1100 REM * DRAW A LINE FROM PEN POSITION TO CURSOR
1110 REM * POSITION AND THEN CHANGE PEN TO CURSOR
1120 REM * POSITION
1130 REM * SPECIAL FUNCTION KEYS:
1140 REM * fa = MOVE MODE
1150 REM * fb = DRAW MODE
1160 REM * fc = STOP PROGRAM
1170 REM * fd,fe = NOT USED
1180 REM * WORKS IN BOTH SINGLE AND CONTINUOUS MODES
1190 REM *
1200 REM *****
1210 REM
1220 INTEGER X,Y,Z,A,St,Pn
1230 ASSIGN "H#15" TO #1
1240 REM * INITIALIZE 9874, SET SINGLE MODE, SET AIR TOGGLE MODE,
1250 REM * BEEP AND TURN ON fa LED
1260 PRINT #1;"IN;SG;AT;BP;SK 1"
1270 REM * SET PEN CONTROL FOR MOVE MODE
1280 Pn=-2
1290 REM * INITIALIZE PLOTTING DEVICE (2647)
1300 PLOT#
1310 REM * SET ASPECT RATIO AND SCALE TO ACCOMMODATE 9874
1320 SETAR (1.29)
1330 SCALE (0,17400,0,13500)
1340 REM * CLEAR GRAPHICS MEMORY, TURN ON GRAPHICS CURSOR AND
1350 REM * RUBBER BAND LINE
1360 PRINT CHR$(27)&"*dfakM"
1370 REM * REQUEST DIGITIZER STATUS AND READ IT
1380 PRINT #1;"OS"
1390 READ #1;St
1400 REM * HAS A KEY BEEN PRESSED?
1410 IF St AND 128 THEN 1540
1420 REM * IS A DATA POINT READY?
1430 IF St AND 4 THEN 1650
1440 REM * REQUEST 9874 CURSOR POSITION AND READ IT
1450 PRINT #1;"OC"
1460 READ #1;X,Y,Z,A
1470 REM * PRINT X AND Y VALUES ON 9874 DISPLAY
1480 PRINT #1 USING 1710;X,Y
1490 REM * MOVE 2647 CURSOR TO CORRESPOND TO 9874 CURSOR
1500 POINT (X,Y)
1510 REM * LOOK AT STATUS AGAIN
1520 GOTO 1380
1530 REM * REQUEST KEY CODE AND READ IT
1540 PRINT #1;"OK"
1550 READ #1;Ky
1560 REM * IF fa KEY CHANGE TO MOVE MODE
1570 IF Ky AND 1 THEN Pn=-2
1580 REM * IF fb KEY CHANGE TO DRAW MODE
1590 IF Ky AND 2 THEN Pn=-1
1600 REM * IF fc KEY STOP PROGRAM
1610 IF Ky AND 4 THEN STOP
1620 REM * GO UPDATE CURSOR
1630 GOTO 1450
1640 REM * REQUEST DATA POINT AND READ IT
1650 PRINT #1;"OD"
1660 READ #1;X,Y,Z,A
1670 REM * MOVE PEN OR DRAW LINE
1680 PLOT (X,Y,Pn)
1690 REM * GO UPDATE CURSOR
1700 GOTO 1450
1710 IMAGE "LB",XX,DDDD,X,DDDD,XX
1720 END

```


13260A/B/C/D Data Sheet

By: Terry Eastham/DTD



A completely revised data sheet for the 13260A/B/C/D Data Communications Accessory is back from the printer and ready to help you sell 264X terminals. If you have been waiting for a good summary of the data communications features (including multipoint!) that are available to the 264X line of terminals, wait no longer. Order some part number 5953-2022's for your office today.

Note: This new data sheet (5953-2022) replaces the old "Data Communications for the HP 2645A Display Station" data sheet (5952-9964).

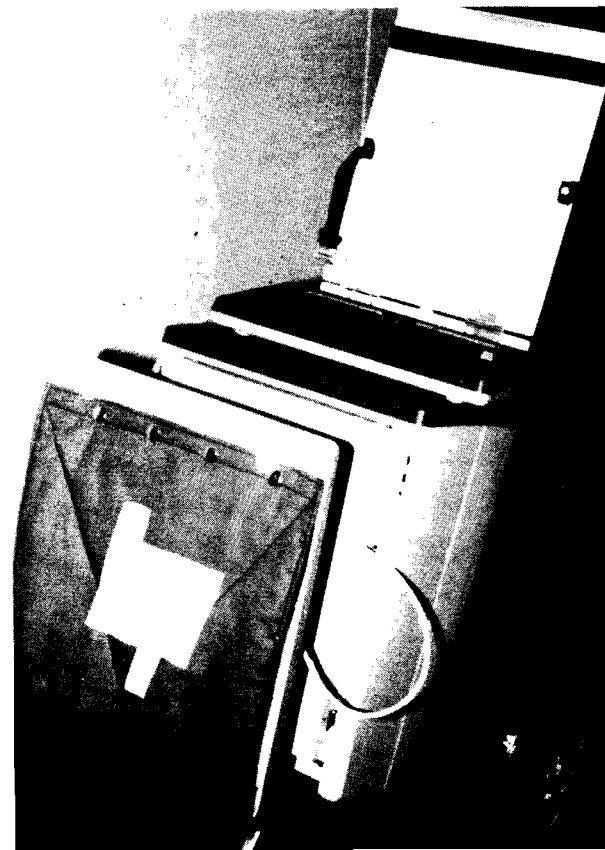
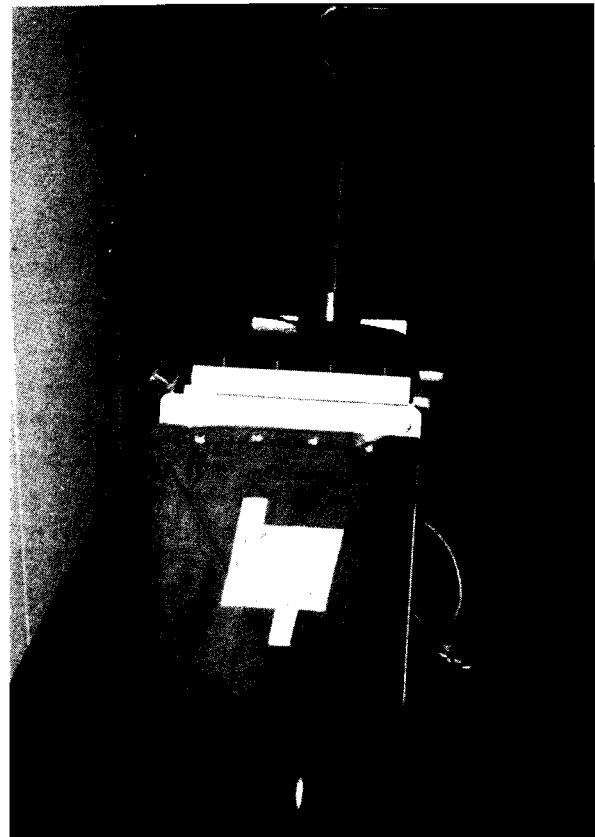
Terminal Carrying Cart

By: George Klein/CSR

The ever-popular CRT Cart has been modified to carry the 2621A/P as well as the 2647A/9872A/2631G/7245A. The modification is a minor one and existing carts can be upgraded as well. The new price is \$180.00 F.O.B. Toronto, with delivery from stock.

These carts have proven to be very popular. Over 20 were ordered one week after they were first announced in the CS Newsletter.

Send your orders to: **A. DOTAN COMPANY**
133 Jenny Wrenway
Willowdale, Ontario
Canada M2H 2Z1
Tel: (416) 498-1540



2621A/P Line-Mode Capabilities*By: Craig Clark/DTD*

Using the "Line-Mode" feature, which is standard on the HP 2621A/P, it is possible to simulate block-mode input of text to a CPU. After entering text locally on the HP 2621A/P terminal, configure the terminal as follows:

```
REMOTE — ON
LN MODE — ON
AUTO LF — ON
Straps: — bcGH xz
Return: — [cR ]
```

When the terminal receives an "ESC d" from the CPU, it will transmit the line of text corresponding to the current cursor position and then execute a carriage return and line feed. Successive "ESC d" commands will cause additional lines to be transmitted to the CPU.

By incorporating this technique in an application program, the CPU can manage the input of up to 45 lines of text. While the display memory is capable of storing 48 lines of text, displaying the configuration mode on the screen requires 3 lines of text which are subtracted from display memory. The following BASIC program is an example of a program that could be used to read a screen of text:

```
10 FILES XXX
20 DIM A$(80)
30 PRINT "27" d;
40 INPUT A$
50 IF A$ = "" THEN 80
60 PRINT #1; A$
70 GO TO 30
80 END
```

As you know, the HP 2621 is a character-mode terminal which is also capable of transmitting an entire line of text. This capability could be an advantage in a particular competitive situation.

Service News

Anderson-Jacobson A242A Modem Compatibility

By: Tim Haney/DTD

I have uncovered a 2621A compatibility problem with the Anderson-Jacobson A242A modem. The A242A uses the single rear 25-pin connector for both current-loop and

RS-232 communications. A conflict of signals arises, resulting in the modem's transmitter hanging up. The gotcha is pin 23 (CH) on the M and N cables.

The following are the non-standard connections:

Modem Pin #	262X Usage	Cable Problems
9	N/C	None
10	N/C	None
16	TTLx8out	C
17	DD	None
23	CH	M,N
24	DA	None

There are a number of solutions to circumvent this problem, including:

1. Use a Y cable instead of the M or N. The A242A and the 2621A/P do not need any of the other control signals to operate correctly if the "t" strap is reset.
2. Cut pin 23 out of the M or N cable.
3. Cut the trace between pins 23 and 24 on the modem card.

Tom Dearing (Engineering) of Anderson-Jacobson is aware of this problem, and plans to fix it in their next generation of modems. For all you Marketing fans, this problem should also occur with a 264X when the 89 or 143 datacomm card is used.

Ninety-Day Warranty

By: Wendi Brubaker/DTD

You asked for it . . . you got it! Effective immediately, products on the A-3 and A-4 exhibits will qualify for a 90-day warranty. The warranty service will be return-to-factory or on-site at HP's discretion.

This should make life much easier for those of you who are selling terminals on non-HP systems. For existing customers who have already signed a CSG Agreement, no change is necessary for them to take advantage of this extended warranty on subsequent shipments.

Keep selling HP peripherals on all systems!

FORT COLLINS NEWS

Division News

FCD Marketing—Still Here, Still Committed to the HP 250's Success

By: Pete Hamilton/FCD

In a recent *CS Newsletter* you read *Paul Ely's* letter regarding HP's commitment to the HP 250 as a Product Line, with next generation R&D taking place at Data Terminals. Perhaps you found yourself asking "What about a commitment from FCD to support the present system during this evolution of the HP 250 into the long-term Business Computer Family Strategy?" Well, here's the answer.

The HP 250 commitment at FCD comes in two parts—Marketing Support and Product Enhancements. The Marketing Support will be the focus herein; however, I will allude to the enhancements as well.

The introduction period for a new product tends to be the most visible time in the product's entire life. It requires dedicating all the available factory resources to pulling off the introduction in a quality manner. It means organizing training, producing product marketing tools, developing market awareness and instilling confidence that the product is significant, with an "HP contribution."

Whereas the introduction must be professional and demonstrate the product's readiness, it soon becomes evident that the product's real success (in terms of orders and satisfied customers) comes about because of the on-going support and product enhancements. We at FCD have a strong commitment to support for the HP 250. Right now part of the marketing team is making the transition from introduction fever to sustained support in a number of functional areas. Yet another group is already preparing for the introduction of enhancements.

Our efforts span the range of those functions so essential to effective support of HP 250 customers. The CE Support Team is responsible for on-line support of the HP 250 and peripherals. In addition, it develops service documentation, the CE training program and the product support programs. The SE Support Group is responsible for on-line HP 250 software support, as well as software programs management—i.e., reporting, SE training, and development of the software support programs.

These are two of the primary post-sales support groups in FCD Marketing. However, these teams really act as the factory contact for a much broader and deeper organization, helping to ensure that our customers receive comprehensive support over the life of their HP 250 investment. Let me briefly identify the others and describe their functions.

Sales Development provides on-line support for sales representatives. This service is designed to assist in closing orders through a variety of programs such as seminars, customer visits, factory visits and a host of tasks which focus the factory resources in behalf of and in partnership with the field sales team. The Marcom Group provides the sales aids—i.e., GIM, brochures, configuration guides, FCD articles in the *CS Newsletter* and a variety of tools from slide presentations to application stories. Marcom also coordinates FCD's role in the advertising program.

Order Processing provides the factory link to your customer order; confirming the order, the HP 250 configuration, the delivery and all special requirements. Order Processing has the charter for identifying these needs and attempting to provide the system in accordance with order specifications, in a timely fashion.

The Technical Documentation Group is responsible for all the user documentation including operator guides, programming manuals and installation manuals. A big task, this group's efforts must continue long after introduction as they strive to maintain up-to-date documentation as production changes dictate.

These are the people who really support you and your present customers. Each is important to providing the customer satisfaction so necessary for referral selling and repeat business. There are a couple of additional groups in the FCD Marketing organization which have perhaps become more visible to you through the introduction of the HP 250. These are the Product Management team and the Applications Product Management team.

These two teams play a key role in bringing the products out of the R&D area and into the market. They provide the on-going focal point for their respective products, ensuring we are responsive to the overall needs of the market. The Product Management groups are the factory product experts. They review product enhancements under development in the R&D Lab with an eye on features,

schedules, cost, and fit with the total Marketing strategy. The Product Management functions are the backbone and backup for the rest of Marketing.

The FCD Factory Marketing people are enthusiastic, experienced and committed. We intend to support the HP 250 and peripherals right, to help guarantee your success with HP customers. This team of nearly fifty people is working hard to provide the support necessary to ensure accomplishment of the FY '79 tactical plans. Give us a call whenever your productivity and success can use this kind of support.

WE ARE READY!

Order Processing

Padded Vans: Taking the Shock Out of Delivering HP 250's

By: Dick Hanson & John Monahan/FCD

While HP's two methods of delivering the HP 250 small business computer will never rival those two most famous delivery methods—the stork and Santa Claus—one method, delivery by padded van, offers significant benefits for your customers in North America.

The reason can be traced to the logistics of your customer's business. He's typically a small businessman or an OEM without a receiving clerk or dock, so he hasn't much help when a computer weighing over 300 pounds arrives.

And that's why HP highly recommends shipment to North American customers by a padded van from Atlas Lines. First, HP provides the van driver and his helper with your

customer's phone number, so the driver can call him 12-24 hours before delivery. This insures that someone will be at the site when the truck arrives.

Second, the van's crew will deliver the HP 250 to the exact site your customer desires—whether it's ten feet away or ten stories up.

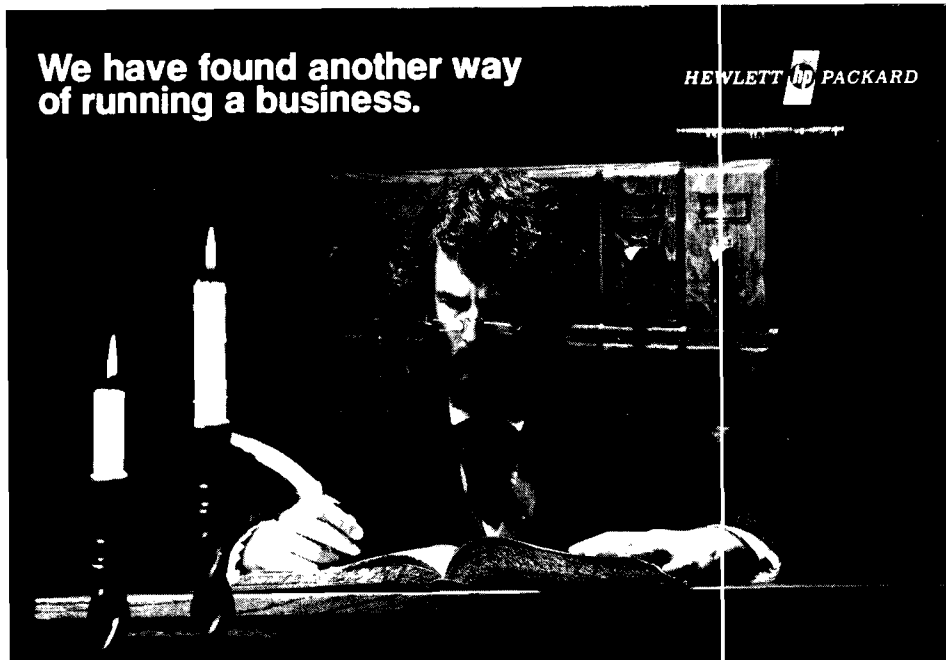
When the HP 250 is delivered by means other than padded van—whether by a truck going directly to the customer or by air freight and then truck—the customer receives no phone call to alert him that delivery is imminent, nor does the driver have any more responsibility than to deliver the computer to the door. He could even drop it off outdoors in the rain if he chose.

Shipment by padded van can also be faster. Generally speaking, deliveries going to the Midwest, the East coast, or the West coast arrive faster if sent by padded van. Those going directly South, directly North, or the Pacific Northwest from Colorado tend to be slower, because there are fewer padded van routes going in those directions from the Rocky Mountain state.

If your customer chooses to have his or her HP 250 delivered by padded van, be sure to have the order transmitted as follows:

- Under the heading "SHIP VIA INSTRUCTIONS", fill in "Padded Van".
- Under either the heading "SHIP TO" or the heading "SPECIAL INSTRUCTIONS", put the name and phone number of the person who will be at the receiving site to take delivery from the van driver.

As far as prices are concerned, they tend to be only slightly higher for padded van shipments. But when you consider the convenience of that form of delivery, it more than outweighs the cost.



GENERAL SYSTEMS NEWS

Product News

Introducing: The New Series III

By: Gwen Miller/GSD

What do you do when you have a successful product that "can't be beat" in the marketplace? You make it better! The *New Series III* represents a continuing improvement in price/performance of the proven, mature Series II/III product line. Externally, it will continue to be called the Series III; it will, however, be ordered by a new product number (32425A). And, it has a new price of \$105,000 for a complete system, including CPU with 256Kb of memory, 2621A system console, 50Mb disc, 16 terminal ports, and 1600 bpi magnetic tape drive.

The "New III" incorporates new New Jersey Division power supplies and some interior redesign of the CPU bay to allow a complete Series III system (up to two megabytes of memory plus nine I/O slots) to be racked in a single cabinet. An optional I/O expansion bay provides a total of 29 I/O slots (the current Series II/III maximum is 23). The magnetic tape unit is no longer built into the system by GSD, but is offered in its own "lo-boy" cabinet and must be ordered separately from Boise. *A mag tape is still REQUIRED on the New Series III for backup, software distribution, and loading of diagnostics. See your Sales Training Manual for →IMPORTANT← details on new ordering procedures!*



While the New Series III is intended to become the high-performance offering in the HP 3000 product line, the Series II and original Series III will remain on the price list at their current prices. Customers with an old Series III in the backlog can take advantage of the lower \$105K price by converting their orders to the New Series III. Series II customers may also want to convert to the New III to get a growth path to two megabytes for only \$6,000! Because the CPU, memory, I/O, and software is the same on the New Series III as on the original Series III, the performance is also identical. All peripherals supported on the Series II and old Series III are also available on the New Series III.

The New Series III offers your customers a number of benefits due to enhancements in design over the original Series III. Most of these benefits are in reducing the cost of ownership and in increasing system up-time by improving reliability and serviceability.

Feature	Benefit
COST OF OWNERSHIP	
New power supplies	Reduced BMMC due to greater reliability
Single-phase power	Reduced cost of site preparation and power installation
Built-in isolation transformer with 200-240 voltage settings, switch-selectable; 50 or 60 Hz	Reduced cost of site prep; no need to pre-install an isolation transformer. No need for a third-party transformer in Europe to accommodate local voltage requirements.
New fans	Better cooling, greater reliability, reduced BMMC
"Lo-boy" tape	Greater flexibility in site arrangement due to detachment from the CPU bay; lower cost for add-on tape drives.

INCREASED SYSTEM UP-TIME	
Single bay	Faster installation
Interior redesign	Improved serviceability and access to system components; reduced MTTR
New power supplies	Greater reliability
Visual indicator of power supply failure	Faster problem diagnosis in case of malfunction

Best of all, your customers can get this "New, Improved" Series III right away! Shipments start in February, so get your orders in today!

GOOD SELLING!

Series 33 Price Reduced to \$58,500!

By: Chosen Cheng/GSD

Effective February 1, 1979 the list price of the Series 33 will be reduced from \$70,000 to \$58,500. The Series 33 is Hewlett-Packard's low cost entry system to the HP 3000 product line, specifically designed for the office environment. With this price reduction, the Series 33 offers the benefits of HP 3000 performance in applications involving on-line transaction processing, batch processing, or program development to an even broader spectrum of customers, especially those concerned about cost.

For instance, it is possible to configure the hardware for a Series 33 system with magnetic tape, a 50Mb system disc and 1024Kb of memory for under \$100,000, less than the price of a New Series III. Remember, we recommend positioning any Series 33 to be sold at the low end of configuration possibilities so that growth potential is available to your customer as needed. However, the configuration possibilities on the following chart do illustrate the relative pricing options now available to your commercial customers.

Memory Size	Series 33 with mag tape and 7920 disc	Series II	New Series III
256Kb	\$75.3K	\$99.0K	\$105K
320Kb	—	106.6	—
384Kb	—	110.3	—
448Kb	—	114.0	—
512Kb	83.3	117.7	113.0
768Kb	91.3	—	121.0
1024Kb	99.3	—	129.0
2048Kb	—	—	162.5

The Series 33 is designed for the office environment and features a total approach to low cost realized by use of HP's SOS technology to reduce system size and corresponding maintenance expenses. Peripherals such as 2621A/P terminals and the 2608A printer fill the bill for low cost, high reliability, HP-manufactured peripherals. With the new low price of \$58,500, we have enhanced this winning combination and demonstrated our continuing ability to broaden the price/performance range of HP's software compatible computer systems.

GOOD SELLING!

??????? And Answers About the New Series III

By: Gwen Miller/GSD

Now that you've heard about the New Series III, you are undoubtedly anxious to go out and sell a dozen or so. But you probably have some lingering questions about it — so here are a few answers to those questions. (More answers appear in your Sales Training Manual, so be sure to read it thoroughly!)

Q: *Do my old Series III customers get a price reduction?*

A: The New Series III price is available *only* on New Series III orders! To take advantage of the price reduction, your customers must convert their orders to the New III (32435A) at least two weeks before the scheduled shipment date. No rebates will be given for any old Series III or Series II system that has been shipped.

Q: *How long will I be able to offer my customers a Series II or an old Series III? What should they expect in terms of availability?*

A: The Series II (and old Series III) will be kept on the price list as long as there is significant sales activity for those products. We anticipate that the New Series III will become the natural sales focus at the high end of the HP 3000 product line, however. Therefore we are not purchasing large quantities of Series II and old Series III parts. If these sales are stronger than we have forecast, availability could go out to five months or more. Be sure to check with GSD Order Processing for an availability quote when you order any new Series II or old Series III systems.

Q: *Can my CX, Series I, and Series II customers upgrade to a New Series III?*

A: Those customers can upgrade to full Series III capabilities, using the existing upgrade kits. The resulting system will keep the rack-mounted tape drives and old power supplies, and will have two or more bays depending on the original system. This allows us to offer an upgrade to the highest-performance HP 3000 system for the least cost.

Q: *Is there anything new in the CPU or memory in the New Series III? What about new or enhanced software? Peripherals support?*

A: All these things are IDENTICAL between the old Series III and the New III. The CPU boards and memory boards are physically the same, and the same MIT tapes load the same MPE-III on both versions of the Series III. All the same peripherals are supported, but note that new cabinets are required with the New Series III for magnetic tape drives and for the paper tape reader and punch.

Q: *Do I need to order a special isolation transformer for my European customer?*

A: No! There is an isolation transformer built into the New Series III, with strappable voltage settings. This is the same as in the Series 33.

Q: *Can I get a New Series III without a magnetic tape?*

A: The New Series III, like the Series II and old Series III, CANNOT run without a mag tape. Tape is the ONLY means of distributing software updates and of loading diagnostics. It is possible, however, to make a *mistake* when ordering a New III system and forget that the *tape must be ordered as a separate line item*. If that occurs, HEART or COCHISE will process the order, but no one in the factory can know that your customer will receive an unusable system!

Q: *What are my choices for alternate consoles to the 2621A?*

A: The following terminals are currently supported as system consoles on the New Series III:

- 2621A Interactive display terminal. Note that there are *three* voltage options for 50 Hz models of the 2621A.
- 2621P Interactive display terminal with integrated printer.
- 2640B Interactive display terminal
- 2641A APL display terminal
- 2645A Interactive display terminal
- 2647A Intelligent graphics terminal
- 2648A Graphics terminal
- 2635A Hardcopy dot matrix terminal

Order 30062D cables for 264X consoles and 13222N cables for 2621A/P; the 2635A comes with cables included.

Clarification of Terminal Support On the HP 3000 Series 33

By: Chosen Cheng/GSD

Judging from the high level of order activity, the Series 33 has been very well received by your customers interested in a low-cost MPE-compatible system with HP-manufactured peripherals such as the 2621A/P terminal.

One distinction between the HP 3000 Series 33 and Series II, III systems should be made clear to prospective customers, however. Series II and III systems may be accessed by a variety of terminals, those in the HP 264X, 263X, 262X family and other non-HP terminals. The Series 33 at this time supports *only* terminals in the HP 264X, 263X, 262X families (i.e., those corresponding to terminal types 10, 11, 12, 15, 16). This means that customers with terminals such as Teletypes, Execuport, or Terminets (i.e., those corresponding to terminal types 0, 1, 2, 3, 4, 5, 6, 9) will not be able to use them on the Series 33. These terminals require special handling by the terminal driver to synchronize the carriage return of the print head or cursor with transmission of data from the computer. Changes to the Series 33 terminal driver to provide the additional terminal types are under investigation by the Lab. No plans are quoteable at this time.

COOLSTART Capability is Now Provided On the Series 33

By: Chosen Cheng/GSD

The same COOLSTART capability that has been available on HP 3000 Series II and Series III systems will be available on the Series 33 with the first customer shipments. COOLSTART enables the customer to restart his or her system from the system disc after a system shutdown or a crash. Spool files in existence at shutdown are not saved, but all resident user files are saved.

This procedure has been of real value to the field SE and to customers in situations where a WARMSTART would not recover their system. A COOLSTART is logistically easier to perform than a COLDSTART (the system disc is always there — the flexible discs containing the system software may not always be available), saving the customer precious time in recovering his or her system.

The COOLSTART capability will be reflected in Series 33 manuals and will be included with software shipped with the Series 33 system.

Plans to provide updated software to consignment and demo units in sales offices are being completed and will be announced.

Packed Decimal Instruction Firmware On Series 33!

By: Chosen Cheng/GSD

Packed decimal instructions used by COBOL are now being implemented in microcode on the Series 33. Implementing machine instructions in microcode enables the system to take advantage of the higher speed of firmware over software, and this advantage is now available equally to all HP 3000 Series 33, Series II, and Series III systems. Series II and Series III systems have had packed decimal firmware for some time.

This means that applications that are heavily *computation-oriented* will now run faster on the Series 33. This has been a factor in COBOL benchmarks run for certain sales situations. But remember, the majority of COBOL code written for *transaction processing applications* is not computation-oriented. Thus, most customers are not affected by decimal firmware at all, and should not expect any change in COBOL performance as a result of this firmware enhancement.

Performance testing is being completed at this time and results will be announced. It is our intention to continue providing you with information to properly set your customer's expectations. We will work with you to help meet needs for performance benchmarks. Contact GSD Sales Development.

This decimal firmware is considered part of the base Series 33 system. It will be shipped at no charge in all Series 33's. Availability will be announced in a future CS Newsletter article.

Enhance Your Customer's HP 3000/33 Console

By: Rich Edwards/GSD

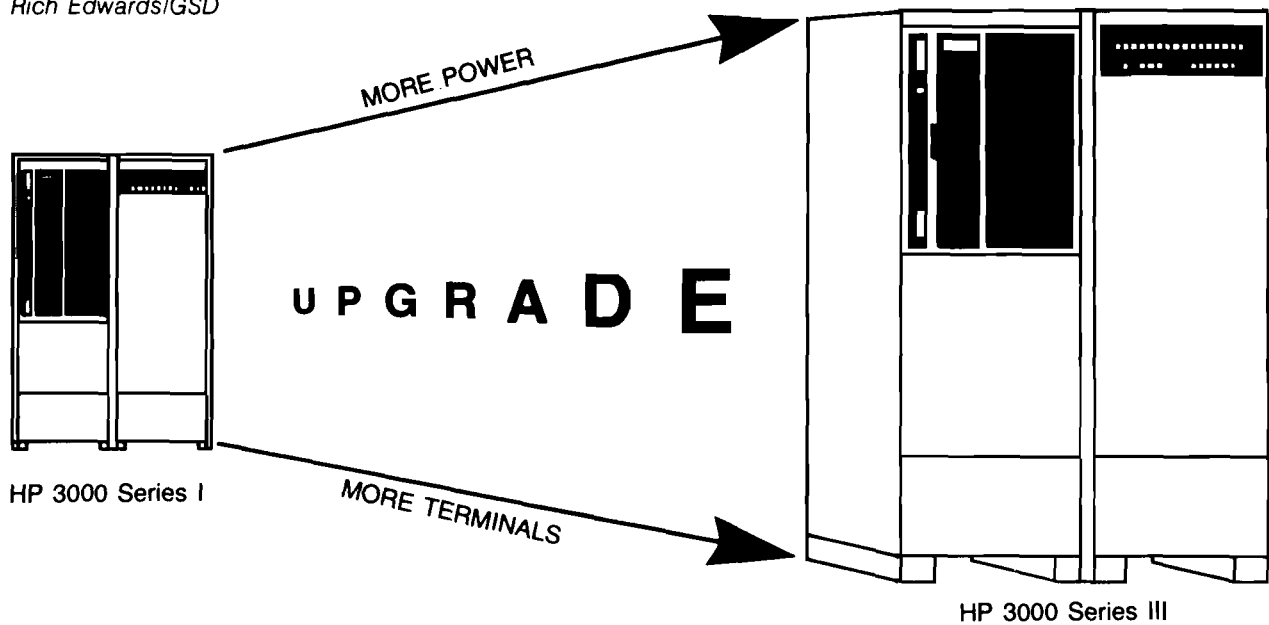
Have you given a demo of the new HP 3000 Series 33 to any prospects yet? If you have, you've certainly seen a lot of interest in the new RUN/HALT and CPU UTIL displays on the console's top line — the "status display". Another good demo is running the system cold-load self-test which displays each step of the self-test in an easy-to-read format (in English).

It has just come to my attention that these displays using inverse video can be enhanced in appearance with the addition of the 264X terminal display enhancements board. The above displays take advantage of the half-bright inverse video for highlighting. By ordering part number 13231A from DTD your customers will get both the display enhancements (blinking, underline and half-bright) and the line drawing character set — for \$250.

P.S. You might want to order the enhancements for your demo Series 33, too.

The News in HP 3000 Upgrades

By: Rich Edwards/GSD



GROW WITH HEWLETT-PACKARD

Other articles in this issue have introduced the new HP 3000 Series III computer system. But something you may not have thought about yet is HP 3000 upgrades. Are they affected by this introduction? The answer is a "yes and no". Read on and you'll be up-to-date on HP 3000 upgrades!

The New Series III offers the same growth and performance as the old Series III, and therefore requires no new upgrade paths. The 30307A Pre-Series II to Series III upgrade and the 30417A Series II to Series III upgrade are still available to bring older machines up to the highest-capability system in the HP 3000 product line. No changes have been made in these kits, as incorporating New Series III features such as new power supplies and lo-boy mag tapes would raise the cost of the upgrade by replacing existing functional equipment. Since there is no performance benefit of the New III over the old Series III, your customers get the maximum performance increase per dollar with the current Series III upgrade kits.

As of February 1, however, we will no longer offer upgrades from the CX or the Series I to the Series II. Our lack of sales of these products indicates that your customers appreciate the greater value per dollar of upgrading directly to a Series III. Specifically, the 30409C and 30306A Upgrade Kits for Series I to Series II Models 6 and 8 are being removed from the HP Corporate Price list effective February 1, 1979.

The following chart illustrates the available upgrade kits:

Product No.	CX, pre-CX, Series I	S/II Mod 5,7	S/II Mod 9	S/II Mod 6	S/II "Big 6"	S/II Mod 8	Series III capacity*	Price
30307A	○ →	→	→	→	→	→	→	\$58,000
30411B				○ →	→			\$10,000
30408A		○ →		○ →	○ →	→		\$25,000
30417A		○ →	○ →	○ →	○ →	○ →	→	\$40,000

*Number of bays and exact configuration may vary depending on original system.

SELL HP 3000 UPGRADES!

Used Series II Memory Boards' Discount Increased to 30%

By: Rich Edwards/GSD

That's right! GSD has raised the discount on used Series II 64Kb memory boards (30008A-888) to 30% so your customers can now increase their Series II system performance by adding memory boards for only \$2,800 factory base price (versus \$4,000 for a new memory board). This is a change from the 20% discount announced in December (CS Newsletter Vol. 4, Number 4) with additional purchase agreement discounts applying. The new price has built into it an additional discount to eliminate the need of hand-computing a separate purchase agreement discount, if applicable. This represents a policy *change*. Purchase agreement discounts may *NOT* be applied to 30008A-888 used memory boards. This new price greatly simplifies ordering and gives all customers an identical price for the used Series II memory board.

The 30008A-888 memory boards (used) are fully refurbished, tested and guaranteed (90-day warranty). The way you take advantage of this super deal is to order part number 30008A in the following way:

Product/ Option #	Description	Factory Base Price
30008A	64Kb memory board	\$4,000
Option 888	Used equipment	0
M93	Used equipment discount	-1,200

(NOTE that NO other discounts apply.)

If you have any Series II Model 6 customers expanding beyond 256Kb, remember to order a 30411B memory expansion kit, too.

If you have any customers considering the purchase of additional 64Kb memory boards for a Series II, let them know about these refurbished boards. Availability of the few remaining new boards is moving out considerably. Your GSD HP 3000 Sales Development contact and *Sharon Bradley* at GSD Order Processing will be glad to answer any questions. Your Series II customers can't afford NOT to take advantage of this deal!

GOOD SELLING!

HP 3000 System Back-up Speeded-up By 40-50%

By: Pete Sinclair/GSD

MPE is regarded as one of the best, if not *the* best, operating systems in the minicomputer industry and we plan on keeping it that way. The 1906 IT, coming out this week, is representative of our continuing effort for excellence. The STORE/RESTORE, DBSTORE, and SYSDUMP intrinsics have been enhanced to execute 40% to 50% faster and use 25% less tape than before! This change should significantly reduce system and database backup times, especially valuable for customers who frequently back-up large databases. The UDC (User-Defined Command) capability

has also been enhanced to allow UDC's to be assigned to individual accounts and/or the entire system with a single command. The user can now tailor his account and the entire system to his specific applications, significantly expanding system friendliness. There are a number of other enhancements to MPE III on the 1906 IT, all of which are explained in detail in this month's *Communicator*. So keep selling customers on MPE III and our continuous efforts to keep it Number 1.

GOOD SELLING!

What's New with VIEW/3000?

By: Jutta Kernke/GSD

- The product was released on the 1831 + VIEW MIT during the week of December 11, 1978.
- Availability of VIEW/3000 is three weeks; the product can be quoted and will appear on the next schedule.
- The Reference manual is available, part number 32209-90001, and can be ordered through regular channels. All SE's and PICS centers received a copy in November 1978.
- Customer training is scheduled for February 1979:
Part #22830A: A two-day course at an HP technical center.
Tuition per student. \$200.00
Part #22831A: A two-day course, on-site. \$1150.00
Both prices and availability will appear in the February CPL.
- DEL is an obsolete product and was taken off the CPL as of January 1979. Our obsolescence policy will be sent to all DM's.

Best wishes for a successful 1979!

Sales Aids

At Last — An HP 3000 Overview Slide Pitch

By: Gwen Miller/GSD



For those of you who have been struggling along with a mixture of old NPT Tour slides for your HP 3000 customer presentations, relief is on its way. To help you sell the Series 33 and New Series III, a product line overview slide pitch has been developed and will be available February 15. The 30 slides have been designed to be modular so you can select those of greatest interest to your prospect.

One set of 35mm slides will be sent to each district, along with a script. Additional sets may be ordered on an IOS from GSD Manuals Distribution as follows:

35mm format: Part No. 30000-60007 \$90/set
overhead format: Part No. 3000-60008 \$60/set

New Literature for the New Series III

By: Gwen Miller/GSD

To help you sell the New Series III, we have a new Price and Configuration Guide and a new data sheet. The Price and Configuration Guide is again in two versions, one for current products and one for mature products. The breakdown of the contents of each volume is as follows:

Current Products:

Series 33 and New Series III (32435A) systems and add-on memory and I/O expansion.

Configuration diagrams for Series 33 and New Series III (32435A).

Software.

All terminals, all discs, "lo-boy" magnetic tapes.

Mature Products (Products used *only* with non-current systems):

Upgrades from Series II, Series I, CX, and pre-CX systems to Series III.

Configuration diagrams for CX, Series I, Series II, and original Series III (32421A).

Memory and I/O expansion for CX, Series I and II, and original Series III (32421A).

Rack-mounted magnetic tapes.

Because we expect sales of the Series II and old Series III to drop off quickly, we have excluded the system prices for these products from the "current products" P/C Guide to avoid rapid outdateding of our literature. For any remaining sales of 32416A, 32418A, or 32421A systems, refer to the 10/78 edition of the Guide. Configuration and expansion information is still available, in the "mature products" Guide.

Data Sheet

The data sheet is a one-page summary of system specifications, which will be inserted into the General Information Manual when it is reprinted. Be sure to include a New Series III data sheet when you give a GIM to your Series III prospect!

One of each of these pieces was distributed in your Sales Training Manual for the New Series III. Additional copies may be ordered from Corporate Literature Distribution with the following part numbers:

Price and Configuration Guide:

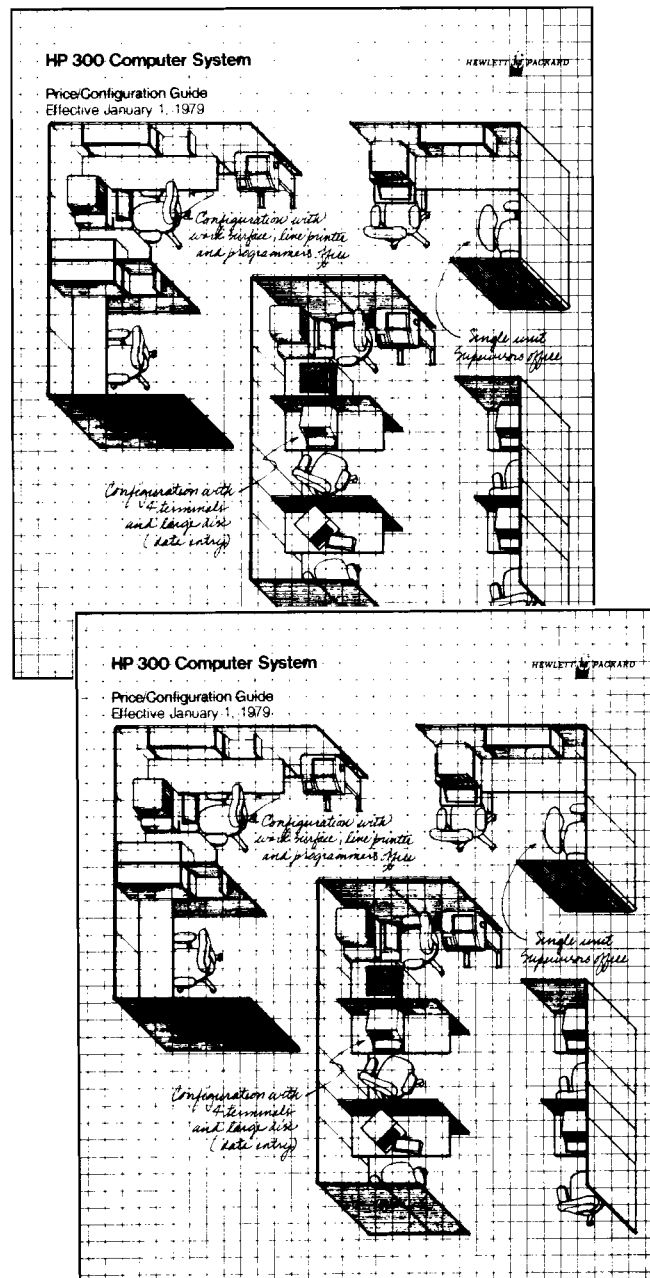
Current Products — 5953-0567D (prices in U.S. dollars)
5953-0567 (prices omitted)

Mature Products — 5953-0568D (prices in U.S. dollars)
5953-0568 (prices omitted)

Data Sheet — 5953-0570

HP 300 Price/Configuration Guide Update

By: Bob Bowden/GSD



A new version of the HP 300 Price/Configuration Guide dated January 1, 1979, is now available (5953-3702D in U.S.; 5953-3702 outside U.S.). The October 1, 1978, version can still be used but one change to it should be noted:

For disc configurations greater than 20 Megabytes, the optional General Information Channel (GIC) is no longer necessary and should not be ordered for this purpose.

Good news! The standard GIC, included in the system price, will support disc configurations up to 260 Megabytes. This reduces the effective price of HP 300 large disc configurations by \$1800.

CSB News

HP 300 Training Activities of CSB

By: Peter Rosenblatt/CSB

During 1978, we have conducted the following HP 300 Training Courses in Boeblingen:

HP 300 Account CE Course (September, 2 weeks)

Attendance: 7 people from Denmark, France, Holland, Sweden, Italy, Switzerland, UK;

HP 300 Field Training Course (October, 1 week)

Attendance: 38 people from Germany, UK, France, Italy, Holland, Belgium, Sweden, Denmark, Finland, Switzerland, Spain;

HP 300 SE Training — Phase I (December, 2 weeks)

Attendance: 10 people from France, Finland, Germany, UK;

HP 300 Cross Training for HP 3000 SE's (December, 1 week)

Attendance: 10 people from Italy, Spain, Norway, Germany, Holland.

For 1979 we intend to continue Field Training courses until the entire commercial Sales Force has been trained on the HP 300. Some of these will be conducted in Sales offices, some in Boeblingen. We will also train all European SE's in Boeblingen. The European CSD Training Facility in Grenoble has the responsibility to train all future HP 300 Account CE's. HP 300 System Specialists will always be trained in Cupertino.

New Applications

HP 3000 Sparks Improvements in Utility Billings

By: Barry Klaas/GSD

Application: Electric Utility Billing

Customer Type: City Government

Background

Stories of city governments are often associated with outdated business practices and financial problems. In this midwestern metropolis of 500,000, it was the same story with the city electric department. However, since the HP 3000 was installed, the financial situation and business practices of this department have vastly improved.

The Problem

Like many other cities, this one has its own electric power distribution system. The electric bills were generated from two weeks to six weeks after the meter was read. The meter data was cranked through backlogs of keypunch and then awaited priority to get processed through the mainframe morass (in this case a Burroughs B3500). On the average, several thousand bills representing about \$800,000 in monthly revenue would be sent to customers 22 days after the meter was read. Bills for customers who were moving would often never reach them due to the time delay and those who didn't move often wondered what time period the billing actually covered. Also, utility ordinances had been passed by the city supervisors regarding consumer information on the billings that could not be complied with because of a backlog of other city central EDP programming requests. As a result of this central EDP priority situation, the electric utility department was forced to maintain meager customer information on a manual ledger card system to which cash receipts were posted. Customer inquiries were often left unanswered due to lack of information.

The Solution

When the central EDP staff was unable to provide a satisfactory solution for electric billings, the electric department director hired a smart young programmer/analyst and obtained approval to find a solution himself. The HP 3000 Series I was selected for price, ease of use, terminal orientation, and database management. The configuration consists of 128Kb memory, 4 HP 2640's, 2 HP 2635's, and an HP 2613 line printer. Software is primarily COBOL and IMAGE.

With the new HP solution, some of the benefits are: meter readings are posted via HP 2640's the day they are received, billings are in the mail the next day, monthly billing payments of \$800,000 are now received a month sooner (run that cash flow and interest savings through your HP 21!), billings contain much more useful information, multiple site customers who used to get (and have to pay) as many as ten or more separate bills can now get one consolidated bill, the net revenue received has increased and bad debts reduced, the number of people required has dropped from four to two, and department morale and customer service have greatly increased. The ledger card system was eliminated. The HP 3000 EDP manager says, "... a lot more work is done with fewer people and a lot more information is available."

Success in the electric utility department now has the attention of the water department which suffers similar problems. Savings of over \$100,000 annually speak loudly and eloquently for the concept of distributed systems in government.

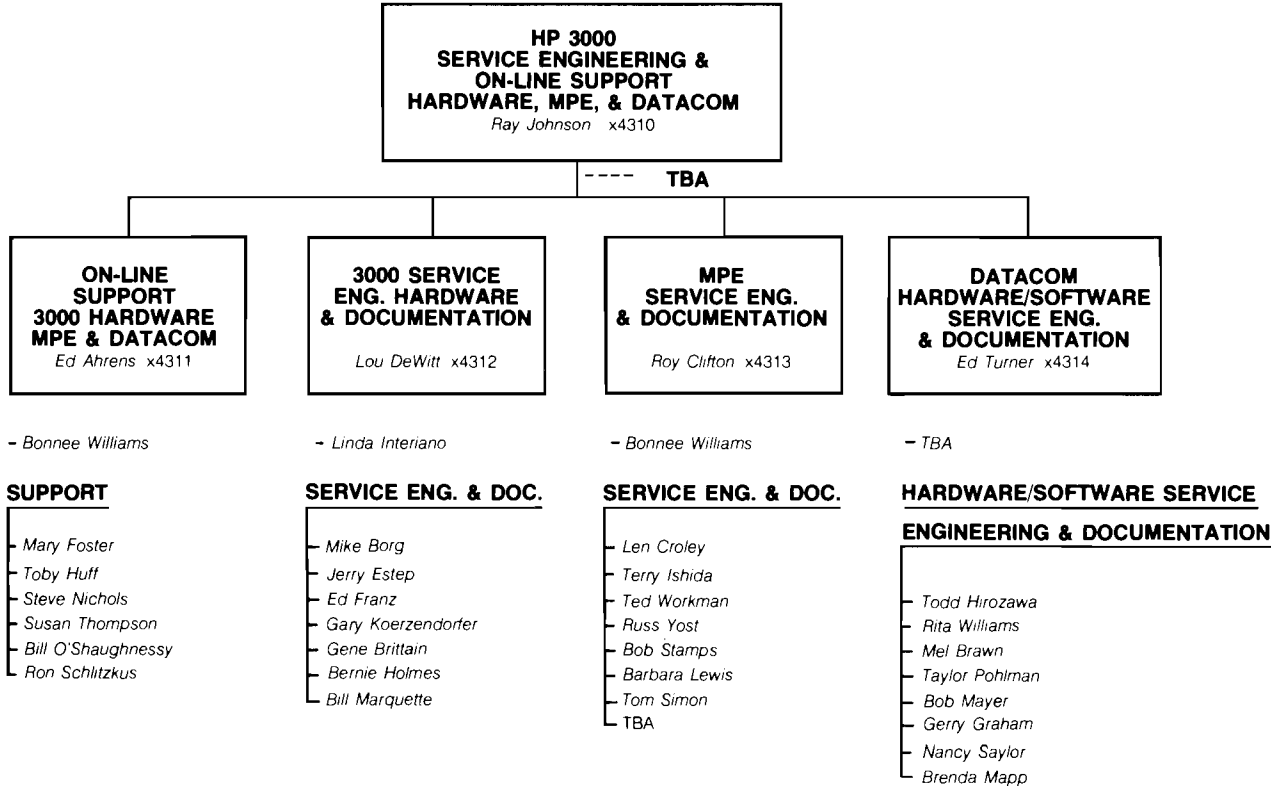
For more information on this application and similar ones, call Barry Klaas or Regina Fanelli at GSD Sales Development.

General News

New HP 3000 On-Line Support Group

By: Ray Johnson/GSD

We've heard you loud and clear that responsive factory support contributes to your sales effort. To continue providing the kind of first-rate on-line support for the GSD 3000 program, to which you have become accustomed, we have organized a group which has but one responsibility — comprehensive on-line support. The chart below shows where this new group fits into the HP 3000 Service Engineering and On-line Support organization.



By the formation of a group dedicated to the on-line support function we will be able to respond quickly to your inquiries. But just as importantly, we expect the synergism between these people, who typically have broader experience than in the single areas listed below, will provide you with an increasingly more proficient on-line support service.

- | | |
|---------------------------|--|
| <i>Ed Ahrens</i> | Manager |
| <i>Mary Foster</i> | Data Com Hardware and Data Com Software Subsystems |
| <i>Toby Huff</i> | Series I, II, III Hardware |
| <i>Steve Nichols</i> | Series I, II, III Hardware |
| <i>Ron Schlitzkus</i> | Series II, III, 33 Hardware |
| <i>Bill O'Shaughnessy</i> | MPE |
| <i>Sue Thompson</i> | Series 33 Hardware |

Others will be assigned to back up the people listed above, but if you do need help, please limit your incoming problem call to this list. Your doing so will help us make an appropriate allocation of support resources to the Service Engineering group that, along with the GSD lab, is working to build increasing serviceability into our new products.

HP GRENOBLE NEWS

Data Systems – Europe

New Sales Development Manager

By: Dave Borton/HPG

Wow! The orders come in faster here than they did in Athens and the Middle East!



I am pleased to announce the appointment of *Tony Gunn* as the European Sales Development Manager for HP 1000 Computers and Systems. *Tony* started his duties in Grenoble November 1, 1978.

Tony, who is British, joined HP in 1969 as a Computer Systems Field Engineer in the UK. He has also worked with the Systems Operation in Boeblingen and comes to Grenoble after spending four years based in Athens as Systems Sales Manager in the Mediterranean and Middle East. During his time with HP, *Tony* has gained wide experience in computer systems sales. *Tony* has a Bachelor of Engineering Degree in Electrical and Electronic engineering from the University of Sheffield as well as a Master of Science Degree in Control Systems Engineering from the University of Birmingham.

The addition of *Tony* to the HP 1000 Marketing Group further strengthens technical computer systems marketing and

demonstrates the commitment of Data Systems Division to developing its capacity in Grenoble for Europe.

Tony joins two other relative newcomers to my marketing staff: *Alic Rakhmaroff* who is responsible for Product Management and Merchandising and *Jean-Pierre Baudouin* who is responsible for Technical Marketing.

Tony, Welcome Aboard!

Product News

2649 Demystification

By: Maurice Poizat/HPG

The 2649 has very often been considered as a product difficult to understand and to sell. It is not so, provided the philosophy of the 2649 program is clear to you.

The 2649 is a product offered to OEM customers who wish to sell to their own customers systems or applications requiring special or specialized features or capabilities that cannot be found on the market in the same price range.

The 2649's terminals are products to which value can be added by the OEM customer because hardware and/or firmware additions can be implemented very easily to give original and powerful capabilities to the familiar "264X box".

We have three basic 2649's to offer to our OEM's:

- The 2649A is obviously a product to which hardware and firmware modules, standard or not, *must* be added, because the 2649A, as it is, is not a finished product: It must be finished by the OEM customer himself who will convert it into a product of his own, which may have capabilities never seen in any product of the 264X family.
- The 2649B is a finished product, physically identical to the 2645A, but different in spirit.
- The 2649C is a finished product, physically identical to the 2648A, but different in spirit.

It must be noted that the 2649B and the 2649C are only special versions of the 2649A and if they differ from the standard 2645A and 2648A, it is because value can be added to them by hardware and/or firmware extensions, as on the 2649A. This is the way our OEM's can make specials for their customers, and for ours as well.

If you need any information on the 2649, any help to close a 2649 deal, do not hesitate to contact me in Grenoble.

SELL OEM, SELL 2649!

Order Processing

OMR—7261A

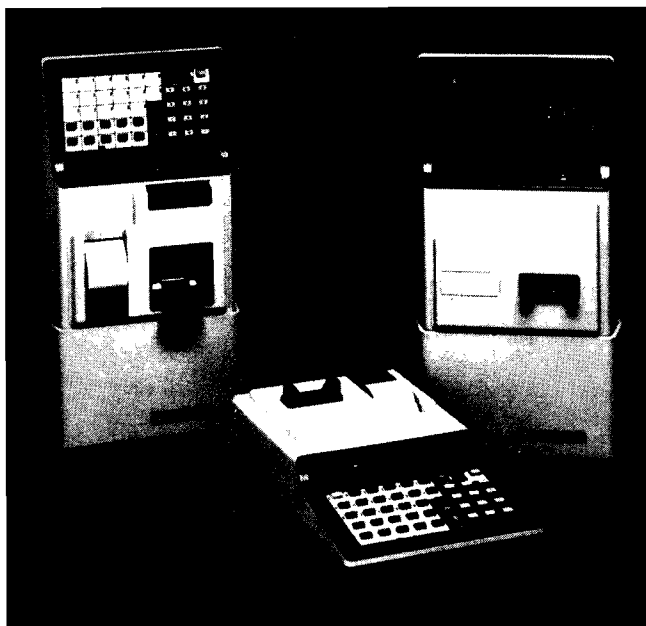
By: *Kathy Romani/HPG*

We have removed the 7261A/12986A from the Price List, however we still have a few left to sell. To order them, enter an override for:

Product — Option	F B Price	USA Import Charges
7261A	\$3,650.00	\$3,995.00 345.00
-002	220.00	230.00 10.00
-003	220.00	230.00 10.00
-004	55.00	60.00 5.00
-005	0.00	0.00
-006	0.00	0.00

Product — Option	F B Price	USA Import Charges
12986A	\$4,425.00	\$4,795.00 370.00
-002	220.00	230.00 10.00
-002	220.00	230.00 10.00
-004	55.00	60.00 5.00
-015	0.00	0.00
-016	0.00	0.00

Delivery is around six weeks. For any special requests, please contact your O.P. coordinator directly.



CS GROUP NEWS

CSG News

New Warranty Policy For Component Products

By: Joe Rodgers/CSG

Effective January 1, 1979, the warranty period was changed for all Component Products (HP accessories, interfaces, peripherals, software and terminals). The new warranty period will be 90 days from date of shipment and the service during warranty will remain on a return-to-HP basis; however, HP at its option will repair on-site on a best-efforts basis. This new warranty is more in line with the needs of the markets we serve.

There will be no change in warranty policy when these component products are ordered with an HP system. In such cases, the components will receive the system warranty of 90 days from date of installation and the warranty will be performed on-site.

A new warranty table will appear in the January update of the CSG Purchase Agreement and Warranty Terms. All customers with purchase agreements that reflect the 30-day warranty will be granted the benefit of this new warranty retroactively on shipments made after January 1, 1979. In addition, any shipped products which are still covered under the 30-day warranty after January 1, will receive an additional 60 days of warranty coverage.

It should be noted that HP will not offer the old option W (30-day warranty and 2% higher discount) to OEM customers under this new 90-day warranty plan. Our experience has shown that the extra administrative costs of handling special 30-day warranty tags and keeping track of those products offsets any real savings by reducing the term to 30 days.

As an added incentive to our component customers to purchase a one year maintenance agreement concurrent with any component product, HP will include installation and on-site coverage during the warranty period, at no additional charge; the commencement date of the initial term and invoice date will begin at the end of the warranty period (90 days from ship date). This represents a change from our current practice which is to start the initial term and invoice date from the date of installation. For those customers who choose a maintenance agreement with extended coverage, this coverage will be included at no additional charge during the warranty period.

This policy change will not affect the special HP 1000 System purchase agreement amendment which provides 5% additional discount to customers who sign for 25 functional units or more, except that the warranty period will be 90 days from date of shipment instead of 30 days.

SAN DIEGO DIVISION

Standard Repair Price On 7225A Graphics Plotter

By: Russ Bergen/SDD

The Standard Price Program offered is applicable to any 7225A returned to Hewlett-Packard for repair. In addition to the standard repair price of \$180, there is a low "mini-repair price" which is common to all models on the program. Should the repair take less than one hour and require nominal parts (\$10 or less), a "mini-repair price" of \$45 will be charged.

This program gives our customers one more repair option that in some cases may avoid a more expensive on-site repair. As long as the customer is willing to tolerate some turn-around time and is able to ship the plotter into a local HP Service Office, HP can guarantee this fixed price of \$180, or if a "mini-repair", a \$45 cost.

7245A Thermal Paper Reproduction Quality

By: Johnnie Koon/SDD

All you folks out there who might be concerned about the reproducible quality of the blue thermal paper used on the 7245A Plotter/Printer . . . relax.

Making a copy of your printout on any of today's modern copying machines (you know who they are) you will be pleased by the results. However, a word of caution if you attempt to make a copy on an older copying machine; say a 1960 vintage. You will not be pleased, nor will the customer you are trying to impress. But, since there are newer machines out there, you should have no problem impressing a customer as to the quality of a reproduction drawn on the blue thermal paper by the 7245A. Seeing is believing. Right? Then make a copy . . . and see!

Hewlett-Packard ends the computer compromise for business OEMs.

Now that HP offers a complete range of small business systems, you won't have any trouble finding exactly the right computer for your customer. Our four systems — the HP 250, HP 300, HP 3000 Series 33 and HP 3000 Series III — cover the price spectrum from \$25,000 to \$250,000. They're all on-line, interactive, terminal-oriented systems with data base management, as well as a variety of other software tools to make your programming easier.

We also offer a broad line of peripherals and an OEM package of discounts,

support and service that will help you when building your systems and after you deliver them.

So don't compromise between price and performance any longer. For complete information, call the Hewlett-Packard office listed in the White Pages. Or write to Hewlett-Packard, Attn. Bill Richion, Dept. 000, 11000 Wolfe Road, Cupertino CA 95014.



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COMPUTER SYSTEMS NEWSLETTER

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