

COMPUTER SYSTEMS NEWSLETTER

For HP Field Sales Personnel

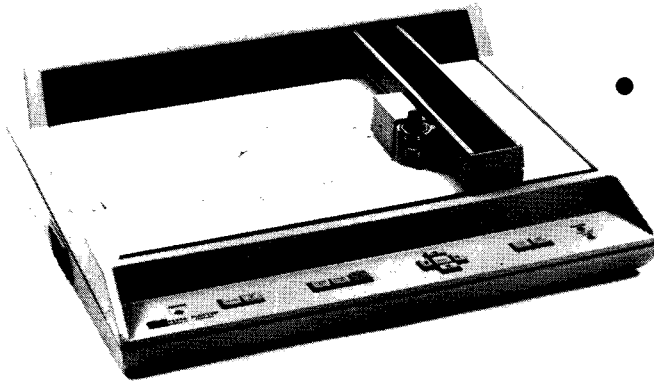
REINHARDT, HELMUT
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HEWLETT  PACKARD

Vol. 3, No. 20
Sept. 1, 1978

NEW FROM SAN DIEGO DIVISION!

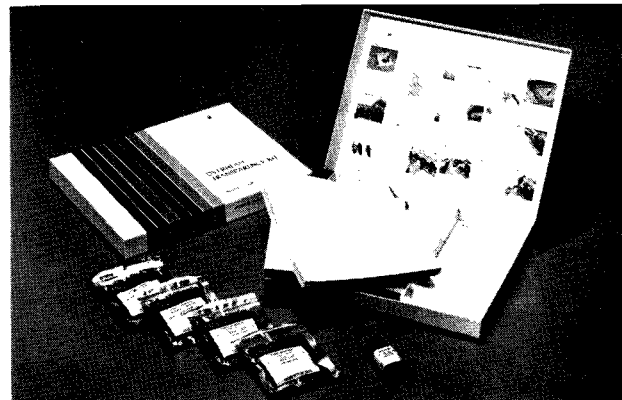
7225A GRAPHICS PLOTTER



- High Quality/Low Cost Vector Plotting
- I/O Flexibility
- 8½ × 11" or True ISO A4 Plotting Area

17055A OVERHEAD TRANSPARENCY KIT (FOR 7221A AND 9872A PLOTTERS)

- Professional Presentations
- Direct Plotting on Clear Film
- Seven Vivid Colors
- Two Line Widths



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BOISE DIVISION NEWS

Division News

Two Additions to Boise Sales Development

By: John Klonick/Boise

We're pleased to welcome two new sales development engineers to the Boise Division marketing team.



Mary McNally

Mary McNally hails from the Boston, Mass. area and will be supporting our ICON Sales Activities. She is a recent BSEE graduate from Massachusetts Institute of Technology, where she specialized in logic design and computer programming. *Mary* has spent several summers with Digital Equipment Corporation developing diagnostic software. *Mary* is an accomplished sportswoman and a welcome addition to the marketing softball efforts!



Robert McCaleb

Robert McCaleb joined us from sunny Tucson, Arizona where he was working with Hughes Aircraft. While holding this full time job, he was able to complete an MBA program at the University of Arizona this past June. *Robert* also obtained a BSEE from the University of Arizona in 1975.

Robert enjoys the challenges of trout fishing and basketball (it is rumored he has uncanny accuracy from 30 feet out).

We would like to welcome both *Mary* and *Robert* to our Boise family!

Product News

New Reliability Verification Testing Brochure

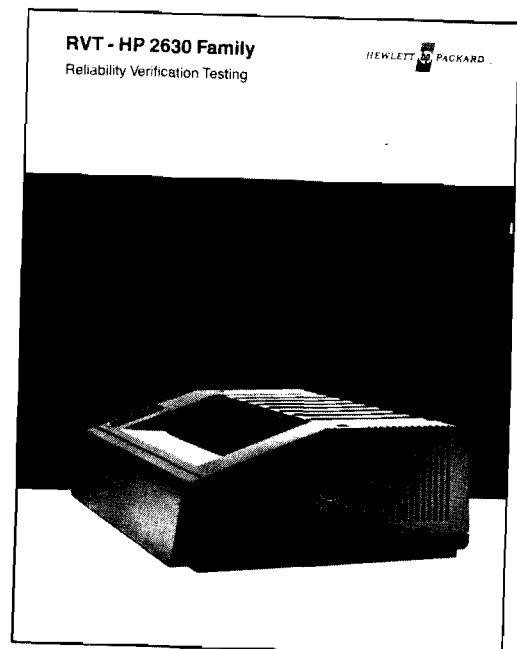
By: Chuck Ulfers/Boise



'Reliability Verification Testing — HP 2630 Family' is a new brochure from Hewlett-Packard that documents the results from tests encompassing the printing of more than 13 billion characters. It summarizes life tests performed on the HP 2630 family of printers and printing terminals, to verify that calculated reliability figures were met or exceeded. Actual MCBF (mean characters between failures) results are specified.

Introduced in September, 1977, the HP 2631A Printer and HP 2635A Printing Terminal are 180-character-per-second, dot-matrix, impact printing devices for use with Hewlett-Packard and other computer systems.

Copies of the brochure (5952-9432) are available without charge from Hewlett-Packard Company, 1507 Page Mill Road, Palo Alto, California 94304.



263X Service Improvement

By: Thad Webster Boise

Effective immediately the 263X family becomes even more cost-competitive. The 2631A and 2635A service contract now includes the print head at no increase in cost. Previously classified as a consumable item, the print head will now be fully covered under the existing Basic Monthly Maintenance Charge of \$31. Further, the replacement cost of the print head has been lowered from \$165 to \$95.

This policy change effectively lowers the BMMC, which should give us an added advantage in sales situations. With availability at its best ever, and volume production in full swing, now is the time to be closing those 263X opportunities.

Boise Attains Millennial Glory

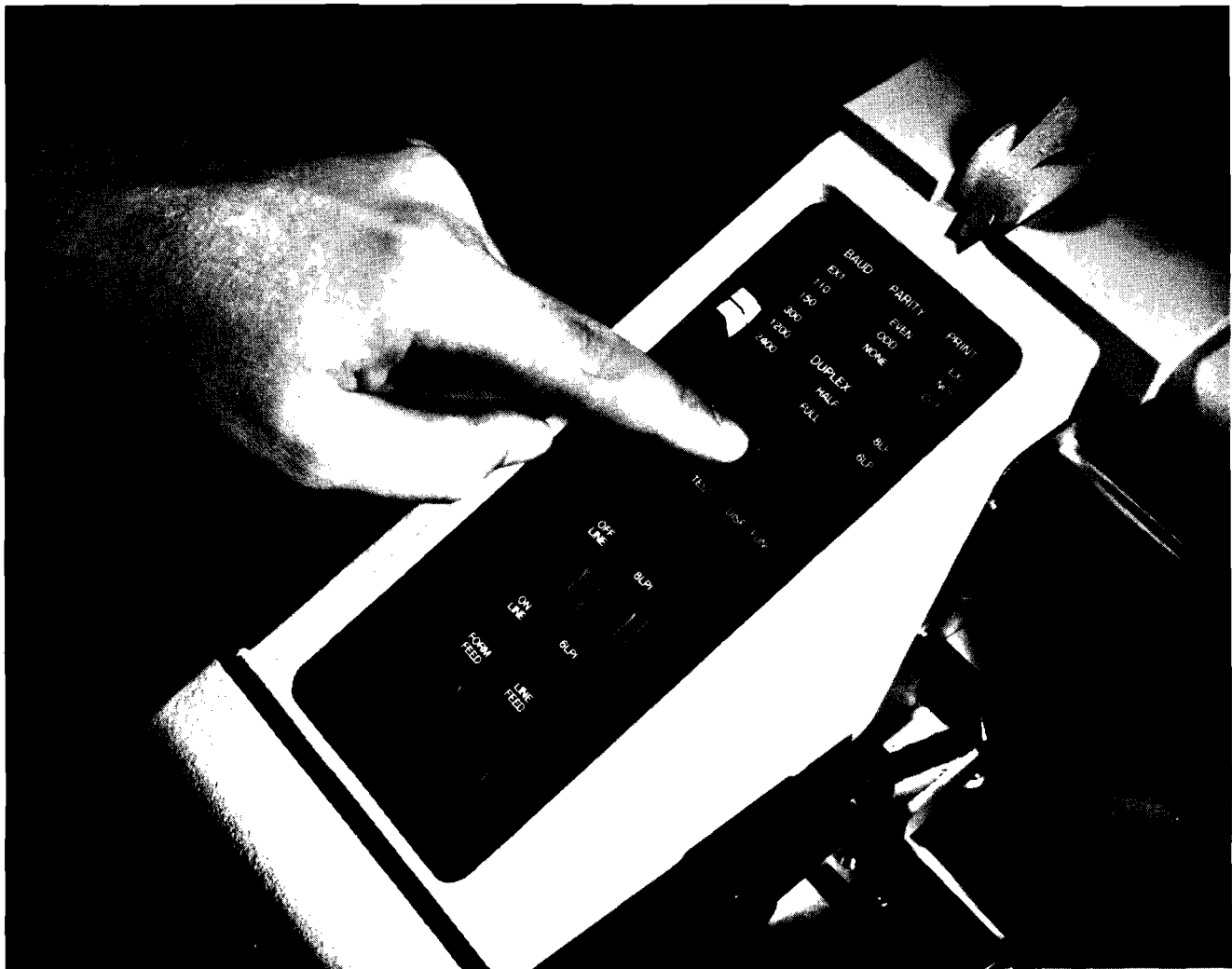
By: Robert McCaleb Boise

After months of suffering the proverbial trials and tribulations of production perturbations, the Boise Division is shipping 2630 family printers in record numbers.

June brought the completion of 750 units, a commendable prelude to July's astonishing achievement. The division's lofty goal for the month was realized on July 31st as the 1000th unit rolled through final testing, amidst a jubilant chorus of "huzzah!" 's.

Needless to say, the new production record is conclusive evidence that we can produce printers in high volume.

SEND ORDERS!



Which Terminal/Printer Interface Option??

By: Gary Sherwood/Boise

As I moved to Boise Division and became a part of Sales Support, I became confused by all the different interface options available on the Terminals. The different options exist of course to give a lot of versatility, but, what is provided in each option to connect the terminal/printer to a System/CRT/Modem? What is included and what do I have to order separately? How do the parts of one option differ from another? What limitations exist with certain configurations? As I asked these questions and was given the answers, sometimes several times, I realized once more that one picture is worth a thousand words. Sooo — I put together the following matrix. I have been using it constantly to answer questions and thought it might be of use to you also. Previous articles have been written in the *CS Newsletter* giving more details about some of the specifics below, but this should help as a summary.

Also, everyone in the field knows by now about the 2609A Interface Kit, right?? The kit allows the customer or field to buy additional interfaces for 2631A/35A's. The kit options parallel the 2631/5 interface options. If for example, the customer wanted to be able to connect a 2631A to a CRT via Option 240 but also wanted to connect the same 2631A direct to a system via Option 041, what could they do? First, order a 2631 with Option 041. This provides the printer with a serial control panel. This panel can operate

both serial and parallel interfaces. Second, order a 2609A with Option 240. Referring to the table and diagram below it can be seen that the terminal interface board and adapter both need to be swapped to change between these two options. If you were switching between Options 041 and 051, only the terminal adapter would need to be changed.

This table now provides you with the information to be able to switch between the different options with:

1. Minimum hardware
2. A configuration check list.

If a parallel interface was ordered initially, and now a serial interface is also wanted, order 26095A and the appropriate interface option. Also order a 29095A Option 010. This is the serial interface control panel. The parallel control panel will not control serial interfaces and therefore needs to be replaced by the Option 010.

I hope this chart and table in conjunction with the above explanation will be as much help to you as it has been to me.

Additional Notes of Information:

1. When using a System 1000 with DVR00 no handshaking is performed. Baud rate is therefore limited. Presently the 263X prints the fill characters used by DVR00 subchannel 9. Presently then, subchannel 0 has to be used. This limits the baud rate to 600. Certain applications (long print lines) will work at 1200 baud.
2. See also the notes provided with the diagram.

Option No.		Terminal/Printer				Computer/CRT I/F Provided?
2631	2635	I/F Card	I/F Card to Cable Adapter	Cable Provided	2631A Control Panel (A)	
STD	—	Parallel 02631-60008	02631-60017	—	Parallel	No
210	—	Parallel 02631-60008	02631-60017	Yes See I/F	Parallel	Includes 12845B interface to HP 1000 Systems.
300	—	Parallel 02631-60008	02631-60017	30209-60004	Parallel	Supplied with cable only. 30209A Interface Board to be ordered from GSD.
040	STD	Serial Min. 02631-60082	02631-60012	02631-60065	Serial	No
041	041	Serial Max. 02631-60083	02631-60012	02631-60065	Serial	No
044	—	02631-60046	02631-60018	—	Parallel	No
240	—	02631-60046	02631-60018	Yes See I/F	Parallel	Subsystem includes 13238A CRT Interface Board and 13232J Interface Cable.
042	042	02631-60021	02631-60019	—	Serial	No
046	—	02631-60090	02631-60011	—	Parallel	No
051	051	Serial Max. 02631-60083	02631-60064	—	Serial	No

(A) Serial 02631-60088
Parallel 02631-60087

SYSTEM 1000

DRIVER	I/F CARD	I/F CABLE	OPTIONS	
			2631	2635
DVA12	*12845B	*12845-60006	Std *210	--
DVR05	STD 12966A-001	12966-6008	051	051
(A) DVR00	or 12531D-004 or 12880A-001	02640-60058		
(A) DVR00	12531D-001	Hardwired or 103 Modem 12531-60026 *02631-60065 (C)	*040	*STD
(A) DVR00	12531D-001	Hardwired or 103/202 Modem 12531-60026 *02631-60065 (C)	*041	*041
DVR37	59310B	59310-60002	046	--
DVR05	12966A-001	12966-60008	264X (F)	
(A) DVR00	or 12531D-004 or 12880A-001	02640-60058	*13238A *13232J	044 *240
DVR05	12966A-001	12966-60008	264X (F)	
(A) DVR00	or 12531D-004 or 12880A-001	02640-60058	13250B or 13260B 13232G (B) (G)	40/41

SYSTEM 3000

IOLPRO	30209A	*30209-60004	STD *300	--
MPLX	30032B	Hardwired or 103 Modem *02631-60065	*040	Std * (D)
MPLX	30032B	Hardwired or 103 Modem *02631-60065	*041 (E)	*041 (E)
MPLX	30032B	02640-60043	264X *13238A (F)	*13232J 044 *240

* Includes card and/or cable.

- (A) Transmission rate with DVR00 presently limited to 600 baud, 1200 baud may work.
- (B) 264X with serial interface inserts Nulls after Esc's. Presently 263X does not trap Null, therefore printer/terminal control functions are not useable. On 2647/8 jumper for zero nulls to correct this problem.
- (C) Cable provided for Modem connection. not needed without modem.
- (D) May lose data when out of paper.
- (E) Not supported on 202 Modem.
- (F) 2640A/B can only dump display memory. (80 columns Max). No escape sequences can be sent to printer.
- (G) 264X Serial Interface does not provide ENQ/ACK Handshake. Limited to 600 baud transmission rate, 1200 baud may work.

DATA SYSTEMS NEWS

Product News

HP 1000 F-Series, Model 45 Receives Enthusiastic Response

By: Bill Elmore/DSD

With shipments now underway, enthusiasm over the new HP 1000 F-Series is running higher than ever. Startup of the F-Series production has been smoother than any new CPU in recent memory. The computer itself is exhibiting very low failure rates in-house, indicating that the F-Series will be an extremely reliable product in the field.

Response to the HP 1000 Model 45 advertisement (reprinted in this edition of the *CS Newsletter*) that appeared in recent issues of *Electronics*, *Computerworld*, and other publications, has been very encouraging. This means that many potential customers have taken notice of the Model 45 and its number crunching capabilities. We think we've got the highest price/performance package on the market with the F-Series and the Model 45, and it looks like our customers agree!

SELL F-SERIES!!!

M-Series CPU Design Changed For RTE-IV Compatibility

By: Eric Isaccson/DSD

Recently a design change was made to the CPU board in the M-Series computers. This change is required for M-Series computers to correctly handle parity error reporting in RTE-IV.

M-Series computers shipped after March 6 and before approximately August 7, will need a new CPU board in order to have complete RTE-IV parity error reporting.

If the customer has purchased RTE-IV software for his computer and if his computer was shipped after March 6 we will replace his CPU board under warranty. A Service Note providing detailed information is being prepared and will be distributed shortly.

Since this change is not critical to normal RTE-IV operation affects only handling of parity errors, the correct CPU date code will be checked at the next routine PM or upon reporting of a problem.

All 92852M Hardware Upgrade kits contain the CPU board required to run RTE-IV.

The data sheets for RTE-IV software (92067A) and the RTE-IV Hardware Upgrade Packages (92852E and M) are being revised to specify that RTE-IV requires that an M-Series computer have both a CPU board with a date code of 1833 or later and a computer serial number prefix of 1810 or later.

As before we guarantee that all M-Series computers shipped after March 6 will be compatible with RTE-IV. (See *CS Newsletter*, Volume 3, Number 16, July 1, 1978, page 5.) We will now replace M-Series CPU boards as required under warranty if the computer was shipped after March 6 and if the customer has purchased RTE-IV software for use on it.

Rack Slides for HP 1000 Computers

By: David Carver/DSD

When your HP 1000 computer component customer wishes to mount the CPU on slides the rack slides must be ordered as a separate line item. There are three kinds of slides:

- 12903A 5-1/4 inch units
- 12903B 8-3/4 inch units
- 12903C 12-1/4 inch units

The following table shows the appropriate rack slide for each HP 1000 Computer.

Computer	Rack Slide
2105A	12903A
2108M, 2109E	12903B
2112M, 2113E, 2111F	12903C
2117F	12903A plus 12903C

Introducing the HP 1000 model 45.

A powerful
number cruncher
that won't
break your
budget.

Most engineers and scientists will find all the power they need in this new leader of the HP 1000 family. A new floating point processor handles big data arrays and cuts lengthy computational problems down to size. And the HP 1000 Model 45 also has the flexibility for complex measurement and control applications, for data base management and distributed networking.

And it isn't hard to get your hands on all this computational power. System prices start at just \$46,500*.

Our new F-Series processor is the hard-working heart of the system. It's extremely fast, completing load and store operations in 900 nanoseconds. The separate hardware processor does floating point calculations at high speeds, too—630 ns for add, 1.8 microseconds for multiply and 3 microseconds for divide.

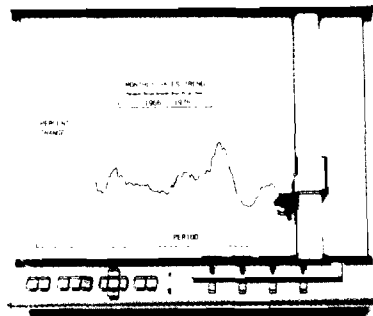
A special scientific instruction set, standard in the system, also helps to improve execution speed, performing trig and log functions in less than 48 microseconds. And a fast FORTRAN processor, which

handles commonly used FORTRAN operations in hardware, also gets things done in a hurry.

Our RTE-IV real-time operating system, the latest in an upward compatible family, lets you manipulate data arrays up to 1.8M bytes, using simple FORTRAN commands. As many as 64 partitions, with a program capacity of 54K bytes, can be resident in memory at the same time.

The HP 1000 Model 45 comes with a fast (25 msec seek time) 20M byte disc drive and an HP 2648A Graphics Terminal, as well as our new Graphics/1000 support software to help you write graphics programs. You can also team it up with other HP products like the HP 9872A four-color plotter and the HP 7245A printer/plotter.

Adding data base management is as simple and economical as adding peripherals. Our IMAGE/1000 software will consolidate your technical information into related and easily accessible files. And you can pool data from other HP 1000 systems (as well as linking to our powerful HP 3000 general purpose computers and IBM) with the help of DS/1000 networking software.



In addition to getting graphic displays on the 2648A terminal, you can get hard copy graphics on our new 9872A programmable four-color plotter, one of many options available with the HP 1000 Model 45. It has a built-in microprocessor and operates up to 360 mm/s (14 inches/s) on each axis. Ideal for vector analysis trace differentiations and window plotting.

So if you've got some big jobs to do, but don't have a big budget to match, the HP 1000 Model 45 can solve your problems fast. To find out all about it, call the HP office listed in the White Pages. Or send us the coupon. We'll prove once again that good things do come in small packages.



HEWLETT  PACKARD

**U.S. domestic list price*

Yes, I'm interested in more computation power for my money. Send me more information.

Name _____ Title _____

Company _____

Address _____

City/State/Zip _____

Phone _____

Mail to: Hewlett-Packard, Attn: Bob Paette
11000 Wolfe Road, Dept. 625
Cupertino CA 95014

F-Series Upgrade for E-Series Computers

By: Bill Elmore/DSD

A few customers have continued to express interest in upgrading their existing E-Series computers to F-Series computers. For those customers, a special product is now available from DSD Specials Engineering. The product number for the F-Series upgrade is 93589S and will require the customer to ship his 2113B computer with high performance memory to the factory. DSD will update, add, and thoroughly test all hardware required to provide the full capabilities of a 2117F F-Series computer, then return it to the customer.

Factory turnaround time for the upgrade is anticipated to be approximately six weeks, and initial availability will be in October, 1978.

List price is \$7800. If your customer is interested in the upgrade, contact your DSD Sales Development Engineer.



National General Electric Users' Group To Meet in San Jose

By: Bill Kaiser/DSD

The National HP User's Group of General Electric will be holding their 1978 Fall meeting October 17-19 in San Jose and Cupertino.

A group of 25-30 people from G.E. divisions all over the country will be attending seminars, presenting papers, and listening to tutorials. Among the subjects to be covered: languages, measurement and control, HP-IB, DS 1000, high-speed data acquisition, and micro-programming. HP personnel are heavily involved in the program, which will be held at Data Systems Division on Tuesday the 17th and at G.E. (San Jose) and the Los Gatos Lodge on the 18th and 19th.

If you have G.E. customers or potential G.E. customers in your territory, make sure that they're aware of this event! This is an opportunity for them to get to know HP much better. The meeting will be technically oriented with a great deal of potentially useful information to be presented. The organizers of the meeting have indicated that G.E. people who are *not* presently HP users are also welcome and encouraged to attend.

If you have G.E. people interested in coming, have them contact:

Stuart Troop
Special Purpose Computer Center
General Electric Company
Boston Avenue — Bldg. 24-EE
Bridgeport, CT 06602
(203) 334-1012 x3265 or x2636
Dial Comm 8 * 223-3265

DSD Technical Articles Awards

By: Jerry Gross/DSD

The pen may or may not be mightier than the sword, but eight DSD people who authored technical articles for four computer and electronic publications did a lot to make HP products better known to thousands of potential customers.

DSD general manager, *Dick Anderson*, recently honored the authors of six articles by presenting them with engraved plaques. *Dick* said they deserved special recognition because "their contributions greatly aided our efforts to make HP and DSD products, technologies and capabilities better known and appreciated by the thousands of customers and potential customers who read their articles."

Three of the DSD-authored articles were featured on magazine covers. All told, the HP articles occupied a total of 36 printed pages.

Authors recognized for their efforts were:

Larry Lopp, Alan Capell, Daryl Knoblock and Larry Mather, co-authors of a cover article in *ELECTRONICS* magazine, "Process Refinements Bring CMOS on Sapphire into Commercial Use."

Bob Frankenberg, for his three-article series in *MINI-MICRO SYSTEMS*, "Unraveling the Mystery in User Microprogramming."

Paul Accampo, who wrote an article in *ELECTRONICS PACKAGING & PRODUCTION* entitled, "Digital Testing: the Economics of Logic Simulation;" and

Scott Stallard and Phil Gordon, who co-authored a 10-page cover article on the E-Series computer. Their article in the June issue of *COMPUTER DESIGN* was called "Microprogrammed CPU Architecture Offers User-Alterable Minicomputer Performance."

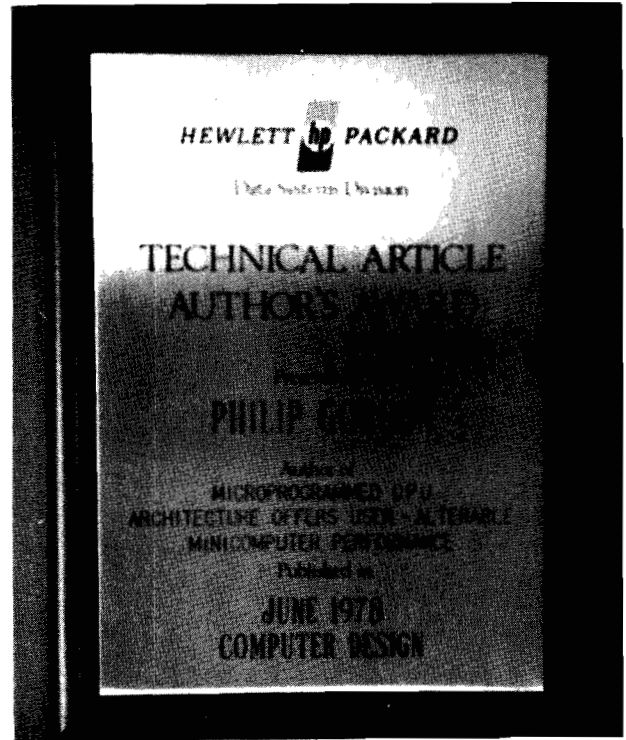
The DSD Technical Articles Program was started a year ago to encourage the publication of HP articles in computer, electronic and other magazines covering target markets. Authors are eligible for a DSD "matching funds" payment program — if a magazine pays an author an honorarium, typically \$125 to \$150, DSD will match that amount. If the magazine does not pay an honorarium, DSD pays a flat \$250 fee to the HP author.

Several other articles are in various stages of development, heading toward print in a number of publications.

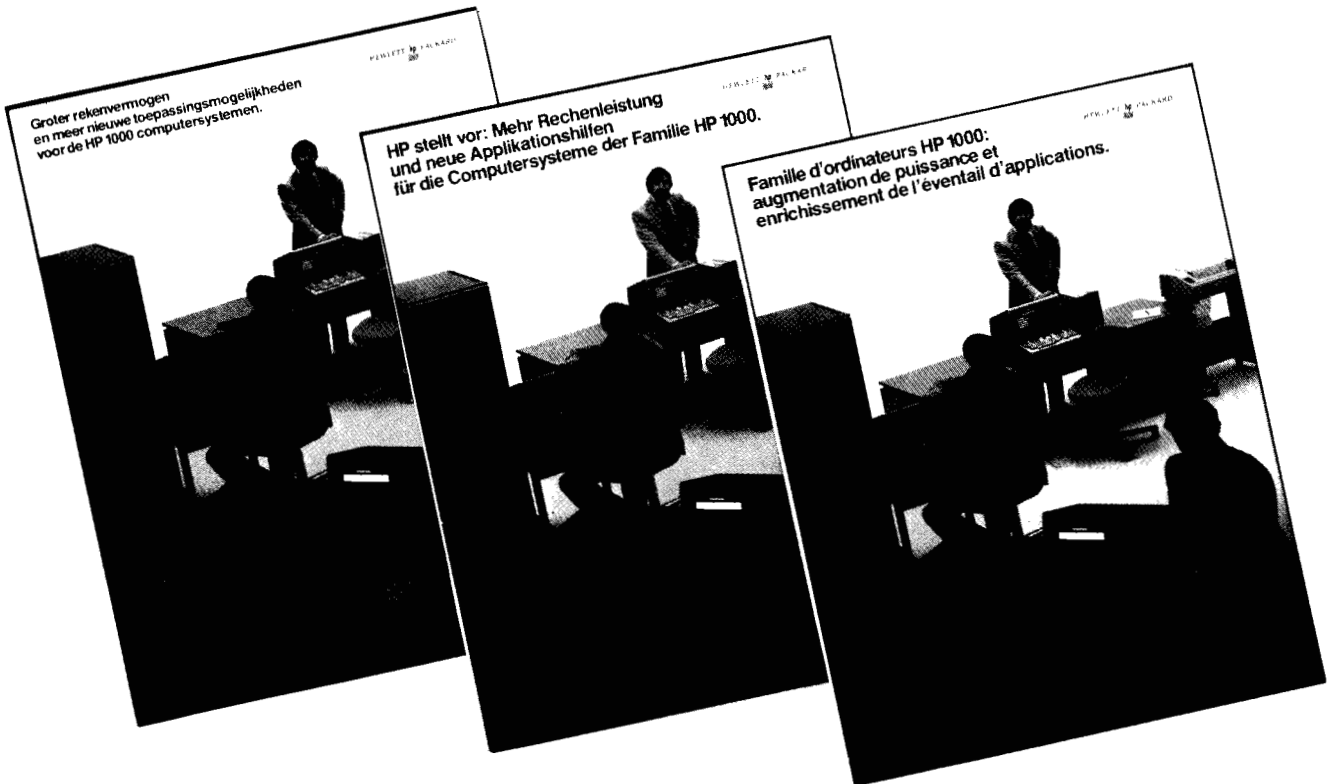
You can join the parade. The DSD Technical Articles Program is open to field people as well as factory types. If you have an idea for a technical article that would benefit HP, and provide useful information to the readers of a given magazine, just call *Jerry Gross* at DSD Marcom. They'll help you get started, and find a "home" for your article in a relevant publication.



Proudly displaying the engraved author's award plaques presented to them by DSD general manager *Dick Anderson* are (l-r) *Paul Accampo*, *Larry Mather*, *Daryl Knoblock*, *Scott Stallard* and *Bob Frankenberg*.



Your name could be proudly emblazoned on an engraved plaque just like this. And, although no one is interested in money, technical article authors also are eligible for added remuneration through DSD's matching funds payment program. All you have to do is write an article for publication.



Sales Aids

New Memory Options for HP 1000

By: Bill Elmore DSD

Effective September 1, 1978, three new memory options for HP 1000 E-Series computers will be added to the CPL. These options reflect the need for an easy way to order an E-Series Computer with 64Kb of either standard or high performance semiconductor memory. In addition, the price of a 2112M with 64Kb of memory has been reduced \$250. HP 1000 CPUs and options, including the new memory options and prices, are listed below.

HP 1000 CPU Product Structure

CPU/Option	Description	List
2108M	M-Series CPU with 64Kb standard performance memory	\$ 7,425
-014	Delete Memory System (A)	(3,300)
-015	Provides 240 Volt operation	0
2112M	M-Series CPU with 128Kb standard performance memory	10,450
-013	64Kb Standard Performance Memory	(1,750)
-014	Delete Memory System (B)	(5,250)
-015	Provides 240 Volt operation	0
2109E	E-Series CPU with 64Kb standard performance memory	9,250
-012	64Kb High Performance Memory	950
-014	Delete Memory System (A)	(3,300)
-015	Provides 240 Volt operation	0
2113E	E-Series CPU with 128Kb standard performance memory	11,740
-012	64Kb High Performance Memory	(800)
-013	64Kb Standard Performance Memory	(1,750)
-014	Delete Memory System (B)	(5,250)
-015	Provides 240 Volt operation	0
2111F	F-Series CPU with 64Kb high performance memory	12,250
-014	Delete Memory System (A)	(4,250)
-015	Provides 240 Volt operation	0
2117	F-Series CPU with 128Kb high performance memory	16,000
-014	Delete Memory System (B)	(6,500)
-015	Provides 240 Volt operation	0

(A) Option 14 requires at least 64Kb of memory to be ordered via a memory package or components.

(B) Option 14 requires at least 128Kb of memory to be ordered via a memory package or components.

GSA Contract — Section K, Data Acquisition Systems, Renewed August 1

By: Bill Fallon/DSD

Yes, it's true, GSA has renewed our Section K contract for Data Acquisition Systems, effective August 1, 1978 through July 31, 1979. This year's contract includes 5 models of the HP 1000 — Models 20, 25, 30, 40 and 45 — with most of the supporting cast except CRT Terminals and Accessories, which is included in the current Configuration and Site Preparation Guide. In fact, the HP 1000 Section of the new GSA catalog will look very much like the Configuration Guide. For specific products and prices check your GSA Price List microfiche dated August 1, 1978 which has been mailed. Remember the hardware prices are greater than those in the Corporate Price List, as they include an extended warranty to 12 months. Although the price includes only 3 months of Comprehensive Software Support, the customer may choose an additional 9 months of either

Comprehensive Software Support or Software Subscription Service at the time he orders the system. This extra 9 months is at an additional cost and is *not* discountable.

All the other terms and conditions of last year's contract remain the same in the new contract:

- Each order must contain a programmable controller and 1 or more measurement front ends.
- Cash discount 3%, plus a repair service credit of 2%.
- MOL, Maximum Order Limitation, quantity 1 to 3; dollars, can't exceed \$100,000.
- Installation and acceptance at customer's site — but acceptance testing must be commenced within 30 days after delivery or the standard testing at the factory will start the warranty clock.
- Transportation — HP will pay the freight to Domestic destinations.
- Time of Delivery — 150 days maximum.

The GSA catalog is well into the printing process and will be distributed shortly. Your government buyer likes to go GSA — so make him happy. Call Sales Development if we can help!

2240A Low Level Analog Input Hardware Compatibility Update

By: Dave Hannebrink/DSD

As indicated in the 2240A Field Training Manual Update (April '78), the 22915A Low Level Analog Input Card is not compatible with existing field 22900A Analog Input Cards. However, contrary to information given on page 13 of that manual, existing 22900A's cannot be modified for 22915A compatibility. Customers currently using 22900A's and desiring add-on 22915A Low Level capability can return their existing 22900A (Rev A or B) for a 22915A compatible 22900A (Rev. C).

The exchange board part number is 22900-69600 and sale is subject to CSD board exchange policies. The exchange price is \$410. Please consult your CE organization for details concerning the change. This card revision was made because bringing the necessary 22900A multiplexing lines out to the 22915A would have required excessive and undesirable jumpering of Rev. A and B 22900A cards.

22900A orders entered on or after 1 June 1978 (introduction of 22915A) will be shipped 22915A-compatible Rev. C 22900A cards. 22900A's obtained on orders entered prior to 1 June 1978 need to be exchanged only if 22915A add-ons are to be made. If still not sure of Rev. level, it can be found near the HP logo on the 22900A card; it will precede an ink stamped date code.

All documentation (including the CPL) will be changed to reflect this prerequisite.

Price Reduction Announced for 32Kb Memory Boards

or
“A Farewell to the 12998A”

By: Bill Elmore/DSD

Effective September 1, 1978, prices will be reduced on the 13187B and 12741A 32Kb memory modules. The purpose of these price reductions is to reflect recent cost reductions achieved through declining RAM prices and high volume production. A secondary purpose of the price reduction is to phase out the old 12998A 16Kb memory module. The 12998A has led a long life for a semiconductor memory board (nearly five years), but its costs are no longer competitive due to the rapidly declining prices of RAMs used in the more recent 32Kb and 128Kb memory boards. By the end of the year, the 12998A will be removed from the CPL and/or its price will be increased.

Memory Price Changes

Product	Description	Old List	New List
13187B	32Kb standard performance memory module	\$1600	\$1400
12741A	32Kb high performance memory module	2100	1800
12998A	16Kb standard performance memory module	750	750

Note that these standalone memory products are primarily for add-on memory orders. The best CPU/memory prices are in all cases obtained by ordering the M, E, and F Computers with memory.

Schematics and Parts Lists for HP 1000 Computers and Board Computers

By: Frank Coughlin/DSD

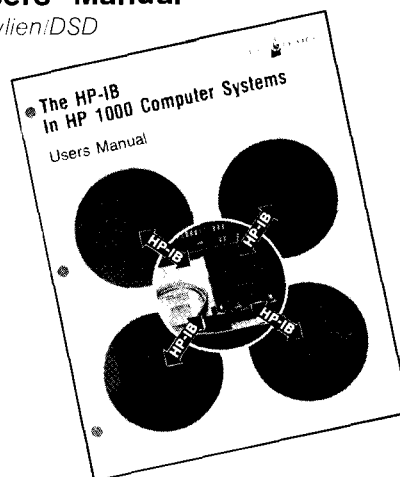
The ENGINEERING AND REFERENCE DOCUMENTATION packages contain schematic diagrams, assembly component location diagrams, parts lists, and theory of operation for most of the computer assemblies. There are currently four of these documentation packages available. They are available to customers by placing a HEART order to CPC; to order for internal use, the HEART order should be coded I2 with an override to division 2200 (DSD).

The prices and part numbers for each package are listed in the following table.

Part Number	Description	Selling Price	Transfer Cost
02108-90017	HP 1000 M-Series E.R.D.	\$125	\$28
02108-90027	HP 2108MK E.R.D.	\$100	\$27
02109-90007	HP 1000 E-Series E.R.D.	\$150	\$35
12728-90001	HP 2109EK E.R.D.	\$100	\$25

HP-IB Users' Manual

By: Dick Lovlien/DSD



This is just a reminder that the new HP-IB Users' Manual has been available since February of this year. If you want copies, order them by part number 59310-90064. The new Message Subroutines for the HP-IB are fully explained, lots of examples in FORTRAN and BASIC are provided, and it has a complete index.

Makes a good hand-out piece to prospective customers!

DATA TERMINALS NEWS

Division News

Sales Development Personnel Changes

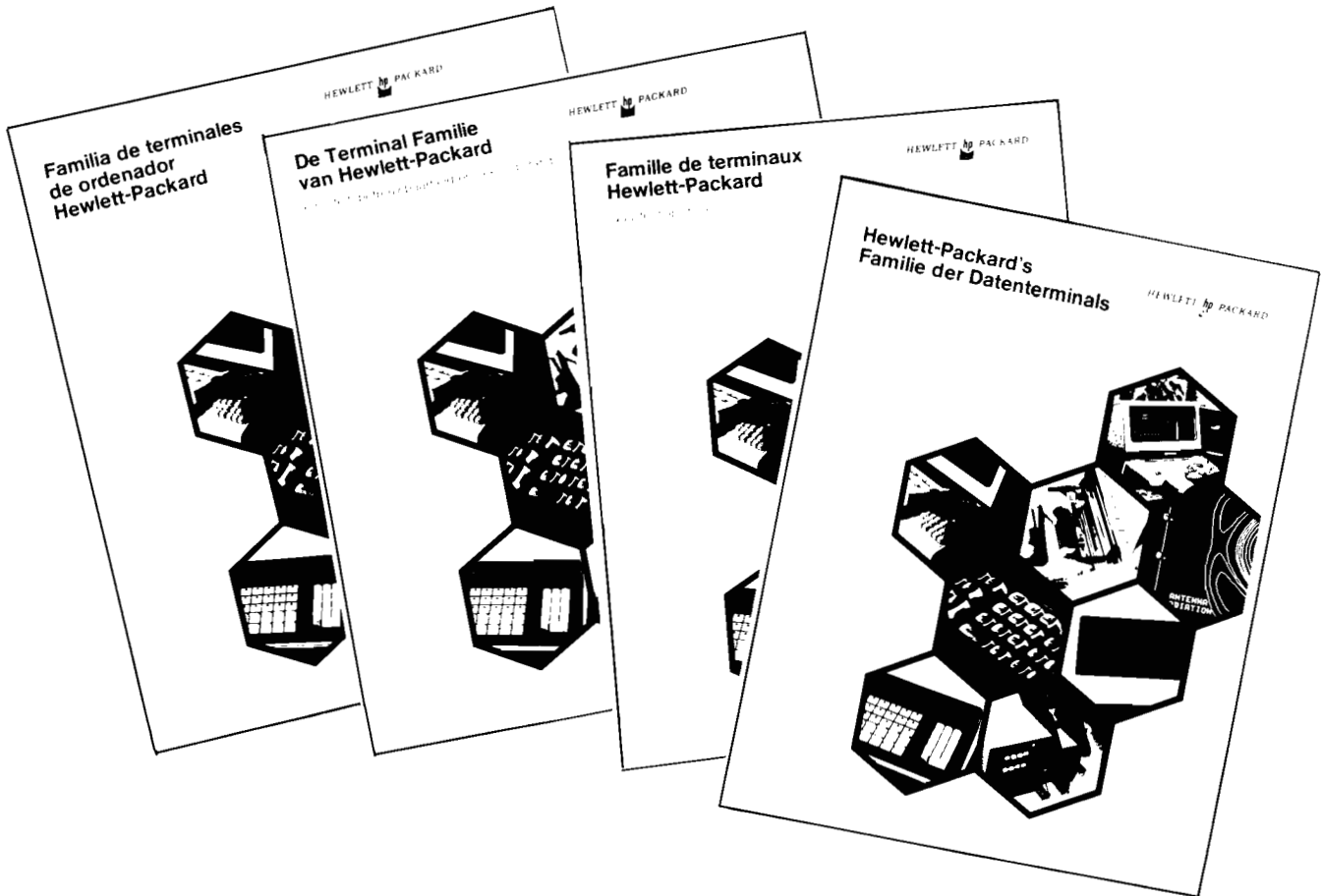
By: Steve Stark/DTD

Alas, all good things must come to an end. However, in the case of *Serge Daoust*, it is a happy end. *Serge*, who has done an outstanding job in providing support to the Southern Sales Region, is moving to the new challenges in Product Management here at DTD. We are going to miss

Serge in Sales Development and we hope you will join with us in wishing him good luck in his new endeavors.

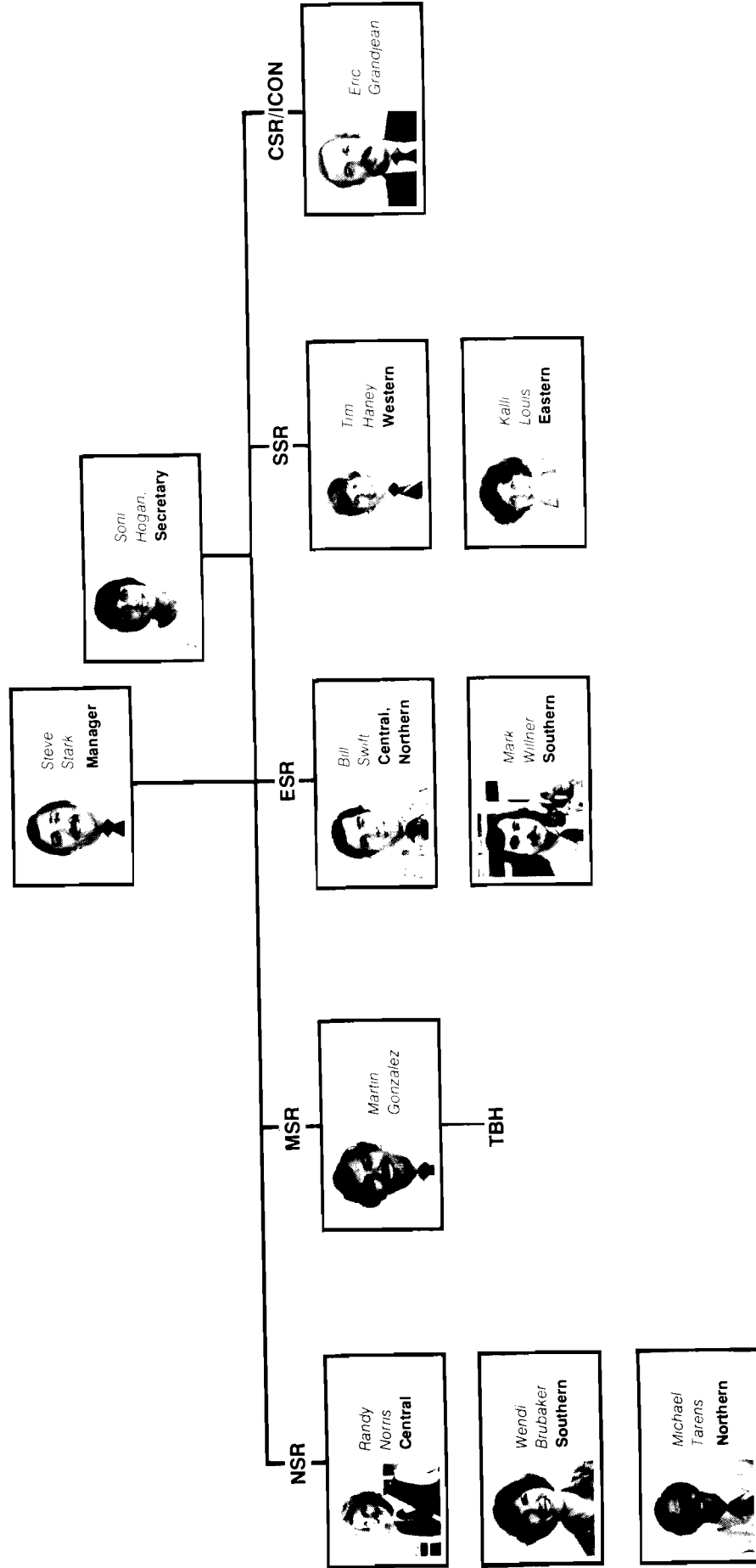
Tim Haney, who has been handling the support chores for the Southern and Northern portions of the ESR will be moving over to provide support for the western portion of the SSR. *Kalli Louis* will provide support for the eastern portion of the SSR.

Mark Willner will pick up the southern portion of the ESR while *Bill Swift* will continue to support the central and northern portions of ESR.



DTD Sales Development

September, 1978



Product News

2649 Additions

By: Michael Tarens DTD

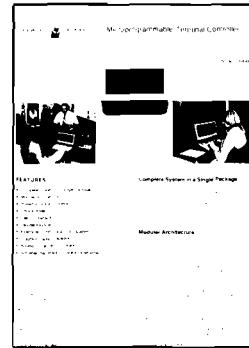
Well, we have two new additions to the 2649 program. They are the 2649B and 2649C which are actually 2649's configured as a 2645A or 2648A. This allows OEM's and Sales Reps to order these products fully configured, thus eliminating the lengthy option selection process.

One option to the 2649B and 2649C that is a necessity but not included on the Price List is 030. This option deletes the standard async datacomm and reduces the product price by \$160. This allows you to add one of the other communication interface accessories (13260B, 13260C, 13260D) to these products. This option will be included with the next edition of the Price List — not to worry! Until then, it may be included on your orders. Our Order Processing Department will recognize this option and process your orders correctly.

SELL OEM!

FLASH!! A New Data Sheet for the 2649A Product Line!

By: Eric Grandjean/DTD



The new 2649A Data Sheet, P N 5953-210(42) dated 8 78 now contains a reference to the 2649A graphic capability options.

They are available in quantity, so we encourage you to order them now to update your own stock. Among many other changes, a new configuration section will help you and your OEM customers order various configurations with a minimum of guesswork and errors.

Please take this opportunity to show it to your OEM customers and new prospects.

SELL OEM!

Sales Aids

Obtaining Graphics Hardcopy from the 2647A

By: Mark Willner/DTD

Since the introduction of the HP 2647A Intelligent Graphics Terminal, we have received several questions about graphics hardcopy using the 47. To help clarify this issue, I have put together a "Cookbook" chart to suggest solutions to particular graphics hardcopy situations. The key to using this table is to ascertain exactly what your customer's hardcopy requirements are.

2647A Graphics Hardcopy Chart

Graphics Input	Required Interface	Data Format	Suggested Hardcopy Devices
A. Graphics generated using Multiplot or AGL/Basic	Shared Peripheral Interface (HP-IB) 13296A	HP-GL Commands (ASCII)	HP 9872A Plotter -or- HP 7225A Plotter -or- HP 7245A Plotter/Printer (Standard)
B. Graphics generated from any source*	Shared Peripheral Interface (HP-IB) 13296A	Raster Dump (Binary)	HP 7245A Plotter/Printer with Option 001
C. Graphics generated from any source with superimposed alphanumeric Display	Video Output Interface 13254A	Composite Video (Analog Signal)	Versatec 1640 -or- Tektronix 4632 with Option 007

*Includes those sources listed in (A) plus graphics from:

Plot 10 Software (Compatibility Mode)

Graphics Escape Sequences

Graphics Keypad

If you are wondering why we can't do a raster dump to a 9872A plotter, the reason is in the data format column. The San Diego Flatbed Plotters are driven by HP-GL commands which are in ASCII format. The format of a raster dump is raw binary data. Attempting to drive an HP 9872A with binary data will produce unpredictable results and will definitely *NOT* produce the plot you are looking for.

If the customer's hardcopy requirements fall within category (B) and yet he insists on a Flatbed Plotter (9872A, 7225A), he can get around the requirement of a raster dump device as long as his graphics are generated using escape sequences or Plot 10 software. In order to have escape sequences or Plot 10 software drive a Flatbed Plotter (which uses HP-GL commands), the user must write an application program in BASIC which reads the datacomm or the cartridge tapes and translates escape sequences or Plot 10 commands into HP-GL commands. Keep in mind that such a program would introduce a certain amount of overhead and may ultimately slow down the plotter.

Selling AGL on the 2647A

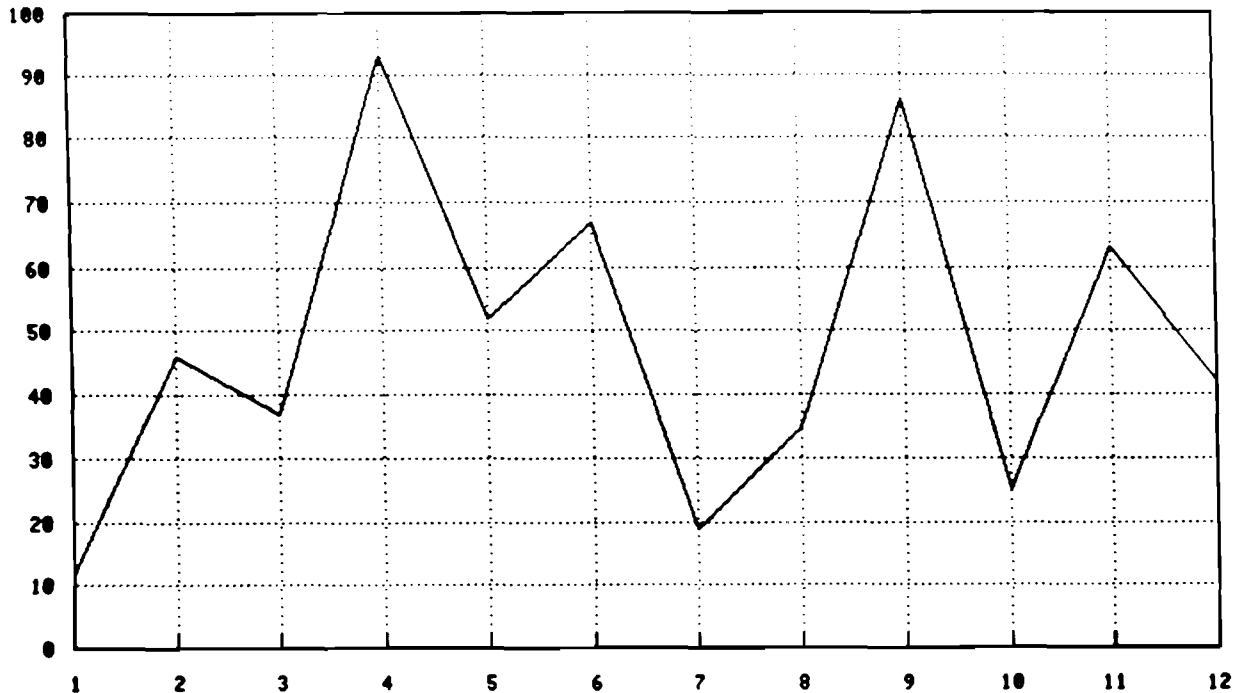
By: Bill Swift/DTD

Besides being programmable in BASIC, the 2647A also supports AGL (A Graphics Language) statements. These are powerful, English-like commands used for graphic setup functions, drawing and labeling of axes, and plotting of data. You can best appreciate the power of these statements by trying to duplicate the results using escape sequences. This would prove to be not only difficult but time-consuming. Using AGL, even your unsophisticated customers can construct graphics plots quickly and easily. The current 2647A demo tape contains one frame showing an AGL program, but some of your prospects may be skeptical about just how easy AGL is to use. To answer this challenge, we offer the AGL program listed below. This 10-line program is all that is needed to construct and label a set of axes and plot 12 data points. You may also want to show the ease of modifying the program. Your skeptics should be more than satisfied with the ease and power of AGL.

```

10 PLOTR(0,1)
20 LOCATE(10,190,10,90)
30 SCALE(1,12,0,100)
40 FRAME
50 LGRID(-1,5,0,0.1,2)
60 FOR X = 1 to 12
70 READ Y
80 PLOT(X,Y)
90 NEXT X
100 DATA 12,46,37,93,52,67,19,35,86,25,63,42

```



To demonstrate hardcopy using either the 9872A or 7245A plotter, simply change the first line of the program to PLOTR(X,1) where X is the HP-IB address of the plotter. Running the program again will direct the plot to your hardcopy device.

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

2647A Basic Application Note #1 How to Print and Draw Alphanumerics On Peripherals

By: Martin Gonzalez:DTD

How can your 2647A BASIC program generate alphanumerics on the 9872, 2631, and 7245 printer/plotters? There are two ways to generate alphanumerics: "drawing" and "printing". Drawing alphanumerics means that the plotter actually *draws* the letters/numbers (from an internal definition). Your program must specify the device (plotter) address, the character size, and the orientation and position of the character relative to the pen position. Here is a sample program to draw text on the 9872 and 7245:

Statements	Comments
10 PLOTR (5,1)	The #5 stands for HP-IB address.
20 MOVE (20, 20)	Lifts pen and moves it to X,Y coordinates.
30 CSIZE (2.5)	Specifies size of alphanumerics.
40 LORG (5)	Selects Character position.
50 PRINT #0; Any text to be 'drawn'.	

Printing alphanumerics means that the letter/numbers are *printed* in (dot matrix form) by the printer from its internal character set(s). This character set of course determines the print size. Here is another sample program to print on the 2631 and 7245:

```
10 ASSIGN " (device) " TO #3
20 PRINT #3; " (Any text to be printed) "
```

Statements 10's device could be L (Left tape), R (Right tape), EX (EXternal printer), SH (SHared printer), DI (DIisplay), or H# (HP-IB #). For the Consignment Code 2647's use. H#4# device address: e.g. H#4#6.

Format Mode Without the Home-Up

By: Scott Guthrie NSR

Here are two methods for placing the 264X terminals in format mode without the cursor ending up in the home position.

First — If the field desired is going to be a fixed one (i.e. always go to the 4th field), then the format mode command (E_cW) followed by the numbers or "r"s to get the cursor where you want it to be works fine.

However, what if the desired field is relative to the current cursor position? Here is a solution to this second situation:

```
Ec&c177120a76d10d303d16d110d177120aEcihr
```

This places the terminal in format mode without homing the cursor. This routine can be loaded into a softkey or sent directly from a computer.

TRY IT — YOU'LL LIKE IT!!!

Multipoint (Continued . . .)

By: Christian Graffi/HPG

You have been told all the advantages of Multipoint on HP 1000 and HP 3000 Systems, particularly when error-free transmissions are required or when communication costs are critical. But now you are faced with the problem of physically setting up a multipoint line and hooking up to it a certain number of terminals.

I am sure you have run down the checklist provided by *Wendi Brubaker* in her article in the *CS Newsletter* of July 1, 1978 to gather the necessary hardware:

- 13232P cable for the first terminal;
- 13232Q or T cables for following terminals;
- additional 13234A 4K memory module for 2645A;
- 13260C Asynchronous Multipoint Datacomm Interface or 13260D Synchronous Multipoint Datacomm Interface (both include interface card and corresponding firmware to upgrade 2645A or 2648A terminal).

Fine, but here comes your nightmare: the switch setting on the keyboard interface card and on the data communication interface card! And if you try and get help from manuals, you will be upset by the contradictory information contained in the 2645A Reference Manual, the 91730A Terminal Interface Subsystem User's Guide (HP 1000), the MTS Multipoint Terminal Software Manual (HP 3000) and the MTS/3000 Reference Manual (HP 3000). To help you in this task, here is a quick guide that you may refer to:

HP 1000 Multipoint:

- Keyboard interface:
 - all switches closed (normal operation)
 - except

D	open	Page Mode
J	open	Places Terminator
K	open	Clears Terminator caused by strap J
T,U	closed	1-2 Datacomm Buffer.
 - with modem V closed if no continuous carrier.
- Asynchronous multipoint interface (13260C):

J17, J16	Closed	512 bytes buffer (recommended)	
J15	Open		
J14	}	Device ID	
J13			
J12			0 = closed
J11			1 = open
J10			
J07	Closed	ASCII code	
J06	Open	CRC-16 Parity check	
J05	Closed	Sync characters not inserted	

J04		}	Group ID 0 = closed 1 = open
J03			
J02			
J01			
J00			
INT	Open		
PL6 thru			
PL0	Open	}	Firmware module address
A4	Closed		
A9 thru			
A11	Open		
-12	Open		Normally open, closed if using 13232T power protect cable.
2SB	Closed		Selects 1 stop bit.

• Synchronous multipoint interface (13260D):

J17, J16	Closed		512 buffer (recommended)
J15	Open		Entire block processed
J14 thru			Device ID (0 = closed, 1 = open)
J10			
J07	Closed		ASCII code
J06	Open		CRC-16 Parity check
J05	Closed		IBM 3270 mode disabled
J04 thru		}	Group ID (0 = closed, 1 = open)
J00			
-12	Open		
			Normally open, closed if using 13232T power protect cable.
A4	Closed	}	Firmware module address
A9 thru			
A11	Open		
RCLK	Open		
			Always open, except for first terminal on the line (if modem cannot supply the clock or if hardwired connection with U cable).
2400		}	Close one of the 3 switches to select speed if RCLK closed.
4800			
9600			

HP 3000 Multipoint:

• Keyboard interface:

- all switches closed (Normal Operation)
- except D open Page Mode
- J open Places Terminator
- T,U closed 1/2 Datacomm Buffer
- with modem V closed if no continuous carrier.

• Asynchronous multipoint interface (13260 C)

J17, J16	J17	J16	Buffer size
	Closed	Closed	512 bytes
	Closed	Open	1024 bytes
	Open	Closed	2048 bytes

	Open	Open	4096 bytes
J15	Open		Entire block processed
J14 thru		}	Device ID (0 = closed, 1 = open)
J10			
J07	Closed		ASCII code
J06	Open		CRC-16 Parity check
J05	Open		Insert Sync characters
J04 thru		}	Group ID (0 = closed, 1 = open)
J00			
INT			
			Open
PL6 thru	Open		
PLO			
A4	Closed	}	Module Address
A9 thru	Open		
A11			
-12	Open		
			Normally open, closed if using 13232 T power protect cable
2SB	Closed		Selects 1 stop bit

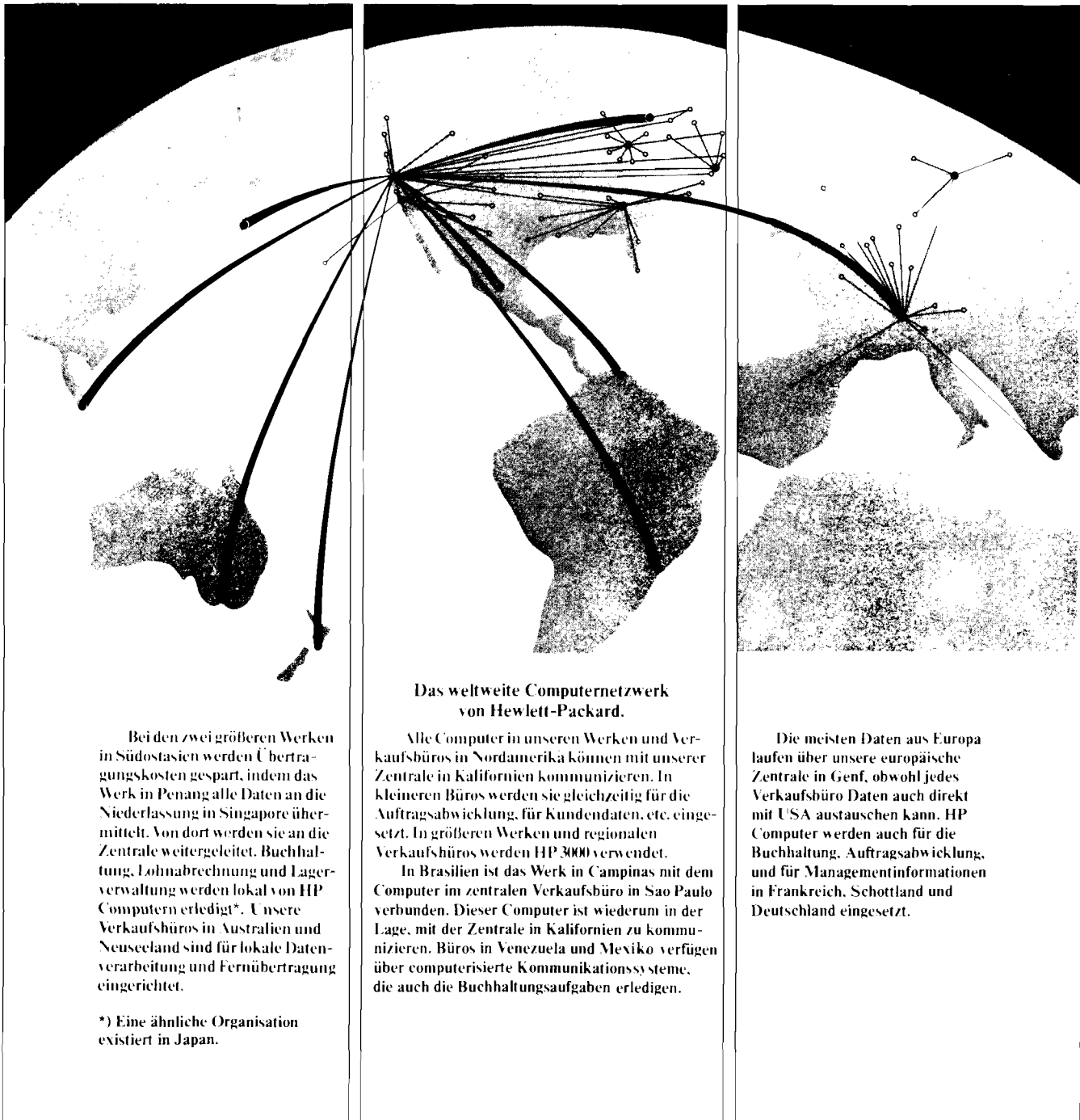
• Synchronous multipoint interface (13260 D):

J17, J16			Buffer size, same as on Async board
J15	Open		Entire block processed
J14 thru			Device ID (0 = closed, 1 = open)
J10			
J07	Closed		ASCII code
J06	Open		CRC-16 Parity check
J05	Closed		IBM 3270 mode disabled
J04 thru		}	Group ID (0 = closed, 1 = open)
J00			
-12	Open		
			Normally open, closed if using 13232T power protect cable
A4	Closed	}	Firmware module address
A9 thru	Open		
A11			
RCLK	Open		
			Always open except for first terminal on the line (if modem cannot supply the clock or if hardwired connection with U cable)
2400		}	Close one of the 3 switches to select speed if RCLK closed.
4800			
9600			

The present article should alleviate some of the problems discovered in the Terminal Interface Subsystem User's Guide for HP 1000 and in the MTS/3000 Reference Manual for HP 3000 and help you set up multipoint lines successfully on both systems.

SELL MULTIPOINT!

Wie können Sie sicher sein, für Sie Vort Sehen Sie sich an, was



Das weltweite Computernetzwerk
von Hewlett-Packard.

Bei den zwei größeren Werken in Südostasien werden Übertragungskosten gespart, indem das Werk in Penang alle Daten an die Niederlassung in Singapore übermittelt. Von dort werden sie an die Zentrale weitergeleitet. Buchhaltung, Lohnabrechnung und Lagerverwaltung werden lokal von HP Computern erledigt*. Unsere Verkaufsbüros in Australien und Neuseeland sind für lokale Datenverarbeitung und Fernübertragung eingerichtet.

*) Eine ähnliche Organisation existiert in Japan.

Alle Computer in unseren Werken und Verkaufsbüros in Nordamerika können mit unserer Zentrale in Kalifornien kommunizieren. In kleineren Büros werden sie gleichzeitig für die Auftragsabwicklung, für Kundendaten, etc. eingesetzt. In größeren Werken und regionalen Verkaufsbüros werden HP 3000 verwendet.

In Brasilien ist das Werk in Campinas mit dem Computer im zentralen Verkaufsbüro in Sao Paulo verbunden. Dieser Computer ist wiederum in der Lage, mit der Zentrale in Kalifornien zu kommunizieren. Büros in Venezuela und Mexiko verfügen über computerisierte Kommunikationssysteme, die auch die Buchhaltungsaufgaben erledigen.

Die meisten Daten aus Europa laufen über unsere europäische Zentrale in Genf, obwohl jedes Verkaufsbüro Daten auch direkt mit USA austauschen kann. HP Computer werden auch für die Buchhaltung, Auftragsabwicklung, und für Managementinformationen in Frankreich, Schottland und Deutschland eingesetzt.

daß Distributed Processing eile bringt? wir damit erreicht haben!

Wir bei Hewlett-Packard fingen bereits 1967 an, die Computerleistung in unsere Werke zu verteilen. Ein weltweites Computernetz wurde 1971 eingerichtet. Dieses Netzwerk hat beigetragen, unseren Umsatz auf 1,35 Milliarden Dollar zu steigern – 42% davon Produkte der Datenverarbeitung.

In der ganzen Welt fertigen wir heute ca. 4000 unterschiedliche Produkte in 40 »Divisions«. In 65 Ländern sind wir mit unseren Büros vertreten. Eine absolute Voraussetzung für dieses rasche finanzielle und geografische Wachstum war die Verteilung unserer Datenverarbeitung.

Wir fingen klein an.

In den Werken wurden zuerst kleine Computersysteme aufgestellt, um Tests zu automatisieren. Der nächste Schritt war, diese Minicomputer mit weiteren Systemen zu verbinden, um Daten und Programme zu übertragen. Diese Computer wurden dann zusammenschaltet, um dem Management Entscheidungen nach aktuellen Informationen zu ermöglichen.

Als das Unternehmen sich weiter vergrößerte, wurden unsere weit verzweigten Verkaufsbüros mit den Werken verbunden. Heute haben wir 130 effiziente Kommunikationssysteme in 94 Betriebsstätten, die komprimierte Daten über Satelliten und Telefonleitungen austauschen. Obwohl täglich etwa 12 Millionen Worte in unserer Hauptverwaltung einlaufen, sind die Kosten unwahrscheinlich niedrig. So können wir 5.000 Worte in einer Minute für ca. DM 10,- um die halbe Welt übertragen. Per Fernschreiber würde

das 45 Minuten dauern und ca. DM 400,- kosten.

Wir brauchen ein anpassungsfähiges System – Sie auch.

Sie brauchen sich nicht für Stern-, Ring- oder Reihenverbund zu entscheiden: Mit HP können Sie die jeweils für Sie passende Version wählen, sei es innerhalb eines kleinen lokalen Verbundes oder auch eines weltweiten Netzwerks. Und der Anschluß jedes weiteren HP-Systems kostet nur ca. DM 15.000,-. Dadurch können Firmen jeder Größe die Vorteile unseres flexiblen Distributed-Processing-Konzepts ausnutzen. Ihre vorhandenen Computer können Sie auch weiterhin verwenden. Selbst wir betreiben einige nicht-HP-Computer und -Peripherie zu unserem Vorteil – das funktioniert auch bei Ihnen.

Die HP 3000 – ein leistungsfähiges kommerzielles System – ist das Kernstück unseres Computernetzes. Über ein preisgünstiges Programmpaket kann sie mit der HP 1000 kommunizieren, einem Computer, der allgemein für Entwicklungen, Tests und Steuerungsaufgaben in den Werken Verwendung findet (beide Computer können auch direkt an einen IBM-Großrechner angeschlossen werden).

Für die Fernübertragung wird hauptsächlich das System HP 2026 eingesetzt, das Editieren vor Ort erlaubt. Durch neue Software steht mit dem HP 2026 jetzt ein noch leistungsfähigeres Werkzeug für die Management-Information zur Verfügung. So können Sie z. B. über Ihr HP 2026 in Düsseldorf auf die volle Leistung und

die Datenbank Ihres Computers in Mailand zugreifen – oder auf jede andere HP 3000 des Netzwerks.

Schutz für die größte aller Investitionen.

In die Betriebssoftware der HP 3000 haben wir hunderte von Mannjahren investiert. Wir kennen die Kosten für die Programmierung und möchten sie, genau wie Sie, möglichst gering halten. Wir erreichen das, indem wir unsere neuen Systeme für Verwendung bestehender Software konzipieren. Ihre Programme werden problemlos schneller und effizienter laufen.

Wir sparen Ihnen eine Menge Ärger, da wir unsere Drucker, Bildschirmterminals, Platten- und Bandlaufwerke, Speicher und sonstige Eingabegeräte selbst fertigen. Falls Kundendienst nötig wird: Wir sind zuständig und kompetent. Sie brauchen nur unser nächstgelegenes Büro anzurufen, wir reagieren schnell.

Die Moral unserer Geschichte:

Wenn Sie international oder in Ihrem Werkbereich ein Computernetzwerk aufbauen wollen, brauchen Sie kein Risiko einzugehen. Das Hewlett-Packard System ist genau so zukunftsicher, wie es sich bereits in der Vergangenheit bewährt hat. Wir gehen Ihnen gerne alle Einzelheiten: Rufen Sie Peter Schöltzel, Tel.: 06 11/50 04-310 an, oder schreiben sie uns: Hewlett-Packard GmbH Vertriebszentrale z. Hd. Peter Schöltzel Berner Straße 117 6000 Frankfurt 56

HEWLETT  PACKARD

GENERAL SYSTEMS NEWS

Product News

MFG/3000 Success Story

By: Pete Van Kuran GSD

In selling any product, one of the really great tools is a story about a customer who has successfully used the product. Even though MFG 3000 has been available for only a short time, we do have a satisfied customer who provides ample evidence that the tangible customer benefits of *quick implementation, increased inventory utilization and increased ability to meet customer demand* can be achieved by MFG 3000.

Quick Implementation

This company was in an enviable situation in that their sales were growing at a rate of 100% per year. Typically, this environment provides a situation where inventories can get out of control as the company focuses on meeting the production schedule. The company in question implemented MFG 3000 primarily to get a materials planning and control system on the air as quickly as possible.

They had been using a rudimentary bill of materials system and a manual Kardex for inventory control prior to installing MFG. They did not have any MRP system. They realized that such a system can take up to 2-3 years elapsed time to develop internally and they wanted a solution much more quickly. It is significant that the time they spent implementing MFG 3000 was *only 7-12 months*. This was the elapsed time from the day they received their software until they began to achieve the results described below. Compared with their expectation for internal development, this company achieved a significant reduction in implementation time, possibly 1-12 years or more.

Increased Inventory Utilization

More significant, however, are the operating results achieved during those 7-12 months. One way manufacturing companies measure inventory performance is to

calculate the number of months of inventory they have on hand or "months of supply" (actually, cost of sales divided by inventory). Theoretically, this is the amount of time it would take to completely consume all inventory and produce finished products. This company already had a very respectable 2.25 months of supply when they installed MFG 3000. Even so, they managed to decrease their months of supply to 1.75 months. This represents a 35% *improvement in their inventory utilization*, especially significant in light of their sales growth. This has allowed them to direct more resources to financing growth instead of investing in inventory.

The second measurable achievement was the fact that the company was able to grow at the 100% rate *with no increase in staff* into their purchasing department. This is attributable directly to the terminal orientation of MFG 3000. Information that buyers need is available on line. MRP makes buying recommendations that can be implemented quickly and rescheduled just as quickly.

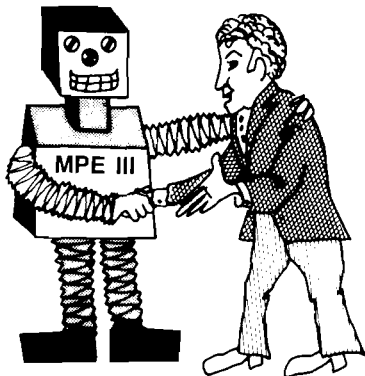
Increased Ability to Meet Customer Demand

A third major benefit has been the ability to *react to changes in their master production schedule in one day* as opposed to the previous two weeks. Hence, when a large customer order is received, the company can order parts and begin scheduling material availability within a day of running MRP. This has given them the capability of providing accurate availability information to their own customers. In addition, it has provided the internal manufacturing and marketing people confidence that the customer order will be shipped on time.

These real and tangible results are the primary benefit of installing MFG 3000. The company is living proof that the benefits claimed by the MFG brochures and sales pitches are achievable. Interested in using them as a reference? Call Dick Knudtsen at General Systems Sales Development for details about the Business Systems Program. And be sure to look for more success stories in future issues.

MPE III and Your Customer

By: Bob Crum:GSD



MPE III brought to users of the HP 3000 Series II and III a host of new capabilities that have been eagerly awaited. Users will soon start designing larger applications that take

advantage of the increased capabilities and performance of MPE III running on large memory (> 512 Kb) Series III's.

When designing those large applications for the Series III, users should pay attention to the relationship between the application and the size of the code segment table in MPE and the size of virtual memory on disc. In addition, users should be aware of the configuration guidelines for the size of memory resident MPE tables and the number of shared files that can be open at one time. To ensure the continuing success of your customers, SE's and Product Specialists have been sent an *SE Note* providing them with more information in these areas so that they can offer consulting aid to customers converting existing applications and designing new ones.

Orders keep rolling in for large memory machines, so keep on selling those Series III's with MPE III!

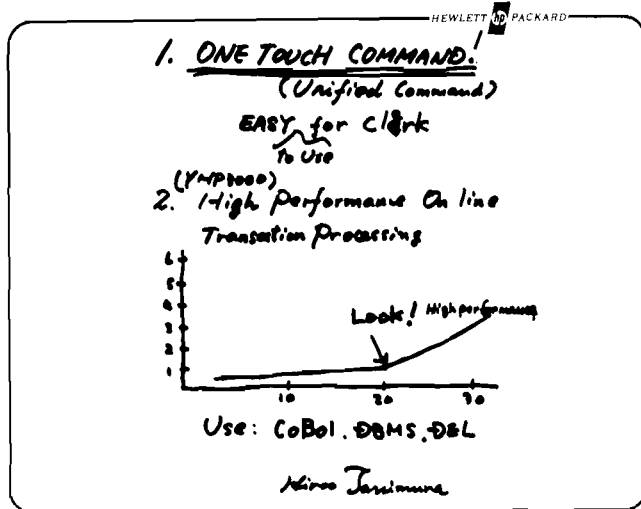
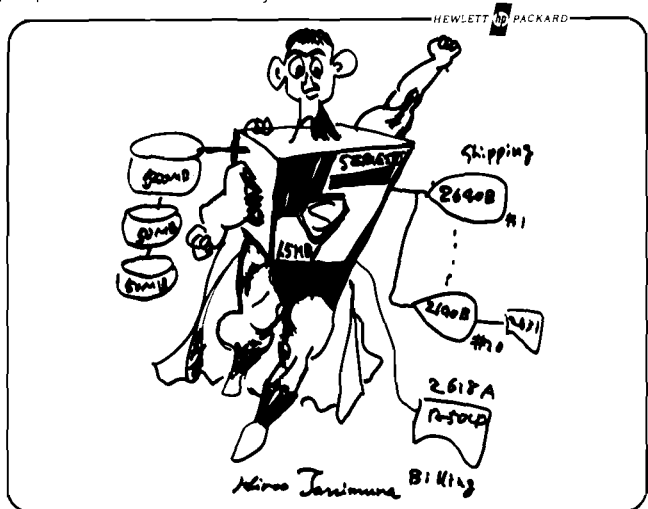
General News

ICON NPT Tour

By: Rich Phillips:GSD

A highly successful NPT tour around the Pacific has just been completed for the Series III. The first stop was Tokyo where approximately 25 enthusiastic 3000 sales reps and SE's attended the Series III enhancement seminar and participated in case studies. That was just the beginning. In Seoul, Korea, over 100 potential customers attended a customer seminar which followed the two day NPT tour there. In Sydney, over 40 existing and potential customers gathered at a customer seminar and were obviously excited by the new features of Series III. We had an active day in Melbourne where two customer seminars were held in one day. Each seminar attracted more than 35 potential customers. Our last stop was Wellington, New Zealand, where we met with government officials to assess the sales potential of 14 proposed 3000 systems to the government. HP is now on the short list; that is, we have been selected as one of the top five vendors. Clearly, ICON has done a great job in creating some excellent sales tools to attract potential customers in the commercial marketplace.

One of the indications of enthusiasm of the NPT participants is a development of the idea of "one touch command" using UNCL. This idea was proposed by a YHP sales rep during the case study session and would be appealing to the turnkey-oriented Japanese users. Another YHP participant has gone so far as to draw a picture as shown below as a part of his proposal in a case study.



DS/3000 Seminars in Europe

By: Don Ringen Steve Feo Joe Dietzgen GSD-HPSA

DS 3000 has proven to be a very popular product in Europe. To capitalize on that, Italy conducted three 1 2 day seminars during the month of May. The seminars covered the whole HP-DSN. Steve Feo (one of your men in Geneva) conducted the DS 3000 portion in Italian. The seminar attracted 356 people (9% of the mailing list). To do an encore and establish HP as the leader in distributed data processing, GSD Europe has organized a series of seminars on HP-DSN. During the last half of September, Larry Hartge will wind up his current world-wide tour, "Seminars on Distributed Processing", with the following schedule.

Seminar Schedule

September 18	Manchester
19	London
20	London
21	Amsterdam
22	Amsterdam
25	Helsinki
26	Helsinki
27	Frankfurt
28	Vienna
29	Vienna
October 12	Geneva

We plan to carry on this successful effort with seminars on a variety of subjects into 1979.

Datamaskinen som sprenger alle grenser... HP 3000 fra Hewlett-Packard.

Et datamaskinsystem som bare foretar satsvis behandling, er bare et halvt system. Den datamaskin du har i dag er sannsynligvis ikke konstruert både for regnskap og det å skaffe øyeblikkelig tilgang på informasjon for ledelsen. Men det er vår maskin.

HP 3000 styrer lønnsutbetalinger, fakturering, registrerer innbetalinger og styrer regnskapene. Samtidig kan du bruke både dataskjerm og skriver og få ut de aller siste salgstall, budsjett og kontostatus.



Denne maskinen er et utvalg av de beste...
...for å gjøre det mulig for deg å...
...og å gjøre det mulig for deg å...
...og å gjøre det mulig for deg å...

HP 3000 er et utvalg av de beste...
...for å gjøre det mulig for deg å...
...og å gjøre det mulig for deg å...
...og å gjøre det mulig for deg å...



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HP GRENOBLE NEWS

General News

Grenoble Terminal Sales Development

By: Christian Graff/HPG



From left to right: Jacques Biard, Christian Graff, Maurice Poizat, Martine Faure, Richard Franklin and Francis Marc.

We now count two new faces in our Terminal Sales Development Team, namely *Martine Faure*, who joined us July 1st as a group secretary, and *Jean-Louis Chapuis* as Sales Development Engineer on August 1st.

Martine, on top of her talents as a secretary, speaks fluently four languages (i.e., French, English, German and Italian) and will be of great help to answer your phone calls (in your own language!) and to improve our communication with you, Sales People.



Jean-Louis Chapuis

Jean-Louis graduated in 1977 from the Ecole Supérieure d'Electricité (one of the most famous engineering schools in France) and spent one year in the French Air Force for his military duty. His background will help boost our sales development activities.

Let me remind you of the present responsibilities of the people in the team, before a complete reorganization takes place to cope with the growth expected next year in Terminal Sales:

- Jacques Biard* : CE support / Staff Engineer
- Christian Graff* : Sweden, Norway, Finland, Switzerland, Italy.
- Maurice Poizat* : Germany, Spain.
- Richard Franklin* : U.K., Belgium, Holland, Denmark.
- Francis Marc* : (Manager) France, Eastern and Mediterranean countries.
- Jean-Louis Chapuis* : presently on training.
- Martine Faure* : secretary.

With this stronger group we hope to be able to support you even better during next fiscal year!

Product News

Grenoble Is Getting Nearer To Cupertino

By: Pierre Ardichvili/HPG

No, this is not the effect of an earthquake but result of a decision to move our U.S. representation from Boise to DTD. This decision is consistent with our policy of aligning our products alongside DTD's so that HP is seen to have one complete range of terminal products. The move should also help you and us to increase contacts between PL 69 products, people, key customers and sales persons who come to the Bay Area. Some logistics of shipping and travel will also be improved with the move.

The transfer is to become effective November 1st and we are now in the process of training DTD people in the product line. In the meantime, Boise has assured us they will continue to provide the excellent service that they have historically provided.

In other words, do not call DTD until November 1st when they will have completed training and be ready to carry the ball.

CS GROUP NEWS

SAN DIEGO DIVISION

Overhead Transparency Kit Enhances HP Graphics Offering

By: Greg Diehl/SDD

On September 1, 1978, San Diego Division will introduce the 17055A Overhead Transparency Kit priced at \$85.00. Now your customers can use HP's 9872A and 7221A Graphics Plotters to directly produce presentation-quality overhead transparencies for seminars, meetings, lectures, and training sessions. The kit contains 16 special overhead transparency pens to produce graphs in seven vivid colors (Black, Red, Blue, Green, Orange, Brown, and Violet.) Your customer doesn't have to worry about smudging because the ink is permanent! Complete user instructions are included in the Kit to help your customer produce professional quality overhead transparencies.

SDD spent a year developing the special overhead slide pens to meet stringent ease of use and quality requirements. The investment has paid off. Our overhead slide pens outperform TEK's overhead pens and produce a much higher quality overhead slide.

	HP	TEKTRONIX
Ink	Permanent	Water Soluble
Drying Time	10 Minutes	4 Hours
Colors	7	9
Line Widths	2	1
Pen Price	4 for \$8.00 (\$2/ea)	3 for \$7.00 (\$2.33/ea)
Graph Appearance	Bright colors	Colors appear washed out

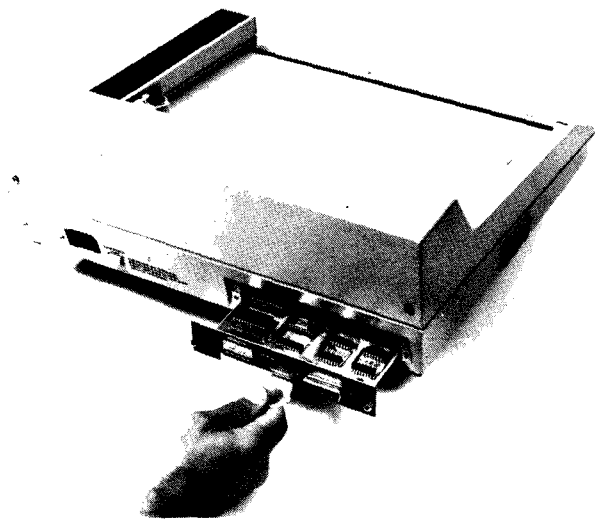
Overhead transparencies can be produced with the 2647A Intelligent Graphics Terminal and with the HP 1000 or HP 3000. Overhead transparencies can be produced quickly on a 2647A 9872A combination using the Overhead Transparency Kit. The customer can enter his data into the 2647A and use Multiplot to output a pie chart, bar chart, or line chart to the plotter. Charts need only 10 minutes to dry and they are ready to present at a meeting. Similar

charts prepared by outside graphics artists could cost \$50.00 or more. Similarly, a customer with an HP 1000 or HP 3000 could generate periodic summaries of sales, financial, or manufacturing data from GRAPHICS/1000 or PLOT/21 graphics applications programs for presentation at regular weekly or monthly executive meetings using HP plotters.

The low cost of kit materials (43¢/slide), professional quality overheads, and the computer and terminal power to produce them quickly make an attractive package for your customer. Ask him if he uses overheads in the course of his business and mention our Overhead Transparency Kit. It may help that "fence-sitting" customer to justify a plotter purchase and generate a bigger sale for you.

Presenting The 7225A Graphics Plotter

By: Bruce Woolpert/SDD



The San Diego Division has just introduced a compact and efficient pen and ink plotter that provides a cost-effective solution to the need for professional hard copy graphics. The 7225A "Miniplotter" is the newest addition to the Division's family of hard copy graphics products. This 18 pound (8 Kg) desktop plotter produces notebook size graphs on 8 1/2 x 11" or true ISO A4 sheets. The user can manually change the single pen to produce the same high quality, multicolor plots available from the larger format (11 x 17") HP plotters, the 9872A and 7221A.

The HP 7225A has the I/O flexibility to be adapted to different computers and controllers. By changing a user "plug-in" unit, called a Personality Module, the 7225A will provide the appropriate interface, language, and graphics capabilities for HP-IB or 16-bit parallel interfaces.

HP-IB Personality Module — 9872A Compatible

The 17601A Personality Module provides an HP-IB interface for the 7225A graphics plotter. The 7225A, with the 17601A, can be run with software written for the 9872A plotter. Software commands to change pens or select pen velocity (the only 9872A features not implemented on the 7225A) are ignored by the 7225A. Like the 9872A, the 7225A/17601A plotter can be used with HP-IB compatible computers and terminals.

The 7225A, with a 17601A Personality Module, will be supported on a future software release of the 92840A GRAPHICS/1000 Graphics Plotting Software package from DSD. Even though the 9872A is already supported on GRAPHICS/1000, some minor changes must be made to the device driver to fully support the 7225A. SDD will let you know just as soon as the 7225A/17601A is supported on the 92840A software. Support starting with the first quarter, 1979, release is currently planned. When the 92840A package cannot be used because of system, memory, software constraints, the user can employ the Hewlett-Packard Graphics Language (HP-GL) instruction set to write applications programs. This instruction set is internal to the 17601A.

The compatibility of the 7225A with the 2647A Intelligent Graphics Terminal represents a significant opportunity for sales to customers needing a low cost graphics hard copy device but willing to give up the automatic pen selection feature and the larger plotting area of the 9872A.

7225A and 9872A Comparison

Feature	7225A/17601A	9872A
Paper Size	216 x 279mm (8½ x 11") or ISO A4	280 x 432mm (11 x 17") or ISO A3
Multicolor	Single pen changed manually	Automatic pen selection
Resolution	.032mm (.0013 inch)	.025mm (.001 inch)
Plotting Speed	25 cm/second	User selectable 1 to 36 cm/second
Character Speed	3 cps	3 cps
Price	\$2600	\$4200

16-bit Parallel Personality Module — 12935A (7210A) Compatible

With the 1760A Personality Module, the 7225A performs like the 12935A plotting subsystem. Since the 12935A will be obsolete November 1, 1978, the 17602A Personality Module will permit customers to upgrade or add hard copy

graphics devices and still take advantage of any applications programs previously written using 12935A software (92409A) supplied by DSD.

Sales Opportunities

The 7225A/17602A can be sold as a direct replacement for the 12935A. In addition, the 7225A/17601A should increase the number of computer mainframes and terminals sold with hard copy devices. The general market will be customers who have insufficient budgets to purchase the larger 9872A (\$4200), but can afford a lower cost alternative, the 7225A/17601A (\$2600). Most sales engineers will be more successful using this "selling down" approach.

The prices of the 7225A and Personality Modules are:

- 7225A Graphics Plotter \$1850
- 17601A Personality Module (HP-IB) \$750
- 17602A Personality Module (16-Bit Parallel) \$200

One Personality Module must be ordered with each 7225A. The 7225A, 17601A, and 17602A have been added to Exhibits A1, A3, and A4 of the purchase agreement.

Sales Support

Because of the similarity between versions of the 7225A and other SDD devices (9872A and 12935A), there will be no need for New Product Training for the 7225A "Miniplotter". There are, however, an attractive 8-page full color brochure (5952-2881) and a 6-page data sheet (5952-2879) available in your office to provide prospects with a strong sales story.



SELL HP GRAPHICS!!!



Mail Distribution Database Gets a Facelift!

By: Ray Vaden/CSG

A new, improved Computer Systems Group internal mail distribution database has replaced the database previously serving in that same capacity. This database, rather than Corporate's "MAILS," is used to distribute literature within CSG (though you may be receiving literature concerning other product groups through "MAILS"). One of the new system's prime features is its ability to distribute literature based on an individual's job function and product line specialty(ies). Do not re-submit your name for inclusion on

the new system, as data residing on the previous database has been converted to the *new* one. However, your future help is needed! To insure that you continue receiving your CSG literature and announcements promptly, be sure to use the form below (or one like it, stocked by your office's "CSG Sales Librarian," "Customer Engineering Support Librarian" and DM secretary) whenever you change product line association, office, etc. Additionally, be sure to include your region office or factory number (commonly referred to as COMSYS number) and, quite importantly, your employee number, which is used to link all data associated with you in the database and is necessary to receive any literature.

If you have any questions about the CSG internal distribution database, contact the CSG database coordinator, Carol McKay, in Building 40 at Cupertino, (408) 257-7000, Ext. 3341.

INFORMATION CHANGE NOTIFICATION

Please update my CSG Internal Distribution and Directory listing as follows:

Type of Change: Add Modify Delete

NAME: _____

EMPLOYEE NUMBER (5 digits): _____

OFFICE/DIVISION: _____

REGION/OFFICE NUMBER OR DIVISION

HOME TELEPHONE NUMBER: _____

JOB TITLE: _____

PRODUCT SPECIALTIES (i.e.: 264X, 3000): _____

MANAGER'S NAME: _____



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