

COMPUTER SYSTEMS NEWSLETTER

For HP Field Personnel

REINHARDT, HELMUT
FRANKFURT
HPSA



Vol. 4, No. 18
Aug. 1, 1979

GSD Chops Memory Prices on HP 3000Page 27

In This Issue...

BOISE NEWS

Product News

Boise Division Features "Quick Reference Material" J. Brusseau/Boise [2]

DMD NEWS

Division News

Behind-the-Scenes Glimpse at DMD R. Bowles/DMD [6]

"Enough of that

Rocky Mountain Whatever" S. Germain/DMD [7]

Bolt Adds a Boilermaker J. Bolt/DMD [7]

Product News

Evaluating Disc Competition: Part IV ... K. Magenis/DMD [8]

DSD NEWS

Competition

DEC Reduces Memory Prices, Raises Software Support Prices D. Carver/DSD [12]

Product News

RTE-IV(A) to RTE-IVB Update J. Koskinen/DSD [12]

CSS Option 200 Replaced by "V" Product P. Ebersole/DSD [13]

FEM Board Relieves Firmware

Installation Problems J. Koskinen/DSD [13]

Support Services for HP-ATS Software . P. Ebersole/DSD [14]

\$42,000 Out The Door At

RosevilleH. Bain & K. Hall/DSD [14]

Upgrade Kit for Early F-Series

FirmwareJ. Koskinen/DSD [14]

Sales Aids

Firmware Updates —

How Do They Work? J. Hornung/DSD [15]

Price Goofs in the New HP 1000

Configuration Guides T. Proske/DSD [16]

Obsolete and Used Equipment at

Great Savings J. Coleman/DSD [17]

Special Driver for Tektronix 4025 Scope C. Avila/DSD [17]

Mag Tape Updates Are Now Less Expensive

for RTE-IV CSS/SSS Customers P. Ebersole/DSD [17]

No, They Aren't Obsolete, Just Missing

or MovedT. Proske/DSD [18]

Right-to Copy RTE-IVB J. Koskinen/DSD [18]

DTD NEWS

Product News

Multiplot Will Execute

Remotely R. Ferguson & P. Taylor/DTD [19]

Numeric Pad on 2647A Revealed! K. Blackford/DTD [20]

X-ON/X-OFF Handshake On 264X and

262X B. Lin/DTD [20]

Monitor Mode in Point-To-Point

Environment P. Moulds/DTD [21]

Sales Aids

Is Your Manual the Latest Issue???? D. Murray/DTD [21]

Free Digital Clock E. Grandjean/DTD [22]

DTD Computer Connections Golden

Issue P. Moulds/DTD [23]

Intermediate Multiplot Speeds E. Grandjean/DTD [23]

Firesale!!! Firesale!!! S. Daoust/DTD [23]

Updated 2621 Field Training Manual B. Miller/DTD [24]

Division News

2647 Demo Derby Finals C. Flock/DTD [24]

GSD NEWS

Product News

Stripes on the HP 300 IDS? M. Schorer/GSD [27]

HP 3000 30307A (Pre-Series II Upgrade) Memory Options

Discontinued—Order 30008B Boards

Instead R. Edwards/GSD [27]

GSD Chops Memory Prices on

HP 3000 R. Edwards/GSD [27]

Bundled Software and Reduced Memory Prices

Result in Significantly Lower

HP 3000 Cost of Ownership! R. Edwards/GSD [28]

HP 300 Troppus Putrats Tik L. Gnidluaps/GSD [29]

Sales Aids

Another New HP 3000 Sales Tool

On Its Way! G. Miller/GSD [30]

Murphy's Law at Work on the HP 3000

Field Training Manual G. Miller/GSD [30]

GSD 3000 Product Marketing Team Welcomes

A Newcomer R. Edwards/GSD [31]

HP 300 Sales Information Binders J. Whitesell/GSD [31]

Competition

HP 3000 Competitive Information: System/38, IBM GSD's

Newest System J. Rose/GSD [31]

Index continued on page 40

BOISE DIVISION NEWS

Product News

Boise Division Features "Quick Reference Material"

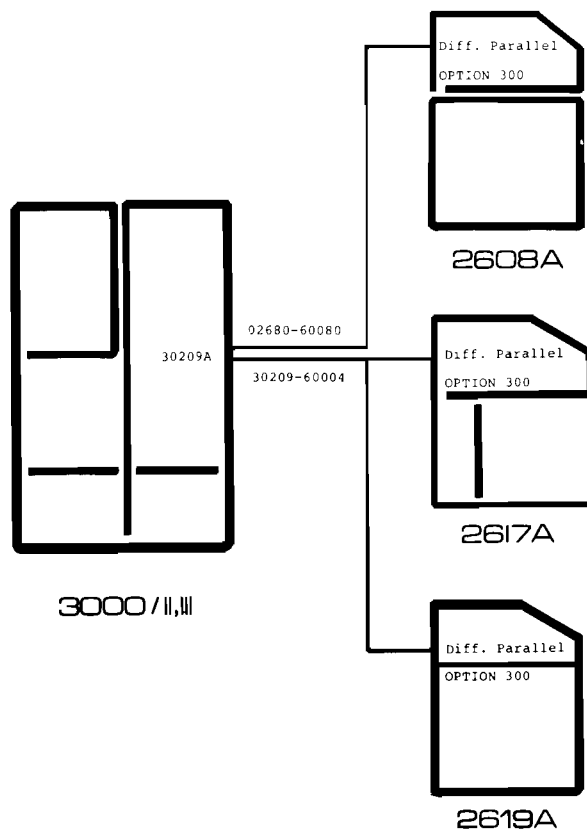
By: Jim Brusseau/Boise

In renovating our Neophyte training program, the Boise Division has found it very useful to organize our configuration information into a "quick reference" format. Gary Sherwood's article of February 15, 1979 in the *Computer Systems Newsletter*, Volume 4, Number 7, originally documented the configuration diagrams for the 2630 Family.

This is the first in a series of CSG articles which will deal with the System Line Printers from the Boise Division. The following seven pages concentrate only on HP's Commercial System/Printer configurations. Future issues will cover the Business and Technical System/Printer configurations.



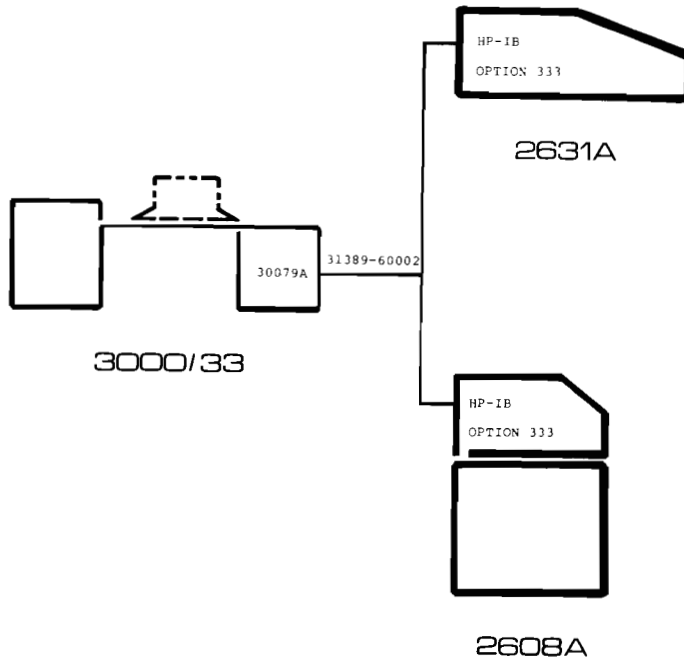
COMMERCIAL SYSTEMS



HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

COMMERCIAL SYSTEMS



HP 3000/33 DOT MATRIX SYSTEM PRINTER

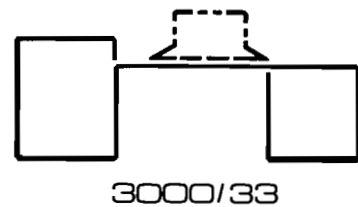
Interface: Gen. I/O Channel Cable: 31389-60002 Interface: HP-IB
 From: GSD From: Boise From: Boise

**** ORDER ****

2608A	\$9,900
#333	\$ 565
#110	\$ 150
#106	\$135

**** RECEIVE ****

400 LPM Dot Matrix Line Printer
 2608 HP-IB Interface & Adapter
 2 Meter Cable to HP 3000/33
 Installation
 Sound Cover
 Ribbon 6 Pack

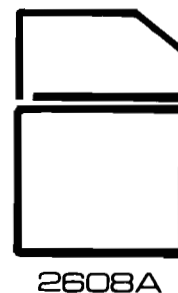


**** FOR ****

Family Literature List
 Special Character Sets
 Longer Cables
 Special Drums
 Print Samples

**** SEE APPENDIX ****

- A
- B
- C
- D
- E



HP 3000/33 DOT MATRIX SYSTEM PRINTER

Interface: 30079A Cable: 31389-60002 Interface: HP-IB
 From: GSD From: Boise From: Boise
 (STD w/Series 33) (w/option 333) (w/option 333)

**** ORDER ****

2631A	\$3,350
#333	\$ 290
26098A	\$ 275
#001	\$ 15
#002	\$ 50
26090A	\$ 100

**** FOR ****

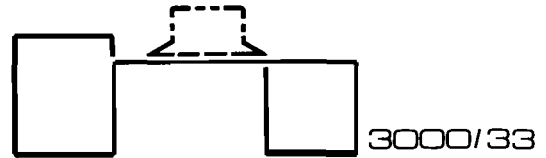
Family Literature List
 Special Character Sets
 Longer Cables
 Special Drums
 Print Samples

**** RECEIVE ****

180CPS Dot Matrix Printer
 HP-IB Interface in 2631A
 2 Meter Cable
 Documentation
 Pedestal
 Casters
 Paper Shelf
 Sound Cover

**** SEE APPENDIX ****

A
 B
 C
 D
 E



HP 3000/II, III DOT MATRIX SYSTEM PRINTER

Interface: 30209A Cable: 02608-60080 Interface: Diff. Parallel
 From: GSD From: Boise From: Boise

**** ORDER ****

2608	\$9,900
#300	\$ 650
#110	\$ 150
#106	\$ 135

**** FOR ****

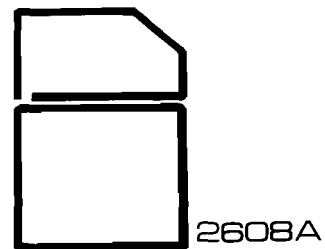
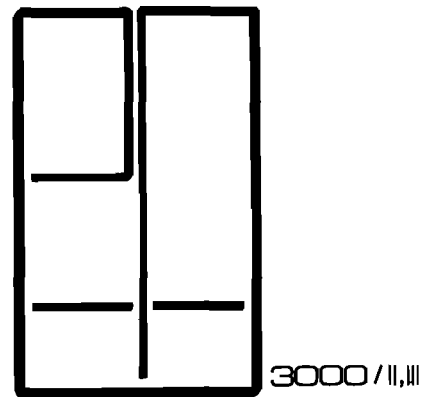
Family Literature List
 Special Character Sets
 Longer Cables
 Special Drums
 Print Samples

**** RECEIVE ****

400 LPM Dot Matrix Printer
 2608 Differential Interface
 & Adapter
 50 Ft. Cable to HP 3000/II, III
 Installation
 Sound Cover
 Ribbon 6 pack

**** SEE APPENDIX ****

A
 B
 C
 D
 E



HP 3000/II, III DRUM SYSTEM PRINTER

Interface: 30209A
From: GSD

Cable: 30209-60004
From: Boise

Interface: Diff. Parallel
From: Boise

3000/II,III

**** ORDER ****

2617A \$15,700
#300 \$ 650

**** RECEIVE ****

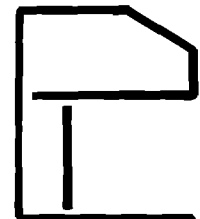
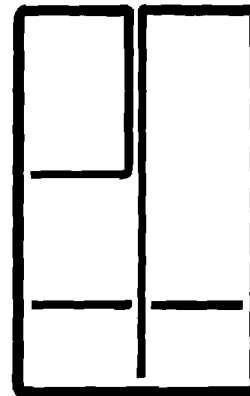
600 LPM Drum Printer
2617 Differential Interface
50 Ft. Cable to HP 3000/II, III
Installation

**** FOR ****

Family Literature List
Special Character Sets
Longer Cables
Special Drums
Print Samples

**** SEE APPENDIX ****

A
B
C
D
E



2617A

HP 3000/II, III CHAIN SYSTEM PRINTER

Interface: 30209A
From: GSD

Cable: 30209-60004
From: Boise

Interface: Diff. Parallel
From: Boise

3000/II,III

**** ORDER ****

2619A \$21,000
#300 \$ 650

**** RECEIVE ****

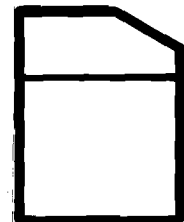
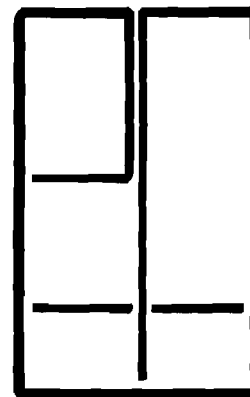
1000 LPM Chain Printer
2619 Differential Interface
50 Ft. Cable to HP 3000/II, III
Installation

**** FOR ****

Family Literature List
Special Character Sets
Longer Cables
Special Drums
Print Samples

**** SEE APPENDIX ****

A
B
C
D
E



2619A

DISC MEMORY NEWS

Division News

Behind-the-Scenes Glimpse at DMD

By: Rich Bowles/DMD



"How did Hoke get loose this time?"
(Rich Bowles and various Marketing personnel)



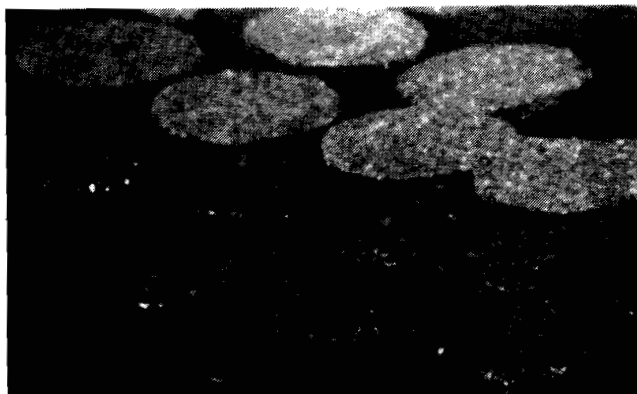
My weiner has a first name;
It's O-S-C-A-R
(Charlie "No Shoes" Woodard, Lab Engineer)



Neophyte Training Class?



"Sometimes the Disc Drives don't fit in the shipping crates too well; so we have to . . ."
(Jim Potts, Shipping)



Would you believe 4" THICK FILM TECHNOLOGY?



"Are you sure this is the CLEAN ROOM!"
(Regina Shepard, Order Coordinator)



"Wanna see me wiggle my ears?"
(Bob Hoke, Marketing Manager)

"Enough of that Rocky Mountain Whatever . . ."

By: Steve Germain/DMD



The "wilds" of Idaho have once again lured another marketing artisan to the Disc Memory Division! *Cathy Salinas* was successfully woo'd away from the charms of Colorado and has joined our Product Marketing team. *Cathy's* primary responsibility will include developing sales aids for current products as well as advertising and promotion strategies for future disc offerings.

Cathy is a graduate of the University of Colorado and will undoubtedly strengthen the Marketing group with her varied marketing and business talents. An avid skier and back-packer, she also boasts of superior skills in racquetball and tennis. Please join me in welcoming *Cathy* into the spinning world of disc drives.

Bolt Adds a Boilermaker

By: Jon Bolt/DMD



Our latest addition to Sales Development is *Debbie Henrichs*, a boilermaker from Purdue. She is still not out of the "hot water" yet as her initial duties will be coordinating and managing DMD's training activities (certainly a high-pressure task for a high-powered girl).

Debbie was a life-long resident of Indiana and the move to Boise seems to be ideal for her since she is very recreationally oriented. Most any outdoor sport catches her interest, but she particularly enjoys water skiing, hiking, biking.

Welcome aboard *Debbie*!

Product News

Evaluating Disc Competition: Part IV

By: Kevin Magenis/DMD

The July 1 issue of the *CS Newsletter* focused on drive features that can influence disc drive competitiveness in the mass storage market. Included was a comparison of DEC and DG pricing and maintenance structure through a life-cycle costing analysis (see July 1 issue for further explanation).

In this issue, we will discuss Mass Storage System features and compare HP's disc offerings to Prime and Univac through an initial pricing and cost-of-ownership analysis.

A) Mass Storage System Features

Drives Per Controller	A large number of drives per controller allows the user the convenience of incremental growth and a large mass storage requirement.
Multiple CPU Access	This feature maximizes the cost effectiveness of mass storage by allowing processor sharing of discs. In many applications, it is not necessary to have one drive per CPU; providing extra dollars for more power capabilities. The HP disc controller can access up to eight CPU's of the HP 1000 variety.
Configuration Flexibility	HP is one of the few disc manufacturers that provides a solution to almost all mass storage requirements. The customer has the option of choosing between cartridge or disc pack type drives, offering small, medium, or large capacities (20, 50, or 120 M bytes). Various configurations allow up to eight drives per controller (20 to 960 megabytes) or up to eight CPU's per drive (HP 1000).
Error Correction Detection	The Error Correction Code (ECC) hardware increases data reliability and system availability by reducing the effects of media errors. The ECC hardware and algorithm are capable of detecting and/or providing correction information for single burst data errors (see MAC Data Sheet for specifics).
Cylinder/Surface	The HP controller will operate in either cylinder or surface modes which are selectable by software. If not selected, the controller automatically defaults to the surface mode.
Automatic Track Sparring	Transparent to the user when a defective track is discovered,

Programmable Recovery of Marginal Data

the data heads seek to a spare track previously assigned at system generation.

Data written off track center can be retrieved using a special instruction in the controller. Heads can be incremented in position up to 63 steps of track center. Each step can be as small as 12.5 micro-inches.

Data Base Protection

The controller provides a security system for the user by using a special bit in the preamble of each sector. This prevents accidental erasure or overwrite of critical data.

Environmental Tolerance

The controller is built to the same durable standards as our own disc drives. HP drives have been designed for superior performance over wide environmental ranges. Our drives are currently used in aircraft, ships, trains, and buses; found in chemical plants, lumber mills, steel mills, and many other atypical disc environments. HP has brought new standards to the term disc environment.

Reliability

The minimal additional BMMC attached to a master drive is because of the controller maintenance charge. This small increase is a reflection of the controller reliability and indirectly of how well it is designed.

Power Requirements

The controller, as with our drives, requires only standard office power.

Dual Porting and Overlapping Seeks

These features are not supported by HP. However, in many applications they are very useful.

B) HP vs Prime and Univac (ISS)

Prime and Univac price their mass storage products at the upper end of the pricing spectrum compared to most other system suppliers. These high prices stem from two different philosophies.

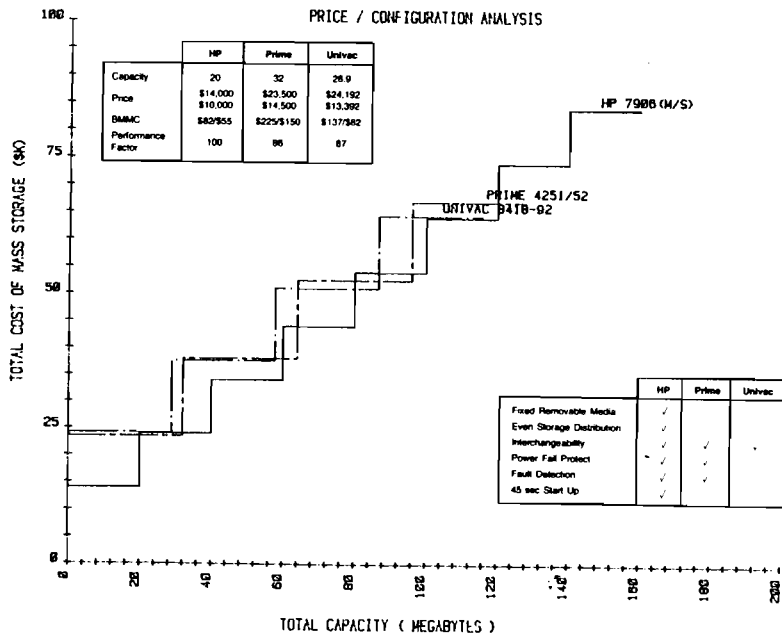
Prime's pricing strategy is influenced by their need to OEM their disc drives from CDC and Perdec. In order to harvest a reasonable profit, Prime has to charge accordingly.

Univac, who manufacture their own drives, have a different philosophy (i.e., charge what the market will bear). Univac is the only major disc supplier to enter all three market areas, PCM, OEM, and End User.

The following three figures compare Univac's and Prime's most competitive disc offerings to HP's 7906, 7920, and 7925, respectively. A life-cycle costing analysis of Univac's and Prime's offerings appears in the last three figures.

*Each step in the pricing graphs denotes an add-on drive.

HP 7906 VS. PRIME AND UNIVAC

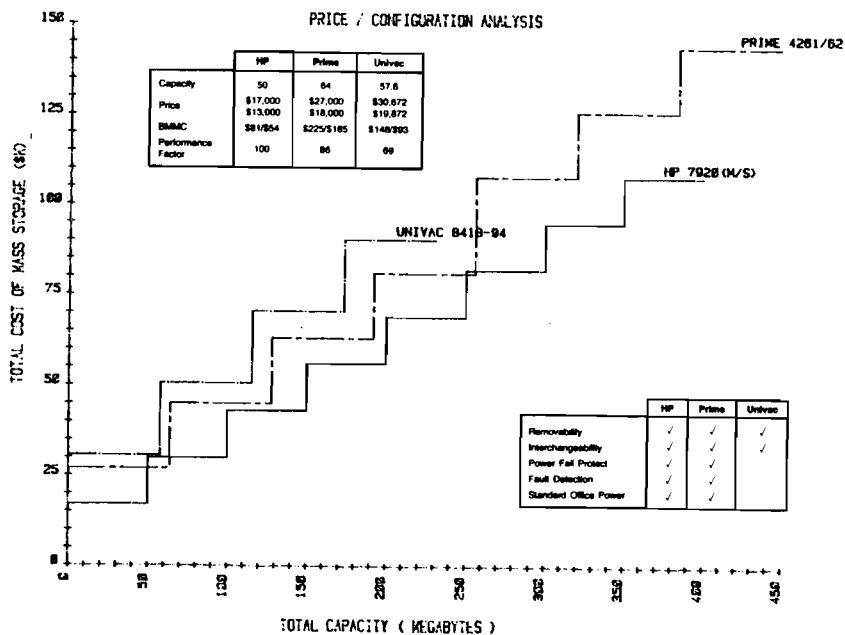


4/1/79

HEWLETT PACKARD

DISC MEMORY DIVISION

HP 7920 VS. PRIME AND UNIVAC

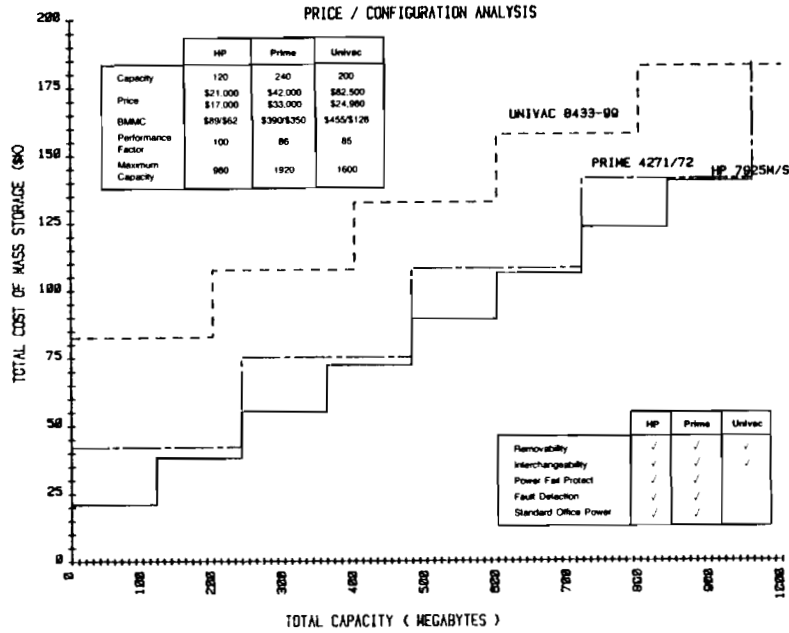


4/1/79

HEWLETT PACKARD

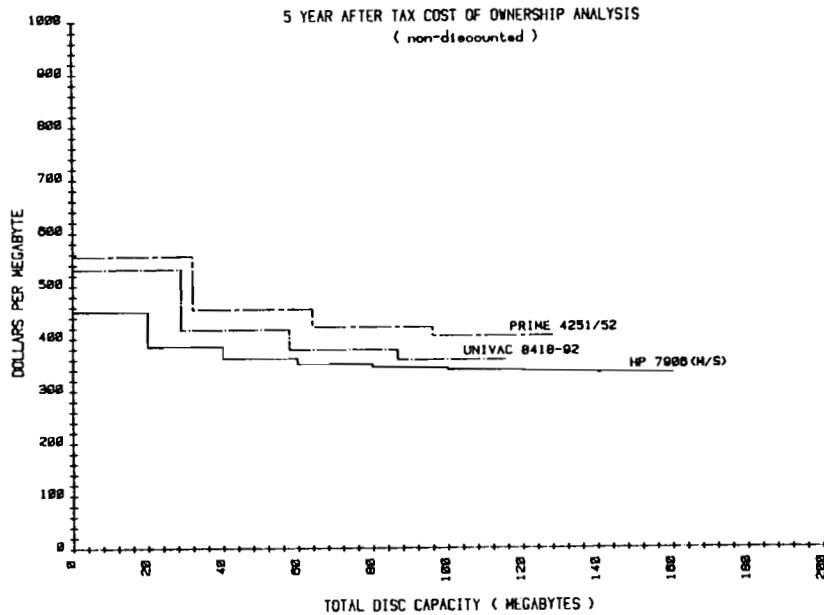
DISC MEMORY DIVISION

HP 7925 VS. PRIME AND UNIVAC



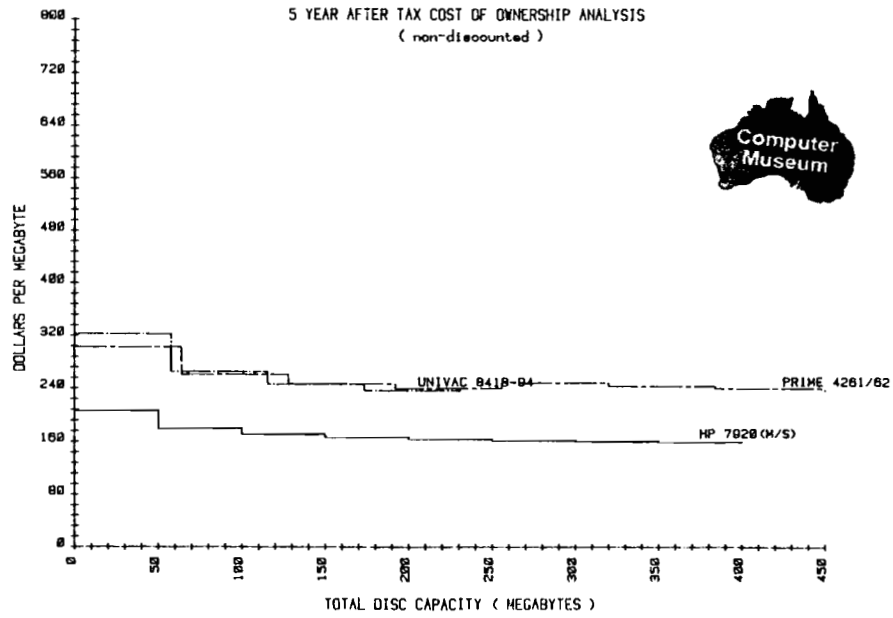
HEWLETT PACKARD
DISC MEMORY DIVISION

HP 7906 VS. PRIME AND UNIVAC



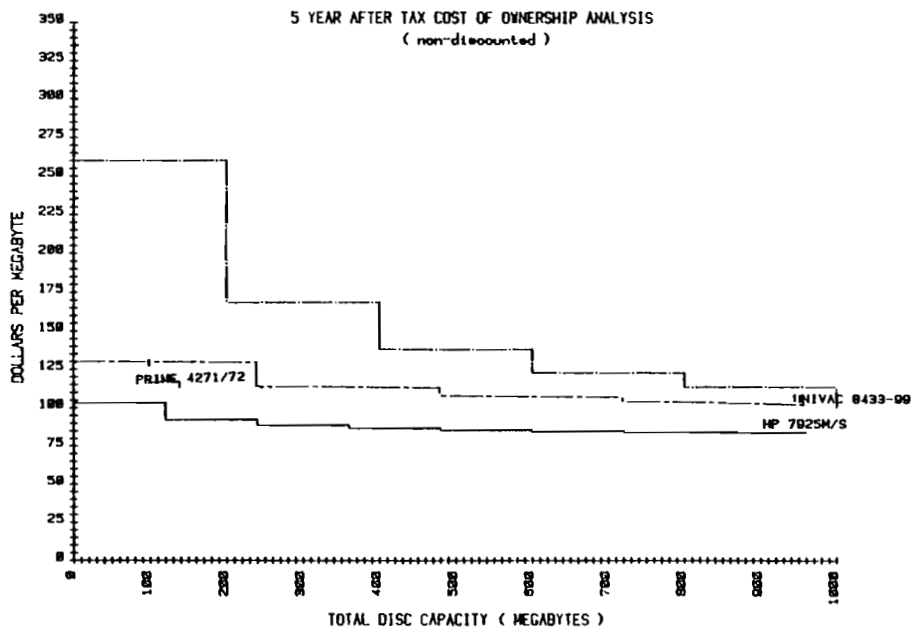
HEWLETT PACKARD
DISC MEMORY DIVISION

HP 7920 VS. PRIME AND UNIVAC



HEWLETT  PACKARD
DISC MEMORY DIVISION

HP 7925 VS. PRIME AND UNIVAC



HEWLETT  PACKARD
DISC MEMORY DIVISION

DATA SYSTEMS NEWS

Competition

DEC Reduces Memory Prices, Raises Software Support Prices

By: David Carver/IDSD

DEC has made, effective July 2nd, some major price reductions in add-on memory. These reductions apply to DEC 20's, 11/780's, 11/70's and 11/34's, and amount to as much as 57% in the case of the 11/780.

DEC also raised software support prices, to "more accurately reflect their true costs, which have been rising due to the labor-intensity of these services." This move is consistent with IBM's DPD and GSD, who on June 27th raised the price of SE time by about 10%. We don't have further details yet about the DEC increases, but will pass them on as soon as we get them.

The reductions in the computer and memory area are the greatest for the 11/780, where the new prices are slightly less than for the HP 1000. DEC also changed the amount of memory packaged into the entry level computers at a small price increase. An example is the 11/780 entry level system, which used to contain 128Kb of memory for \$128,600; the new price of \$134,600 includes 256Kb of memory.

Of most significance for the HP 1000 is the new 11/70 pricing, which DEC has brought closer to the F-Series with a 53% reduction in the CPU and 1Mb price. Notably absent were any price cuts on the 11/60. This says that DEC is concerned about the price-performance in its mid-range systems, i.e., right where the F-Series is strongest. Let's get out there and sell the F-Series while we still have a leadership position!

The table below shows we're still in very good shape price-wise, and the new Vector Instruction Set and RTE-IVB products make our performance at least the equal of the 11/70.

The 11/34 memory reductions were not as significant as on the larger machines, but are still slightly below the HP 1000

for add-on memory. Remember that we reduced computer prices (\$500 on the 2113E and \$100 on the 2117F), which offsets the memory advantage. Remember also that HP 1000 memory packages include Dynamic Mapping Hardware, while the DEC prices are for memory only.

The comparison below contains all the details we've been able to get so far.

Price Comparison

	DEC		HP 1000		
	Increment	Price	Memory Pkg	Price	Δ %
VAX-11/780	2Mb	\$29,800	—	—	—
VAX-11/780	1Mb	18,500	12787D	\$23,000	+24
VAX-11/780	512Kb	13,000	12787C	13,500	+4
VAX-11/780	256Kb	8,500	12787B	8,000	-6
PDP-11/70	1Mb	32,000	12787D	23,000	-28
PDP-11/70	512Kb	20,000	12787C	13,500	-33
PDP-11/70	CPU+1Mb	43,700	E-Series	29,500	-33
PDP-11/70	CPU+1Mb	43,700	F-Series	35,500	-19
PDP-11/34	256Kb	6,000	12786B	6,500	+8
PDP-11/34	128Kb	4,000	12786A	4,500	+13

All packages are Fault Control except PDP-11/34.

Product News

RTE-IV(A) to RTE-IVB Update

By: John Koskinen/IDSD

We are encouraging our RTE-IV(A) customers to update their software to RTE-IVB. The vehicle for doing this is to have the qualified customer order 92068A Opt. 002, which provides a zero net price for the software. The customer qualifies for this option by being current and up-to-date on RTE-IV(A) software with CSS or SSS, regardless of when they ordered them. The update option is being offered for only 180 days, from July 1, 1979 to December 31, 1979.

Let's take an example. Suppose a customer received a 2176A system in September. The 3 months of CSS provided on the 2176A system means the customer is current and up-to-date on RTE-IV(A). This qualifies the customer to update to RTE-IVB in November using Opt. 002.

CSS Option 200 Replaced by "V" Product

By: Phil Ebersole/DSD

Option 200 to CSS (9XXXXT) for all DSD software products has been removed from the CPL as of August 1, 1979. This discount option was used in the past to reduce the price of CSS support for an additional system under the same system manager.

Option 200 has been replaced by a separately orderable product, identified by the "V" suffix (e.g. 92068V), which provides for centralized support of an additional system at a reduced rate. This product provides:

- The right to make one copy of the software updates delivered to the central site and the right to distribute and use these updates on one additional computer system.
- One copy of firmware updates (if applicable).
- The right to copy, distribute and modify one copy of the appropriate reference manual updates for use with one additional computer system.
- Use of Phone-In Consulting Service by the central site System Manager on behalf of the additional site.
- On-site assistance by an HP System Engineer at the central system to identify and verify software problems on behalf of the additional systems. The request for assistance must originate from the central site System Manager and problems need to be recreated at the central site unless the additional system is installed at the same customer facility address.

New Product — Lower Price

Prices for the new multiple system support products ("V"-products) have been drastically reduced when compared to the old CSS option 200 prices, as the following example shows:

Product	Old CSS Option 200 Price	New 9XXXXV Price
RTE-IV	\$110/month	\$ 50/month
DS/1000	\$ 85/month	\$ 55/month
IMAGE	\$ 85/month	\$ 10/month
	\$280/month per additional system	\$115/month per additional system

Ordering Example

Suppose a customer has three systems, each of which has the new RTE-IVB software (92068A) and the new IMAGE/1000 software (92069A), and furthermore, that the customer agrees to support all systems under one Systems Manager. Then the following support services would be quoted. (Remember: services are quoted in *monthly* units, usually for a period of one year, and thus the quantity is 12).

Quantity	Product	Service	Price
1st System			
12	92068T	CSS for RTE-IVB*	\$250/mo
12	92069T	CSS for IMAGE/1000*	\$ 40/mo
2nd System			
12	92068V	Centralized support for RTE-IVB on additional system	\$ 50/mo
12	92069V	Centralized support for IMAGE/1000 on additional system	\$ 10/mo
3rd System			
12	92068V	Centralized support for RTE-IVB on additional system	\$ 50/mo
12	92069V	Centralized support for RTE-IVB for additional system	\$ 10/mo

*Don't forget to order an update media option, also.

Services Tailored for Major Accounts

The dramatically reduced support prices for multiple systems under one System Manager should make it easy to tailor a complete support package for those major accounts. For more information on these and all of the other new support products refer to the new CSG Software Support Services and Policies Sales Training Manual. If you don't have one, send me a TWX, and I'll see that you get one!

FEM Board Relieves Firmware Installation Problems

By: John Koskinen/DSD

The new FEM (Firmware Expansion Module) 12791A (\$500, US List) board for M-, E-, and F-Series computers, in addition to adding firmware capacity, makes access much easier for replacing outdated or broken ROMs. The new board allows the placement of 4K ROMs on a board which fits into an I/O slot. The ease of access for future service and updates is obvious to anyone who has worked with CPU and FAB loaded firmware.

Customers purchasing the new board will receive installation by an HP Customer Engineer if the system is covered under full hardware support. An important benefit is that this installation includes moving most of the customer's existing firmware from the Firmware Accessory Board (FAB) to the new FEM board, which simplifies installation of firmware updates. All the firmware can be moved, except for the Dynamic Mapping and part of the FFP ROMs.

Support Services for HP-ATS Software

By: Phil Ebersole/DSD

Effective July 1, 1979, we've added software support services for DSD's HP-ATS software. Now your HP-ATS customers can purchase support for *all* of the software on their systems for a low monthly fee. Product numbers and prices are as follows:

Product No.	Description	Price
93284T	Customer Support Service for HP-ATS software	\$50/month
93284V	Central Support for an additional copy HP-ATS software under the same System Manager	\$10/month
93284S	HP-ATS Software Subscription Service	\$35/month

HP-ATS software (MTIS and device subroutine) updates will be released on a quarterly basis, as required, in the same fashion as all of our other software products.

When ordering support for HP-ATS remember the requirement that the same level of service (CSS or SSS) must be purchased for *all* of the software products which make up one computer system. Due to the interaction among software elements, service cannot be given to specific software products while eliminating others.

Upgrade Kit for Early F-Series Firmware

By: John Koskinen/DSD

There is an easy way for early F-Series processors (shipped before June, 1979) to obtain the latest enhancements to base instruction set, FFP and SIS firmware. The firmware upgrade kit, 12823F, is available for \$700. Installation is included if the system is currently covered with a hardware maintenance contract. The kit consists of 21 ROM's: 6 F-Series base set, 9 F-Series FFP, and 6 F-Series SIS. The set provides high-performance double-precision floating point, double-precision SIS, the polynomial evaluation instruction, and double-word integer routines. Eighteen of the ROM's can be placed on the new FEM board (12791A) making service and future updates much easier.

Division News

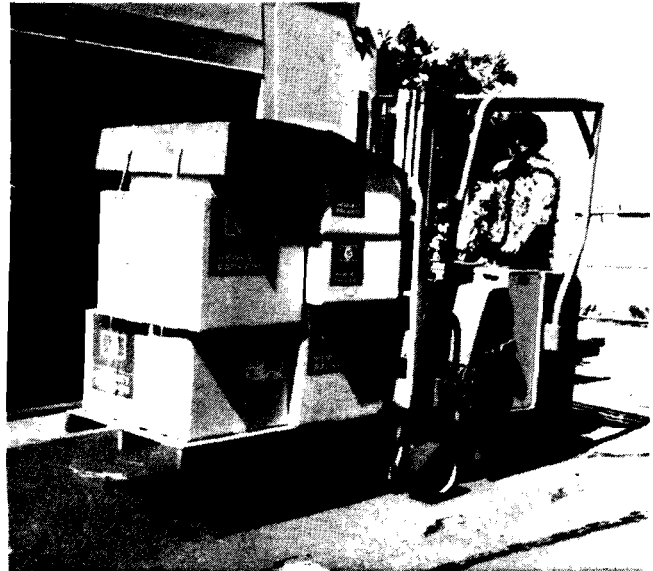
\$42,000 Out The Door At Roseville

By: Howard Bain & Ken Hall/DSD



On June 27th, all Roseville personnel take a break . . .

Wednesday, June 27th was a big day at DSD's new Roseville operation. Four weeks after the move from Cupertino, the first major shipment of measurement and Control products (2240A and 2313B) was made on schedule. The shipment included products destined for customers in Europe, Japan, Mexico, Canada and the U.S.A. Al Seely and his staff of just over 30 capable employees celebrated the event with another first for Roseville — a traditional HP beer bust.



. . . to savor the first revenue producing shipments from DSD's newest location.

Roseville's manufacturing organization will grow in the upcoming months, however, all R&D and Marketing functions for the 2240/2313 continue to be located at DSD in Cupertino.

A final reminder — the Supplying Division's code for Roseville is 2251. Orders should be entered using this code and availability for the 2240A and 2313B can be found under it in the Availability Schedule.

Sales Aids

Firmware Updates — How Do They Work?

By: Jeff Hornung/DSD

As of July 1, 1979, DSD has added firmware updates to its software support program. This new feature provides your customers with a low cost way to maintain their firm-

ware at the latest revision level and obtain any enhancements released by HP. The following table summarizes what firmware updates are provided on the various services.

Category	Support Service Product	Firmware Updates Included
F-Series Firmware	12823S 12824S	F-Series DMI, FFP, and SIS ROMs F-Series VIS ROMs
E-Series Firmware	13306S 13307S	E-Series FFP ROMs E-Series DMI ROMs
M-Series Firmware	No subscription service for M-Series DMI, FFP, or DS/1000 firmware is available.	
Interface Card Firmware	12790S	Multipoint Interface Card ROMs
Software/Firmware Products	9206 8S,T,V or W 9206 7S,T,V or W 91740S,T,V or W	RTE-IVB EMA ROMs RTE-IVA EMA ROMs (bug fixes only, no enhancements) DS/1000 ROMs (E-Series & F-Series only)

Note specifically that the services for the operating systems do not include updates to DMI or FFP firmware. These are separate services.

Furthermore, no subscription service currently exists for any base set firmware.

Firmware and Software Support Must be Purchased Together

If either SSS or CSS is purchased for the software, then SSS **MUST** be purchased for any and all of the firmware-only products (e.g. VIS, FFP) present in the system. (Note that there is no CSS service for firmware-only products). A customer is not allowed to buy services for software without also buying services for firmware. This is because the latest software is tested only with the latest firmware.

Ordering Example

For example, support for a customer purchasing a single HP 1000 Model 45 System (F-Series Computer with RTE-IVB and VIS) would order the following for complete software/firmware support (remember services are ordered in monthly units, normally 1 year at a time, so the quantity is 12).

Quantity	Product	Service
12	92068T	Customer Support Service for RTE-IVB
12	12823S	Subscription Service for Standard F-Series Firmware
12	12824S	Subscription Service for VIS Firmware

Current Version Requirement

Before starting SSS for firmware, the customer's firmware must already be at the latest revision level.

Customers with service contracts should arrange to have the account-responsible CE inventory all of the existing firmware and recommend the most economical way to obtain the latest versions (if any upgrading is necessary).

Customers without hardware maintenance contracts should inventory their own firmware and purchase one of the products listed below to obtain the latest versions. Alternatively, they should arrange for on-site CE consultation (generally on a time-and-materials basis) to inventory and order the latest revision firmware as required.

For your convenience, the current revision levels of all firmware products have been listed in *Support Update*, Issue #174 (July 13, 1979) in an article titled, "E/F-Series Firmware History."

Obtaining the Latest Versions of Firmware

The following table summarizes how customers with out-of-date firmware can obtain the latest version of each firmware product. It also shows how cost-effective the newly introduced subscription services can be for your customers when compared with the cost to upgrade to the latest version.

Firmware	To Obtain Latest Revision Order:	Price	Associates SSS Product	SSS Price
F-Series DMI, FFP, and SIS ROMs	12823F ¹	\$ 700	12823S	\$32/mo.
F-Series VIS ROMs	12824A ³	\$1500	12824S	\$20/mo.
E-Series FFP ROMs	13306A	\$ 650	13306S	\$10/mo.
E-Series DMI ROMs	13307A	\$ 500	13307S	\$ 5/mo.
Multipoint ROMs	No upgrade product available ²	—	12790S	\$10/mo.
RTE-IVB EMA ROMs	9206 8A Option 001 ³ (includes software update)	\$3000	92088S	\$100/mo (includes software updates)
RTE-IVA EMA ROMs	92067A Option 001 ³ (includes software update)	\$3000	92067S	\$ 85/mo. (includes software updates)
DS/1000 E-Series ROMs	No upgrade product available ²	—	91740S	\$ 65/mo. (includes software updates)

¹Does not currently include DMI ROMs. However, no updates have been made to DMI since the F-Series was introduced.

²All current versions satisfy latest revision requirement.

³No updates have been made to these ROMs since these products were introduced.

Installation Included for Maintenance Contract Customers

Installation of the firmware updates will be performed at no additional charge by a Hewlett-Packard CE if the system on which the updates are to be installed is covered under a maintenance contract. Upon receiving the updates, the customer should contact the account-responsible CE to arrange a time for installation (usually within two weeks).

Customers without hardware support will be responsible for installing the firmware updates themselves. Purchase of the new 12791A Firmware Expansion Module (see companion article), greatly simplifies this installation. You should recommend purchase of this module, known as the FEM Board, to all of your support services customers.

An alternative for non-maintenance contract customers is to arrange with HP to have a CE perform the installation. A standard fixed-fee product has been established by CSD for this service. The cost is \$200 for the first computer updated (within an HP service travel areas), and a small incremental charge is made for each additional computer updated on the same trip.

There's No Competition

As far as we can tell, HP is the only minicomputer vendor offering firmware updates as part of its Software Support Program. Once again, HP leads the industry in software support!

Price Goofs in the New HP 1000 Configuration Guides

By: Ted Proske/DSD

Partly because I wasn't notified in advance of certain price changes by other Divisions, and partly because even I can make a mistake, certain prices are wrong in the new HP 1000 Configuration Guides (5953-4201 for the Systems Guide and 5953-4203 for the Computers Guide). Embarrassing as it is, I thought you'd want to know, so the error situation is summarized below.

Product Number	Wrong Price	Correct Price	Systems Config. Guide Page Ref.	Computers Config. Guide Page Ref.
12925A	\$ 3,300	\$ 4,349	23	27
2748A	2,780	3,854	n/a	27
2631A+240	4,000	3,455	27	21
3070B	3,200	3,854	32	26
13394A	600	525	33	29

I am happy to report that these prices will all be correct in the July 1979 DSD Pocket Guide, which should have been enroute to you before the end of July.

Obsolete and Used Equipment at Great Savings

By: Judy Coleman/DSD

The following obsolete and used equipment is available at great savings and all units carry a full 90-day warranty.

Qty.	Product Number	Description	Price
1	12531C-888	Buff Tele I/F	\$ 227.00
1	12531D-004-888	I/F-Buff Tele	263.00
1	12555B-888	Dig to Analytical Conv	390.00
7	12556B-888	Printer I/F	422.00
2	12566B-001-888	Micro Ckt I/F	227.00
5	12587B-888	Dataphone I/F	357.00
1	12589A-888	Data Set ACU	292.00
2	12597A-002-888	8-Bit Duplex Reg	292.00
2	12604B-888	Data Source Intr	390.00
3	12897A-888	DCPC	450.00
1	12920B-001-888	Asyne Multiplexer	1820.00
1	12930A-002-888	Universal I/F	552.00
1	12936A-888	Priv Intr Fence	162.00
10	12944A-888	Pwr Fail A-Series	390.00
1	12967A-888	Sync Comm I/F	422.00
1	12968A-001-888	Async Data CM I/F	487.00
2	12968-888	Async Data Cm I/F	487.00
2	12976A-003	DYN Mapping Sys	1755.00
15	12977A	Fast FORTRAN	570.00
6	12979A-888	I/O Extender	1000.00
3	12990A	Memory Extender	2100.00
2	12990A-015	Memory Extender	2100.00
3	12990A-888	Memory Extender	2000.00
20	12991A	Power Fail 2112A, 2113A	360.00
6	12991A-888	Power Fail 2112A, 2113A	300.00
6	12994A-888	4K Mem Module	300.00
30	13187A	16K Mem Module	840.00
5	13187A-888	16K Mem Module	740.00
4	2100A-008-888	8K Computer	5000.00
4	2100A-16-888	16K Computer	8000.00
15	2102A	Memory Controller	360.00
4	2102E-888	HS Mem Control	552.00
1	2108K-888	Micro-P Processor	958.00
2	2109A-888	21MXE Computer	2000.00
10	2113A-888	21MXE Computer	2500.00



Availability approximately 4 weeks after receipt of order.

Please confirm with Judy Coleman (408) 257-7000 for transmitting instructions. Please do not transmit orders until you have confirmed your order. Units are available on a first-come first-served basis.

Special Driver for Tektronix 4025 Scope

By: Carlos Avila/DSD

Ivan Henkle's Special Engineering Group has now checked out an RTE-IV driver for the microprocessor-based Tektronix 4025 Graphics Scope. The driver which uses the 12966A Buffered Asynchronous card can communicate with the 4025 at up to 4800 baud.

Please contact your DSD Sales Development engineer for quotations on price and delivery.

Mag Tape Updates Are Now Less Expensive for RTE-IV CSS/SSS Customers

By: Phil Ebersole/DSD

RTE-IVB (and RTE-IV) CSS and SSS customers who choose to receive software updates on mag tape instead of cassettes can realize savings of \$30/month in their software support costs. This translates to a savings of \$360/year for each system covered under full CSS or SSS!

And mag tape updates are easier to use, too. Instead of receiving each update on numerous cassettes (as many as

seven may be required), and reading these into the computer one at a time, the customer receives a single mag tape containing an exact image of the complete, updated RTE-IV grandfather disc. This means no more lost cassettes and there's less chance of parity errors.

The update media is specified as an option to appropriate software support service. The following table lists the available media for RTE-IVB support services (92068S/T) and RTE-IV support services (92067S/T)

Option No.	Update Media	Price
20	Cassettes	+ \$30/month
50	800 bpi mag tape image of 7900 grandfather disc	N/C
51	1600 bpi mag tape image of 7900 grandfather disc	N/C
52	800 bpi mag tape image of 7905/06/20	N/C
53	1600 bpi mag tape image of 7905/06/20 grandfather disc	N/C

and for RTE-IVB only:

54	800 bpi mag tape image of 7925 grandfather disc	N/C
55	1600 bpi mag tape image of 7925 grandfather disc	N/C

N/C = No Charge

Let Your Customers Know

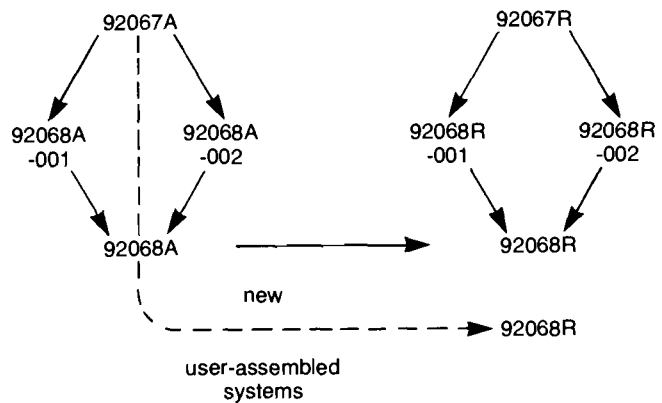
Most RTE-IV customers today receive updates on cassettes. But many will no doubt want to switch to mag tape updates to realize the cost savings. So when your customers' services come up for renewal, take a minute to point out the benefits of receiving RTE-IV updates on mag tape.

Right-to Copy RTE-IVB

By: John Koskinen/DSD

When a customer pays full price for RTE-IV(A) or RTE-IVB (less purchase agreement discounts) they have qualified to purchase the right-to-copy product, 92068R. Let's take an example.

Suppose your customer has purchased one 92067A, and nine 92067R's. He converts the 92067R's to 92068R's by the appropriate upgrade or update options (001 or 002 see RTE-IVB Updates, July 1 CSG Newsletter). Now the customer would like to buy ten more 92068R's for ten more new user-assembled systems. The answer is easy — as long as the customer originally ordered one 92067A or 92068A at full price, he qualifies for the 92068R's via the 92068A upgrade or update options.



92067A or 92068A qualifies for 92068R user-assembled systems.

No, They Aren't Obsolete, Just Missing or Moved

By: Ted Proske/DSD

Recently, a sales development engineer here at DSD asked me if the omission of the 12551B Relay Output Register data sheet from the latest HP 1000 Computer Hardware Data book indicated that it was obsolete. Since that omission and other omissions from the HP 1000 Peripherals Data book may puzzle you and your customers, I thought you'd like to know what has been taken out of the various data books and why.

Data book change

12551B, 12555B, 12556B, and 12604B data sheets removed from the HP 1000 Computers Hardware Data book

2640B/2645A/2648A, 2635A, and 92900B data sheets removed from the HP 1000 Peripherals Data book

2240A, 2313B, and 91000A data sheets removed from the HP 1000 Peripherals Data book

Why

To avoid redundancy with these same data sheets when DSD (eventually) publishes an HP 1000 Instrumentation Data book

To avoid redundancy with terminals data sheets in the HP 1000 Distributed Systems & Communications Data book

To avoid redundancy with these same data sheets when they are published in the HP 1000 Instrumentation Data book

If in doubt concerning the marketing status of any product in the HP 1000 product line, check with the HP 1000 Computers Selection and Configuration Guide or the HP 1000 Computer Systems Configuration and Site Preparation Guide, whichever is most appropriate.

DATA TERMINALS NEWS

Product News

Multiplot Will Execute Remotely

By: Rich Ferguson & Peter Taylor/ITD

The 2647A is as flexible as the programmer is skilled. By sending a few simple commands from the host computer, it is possible to run multiplot remotely. A BASIC program which calls up the linear chart menu and plots sine waves is shown below.

To run any of the other multiplot programs, simply change the file number in statement 20. Then modify the menu coding statements (140-180) for your data and away you go!

JUNK

```

10 REM commands to get multiplot linear up and going
20 PRINT ^27"F"^27",cf f 4 1"
30 PRINT ^27",cbasic"
40 PRINT "remove stdx"
50 PRINT "remove user"
60 PRINT "get"
70 PRINT "run"
80 REM timing needed to get program up and running
90 ENTER 60,X,A$
120 REM load menu
130 PRINT ^27",c di w#2"
140 PRINT ^27"W"^27"J2"^9"da1"^9/9"2"^9"1"^9/9
150 PRINT "linearlinearY"^9"0"^9"1"^9"10"^9"1"
160 PRINT "-1"^9"1"^9"1"^9"1"
170 PRINT "EXAMPLE OF LINEAR PLOT"^9"X-Axis Label"
180 PRINT "HP 2647A Multiplot"^9"Y-Axis Label"
190 PRINT ^27"&f7E"
192 ENTER 10,X,A$
195 PRINT ^27"&f8E"
196 ENTER 10,X,A$
200 FOR I=0 TO 10 STEP .25
210   PRINT I;SIN(I)
220 NEXT I
230 PRINT ^30

```

NOTE: The timing statements 90 and 196 are necessary for proper execution.

Numeric Pad on 2647A Revealed!

By: Ken Blackford/DTD

In times past, the only way to change the definition of a keyboard was to find an OEM to modify the microcode. Today, within the heart of the 2647A Intelligent Graphics Terminal lies an embryonic versatile work-station which can be used for data entry; if you have the key. (Or keycode).

The following program changes the graphics key pad to a numeric keypad and illustrates the many powerful and simple to use features which lie dormant in the terminal simply awaiting the user's touch.

```

10 KEYCDE (0,86,48)
20 KEYCDE (0,78,46)
30 KEYCDE (0,6,49)
40 KEYCDE (0,14,50)
50 KEYCDE (0,22,51)
60 KEYCDE (0,7,52)
70 KEYCDE (0,15,53)
80 KEYCDE (0,23,54)
90 KEYCDE (0,95,55)
100 KEYCDE (0,87,56)
110 KEYCDE (0,79,57)
120 END
    
```

Convert the Graphics Keys to a Numeric Pad

```

10 KEYCDE (0,86,166)
20 KEYCDE (0,78,138)
30 KEYCDE (0,6,139)
40 KEYCDE (0,14,164)
50 KEYCDE (0,22,140)
60 KEYCDE (0,7,165)
70 KEYCDE (0,15,135)
80 KEYCDE (0,23,163)
90 KEYCDE (0,95,147)
100 KEYCDE (0,87,162)
110 KEYCDE (0,79,136)
120 END
    
```

Reconvert to the Graphics Pad

(Run the program and it changes the key assignments until the terminal is turned off.)

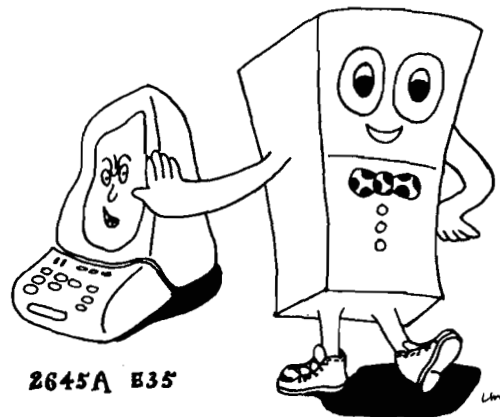
Put these programs on a tape and surprise your customer and confound the competition. It's not only catchy but it illustrates a point. And, it's useful for people who want to enter some data for multiplot.

X-ON/X-OFF Handshake On 264X and 262X

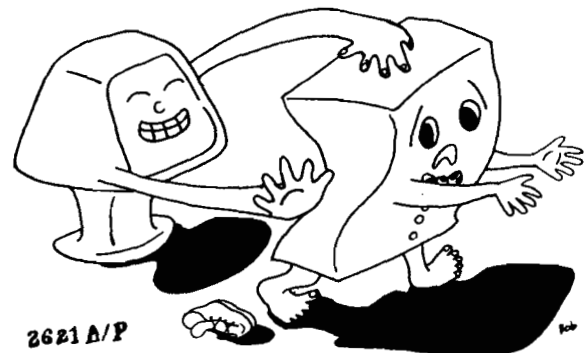
By: Bob Lin/DTD

We have had a number of queries recently regarding X-ON/X-OFF handshake protocol in both 264X and 262X series. The following description provides a brief discussion on this subject.

The X-ON/X-OFF handshake protocol is available in 264X series only as the 2645A special E35. This special is compatible with DEC 11/70 IAS Release 2. The X-OFF character (DC3) is used to inhibit further transfers from the terminal until X-ON (DC1) is received. The terminal, in this case, is receiving the X-ON/X-OFF control from the host computer.



The 2621A/P offers a standard X-ON/X-OFF handshake protocol that allows the terminal to signal the host computer to stop transmitting data and, subsequently, to resume transmitting data as the input buffer fills and empties. This handshake can be enabled or disabled by changing the state of the displayed character during configuration.



Notice the distinct difference between these two features. Precautions should be taken to avoid confusion!

Monitor Mode In Point-To-Point Environment

By: Peter Moulds/DTD

Most people relate Monitor Mode to Multipoint environments and overlook its application to point-to-point installations. Monitor Mode is a standard feature of the 13260A and 13260B point-to-point data communication interface boards. It is an excellent tool for solving data communication

problems between DTD terminals and host computers. Frequently, customers have problems developing software communication drivers on their computers. By placing the terminal in Monitor Mode (refer to reference manual) the programmer can visually monitor the actual character transmission occurring — including the handshake characters. Many times the problem can be recognized immediately from this visual inspection. So, the next time a customer requests assistance with communications programming, mention Monitor Mode to him.

Sales Aids

Is Your Manual the Latest Issue????

By: Dwayne Murray/DTD

Typically, we print a six months supply of each manual. This allows for the incorporation of additions and corrections found over the previous six months. Knowing the latest print date of a manual may help you with customer calls relating to his copy of the manual.

The following is a list of the latest print dates of each manual produced by Data Terminals Division. The list is in order by Product Number; therefore, some manuals will appear several times in the list.

Model No.	Appropriate Manuals	Latest Print Date
2621A/P	2621A/P Owner's Manual, Part No. 02620-90001	DEC 1978
	2621A/P Service Manual, Part No. 02620-90002	FEB 1979
2640A	2640A Owner's Manual, Part No. 02640-90011	MAR 1979
	2640A Service Manual, Part No. 02640-90012	AUG 1977
2640B	2640B/N/S Users Manual, Part No. 02640-90109	MAY 1977
	2640B/N/S Reference Manual, Part No. 02640-90110	APR 1979
	2640B/N/S Service Manual, Part No. 02640-90115	AUG 1978
2640C	2640A Owner's Manual, Part No. 02640-90011	MAR 1979
	2640A Service Manual, Part No. 02640-90012	AUG 1977
	2640C Manual Supplement, Part No. 02640-90037	DEC 1976
2640N	2640N Users Manual, Part No. 02640-90111	DEC 1976
	2640B/N/S Reference Manual, Part No. 02640-90110	APR 1979
	2640B/N/S Service Manual, Part No. 02640-90115	AUG 1978
2640S	2640S Users Manual, Part No. 02640-90113	DEC 1976
	2640B/N/S Reference Manual, Part No. 02640-90110	APR 1979
	2640B/N/S Service Manual, Part No. 02640-90115	AUG 1978
2641A	2641A Users Manual, Part No. 02641-90001	JAN 1977
	2641A/2645A/S Reference Manual, Part No. 02645-90005	NOV 1978
	2641A/2645A/S Service Manual, Part No. 02645-90003	MAY 1979
2644A	2644A Owner's Manual, Part No. 02644-90001	MAY 1976
	2644A Service Manual, Part No. 02644-90002	SEP 1977
2645A	2645A Users Manual, Part No. 02645-90001	JAN 1978
	2641A/2645A/S Reference Manual, Part No. 02645-90005	NOV 1978
	2641A/2645A/S Service Manual, Part No. 02645-90003	MAY 1979
2645K	2645A Users Manual, Part No. 02645-90001	JAN 1978
	2641A/2645A/S Reference Manual, Part No. 02645-90005	NOV 1978
	2641A/2645A/S Service Manual, Part No. 02645-90003	MAY 1979
	2645K Users Manual Supplement, Part No. 02645-90030	AUG 1977
	2645K Reference Manual Supplement, Part No. 02645-90031	NOV 1977
	2645K Service Manual Supplement, Part No. 02645-90032	SEP 1977

2645N	2645A Users Manual, Part No. 02645-90001 2641A/2645A/S Reference Manual, Part No. 02645-90005 2641A/2645A/S Service Manual, Part No. 02645-90003 2645N Users/Reference Manual Supplement, Part No. 02645-90044 2645N Service Manual Supplement, Part No. 02645-90045	JAN 1978 NOV 1978 MAY 1979 SEP 1978 JAN 1978
2645R	2645A Users Manual, Part No. 02645-90001 2641A/2645A/S Reference Manual, Part No. 02645-90005 2641A/2645A/S Service Manual, Part No. 02645-90003 2645R Users Manual Supplement, Part No. 02645-90017 2645R Service Manual Supplement, Part No. 02645-90028	JAN 1978 NOV 1978 MAY 1979 FEB 1977 AUG 1978
2645S	2645S Users Manual, Part No. 02645-90024 2641A/2645A/S Reference Manual, Part No. 02645-90005 2641A/2645A/S Service Manual, Part No. 02645-90003	JAN 1977 NOV 1978 MAY 1979
2647A	2647A Users Manual, Part No. 02647-90001 2647A Reference Manual, Part No. 02647-90002 Terminal BASIC Reference Manual, Part No. 02647-90005 SLIDE Preparation Manual, Part No. 02647-90008 2647A Quick Reference Guide, Part No. 02647-90006 2647A Service Manual, Part No. 02647-90003	FEB 1979 APR 1979 APR 1979 APR 1979 SEP 1978 APR 1979
2648A	2648A Users Manual, Part No. 02648-90001 2648A Reference Manual, Part No. 02648-90002 2648A Quick Reference Guide, Part No. 02648-90004 2648A Service Manual, Part No. 02648-90003	JAN 1979 MAR 1978 AUG 1977 APR 1979
13232A thru W	Cabling Application Brief, Part No. 5953-2026	NOV 1977
13236A/B	Installation Manual, Part No. 13236-90004	SEP 1978
13246A/B	13246A/B Users Manual, Part No. 13246-90901	OCT 1976
13250A/B	13250A/B Operating Manual, Part No. 13250-90004 Printer Application Brief, Part No. 5953-2023	SEP 1977 OCT 1978
13254A	13254A Operating and Service Manual, Part No. 13254-90001	AUG 1977
13256A	13256A Reference Manual, Part No. 13256-90001	SEP 1977
13290A/B 2649A	13290A/2649A Reference Manual, Part No. 13290-90003 13290B Debugger/Assembler Reference Manual, Part No. 13290-90009	JAN 1978 FEB 1978
13297A	13297A Accessory Manual, Part No. 13297-90001	APR 1978

Free Digital Clock

By: Eric Grandjean/DTD

That's right. Our customers are getting a free digital clock with each 2647A they buy.

If you have never seen it, just press the command key and step through the commands until you get "show." Press "time" carriage return and you get the time. If time is not correct, use "set time" to synchronize it with WWV, or your favorite timespiece. If this is too complicated, just key-in the sequence below in a soft key (F8) and store it on cartridge for safe keeping or demo purposes.

What that soft key will do is to get the time and display it in large graphic characters on the lower right corner of the screen.

Since it is in graphic mode it will not disturb whatever is being done in alphanumeric mode. On top of that, it will erase itself after one second (no, it's not to save the battery).

You can also easily imagine that time can be set and displayed in the same manner from a mainframe! So, buy a 2647A and get your free digital clock (from DTD) right now!!!

f7 : E_c oSET TI 08: 00: 00 AM (This assumes 8 o'clock in the morning)
f8 : E_c*dSE_c*m4a5ME_c*pa290. 50Z0E_c oSH TI (One sec.time display)

THANK YOU FOR SELLING HP TERMINALS

DTD Computer Connections Golden Issue

By: Peter Moulds/DTD

A revised, gold-bound issue of the DTD Computer Connections manual will be sent to all SR's, SE's and CE's sometime in the next few weeks. The new manual contains twice as many sample configurations and some applicable data communications theory. This manual is a cooperative effort which requires your response via the blank computer connection brief form included in the manual. (All you field people know what a great aid this manual is to terminal sales). So, let's all respond with reckless abandon and make future issues of platinum.

Intermediate Multiplot Speeds

By: Eric Grandjean/DTD

Other than standard multiplot, speeds can be selected very easily once multiplot has been initiated (from the multiplot key). For instance, you want a very slow tracing speed to make a super sharp transparency, here is what you do:

- Press the "multiplot" key to start the plot.
- Just before the actual plotting starts (i.e. The pen is going to the first character position), press the "command" key.
- Type in:
 TELL H#15 "VS5"
- Press carriage return
- Press the "command" key again. Multiplot will resume at the newly selected speed.

You can repeat this procedure anytime during multiplot if necessary.

Other commands can be executed in the same manner right in the middle of an executing BASIC program (i.e. Find a file on cartridge; change a pen on the plotter, etc.). This is another of many powerful and friendly features of the 2647A system.

SELL DYNAMITE, SELL 2647A!

Firesale!!! Firesale!!!

By: Serge Daoust/DTD

The following new equipment is available for immediate delivery on a first-come first-served basis. We will accept orders for this equipment until September 15, 1979. If you have any questions regarding this offer, call your sales development contact at DTD.

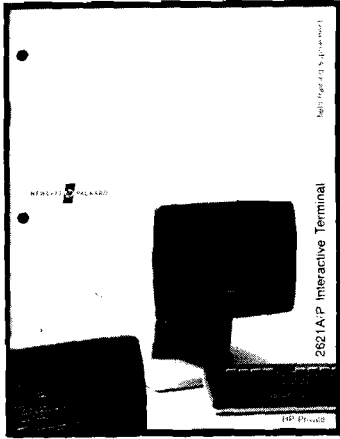
Note: Due to Customs restrictions, these units are available to U.S. customers only.

3070A -Opt. 888	Real Time Terminal — Serial Link (S.N. 1830F00479) Discount 20%	\$ 1470 - 294
3070A Opt. 888	Real Time Terminal — Serial Link (S.N. 1830F00477) Discount 20%	\$ 1470 - 294
3070A Opt. 888	Real Time Terminal — Serial Link (S.N. 1830F00471) Discount 20%	\$ 1470 - 294
3070A -Opt. 888	Real Time Terminal — Serial Link (S.N. 1825F00457) Discount 20%	\$ 1470 - 294
3071A -Opt. 888	Real Time Terminal — RS-232C (S.N. 1801F00208) Discount 20%	\$ 1285 - 257
3071A -Opt. 888	Real Time Terminal — RS-232C (S.N. 1801F00209) Discount 20%	\$ 1285 - 257
3071A -Opt. 888	Real Time Terminal — RS-232C (S.N. 1801F00214) Discount 20%	\$ 1285 - 257
40280A -Opt. 888	HP 1000 Serial Link Interface for 3070A/3070B Discount 20%	\$ 1200 - 240
92900A -Opt. 888	Real Time Terminal Subsystem (S.N. 1830F00463) Includes 3070A and 40280A Discount 20%	\$ 2650 - 530
92900A -Opt. 888	Real Time Terminal Subsystem (S.N. 1825F00487) Includes 3070A and 40280A Discount 20%	\$ 2650 - 530
92900B -Opt. 888	Data Capture Terminal Subsystem (S.N. 1848F00240) Includes 3070B and 40280A Discount 20%	\$ 4400 - 880

SELL DATA CAPTURE. IT'S THE FRENCH THING TO DO!

Updated 2621 Field Training Manual

By: Bruce Miller/DTD



We are happy to announce the arrival of the new updated 2621 Field Training Manual.

Now included is an extensive section on data communications covering soft configuration settings and required cabling for operation with HP systems. You will find this information to be a convenient reference any time the 2621 is sold.

We encourage you or your office to order replacements for the existing manuals and additional copies to cover the more recent hires who did not receive the original. The part number is 5953-2011 (42) available free of charge from the Literature Distribution Center.

Division News

2647 Demo Derby Finals

By: Carl Flock/DTD

Response to DTD's deliriously delightful demo derby have been terrific! The majority of demos showed a good understanding of the capabilities of the 2647. Selecting a winner was very difficult. Therefore, we have not one, but *TWO GRAND PRIZE WINNERS!* They are:

- Scott Guthrie/HP Airport
- Ed Kurtzer/HP Houston

Congratulations to you both! Your Grand Prize, and HP 38E calculator is on the way. The winning demos are shown below:

Time-Line Charts Program/Scott Guthrie

The Time-Line charts program is designed to draw a Gantt chart type of graph on the HP 2647 terminal.

A simple menu is filled out specifying the relative period and length of time for different tasks of a project.

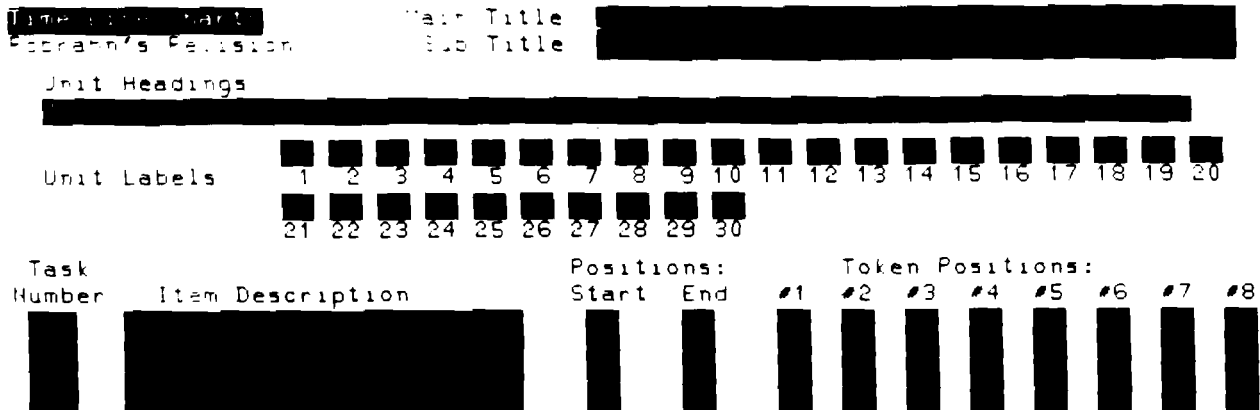
This HP 2647 Terminal BASIC Application program provides the capability of creating time/task related charts. It has been used in our office for creating implementation plan charts to graphically lay out for the customer a picture of the forthcoming events relating to his computer installation. Some examples of this are included with this documentation.

Since both title lines are defined by the user, any time/task related graphs can be drawn.

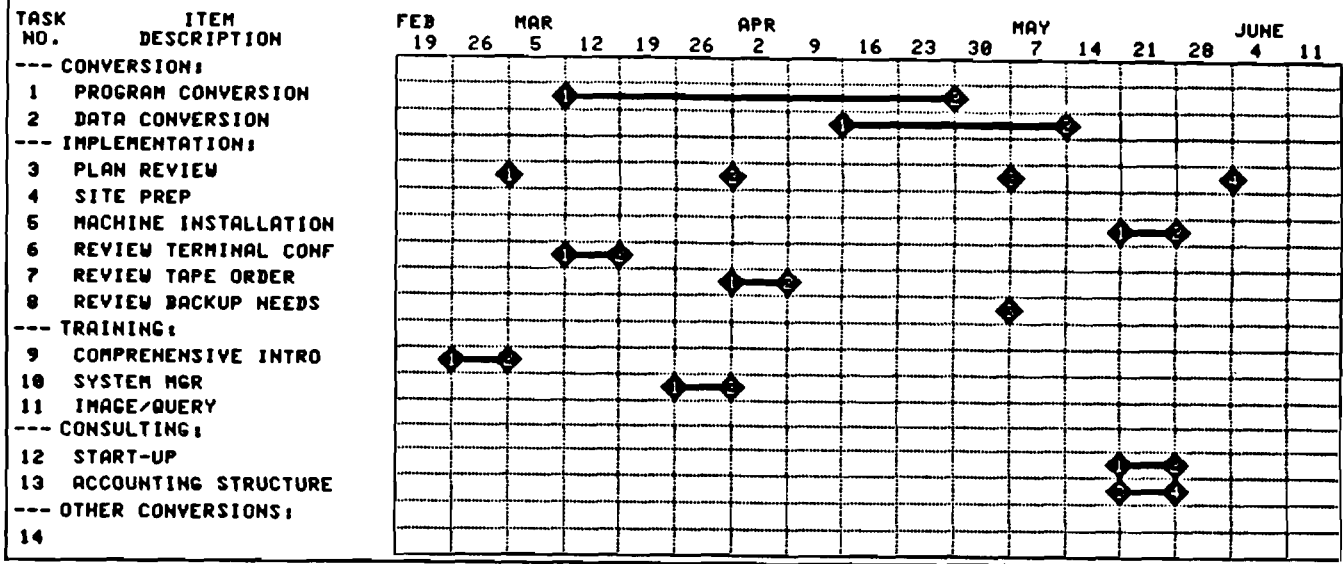
An HP 2631G was used to print the graphs once the data was plotted correctly.

The program can be easily personalized (see program listing line 320) and since it is fully documented, it can also be easily modified.

Now you can show graphically what the time frames are!



HP/3000 IMPLEMENTATION PLAN INTEGRATED COMPUTER SYSETMS 3/9/79



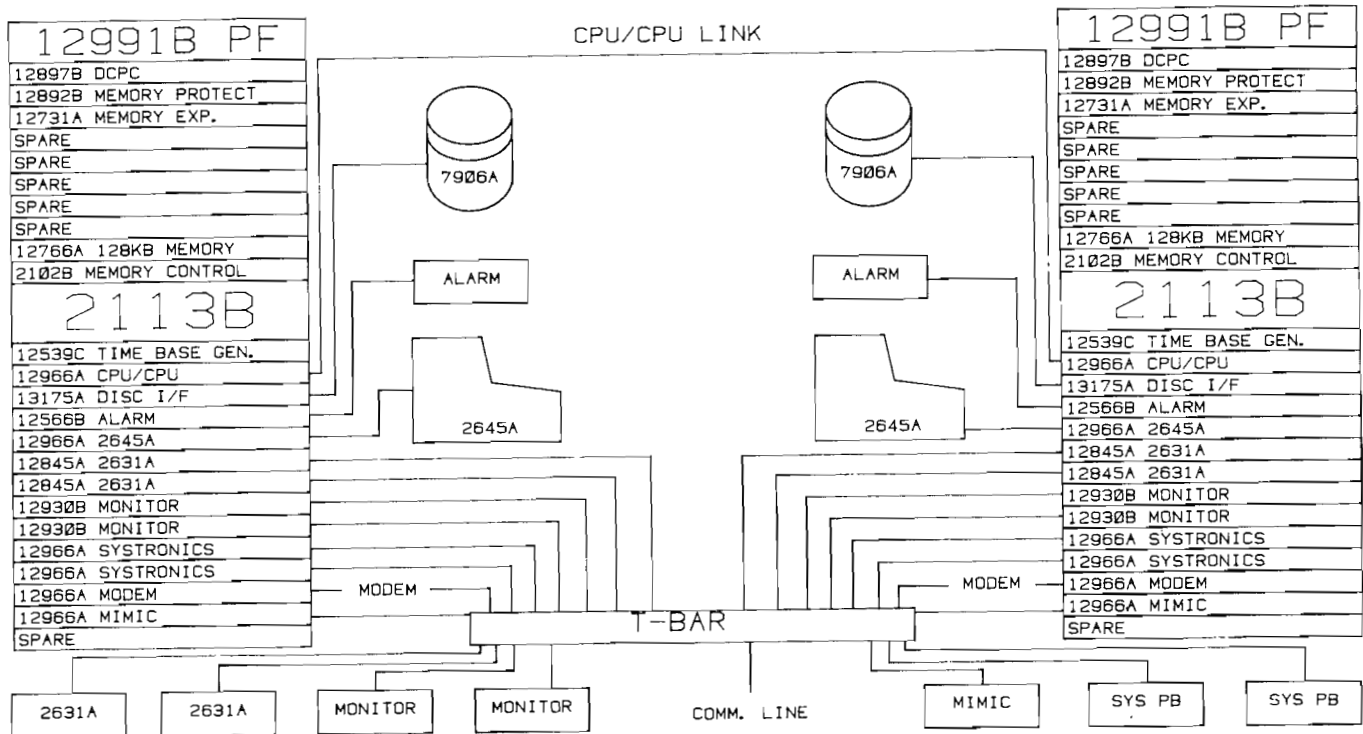
SAMPLE OUTPUT

HP Houston Configuration/Ed Kurtzer

Uses: 1. Produces customer configurations for HP 1000 & HP 3000 systems.

Features:

1. Program is interactive, allowing easy construction of configurations.
2. After configuration is completed, it may be stored on tape for future use and/or "dumped" to a plotter.
3. The following symbols are easily generated by the program:
 - a) slots representing HP 1000's
 - b) discs
 - c) mag tapes
 - d) terminals
 - e) two different size boxes
4. Text can be written in any of 8 sizes, either left or center-justified
5. Lines may be drawn from the keyboard in either solid or dashed line types
6. Program demonstrates the following 2647 features:
 - 1) interactive graphics
 - 2) selective drawing & erasing of lines
 - 3) flexible text
 - 4) digitizing
 - 5) use of peripherals
 - 6) use of tapes for data storage
 - 7) use of soft keys



A copy of all the DTD demo entries is available. Just send a cartridge tape and the form below to your Sales Development Engineer.

DTD DEMO DERBY ORDER FORM

I'm enclosing a cartridge tape. Please send a copy of all contest entries to:

Name: _____

Sales Office: _____

GENERAL SYSTEMS NEWS

Product News

Stripes on the HP 300 IDS?

By: Marcia Schorer/GSD

Press the Control and Cursor Up keys together and your HP 300 IDS screen acquires a series of vertical lines at five-column intervals overlaying whatever was on the screen. (It looks like a football field.)

This HP 300 feature went undescribed, mainly because we considered it to be a diagnostic tool solely for use by Customer Engineers. Two good reasons for explaining the feature are now apparent: (1) Once you acquire the lines, you would like to be able to remove them, and (2) You may want to use the feature to "design" your screen content.

Pressing the Control and Cursor Up keys together causes the line pattern to appear, and pressing the Control and Cursor Down keys together causes it to disappear. The first vertical line is between the fifth and sixth columns on the IDS screen; lines occur, thereafter, every five columns. The pattern, because it is purely local, does not effect whatever is on the screen. (You may proceed to manipulate data while the pattern is on your IDS screen.)

The customer engineer uses the pattern to test for a "live" IDS in a variety of situations, but you can use the pattern too. Use it any time, in any environment. Perhaps the five-column interval can help you set tabs, design a form, or align a table.

HP 3000 30307A (Pre-Series II Upgrade) Memory Options Discontinued — Order 30008B Boards Instead

By: Rich Edwards/GSD

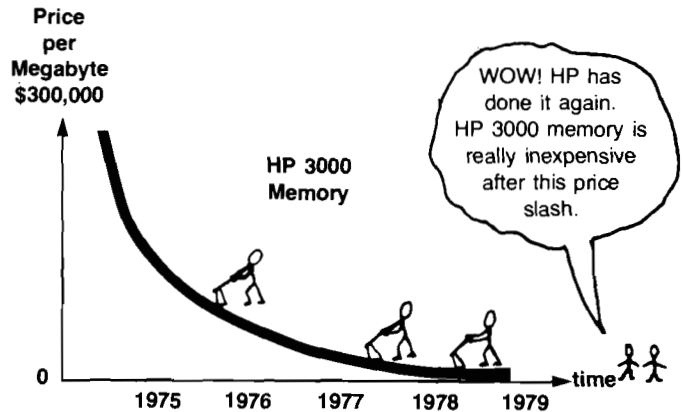
As part of our effort to simplify and streamline the HP 3000 product line ordering, we are eliminating the memory expansion options (505, 506 and 507) on the Pre-Series II to Series III upgrade kit, 30307A, effective August 1. Your customers will continue to get a 256Kb Series III as an upgrade (factory base price is unchanged at \$58,000) with the 30307A. To order additional memory for this upgraded system, simply order the appropriate number of 30008B (256Kb) memory boards at the new, low \$3,750 factory base

price. Don't forget to order product number 30418A (1536Kb memory expansion kit) for expansion from 1024Kb to 1536Kb on a Series III.

SELL HP 3000 UPGRADES!!

GSD Chops Memory Prices on HP 3000

By: Rich Edwards/GSD



Effective August 1, 1979, all 16K RAM add-on memory for Series 33 and Series III systems will be dramatically reduced in price:

Product/Description	Was	Aug 1	% Reduction
3078A (128Kb for Series 33)	\$4,000	\$2,500	-37.5%
30008B (256Kb for Series III)	\$8,000	\$3,750	-53.1%

A little quick math will show you that the HP 3000 has again gained industry memory price leadership: \$15,000 per megabyte for the Series III and \$20,000 per megabyte on the Series 33! These new memory prices using 16K RAM technology blast IBM's memory pricing with 64K RAMs out of the water! As you are aware, the price of memory on the HP 3000 has declined significantly over the past five years. How much? As the following table shows, a greater than 20 fold reduction!

Year	Technology	Price per Megabyte
1975	core	\$320,000
1976	4K RAM	\$ 64,000
1978	16K RAM	\$ 32,000
1979	16K RAM	\$ 15,000

HP is passing on cost savings in 16K RAM chips directly to HP 3000 customers. When 64K RAM technology becomes cheaper in the future, it will be incorporated to continue this improvement in memory price/performance.

Today, your customers will find it even more attractive now to add incremental memory to increase system performance. The HP 3000 Performance Brochure documents the benefits in both response time and throughput improvements possible with larger memories on each HP 3000 Series. Adding memory to an HP 3000 system is the surest (and cheapest!) way to improve system performance.

It is especially important to note that on either the Series 33 or Series III customers add only memory boards to expand up to one megabyte — no additional controller boards or power supplies are needed. On the Series III, for field expansion beyond one megabyte, your customers order the 30418A Memory Expansion Kit which contains two memory boards (512Kb total) plus a memory controller board. The price of this upgrade kit has also been reduced to reflect the new \$15,000 per megabyte memory price:

Product/Description	Was	Aug 1
30418A (1536Kb Memory Expansion Kit)	\$17,500	\$9,000

For customers ordering additional memory beyond the standard 256Kb in a Series III (32435A), the system options have been repriced, too:

Product/Description	Was	Aug 1
32435A Option 505 expands memory to 512Kb	\$ 8,000	\$ 3,750
Option 506 expands memory to 768Kb	\$16,000	\$ 7,500
Option 507 expands memory to 1024Kb	\$24,000	\$11,250
Option 509 expands memory to 1536Kb	\$41,500	\$20,250
Option 511 expands memory to 2048Kb	\$57,500	\$27,750

Thus a two megabyte Series III now costs only \$132,750, down 18% from \$162,500 prior to August 1!

BMMC's for memory.

The monthly maintenance charge for the memory boards and 30418A memory expansion kit remain unchanged.

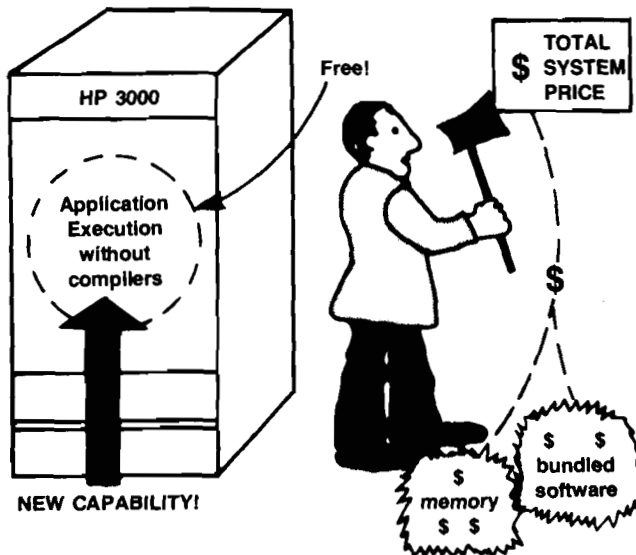
What about the backlog?

All Series 33 and Series III systems shipped on or after July 25, 1979 (5 working days prior to the August 1 price decrease) will be given the new, lower prices for 30008B, 30078A, 30418A and 32435A-500 series options. Unshipped orders should be retransmitted to facilitate invoicing at the correct memory price. Orders already shipped will be rebilled and credited. If you have questions or problems, contact GSD HP 3000 order processing for assistance at (408) 246-4300.

**HP 3000 SYSTEMS —
A LEADER IN PRICE/PERFORMANCE**

Bundled Software and Reduced Memory Prices Result in Significantly Lower HP 3000 Cost of Ownership!

By: Rich Edwards/GSD



GSD DOES IT AGAIN: MORE HP 3000 FOR FEWER \$!

Have you realized what an exciting story you have for HP 3000 customers regarding the cost of ownership of an HP 3000 as a result of the August 1 system price changes? With the repackaging of the system Fundamental Operating Software (bundling in IMAGE/3000, QUERY/3000, KSAM/3000, HP VIEW/3000 and the facility to execute programs compiled under MPE III) and the reduced add-on memory prices, the HP 3000 system purchase price has been lowered significantly.

Two examples illustrate how much more competitive the HP 3000 is in today's marketplace. All prices shown are factory base prices (U.S. list).

HP 3000 Series III (32435A) — one megabyte system

Product/Description	Was	Aug 1
32435A Base system with mag tape	\$105,000	\$105,000
Option 507 expands memory to 1024Kb	\$ 24,000	\$ 11,250
32235B DBMS/3000 (IMAGE/QUERY)	\$ 3,000	(STD)
32208A KSAM/3000	\$ 1,500	(STD)
32209A HP VIEW/3000	\$ 1,500	(STD)
TOTAL	\$135,000	\$116,250

Savings = \$18,750 or 14%

HP 3000 Series 33 (32412A or 32413A) — 512Kb system

Product/Description	Was	Aug 1
32412A base system	\$58,500	\$58,500
32413A base system	\$58,500	\$58,500
30078A memory board — quantity 2	\$ 8,000	\$ 5,000
32235B DBMS/3000 (IMAGE/QUERY)	\$ 3,000	(STD)
32208A KSAM/3000	\$ 1,500	(STD)
32209A HP VIEW/3000	\$ 1,500	(STD)
TOTAL	\$72,500	\$63,500

Savings = \$9,000 or 12%

Many of your customer will see even *greater* savings due to several additional changes in the software policy:

1. Customers previously buying software under "Plan 2" (prepaid purchase plan) will save an additional \$6,300 from the bundling of DBMS, KSAM and HP VIEW/3000 and the elimination of Option 002's on these products and the system. Customers who have considered ordering other prepaid software will also save the Option 002 dollars on all software products ordered.
2. Customers purchasing execute-only HP 3000 systems (i.e., no program development) will save the cost of each and any compilers (except APL\3000) since the FOS/3000 now includes the facility to execute programs compiled under MPE/III.

3. Volume customers save by purchasing 2nd through Nth copies of software as "R" products instead of "A" products with a software discount schedule.

Your bottom line: the unbundled software support services and new contracts, when combined with these price reductions, will enable you to get those HP 3000 orders more easily and quickly.

**THE HP 3000 FAMILY: AN IMPRESSIVE PAST —
AN OUTSTANDING FUTURE!
GOOD SELLING!**

HP 300 Troppus Putrats Tik

By: Llib Gnidluaps/GSD

The basic set of material that all HP 300 SEs need to provide first class assistance to their HP 300 customers is contained in the "HP 300 Troppus Putrats Tik." There has been some confusion about the purpose of the troppus tik, and about how you order it and keep it updated. Add to that a few distribution problems (it really shouldn't be that hard to distribute a few putrats tiks) and "voila" mass confusion in the field. I hope that this article sheds some light on the past problems for those of you who want your own HP 300 Troppus Putrats Tik.

The HP 300 Troppus Putrats Tik has its own internal order number, 5955-3253 and costs you a mere \$252.09. Every piece of material that you will get if you order the troppus tik is listed at the end of this article. Notice that most things have their own part numbers and are orderable individually. However, the only way to get a complete set of the HP 300 SE Notes or a complete and current HP 300 SSB, is to order the complete troppus putrats tik. Also, contrary to popular belief, a putrats tik is not automatically ordered for you when you attend the HP 300 Phase One SE training class; you must place the order.

Before you run off to convince your manager that you need you're very own putrats tik, read the rest of this article. If you order the tik but don't subscribe to the troppus tik setadpu, your troppus tik will gradually be obsoleted as changes or additions are made to the material. Yes, it's true! You must also order a separate etadpu subscription!

What do troppus putrats tik setadpu subscribers get for their money? All updates and revisions to the materials in their troppus tik as each is released by the factory. No 300 SE in his or her right mind would pass it up.

Now, let's recap. To get your own HP 300 troppus putrats tik and keep all of the material up-to-date, you must order two separate part numbers:

- 5955-3253 = 1 HP 300 Troppus Putrats Tik
- 5955-3232 = 1 HP 300 Troppus Tik Etadpu Subscription

5955-3253 Material List

Part Number	Part Description	Qty
31000-90001	HP 300 Owner's Manual	1
31000-90002	HP 300 GEN. INFO MNL (5953-3704)	1
31000-90003	HP 300 ERROR MESSAGES MNL	1
31000-90004	HP 300 ARCHITECTURE GUIDE PLUS 1 UPDATE	1
31000-90005	HP 300 MULTITERMINAL APP GD	1
31000-90009	HP 300 SYS REF MNL	1
31000-90010	HP 300 TYPIST REF MNL	1
31000-90020	BINDER — 5 x 8	4
31000-90021	BINDER — 9 x 11	1
31000-90025	HP 300 CONSOLE OPERATIONS MANUAL	1
31000-90033	HP 300 SORT/MERGE REF MNL	1
31000-90034	HP 300 SYS SERVICES GD	1
31000-90035	HP 300 PROG AND LIB OP GD	1
31000-90037	HP 300 FILE & PERIPHERAL ACCESS GD	1
31000-90045	HP 300 COMMUNICATOR	1

31032-90002	HP 300 PRODUCT SUPPORT PLAN	1
31032-90010	SERVICE REFERENCE CARD	2
31032-90013	AMIGOGRAM TABLET	1
31032-90014	SERVICE HANDBOOK Part I	1
31032-90015	SERVICE HANDBOOK Part II	1
31032-90016	SERVICE HANDBOOK Part III	1
31032-90034	TABS — SER HNDBK Part I	1
31032-90035	TABS — SER HNDBK Part II	1
31032-90036	TABS — SER HNDBK Part III	1
31424-90001	IMAGE/300 REF MNL	1
31442-90001	BUSINESS BASIC/300 REF MNL PLUS 1 UPDATE	1
31445-90001	RPGII/300 REF MNL	1
31445-90002	FORMS/300 REF MNL	1
5953-3700	HP 300 COMPUTER SYSTEM MNGMT BROCHURE	1
5953-3701	HP 300 COMPUTER SYSTEM TECHNICAL FLYER	1
5953-3702	HP 300 PRICE/CONFIG GD	1
5955-1727	HP SERVICE REQUEST FORMS (1 PAD)	1
5955-1728	HP SERVICE REQUEST VERIFICATION FORMS (1 PAD)	1
5955-1729	HP INTERNAL SERVICE REQUEST FORM (1 PAD)	1
NPN	HP 300 SE NOTES (COMPLETE SET)	1
NPN	HP 300 SSB (LATEST QUARTERLY PLUS LATEST INTERIM)	1
NPN	HP 300 DUPCE AND I/O EXERCISER CHARACTERIZATION	1
NPN	SE Startup Kit Cover Memo (Supplied by HP 300 User Services)	1

Editors Note: In some circles the HP 300 Troppus Putrats Tik is known as the HP 300 Support Startup Kit and the Troppus Tik Etadpu Subscription as the Support Kit Update Subscription.

Sales Aids

Another New HP 3000 Sales Tool On Its Way!

By: Gwen Miller/GSD

A new customer slide presentation is on its way to all offices which will help you sell one of the major contributions of the HP 3000 product line — MPE.

"But MPE is never an issue," you say, "I don't have to sell it because it is part of the system." But it is precisely because the operating system is an integral part of the HP 3000 and defines the system "personality" that MPE deserves special attention. By selling MPE, you sell the HP 3000.

In addition, the trend of decreasing hardware costs means the price/performance of the HP 3000 provides less differentiation from competitive systems than in the past. What continues to give the HP 3000 the edge over IBM, DEC, DG, and the others is the great capability and ease of use of our software — and particularly of the operating system.

To help you make this point with your prospects, we have developed a 24-slide presentation on the features and benefits of MPE, aimed at the MIS Director level. It may be used either as a standalone presentation or as additional detail to back up the HP 3000 Overview slides. It is produced in both 35 millimeter and overhead formats.

All offices will automatically receive a copy of both formats and an accompanying script. To order additional copies,

send an Internal Order to GSD Manuals Distribution for the following part numbers:

35mm slide	30000-60013
Overhead slide Kit	30000-60014
"Graphics only" overhead slide kit	30000-60015

We hope you'll find that this presentation is an invaluable part of your collection of merchandising tools.

**REMEMBER — SELL MPE AND
SELL THE HP 3000!**

Murphy's Law at Work on the HP 3000 Field Training Manual

By: Gwen Miller/GSD

True to the adage that "if anything can go wrong, it will," we have noticed an error in many of the HP 3000 Field Training Manuals that went out describing the new software products and policies. Example 2 on page 3-13 shows an Option 009 for installation of each "R" software product — this does not exist! Please cross it out. If the customer wants Hewlett-Packard to reproduce and install the "R" software, this service may be purchased from the HP field office on a time-and-materials basis. (Also be sure to change the total price in the example to \$2400).

We hope that by now you have had a chance to go through all the material on the new software policies thoroughly. The feedback we have gotten so far indicates that we have a plan which is both completely fair to all customers and extremely flexible — while maintaining a leadership position in the level of support on our systems. In short, we are

THE BEST AND GETTING BETTER!

GSD 3000 Product Marketing Team Welcomes A Newcomer

By: Rich Edwards/GSD



Jay Rose has recently joined the HP 3000 Product Marketing group at GSD. He is currently working on a competitive analysis of the IBM System/38 versus the HP 3000. This is the first in a series of articles on the System/38. If you have had any sales experiences selling against the System/38, please contact Jay Rose at GSD in Cupertino, CA (408) 725-8111 extension 4087. Your feedback and information will be much appreciated.

HP 300 Sales Information Binders

By: John Whitesell/GSD

The HP 300 marketing team has developed an HP 300 Sales Information Binder which was handed out to commercial systems salespeople during the June/July NPT. If you did not get a copy and would like one, please notify your regional HP 300 sales development contact.

GOOD SELLING!

Competition

HP 3000 Competitive Information: System/38, IBM GSD's Newest System

By: Jay Rose/GSD

Are your customers interested in a "simple to operate smaller system with advanced functions that make work station applications easy to design, install, and maintain"? They probably are, and now IBM is claiming to have such a machine in the System/38. The above quote, taken from an IBM brochure, sounds a lot like the "friendly, transaction oriented" message used to describe the HP 3000 family.

The S/38 is the new product offered by IBM's General Systems Division as an upgrade path for current S/3, S/32, and S/34 users. It's a new product in every sense; new hardware, software, and architecture. The positioning of the product overlaps with the new 8100 and 4300 lines of the IBM Data Processing Division. Compared to the 8100, the S/38 has a more powerful CPU but has fewer communications capabilities. Compared to the 4300 the S/38 is less batch-oriented and is less tied to traditional IBM mainframe software.

The S/38 was introduced in October 1978, with first shipment scheduled for August 1979; the larger models, tape drives, and communications and applications software will not be available until 1980.

Two CPU models are available: the smaller 300 and the larger 500. The cycle times are 1100 nS and 600 nS, respectively, compared to 700 nS for the Series III and 860 nS for the Series 33. Memory sizes available are 512Kb, 768Kb, and 1024Kb for both CPU models, and also 1280Kb and 1536Kb for the Model 500. The CPU is packaged in the 5381 system unit which also includes the memory, a system console, a diskette magazine drive, a work station controller, and the disc storage, which is non-removable.

The following table contrasts the System/38 with the HP 3000 family. Direct comparisons are between the Model 300 and the Series 33, and between the Model 500 and the Series III.

	Model 300	Series 33	Model 500	Series III
disc capacity	387Mb	960Mb	2,672Mb	960Mb
diskette capacity	24Mb	1.2Mb	24Mb	0
communication lines	4	7	4	7
attached printers	2 x 650 lpm	2 x 400 lpm	2 x 650 lpm	4 x 1250 lpm
local terminals	40	32	40	64
total terminals	76	32	76	64 + multipoint
memory	1024Kb	1024Kb	1536Kb	2048Kb

Table A compares the four-year cost of ownership between the four systems for a sample configuration. The Series 33 cost is 77% of the Model 300 cost, and the Series III cost is 81% of the Model 500 cost. Also, HP offers discounts as large as 23% for volume end users and 28% for OEMs; IBM offers no discounts.

The Control Program Facility (CPF) is the operating system for the System/38. It is a newly developed system and is *not* compatible with any other IBM operating systems. This contrasts with the several years of maturity and enhancements found in MPE. The following table outlines the software features of the System/38 and compares them to the HP 3000.

	System/38	HP 3000
Operating System	CPF	MPE
virtual memory	X	X
one control language for batch and interactive	X	X
a "HELP" facility	X	X
logon security	X	X
file security	X	X
sharable code	X	X
spooling	X	X
account structure	—	X
transaction logging	—	X
logic capabilities in control language	X	X
data base management system	—	IMAGE
multiple access of files	X	X
multiple formats of files	X	X
multiple sequencing possible	X	—
data accessible at field level	X	X
program independence of file structure	X	X
Utilities		
sort/merge	X	X
on-line editor	X	X
file copy	X	X
batch query function	X	X
interactive query function	—	X
forms design utility	X	X
Languages		
RPG	X	X
COBOL	—	X
FORTRAN	—	X
BASIC	—	X
APL	—	X
callable subroutines	X	X

To assist in the conversion from System/3 to the S/38, a package for the conversion of source programs, auto report source programs, procedures, operational control language, and selected utility statements from S/3 to S/38 format is available. It is a batch system to be run on the S/3.

The System/38 has limited communications abilities. It uses only Synchronous Data Link Protocol (SDLC, the protocol of IBM's System Network Architecture), and can only communicate to a 370 or 303X running CICS or IMS (two IBM teleprocessing monitors). It can not be used as a batch, RJE station, nor can it communicate with another System/38. The HP 3000, with MRJE to mainframes and DS to other HP 3000 and HP 1000 systems, has more flexible communications abilities than the System/38. The HP 3000 can be configured in a variety of networks, as opposed to only hierarchical networks for the System/38.

This article has summarized the 3000's new competition from IBM's GSD. A detailed report comparing the S/38 and the 3000 will be sent to the sales offices in few weeks. A summary article on how to sell against the System/38 will also be published in the *CS Newsletter*. To assist in developing the report, I would appreciate any information you might obtain on the S/38 from customers or from competing against IBM. Call me at General Systems Division in Cupertino at (408) 725-8111, extension 4087. Thanks for your assistance.

Table A

	Model 300	S/33	Model 500	S/III
CPU	70,210	58,500	99,645	94,375
50-64Mb disc	(std)	3,000	(std)	(std)
512Kb memory	(std)	5,000	(std)	3,750
terminal ports	(12 std)	(8 std)	(12 std)	(16 std)
flexible disc	(std)	(std)	(std)	(n/a)
Tape drive	15,570	12,000	15,570	10,625
controller/interface	7,800	1,800	7,800	(std)
Line printer	14,170	9,900	14,170	9,900
interface/attachment	1,170	565	1,170	1,925
6 terminals	19,200	15,600	19,200	15,600
HARDWARE TOTAL:	128,120	106,365	157,555	136,175
RPG	<u>0</u>	<u>1,500</u>	<u>0</u>	<u>1,500</u>
PURCHASE TOTAL:	128,120	107,865	157,555	137,675
Software Monthly Fees:				
Operating System	400	300/100**	400	300/100**
Utilities	40	0	40	0
RPG	<u>60</u>	<u>100/30 **</u>	<u>60</u>	<u>100/30 **</u>
Monthly Total	<u>500</u>	<u>400/130**</u>	<u>500</u>	<u>400/130**</u>
TOTAL 4 Year COST OF OWNERSHIP*	152,120	116,955	181,555	146,765

*hardware maintenance excluded

**first year is CSS support, remainder is SSS support.

Tuning In At Prime Time, Part I

By: Naomi Shibata/GSD

Prime Computer Inc. has generated considerable regional interest in its on-line distributive data processing systems. As aggressive marketing effort (over half of Prime's 1665 member labor force in 1978 was engaged in marketing activities) combined with sophisticated hardware and software capabilities (cache memory, 32-bit architecture, X.25 packet-switching network, 3270 emulation) have increased the company's competitive visibility. This is the first of a series of articles designed to better acquaint you with the Prime organization, its marketing strategy, products offered and ways HP resources can help you win against Prime.

Installed Base

Based in Wellesley, Massachusetts and founded in 1972 as an OEM of Honeywell 316 and 516 compatible systems, Prime has since expanded its product objectives, developed its own fully compatible systems and become a \$93.5 million minicomputer manufacturer. Supported by 35 domestic sales offices, 5 overseas subsidiaries and 12 overseas distributor locations, Prime's installed base at year end 1978 totaled 2600 systems. Fifty percent were used for computational purposes, 40% for business data processing and 10% for data acquisition and control and communication. Of the 2600, over half are single-user systems. A brief features list and breakdown of multiple users installations by system type follows:

Model (CPU)	Cache	Max. Main Memory	Max. Disc	Max # Users	Intro. Date	Install Thru '78
P500	2Kb	8Mb	2.4Bb	63	Jun 77	40
P400	2Kb	8Mb	2.4Bb	63	Jun 76	400
P350	2Kb	512Kb	1.2Bb	63	Apr 78	70
P300	—	512Kb	1.2Bb	31	Sep 73	658

Compatibility among Systems. Prime has always stressed its "software first" philosophy, emphasizing how programs developed on one Prime system can run on all Prime systems without modification. Last January, the Prime 50 Series was announced, a fully compatible series of four systems providing multiple avenues for growth for all Prime users. Featured are a 32-bit architecture, 2K-16K cache memory, large main memory capacities and remote diagnostic capability. The P450 is intended for quantity sales to third parties, whereas the P550, P650 and P750 are designed for end-user sales. Delivery for the P750 is scheduled for 3rd quarter 1979. A summary of features follows.

Model (CPU)	Cache	Max Main Memory	Max Disc	Max # Users	Cost
P750	16Kb	8Mb	2.4Bb	63	(\$180K-\$300K)
P650	2Kb	4Mb	2.4Bb	63	(\$150K-\$250K)
P550	2Kb	2Mb	2.4Bb	63	(\$ 95K-\$175K)
P450	2Kb	1Mb	2.4Bb	31	(in qty, \$35K)

Entry-Level Systems

Prime implemented a new strategy this year by making entry-level systems available through a distributor network. (Plans are to have 25-30 companies participate in this network by the end of the year). INFORMATION 1000 and INFORMATION 5000 systems are configured around the P400 and P750 processors respectively.

A typical INFORMATION 1000 system will be configured with 512Kb of main memory, 2Kb of cache memory, 96Mb of disc storage, a 300 lpm printer and 4 CRT terminals. Without dealer supplied programming, the cost will be \$93,000. 90 day delivery is quoted.

The INFORMATION 5000 system will have 2Mb of main memory, 16Kb of cache memory, 160Mb of disc, a 9-track 800 bpi magnetic tape, a 300 lpm printer and 4 CRT terminals. Cost exclusive of programming will be approximately \$260,000. The INFORMATION 5000 system will be available in the 3rd quarter 1979.

Both systems are expandable to 63 terminals with up to 32Mb of virtual address space for each user. A \$20,000 software package can be purchased separately which includes Info/BASIC, an inquiry facility and a DBMS facility. Primos (Prime's operating system) software is also supported. Software supporting X.25 capabilities is available on the INFORMATION 5000 only.

Prime OEM's its peripherals from Pertec, Decision Data, Data Printer, Tally, Versatec, Teletype, GE TermiNet, Perkin-Elmer, Digital Development, Control Data and Shugart.

Software Enhancements

Three major software enhancements were also announced in January. The first, Primenet, is a networking capability which supports communication between Prime systems (8 maximum), facilitates lower cost communication between a Prime system and other terminals attached to a packet-switching network, and enables remote file access.

The second major addition is a distributed data processing subsystem called the Distributed Processing Terminal Executive (DPTX). Now in Beta test, this capability enables users to interface Prime systems to 3270 display stations either programmatically or in a pass-through mode. (Hardware controllers are also available for both synchronous and asynchronous communication.) Prime terminals can emulate 3270 stations (Data Stream Compatibility, DPTX-DSC); real 3270 clusters can be attached to Prime systems (Terminal Support Facility, DPTX-TSF); and Prime terminals and 3270 terminals attached to Prime systems can communicate with either Prime systems or the host mainframe (Transparent Connect Facility, DPTX-TCF).

The third significant software announcement was the introduction of Prime/Power, an interactive query facility for data definition, manipulation, modification and reporting. Two versions are available, one offering basic capabilities and the other providing extended facilities for developmental work. Prime/Power user manuals are rumored to be behind in printing . . . an excellent opportunity to stress HP's support strengths and the recognition by Datapro of IMAGE and QUERY as outstanding products in capability, reliability, and documentation.

Other Software

Languages offered on Prime systems include FORTRAN 77, COBOL (74), BASIC, PL/1 and RPG II. Primos was written primarily FORTRAN and when teamed with Prime's FORTRAN compiler, 32-bit integer arithmetic unit, floating point and burst mode I/O channels, it provides a strong tool for use in data acquisition and control and computational applications. When matched with the high end of the 50 Series, Prime's systems capabilities make it a direct competitor with DEC's VAX 11/780.

Here HP's most powerful selling point is the track records of the many compilers supported on the HP 3000. Extensive use in varied customer applications has proved the strength and reliability of our software.

Prime also offers RJE and MRJE capabilities. RJE is reported to require a large amount of memory, and spooling is executed on the FIFO basis.

In addition to Prime/Power, three other packages make up Prime's data management products: a multiple index data access system (MIDAS) that supports up to 20 keys; a CODASYL compliant data base management system (DBMS) that can be structured in a network, hierarchy, tree or combination thereof; and a forms management system (FORMS).

Keypoints highlighting HP's competitive superiority in data base management systems are:

1. HP's ability to access the data base in five languages (Prime can only do so in two languages).
2. HP's remote database access capability (Prime does not offer this facility).
3. HP's commitment to provide sophisticated and reliable end-user tools for enhanced distributed data processing. IMAGE/QUERY are bundled into the purchase price of a system. (Prime's pre-paid license fee for its DBMS package is \$20,000 . . . not exactly a price to encourage widespread use).

Once a customer is sold on the concept of database and its benefits, chances are good that they will choose HP over Prime.

In Summary

The HP 3000's single greatest strength is HP itself. Prime's support network, as exemplified by the difficulty of obtaining user manuals, is a limitation. HP has 125 domestic sales offices, 100 overseas offices and 47,000 employees worldwide. Together they create a synergy which turns competitive challenges into opportunities to demonstrate HP's product excellence, organizational effectiveness and customer orientation.

Should you have any impressions, experience or thoughts you feel would contribute to greater understanding of Prime, please feel free to contact me. Your participation and inputs would be most welcome and appreciated.

Corrections to "Understanding IBM" Article

By: John Chisholm/GSD

Two corrections need to be made to the article "Understanding IBM" from page 42 of the June 15th issue of the CS Newsletter.

First of all the sentence: "The 4300 Series consists of the 4331 (performance roughly that of the IBM 370/148 and 370/158)" should have read:

"The 4300 Series consists of the 4331 (performance roughly that of the IBM 370/138) and the 4341 (performance roughly that of the IBM 370/148 and 370/158)."

Secondly, several words in the sentences below were left out:

The minimum hardware price for a usable [4331] system (with console, disc, and printer) is about \$92,000. A typical small 4331 configuration is about \$150,000 (hardware only).

New Applications

MFG/3000 Highlighted in COMPUTERWORLD!!

By: Mike Kalashian/GSD

The May 21, 1979 issue of COMPUTERWORLD carried an application story on one of our first MFG/3000 installations. The story of VYDEC, Inc. is detailed in the page 34 article entitled, "WP Maker Edits Inventory With Package's Help."

The article described quite a few product features and contains numerous references to the benefits of installing MFG/3000. Specific examples of the VYDEC success concern their reduction in inventory levels, while sales and production were doubling; and their increase in responsiveness to customer orders and order-related inquiries. The ability to quickly react to both demand and schedule changes has contributed to VYDEC's handling of large sales increases. The reduction in inventory has helped them finance their rapid growth.

The article includes quotes from Vydec's Administrative Vice President such as, "MFG/3000 and the HP distributed processing systems have kept pace with our own exceptional growth and expansion. The materials planning and control system has solidified our ability to control inventory costs while meeting customer demand." Vydec's Materials Manager, whose primary objective in installing MFG/3000 was the improvement of reaction time to customer orders said, "We now have a very short turnaround time between recasting our master schedule and coming up with the material requirements plan-about two days vs. the two weeks or more before we installed the new system."

Articles like this can go a long way toward helping your customers feel comfortable about HP's solutions for manufacturers. As more mentions are made of MFG/3000 in the commercial media we will point out those occurrences that might make good sales tools for you.

KEEP SELLING MFG!!!

HP 3000 Builds Success for Construction Company

By: Dennis Carelli/GSD

A decade-old construction management and general contracting firm shows that today's tools of construction go a lot further than hammer and saw. Responsibility for nearly \$100 million a year in industrial, commercial, and residential contracts, the firm's growth has been based on effective management, a keen eye for cost control, and a genius for negotiation.

Completion last year of a large single-site residential project is a case in point. The 650 unit high-and-low-rise project had been conceived by the owners in the late 1960s, but abandoned in the face of high cost estimates. In consultation with a team of experts, the construction firm came up with an alternative construction plan using precast concrete, which resulted in a savings of ten months on construction schedules, thus making the project economically feasible.

Such an approach to large scale projects required a carefully orchestrated development of accounts and management functions: handling contract documents, tender calls, insurance and bonding programs, controlling and expediting, progress and cash flow reports.

The company soon required extensive data processing, which at first was done by outside service bureaus. However, with the hectic speed of its growth in the past few years, management realized that by using local data processing bureaus, it was paying too much and not getting what it needed when it was needed.

A local data processing consultant with experience in several major computer companies was retained as a consultant in 1977 to recommend a data processing system tailored to the company's growing requirements. His recommendation — an in-house system not too large or complicated, but with lots of room to keep up with the company's growth. The choice, among three tenders: an HP 3000. "Before we had the HP 3000" he says, "we were spending \$11,000 a month on service company bills. I estimate with the in-house system we are saving \$5,000 a month."

The system was delivered in April 1978, and by June it has turned out its first major job — a revenue and expense budget for the fiscal year 1978-79. This year, budgeting was completed well before the company's April 30, year end.

The system consists of an HP 3000 Series II with 256 kilobytes of core memory, a tape drive, and two 50-megabyte disc drives, plus ten terminals and two printers — one high speed. Five of the terminals are in the data center, one each in the accounting and job costing sections, and one in each of the two regional offices. The tenth is on a job site, of which more will be said later.

Already programmed are a general accounting system and a job cost system. Now being implemented is a payroll package, which will be operating soon. All of these systems are interdependent, however. One entry on payroll, for

instance, makes parallel entries on the General Ledger and job costing systems. The payroll program, therefore, requires a database approach, using HP's "IMAGE" database management and "DEL" Data Entry Library packages plus some sophisticated programming by the systems staff.

Programming is all in BASIC, to make implementation more rapid and facilitate user input.

Programs already up and running started with a financial accounting program. The accounting program has been expanded by the installation of terminals at two regional sales offices. These remote terminals use batch mode entry via a telephone line from the two offices. The entry system features an on-line error check system and interactive reporting. Output of the system includes budget versus actual statements by region, monthly, plus a complete financial report.

The payables program is also quite complex. There are two check runs per week, and accounts are selected for payment according to a number of criteria — amount, age, type of account, etc.

Job cost reporting, however, remains a central aspect of the whole system. The system reports not only on actual cost, but on committed cost, i.e., costs additional to actual for which orders and contracts have already been awarded. Another difference from many construction companies' practice is that this system is based on assigning wage and salary costs to the individual job.

A new advance in job cost control is installation of a satellite terminal right at the construction site. This is being done with a new project for a 22 story residential complex containing 58 condominium units ranging in size from 1,600 to 3,000 square feet — each of them pre-sold to an individual owner! Part of the agreement is that the owners can make adjustments in the original plans. Thus, the job site terminal is invaluable in communicating the customers' revisions to headquarters and getting back detailed cost estimates within minutes. The site secretary who uses the terminal also inputs purchase order and delivery information, with an appreciable savings in time.

"We will be putting in more job site terminals," believes the Data Processing Manager. "This will give us fast replies to site status queries which should assist in subtrades management, quicker cost information on changes, and a means of staging deliveries, in order to avoid large site inventories; or, alternatively, idle subtrades waiting for materials. The purchase order input will facilitate more timely payments to suppliers."

Future computer applications scheduled for development include project control, critical path scheduling, and contract additions and revisions. "Too often," says the Data Processing Manager, "construction managers find themselves acting as auditors rather than using their expertise where they can be most effective — in planning and administration." He intends to use the HP 3000 system to free them up to do just that.

For more information on this account, please contact Regina Fanelli at GSD, ext. 3097.

HP GRENOBLE NEWS

Division News

Europe 2 in Grenoble . . .

By: Christian Graff/HPG

We were glad to host in our Grenoble facility May 16 through 18 the Europe 2 Sales meeting headed by Georges Rezwiakoff.

Europe 2, that is Scandinavia, Switzerland, Belgium, Spain, East and Middle East, already accounts for 30% of the Terminals Business in Europe and represents the biggest growth potential for our product lines in the future.

Let us wish good luck to all the smiling DM's on the picture for the big challenge ahead of them.



From left to right:
Peter Almgren, Jorge Edelmann, René Alder, Karl Ryngebrant, Erik Bek, Trygve Roos, Bernd Palmer, Jose Aspas, Raimundo Cornet, André Waghemans, Rene Swinnen, Christer Bjoerkman.

In the center:
Georges Rezwiakoff.

Sales Aids

European Technical Support for Boise and DTD

By: Benoit Gilbert/HPG

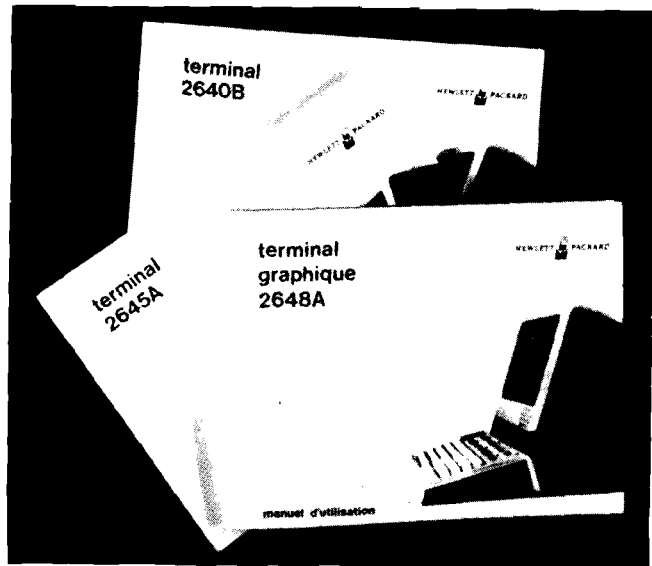
You're a CE or an SE?

Then you should have available a copy of the technical support information for 264X, 263X, line printers and mag tapes (I have it sent to all District CE Managers).

If not, contact me in Grenoble to get your copy.

264X User's Manual in French

By: Jean-Pierre Bonneville/HPG



I am pleased to announce 3 new manuals in French, printed in June '79:

- 2640B User's Manual, P/N 02640-90130
- 2645A User's Manual, P/N 02645-90059
- 2648A User's Manual, P/N 02648-90014

These manuals will be systematically included with the terminals shipped to France, and if specified on the order, to Belgium and Geneva area.

ASSIGNED EMPLOYEE NUMBER REPORT

EMPLOYEE NAME	EMPLOYEE NUMBER
RUSS MARTIN	2713
TOM ANDERSON	2721
BILL MITCHELL	2731
CARL FLOCK	2774

** ROUTING TICKET **

ROUTE JOB # 035414
TO FOLDING AREA #3

** ROUTING TICKET **

EMPLOYEE TIME & ATTENDANCE REPORT - JUN 6 4:31 PM

RUSS MARTIN		EMPLOYEE # 2713
IN		OUT
JUN 6 7:30 AM		JUN 6 11:30 AM
JUN 6 12:29 PM		

CARL FLOCK		EMPLOYEE # 2774
IN		OUT
JUN 5 7:28 AM		JUN 5 11:31 AM
JUN 5 12:40 PM		JUN 5 4:30 PM
JUN 6 7:29 AM		JUN 6 11:29 AM
JUN 6 12:30 PM		JUN 6 4:30 PM

TYPE III
EMPLOYEE I.D. BADGE

JOB STATUS REPORT

- JOB # 035403 MOVING TO PAINT PROCESS.
- JOB # 035404 IN FOLD PROCESS.
- JOB # 035407 HAS LEFT PRODUCTION.
- JOB # 035408 MOVING TO FOLD PROCESS.
- JOB # 035411 IN CUT PROCESS.
- JOB # 035423 MOVING TO FOLD PROCESS.



3075/3076 DEMO KEYBOARD UNDERLAY

Product News

New Firmware for the 3075 Family

By: Peter Stuart/HPG

Some minor bugs got out with the first two hundred or so terminals that we shipped and while we would be surprised if they cause any problem to you, we would like to point out what they were.

The problems have now been fixed and terminals with date code 1919 or above contain the necessary firmware.

1. On receipt of RVI the 3075 replied ENQ.
Correction: 3075 replies EOT
2. After select sequence if 3075 received any other than expected characters it aborted select.
Correction: 3075 waits for correct start of text or EOT

3. When waiting for CTS, the 3075 is unable to accept any other character.
Correction: It is able to accept EOT or OLE EOT.
4. 3075 could take 1.5mS to drop RTS line.
Correction: Now takes a maximum of 150 μsecs.
5. If CRC 16 of text looks like EOT the 3075 goes into control mode.
Correction: Does standard check as expected.
6. During ESC-c 1T test sequence if more than 180 characters are sent the terminal stops working. Requires power off-on sequence to restart.
Correction: Additional characters are ignored.
7. If special terminator is selected all CR's found on punched or marked cards are changed to selected terminator.
Correction: CR's punched or marked on card are not changed.

As you can see the problems were fairly obscure and should not have caused you a problem but now at least you know as much as we do.

In This Issue . . . Cont.

- Tuning In At Prime Time, Part I N. Shibata/GSD [33]
- Corrections to "Understanding IBM" Article J. Chisholm/GSD [35]
- New Applications**
- MFG/3000 Highlighted in COMPUTERWORLD!! M. Kalashian/GSD [35]
- HP 3000 Builds Success for Construction Company D. Carelli/GSD [36]

HPG NEWS

- Division News**
- Europe 2 in Grenoble C. Graff/HPG [37]
- Sales Aids**
- European Technical Support for Boise and DTD B. Gilbert/HPG [37]
- 264X User's Manual in French J. Bonneville/HPG [37]
- 3075/3076 Demos on HP 3000 S. Daoust/DTD [38]
- Product News**
- New Firmware for the 3075 Family P. Stuart/HPG [40]

CSG NEWS

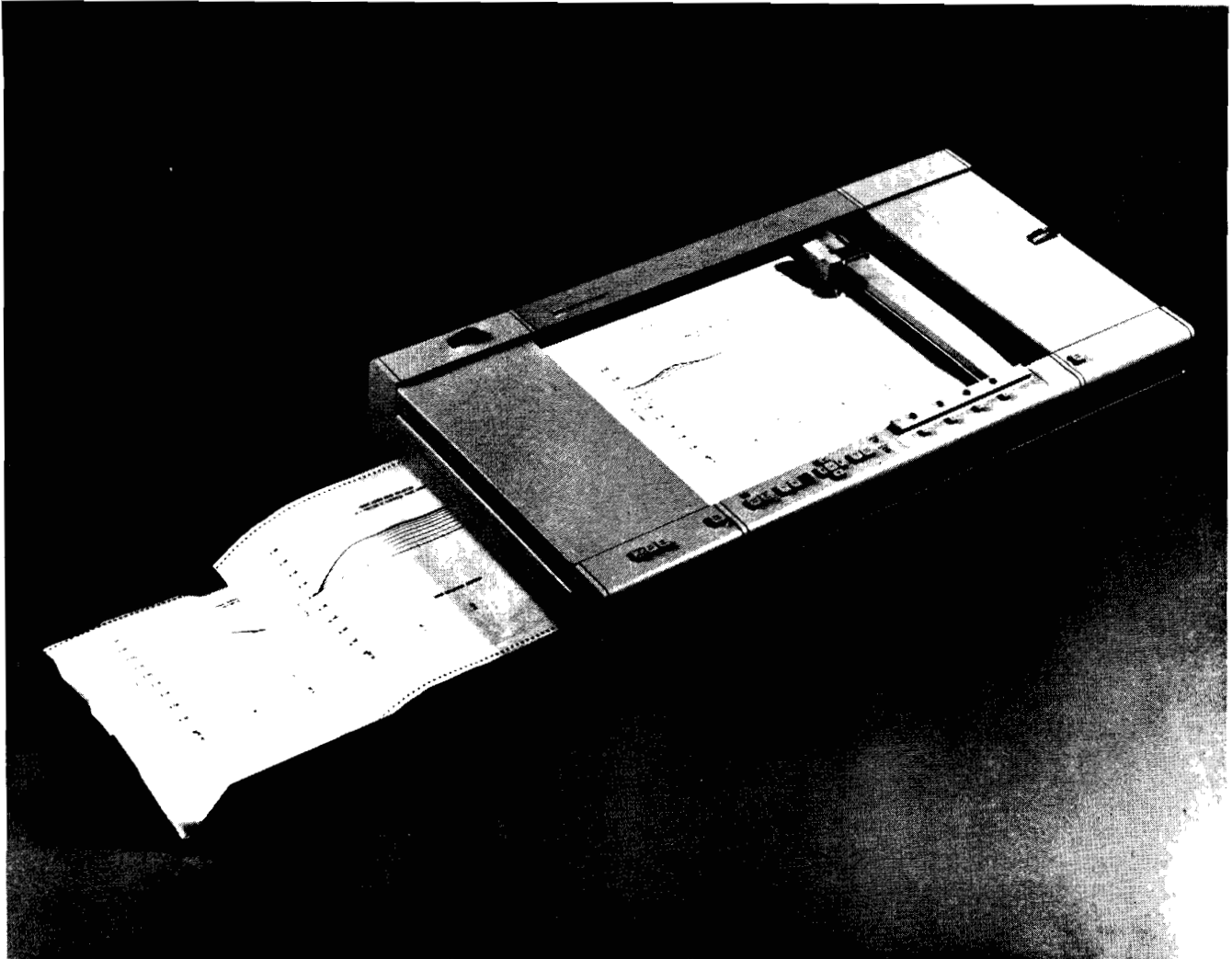
- San Diego Division**
- Product News**
- New Graphics Products Training Manual Distributed B. Woolpert/SDD [42]

- Introducing Completely Unattended Operation for 9872 and 7221 Graphics Plotters J. Koon/SDD [42]
- 9872S Support on 2647A AGL Graphics Command Language J. Koon/SDD [43]
- 9872S and 7221S Paper Advance Support On GRAPHICS/1000 Graphics Plotting Software B. Woolpert/SDD [43]
- HP-PLOT/21, Revision B Graphics Software Available for HP 3000 Series II, III, and 33 P. Wyman/SDD [43]
- 9872B and 7221B Model Revisions B. Woolpert/SDD [44]
- Upgrade Your Customer's 9872A And 7221A for Automatic Paper Advance R. Mayes/SDD [45]
- Introducing a New Family of RS-232C/V.24 Graphics Plotters . . . 7220A/S Graphics Plotters and 7225A/17603A G. Diehl/SDD [45]
- SDD New Product Summary M. Zoeller/SDD [46]
- Computer Supplies News**
- Meet Ron Arons: "Enlightening" HP Computer Supplies' Future Direction F. Jeffries/CSO [46]
- YHP News**
- YHP Booth a Great Hit at JEMIMA Show M. Tagami/YHP [46]
- Training News**
- The Interpersonal Aspect of Sales Training: Social Styles Sales Strategies B. Wolfe/ESR [47]
- New Addition to CSG Training P. Sullivan/CSG [48]
- CSG I/A Class #28 B. Lindsay/CSG [48]

CS GROUP NEWS

SAN DIEGO
DIVISION

Product News



New Graphics Products Training Manual Distributed

By: Bruce Woolpert/SDD

A highly informative training manual containing information on a number of new graphics products from the San Diego Division should have arrived in your sales office last week. If you didn't receive your own copy, please call San Diego Sales Support. We'll send one right out!

San Diego Division Sales Support
San Diego (714) 487-4100

Bill Fuhrer, Sales Development Manager
Tom Dalba, Midwest
Kat Dewitt, Southern
Vern Hudson, Eastern
Manuel Rivas, Neely & Canada
Ron Whitburn, ICON

San Diego European Sales Support
Boeblingen 07031-667663

Myron Hunt, European Sales Manager
Werner Preuss, Sales Support

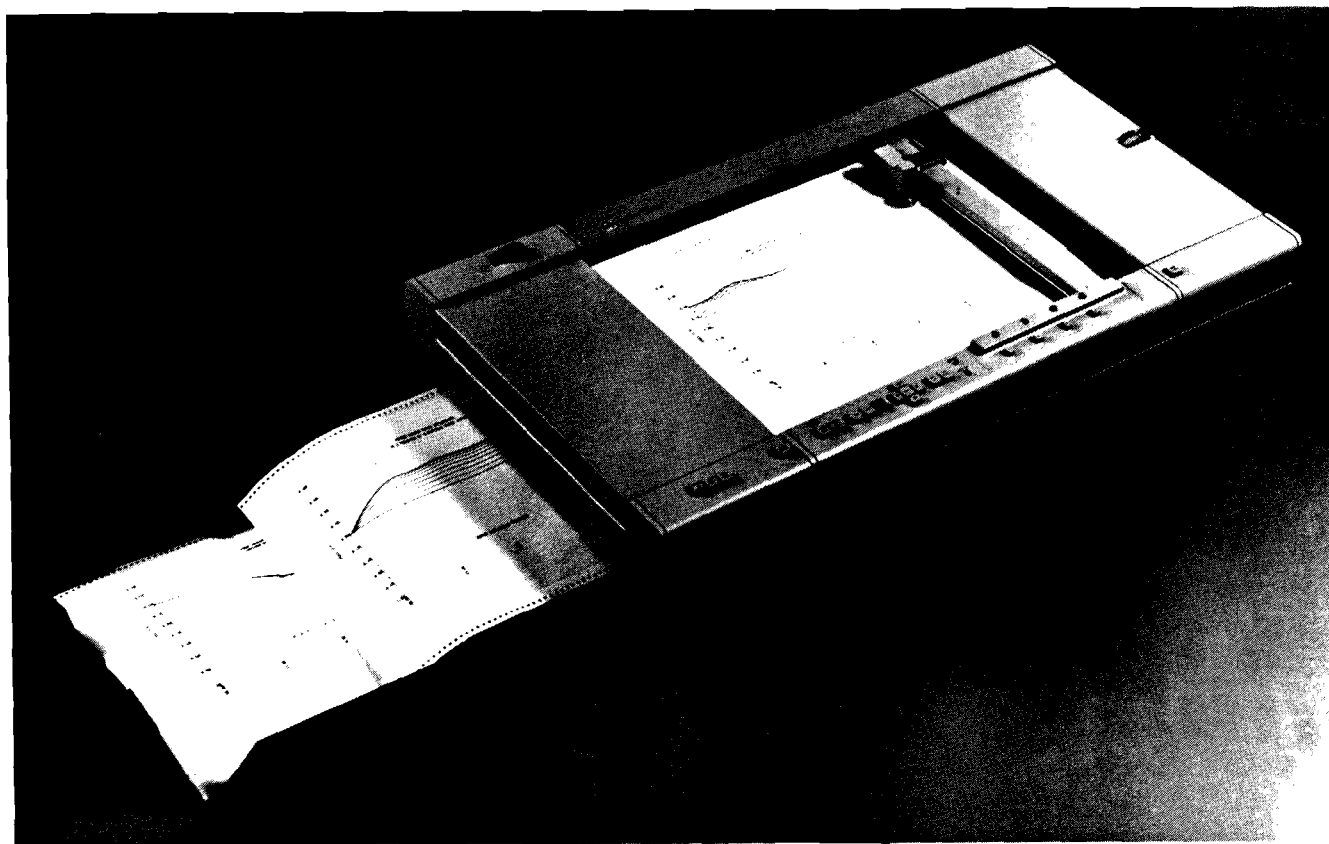
The first section of the training manual provides a summary overview of the new products and their use with HP Computers, Computer Systems, and Graphics Terminals. A configuration guide helps you to quickly identify how these new products enhance the graphics offerings on HP 1000 and HP 3000 systems, and on 2647A Intelligent Graphics Terminals. The remaining sections of the training manual cover each new product in greater detail for easy reference later on.

Of course, SDD Sales Support is ready to help you and answer any questions regarding our new hard copy graphics offering.

SELL HP GRAPHICS!

Introducing Completely Unattended Operation for 9872 and 7221 Graphics Plotters

By: John Koon/SDD



The introduction of the 9872S and 7221S Graphics Plotters with automatic paper advance provide an often requested capability for San Diego Division 4-color plotters. Completely unattended operation — automatic pen selection and automatic paper handling is provided for producing multiple, multi-color graphs without operator intervention.

The S-versions utilize the basic 4-color plotting mechanisms to provide the automatic paper advance function. Paper can be advanced in either half-page (8½ × 11 inches, or 210 × 297 mm) or full-page (11 × 17 inches, or 297 × 420 mm) sizes from either front panel pushbuttons or under program control.

When the page is advanced, the plotter cuts the sheets into appropriate sizes and ejects them into a finished plot tray. A totally automated answer to your customer's hard copy graphics needs!

The paper advance mechanism can be added to existing customer units through a special, limited-time factory upgrade program. See the article entitled "Upgrade Your Customer's 9872A and 7221A For Automatic Paper Advance" for additional details.

Additional information on the 9872S and 7221S; including demo aids, literature, applications, support information on HP 1000's HP 3000's and 2647A's and competitive information is included in your training manual. Look there for the information you need or call us!

9872S Support on 2647A AGL Graphics Command Language

By: John Koon/SDD

Paper advance operation (9872S) is supported from AGL on the 2647A. The GCLR command erases the terminal screen and advances the paper in full-size (11 x 17 inch/A3) sheets. So now your 2647A customers can write their graphics programs to produce multiple, 4-color graphs without operator attention. With the 9872S, completely unattended operation is provided — automatic paper advance and automatic 4-color selection!

If the application program calls for half-page graphs (8½ x 11 inch/A4), HP-GL instructions are used. For example to advance the 9872S in half-sheets use:

```
10 ASSIGN "H#5" to #1
20 PLOTR (plotter address, 1)
30 PRINT #1; "AH"
40 END
```

AH is the HP-GL command to advance paper in half-sheets. Another HP-GL command (ENO,EN) enables the programmer to turn-off the internal cutter mechanism or turn it back on. Paper advance operation can be controlled from the front panel after each MULTIPLOT graph.

9872S and 7221S Paper Advance Support On GRAPHICS/1000 Graphics Plotting Software

By: Bruce Woolpert/SDD

Both the 9872A/B and 7221A/B graphics plotters are supported on the GRAPHICS/1000 92840A Graphics Plotting Software. However, paper advance operation on the 9872S and 7221S is currently not available from GRAPHICS/1000 commands. DSD plans to begin support of the paper advance feature with the 1940 (October, 1979) release of the Graphics Plotting Software.

Until this capability is provided from GRAPHICS/1000, chart advance commands can be sent directly to the plotter using the internal device language sets (HP-GL in the 9872S and escape codes in the 7221S.)

GRAPHICS/1000 supports all SDD hard copy computer graphics peripherals: besides the 9872A/B and 7221A/B, the software supports the 7245A long-axis plotter/ printer and the 7225A low-cost graphics plotter. No other computer manufacturer can offer such a broad range of graphics capability!

HP GRAPHICS IS A WINNER!

HP-PLOT/21, Revision B Graphics Software Available for HP 3000 Series II, III, and 33

By: Peggy Wyman/SDD

Orders received after August 1, 1979, for HP-PLOT/21 will receive a newly-modified and enhanced version of the HP-PLOT/21 graphics subroutine software package. HP-PLOT/21 is a set of high-level graphics subroutines which support a wide variety of graphics applications using the 7221 plotter family. HP-PLOT/21 is written in the high level FORTRAN IV language, but can be called from BASIC/3000. (See Computer Systems COMMUNICATOR, Issue 20, on using HP-PLOT/21 from BASIC/3000).

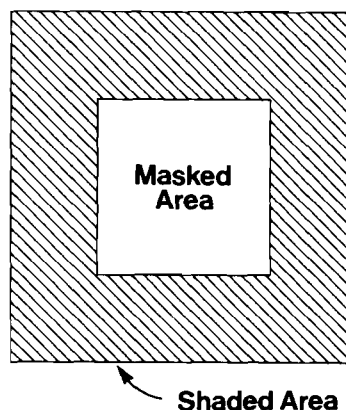
HP-PLOT/21 Revision B includes a number of features not available in the earlier version. Revision B includes additional graphics commands for paper advance operation, shading, masking, and a variety of high quality character sets.

Paper Advance Support for 7221S

Subroutines have been added to allow users to fully implement unattended operation for 7221S plotters on HP 3000 Series II, III, and 33 computers.

Shading and Masking

Shading makes it easy to crosshatch an area in order to differentiate areas of a graph. Masking allows the applications programmer to shield an area (no plotting, only labeling, occurs in this shielded area.) The masking function is very useful to reserve an area for labeling.



Software Resident Character Sets

Four additional character sets are now available to add a professional look to charts and graphs. These character sets are generated by the HP-PLOT/21 software. These new software generated sets and the original 7221 firmware sets are not *both* available to the HP-PLOT/21 user.

Enhanced Stick

```

. , # $ % & ' ( ) * + ,
- . / 0 1 2 3 4 5 6 7 8
9 : ; = ? @ A B C D
E F G H I J K L M N O P
Q R S T U V W X Y Z
a b c d e f g h
i j k l m n o p q r s t
u v w x y z !
    
```

Script

```

A B C D E F G H I J K L
M N O P Q R S T U V W X
Y Z a b c d
e f g h i j k l m n o p
q r s t u v w x y z
    
```

9872B and 7221B Model Revisions

By: Bruce Woolpert/SDD

Minor production changes, made to incorporate the paper advance feature on the 9872S and 7221S, have necessitated the change from A to the B-models. Prices remain the same as the A-model. The 9872B and 7221B will appear on the August 1 Corporate Price List. The A-models will be removed from the CPL on September 1, 1979.

The 9872B and 7221B incorporate a number of new capabilities which will be useful in situations in which there is no HP graphics software (e.g., HP-PLOT/21, GRAPHICS/1000, 2647A AGL) support available. The enhancements improve compatibility with other SDD products and make

HP-PLOT/21 (Model 72021B, USA Price \$100) comes complete with source on magnetic tape, loading instructions for the HP 3000, test programs, and an extensive User's Manual.

Triplex Roman

```

! " $ % & ' ( ) * + ,
- . / 0 1 2 3 4 5 6 7 8
9 : ; = ? @ A B C D
E F G H I J K L M N O P
Q R S T U V W X Y Z ' '
a b c d e f g h
i j k l m n o p q r s t
u v w x y z
    
```

Gothic

```

! " $ % & ' ( ) * + ,
- . / 0 1 2 3 4 5 6 7 8
9 : ; = ? @ A B C D E F
G H I J K L M N O P Q R
S T U V W X Y Z ' '
a b c d e f g h i j
k l m n o p q r s t u v
w x y z
    
```

software development easier. Compatibility across our hardcopy graphics line is very important to OEM's who develop their own graphics subroutine or applications programs.

You need not worry about your current customers or support on HP systems and terminals. The B-models (as well as the S-units) are compatible with software developed for the A-models. Your customer's software investment is protected!

The 9872B and 7221B will not be included in the factory paper advance upgrade program. If your customer desires the completely unattended operation offered by the 9872S or 7221S, the S-model must be ordered initially.

Upgrade Your Customer's 9872A And 7221A for Automatic Paper Advance

By: Rick Mayes/SDD

A number of your customers will already own a 9872A or 7221A when the new S models are introduced. Undoubtedly, a number of them will want to add the automatic paper advance feature. Well, guess what — there's an easy way to do it! San Diego has developed a factory upgrade program for the 9872A and 7221A to make it easy to upgrade these units to include the paper advance feature.

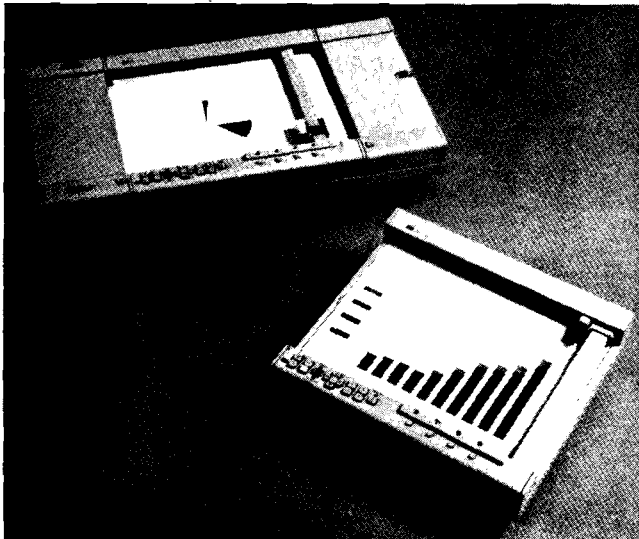
The customer can send the 9872A or 7221A unit to any of the three worldwide factories (San Diego, BID, YHP) where it will be upgraded with the automatic paper feature. Paper advance upgrade cannot be done in the field. But, we've made it easy for you and your customer. Here's the steps you should follow:

1. Send SDD, BID, or YHP an order for 17072A (to upgrade a 9872A) or 17073A (to upgrade a 7221A). This starts the wheels in motion!
2. The factory will acknowledge the order. The acknowledge date is the date that the customer should ship their unit to the factory. By not sending the plotter to us until we can work on it, the customer gets to use the plotter until we're actually ready to begin work.
3. Turnaround time after the plotter reaches the factory is 2-3 weeks.

Remember the upgrade program will be available for only a limited time (6 to 9 months). Only 9872A and 7221A units are included in the upgrade program. It is *not* possible to upgrade an A model to a B model in any case. 9872B and 7221B models will not be upgraded to include automatic paper advance (only A models are included in the upgrade program).

Introducing a New Family of RS-232C/V.24 Graphics Plotters . . . 7220A/S Graphics Plotters and 7225A/17603A

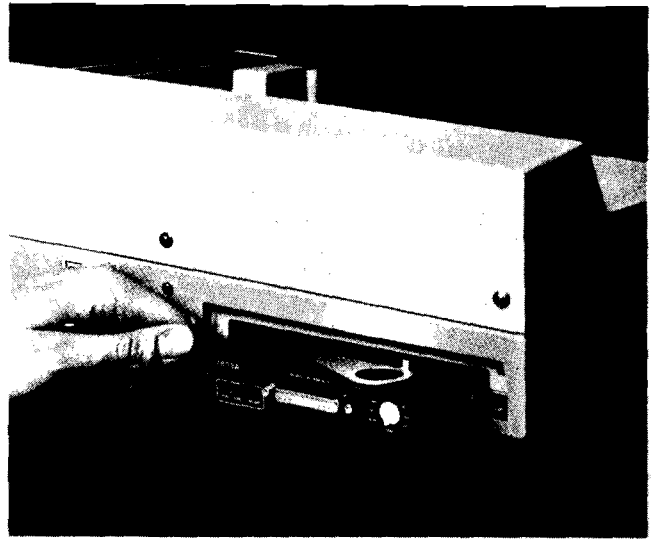
By: Greg Diehl/SDD



7220A/S Graphics Plotters

Both the new 7220A/S and 7225A/17603A plotters are intended for use on computers and systems for which there is no HP graphics software support. Both units are best suited for operation at high baud rates, rates at or above 1200 baud. The 7221B/S still provides the best data efficient operation at low baud rates, as well as high rates.

The 7220A/S and 7225A/17603A offer the easy-to-use HP-GL internal graphics command language to make graphics subroutine and applications programming development easier in RS-232C/V.24 environments. (HP-GL is a set of two-letter commands which support all the graphics functions.) Since both units use the HP-GL set, the 7220A/S and 7225A/17603A provide OEM's with a largely



17603A Personality Module for the 7225A Graphics Plotter

compatible HP-GL language set on either the smaller, lower cost 7225A plotter, or the larger, multicolor 7220A/S plotters. While the 7220A/S can be used in hardwired or modem environments, the 7225A/17603A does *not* support modem communications.

The 7220A/S and 7225A/17603A offer a "family solution" in situations in which GRAPHICS/1000 cannot be used or when the user wants to develop his own software for HP 1000, HP 3000, HP 300, and HP 250 computer systems.

So if you've got an HP computer OEM who'd like to offer his customer a choice of hard copy devices on OEM-developed software — the 7220A/S and 7225A/17603A might offer the right answer. Additional information on the 7220A/S and 7225A/17603A is contained in your training manual. Both products have been added to Exhibits A-1, A-3, and A-4 of the Computer Systems Group Purchase Agreement.

SDD New Product Summary

By: Mary Zoeller/SDD

It might be useful if we summarized introduction dates and model numbers of our new SDD products.

	Introduction Date	USA Price
9872S Graphics Plotter with Automatic Paper Advance	August 1	\$6,500
9872B Graphics Plotter	August 1	\$4,750 (same as A)
7221S Graphics Plotter with Automatic Paper Advance	August 1	\$6,750
7221B Graphics Plotter	August 1	\$5,000 (same as A)
17072A Upgrade for 9872A	August 1	\$2,750
17073A Upgrade for 7221A	August 1	\$2,750
72021B HP-PLOT/21 Software, Revision B	August 1	\$ 100
7220A Graphics Plotter	July 1	\$5,000
7220S Graphics Plotter	July 1	\$6,750
17603A Personality Module (RS-232C) for 7225A Graphics Plotter	June 1	\$ 750 (\$1850 for 7225A)

All products are multiple-sales-force coded for quota credit and commission by SF02. The 9872B/S, 7221B/S, 7220A/S, and 7225A/17603A are included on Exhibits A-1, A-3, and A-4 of the Computer Systems Group Purchase Agreement. Be sure to include the product support Option (#952) on your quotations and orders to assure proper quota credit.

Computer Supplies News

Meet Ron Arons: "Enlightening" HP Computer Supplies' Future Direction

By: Fran Jeffries/CSO



Ron Arons, summer intern from the University of Chicago, has joined Carl Anderson's CSO marketing team for the summer. Ron is working toward his Master's degree in Business Administration, and he has a background in computer science. His summer assignment is to help us assess the sales potential of supplies for HP computer products, and our current penetration of the market.

Ron will be consulting with many of you in division and field locations, as well as with customers, to gain insight into supplies usage rates for HP systems and peripherals. He'll also be gathering information on customer buying preferences, which will assist us in charting CSO's future direction.

If you don't get a chance to meet with Ron but still have thoughts to share on consumption rates, sales opportunities, supplies procurements, buying habits of customers or better ways to serve your customers and yourself, please give us a call or contact us at COMSYS address 2268.

YHP News

YHP Booth a Great Hit at JEMIMA Show

By: Masaaki Tagami/YHP



The JEMIMA show (which is one of the biggest measurement and instrumentation shows in Japan) was held in Osaka on June 5, 6, 7, and 8.

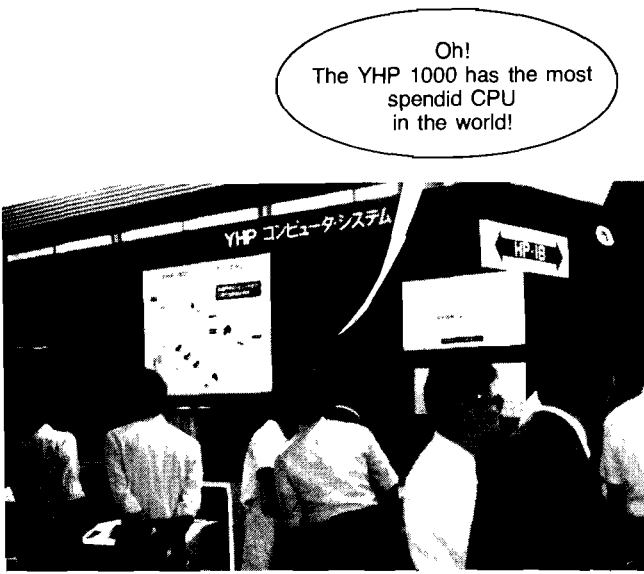
Over 30,000 potential customers visited this year's show, and at least half of them stopped at the YHP booth. Our Computer Systems Group display included the YHP 1000 with a 2240A and a 2647A.

This was the first big show in Osaka this year, so all of the Kansai-jin (people) were interested in our YHP products.

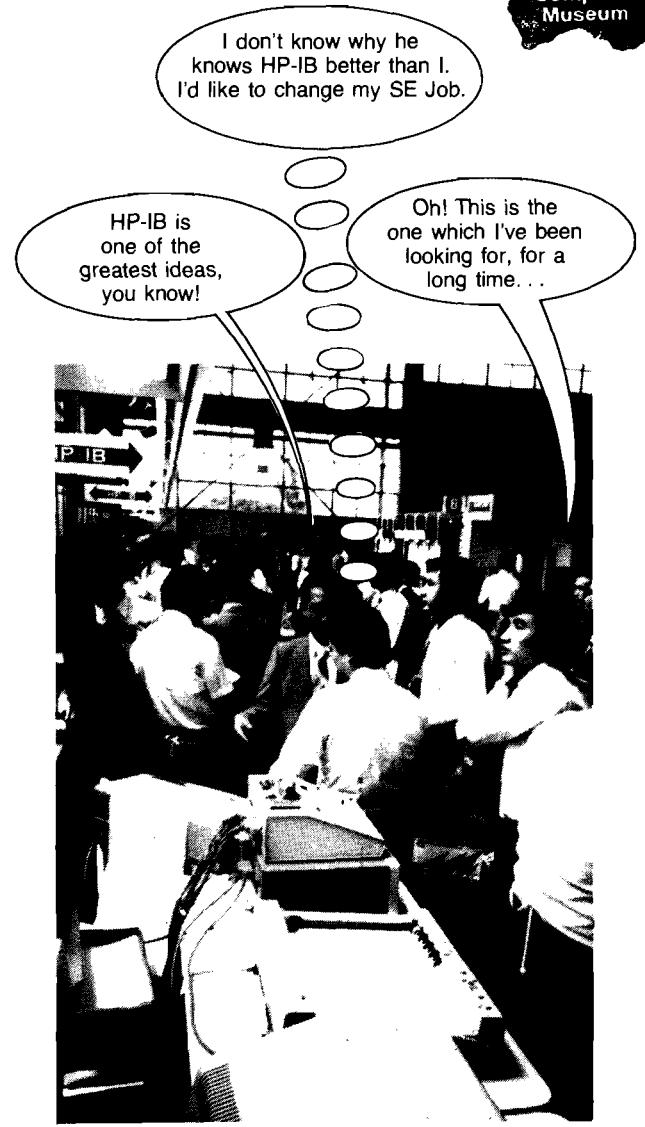


See!
That's why
you should buy a
YHP 1000!

WOW!
DEC and DG
don't have those
capabilities!



Oh!
The YHP 1000 has the most
splendid CPU
in the world!



I don't know why he
knows HP-IB better than I.
I'd like to change my SE Job.

HP-IB is
one of the
greatest ideas,
you know!

Oh! This is the
one which I've been
looking for, for a
long time...

Training News

The Interpersonal Aspect of Sales Training: Social Styles Sales Strategies

By: Bob Wolfe/ESR

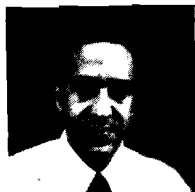
Recognizing that interpersonal skills are as equally important in the sales process as technical skills, predicated the inclusion of social style awareness exercises in the "Sales Basics" seminar. Feedback from participants in the program indicated the need to supplement the awareness phase with skill building exercises. As a consequence of the feedback, a decision was made in the Eastern Sales Region to remove the "styles" section from the "Sales Basics" program, compacting "Sales Basics" to a 3-day program and offering a 2½ day follow-on program devoted entirely to interpersonal skill building.

The vehicle chosen to accomplish this task is the Social Styles Sales Strategies (S-4) program purchased from Wilson Learning Corp. The awareness portion of this program is identical to the MIR seminar that has been utilized throughout HP for many years. The difference between the two programs concerns the skill building exercise. The S-4 course utilizes a Computer Systems sales call that builds up from the initial investigation of and contact with the customer, to the presentation of a solution to the customer buying committee. In the Eastern Sales Region, S-4 is presented on a monthly basis by one of three licensed instructors, *Frank Carretta*, Region Medical Sales Manager, *Gary Bowen*, District Sales Manager for Desk Top Computers, and myself, *Bob Wolfe*, Region Training Manager.

If you would like to know more about the program, just give me a call at ESR Headquarters, Rockville.

New Addition to CSG Training

By: Pat Sullivan/CSG



Please join me in welcoming *Bob Dennis*, Audio Visual Writer/Producer/Director, to CSG Media Services. *Bob* comes to us from the Saco School System in Maine, where he was Director of Media and Technology for four years.

His prior media experience includes producing and directing television programs for Boston College, and for the Maine Public Broadcasting Network, while his technical background includes experience as a Quality Control Technician, Computer Hardware Installer, and Electronic Test Technician.

Bob completed two years of Electrical Engineering studies at the University of Maine, where he later earned his BA in Education and Broadcasting. He then earned his Masters in Educational Technology from Boston College.

Bob's most recent experience was preparing a User's Guide to the HP 3000 for a turn-key software package developed by the consulting firm of Smith, Dennis & Gaylord.

Welcome to CSG Training, *Bob*.

CSG I/A Class #28

By: Bob Lindsay/CSG



Pictured above is *Dick Anderson*, General Manager — Data Systems Division, addressing CSG Industry/Applications Class 28 at their Graduation Dinner on June 13th. Unfortunately, *Dick* spotted the accidental typo in the title of the article entitled "GSD Industry/Applications Class Graduates with Distinction" which ran in the last issue of the *CS Newsletter*. (As we all know it's a CSG — sponsored course.) Thanks to *Dick* and all the other sharp-eyed readers who spotted the error.

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 (optional): _____

JOB TITLE: _____

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

MANAGER'S NAME: _____

If you have changed jobs, location, or product specialty and have not updated the CSG Literature Distribution database, just fill out this card and mail to:

Hewlett Packard
CSG Lit. Distribution
c/o Carol McKay - 40
11000 Wolfe Road
Cupertino, CA 95014

COMPUTER SYSTEMS NEWSLETTER

HEWLETT-PACKARD COMPUTER SYSTEMS GROUP
11000 Wolfe Road; Cupertino, California 95014 USA

Bob Lindsay/CS Group - Editor

SUE BRAULT/BOISE — Editor
OLEN MORAIN/CSD — Editor
RICH BOWLES/DMD — Editor
SANDY BETTENCOURT/DSD — Editor
SYLVIA RAUMACHER/DTD — Editor
REGINA FANELLI/GSD — Editor
MURIEL JEAN/HPG — Editor

CHUCK ULFERS/BOISE — Technical Editor
BOB PUETTE/CSD — Technical Editor
BOB HOKE/DMD — Technical Editor
JOE SCHOENDORF/DSD — Technical Editor
CARL FLOCK/DTD — Technical Editor
JERRY PETERSON/GSD — Technical Editor
PIERRE ARDICHVILI/HPG — Technical Editor