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COMPUTER SYSTEMS NEWSLETTER

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HP Computer Museum
www.hpmuseum.net

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BOISE DIVISION NEWS

Competition

More Competitive Information—IBM 8100 Peripherals

By: Gary Sherwood/Boise

Some of you may have recently heard of IBM's new 8100 Information System. It is a new part of their distributed processing capability. There are also some new peripherals that exist on this system that you might like some competitive information about. If so—keep reading. The two peripherals of interest are a dual speed magnetic tape and a line printer.

The mag tape is a model 8809. It runs at two different speeds, switchable under processor control. The slow speed is a 12.5 ips and is used for normal data read/write. The high speed is 100 ips and is used for volume dumps. It is a 1600 bpi, phase-encoded machine. It is therefore supposed to permit compatible interchange of tapes with IBM 2400 and 3400 systems. It turns out, however, that reel inertia is critical to the 8809 motion control system. There could therefore be problems with some types of tape reels and additionally, when transporting from an 8809 to another system, there could be interlayer slippage and temporary or permanent errors. The 8809 does have parity checking and single trace error correction "in flight". A summary of major specs and prices is below.

	IBM 8809		HP 7970E	
Specifications	Start/Stop	Streaming		
Tape Speed	12.6 ips	100 ips	45 ips	
Data Rate	20 kb/s	160 kb/s	72 kb/s	
Density	1600 bpi	1600 bpi	1600 bpi	
Rewind time 2400 ft. reel	2.6 min	2.6 min	3.0 min	
Drives	Cost	BMMC	Cost	BMMC
1st unit	\$12780	\$ 63	\$12150	\$ 92
2nd unit	9630	44	8990	65
3rd unit	10440	48	8990	65
4th unit	9270	43	8990	65
Totals with X drives				
1	\$12780	\$ 63	\$12150	\$ 92
2	22410	107	21140	157
3	32850	155	30130	212
4	42120	198	39120	277

The line printer is an IBM 3289. It comes in three models. It prints via a revolving metal belt. There are different character sets available in ASCII and EBCDIC. A summary of character sets vs. speed of print follows:

Model Number	Max Lines Per Minute	Character Set (ASCII or EBCDIC)
1	155	48 characters
	120	64 characters
	80	94 characters
2 & 3	400	48 characters
	300	64 characters
	230	94 characters

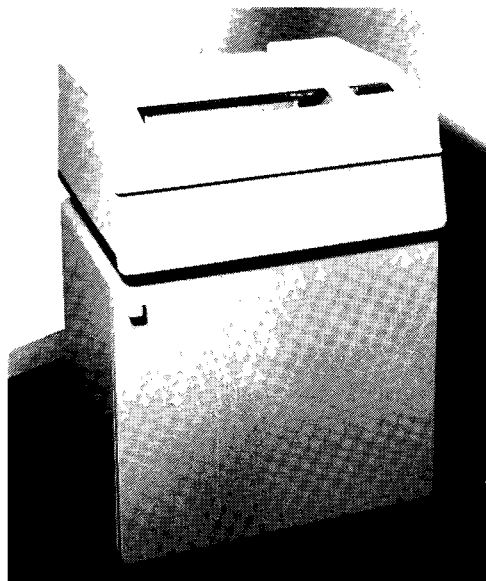
The character sets since they are on belts can be physically changed by the customer. (One resident at a time). The character set used (EBCDIC or ASCII) must be the same as the transmission code/character set used on the control unit to which it is attached.

The model 3 is the only printer that will connect to the 8100 system and is only available with EBCDIC character set. The base price list is:

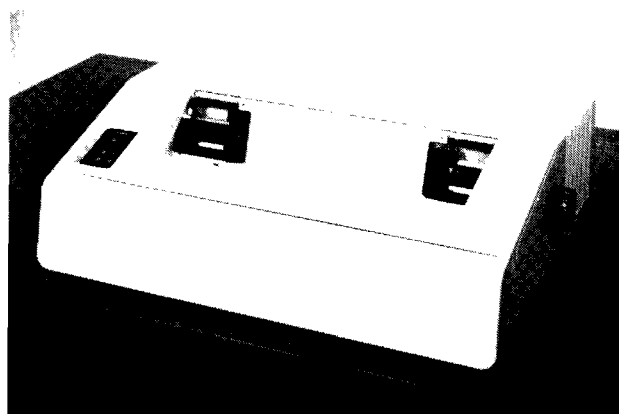
Model	Purchase Price	BMMC
1	\$ 8900	\$105
2 & 3	\$13250	\$179



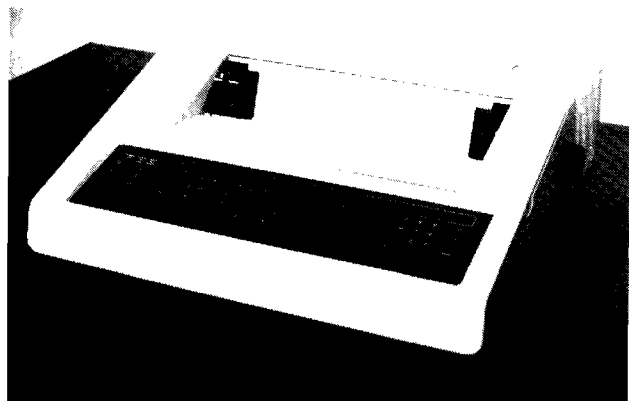
When you compare the HP 2608 against the competition from a price and/or feature viewpoint, you see once again that it is a very good addition to our product line.



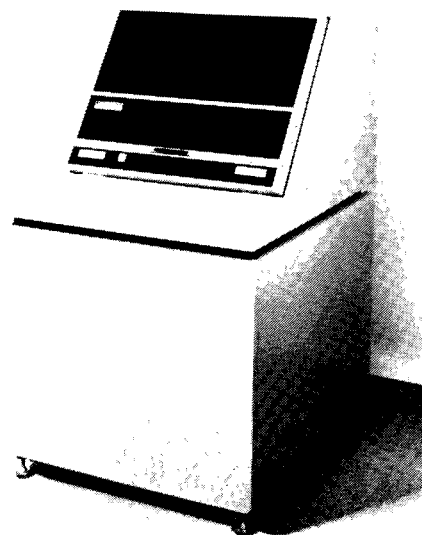
HP 2608 A



HP 2631G



HP 2639 A



HP 7970

DISC MEMORY NEWS

Product News

Everything You Always Wanted to Know About Interfacing Disc Drives . . .

By: Jon Bolt/DMD

Have you got any customers wishing to investigate interfacing an HP MAC Family disc drive to a non-HP system?

Requests for technical information of this nature have frequently arisen in the past — particularly from potential OEM's that require a durable, dependable disc product.

Available *now* from DMD is the "13037B Disc Controller OEM Interfacing Guide". This manual covers all the programming commands and protocol for CPU communication with our MAC Family Controller (13037B). The controller, in turn, handles all communication with the disc.

This manual also presents hardware design guidelines for interfacing the controller. Interfacing our controller does provide the customer with the option of utilizing the 7906, 7920, or 7925 disc drives.

The manual number is 5953-3601, and is available on request from DMD Sales Development.

GOOD SELLING!

Order Processing

So Your Disc Drive is Shipping From Boise, Idaho!

By: Regina Shepard/DMD

How long will it take my customer's disc drive to arrive after it ships from Boise, Idaho? This is one question we get asked many times. The past few months our Traffic Manager, Garry Stentzel, has been compiling transit time history. The table on the following page is the result and should help answer your questions concerning the best shipping method for your customer.

Air Consolidation Program (ACP)

ACP, an HP-designed method of transportation that covers *only* the Northeastern area of the United States, combines shipments destined for the Northeastern area and moves them via air to Newark, NJ. HP is able to secure a lower freight rate by using this method. Delivery from the airport to the final destination is provided by specific carriers. This combination of air and surface travel enables HP to offer their customers transportation which is faster and safer than surface but at a rate no higher than fully-insured surface transportation.

All shipments going into the thirteen Northeastern states will normally be shipped ACP. The only exception will be orders which specify Padded Van, Air Freight, or not to ship ACP.

Air Shipments

Air shipments are limited coming out of Boise because:

1. Currently we have no aircraft in Boise large enough to carry our bigger drives. These products must first be trucked to Salt Lake City, San Francisco, or Seattle, then flown to their destination.
2. Our drives contain magnetized material, which in some circumstances is a Restricted Article. A carrier can refuse to carry them even with the proper paperwork.

Padded Van

Padded van shipments are given to the carrier unpackaged, who in turn wraps the equipment in blankets and moves it in a van to the destination. A customer that needs either an inside delivery or has no loading dock *must ship via padded van!* Padded van shipments leave Boise on Wednesday or Thursday ONLY. The carriers we use for padded van shipments are Atlas, North American, and United Van Lines.

Tracing

Tracing consists of tracking down a shipment that has left our factory on route to a customer's site. The reasons for requesting a tracer are as follows:

1. Lost shipment
2. Proof of delivery
 - a. Copy — takes an average of 15 days.
 - b. Verbal — takes an average of 1 day.
(UPS will only give us a written proof of delivery which will take an average of 15 days.)

Copy of Freight Bill

When you request a copy of a freight bill, it will normally take about five days. However, if we have not received the bill from the carrier, it can and will take longer.

Coordinated Shipments

The Order Processing and scheduling job is to ensure that the customer's disc drive arrives on or before the system arrives at the customer's site. In order for us to meet our objective, we must look at two things:

1. When is the system scheduled to ship?
2. How long will it take our shipment to reach the destination using the specified ship via?

Once these things are established, we can then proceed to schedule the order. In some cases, in order to meet the intent of coordinated shipment, we must ship prior to the window specified on the order.

EXAMPLE: Order shipping to New York via padded van.
 Window: 12Dec - 22Dec
 System scheduled 12Dec
 We must ship this unit on 05Dec in order to meet objective.

Because of this anticipation of system ship dates, it is imperative that we be notified immediately of any changes to the system shipping schedule.

We hope this information will help you in advising your customer as to the best shipment methods.

FREIGHT SHIPMENT TIMETABLE FOR DMD PRODUCTS

SHIPMENT FROM BOISE, IDAHO TO . . .	SURFACE					AIR			
	0 TO 50 POUNDS		51 POUNDS & UP		TRANSIT TIME (DAYS) VIA PADDED VAN (ATLAS, NO. AMERICAN & UNITED VAN LINES)	STANDARD		EXPEDITED	
	CARRIER	TRANSIT TIME (DAYS)	CARRIER	TRANSIT TIME (DAYS)		CARRIER	TRANSIT TIME (DAYS)	CARRIER	TRANSIT TIME (DAYS)
Alabama	UPS	9-11	CFW	7-9	7-10	UAL	4-6	Emery	2-4
Alaska	IML	10-15	IML	10-15	15-20	Emery	4-6	Emery	2-4
Arizona	UPS	5-6	IML	2-3	4-5	AM/PM	2-4	AM/PM	1-2
California - No	UPS	4-5	Garrett	2-3	3-4	AM/PM	2-4	AM/PM	1-2
California - So	UPS	5-6	IML	2-3	3-4	AM/PM	2-4	AM/PM	1-2
Colorado	UPS	4-5	Northwest	2-3	3-4	AM/PM	2-4	AM/PM	1-2
Connecticut	UPS	5-7	ACP	4-6	10-14	ACP	4-6	Emery	2-4
Delaware	UPS	5-7	ACP	4-6	10-14	ACP	4-6	Emery	2-4
Florida	UPS	10-12	CFW	8-11	9-13	Emery	3-5	Emery	2-4
Georgia	UPS	10-12	CFW	8-10	8-11	Emery	3-5	Emery	2-4
Hawaii	IML	10-15	IML	10-15	NA	Emery	3-5	Emery	2-4
Idaho	UPS	2-3	Garrett	1-2	1-3	AM/PM	1-2	AM/PM	1-2
Illinois	UPS	6-8	CFW	5-6	6-9	Emery	2-4	Emery	1-3
Indiana	UPS	6-8	IML	5-6	6-9	Emery	2-4	Emery	2-4
Iowa	UPS	6-8	CFW	4-5	6-9	Emery	2-4	Emery	1-3
Kentucky	UPS	7-9	CFW	6-8	7-10	Emery	3-5	Emery	2-4
Kansas	UPS	5-6	CFW	3-4	5-7	Emery	2-4	Emery	1-3
Louisiana	UPS	7-9	CFW	5-6	6-9	Emery	3-5	Emery	2-4
Maine	UPS	5-7	ACP	6-8	10-14	ACP	6-8	Emery	1-4
Maryland	UPS	5-7	ACP	4-6	10-14	ACP	4-6	Emery	2-4
Massachusetts	UPS	5-7	ACP	4-6	10-14	ACP	4-6	Emery	2-4
Michigan	UPS	8-10	IML	6-8	6-9	Emery	2-4	Emery	2-4
Minnesota	UPS	5-7	CFW	4-5	6-9	Emery	2-4	Emery	1-3
Mississippi	UPS	7-9	CFW	5-6	7-10	Emery	3-5	Emery	2-4
Missouri	UPS	5-7	IML	4-5	6-9	Emery	2-4	Emery	1-3
Montana	UPS	3-4	Garrett	2-3	4-5	AM/PM	2-4	AM/PM	1-2
Nebraska	UPS	5-6	PIE	3-4	5-7	Emery	2-4	Emery	1-3
Nevada	UPS	2-3	IML	1-2	3-4	AM/PM	1-2	AM/PM	1-2
New Hampshire	UPS	5-7	ACP	5-7	10-14	ACP	5-7	Emery	2-4
New Jersey	UPS	5-7	ACP	4-6	10-14	ACP	4-6	Emery	2-4
New Mexico	UPS	4-5	IML	2-3	4-5	AM/PM	2-4	AM/PM	1-2
New York	UPS	5-7	ACP	4-6	9-13	ACP	4-6	Emery	2-4
North Carolina	UPS	10-13	CFW	9-12	9-13	Emery	3-5	Emery	2-4
North Dakota	UPS	5-6	CFW	3-4	5-8	Emery	2-4	Emery	1-3
Ohio	UPS	8-10	IML	7-9	7-10	Emery	2-4	Emery	2-4
Oklahoma	UPS	5-7	CFW	3-5	6-9	Emery	2-4	Emery	1-3
Oregon	UPS	4-5	Silver Wheels	2-3	3-4	AM/PM	1-2	AM/PM	1-2
Pennsylvania	UPS	5-7	ACP	4-6	9-13	ACP	4-6	Emery	2-4
Rhode Island	UPS	5-7	ACP	4-6	10-14	ACP	4-6	Emery	2-4
South Carolina	UPS	10-12	CFW	9-12	9-13	Emery	3-5	Emery	2-4
South Dakota	UPS	5-7	CFW	3-4	5-8	Emery	2-4	Emery	1-3
Tennessee	UPS	8-10	CFW	7-9	7-10	Emery	3-5	Emery	2-4
Texas	UPS	6-8	CFW	4-5	6-9	Emery	2-4	Emery	1-3
Utah	UPS	4-5	IML	2-3	3-4	AM/PM	1-2	AM/PM	1-2
Vermont	UPS	5-7	ACP	5-7	10-14	ACP	5-7	Emery	2-4
Virginia	UPS	5-7	ACP	5-7	9-13	ACP	5-7	Emery	2-4
Washington	UPS	4-6	IML	2-3	3-4	AM/PM	2-4	AM/PM	1-2
West Virginia	UPS	5-7	ACP	5-7	8-11	ACP	5-7	Emery	2-4
Wisconsin	UPS	7-9	CFW	5-6	6-9	Emery	3-5	Emery	2-4
Wyoming	UPS	4-6	IML	2-3	4-5	AM/PM	2-4	AM/PM	1-2

DATA SYSTEMS NEWS

Product News

Software Sources For RTE-IV

By: John Koskinen/DSD

The software sources for RTE-IV are now available for a license fee of \$15,000. The 9207X Software Sources Product is a set of computer source code used to construct an RTE-IV (92067A) Real-Time Executive operating system and supporting subsystems, such as the File Manager, Loader, Assembler, FORTRAN compiler, and libraries. The software sources product is provided for customers who have a current HP Purchase Agreement that wish to modify or directly support portions of the RTE-IV operating system software. Purchasing the 92067X product gives the customer the right to use RTE-IV sources on one HP 1000 computer with minimum hardware as defined in the 92067A data sheet.

The sources product includes the following:

Source Name/Description

RTE-IV Operating System
 RTE-IV System Library
 Relocating Loader
 RTE-IV System Generator
 Switch Program
 WHZAT Program
 Log Track Table
 RTE Assembler
 Spool System
 File Manager
 Directory Manager

Batch Monitor Library

Editor

Utilities

RTE FORTRAN IV Compiler

Compiler Library

Cross-Reference Program

Multi-Terminal Monitor

Power Fail and Auto-Restart Routine

Configuration Extension

EMA Diagnostic

Flexible Disc Backup

Formatter Library

RTE/DOS Library

Decimal String Package

RTE Drivers Package

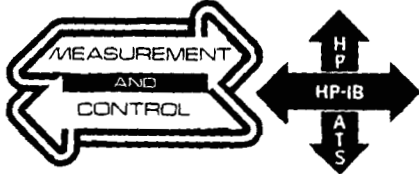
Prerequisites

The 92067X product is available to customers who have a current HP Purchase Agreement and who have previously acquired the 92067A product separately or in an HP 1000 system. Purchase of the 92067X product requires the signing of a Software License Agreement and payment of the license fee listed in the Hewlett-Packard Corporate Price List. The License Agreement defines the appropriate use of the Software Sources and any derived object code.

The right to copy any derived binary code from the modified sources is available as 92067Y for \$2,000, and is similar to the 92067R product.

The software subscription service is also available as 92067Z, \$100/month, minimum of six months to start.

Automated Measurement News



Automated Measurement News

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

VOL 1

NOVEMBER 1978

NO 6

THE MILITARY ATE MARKET - \$6 BILLION 1978-1982

By: Andy Mills

Military funding for automatic test equipment will continue to expand during fiscal years 1978-1982 with appropriations exceeding \$1 billion according to a report by Frost & Sullivan, New York, which will provide you expanding sales prospects.

Between fiscal years 1975 and 1977 government ATE funding increased by 40% annually, from \$465 million in 1975 to \$878 million in 1977. The market will expand to \$1,000 in 1978 and \$1.4 billion by 1982.

The outlook for continued growth for the military ATE market in the future appears healthy because ATE will become a requirement for all major weapon system programs of the 1970's and 1980's. The leading suppliers to this market in the late 1970's and early 1980's will consist of three types of companies: prime contractors of major weapon systems, ATE specialist companies with a broad range of commercial ATE, and companies with solutions to the new applications of ATE (such as, motor vehicles and helicopters). Such firms as Raytheon, G.E., PRD, Grumman, McDonnell Douglas and Hewlett-Packard will continue to dominate this market in the next 5 years, per F&S.

What this means to you is that your customer who is supplying "turn key" solutions to the government will have an increasing need for standard commercial computers and systems from Hewlett-Packard.

Good selling!

NEW HP-ATS INSTRUMENT

By: Dawson Mabey

The following instrument is now available as standard in HP-ATS:

<u>Instrument</u>	<u>Rack/Cabling</u>		<u>Conf/Test</u>
	<u>003</u>	<u>EU</u>	<u>EU</u>
HP 8566A Spectrum Analyzer (device subroutine not required)	1 ea	2 ea	8 ea

The HP 8566A is the closest replacement we have for HP 8580C Automatic Spectrum Analyzer.

FOR HP INTERNAL USE ONLY

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HP-ATS SOFTWARE NOTICE

BY: Dawson Mabey

ATS software is gradually being incorporated into the standard DSD software support procedures and guidelines, including adding MTIS (ATS session monitor) and device subroutines to the Cupertino binary tape (used for internal distribution of all current DSD software). The result will be much better support for our customers without the need for highly trained ATS specialists at both the factory and in the field.

You should be aware, however, this does have some implications to those customers who purchase multiple copies of the same system over an extended period of time. Specifically, all RTE based ATS systems (9580A and HP-ATS) will be shipped with the current revision of RTE and ATS software. Since this software can be updated quarterly, identical systems shipped as little as 2-3 months apart can have slightly different software.

Furthermore, DSD's policy is that only the current revision of RTE is supported. Customers with older versions are encouraged to purchase the software subscription service so that their software stays current and supportable. HP-ATS/9580 systems will not be shipped with older, unsupported versions of this software.

Some of our DOD/Aerospace ATS customers will have a problem with this due to their extremely strict QA guidelines regarding any changes to the system. This problem will exist even though most updates will have no effect on their applications programs. These customers may copy the ATS portion of their older version for re-use on each new system, with the understanding the software is no longer supportable by HP. See below regarding the requirements to copy the RTE portion of their software.

The specific requirements to copy HP software are described in DSD SOFTWARE SUPPORT POLICIES, Field Training Manual dated 3/78. In general, these requirements are as follows:

- (1) RTE-IV is Type I software. Therefore, to copy they must:
 - (a) Buy HP 92067A RTE-IV Software one time.
 - (b) Buy HP 92067R Right to Reproduce for each system.
- (2) ATS software is Type II software and may be reproduced once for each HP 1000 purchased. This includes MTIS, device subroutines, and SFT's.
- (3) TESTAID/FASTRACE are Loveland products that currently must be purchased each time for each system. (Please refer to the next article for more information.)
- (4) ATLAS/1000 includes the right to copy ATLAS. It does not include the right to copy RTE-IV which must be purchased separately. (Please refer to the next article for more information.)

Continued....

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For those customers who purchased systems racked and cabled only, the above reproduction policy applies to existing HP software that they plan to copy.

You should note that 9580 and ATS systems are shipped with a configured version of RTE. If this version is RTE-IV, your customer must purchase the right to reproduce as described above, before copying the disc. If the configured version contains RTE-III, it falls under the guidelines for Type II software.

ATS SOFTWARE LICENSES

By: Dick Landes

Here are a few current procedures that should be followed for ATS-related software.

HP 91705B TESTAID requires a signed License Agreement whether ordered as a separate product directly from Loveland or as part of an ATS system. DSD assumes the license has been signed when they receive an order for TESTAID. However, there have been a few instances recently where DSD placed an internal order for TESTAID on LID, only to be advised there was no license on file. The result is a delay in manufacture of the ATS system while DSD waits for the FE to get a license signed, so that TESTAID can be delivered. This won't build much customer satisfaction and increases our costs. Please make sure a TESTAID license is on file and that LID is notified before you transmit a 91075B order to DSD.

HP 92111A ATLAS is off and running. It also requires a signed License Agreement, or the appropriate special provision if ordered under a U.S. Government Contract. If you need copies of the license agreement or the special Government wording, please request them from your RSE contact at the factory or from the Contracts Department. We'd like to know the name of the customer and the planned usage.

RTE-IV Source Code listings and license are also now available and can be obtained from your factory RSE contact or the Contracts Department.

If you have any questions on the intent or wording of the ATLAS or RTE-IV licenses, give me a call and I'll try to help. Questions on the TESTAID license should be directed to Loveland.

ATLAS/1000 AND THE HP 1000 AT AUTOTESTCON '78!

By: George Low

The AUTOTESTCON '78 Automatic Testing Conference, sponsored by the IEEE and attended annually by some 400+ of the ATE community, will be held at the San Diego Hilton Hotel, California on November 28-30, 1978. DSD will be there with two HP 1000 systems, each controlling a different test head, to demonstrate the transportability of ATLAS/1000. ATLAS/1000 is a software compilation system that is a comprehensive subset of IEEE 416-1976 ATLAS, which is a requirement in most major ATE procurements today.

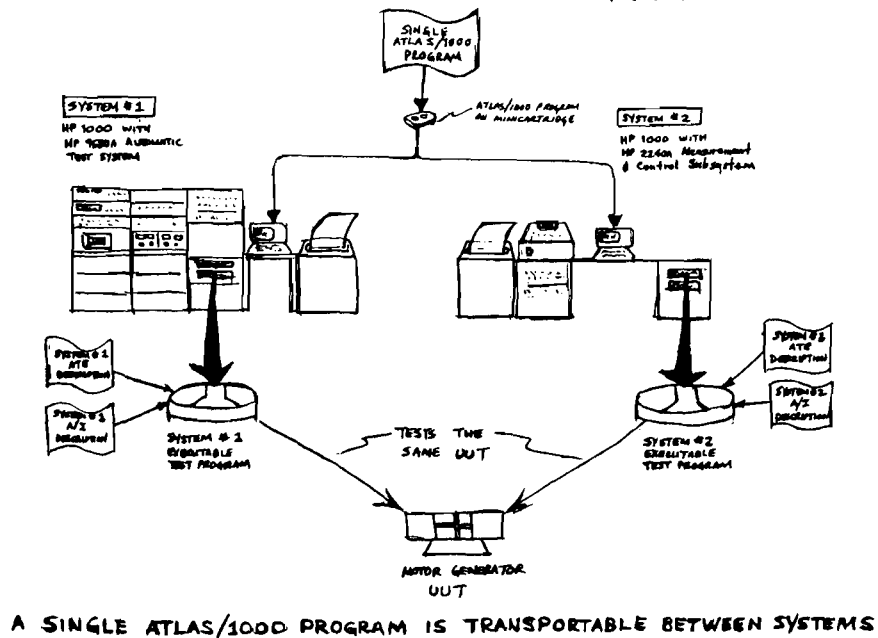
Continued.....

Our demo (see diagram) will use a single ATLAS/1000 source program on minicartridge that will enable compilation of an executable BASIC test program for the same UUT (unit-under-test) on both HP 1000 systems, even though one HP 1000 uses a HP 9580A Automatic Test System and the other uses a HP 2240A Measurement and Control Subsystem. Besides program transportability, ATLAS/1000 also features automatic allocation of ATE resources, a variety of auxiliary listings to simplify program preparation and validation, and complete source level code, documentation, and training.

If you and your customers are in the San Diego area, please drop by to see us. We will have the equipment to demo and sell HP 1000 computers, ATLAS/1000 and HP 2240S's. Private demos can easily be arranged. With our exhibit will be a hospitality setup, and plenty of factory people will be there to assist you, including our super sales development team of Dave Kline and Andy Mills, Mal Spann from the lab, and our chief demo expert Bob Richards, who is the ATLAS/1000 production engineer.

So, hope we see some of your customers in San Diego!

ATLAS/1000 DEMO BLOCK DIAGRAM



Continued.....

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HP 1000 INSTRUMENTATION QUALIFICATION COURSE FOR SF02 SYSTEM ENGINEERS

By: Phil Ebersole

Excellent follow-on software and hardware support is one of the best ways to ensure your customer's satisfaction with his HP 1000 controlled instrument system. And one of the best ways to ensure that the HP 1000 end of this support is available is to have one of the local SF02 System's Engineers (SE's) attend the HP 1000 SE Instrumentation Qualification Course.

This newly revised and improved course, which was taught at DSD for the second time from October 2 through October 13, is the result of many long hours of work by Tony Rollis (DSD Technical Marketing Department) and several others at DSD. The first course was extremely successful. The next courses are being given 1-29-78 and 4-23-79.

We hope one of your SF02 SE's will attend one of the forthcoming Instrumentation Qualification courses.

IMPROVED SUPPORTABILITY FOR CUSTOMERS WITH CRITICAL SYSTEM UP-TIME REQUIREMENTS

By: Ken Hall

A DM from our St. Louis office utilized a customer-owned-spares concept to satisfy their 9580A customer's requirement for minimal down time. The cost was approximately \$19K for spare equipment to support one system consisting of about 15 instruments.

Customer-owned-spares satisfies the customer because repair can often be made in hours by HP service vs days/weeks when the customer relies totally on HP service and sparing.

Customer-owned-spares could be used for the HP 1000, HP 2240, HP-ATS and any other HP equipment/system when up-time is critical.

By the way the "Maintenance Assurance Program" offers dedicated and shared spares on a lease basis for those customers who are unable to purchase their own spares. Refer to "MAP" sales amplifier HP stock # 5951-5918 for additional information.

DATA TERMINALS NEWS

Product News

HP 2621 A/P System Interfacing

By: Terry Eastham/DTD

YES, the new low cost HP 2621A (\$1450 U.S.) and HP 2621P (\$2550 U.S.) terminals are supported on HP systems. Just get the right cable(s) and plug it in for instant success! The following chart shows what is needed to connect the HP 2621 to the different HP systems.

System	Interface	Cabling	Comment
HP 3000 Series I, II, III	Asynchronous Terminal Controller	13222N (U.S.) or 13222M (European) cable. Hardwired or modem operation	Terminal
HP 3000 Series 33	ADCC	13222N (U.S.) or 13222M (European) cable. Hardwired or modem operation	Terminal only
HP 300	ADCC	13222N/M cable plus 13232U cable for Hardwired operation 13222N (U.S.) or 13222M (European) cable for modem operation	Terminal only
HP 1000	12966A (recommended)	12966A-005 cable for Hardwired operation 12966A-002 cable plus 13222N/M cable for modem operation	Terminal only
	12531D	12531D-001 cable plus 13222C cable for Hardwired operation. 12531D-002 cable plus 13222N/M cable for modem operation	
	12880A	12880A-60003 cable plus 13222C for Hardwired operation	
HP 250	45120A ASI	13222N (U.S.) or 13222M (European) cable Hardwired or modem operation	Terminal only
HP 2026	12966A	12966A-005 cable	Console only
HP 2000	12920B Multiplexor	13222N/M cable for Hardwired or modem operation	Terminal only
	12531D	12880-60003 cable plus 13222C cable	Console only

HP 2621 A/P System Interfacing

More detailed information on this subject will be included in an addendum to the HP 2621 Field Training Manual. However, you might note that the 13222N, 13222M, 13222C and 12966A-005 cables are new cables made necessary by the fact that the HP 2621 terminal has a 50-pin connector on the back. The first three of these cables are available from Data Terminals Division while the 12966A-005 is supplied by Data Systems Division.

Contact your DTD Sales Development Engineer for more information. Start the New Year out right and SELL HP 2621 TERMINALS!!!

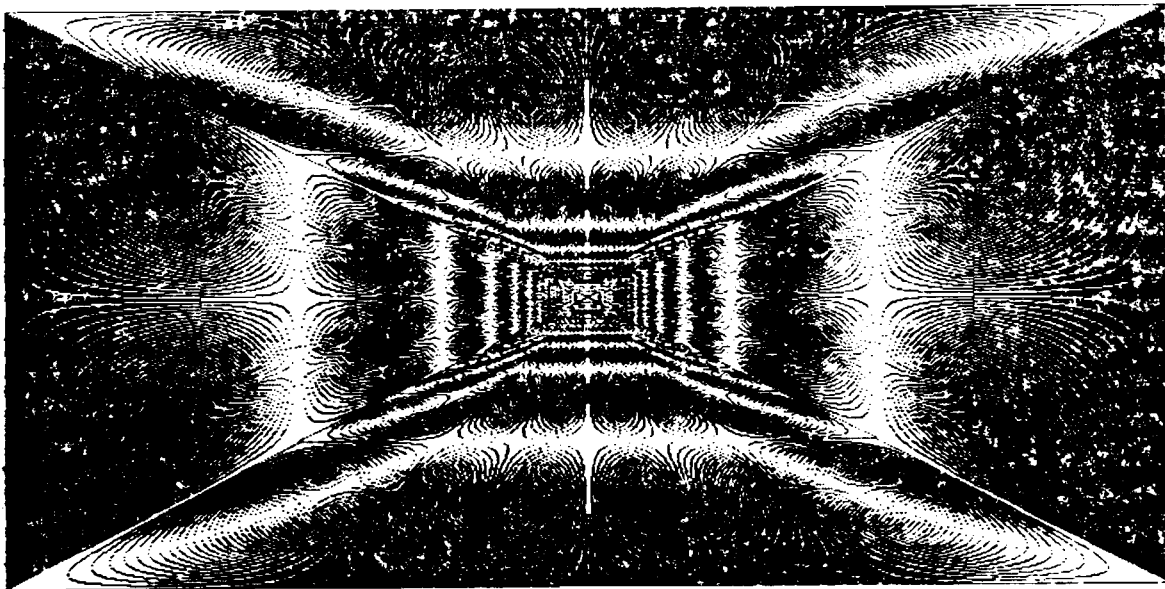
Sales Aids

Quick and Easy AGL Demo

By: Bill Swift/DTD

Remember the first frame on the HP 2648A Demo Tape? This frame is an excellent example of the complex graphics that can be displayed on our terminals. The demo tape produces this display through a long series of escape sequences, each of which draws a single line vector. In fact, it would require about 400 inches of tape if you were to program this with escape sequences. But this display only requires a 13-line AGL program on the 2647A! In addition to being a short program, it also shows off both BASIC and AGL in an impressive way. You can demonstrate the power of AGL and the friendliness of its high-level commands. Here's the program:

```
>
>
LIST
10 PLSTR (0,1)
20 GCLR
30 SCALE (0,719,0,359)
40 PEN (-2)
50 FOR I=0 TO 719
60 MOVE (I,0)
70 DRAW (719-I,359)
80 NEXT I
90 FOR I=1 TO 359
100 MOVE (719,I)
110 DRAW (0,359-I)
120 NEXT I
130 END
>
```



OEM Terminal Applications

By: Tim Haney/DTD

One of our OEM customers has taken advantage of the HP 2649A Terminal/Controller to develop a backup data collection system. The customer interfaced an OCR-A optical reader to the 2649A via the HP 13238A 8-bit Duplex Interface Card and wrote an alternate I/O driver to process the data from it.

In normal use, data is collected from specially printed "bundle tickets" and sent to a host HP 21MX CPU. However, if, for some reason, the CPU should be down, the HP 2649A will automatically log the data on a mini-cartridge for later transmission to the host. Thus, the data collection operation will continue without interruption.

The OEM was particularly pleased about the fact that no special hardware was required for the interface and a minimum of code was needed.

Reading System Messages on the 2641A

By: Mark Willner/DTD

Several APL users have complained that their APL systems often return error or system messages when they are still in APL mode (APL light on). These messages are displayed using the APL character set which makes them unintelligible.

To read these messages, they must be converted to the standard Roman character set. To do this, simply place the cursor in the first column of the line to be converted and hit the APL key. The line should now be displayed in the Roman set. Hitting the APL key once more will return to the APL set.

Using this same method you can also convert Roman to APL and back.

Note that in some instances you may have to hit the APL key more than once to make the change. This is because the line must be "synchronized" with the operation of the APL key.

Blanks Imbedded in Escape Sequences

By: Maurice Poizat/HPG

The reference manuals for the 2645A and 2648A may be somewhat misleading because all the escape sequence examples show some gaps between characters that can be mistaken as spaces. In fact these gaps are not intended to represent spaces, but to make these escape sequence examples more easily readable.

No blanks can be admitted in an escape sequence. A blank aborts the sequence and returns the terminal to normal operation: subsequent displayable characters will appear on the screen.

However, it is possible to put blanks on both sides of numeric parameters which appear in some escape sequences:

Example 1: In ϵ_c h no blank is allowed between the Esc code and h

Example 2: $\epsilon_c * a 2h 1i 2j 6k 20U$ can be written as:

$\epsilon_c * a$	$2 h 1 i 2 j 6 k 20 U$
no blanks allowed in preamble	blanks are allowed in the command/parameter section

Example 3: $\epsilon_c \& p 2u 0C$ can be written as:

$\epsilon_c \& p$	$2 u 0 C$
no blank allowed	blanks allowed

(It is the prefix of the Esc sequence.)

So, if a customer generates escape sequences automatically by program, let him know that he should format his strings of characters accordingly. It's easy, isn't it? Then take it easy and keep selling terminals!

Differences Between the DEC VT-5X Terminals and the HP 264X Terminals

By: Steve Stark/DTD

With the many DEC customers who are turning to Hewlett-Packard to satisfy their terminal needs, a question which arises very often is: "What are the differences between my DEC VT-50/52 and your HP 2645A??" Thanks to *Eddie Slaven* in Minneapolis, who provided us with some first-hand information about the DEC scope, we can now answer this question.

The major difference between the HP 264X terminals and the DEC VT-5X series of terminals is that the HP terminals possess a more extensive feature set. This greater capability means that the HP terminals can perform the same functions as the DEC terminals and considerably more. There are, however, several capabilities of the DEC terminals which are not supported by HP terminals.

Because the DEC terminals do not have off-screen storage capabilities, they have implemented a feature called "hold-screen mode" in order to provide the user with some control over the display of data which extends beyond 24 lines. In this mode, the operator may request a full screen of data by pressing SHIFT/SCROLL. Additional lines of data may be requested by pressing SCROLL. After each line of data or page of data is received by the terminal, an XOFF character is sent to the host to prevent further transmission of the new data.

Another capability of the DEC terminal which is not needed by the HP terminals is the "alternate keypad mode." This allows the DEC terminal to utilize the keys in the numeric keypad in their keyboard as function keys. When the numeric keys are pressed in this mode, they emit escape sequences instead of their corresponding ASCII character codes. This capability is not needed in HP terminals because we provide the user with both a numeric keypad and eight separate function keys.

The DEC VT-52 terminal also provides a limited alternate character set generation capability which represents a small subset (33 symbols) of the capability that is present in the HP terminals. They refer to their alternate character set capability as "graphics mode."

In terms of applications software compatibility, the HP 2645A is very similar to the VT-5X series of DEC terminals. The most notable difference is that the HP 2645A will not interpret certain escape sequences in the same way as the DEC terminals. These escape sequences are shown below with the corresponding HP 2645A sequences shown in parentheses.

- ESC I — Reverse line feed (ESC T)
- ESC Y — Direct cursor addressing (ESC & a)
- ESC Z — Identify terminal type (no equivalent)
- ESC [— Enter Hold-Screen Mode (no equivalent)
- ESC \ — Exit hold-screen mode (no equivalent)
- ESC = — Enter alternate-keypad mode (no equivalent)
- ESC > — Exit alternate-keypad mode (no equivalent)
- ESC F — Enter graphics mode (no equivalent)
- ESC G — Exit graphics mode (no equivalent)

Assessing the data communications compatibility between DEC and HP terminals is somewhat difficult because of the many different computers, interfaces and operating systems which are involved. However, we have managed to circumvent most connection problems through the use of our standard hardware and the appropriate strap settings.

Here It Is—The Graphics Brochure

By: Rich Ferguson/DTD, Bruce Woolpert/SDD, Steve Richardson/Boise, Bob Moore/DCD



Yes, your wait is over. The HP graphics brochure is here at last. It's the literature for the now generation . . . more powerful than a "play person" centerfold . . . faster than a computer salesperson, leaps all of Cupertino in a single bound . . . it's "Graphics" from HP.

What does it do, you say? Well, it shows HP as the strong graphics supplier we are, yes it's 100 pounds of delight in 12 pages of pure dynamite.

How do I use it? Leave it after every sales call, use it as a direct mail piece, use it for trade shows, etc. It's designed as a motivational flyer that emphasizes:

- A. Business Graphics
- B. HP's workstation solution
- C. Equipment configurations
- D. Scientific and engineering applications.

It's the first piece of literature that ties all HP's graphics equipment together. Use it and motivate your customers.

Rather than concentrate on product specifications which tend to be meaningless to the new graphics user, the brochure focuses on application needs and workstation capabilities. The first 8-pages focus on business graphics, the fastest growing graphics applications market. Based on 9 months of investigation and 35 interviews with corporate managers (done as part of HP's long range graphics product planning), this section describes the benefits of an effective business graphics reporting system.

Management wants a system which allows them to receive progress and status reports on a regular basis (e.g., monthly). A collection of graphs can provide management with a concise overview of its business; providing an answer to "how are we doing?" Management also wants to produce graphs on short notice for meetings and analysis. Answering these needs is the 2647A's local processing power and the Multiplot graphics software package. Of course, the 2647A is only half of the business graphics workstation. So we used pictures and examples to illustrate the broad range of output available from HP's four hard copy graphics devices to present the customer with a complete business graphics system. Included, with photographs and captions, are the 9872A Multicolor Graphics Plotter, 2631G Graphics Printer, 7225A Graphics Plotter, and 7245A Plotter/Printer/Raster Copy devices.

The science/engineering user is addressed in the next section of the brochure. Because these users are usually familiar with graphics, the emphasis in this section is on the flexibility HP Graphics Workstations provide. For technical applications, the 2647A is a powerful tool for both local and on-line use. Locally, the terminal's programmability makes it ideal for simple or routine tasks. On-line, with a host computer, the 2647A can help with pre- and post-processing tasks. With the English-like graphics language, called AGL (A Graphics Language), the terminal has sufficient power to generate the complex and specialized graphics that technical applications demand. The 9874A Digitizer is included in this section because strip charts, X-rays, drawings, etc. often must be converted to coordinate form for local processing or detailed analysis by a host computer.

Now you can introduce every new prospect to HP Graphics. In addition, it makes an ideal mailer, providing a postage-paid reply card and a two-page configuration matrix and "family photograph" to help readers fill in the card. The brochure, P/N 5952--2884, should be available in your office's literature area. As always, your Sales Support contact at DTD, SDD, DCD or Boise can supply you with copies.

SELL HP GRAPHICS!

Graphics from the Customer's Viewpoint

By: Steve Stark/DTD

6



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Ideas for Action

*Developments, trends & useful proposals
for the attention of managers*

George B. Blake
is vice president of finance at
Anderson, Clayton & Co., S.A., one
of the ten largest companies in Mexico.

George B. Blake

Graphic shorthand as an aid to managers

Of all the frustrations of business life, surely one of the most aggravating and persistent is the flood of paper. Until a year ago, I used to update my mental portrait of my company by wading through a 100-page monthly budget report full of data on the corporation, the divisions, the profit centers, and the products.

To round out the picture, I also slogged through a series of smaller reports on collections, bank loans, and the like. These added perhaps 50 pages to my pile.

Now I get a better picture from just one sheet of paper. It has 20 small

graphs on it and looks like *Exhibit I*. (Because my company's data are in pesos, for ease of understanding I have created a fictitious situation in the exhibit to show the graphs in dollars.)

We started experimenting with graphs as part of a paper reduction campaign. Discussions of what reports to eliminate, shorten, or combine led ultimately to the question, How much information can be put on one sheet of paper?

A large quantity of figures, of course, can be crowded into a small space, but the result is not very legible. Worse, it does not clearly show the underlying relationships of the present, past, and future. We decided that charts of various types were better than lists of figures. Moreover, by keeping them simple, we could fit as many as 20 minigraphs comfortably on one page.

We also put together a set of 20 charts on important aspects of the economy, like the money supply and levels of exports and imports, and printed them on the back of the same sheet. Then the operating divisions of the company asked for their own sets. So we made up charts containing such divisional data as sales by products, product contribution to earnings, market shares, and advertising. We now distribute these sheets to approximately 25 managers.

A chart can make a complex relationship much clearer than figures or words can and present it with less ambiguity. The eye and mind can more quickly visualize a trend in a chart than in a table of figures. *Exhibit II* provides a specific comparison.

George B. Blake, "Graphic Shorthand as an Aid to Managers," *Harvard Business Review*, March-April 1978, Copyright © 1978 by the President and Fellows of Harvard College; all rights reserved.

Exhibit I
Corporate data (as of February 28, 1978)

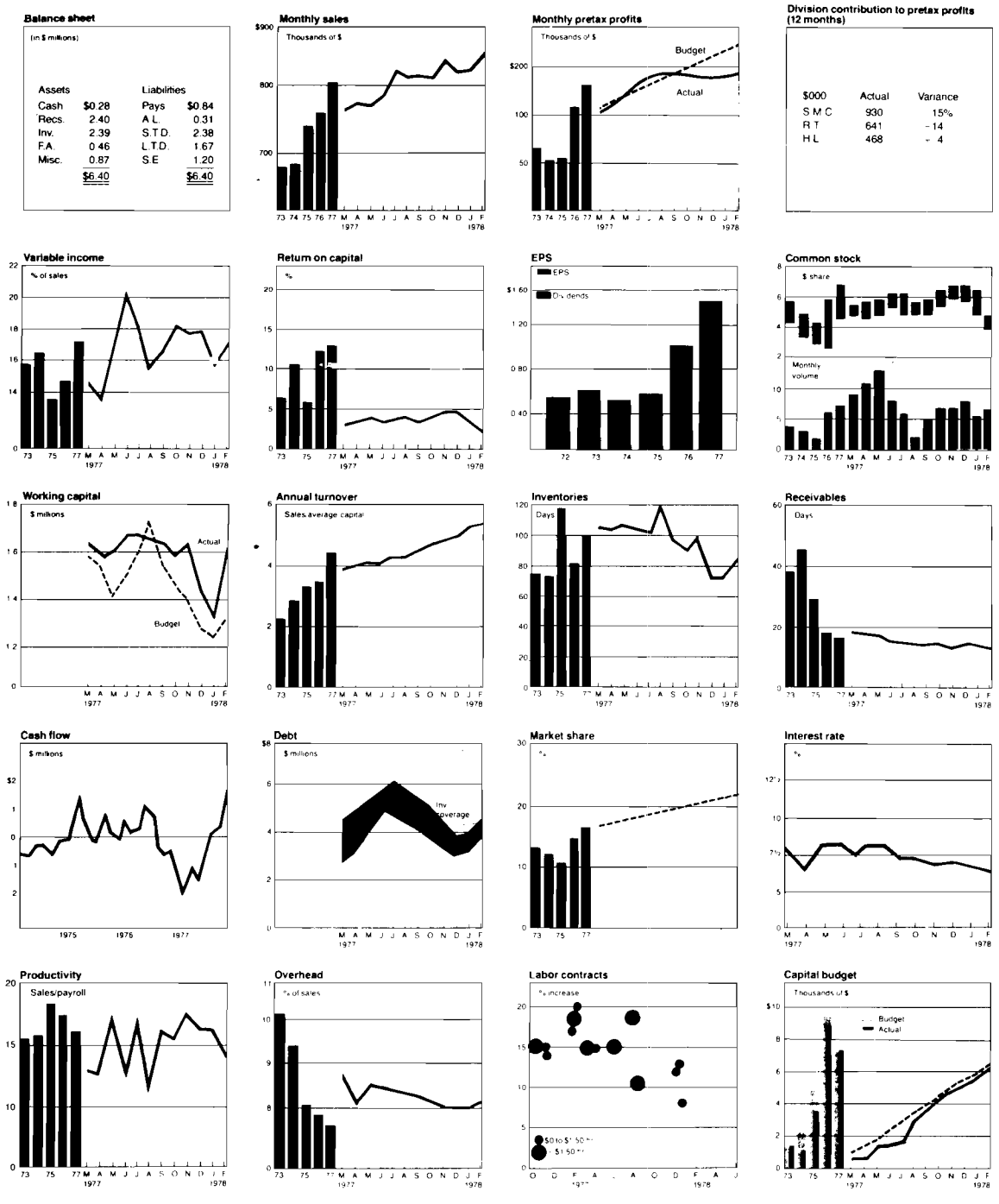


Exhibit II
Words and figures versus a graph

Words

The Mexican money supply maintained a fairly stable growth rate of about 20% per year for several years but began to increase more rapidly toward the end of 1976. It reached a peak growth rate of 33% in November 1976, but since then the expansion appears to have slowed. We predict a continued decline in the growth rate for the rest of 1977.

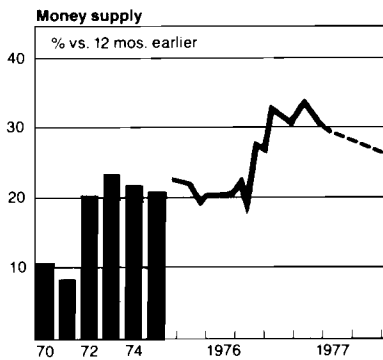
Figures

Money supply

Year	Percent of change from 12 months prior	Month	Percent of change from 12 months prior, 1976	Percent of change from 12 months prior, 1977
1970	10.5%	January	22.1%	30.9%
1971	8.3	February	21.7	32.7
1972	21.2	March	18.4	31.2
1973	24.2	April	19.8	29.8
1974	22.2	May	19.7	28.7
1975	21.3	June	19.6	29.5
		July	20.9	29.0*
		August	17.0	28.0*
		September	27.1	27.5*
		October	26.9	27.0*
		November	32.9	26.8*
		December	30.6	25.0*

*Estimate.

Graph



The graphic management that has evolved helps stem the paper flood and has resulted in many benefits, not all of them expected:

- The combination of charts gives us a concise overview of our business. In many cases it allows us to make decisions without further detail.
- We can easily compare two or three elements, such as earnings per share and dividends per share, on one chart. The graphs are easy to update and issue promptly by merely adding the latest points to the master graph and then duplicating the result.

By selecting which charts to include in the series of 20, we can direct attention to the most crucial and productive aspects of the business. If ROI or growth or retrenchment is our banner, we can choose the graphs with that in mind.

Once the viewer is acquainted with a graph, he can recognize the changes caused by new data more quickly than he can from a table. When the company is using the "managing by exception" technique, on a graph that is well designed the exceptions are more obvious.

Exhibit III
Subjects useful to graph

Economics

GNP real growth	Balance of payments
Population	Balance of trade
Per capita income	Public debt
Minimum wage	Government reserves
Inflation	Price and availability of specific raw materials
Money supply	Futures market
Money velocity	Devaluation risk

General topics

Sales (price level and current basis)	Days of payables
Profits	Productivity
Division performance	Capital budget
Variable income, percent of sales	Cash flow
Earnings per share	Debt
Common stock price	Interest rates
Return on equity	Exchange exposure
Return on capital	Debt ratio
Working capital	Current ratio
Turnover	Market shares
Days of inventories	Internal price and cost indexes
Days of receivables	Production efficiency

Computers

Machine efficiency	Project completion efficiency
Production efficiency	Input timeliness
Key strokes per hour	Output timeliness

Personnel

Management by objectives	Safety records
Overhead as a percent of sales	Number of employees
Labor contract settlements	Salary increases

The one-page sheet of graphs is always within reach and can be readily carried to a meeting or on a trip. Since all top executives receive it, a manager can use it as a basis for discussion when conversing on the phone with a colleague in a distant location.

At yearly budget time these charts provide a convenient starting point. To construct a framework for the budget, the participants can mark expectations for both the economy and the particular business right on the graphs.

Choosing the graphs

A comprehensive set of management graphs should start with a statement of the key strategies and objectives of the company, so that the material can [Continued on page 12]

be arranged to measure performance in these areas. The effort to graph goals and objectives provides an automatic test of how measurable they are. If the strategy or goal cannot be graphed, it probably cannot be measured and should perhaps be rethought.

In choosing which graphs to use, it is helpful to determine first what question the graph answers and second what decisions can be made based on that answer. For example, a question could be, How fast is our market growing? Useful plots would include population size and growth, per capita income, and age distribution. Such information could be used for decisions on new plant capacity or new product plans. *Exhibit III* lists the subjects we have graphed at one time or another.

Most graphs use time as the independent variable, shown on the horizontal scale. The vertical scale should make changes from one time period to the next clearly visible. Often this requires use of a broken scale, one that does not begin with zero.

In inflationary economies it is useful to pick measures that cancel out inflation. For example, days of inventories and days of receivables often make more meaningful comparisons to historical data than do dollars of inventories or dollars of receivables. Productivity can be measured in dollars of sales per dollar of payroll.

Of course, some people simply are not comfortable with graphs. A good management information system should be flexible enough to adapt to individual preferences. Graphs should not be forced on a manager who would rather see a table of figures first, in addition, or instead.

There are surprising benefits in converting information into "geometric metaphor," as Bertrand Russell put it. And there is something smugly satisfying about boiling an ocean of paper down to a single sheet.

Graphics from the Customer's Viewpoint (Cont.)

Since DTD's entry into the graphics marketplace, we have been extolling the virtues of graphics to you. It would seem now that we are not alone in this crusade. A recent article which appeared in the *Harvard Business Review* (a well-respected and widely-read periodical) cited many of the same benefits of business graphics that we have presented during our NPT Tours and in our sales literature. Because of its relevancy, we requested and were granted permission to reprint this article.

We think the preceding article will make an excellent handout piece for terminal seminars, open houses or even for use in a direct mail program. If you would like copies of the article, please contact your regional support engineer at DTD.

GENERAL SYSTEMS NEWS

Product News

The Series 33 is Off and Running!

By: Regina Fanelli/GSD

Starting with the day of introduction, the orders for Series 33's have begun to roll in! An OEM software house, with whom HP has done extensive business in the HP 1000, HP 2000, and HP 3000 product areas, was the first to order an HP 3000 Series 33. The customer plans to use their Series 33 for software development, having previously implemented packages dealing with commercial data entry, invoicing, accounts payable and receivable, and a large parts catalog system in BASIC and COBOL using DBMS 1000 and 3000, respectively. Additionally, the customer is well-noted as a specialist in screen management techniques. For more information on this account, please contact *Rich Phillips* in Sales Development.

Our second order for an HP Series 33 came about in a rather interesting way. An oil well drilling company was originally considering the purchase of a Series I, replacing an NCR 399, to handle their royalty sharing, joint owner billing, accounts payable and receivable, general accounting, and a complex payroll system. After seeing a demonstration of the HP Series 33 at a local show to which they were invited, the customer opted for the improved performance and reduced monthly costs of the Series 33 over the Series I. *Chuck Smith*, the GSD Sales Development Representative, will be happy to answer your questions regarding this account.

As the orders for Series 33's continue to flow in, we plan to keep you posted on the market areas, applications, competition, etc. If you have any interesting information to share with your comrades in the field, please give us a call.

GOOD SELLING!

HP 300 Opens Door for HP at Software House

By: John Whitesell/GSD

A large, reputable, and profitable software house in Arizona has decided to branch out from IBM 370's into the small computer market. This company specializes in financial planning packages, program language optimizers, and a few other vertical market segments, and it's been looking for a \$35K-\$50K computer to use in providing a powerful, interactive turnkey financial planning system.

Although this company had not previously purchased any HP computer products, one of their managers called the HP office recently to inquire about HP's offerings. The sales representative got them so interested in the HP 300 that they asked to visit the factory immediately to see one in action.

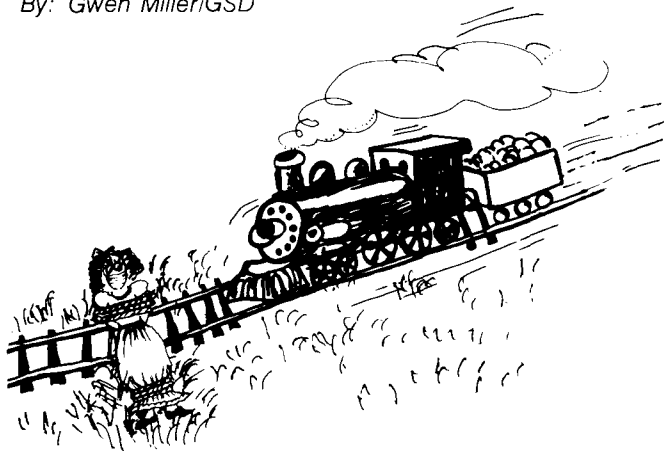
To make a long story short, the sales representative brought them to the factory within a few days, they saw the NPT Tour demos, studied our documentation, decided two days later that the HP 300 was just what they wanted, and gave HP a P.O. for their development system.

According to the HP sales representative, the product capabilities that turned them on the most were the powerful operating system and system tools provided to the user, the portable, office-oriented, self-contained system with 12Mb of disc storage, and the friendly user interface, especially the programmatically labeled softkeys and windowing available at the master console.

Congratulations to the HP sales representative for doing an outstanding job. For further information on this account, please contact me, *John Whitesell*, in GSD Amigo Sales Development.

"Our Hero" — The Series 33!

By: *Gwen Miller/GSD*



In its short lifetime of only three weeks, the HP Series 33 has already saved the day for a valuable HP 3000 customer. The first beta site machine was shipped in the last week of September, in a configuration that included maximum memory, 170Mb disc (one 7920, one 7925), a 2608 printer, and a tape drive. The customer had intended to use it primarily for COBOL program development for the first several weeks. But then the gremlins got into their Series II and broke some chain pointers in their General Ledger database in the middle of month-end processing! They simply carried the database — all 120,000 sectors — and their GL programs over to the Series 33, patched the pointer chains, and completed their work with minimal lost time. Since then, they have been exchanging programs and data between the Series II and Series 33 machines whenever they want to balance the processing load on the two systems.

As more feedback comes in from beta sites on the use and performance of both large and small Series 33's, we will pass it on to you. In the meantime,

GOOD SELLING!!

Is "Net Change" MRP a Lockout Against MFG/3000?

By: *David Sohm/GSD*

If you've been selling MFG/3000, you've probably heard your customers say "I've been reading a lot about net change MRP recently, what've you got?" What is Net Change and how does MFG/3000 stack up?

Net Change is an approach to Material Requirements Planning (MRP) that collects changes to inventory, orders and bills of material throughout the day. At the end of the day, an MRP run is made that takes the old material plan and applies only these changes to it to produce a new material plan. This is communicated to the planners as exceptions every day.

Regenerative ("regen") MRP (MFG/3000's approach) takes the new master production schedule, throws out the old materials plan, and recalculates a brand new materials plan. It is typically run weekly or, even less often.

These are really just two EDP techniques to achieve the same results. In fact, a "regen" run and a net change run using the same data will achieve the same result (assuming of course, the same order planning algorithms, etc.). Most of the advantages associated with net change are that it can be run more often (probably daily) because of its smaller use of computer resources. Running daily, or more often, can often introduce needless changes into a system. This can be likened to trying to balance a check book while two other people are making deposits and withdrawals. Just as you complete a snapshot, it changes, never giving any time to act on it.

Regenerative MRP run weekly gives your customer even more confidence and presents a plan that is stable for at least a week. But what about those daily variances between the plan and actual that the "net-changers" tout? Can MFG's regenerative approach help there? You bet it can! Any close-in fluctuations can be picked up and tracked by the allocation and pre-shortage system of IOS, thus allowing plan deviations to receive attention early. And what about exceptions? MFG/3000 provides exception reports highlighting only those things that require action. Anything not on plan is brought to the planners' attention. Most consultants agree that weekly "regen" is easier for users to understand and install and if they work in weekly time frames anyway (do they use M [manufacturing]-day or M-week?) and update their master schedule at most weekly, daily replanning is probably not required.

If your customer does ask the question, respond positively with, "MFG can provide almost all of the benefits of Net Change when MRP and IOS are used together". Net Change versus Regenerative MRP continues to be a long running battle in the marketplace so, unless your customer just wants to be part of the latest "fad" in manufacturing systems, MFG/3000 WILL DO THE JOB!

Sales Aids

HP 300 Publications

By: *Nalter Utz/GSD*

The following HP 300 publications are now available:

Title	Part Number
Business BASIC/300 Reference Manual	31442-90001
IMAGE/300 Reference Manual	31424-90001
HP 300 Typist Reference Manual	31000-90010
HP 300 System Services Guide	31000-90034
HP 300 Multiterminal Applications Guide	31000-90005
HP 300 Architecture Guide	31000-90004
HP 300 Program and Library Operations Guide	31000-90035
HP 300 Sort/Merge Reference Manual	31000-90033
HP 300 Console Operations Manual	31000-90025

These publications can be ordered from SSC (Division 50, Entity 06, Kardex 09). Transmit an Internal Order form to *Ralph Sierra*, Hewlett-Packard, 19310 Pruneridge, Cupertino, CA 95014. (Bldg. 49A).

HP 3000 Literature

By: Jerry Epps/GSD

To help you in your selling efforts, a complete selection of HP 3000 literature is now available and may be ordered from the literature department in Palo Alto. The pieces range from the Family Flyer, which gives a quick overview of all our computer products, to the nuts-and-bolts details of the General Information Manual. We think you'll find a piece to help you at each step in the sales process.

		Date Published
5953-0561	Computer Products Family Flyer	9/78
5953-0559	HP 3000 Benefits Brochure (Introduction for Managers)	10/78
5953-0543	Distributed Processing Solutions Brochure	3/78
5953-0883	HP Distributed Systems Networks Flyer	10/77
5953-0560	HP 3000 General Information Manual	10/78
5953-0556	Performance Guide	9/78
5953-0536	HP 3000 System Upgrades Flyer	10/77
5953-0558	Price/Configuration Guide (Current Products)	10/78
5953-0557	Price/Configuration Guide (for Pre-HP 3000 CX, HP 3000 CX, Series I, and Series II Models 5, 7, 9)	10/78
5953-0552	Support Services Brochure	5/78
5953-0507	Total Solution APL Brochure	2/77
5953-3703	Commercial OEM and Software Suppliers Brochure	9/78
5953-0548	MFG/3000 General Information Manual	5/78
5953-0540	MFG/3000 Data Sheet	3/78
5953-0544	MRJE/3000 Data Sheet	1/78
5953-0506	KSAM/3000 Data Sheet	12/76

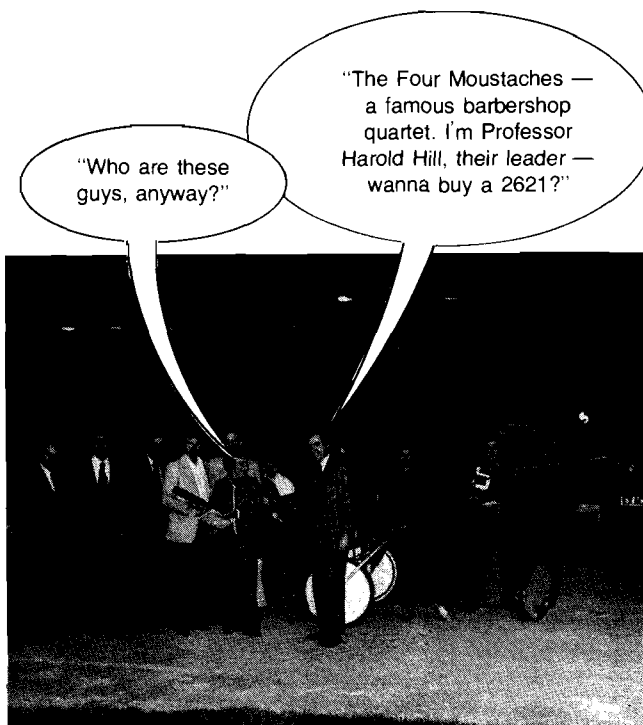
General News

Latest New Product Tour A Daily Double Winner

By: Jerry Peterson/GSD

By the time you read this, the NPT for the HP 3000 Series 33 and the HP 300 should be wrapping up somewhere in Australia. Yes — believe it or not, we have been "NPT Touring" for two months with 12 stops in the U.S., 6 in Europe, and a final stop in Australia.

The GSD team would like to thank all of you who worked overtime setting up the logistics of this large and complex NPT Tour. Thanks to you, the equipment set-up, the NPT Tour day and the customer seminars went off without a hitch at almost every stop. We don't have numbers yet on the European or Australian stops, but in the U.S. we talked to approximately 1000 customers and prospects on the third day seminars. With that kind of customer interest, FY '79 should be off to a great start!



We had a lot of unusual experiences on this NPT Tour. The one above was captured by a roving photographer at Mohawk Raceway near Toronto, where we had an NPT Tour dinner with *Mike Naggiar* and his team. The theme for this stop was "Off to the Races in FY '79" and as you can see, the factory team of *A. J. Laymon, Jake Jacobs, Jerry Peterson, Tom Ashburn, Bob Kadarauch, and Ed Hayes* actively participated. Thanks to *Mike* and his team for an outstanding NPT Tour stop and an excellent evening (even if we all left a bit poorer!)

New Faces in HP 3000 Sales Development

By: *Jerry Peterson/GSD*

I'm pleased to announce some changes in responsibility in Sales Development and welcome several new people on board.

Support for Canada has moved under *Ralph White's* responsibility. His team now supports both Midwest regions and Canada. *Ralph's* new team includes *Tom Stokes* (Midwest-East) and *Dennis Carelli* (Canada) both joining us from Corporate Marketing Services. *Kay Emerson*, a recent MBA graduate from the University of Hawaii, will be joining the team January 1. Until *Ralph* completes his recruiting effort, he will be supporting Midwest-West himself.

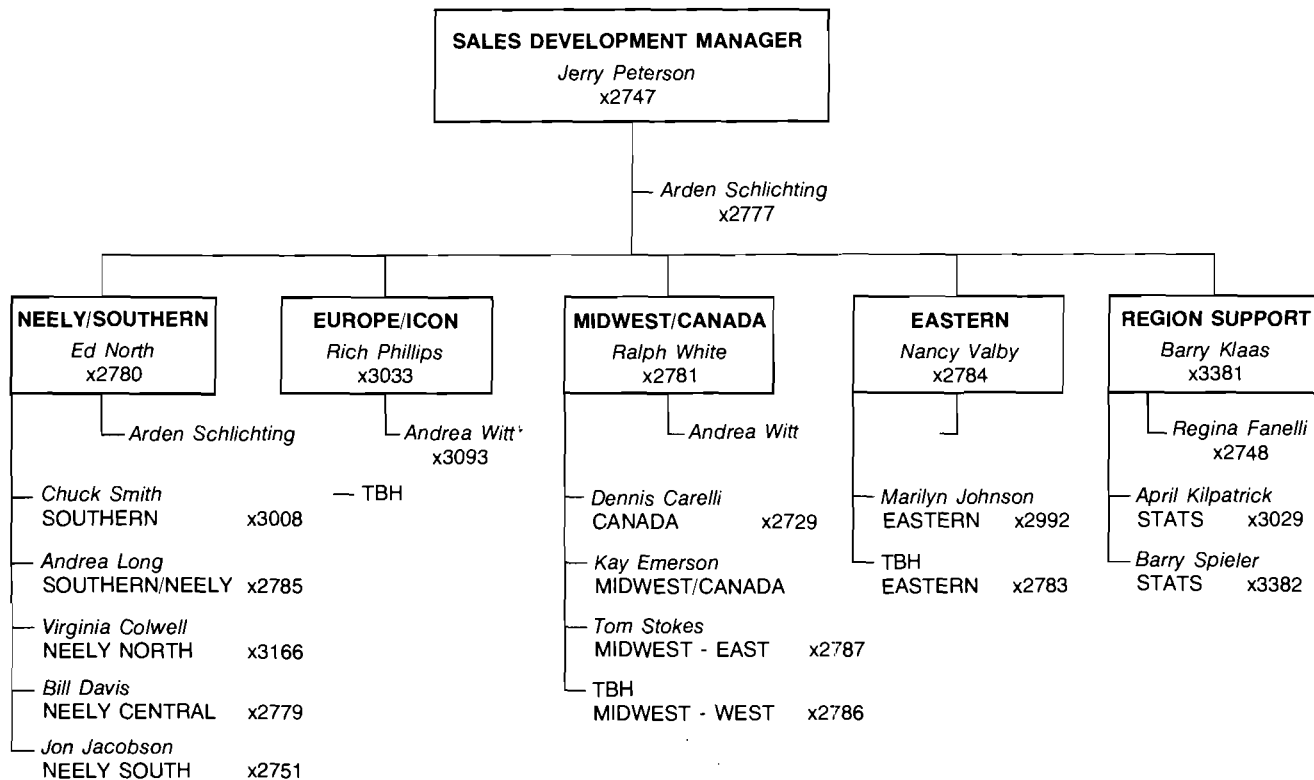
Congratulations to *Nancy Valby* who now heads up an Eastern Region Support Team. *Nancy's* group includes *Marilyn Johnson*, a June MBA graduate from the University of Virginia, plus one other new hire we hope to have on board very quickly.

Ed North's Neely/Southern support team has been bolstered with the addition of *Andrea Long* from Bay Area EDP. The rest of *Ed's* team remains unchanged.

Andrea Witt is our new secretary supporting *Ralph, Nancy,* and *Rich Phillips*. With *Andrea* on the team, *Regina Fanelli* has been able to take on some new assignments; namely, managing the Customer Reference Database and editing the GSD portion of this Newsletter. If you have an article to contribute or you need customer reference information, call or telex *Regina*. In addition to the above tasks, *Barry Klaas'* group manages our sales forecasting and statistics effort. *Barry Spieler* has joined us from the 3000-based M.I.S. group at Microwave Semiconductor Division to strengthen our efforts in this area.

As always, our objective in Sales Development is to provide you with enthusiastic, responsive support. Call us first — we can help!

GSD 3000 PRODUCT LINE SALES DEVELOPMENT



HP GRENOBLE NEWS

Division News

HP Communications Really Work!

By: Jean-Pierre Baudouin/HPG

Was it the subject that had an effect? Or was it just the European mix? Whatever the reason, the communications really flowed at a recent SE workshop in Amsterdam. The objective was to get senior European HP 1000 SE's together for three days to exchange information on data communications. The workshop was so successful that we are already planning the next session!



The attendees of the SE Workshop in Amsterdam.

Left to right, Top row: Marc-Henry Bricquet—GRE, Jean-Pierre Baudouin—GRE, Ed Wagenaar—AMS, Rob Porter—WIN, Yvonik Laleouse—OSY, Christian Giorla—GVA, Hans Abendschön—FRA, Frank Slootweg—AMS, Jean-Luc de Schutter—BRU, Jean-Alain Moreau—OSY.

Bottom row: Damian Paredes—MAD, Andreas Rodhe—STK, Giuseppe Bordanzi—MIL, Horst Dworschack—VIE, Olaf Meyer—CPH.

Terminal Courses Again

By: Francis Marci/HPG

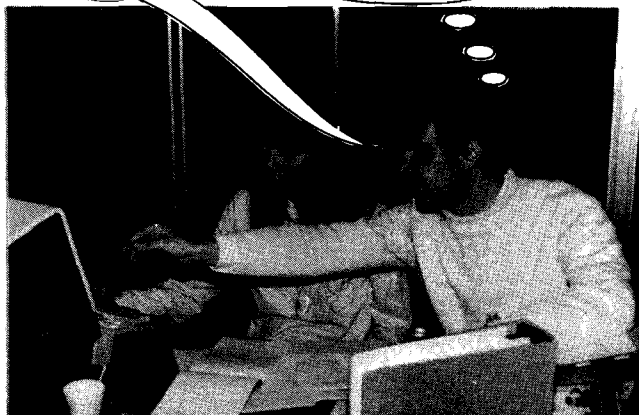
In September we hosted and trained with pleasure more European SR's and SE's. Some stayed an extra week at Grenoble to also attend the 2649 Customer Course (13294A), which is more and more comprehensive, full of detailed information and new impressive microprogramming techniques.

Before enjoying the traditional photos with captions, two important reminders:

1. You, SR, SE, beginner or senior, terminal specialist or system-oriented, are welcome to come and get dedicated training at any time (we prefer small groups to give you first class attention). And it's free. Give us a call today!
2. Every time we give a 2649 course, we are impressed by the skill of some customers. But we always have to train others who are absolutely unprepared, seeing a 264X for the first time in their lives or discovering the 8080 Assembler. Are you sure you sold them the course the proper way? Please check with us before you send customers to the course.

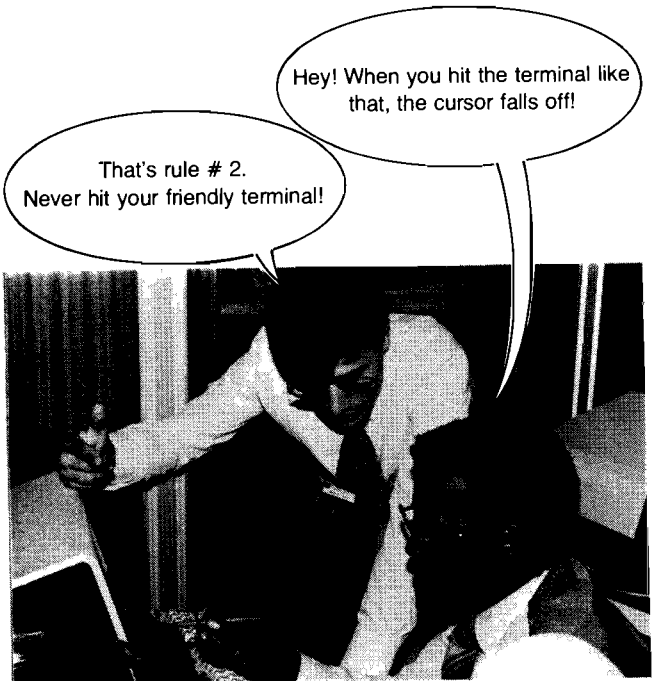
... and the cursor moved to the left.

The problem is that we have to carry some 2649 customers at arm's length.



Mrs. Mercier
(Institut De Physique Nucleaire Paris)

Robert Boissier
(HP Orsay)

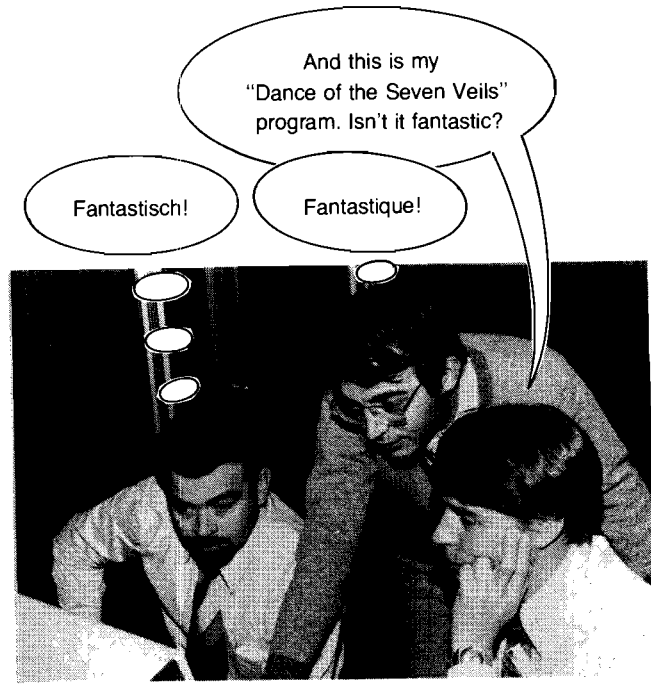


That's rule # 2.
Never hit your friendly terminal!

Hey! When you hit the terminal like that, the cursor falls off!

Maurice Poizat
(HP Grenoble)

Mr. Davids
(ITT—Brussels)



Fantastisch!

Fantastique!

And this is my
"Dance of the Seven Veils"
program. Isn't it fantastic?

*Karl Heinz
van Husen*
(HP Frankfurt)

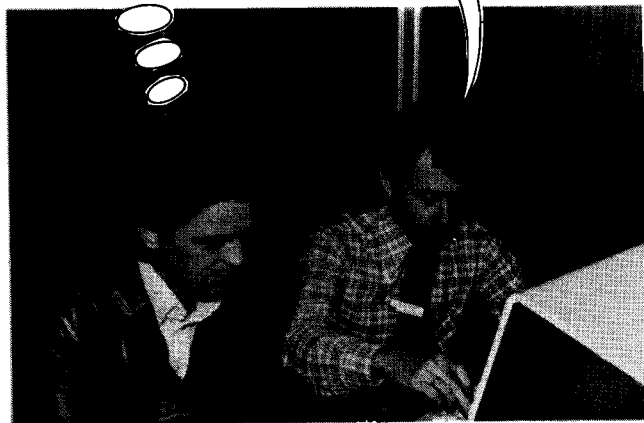
*Jean-Louis
Chapuis*
(HP Grenoble)

Les Bunce
(HP Winnersh)



The plot thickens.

Now "pen-down" . . .



Fritz Schürmeier
(HP Frankfurt)

David Padanyi
(HP Zurich)

CS GROUP NEWS

CSG News

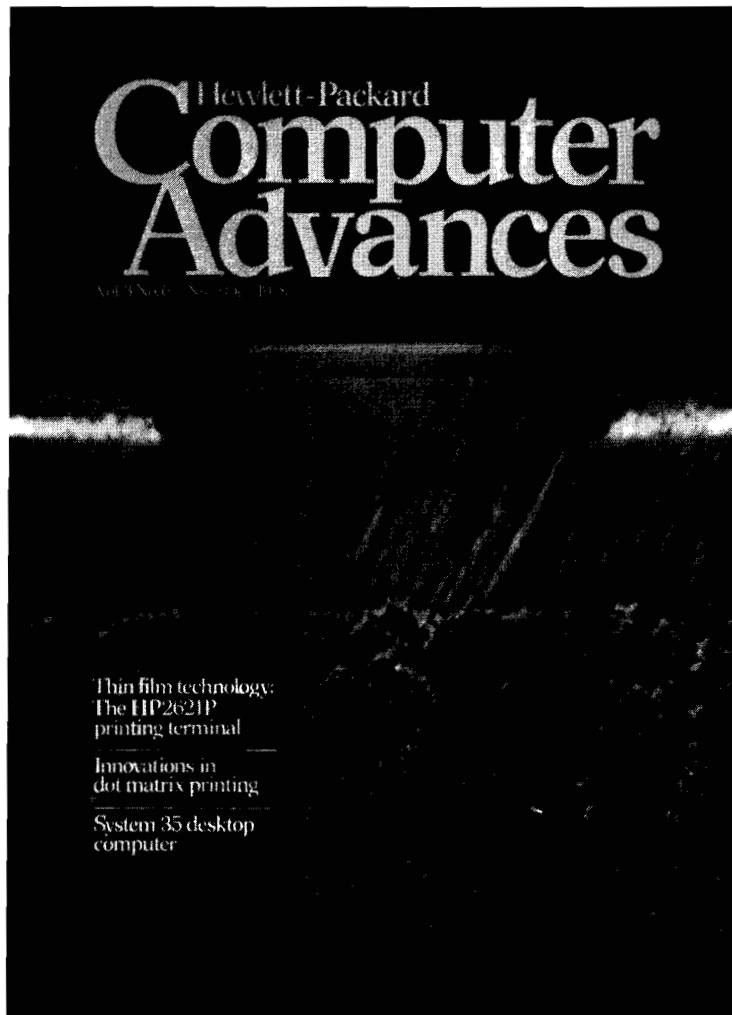
November Issue Of Computer Advances

By: Carol Scheifele/CSG

The November issue of *Computer Advances* emphasizes the fact that HP designs and manufactures its own peripherals making us "The one stop shop for terminals, printers, discs, and systems".

The issue covers a spectrum of products:

The HP 2621, HP 2608, HP 2631G, HP 2639, HP 1000 Model 35, and MFG/300.



The cover is an interesting microscopic photograph of the innovative thin film printhead featured on the HP 2621P. The rainbow of colors exhibited by the various layers was an exciting surprise.

Appearances for this issue will be in the special November issue of *Datamation* and the November 27th issue of *Computerworld*. Direct mailing to your prospects will occur the week of November 6th.

We are attempting to build the direct mail list so it reflects the names of your most promising prospects. Qualifying sign-up cards are available to accomplish this. Request them from *Carol Scheifele*, Bldg. 40, CSG, Cupertino. Please complete all categories of information so the list can serve as a source for future specific direct mailings.

Hewlett-Packard invites you to join its COMPUTER ADVANCES readership.

please open

HEWLETT-PACKARD Computer Advances Mailing List
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Category 1

Please write the number which BEST describes your company or institution in the CATEGORY 1 box below:

- MANUFACTURING/PROCESSING**
- 02 Electronic Measuring Test Equipment
 - 04 Computers - Numerical Control Mfg.
 - 06 Computers - Data Processing Equipment
 - 08 Computers - Communications Equipment
 - 10 Consumer Electronics Equipment
 - 12 Navigation/Control/Radar Systems
 - 14 Machine Tool/Shop
 - 16 Aircraft Parts
 - 18 Automobile/Railroad Vehicles
 - 20 Boat/Ship
 - 22 Petroleum Extraction Refining
 - 24 Chemicals/Plastics/Synthetic Rubber
 - 26 Textiles/Apparel
 - 28 Minerals
 - 30 Primary Metals
 - 32 Machinery/Fabric and Metal Products

SKILLS

- 34 Food/Beverage
- 36 Wood/Paper Products
- 38 Pharmaceuticals
- 40 Printing/Publishing
- 42 Other Manufacturing/Processing
- 44 Banking/Investment
- 46 Insurance
- 48 Accounting Services
- 50 Legal Services
- 52 Computer Systems House
- 54 Software/Systems Programming
- 56 Physical/Private Practice
- 58 Hospital/Clinic
- 60 Electric Gas Lines
- 62 Telephone/Telegraph/Post Services

- 64 Radio/TV/Cable Broadcasting
- 66 Transportation Carriers
- 68 Construction
- 70 Wholesale/Retail Trade
- 72 Civil Engineering/Surveying
- 74 Other Services

GOVERNMENT/EDUCATION/SEARCH

- 76 Federal Government (Non-Military)
- 78 Military Services
- 80 State/Local Government
- 82 College/University (Non-Medical)
- 84 Medical School
- 86 Secondary Education
- 88 Independent Research Lab./Non-Medical
- 90 Medical Research Organization

Category 2

Please write the number which BEST describes your professional activity in the CATEGORY 2 box below:

- 01 Management General/Corp
- 03 Finance/Accounting
- 05 Long Range Planning
- 07 Purchasing
- 09 Data Processing Major Supervisors
- 11 Systems Manager/Engineer
- 13 Marketing/Sales
- 15 Maintenance/Field Service
- 17 Research
- 19 Engineering Design/Development

- 21 Applications Engineering
- 23 Manufacturing Production
- 25 Process Control
- 27 Quality Control/Inst
- 29 Methods Development
- 31 Medical Administration
- 33 Medical Administration
- 35 Physician
- 37 Nurse
- 39 Medical Technician

- 41 Biochemistry
- 43 Laboratory Analysis
- 45 Clinical Engineering
- 47 Chemical Analysis
- 49 Consulting
- 51 Teaching
- 53 Student
- 55 Other

Please indicate your product interests by checking the boxes below

- A Display Terminals
- B Graphic Terminals
- C Hard Copy Terminals
- D Data Entry Terminals & Systems
- E Line Printers
- F Dot Matrix Printers
- G Other Printers
- H Magnetic Tape Drives
- I Interface Devices
- J Microprocessors

- K Computing Controllers
- L Control Processing Units
- M Hand Held Scientific Calculators
- N Portable Printing Calculators for Science & Engineering
- O Desktop Computers for Science & Engineering
- P Computer Systems for Science & Engineering
- Q Computer Systems for Production/Mfg

- R Automatic Test Systems
- S Hand Held Business Calculators
- T Portable Printing Calculators for Business
- U Small Business Computers
- V Large Business Computers
- W Business Data Processing
- X Distributed Data Processing
- Y Transaction Processing

HP has other product areas not listed above. If any of these are of particular interest to you, please check below:

- Medical Instrumentation
- Microelectronic Components
- Microelectronic Packaging
- Analytical/Chemical Instrumentation
- Electronic Measuring Test Instrumentation

Are you an owner of any HP Terminal, Desktop Computer or Computer System? Yes No

If yes, please indicate HP model Number: _____

I am interested in computer products for resale end use

Category 1:

Category 2:

Product Interest Matrix:

Category	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
Product Interest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HEWLETT-PACKARD

New CSG Sales Manager for Europe

By: Doug Chance/CSG



We are very pleased to announce that *Alex Sozonoff* is assuming the position of CSG Sales Manager Europe. *Alex* will report to *Heiner Blaesser*, CSG Marketing Manager Europe, and have direct responsibility for our six sales areas. Service, the SEO, MARCOM, and major accounts/contracts continue to report directly to *Heiner*.

Alex has most recently served as Fort Collins Marketing Manager. He has previous experience as CPD Marketing Manager, Calculator Sales Manager Europe, and APD Program Manager. His recent commercial marketing and sales experience will be a great addition to our European plan to "make 1979 a special year". *Alex* will be working full time in HPSA after January 1 and moving his family to Geneva this spring. He has already become heavily involved in a number of major account visits, however. We are happy to have a person of his experience added to our European sales team and wish him the best of luck in his new assignment.

<h1>COMPUTER SYSTEMS NEWSLETTER</h1>	HEWLETT-PACKARD COMPUTER SYSTEMS GROUP 11000 Wolfe Road; Cupertino, California 95014 USA	
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