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# COMPUTER SYSTEMS NEWSLETTER

*For HP Field Sales Personnel*

HEWLETT  PACKARD

Vol. 3, No. 23  
Oct. 15, 1978

Introducing: the

**HP 3000 Series 33**

SOS and MPE III combined in a low cost,  
high performance package designed for the office



Hewlett-Packard delivers big system capabilities for transaction processing applications at a low cost.

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# BOISE DIVISION NEWS

## Division News

### Neely Support

By: Gary Sherwood/Boise



Once again Boise Division has a new entry in the Sales Support Group. His name is *Jim Brusseau* and he will be supporting Neely South. *Jim* graduated 12 years ago from the University of Maryland with a Bachelor's Degree in Personnel and a Master's degree in Behavioral Sciences. *Jim* worked for 10 years in EDP programming while at school and after graduation. He then went to work for Armstrong for three years selling flooring on the west coast. Two years ago *Jim* came to work for HP in the Boise Division personnel department. He has recently decided to expand his career opportunities by entering the Marketing Department. He is now on-line and eagerly awaiting your calls so he can provide you support in the traditional Boise Division way. Please welcome *Jim* to Neely.

## Product News

### New 263X Serial Interface

By: Mary McNally/Boise

Boise Division has upgraded the serial interface for the 2631A, 2635A family of printers. The previous serial interface was not set up to recognize NULL and DELETE characters as timing characters in the data stream. As a result, DELETE characters were printed with the rest of the data. The new serial interface recognizes and strips NULL and DELETE characters from the data stream.

The new interface will replace the current serial interface in Options 041 and 051 for both 2631A and 2635A printers as of November 1. The interface will also be available in a conversion kit as 26095A Options 041 and 051 at that time.

### Here Comes The "G"

By: Robert McCaleb/Boise

You can now order the 2631G—Boise's new "Graphics Plus" printer. Here's how:

Product	Price
2631G 180 cps (instantaneous) printer with raster data format graphics, 128 USASCII character set, IEEE 488-1975 I/F, Operator's Manual, Pocket Guide, Technical Reference Manual, ribbon cartridge, hex key cleaning brush, power cord.	\$ 4,250.00
001 Swedish/Finnish	} *
002 Norwegian/Danish	
003 French	
004 German	
005 U.K.	
006 Spanish	} *
007 Cyrillic	
008 Katakana	\$ 150.00
009 Extended Roman	\$ *
010 Math	\$ 150.00
011 Line Draw	\$ 150.00
012 High Density Print Set	\$ 150.00
015 220V 48-62Hz	\$ 0
016 100V 48-62Hz	\$ 0
017 240V 48-62Hz	\$ 0
715 Service Documentation	\$ 15.00
26098A Stand for 2631G	\$ 275.00
001 Adds casters	\$ 15.00
002 Adds paper stacking shelf	\$ 50.00



### OPERATING SUPPLIES

Ribbon Cartridge	Order Number	Qty	Price
		1	\$ 15.00
		6	\$ 12.00
		12	\$ 10.50

The 2631G is currently supported only on 2647A and 2648A terminals using HP-IB. Call your Boise Division Sales Development Engineer with your questions.

\*A maximum of three Options 001 through 012 may be ordered, but only one of Options 001 through 006 and 009 can be ordered. Remember, Options 001 through 006 and 009 all come in one ROM, so you need only order one option to get all those languages! Any Option 001-006 or 009 is priced at \$150.

### 2631G CRT Dump Device

By: Jim Brusseau/Boise

The 2631G is the exciting new hard copy graphics printer developed by the Boise Division. To take full sales advantages of this new device, it is important to be familiar with its many new features.

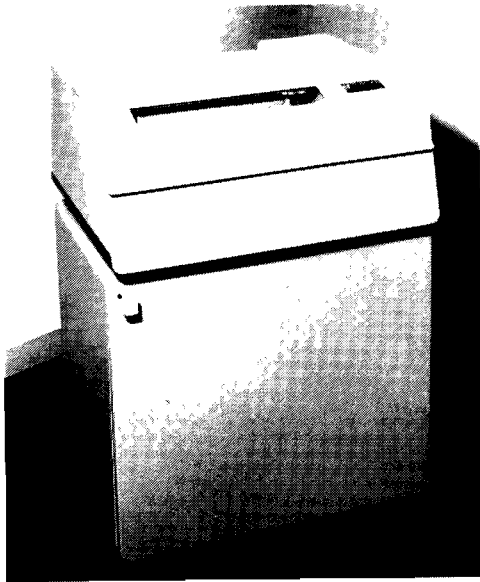
Probably the most significant selling features of the 2631G are that it requires no special paper and that it is capable of printing on multipart forms. Additionally, it has graphics capability and the power of a high speed printer. No other CRT dump device in its price range gives your customer these capabilities.

Further, there are additional enhancements on the 2631G which fill a number of your customer's needs. There are now four print widths (5, 7.2, 10, 14.4 cpi) which give your customer much more flexibility in report formatting. In addition, the 2631G has the ability to contain multiple secondary character sets, a line drawing set to create forms in ASCII mode, and a new high-density character set which enhances the print quality for letters and reports.

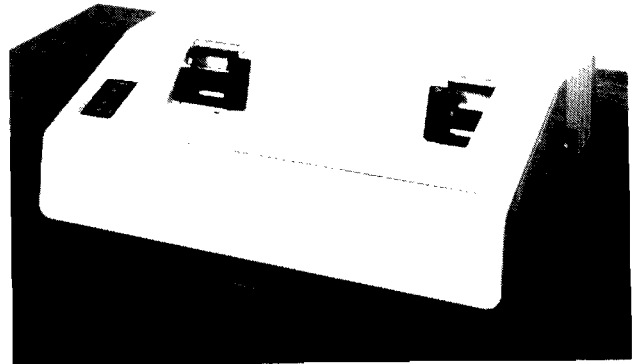
Vertical forms control is a real plus on the 2631G. Both page length, the length of the physical page, and text length, defined as the length of the printed text on the page, are programmable. These two controls, used in conjunction with the automatic page perforation skip mode, enable your customer to handle forms of any length up to 225 lines.

The 2631G is the ideal hard-copy device for use with 2647A/2648A terminals. There is, though, no support for the 2631G on any other HP systems. Although it is an HP-IB device and could be easily connected to many HP systems, there is no software, either graphics packages or drivers, which will allow it to be used easily. Further, because of this interface limitation, the 2631G will not be discounted to OEM's. It is important that both you and your customer are aware of these facts before selling into one of these situations.

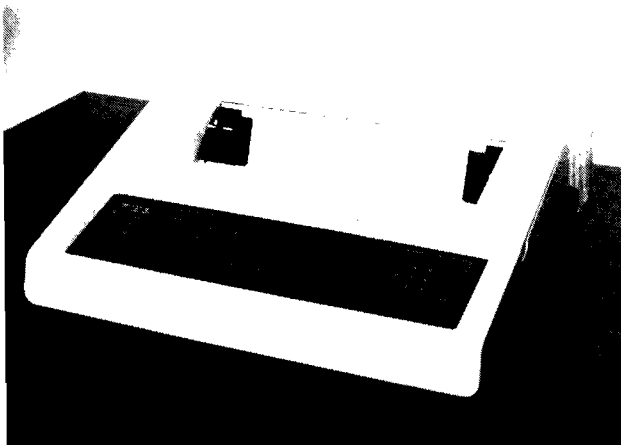
For further information on this new CRT dump device, contact your regional Sales Development Engineer.



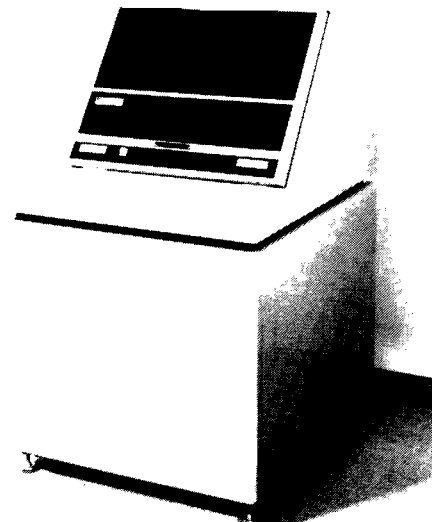
HP 2608 A



HP 2631G



HP 2639 A



HP 7970

# DATA SYSTEMS NEWS

## Product News

### New Low Cost Auxiliary Terminal for the HP 1000

By: Van Diehl/DSD

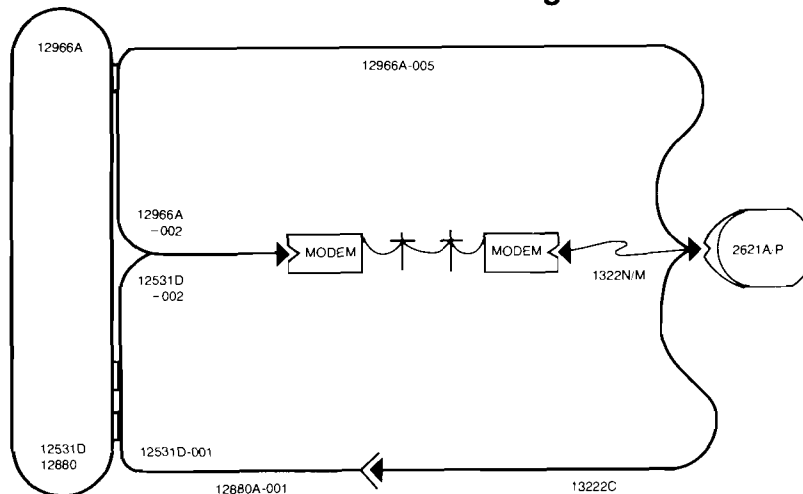
DSD is introducing two super terminals—the 2621A and 2621P. These terminals can be used with the HP 1000 as auxiliary terminals. (They cannot be used as system consoles because of the requirement of minicartridges for diagnostic and software updates.) These low cost terminals can be used either with the 12966A buffered interface card and the DVR05/DVA05 driver or the 12531D/12880 interface cards and DVR00 driver. Note the line mode editing is only supported with the 12966A interface card, (which is the recommended interface for use with these terminals).

The following table and diagram summarize the mode of operation and the recommended cables.

All components shown are orderable, starting October 1st, except the Option 005 (cable) for the 12966A interface that will be orderable starting November 1st.

HP 2621 Configuration	Char/Line	Console/ Terminal	Hardwired/Remote	Driver/ Terminal Type	Operating System
2621 A or P	Either — Line mode allowed w/ 12966 card only.	Either	Either via 12966A 12531A MUX  Hardwired only via 12880A	DVR05/DVA05 with 12966  DVR00 with 12880 or 12531	RTE-M RTE-II RTE-IV

### Recommended Cable Configuration



## Paper Tape Diagnostics No Longer Shipped with HP 1000 Components

By: Bill Elmore/DSD

Because paper tape is no longer the primary media for diagnostic or driver software, we are going to eliminate the practice of shipping paper tape diagnostics and drivers with every component.

Products shipped after November 1, 1978 from DSD and Grenoble will no longer contain paper tape diagnostics, drivers, and any associate diagnostic or driver manuals. For the most part, customers should not be affected. Those customers who still have a need can order diagnostics on paper tape (24396A) or RTE drivers on paper tape (92062A).

One additional note on diagnostics. Since customers will be ordering the 24396A product only once, they should also be encouraged to order the 24396S Diagnostic Subscription Service to insure having the most recent diagnostic with which to test their equipment.

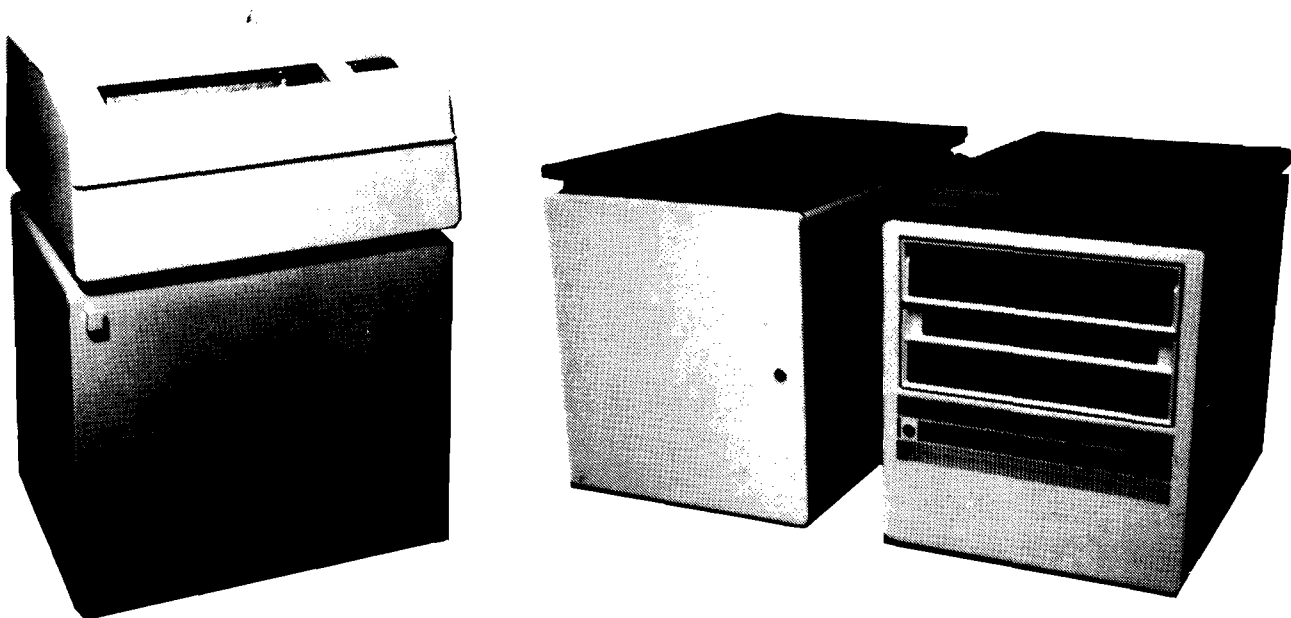
Following is a list of products affected by the change:

Computers	Accessories
2105A	12977A/B — M-Series FFP
2108B	
2108M	12539C — Time Base Generator
2109B	12566B — Microcircuit I/F
2109E	12892B — Memory Protect
2112B	12897B — DCPC
2112M	12930A — MUX
2113B	12554A — 16-bit duplex register
2113E	12597A — 8-bit duplex register
	12604B — Data Source I/F
	12909B — PROM Writer
2117F	12936A — Privileged Interrupt Fence
	12976B — DMS M-Series
	12978A — 256 word WCS
	13197A — 1K word WCS
	13305A — DMS E-Series
	13306A — E-Series FFP
	2102B/C/E/H — Memory Controllers
	59310B — HP-IB I/F
	91000 — A/D I/F
	91200B — Video I/F

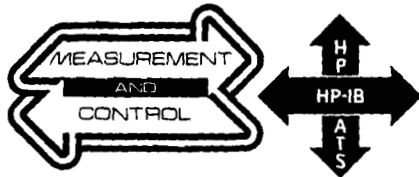
## Order 2608A with Option 210 for HP 1000

By: Mike Scott/DSD

In the last issue of the *CS Newsletter*, I discussed the 2608A on the HP 1000 but failed to mention the option that should be ordered with the 2608A. Option 210 includes the 26099A and everything else required for interface to the HP 1000. The list price for Option 210 is \$650.



# Automated Measurement News



## Automated Measurement News

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

VOL 1

OCTOBER 1978

NO 5

### DSD AUTHORS SPEAK AT ATEX EAST

By: Dave Kline

The first ever National ATE Association Seminar and Exhibit held in Boston, September 25 - 27, had 2 speakers from DSD. Andy Mills chaired the first day's Technical session titled "ATE System Test". The writer presented a paper titled "ATE Networking and Data Base Management - New Tools for Improved Plant Efficiency". There were over 750 preregistrations for the conference.

The writer's paper discusses the benefits of Networking and describes 3 implementations -- Navy, Keyport, Washington; Medtronics, St. Paul, Minn; and Hughes, Tuscon, Arizona.

Reprints are available on request.

### ATS AND GOOD SELLING GET 100% HP IN MISSILE PRODUCTION TEST

By: Dave Kline

One innovative FE from SSR just booked his 6th over \$100K ATS system from a large prime contractor to do missile electronic test. How he converted all tester components to HP using imaginative selling makes an interesting story.

The main competition for test systems with this customer was in-house design using DEC computers. In-house design would have taken considerable time. Since the customer needed to be operational quickly SSR arranged to get a patch panel layout 6 weeks after order. The early layout allowed his customer to begin adapter design soon after order. Since the programming information was also available early, his customer felt more assured of meeting schedules by buying ATS from HP than by building his own. Assured ATS delivery and quick interface and programming information turned the customer to HP ATS.

How our SSR Field Hero got the last 2 instruments converted to HP shows real resourcefulness. The customer wanted a North American Gain/Phase Meter for \$2000 less than the HP 3575. By showing the customer the value HP provides of software device subroutines, rack cable design, system functional test, system support availability and system manuals SSR convinced the customer that for the 20 hours that \$2000 buys HP was a better buy. That took care of the 3575.

The TEK Storage Scope their customer wanted was tougher. After explaining all HP Scope benefits one-by-one and seemingly failing, our SSR Hero tried one last effort. He offered to give his customer "a pail of HP gray paint to ship to TEK so their Scope would match the station". With that offer the customer finally gave up and converted to the HP 1741. Color matching was the final straw to convert this customer to the HP Scope.

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While there are some non HP components that we don't make like Autek Waveform Analyzers and Elgar 3 phase power, all is HP made that HP makes.

For your general interest, the three ATS orders in July, 1978 will be used to test in production heat seeking missiles and the 1st three ordered in September are for F-18 missiles. We are furnishing a 2113 "E" model computer, with 2648 graphics and the new 2608 line printer on this order.

Other benefits helping the sale were the offering of newer HP instruments than the in-house competition, and the use of RTE which eliminated the need for program preparation.

It's amazing that a little thing like paint color can put the final touch to go 100% HP.

#### HELPFUL HINTS ON ATS QUOTES

By: Harry Haayer

Here are a few hints and reminders learned from recent experiences which might make your quotations quicker.

#### A) How to Expedite Quoting Specials!

##### 1) For HP instruments not on the HP ATS Configuration Guide:

- a) List instrument and options with prices on worksheet 9 of the HP ATS Guide.
- b) Add a brief note on Worksheet 9 for racking and configuration considerations such as:
  - "Manual supply connected to high current panel"
  - "Integrate with device subroutine (driver) and connect to 9412"
- c) Indicate how instrument is to be connected in Table 1 (page 19 of Guide).

##### 2) Quoting OEM Instrument Specials Guidelines:

- a) Can an HP instrument do the job? If the answer is yes than a competing instrument cannot be considered.
- b) Nonnally OEM instruments are beyond the scope of HP ATS and will not be quoted by DSD (for exceptions please refer to the HP ATS Field Training Manual page 29)
- c) Under certain circumstances (multiple system program sale) DSD will quote a racked and cabled only OEM instrument which is Customer Furnished Equipment (CFE). This means the customer assumes the responsibility for procurement, service and support for the OEM instrument.

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- d) Fully integrated OEM instruments are limited to those specified in the HP ATS Field Training Manual. (always customer furnished equipment) Exceptions to this require Division Management approval and in most cases are beyond DSD's specials capability.
- B) High current power supplies (greater than 5 AMPS) should be connected to a high current panel. Power supplies that are 5 AMP and lower can be connected to the 9412 modular switch.
- C) For customers who want the System 1000 before the Automatic Test Equipment portion of the system:
- 1) The System 1000 would not be consolidated. i.e., the price of the System 1000 will not be included in the consolidation unit calculation.
  - 2) Order HP 93284A-006 (line 11 on HP-ATS Summary page.  
Note: For a \$50K System 1000 the total system price would be the same considering 1) and 2) above!
  - 3) When the System 1000 is not consolidated the additional system peripherals (over the base HP 1000) will not be integrated.

NETWORKING HELPS SELL 5 ATS'S

By: Dave Kline

Our Neely FE in the Northwest just booked his second and third ATS this year (sold as "9580" for HP convience in negotiations) and expects 2 more early next year for a distributed systems network for a military base to repair torpedo electronics. The reason for selecting HP over other ATE was availability of a Distributed Systems Package, DS 1000 and the Data Base Management and Graphics Packages. Another major consideration in selecting HP in addition to the above software packages was the need to remain compatible with the 8,9500 stations also at this facility, so they may also be tied into the network by the customer.

In addition to the 3 ATS systems sold, a new central was provided. The central consists of a 2113 with 128K words high performance memory; 2, 7920 discs, and 2, 2648 graphics terminals.

The ATS's ordered included the first HP 8568 Low Frequency Spectrum Analyzer to be integrated by DSD. The ATS's also have some OEM consisting of a 3 phase power meter, and Elgar AC power supplies. The ATS stations will be used by the military base for testing power supplies, while the one previous station tests low noise amplifiers. Switching is handled by the HP 9411 family.

The 2 ATS's for next year will test video and A to D converters respectively.

As seen in the Northwest, Distributed Systems capability can help sell ATS.

## Sales Aids

### What's Happening with DATACAP/1000?

By: Linda Siener/DSD

#### What is DATACAP/1000?

Briefly, DATACAP/1000 is a software package designed to help your customers create a factory data collection system with multiple HP 3070 terminals and HP 1000 Computer Systems.

Four different types of people are involved in a factory data capture system:

1. The factory worker who enters the data into the 3070 terminal.
2. The computer operator responsible for daily DATACAP operations and maintenance of journal files, databases and/or user programs.
3. The DATACAP administrator/designer who creates/modifies the system and its interface to other system/applications.
4. The managers/supervisors who access the timely and accurately collected data to get immediate information about where jobs are, how many parts were made, etc.

The DATACAP software consists of two sets of "software tools". The first allows the DATACAP administrator/designer to define how the 3070 terminal will be used (called the "transaction specification"). A transaction specification consists of a definition of the sequence in which the prompting lights should be lit prompting the worker for information, how the data should be validated (integer, real, string, against a database), and where the data should be stored (disc file, mag tape, database). The second tool helps the administrator/designer create the program that controls and monitors the terminals according to the transaction specifications. FOR A MORE DETAILED EXPLANATION OF DATACAP, THE DATA SHEET, (5953-3008), AND THE REFERENCE MANUAL, (92903-90001) ARE NOW AVAILABLE.

#### Performance Considerations

During the month of June, we tested DATACAP with different numbers of 3070 terminals and different types of transactions. We have some statistics that will help you judge the suitability of DATACAP to your customers' data capture problems.

The major objective of our testing was to get a feeling for three parameters of DATACAP/1000: throughput, response time and CPU utilization. We did not intend to represent any particular customer's application. Instead, we attempted to define the limits of DATACAP's performance. The tests were conducted on an HP 1000 System using a 21MX E-Series processor with RTE-IV operating system, Fast FORTRAN Processor, 2645A console, 7906A 20Mb disc, 7970 Tape Unit and 256Kb of high speed memory.

Please keep in mind that all testing was conducted with constant activity on all terminals and that we were dealing with a far more severe environment than the expected occasional walk-up user in a real factory data collection environment. In other words, when we tested a 12-terminal situation, it was with all 12 being used *simultaneously* and *continuously*. No allowance was made for the fact that, in most installations of 12 terminals, between 4 and 8 might be in use at any one time. DATACAP can handle about 18 terminals *simultaneously* executing a transaction specification. The 19th terminal to become active will receive an error message that means "I'm busy, try again". With *non-continuous* activity, DATACAP can handle up to the EQT limit of terminals in the system. If you need more than 18 simultaneously executing terminals, please give me a call, as a few other considerations are involved which may alter the limit of 18.

**TEST 1:** Executing a simple transaction of 44 bytes (4 ASCII strings, 1 integer number, 1 real number), no card reading, no IMAGE database access, and no user modules, DATACAP supported 12 terminals with an activity of 2.5 transactions per minute per terminal with CPU utilization of 90% and an average response time of 0.4 seconds. For 18 terminals the average number of transactions per minute per terminal was about 2.0 with an average response time of 0.5 seconds. For 5 terminals it was 3 transactions per minute per terminal with average response time of 0.3 seconds.

**TEST 2:** When executing TEST 1 with all information on a punched card, DATACAP supported 12 terminals with an activity of 26 transactions per minute per terminal with CPU utilization of 99% and an average response time of 8.5 seconds. For 18 terminals the average number of transactions per minute per terminal was about 1.7 with a response time of 11 seconds. For 5 terminals it was 4.4 transactions per minute per terminal with a response time of 4.7 seconds.

**TEST 3:** Executing a more elaborate transaction of 70 bytes, (9 database items: 7 ASCII strings, 1 real number, 1 integer number) key and card input, IMAGE database access and user module interaction, DATACAP supported 12 terminals with an activity of about 1.7 transactions per minute per terminal with CPU utilization of about 97% and an average response time of 1.7 seconds. For 18 terminals the average number of transactions per minute per terminal was about 1 with an average response time of 2.3 seconds. For 5 terminals it was about 2.8 transactions per minute per terminal with an average response time of 1.3 seconds.

**TEST 4:** Simulating a more realistic environment of all three of the above tests running, 18 terminals were supported with a throughput of 1.4 transactions per minute per terminal, 98% CPU utilization and an average response time of 3 seconds.

I would like to re-emphasize the limited nature of these tests by again stating that all terminals in all tests were *constantly* busy.

Realizing performance measurements seem to raise more questions than they answer, please don't hesitate to give me a call.

**Current Sales Activity**

The current sales activity of DATACAP is:

1. Two installations: in our Palo Alto Manufacturing Division and in our Grenoble plant;
2. One customer whose system was just recently shipped;
3. About 3 proposals;
4. About 15 sales people currently getting ready to quote, and
5. Two sales offices (Neely Santa Clara and Tualatin) have successfully held Data Capture seminars for around forty customers, and Neely Bellevue will be holding one soon.

We've found that a common customer response to DATACAP is, "I can't believe HP really has a datasheet on a software product like this! I've had applications for this sitting on the shelf for three years waiting to be programmed!" And from our DATACAP users, "Overall, I'm very impressed with the capabilities of DATACAP and the ease with which we got an application up and running. DATACAP got our installation up and running within a few weeks instead of the year it would have taken me to program it!"

In conclusion, DATACAP is indeed on the Corporate Price List (#92903A for \$2500), we now have datasheets and reference manuals available and courses are being taught which cover DATACAP/1000 and the performance considerations: for SE's, the Operations Management Course (one in October), and for Sales Representatives the Industry Applications Course.

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**SELL THE HP 1000, DATACAP AND 3070B's!**


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**Letters . . . we get letters . . .**

*By: Jan Weldon/DSD*

What does a prisoner in Leavenworth have in common with a Maryland horticulturalist and a New Jersey pharmacologist? They all want to know more about the HP 1000 Model 45!

Although the majority of Data Systems' inquiries come from engineers, managers, and computer professionals (our respondent from Leavenworth evidently was a programmer

in real life), occasionally we hear from some unusual market segment. For example, the president of a Texas beef packing plant wanted to know more about the F-Series' computational capability. (Haven't we insisted for years that HP computers were prime choice?)

Inquiries also crossed the desk from a national candy company (how sweet it is); manufacturers of women's lingerie, home canning equipment, and baby products; a Cincinnati TV station; and the Anchorage school district. Have you ever tried to figure out which field engineer has territorial responsibility for Killimnee, Florida or Kosmodale, Kentucky?

As of September 20, the winning Model 45 "number-cruncher" ad had generated 247 inquiries — all of which were personally answered and passed along to you in the field.

No matter who, what or where, we *do* take our prospective customers seriously.

---

**IDC Programs Now Available to the Field**

*By: Dennis Haar/DSD*

Data Systems Division Sales Development has been maintaining the International Data Corporation (IDC) OEM list on an IMAGE 1000 database since January. During this period, we have been providing information from this database to the field upon request (see January 9, 1978 issue of the *CS Newsletter*).

There have also been several requests for the database itself and the necessary application programs. Many offices maintain local databases which could be enhanced with IDC information. In order to service these requests, I have documented the IDC programs and put them on a mag tape available to the field.

If you wish to get the IDC programs, please send a blank mag tape (about 200 ft) to me here at DSD. This tape will not include the IDC list itself, so an additional mag tape will be needed if a copy of this list is not available in your sales office.

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# DATA TERMINALS NEWS

## Division News

### The New ESR Team

By: Bill Swift/DTD

Our group has grown to three! *Craig Clark* joined our Sales Development team on September 15, and his primary area of responsibility will be supporting the Northern area of the Eastern Sales Region.

*Craig* joins us from Data Systems where he logged five years of factory experience in the Controller's Department. He was also heavily involved with the start-up of Cupertino's LSI facility.

In addition to *Craig*, *Mark Willner* will be the primary support person for the Southern area, and I will continue to support the Central area.

#### Eastern Sales Region Support:

NORTHERN AREA	<i>Craig Clark</i>
New Haven	
Lexington	
Fairport	

CENTRAL AREA	<i>Bill Swift</i>
King of Prussia	
Manhattan	
Paramus	
Woodbury	

SOUTHERN AREA	<i>Mark Willner</i>
Baltimore	
Rockville	

We have a very strong team working with ESR, and we intend to supply the same high level of support you've come to expect from DTD.

## Product News

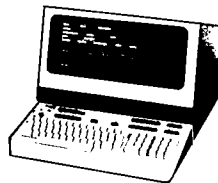
### 2640B Expanded Memory

By: Eric Grandjean/DTD

For the same low price of \$2600 (U.S.), the 2640B now has an additional 4 Kbytes of display memory, for a total of

5 Kbytes. This additional memory represents a reduction in price of about \$300. On top of this, the full 128-character set is now standard, which saves your customer another \$100. Of course, the 2640N and 2640S are included in this change.

This is like giving your customers a 15% discount! Or, looking at it another way:



+ 13234A  
+ OPT 001 } = New Standard 2640B Configuration

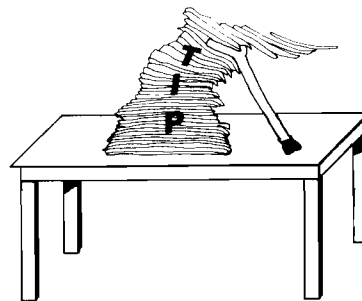
If your customer needs:

- Block Mode
- Format Mode
- Display Enhancement
- Low Cost Quality

The 2640B is more than ever—the answer. Data sheets will be updated very shortly.

### A Tip on T.I.P.

By: Eric Grandjean/DTD



Our Technical Information Package now contains (2648A) graphics!

These new sections describe the hardware modules of the 2649A graphic options:

Universal Memory Module	13255-91171
Graphic Display Module	13255-91126
Graphic M-Module	13255-91125

In addition, the source listing of the 2648A is now available as Option 004 of the 13255A T.I.P. or as a separate module 13255-90010.

Future orders of 13255A will contain the additional hardware modules at no additional charge. Option 003 will provide the original 2645A Maincode source listing; Option 004 will provide the 2648A Maincode listing.

**SELL OEM!**

**Sales Aids**

**The 2645A Border Line**

By: Eric Grandjean/DTD



You or your customer are working on an application; at one point in time you happen to discover that your terminal does something funny or something that is not unexplained, anywhere in the manual. First reaction: "I found a bug!" Or did you??

Here is a case which reveals some of the many ideas and considerations which went into the design of our terminals and which, for practical reasons, were never published in our manuals.

Most 2645 functions operate identically whether initiated from the keyboard, the datacomm, or an I/O device. There are, however, a few exceptions. For example:

- Data entered from the keyboard will cause the bell to ring on approaching the end of a display line; this is not true for data entered from the datacomm or an I/O device.

- Data entry from the keyboard in format mode generally involves only unprotected fields, while data entry from the datacomm or an I/O device will fill transmit-only fields as well.
- A third example is the handling of I/O device control errors (e.g., an attempt to rewind a non-existent tape). If the operation was initiated from the keyboard, an error message is displayed until the user/operator acknowledges the error by pressing the Return key. If the operation was initiated from the datacomm, the terminal responds by sending a failing response (F) code back to the datacomm (the host may then determine the nature of the error by requesting device status).

These function differences were designed into the 2645 to enhance the user interface. However, there are some side effects which the user may need to be aware of if he/she intends to make full use of the 2645's capabilities. These are enumerated below:

1. ESC H (home to transmit-only or unprotected field)  
 ESC Z (terminal self-test)  
 ESC & f . . . (define soft key), and  
 ESC & p [3 s] B  
 ESC & p [3 s] F  
 ESC & p [3 s] M  
 [ESC & p 3 S] ESC e } (copy from display)

When executed from a local-only softkey (L) the above sequences cause subsequent characters in that softkey to be interpreted as if they were received from the datacomm (i.e., device errors from subsequent operations are not displayed, the bell is not rung at end of field, etc.)

The same effect may be noted when one of the first three operations is included in an I/O device record (the other sequences are not legal in this context). In this case, the rest of the data transferred in the particular operation will be affected.

To avoid problems, one may:

- a. Use only Normal-mode softkeys (N) when the above operations must be followed by device-control or other sensitive operations in a softkey.
- b. Replace ESC H by ESC h or equivalent cursor-positioning escape sequences (e.g., ESC A, ESC & a . . . , etc.) when it must be used in a Local-only softkey (L) or from an I/O device record.

- c. The most common use for such a softkey, home up and copy all from display to I/O device, is implemented by pressing the RECORD or ENTER keys in local mode.
2. ESC h (home up) in format mode and ESC W (enter format mode), when executed from an I/O device, cause the cursor to be positioned in the first unprotected or transmit-only field on the display, rather than to the first unprotected field. If this represents a problem, the user should follow these operations by appropriate cursor controls (e.g., TAB, ESC A, ESC & a . . . , etc.) when executed from an I/O device.
  3. ESC J (clear display) in format mode, when executed from an I/O device with the cursor positioned above all fields in the display, will clear an initial transmit-only field (if one exists) rather than clearing just the unprotected fields. If this is a problem, one should be careful to position the cursor prior to executing the clear display command.

We hope that this clarification will help you with "problems" raised by your customer. Our manuals have been designed to adequately cover the majority of applications and we wanted to keep them to a reasonable size.

Only in rare cases will your customers be confronted with border-line problems such as the ones exposed above. It has been our observation that in most cases they have found the light on their own. It is also interesting to note that quite a number of alleged bugs turned out to be unpublished features! Please avoid falling in the bug trap after a long day's work. Give us a call when in doubt.

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### Reading Format Mode Tapes in Binary Or Getting More Than You Bargained For

By: Mark Willner/DTD

If you have ever tried to read tapes created in format mode using the binary READ escape sequence (E<sub>c</sub>&p2R), you found that each field on the tape was preceded by two or four mysterious characters. The first character appears to be an upper case D and is followed by a control character. The third character also appears to be an upper case D and it too is followed by a control character.

What makes matters worse is that if you read the tape locally with display functions on, you won't see these extra characters.

So what are these characters used for and why can't you see them with display functions on?

The answer is that these characters are binary data used to locate fields on the screen. What appears to be an uppercase D is really an octal 304 (a capital D with the parity bit set). What appear to be control characters are binary numbers which indicate a number of rows or columns to skip before placing the field on the screen.

The reason that display functions does not reveal these characters is because of the way in which the terminal interprets characters with a set-parity bit. In the case of octal 304, the terminal throws these characters away after placing the fields into their coded positions in format mode.

Normally these extra characters cause no problems and can be ignored by the CPU. However, if you are operating in half duplex with main channel protocol, you are in for a headache. If the binary row/column count is a 3 or 4, the control character you see will be an ETX or EOT. With main channel protocol, both of these control characters will turn the line around. A most undesirable side effect.

The solution to this problem is to have your customer do an ASCII read (rather than a binary), if he is using main channel protocol. If he insists on the binary read, a possible fix is to first read the tape to the display and then do the binary read from the display. More on this in another CS Newsletter article.

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**GOOD SELLING!**

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### The Marketeer's Corner Terminal Review By Feature

By: Martin Gonzalez/DTD

Hello! In the last issue of the CS Newsletter, we presented the applications where our terminals are being installed. We now follow up on a review of the features that are found in our family of terminals and the chart that follows, hopefully, will provide you with a wealth of knowledge of terminal features at-a-glance.

If you want additional copies, please feel free to call us.

**GOOD SELLING!**

Terminal Review By Feature

STD = STANDARD FEATURE  
 OPT = OPTIONAL FEATURE  
 LTD = LIMITED FEATURE

Feature	2621A/P	2640B	2645A	2647A	2648A	2649X	2631A/G	2635A	3070B	7260A
Keyboard	Simplified	STD	STD	STD	STD	OPT	No	STD	STD	No
Reader		Interfaceable					No	Interfaceable	Badges, Mark Sense/ Punch Card	Mark Sense Cards, LTD Punch Card
Cartridge Tapes	No	No	OPT	STD	OPT	OPT	No	No	No	No
Digitizer	No	No	No	OPT	No	Customer Design	No	No	No	No

Printer	Built-In 26218 Only	OPT	OPT	OPT	OPT	OPT	STD	STD	STD	No
Display		1920 Characters					No	No	15 Char. Numeric	No
Cartridge Tapes	No	No	OPT	STD	OPT	OPT	No	No	No	No
Video	No	OPT	OPT	OPT	OPT	OPT	No	No	No	No
Plotter	No	No	No	OPT	OPT	Customer Design	No	No	No	No

Page Mode	No	STD	STD	STD	STD	OPT	No	No	Buffered Input	No
Off-Line Editing	STD	STD	STD	STD	STD	OPT	No	LTD	LTD	No
Line-Drawing Character Set	No	OPT	OPT	OPT	OPT	OPT	OPT	OPT	No	No
Input Validation	No	No	Character	Character	Character	OPT	No	No	Input Medium	No
Auto Data Logging	STD	No	OPT	STD	OPT	OPT	No	No	No	No
Transmit-Only Fields	No	No	STD	STD	STD	OPT	No	No	No	No



Terminal Review By Feature (Continued)

STD = STANDARD FEATURE  
 OPT = OPTIONAL FEATURE  
 LTD = LIMITED FEATURE

	2621A/P	2640B	2645A	2647A	2648A	2649X	2631A/G	2635A	3070B	7260A	
ADDITIONAL FEATURES	User Programs	No	No	No	STD	No	OPT	No	No	No	
	User-Programmable Keys	No	No	STD	STD	STD	OPT	No	No	STD	
	STD Character Set	128 ASCII	128 ASCII	128 ASCII	128 ASCII	128 ASCII	OPT	128 ASCII OPT Foreign Lang.	128 ASCII OPT Foreign Lang	15 Char Numeric	Reads 128 Hollerith XMITs 128 ASCII
	Plug-In Character Set	NO	OPT (3)	OPT (3)	OPT (3)	OPT (3)	OPT (3)	OPT (1)	OPT (1)	No	No
	Display Memory—STD	4K	5K	4K	12K	8K	0K	No	No	No	No
	Display Memory—OPT	—	8K	12K	—	12K	12K	—	—	—	—
	Display Enhancements—STD	Underline			Inverse Video			Underline	Underline	No	No
	Display Enhancements—OPT	—			Blinking, Half-Bright, Underline			—	—	—	—
	Self-Test	STD	STD	STD	STD	STD	STD	STD	STD	STD	No
	Option Slots—QTY	0	2 +5 With Extender	7	1	4	11	No	No	No	No

DATA COMMUNICATIONS	Line Configurations: Point-To-Point	STD	STD	STD	STD	STD	OPT	STD	STD	No	STD
	Multipoint	No	No	OPT	OPT	OPT	OPT	OPT	OPT	No	No
	Transmission Modes: Asynchronous	STD	STD	STD	STD	STD	OPT	STD	STD	No	STD
	Synchronous	No	No	OPT	OPT	OPT	OPT	No	No	No	No
	20 mA Current Loop	No	OPT	OPT	OPT	OPT	OPT	OPT	OPT	No	No
	Transfer Rates: Bits Per Second	110-9600	110-2400	110-9600	110-9600	110-9600	110-9600	110-2400	110-2400	25,000	110-2400
	External	STD	STD	STD	STD	STD	OPT	STD	STD	No	No
Custom	No	OPT	OPT	OPT	OPT	OPT	No	No	No	No	

# GENERAL SYSTEMS NEWS

## Product News

### SOS + MPE III: Introducing the HP 3000 Series 33

By: Rich Edwards/GSD

On October 3, Hewlett-Packard introduced the newest HP 3000 — the Series 33. The Series 33 makes the following contributions:

- Designed for the office environment
- Low-cost member of an MPE III compatible family (Series 33, II, III)
- Designed to meet the on-line transaction processing needs of business and industry
- A total Hewlett-Packard approach to a low-cost system through HP technology: mainframe, low-cost peripherals with advanced features, lower cost of maintenance through new system service tools and protection of users' software investment through MPE III compatibility.

The Series 33 joins a large and growing HP 3000 installed base. Through your sales success, we have over 1800 HP 3000's installed worldwide. With the addition of the Series 33 to the current MPE III line of 3000's, your customers in FY '79 will have a broad range of HP 3000's from which to choose.

#### System Description

Hewlett-Packard Company's HP 3000 Series 33 is a powerful, multiple terminal, interactive business data processing system designed for use as an organization's complete EDP system. Joining the HP 3000 product line, the HP 3000 Series 33 is Hewlett-Packard's first application of its silicon-on-sapphire (SOS) technology to the top of the Hewlett-Packard computer systems product line. The use of three proprietary large scale integrated SOS chips enabled the system designers to produce the HP 3000 CPU on 2

printed circuit boards, a major reduction from the 9 boards on the HP 3000 Series II/III. A new mainframe desk package was made possible because of the SOS circuits' low power consumption and low heat dissipation, combined with their small size.

New peripherals supported on the HP 3000/33 are the Hewlett-Packard double-sided flexible disc and the stand-alone, separately-powered HP 2608A line printer.

The HP 3000/33 supports all of the CRT terminals in Hewlett-Packard's family of 2640 data stations, including the HP 2647A and HP 2648A graphics terminal with automatic plotting of columnar data. Also supported is the HP 2635A printing terminal and the new low-cost 2621A CRT terminal. Each terminal operator independently has full access to all system resources. Data entry, database updates and retrievals, interactive program development, data communications, and batch programs can all be supported simultaneously on the system.

The HP 3000/33 runs under the widely used Multiprogramming Executive (MPE III) operating system, including the recent additions of a new, friendlier user interface and private disc volumes. A new, easy to use data entry subsystem, VIEW/3000, is supported on both the HP 3000 Series 33 and the HP 3000 Series II/III.

All non-privileged HP 3000 Series II and Series III programs — both source code and object code — written in COBOL, RPG, BASIC, FORTRAN, or SPL will run without any modification on the new HP 3000 Series 33. The Series 33 runs all HP 3000 Series II/III software subsystems except APL/3000 and the data communications subsystems (DS/3000, RJE/3000, MRJE/3000, and MTS/3000) which are not offered on the HP 3000 Series 33.

The system console is a second computer system utilizing a microprocessor within the terminal for expanded capabilities. These include not only the ability to receive/transmit traditional system operator messages and access the console as a user terminal, but also the system operator controls (START, HALT, etc.), a complete maintenance "window" into the system (diagnostic loader and system register displays), and an ability to connect any HP 2645A terminal through modems as a remote system console/maintenance console.

Purchasers of an HP 3000/33 have a large selection of support services from which to choose. A site preparation guide and installation of the system are included in the list price. Several levels of hardware maintenance are offered under system maintenance contracts. The price of software for the HP 3000 includes mail, telephone, and on-site support for each product. Consulting by Hewlett-Packard Systems Engineers is offered. Purchasers may choose among more than 15 training courses; they may be conducted at Hewlett-Packard Technical Centers or at the user's site.

### System Configuration

The basic HP 3000 Series 33 consists of a central processing unit (CPU), cartridge disc storage of 20 megabytes, a double-sized flexible disc drive with a capacity of 1.2 megabytes, and a microprocessor based system console/maintenance console. It includes 262,144 bytes of fault control main memory, two general I/O channels, two asynchronous data communications controllers (one main, one extender) for connecting the hardwired system console and up to 7 asynchronous terminals (hardwired or connected through modems), and remote diagnostic capability.

The maximum capability of the Series 33 can be achieved by configuring at the factor or in the field to include all of the following:

- 1,024,000 bytes of fault control memory
- 960 megabytes of disc storage
- 3 general I/O channels
- 8 asynchronous data communications controllers which support up to 4 terminals each
- 4 magnetic tape drives at 1600 bits per inch
- 2 line printers

Your Sales Training Notebook has more complete information about these peripherals, as well as describing system features in more detail.

### Price and Delivery

United States list price of the basic HP 3000 Series 33 is \$70,000. The HP 3000/33 will lease for \$1,462 per month under a 5-year lease. The Basic Monthly Maintenance Charge (BMMC) is \$410. Announced availability is eighteen weeks.



## HP 3000 Series 33 Receives Wide Press Coverage

By: Rich Edwards/GSD

Hewlett-Packard's Business Systems Family introduction of October 3 has received wide coverage in the press, with more to come in the monthly magazines and newsletters. The following is the press release on the Series 33:

### NEW LSI-BASED HP 3000 COMPUTER SYSTEM OFFERS COMPACT DESIGN, LOWER PRICE THROUGH SOS

In a dramatic application of new technology, Hewlett-Packard has packed a full-fledged HP 3000 Computer System into a desk-sized piece of office equipment. With U.S. prices beginning now at \$70,000, the HP 3000 Series 33 is the new low-cost HP 3000, designed especially to meet the on-line transaction-processing needs of business organizations. It runs the same multi-programming executive operating system, MPE-III, as the larger HP 3000 Series II and III systems, and shares immediately in the benefits of the thousands of man-years of software development that HP and its customers have invested in these systems. New Hewlett-Packard technology is exhibited throughout the Series 33, in new lower-cost peripherals, new compactness, new freedom from the need for special site conditions, and new self-test features. The HP 3000 Series 33 is expected to open new options for many one-computer organizations, and to expand the opportunities for applying computers in larger organizations.

Drastic reductions in size and power consumption are accompanied by greater quietness and improved ease of operation and maintenance, largely through application of Hewlett-Packard SOS (silicon-on-sapphire) LSI technology. The HP 3000 central processor, which formerly consisted of components on 700 square inches of printed circuit boards, now is reduced to three SOS chips of less than one square inch total. Using 16K RAMs, the standard fault-control main memory is 256 Kbytes. Expansion is possible to 1 megabyte within the desk, with no additional power supply or card cage. Also within the desk is an entirely new 1 megabyte flexible disc drive. Further standard equipment is a 20 megabyte disc; expansion is possible to as much as 960 megabytes, using drives of 20, 50, or 120 megabytes each.

#### Strong On-Line Transaction-Processing Features

Like all HP 3000 Computer Systems, Series 33 is designed to serve especially well in on-line transaction-processing applications such as order entry, inventory status-checking, and materials planning. This capability is rooted in MPE-III, the multiprogramming executive operating system that is common now to HP 3000 Series II, III, and 33, presenting the same friendly interface to the users of all these models, assuring speedy response when many terminals are simultaneously on line. MPE-III includes features commonly found only on large mainframe systems, such as virtual memory, multiprogramming, and multi-level security. Similarly shared by Series 33 are the other HP 3000 contributors to effective on-line transaction processing. These are 1) multiple high-level languages, 2) a powerful database manager, and 3) easy-to-use data-entry software.

#### Languages

Like all HP 3000's, Series 33 offers SPL/3000, HP's high-level systems programming language, and four high-level applications programming languages. These are COBOL/3000, RPG/3000, FORTRAN/3000, and BASIC/3000.

#### Data Management

IMAGE/3000, Hewlett-Packard's award-winning database management system, runs on HP 3000 Series 33 machines, with its QUERY subsystem that makes access to an IMAGE database a simple matter even for non-programmers. KSAM/3000 is an optional access method, providing keyed sequential access to files that may have one primary key and up to 15 alternate keys per data record.

#### Data Entry

A new Hewlett-Packard software package, VIEW/3000, makes it easy for non-expert and expert users alike, to create, on an HP CRT terminal, business forms tailored to numerous on-line transaction-processing applications. Designed both as a self-contained, stand-alone source data entry capability and a 'front end' to an on-line transaction-processing system, VIEW/3000 makes it possible to create in a few minutes business forms that once took hours or days to design.

#### Compatibility

Existing non-privileged-mode HP Series II or Series III application programs developed by HP 3000 users can be run on the HP 3000 Series 33 without recompilation. The exceptions are programs written in APL, which is not offered, programs calling for data communications, and programs using peripherals unique to HP 3000 Series II and III systems. Advanced synchronous data communications capabilities, now available on Series II and Series III systems, such as networking, remote job entry, and multipoint terminals support, are planned for Series 33 in the future.

#### New Maintenance Aids

A diagnostic microcomputer incorporated into the system console gives the user the ability to check quickly for correct operation, using a data cartridge that plugs into the console. Moreover, it is possible via modem to give complete, interactive control of all the system console's capabilities, including its maintenance functions, to an HP service specialist at any distance. The right corrective measures then can be quickly supplied; thus system up-time is maximized.

Terminal options include the just-introduced low-cost HP 2621, and any of the HP 2640 series, including the recently-announced HP 2647 intelligent graphics terminal. As many as 32 terminals can be connected to the HP 3000 Series 33.

All three of the current HP moving-head discs are usable with Series 33. One 20 megabyte HP 7906 is standard. Both the 50 megabyte HP 7920 and the recently-introduced 120 megabyte HP 7925 are supported. Maximum disc memory with Series 33 is 960 megabytes. The familiar HP 7970E 1600 bpi magnetic tape drive, in its attractive new office-style enclosure, is a Series 33 option.

#### Price and Delivery

Base U.S. list price is \$70,000 for an HP 3000 Series 33 System consisting of CPU, 256 Kbyte fault-correcting main memory, 1 megabyte flexible disc, 20 megabyte fixed system disc, system/maintenance console, and desk enclosure. Current delivery estimates are 14 weeks.

## Series 33 Demo Centers Installed

By: Ed North/GSD

An exciting part of the HP 3000 Series 33 introduction has been the availability of a Series 33 demo system at each of the NPT stops. An introduction becomes a first class affair when the new system can be demonstrated in *your* office for you and your customers. And that's what we've done with the Series 33 introduction!

I'm sure you saw the Series 33 in your sales office during the NPT. But did you know that in September and October we will have shipped 20 systems to the U.S., European, and ICON Sales Offices?

Systems have shipped to:

### Southern Sales Region

Dallas  
Atlanta

### Midwest Sales Region

Rolling Meadows  
Farmington

### Eastern Sales Region

Paramus\*  
Rockville  
Lexington

### Neely Sales Region

Bellevue  
Santa Clara  
L.A. Airport  
Fullerton

### Canadian Sales Region

Toronto

### ICON

Sydney, Australia  
Osaka, Japan

### HPSA — Europe

Winnersh, U.K.  
Orsay, France  
Milano, Italy  
Amsterdam, Netherlands  
Frankfurt, Germany  
Stockholm, Sweden

HP's done it again! A professional new product introduction with demonstratable, deliverable products.

### GOOD SELLING!

## Order Your 33mm Slides Now!

By: Rudann Ramsey/GSD

As you know, the third day of the recent NPT consisted of customer presentations on our new products. In order to make these seminars professional and stimulating, all three product groups (HP 250, HP 300 and HP 3000 Series 33) produced color enhanced 33mm slides for their presentations. One complimentary set of *original* slides for all four presentations (product overview and all three product pitches) was left behind at each stop, enabling you to make as many duplicate copies of these slides as you need.

If you would prefer to order duplicate copies, rather than make your own, you can receive sets of the 13 product overview slides, 60 HP 300 slides, and 20 HP 3000 Series 33 slides by sending an IOS for \$70.00, specifying part number 30000-90142, to *Bob Hall*, General Systems Division Marketing Communications. This order must be received by November 1st. All requests will then be filled at the same time, and you will receive your slide sets by November 22. This is a one-time offer. After the November 1st cut-off date, you will need to make further copies from the original slide set left behind at the NPT stop.

To get additional copies of the HP 250 slides, you should contact the Fort Collins Division, attention *Dick Hanson*.

## The HP 3000 Series I Prepares For Obsolescence

By: Jon Jacobson/GSD

As I'm sure most of you are aware, we have been scaling down the Series I program to coincide with the introduction of the HP 3000 Series 33. Though the Series I has been an extremely successful program since its introduction in April, 1977, continued manufacturing of the system has reached a point where it would no longer be economically feasible to continue production.

As of November 1, 1978, the HP 3000 Series I (32420A) will no longer appear on the Corporate Price List. Our intention is that the last Series I will ship no later than December 31, 1978. If this can be accomplished, we could begin obsolescence and start the five year support clock in the second quarter of 1979.

To accomplish this, we need your help. If you have an outstanding quote on a Series I where the order would be placed after November 1, 1978, and the required date would be before December 31, 1978, please contact me. We're asking that APO's be placed against these by October 15, 1978.

We have a limited number of systems that will be built in October for November and December shipments. However, orders for Series I's placed after November 1 would have to be treated as specials, and we cannot guarantee the availability of a Series I to which we have not acknowledged a shipping slot before that time.

Also, if you have a Series I order that has been placed and you plan to convert your order, please let us know. You may very well free up a system that another customer could use.

Again, we want to thank you for your support of the HP 3000 Series I. Our success in the factory with the Series I could never have been accomplished without your efforts.

## Competitive Information

### Winner and Still Champion — The HP 3000!

By: Gwen Miller/GSD

The latest in the continuing string of good news about the HP 3000 comes from a benchmark run by one of the largest German construction companies. With a prize of an order of several systems to be installed in Germany and Saudi Arabia, a Series II was compared with a Prime 300 and 400. The overwhelming recommendation was for the Series III!

The tests involved heavy COBOL use as well as data entry and editing and some FORTRAN. The performance of the 128Kb Prime 300 was found to be significantly poorer than that of the 256Kb Series II; in fact, the tested configuration (with 12Mb disc) was judged inadequate for more than three users! Perceived software deficiencies, held in common between the Prime 300 and 400, included the following:

- No SORT verb in COBOL.
- Restricted modularization of COBOL programs due to lack of code segments and lack of ENTRY statement.
- Inconsistent structure of COBOL and FORTRAN data files.
- Reduced performance due to intermediate instructions created by the compiler that must be interpreted during execution.
- Large memory capacity required by COBOL.
- Much lower level of sophistication in the Prime COBOL compiler than the HP or IBM compilers.
- No COBOL support for MOVE CORRESPONDING, MOVE ALL, RENAMES (level 66) OCCURS, and EXAMINE.
- No "Help" facility in the PRIMOS operating system.
- No auto restart after power fail.
- No firmware decimal arithmetic, causing reduced performance.
- No performance measurement tools or published guidelines.
- No tape labels.

In contrast to the Prime tests, which had to be terminated after 30 hours because of excessive problems, the HP 3000 tests ran very smoothly in 12 hours. None of the difficulties encountered with the Prime system were experienced in the Series II, in either the hardware or software. In addition, the

customer was particularly impressed with the degree of compatibility of software among the Series I, II, and III, and even the closeness of the HP COBOL and FORTRAN compilers with those on their IBM 370/148.

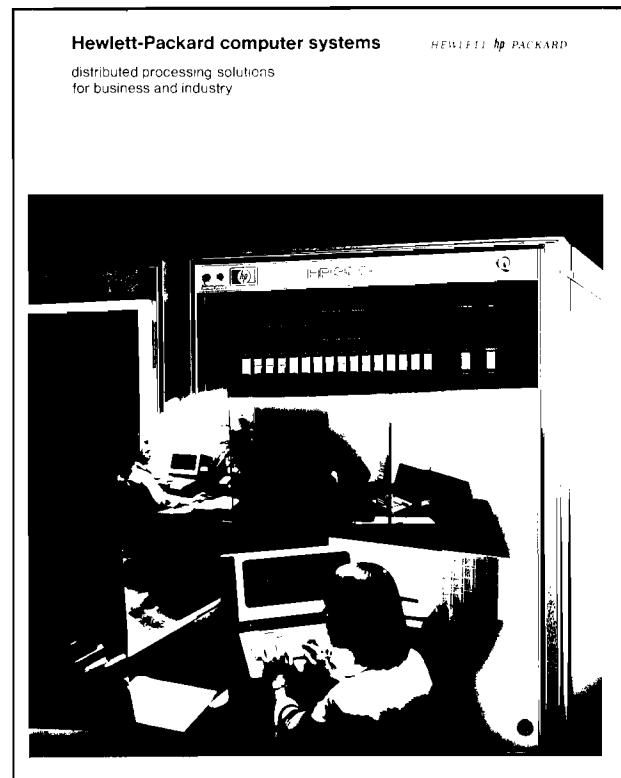
The happy ending to this happy story is that we have already received an order for the first system, to be installed in Saudi Arabia!

## Sales Aids

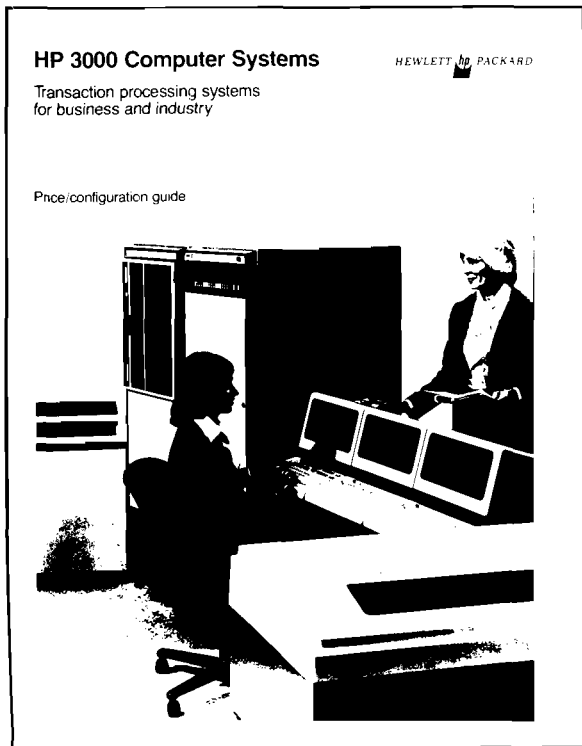
### New Sales Literature

By: Jerry Epps/GSD

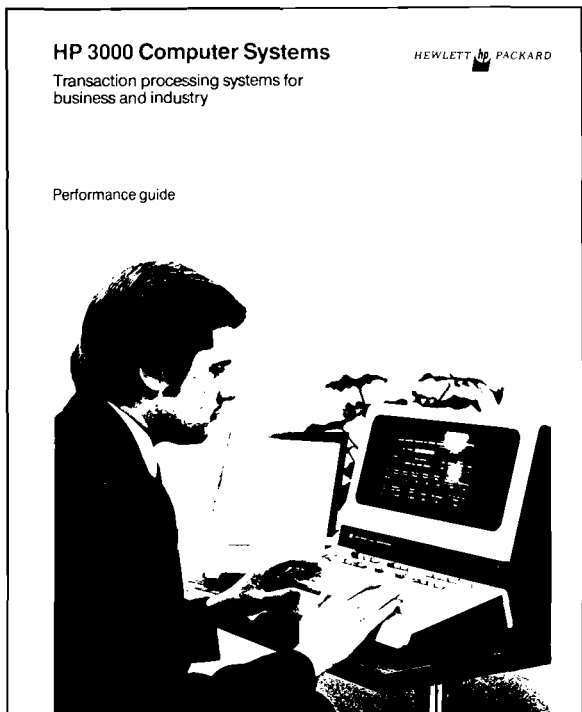
To support our marketing thrust for the Series III and the new Series 33, we've just printed or reprinted several pieces of sales literature. And . . . they're available immediately from the Literature Distribution Center.



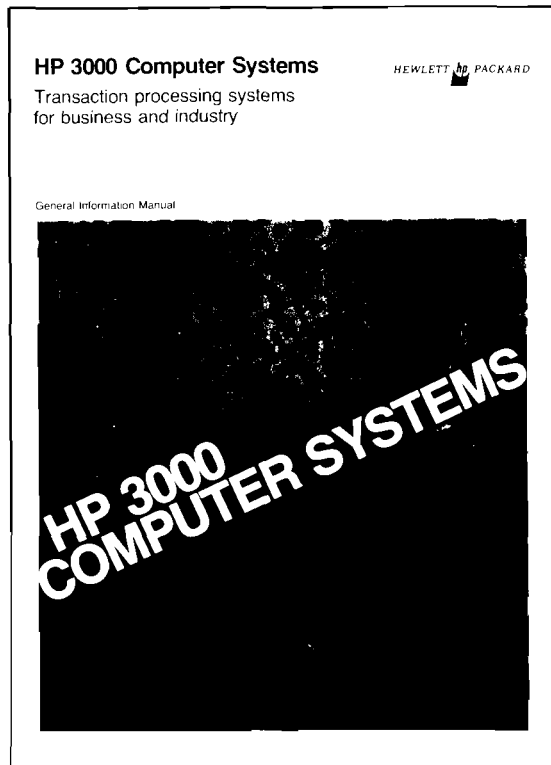
First is the spiffy new computer products family flyer (5953-0561). It's in glorious four-color, and covers our major computer products including the HP 250, HP 300, Series 33, and Series III. The flyer is designed as a first level response piece for your inquiries, for use in direct mail, and as a trade show handout.



The Price/Configuration Guide is now two separate books — the current products (5953-0558) and the mature products (5953-0557). International versions of these are essentially the same as the U.S. version except that prices are deleted.



Another brochure you'll find very useful is the revised Performance Guide (5953-0556). It now incorporates performance curves for both the Series III and Series 33 to help you characterize the systems for your prospects.



In addition to the above literature, two other pieces have been reprinted. These are the General Information Manual (5953-0550) and the Distributed Processing Solutions (large company) brochure (5953-0543).

All this literature is now in stock and ready for immediate shipment.

### HP 300 Customer Training Courses

By: *Walter Utz/GSD*

Two HP 300 training courses will be offered at the Cupertino facility during the Fall season. These courses will also be available at the Western Regional Training Center in 1979.

#### 31362A — HP 300 Introduction for Programmers—five days

This course is designed to give the HP 300 programmer sufficient familiarity with the system and the associated documentation to allow the development of straightforward applications using the major facilities of the operating system, utilities, and languages. Extensive hands-on experience is included.

December 11–15, 1978 \$500

#### 31363A — HP 300 System Course — three weeks

This course teaches the student how to design and develop application programs in Business BASIC/300 with full utilization of operating system services. Special emphasis is placed on the development of multiterminal applications and use of the Integrated Display System.

November 6–22, 1978 \$1500



For additional information, please contact *Walter Utz* (408) 249-7020 x3212. For registration, contact *Penny Haney* (408) 249-7020 x 3200.

Please note that registration for the HP 300 System course will give priority to customers who have placed orders for the HP 300.

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## General News

### Let's Go to APICS

By: *Mike Kalashian/GSD*

If your customers are interested in hearing what industry experts (including a few from HP) think about manufacturing, they should attend the annual APICS convention to be held in Hollywood, Florida on October 24-27. If they are

interested in seeing what's new in solutions to the manufacturer's problems, they should visit the HP exhibit and see MFG/3000, the Series III, the HP 1000, and the HP 250.

If you are interested in what current and prospective customers are saying and also what HP's competitors are saying and selling, why not drop by? Based upon projected attendance, it should be worth your time and expense. Full details are in the October 1st issue of the *CS Newsletter*.

N.B. — Local APICS chapters are also good vehicles for developing industry experience and sales references.

**SEE YOU AT APICS IN FLORIDA!!**

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# HP GRENOBLE NEWS

## Division News

### European OEM Senior Sales Workshop

By: *Georges Retornaz/HPG*

On September 4-5th, ten of our most successful OEM sales representatives in Europe and two DSM's were invited to Grenoble, to attend the second OEM senior sales workshop.

The objectives of this workshop session were:

1. Feedback from the field to the Grenoble factory on Data Systems products and sales aids oriented to the OEM market.
2. Information exchange among senior sales representatives (with the sharing of sales experiences of our senior OEM salesmen according to typical European sales situations).

The attendees had the opportunity for discussions with *Cyril Yansouni*, our Division Manager, *Dave Borton*, DSD Europe Marketing Manager, and several other people in Grenoble Marketing.

It was a great success. Each participant contributed to the various discussions and gave their suggestions how to improve our products, our technical support and our sales aids.

## Product News

### Here it is, at last! The VDE Label

By: *Maurice Poizat/HPG*



You, (German guys mainly), have been waiting for it for a long time. The 2645A was designed to meet all the VDE requirements, but the approval had been pending for long before the final decision came:

All the 2645's are fully approved! They will be shipped with the VDE label. 2645's are now being shipped with the VDE label, I should say. That's really another plus.

**KEEP SELLING!**

## Sales Aids

### 3070B User's Manual

By: *John Willett/HPG*



In the July 1st issue of the *CS Newsletter*, I told you to order extra copies of the super 3070B User's Manual from Grenoble. This was an error. Instead please order them in the normal manner from CPC or PCE.

Do not forget the manual is even better value for money now; you get a free cleaning card for the multifunction reader with every manual!

## Order Processing

### OOPS # TWO!

By: *John Willett/HPG*

In our original OOPS! article, (*CS Newsletter*, Vol. 3, #16, July 1), we pointed out an error in the Peripherals Data Booklet which described Option 002 of the 92900B and 3070B as "Delete Printer Options". True to "Murphy's Law of Random Perversity", this error seems to be propagating itself in a number of other places as well. Let me repeat what the option should be, to clear up the confusion.

**92900B and 3070B Option 002 Delete multifunction reader from 3070B terminal.**

Now, I'll just hope hope it won't be necessary to write OOPS # THREE!

# CS GROUP NEWS

## CSG News

### Two New Persons On CSG Training Team

By: Bob Lindsay/CSG

I'd like to introduce two new persons who have just joined the CSG Training department: *Jody Ryden* and *Nancy Collison*.



*Jody Ryden* has been with HP for almost 6 years, first with HPA and most recently as a production scheduler with DTD Manufacturing. (She helped introduce the 2645A in June 1976.)

*Jody* has a B.A. in English Education to her credit and is currently working on her MBA at the University of Santa Clara.

In our department she'll be co-ordinating the CSG Overview courses and helping to make your overall Field Marketing Training Program "run like clockwork".



*Nancy Collison* has already been helping you for several months as backup Training Registrar. Her first official day with HP was October 2nd and we're particularly glad to have her on board with her cheerful smile and dedication to making training seminars run smoothly. *Nancy* likes to go flying and waterskiing and plays a mean game of raquetball.

Welcome aboard *Jody* and *Nancy*!

### Another Super Group of New-Hires

By: Bob Lindsay/CSG



Back Row (Left to right): *Ben Richardson, Cammillo Fenzi, Mark Dankers, Gary Walkowski, Rick McNabb, John Hammann, Graham Collins, Peter Neuhaus, Susan Holzman, Dave Lyons, Rob Peters, Mike Lothian, Kees Bergkamp, David Tse, Larry Muccilli, Alan Williams, Per Hojem.*

Middle Row (Left to right): *Ken Schoettle, Don Campbell, Bruce Sherman, Russell Zears, Jody Ryden, Jim Capparell, Denis Hitchens, Michael Starbird-Valentine, Sharon Jacobs, David Leicht, Stu Spector, Bill Kingsbury, Marilyn Johnson.*

Front Row (Left to right): *Guido de Gennaro, Dave Evans, Jack Whitfield, John Helms, Gary Slye, John Magazine, Bob Niland.*

CSG Overview Class 23 will be another class to remember.

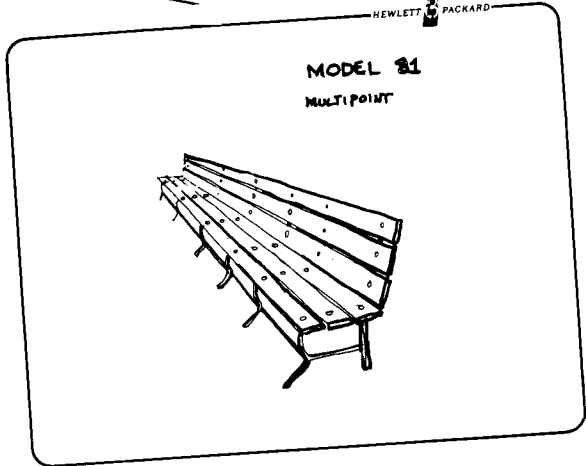
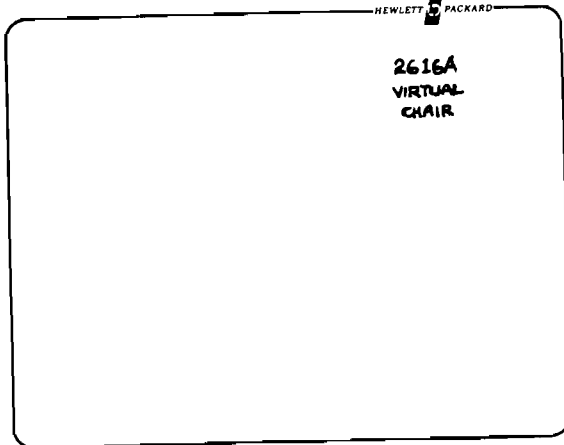
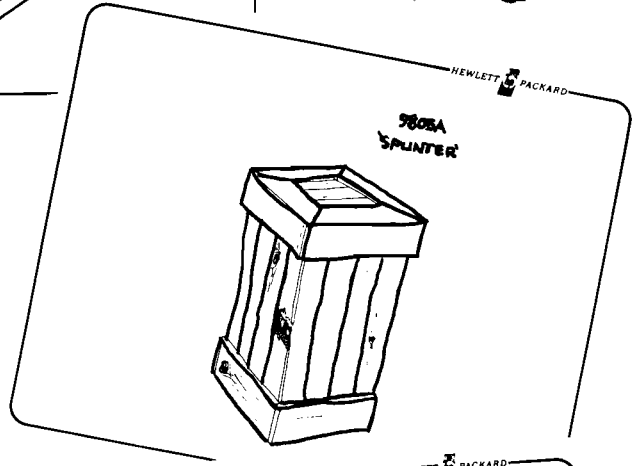
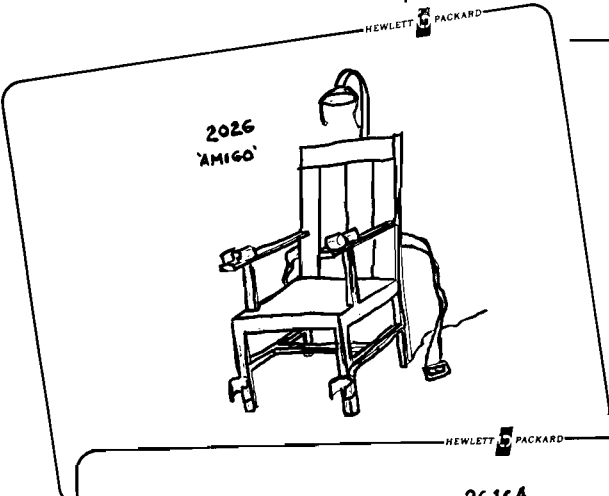
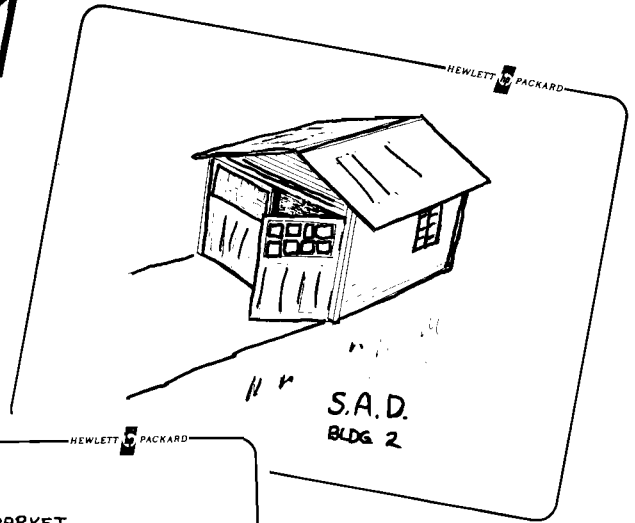
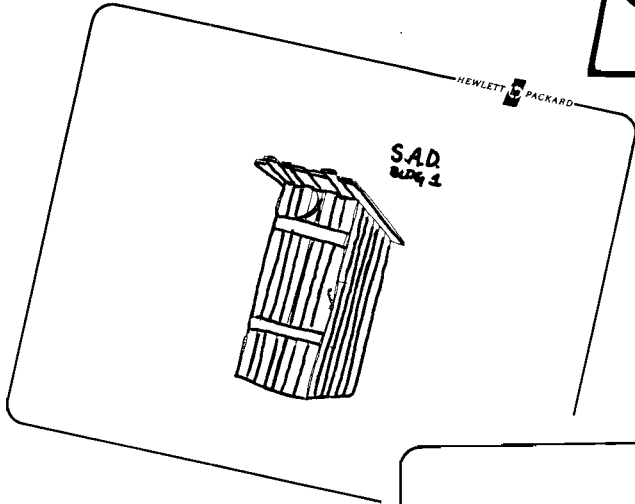
Arriving in Cupertino on September 18th, they were successively treated to a day-and-a-half of CSG presentations; 1/2 a day from FCD; 1/2 a day from San Diego Division; 1/2 a day with *Bob Kressek* and *Greg Lynott* (NSR Santa Clara); plus two days each with DTD, GSD and DSD. (They passed their final exam on the final day with flying colors.)

Along the way they managed to present one of the best skits ever given at a Mid-Term Dinner.

Describing the operations of a mythical organization known as "DARKCAP-THELWET" were five key presenters: Tom Tellitall — Co-ordinator (*Dave Lyons*); Rex Pansion — Sales (*Bruce Sherman*); Tony Trainer — Sales Training (*Jack Whitfield*); Rick Terscale — SAD Manufacturing Manager (*Bob Niland*) and Larry Legal — Contracts (*John Helms*).

The highlight of the evening was the presentation from the Manufacturing Manager of the SAD (San Andreas Division (no-fault memories, chairs, etc.)). Some of Rick Terscale's memorable slides have managed to survive the earth-shaking laughter that they provoked and are reproduced here for your edification.

# DARKCAP dt THELWET



# Corporate Training & Management Development

## NEW VIDEOTAPE INFORMATION

### New Videotapes from Corporate Training

By: *Chuck Ernst/Corp.*

Title: 1831 HP 3000 SE Update

Audience: HP Systems Engineers

Purpose: To describe enhancements to three software products.

Content: The latest enhancements to the software products, BASIC, EDITOR, and MPE III are described by *Lee Osborne, Dennis Handy, and Terry Ishida.*

This program is intended for viewing by HP systems engineers.

Time: 16 minutes

Part Number: 90818Z

Date Released: September 1978

How To Order: Transmit a HEART (COCHISE) I2 order to Video Products, Product 95, Division 0700, Palo Alto. Order 90818Z for a videocassette.

# COMPUTER SYSTEMS NEWSLETTER

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