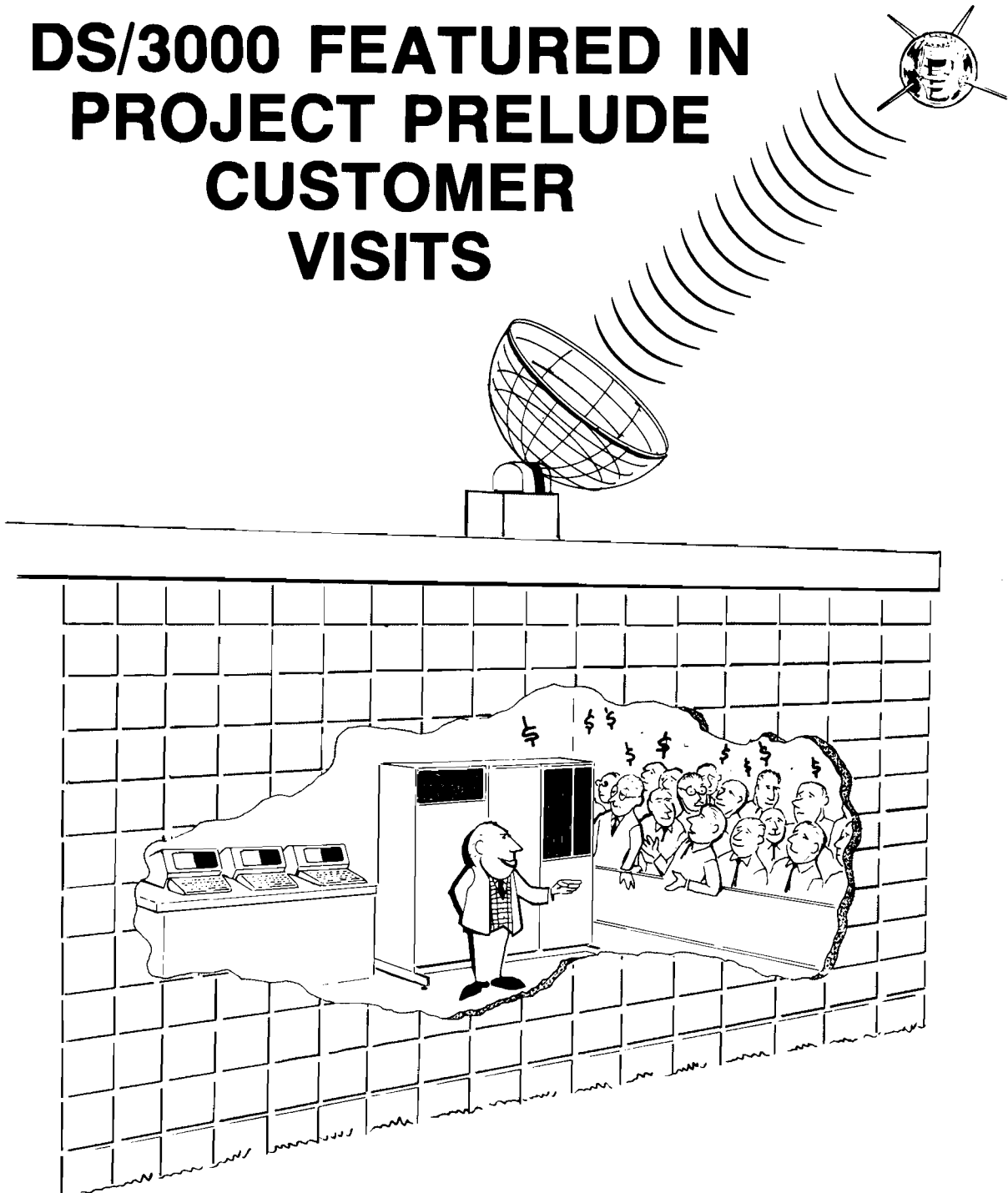# COMPUTER SYSTEMS NEWSLETTER

For HP Field Sales Personnel

HEWLETT **hp** PACKARD

Vol. 2, No. 22
Oct. 1, 1977

DS/3000 FEATURED IN PROJECT PRELUDE CUSTOMER VISITS

New Prices on HP 3000 Upgrades to Series II ....Page 19

In This Issue...

AMD DIVISION NEWS

Sales Aids

Bob Payne Sells DTS-70's
By: Paul Accampo/AMD

Bob Payne, Neely Santa Clara Field Engineer, has sold eight 9571's! Lately, he even convinced a customer to put in his RFQ, our ultimate lockout spec, *Eichelberger Race Detection*, shown in the RFQ below along with other key System features.

Bob has not done a demo for some time, yet he has been winning sales from our major competitors. We thought you might be interested in some of his techniques:

1. He knows the features of Testaid. Eichelberger Race Detection, explained in application note 210-1, is a significantly better way to develop quality tests. If the customer understands this, and asks a competitor how he detects races, you will have an advantage.

2. *Bob* refuses to do benchmarks. When a customer brings it up, he immediately points out that HP has many large and small boards in production, and has satisfied users.

   A benchmark does not really tell the customer what he wants to know. It does not prove that the system will test boards other than the specific one he tries. A re-run of one of the standard demo boards serves as well.

Bob has taken orders away from both our major competitors and says selling 9571's is getting easier all the time.

CONGRATULATIONS!

BOISE DIVISION NEWS

Product News

Business Week Spreads the Word about Boise Division's New Printer and Printing Terminal!

By: John Klonick/Boise

In the September 26th issue of BW, the newest Boise Division products are discussed. The article describes how the HP-developed SOS chip technology has been successfully applied to produce the 2630 family of low cost/high performance printers. Both the 2631A printer and the 2635A printing terminal are discussed as worthy competition in the $100 million-a-year printer market.

Bill Murphy, marketing manager, is quoted as saying: "We can't go against sophisticated competitors with me-too products." Thus, the new printers with their microprocessor "smarts" have three print modes, two separate 128 character sets and the ability to print at 180 cps. HP is described as ready to step into the ring with firms like DEC, Okidata and Centronics and carve out a substantial slice of a market growing at 25% annually.

The article goes on to discuss the high customer enthusiasm for the 2630 family, even before the products were formally announced. Both Summa Corporation and Union Camp Corporation are directly quoted as end users who feel the Boise Products are far superior to the competition.

Based on such glowing market endorsements, the 2630 family is already a valuable addition to any sales situation. Familiarize your customers with both of the new products and refer them to this latest BW article. You'll be surprised at the results!

2630 Family News—Direct Mail Promotion

By: Steve Richardson/Boise

Now that we have announced the 2631A and 2635A we want the world to know about it. In addition to an extensive advertising campaign, we are taking an extra step to inform your customers and potential customers of this great new family through a direct mail program.

This mailing will include a cover letter, highlighting the key features and customer benefits of these units. We will also send product brochures of the 2631A and 2635A and a reply card.

The mail will be directed to HP's existing customer base by use of the OEM Newsletter, COMMUNICATOR mailing list, and the Data Terminals Division CRT customer list. In addition, we will be mailing letters to all System Houses and OEM's on the IDC data base (over 1700 in all!). This will mean about 10,000 good exposures for our new family.

To fully capitalize on this mailing, Boise is presently developing an inquiry response program to handle the reply cards generated by this program and our advertising. We will be forwarding the leads to you as soon as possible so that you can immediately take advantage of these prospects. We think that our customers will be as excited as we are about the 2630 family.

Used Equipment

By: Steve Davis/Boise

Boise still has a few items of used equipment available at significant savings.

Product	Options	Serial No.	Sales Price
13182A	001/888	(1 available)	$ 5,145.00
13193A	STD/888	(2 available)	230.00
13196A	001/888	(1 available)	460.00
2752A	STD/888	1302A-04462	1,600.00
2752A	STD/888	1320A-06160	1,600.00
7970E	150/007/888	1606A-02048	5,645.00
7970E	165/020/888	1631A-02810	8,050.00

All quotes should be made "subject to prior sale". Before transmitting your order, contact Boise Division Order Processing to insure that the unit you desire is available.

Each order should specify the serial number of the unit and should also specify option 888 (designating used equipment).

DISC MEMORY NEWS

Product News

HP Media Products
By: B. Hoke/DMD

There have been several requests for an explanation of DMD's position on the use of non-HP media products (packs and cartridges) on HP drive products. The following are the reasons why we *strongly* specify that our users use *only* the HP supplied media product.

First, the distinction must be made between media and other supplies-type products such as mag-tape and line printer paper. In the case of media, HP's disc drive reliability and performance is intimately dependent upon the quality and performance of the pack or cartridge.

Specifications, such as data integrity, interchangability, and error-rate performance must be specified in conjunction with a media that meets stringent HP tolerances. Yet as important as these specs are, they are not as important as some critical mechanical balance and surface flatness criteria. The mechanical tolerances although extremely difficult to specify are factors that can cause major catastrophic damage to HP disc products.

Our experience shows that media from the outside (even from our own vendors) do not reliably meet the above criteria. HP has invested around $200K worth of unique electronic measurement and testing equipment for testing and verifying each and every pack or cartridge product. The high rate of rejection, considering these products were built to HP specs, is the reason why we feel we must continue to carefully control the quality of the media products installed in HP drives. The main reason for rejection turns out not to be the error rate performance but failure to meet the mechanical tolerances.

The customer must be made to understand that HP is not supplying the same product as available from an outside vendor. The HP product is selected and uniquely and individually tested and certified to meet HP's rigid requirements for total drive performance. This added value does make our product cost somewhat more but the added costs are necessary in order to achieve a high level of customer satisfaction.

If a customer insists on using an outside pack and damage occurs as a result, HP will *not* pay for the repair of that damage under warranty or under the service contract.

I can assure you that the media area is under careful study at DMD and that everything possible is being done to bring your customer the best possible value in both drive and media products.

GOOD SELLING!!

Division News

DMD Field Communications Guide
By: Jan Hallberg/DMD

ORDER PROCESSING
FIELD
COMMUNICATIONS GUIDE
August 1977

HEWLETT PACKARD
Disc Memory Division
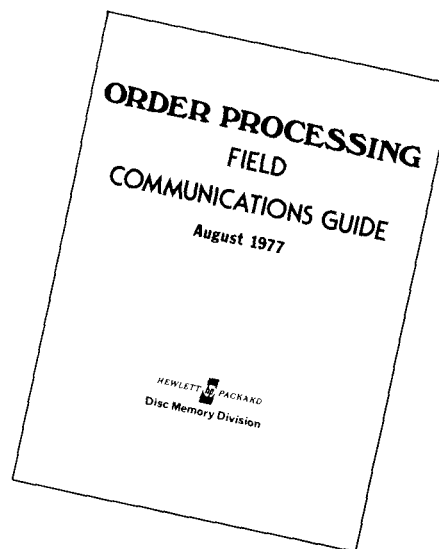
We recently produced a handout to introduce *Jon Bolt* (our "disc jockey") and our Order Processing people to the newly-hired salespersons who come to Boise for sales training sessions.

It's been such a success that we'd like to share it with all our readers!

THE
'DISC'
Jockey

JON
SALES DEVELOPMENT
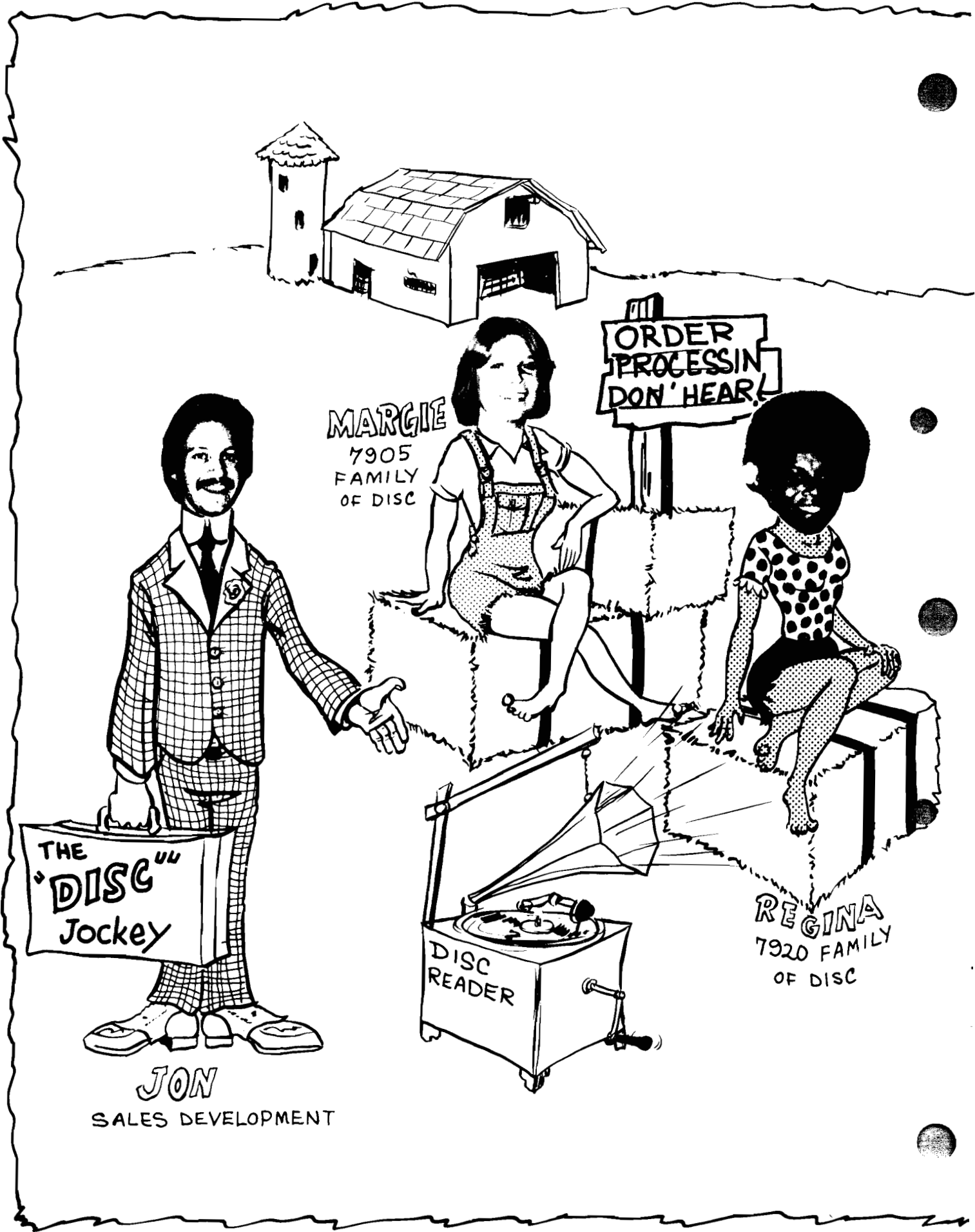
MARGIE
7905
FAMILY
OF DISC

ORDER
PROCESSIN
DON' HEAR!

DISC
READER

REGINA
7920 FAMILY
OF DISC

JERRY
ORDER PROCESSING
MANAGER

BETH
ORDER PROCESSING
SUPERVISOR

DEBBIE
7900 FAMILY
OF DISC

DIGITS

FOR INTERNAL USE ONLY
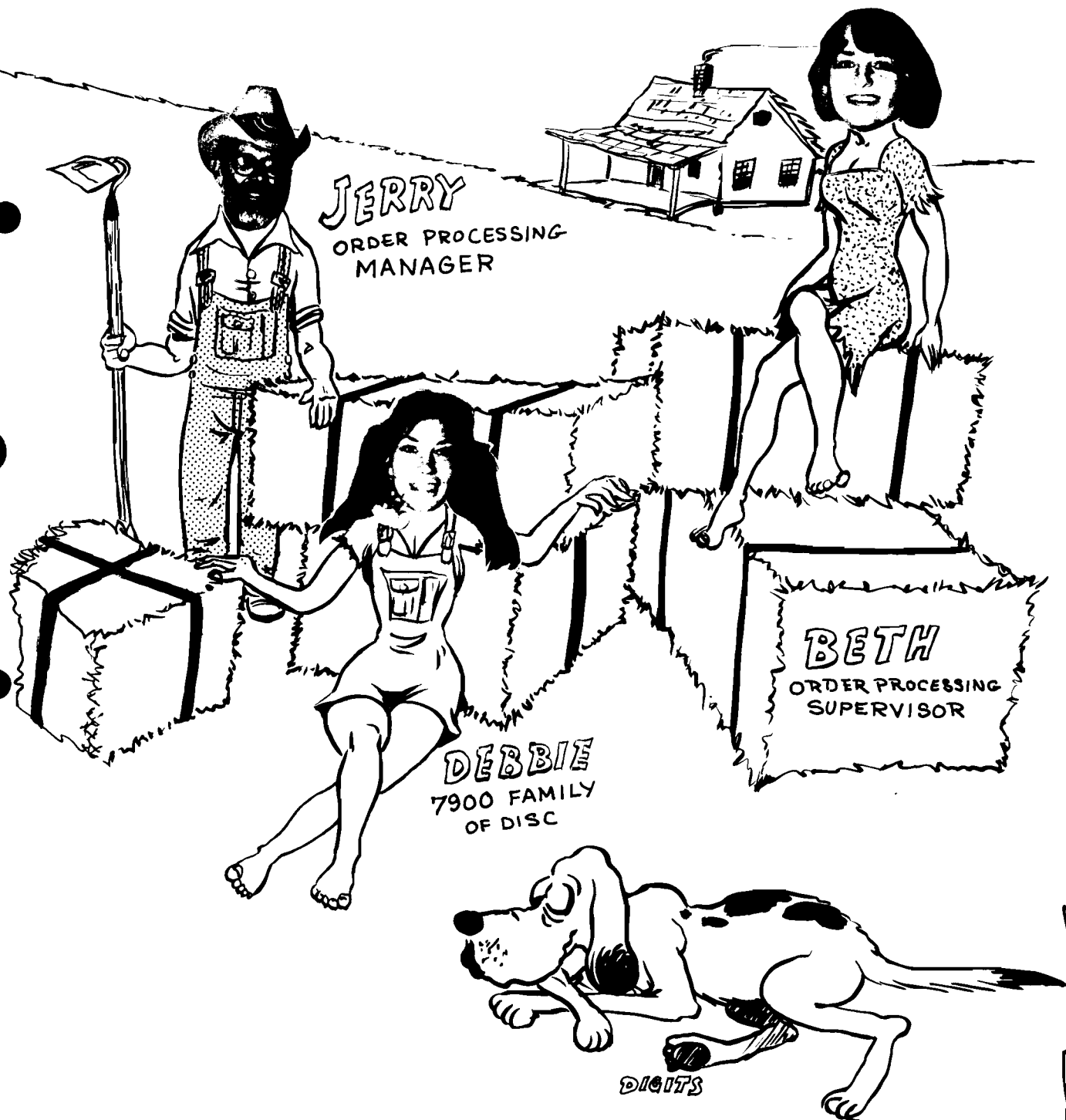
HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

Sales Aids
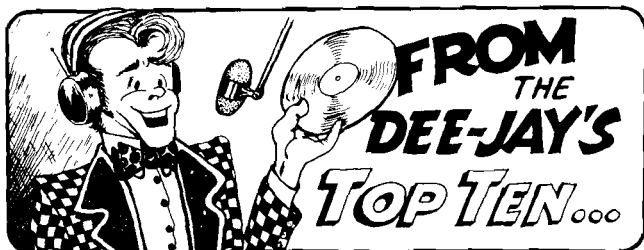
Selling the 7920 Against Larger Capacity Drives
By: Jon Bolt/DMD

Have you ever been faced with the task of selling a 7920 50-Megabyte drive when the sales situation pits you against a large capacity drive (100, 200, 300 or more Megabytes) in one disc mainframe? Sound tough?

Well, sit back and let the DMD "D.J." suggest a few notes you might play to tune-in your customer to the advantages offered by our 7920 multi-spindle concept.

To achieve large peripheral storage capacities, HP "daisy chains" multiple 7920's drives to furnish a system capable of meeting the customer's requirements. We call this a multi-spindle system.

The chief objections a customer will have to our multi-spindle idea are:

1. Total cost of HP drives necessary to meet his requirements;

2. Greater service cost—more drives = more support = more $;

3. More drives implies a greater chance of any single drive failure. What advantages can a multi-spindle system offer the customer in view of these apparent disadvantages?

Initially, pursue a strategy that involves establishing the customer's *immediate* memory capacity requirements. In many cases, his immediate needs will be significantly less than his requirements two or three years from now, which he may believe he needs now, or has been led to believe is necessary by our competitors. Establishing a more realistic capacity reduces the number of 7920's involved and ultimately makes our system more attractive price wise. You must determine his short-term requirements and convince him to trust HP to solve his long-term needs as his business prospers. You may suggest that he spend no more money than necessary in the immediate future; and in the long run, by gradually adding newer drives as his needs grow, he will have the opportunity to benefit from technological advances. He will save significant $ and have a better performing system.

Now, after establishing your customer's short term capacity requirement, let's look at the advantages that a multi-spindle system can offer.

1. 7920 Performance—
A logical starting place is to point out that the 7920 has

set an industry standard for performance in terms of seek times, short latency and high data transfer rate.

2. System Reliability and Backup—
Contrast the hazard involved by placing the entire data base on one large disc as opposed to distributing the data over several smaller discs.

3. Multi-Spindle Performance—
Distributing a data base judiciously over several discs offers pronounced improvements (over a single disc) in system performance. These benefits are derived from an operating system function called "Locality" and results in a 15-25% performance increase. Definitely, "Two heads are better than one." For a more detailed explanation of this important point, call *Jon Bolt* in Sales Development/DMD.

4. Quality Design/Manufacture—
Emphasis of this point helps relieve his concern of "more drives mean more failures." Those of you who have seen the 7905 demo on the shake table at DSD can vividly appreciate this characteristic of all HP drives. Articles like those in the July 15th issue of the *CS Newsletter*, (pg. 7), and the November 1, 1972, DSD Bulletin concerning flight testing of our drives, helps substantiate the above point.

5. Single Vendor Support/Cost—
Don't fail to point out that the 7920's BMMC is just $54/mo. In systems with up to a few drives, this cumulative charge can be less than the charge for a single larger disc. Additionally, buying HP drives relieves the customer from worrying about compatibility and support problems. A thoroughbred HP system alleviates compatibility problems and furnishes entire system service by our responsive support organization. No multiple vendor hassles need arise.

6. Low Cost of Ownership—
The above points concerning multi-spindle systems— drive and system performance, drive reliability, system backup, low BMMC, responsive support—all contribute to a new low cost of ownership in terms of down time and maintenance costs.

7. New Product Lock-Out—
As future product evolution occurs, considerable R&D funds will be spent on making our new product dovetail into our existing product lines. No consideration will be given to foreign peripherals. If a customer is unable to grow his system because of a previous non-HP drive commitment, then his short-term expediency will result in a longer term dissatisfaction.

8. Sell the Company—
Stress HP's commitment to the disc business as evidenced by the commitment of a new division. Emphasize our goal to remain competitive on a cost/ Megabyte basis.

With all this, how can you lose? Remember, the "D.J." says, "Don't be swindled out of multi-spindle."

GOOD SELLING!

DATA SYSTEMS NEWS

Product News

Announcing DVA05
By: Bill Stevens/DSD

Has your customer been asking you if HP is going to provide modem support for 2645A terminals with minicartridges? Are you tired of suppressing that "ah . . . "? Well, NOW you can say YES!

DVA05 is an enhancement of DVR05 which provides support for the operation of 2635A, 2640B, 2645A and 2648A terminals over *both* full duplex, asynchronous modems and over direct hardwired connections. DVA05 operates in conjunction with the 12966A Interface (Option -001 provides the cable for hardwired connection to the terminal while Option -002 provides the cable for connection to modems). DVA05 supports the operation of 264X system consoles on hardwired links but *not* on modem links; DVA05 does support, of course, program development and execution over modem links.

DVA05 has been added to the 92062A RTE Drivers Package ($250 U.S.A. list price). DVA05 is on the October 1 Grandfather Disc and will de shipped with all RTE-M-II and -III operating systems.

DVA05 is compatible *only* with the latest revision of RTE-M, RTE-II and RTE-III. The October 1, 1977, revision is 1740. On modem links to terminals, DVA05 requires the 12539C Time Base Generator.

DVA05 is approximately 3200_{10} bytes. DVR05 is approximately 2900_{10} bytes.

Features

- Support of both hardwired and modem-based communications.

  DVA05 operates over RS232-C or CCITT V.24 compatible full duplex, asynchronous modems at up to 1200 baud. With the 12966A-002 Interface it is compatible with the following 300 and 1200 baud modems: Bell 103A or equivalent and Vadic VA3400 or equivalent. DVA05 operates on hardwired connections identically to DVR05.

- Support of Auto-Answer at the HP 1000/21MX-based System.

  DVA05 is compatible with modems which support auto-answer (Bell 103/804B or equivalents). Therefore, the remote terminal operator can independently dial in to a port on the computer which has been initialized by File Manager control commands entered at any active terminal or initialized by program control.

- Line Down Recovery.

  If the modem-link goes down during terminal operation, DVA05 will detect this and suspend further requests. When the line comes up again, DVA05 will automatically begin to process the suspended requests.

- Support of 2645A/2648A Peripherals.

  DVA05 supports all 2645A/2648A peripherals including the Minicartridges, 2631A-240 Printer, and the 13246A/B or 13349A Printer Subsystems. ASCII and Binary files can be written to and read from minicartridges. Therefore, the remote user can store a copy of a program's object chart locally.

- Keyboard input in character or block mode.

- Write to/read from display.

- Enabling/disabling of program scheduling by keystroke on terminal.

- Bidirectional control of printwheel carrier on 9871A-122 Printer which forms the basis for the 13349A Printer Subsystem. Plotting and reverse line feed on the 9871A-122 Printer are not supported.

- Character Set.

  DVA05 passes the extended character sets and display enhancements of the 2640 series CRT Terminals, but these are not recognized by the operating system or program processing software. Only upper case ASCII characters are usable in operating system, File Manager, or Editor commands, or in program statement names and labels.

On full duplex modem links at 1200 baud or less, the extended asynchronous communications interfaces (Option 020 on the 2640B, Option 030 and the 13260B on the 2645A/2648A and Option 051 on the 2635A) are not required. DVA05 and the 12966A-002 are compatible, however, with the extended asynchronous communications interfaces. The 13232N Modem Cable is for use with U.S. modems while the 13232M Modem Cable is for use with European modems. On hardwired links, extended asynchronous communications interfaces are required only on 2645A's and 2648A's with minicartridges.

Again, DVA05 is compatible with 2640B terminals and 2645A/2648A terminals without minicartridges which do have extended asynchronous communications interfaces operating over hardwired lines.

If DVR05 is generated into an RTE-M, -II or -III system with revision code 1740 or later, the extended asynchronous communications cards (2640B-020 and 2645A/2648A-030 and 13260B) are required only for 2645A's and 2648A's equipped with minicartridges. Revisions prior to 1740 do require the extended asynchronous communications card. Not specifying the 13260B on a 2645A/2648A will save your customer $165 per terminal.

To summarize, the hardware configurations recommended for DVA05 are as follows:

Hardwired Connections With The 12966A-001 Interface	
Terminals Without Minicartridges	Terminals With Minicartridges
2640B/2645A/2648A 2635A-051	2645A/2648A-007, -030, 13260B

Modem Connections With The 12966A-002 Interface and the 13232M Cable in Europe and the 13232N Cable In North America
2640B/2645A/2648A 2645A/2648A-007 2635A

New RTE Manual Package Makes It Easier to Get Started with the HP 1000/HP21MX System . . . .

By: Van Diehl/DSD

Now with a single product number you can order the combined 37 manuals of RTE-II and RTE-III or the 28 RTE-M manuals. The total list of manuals is given below.

HP 92827A

2M 422,-

Just for $200.00, you can get the RTE-II/III Software Manual Package (Product 92826A) or for $150.00 you get the RTE-M Software Manual Package. Isn't that a simple and inexpensive way to get started with your HP 1000 System?

RTE-M SOFTWARE MANUALS PACKAGE

RTE-M Programming and Operating Manual
RTE-M System Generation Manual
RTE-M Editor Manual
92064A Software Numbering Catalog
FORTRAN Manual
RET-DOS Program Libraries Manual
21MX Assembler Manual
Multi-device Driver DVR00 Manual
264X CRT Terminal Driver DVR05 Manual
7210A Graphic Plotter Driver DVR10 Manual
CalComp Plotter Driver DVR10 Manual
3070A Data Entry Terminal Driver DVA47 Manual
2892A Card Reader Driver DVR11 Manual
2607A Line Printer Driver DVA12 Manual
9866A Printer Driver DVR12 Manual
91200B TV Interface Driver DVA13 Manual
7261A Optical Mark Reader Driver DVR15 Manual
7970 9-Track Mag Tape Driver DVR23 Manual
59310B HP-IB Interface Driver DVR37 Manual

12732A Flexible Disc Driver DVR33 Manual
92062A Software Numbering Catalog
RTE Operating System Drivers and Device Subroutines Programming and Operating Manual
RTE Utilities Manual
Getting Started Manual
FORTRAN IV Manual
RTE-M Pocket Guide
BASIC 1000/M
BASIC Software Numbering Catalog

92826A RTE-II/III SOFTWARE MANUAL PACKAGE

General Information Manual
RTE-II Programming and Operating Manual
RTE-III Programming and Operating Manual
RTE: A Guide for New Users
RTE-II/III and BSM Pocket Guide
RTE Utilities Manual
FORTRAN Manual
FORTRAN IV Manual
HP ALGOL Manual

21MX Assembler Manual
Decimal String Arithmetic Manual
RTE/DOS Program Libraries Manual
SIO System Manuals Kit
7261 OMR Driver DVR15 Manual
7970 (7-Track) Mag Tape DVR24 Manual
Multi-Device Driver DVR00 Manual
59310 HP-IB Driver DVR37 Manual
2892 Card Reader Driver DVR11 Manual
7210 Graphic Plotter Driver DVR10 Manual
91200 RV Driver DVA13 Manual
12560 Calcomp Plotter Driver
2607 Line Printer Driver DVR12 Manual
264X CRT Driver DVR05 Manual
7970 (9-Track) Mag Tape Driver DVR23 Manual
3070 Driver DVA47 Manual
12732 Flexible Disc Driver DVR33 Manual
9866 Printer Driver DVR12 Manual
Batch Spool Monitor Reference Manual
Interactive Editor Reference Manual
RTE-II/III On-Line Generator Manual
RTE Drivers and Device Subroutine Manual
Getting Started Manual

With systems orders, the danger of delaying shipment is much greater because we must have a credit release five weeks in advance of the ship date. It takes four full weeks to complete the following process: Configuring of the MX, XE, or disc subsystems, issuing of all products to the system floor, racking of all products, configuring of the system, testing, and final Q.A. Thus by seeking credit release one week in advance of this process we are requiring credit approval five full weeks in advance of shipment. This means that a system order with eight weeks availability has only three weeks to clear credit.

So don't ignore credit holds—the sooner you obtain a credit release, the safer your promised delivery date will be.

Sales Aids

First Step in Customer Problem Solutions
By: Dick Walker/DSD

A simple check has the potential for saving many hours of burrowing through reams of customer listings; *make sure the software manual the customer is referencing to matches the on-site software actually being used.*

The procedure is simplicity itself:

1. Make sure the Software Revision Code (e.g., 1740) appearing in the customer's manual matches the Software Revision Code appearing on the label fixed on the outside of the customer's grandfather disc.

2. In software manuals, the Software Revision Code can be found on a Manual Update notice (if applicable), title page, and under "Publication History" on the Publication Notice that appears on the back of the title page. Note that "Publication Notice" has replaced the "List of Effective Pages" that formerly appeared on the back of software manual title pages.

3. If the label is missing from the grandfather disc for any reason, the Software Revision Code can be ascertained by listing (checking) the NAM records of all system modules. The most recent date code listed is the same as the date code for the whole system and should match the Software Revision Code appearing in the manual.

There are several reasons for a possible mismatch between software and its documentation. Although the software may be regularly updated through Software Subscription Service, extra manuals (survivors of an old training class) may still be in general circulation. Conversely, the customer may have received (through several sources) an updated manual without a corresponding change in existing software if he is not on the Software Subscription Service.

Help Wanted

WANTED —

Applications Engineer Wanted
By: Jim Eckford/DSD

Now that we are rolling with the Measurement and Control area at DSD, we have a need for a person to help us exploit applications for the various Measurement and Control products offered by HP. The requirements of the job are that the person have several years experience with hardware and software related to Measurement and Control problems. If you are interested, or know anyone who would be interested, please contact me at DSD.

Order Processing

A Note From O.P. on "Credit Holds"
By: Nancy Justice/DSD

Over the past few months, several questions have arisen relating to credit holds and their impact on shipments. A quick review of our credit hold policy should help you avoid delayed customer deliveries.

An order is placed on "Credit Hold" when it is pending credit approval. Until "Credit Release" takes place, the process which eventually results in Customer Shipment cannot begin. This is not a particular problem with component orders because their lead time is typically only one week. This means that only one week elapses between the time we issue parts and the eventual shipment date. We call for a credit release one week in advance of this issue week which means that credit can be pending up until two weeks prior to shipment.

DECNET Delay Details

By: Dave Borton/DSD

Data Communications magazine has given us their permission to reprint this article from their August 1977 issue. We thought you would like to read the entire article. Our four years of experience in Distributed Systems (since 1973) looks better all the time!

Rewrite. *DEC's network users will be able to obtain future software modifications for a small cost.*

Delays hit Decnet as Digital Equipment revises its software

Minicomputer manufacturer 'bites bullet' and renews commitment to innovative distributed network

Digital Equipment Corp.'s ambitious Digital Network Architecture (DNA) has had enough delays for the mini-computer manufacturer to reach what some company insiders have called "an emergency situation" some weeks ago over the issue. In the end, DEC decided to revise key elements of Decnet, the software portion of DNA.

The focus of the recent DEC company study on DNA's problems centered on Network Services Protocol (NSP), the software that routes messages, creates links, and generally manages the network. NSP architecture is being altered as a result of the study.

"We were faced with a traumatic business decision," said Nathan A. Teichholtz, DEC's corporate program manager of computer network development. "We were faced with the possibility of having incompatible products. We lost a few months with this, but we bit that bullet."

While Teichholtz concedes that DNA and Decnet are behind schedule, he still believes DEC's ap-proach is a sound one and that the advantages of the network will become more apparent to users as DEC increases the flow of Decnet products. "The company," said Teichholtz, "is enormously committed to this concept."

When DEC began publicly talking about DNA in 1974, it became evident immediately that the firm planned a dramatically ambitious approach to computer networking. Unlike other information processing manufacturers, who tend to closely follow international networking standards set by official standards bodies and de facto standards set by IBM, DEC designed its own network with its own unique software and protocols.

No host needed. IBM's Systems Network Architecture (SNA), for instance, is designed around a concept in which a host computer serves as the network manager. On the other hand, DNA requires no host computer. DEC also has its own lower-level protocol, Digital Data Communications Message Protocol (DDCMP) which is mes-

Newsfront

sage-oriented. IBM's protocol, SDLC, is bit-oriented.

One important result of the DEC networking approach is that DNA represents a true distributed processing network, and it also lends itself to packet switching environments—two great advantages over other networking approaches.

As for the various software layers in Decnet, Teichholtz said that DDCMP will remain virtually unchanged and that Data Access Protocol (DAP)—which performs many user functions—will probably see some minor changes. The major changes will be in NSP.

Teichholtz noted that NSP is utilized virtually everywhere throughout the entire Decnet product line. The NSP architecture changes were completed in late winter; some software is currently being field tested; and users can look for a steady flow of new NSP products in coming months.

Teichholtz emphasized that customers using older software releases will not be left out in the cold by the new releases, which, for some applications, could result in some incompatibility among older and newer products. Teichholtz noted that current DEC users are entitled to Decnet updates at a low cost under a program the firm calls "backward compatibility bridge."

Bits and pieces. A telephone survey of DEC users, conducted by DATA COMMUNICATIONS, indicates that some users have begun to institute DNA—usually in a bits-and-pieces manner—while others have had to delay implementing the network discipline, primarily because of the delay in various operating system releases.

One user, the First Data Corp., of Waltham, Mass., with six DEC-system 10's and PDP-11's as front ends and remote nodes, has not been able to use DNA, but, instead, is using ANF-10, an older DECsystem-10 networking discipline. Teichholtz admitted some ANF-10 customers were unhappy that they can't properly use Decnet—which isn't compatible with ANF-10.

Another user, at a Caterpillar Tractor facility in Pennsylvania, attempted to link PDP-11's and PDP-8's with Decnet, but found

that the application ate up too much core. In the end, the user tied the machines together by writing his own protocol.

Teichholtz indicated that DEC is emphasizing program development of Decnet products for the firm's line of DECsystem 10 and PDP-11 machines. "We're making good progress here," said Teichholtz, "We have a couple of customer sites in the Midwest running 11's on Decnet 10."

DEC, Teichholtz pointed out, is "not aggressive" in attempting to make standards of its protocols, but rather is adopting a stance of developing its own interfaces that will make DNA easy to interface with gear manufactured by other equipment makers.

DEC has an additional challenge with DNA, because the firm's various computer families are incompatible among themselves. Teichholtz indicated that DECsystem 20 Decnet products will not be available for at least a year and, further, that the PDP-8, as the firm's low-end minicomputer, is unlikely to receive great Decnet attention.

X.25, too. While Teichholtz said DEC's primary emphasis is currently on Decnet, he indicated that the firm has a strong commitment to making its network compatible with

equipment developed for X.25 and IBM's SNA standards.

"We call this our Gateway Concept," says Teichholtz. "We're starting to test our SNA and SDLC projects at user sites now. But we're going to be very careful. We anticipate a long testing period because DEC must learn about SNA."

Teichholtz expects Decnet's SNA and X.25 products to begin emerging in late 1978 or 1979. DEC has funded semiconductor houses to develop protocol chips that execute DEC's DDCMP as well as IBM and other standard protocols. The chips are expected to be designed in various manufacturers' hardware and should begin appearing on the market in 12 to 18 months.

Informed sources say that another indication of DEC's commitment to DNA is illustrated by the firm's growing commitment to the network discipline. While some 40 professionals are said to be working on DNA now, that number is expected to jump to 60 by the end of the year.

To date, some 200 customers and 500 computers have been licensed to use Decnet. More than 900 computers are expected to be using some form of Decnet by the end of the year.

Can your computer system pass this test?

Recent independent studies show that the HP 1000 real-time computer system, with its new 21MX E-Series high-speed processor, ranks head and shoulders above other small computers. Test your favorite against Hewlett-Packard's price/performance leader:

Feature	The HP 1000	Your old favorite
CPU	608K bytes memory capacity. Standard I/O rates of 2M bytes per second; burst rates up to 11.4M bytes per second.	
Micro-programming	Full software for developing and running 8.5K 24-bit words. 175 ns instruction execution time.	
Memory Speed	Cache speed 350 ns cycle time for all 608K bytes: just $2100* per 32K bytes. 595 ns cycle time. $1600 per 32K bytes (just 5¢ per byte!).	
Operating Systems	One upward-compatible family of Real-Time Executives: memory-based or disc-based RTE up to 608K bytes. BASIC, FORTRAN and Assembly languages. Pick what you need for today's job—expand when you're ready.	
Data Base Management	IMAGE, HP's complete DBM capability, plus QUERY language for easy access to related data. costs just $2500.	
Networking	Over 150 RTE networks installed and running. Modems or high-speed hardwired communications. Also RJE/1000 2780 emulator at 9600 baud.	
IEEE-488 Interface	HP-Interface Bus (HP-IB), HP's implementation of IEEE-488, allows simple link to instruments. Complete software including driver, formatters, message subroutines.	
Cost (Every HP 1000 includes 21MX E-Series CPU; CRT with dual mini-cartridges and soft keys; and RTE operating system.)	Model 20, 64K-byte memory-based system: $21,000. 500K-byte flexible discs optional.	
	Model 30, 64K-byte disc-based system, 15M-byte disc storage: $36,500. 5M- and 50M-byte discs available.	
	Model 80, 128K-byte data base management system with 15M-byte disc storage, IMAGE, mag tape, and line printer: $61,700. 50M-byte discs available.	
Delivery	12 weeks ARO.	

*All prices shown are U.S. Domestic List

Any more questions about the price/performance winner? Then call your nearest Hewlett-Packard office listed in the White Pages and ask an HP Computer Systems Representative. We'll be glad to arrange a demonstration of the HP 1000. Or send us the coupon and we'll get in touch with you. You'll find that our computers are even better in action than they are on paper.

Performance comes in three sizes:
the HP 1000 Models 20, 30, and 80.

HEWLETT **hp** PACKARD

DATA TERMINALS NEWS

Product News

DEC Block Mode Protocol ROM for $100
By: Sarv Thakur/DTD

A special Asynchronous Datacomm Protocol—compatible
with DEC 11/70 IAS Release 2—has been implemented
and is now available as Option E35 on the 2645A. This option
provides the following modifications to the standard
2645A Async. Datacomm Protocol:

1. X-ON/X-OFF control of block transfers. The DC3 charac-
    ter is used to inhibit further transfers from the computer
    until a DC1 is received. This capability is used to sus-
    pend Block Transfers when the receiving buffer is filled.

2. HT/EOT in place of US/RS in Format Mode. The HT
    character is used instead of a US control character to
    separate unprotected fields in Format Mode. Also, EOT
    is used in place of an RS to terminate the transfer.

3. Framing of block transmissions with STX and EOT—All
    block transmissions begin with an STX and end with an
    EOT. Since EOT is used to frame block transfers, the
    use of main channel protocol should not use EOT as a
    turnaround character. An ETX may instead be used for
    this purpose.

Remember that Option E35 is applicable only to the 13260A
or 13260B Datacomm options. The part number for the ROM
is 1818-0421 and it replaces part number 1818-0213
on the Control Memory PCA. (Note: This ROM can be used
on the 2648A but not with Compatability MODE!)

Ordered as option E35, the price is $100.

Demonstrating Compatibility Mode
By: Bill Swift/DTD

We designed the compatibility mode into the 2648A so that
our graphics terminal can utilize most existing software
which addresses a 1024×1024. In many sales situations,
you will be trying to replace a customer's existing terminal
with a 2648A. Being able to demonstrate compatibility is a
must. Listed below is a step-by-step approach that should
help you avoid some of the pitfalls.

1. Open the 2648A and physically set the P and Q
    switches on the keyboard Interface PCA to the OPEN
    position. This allocates a 2K byte datacomm buffer for
    incoming data. If you set the switches with an escape
    sequence, you will not allocate the datacomm buffer.
    Do a hard reset after setting the straps if power was not
    off.

2. Set the terminal to operate at 2400 baud (if possible). If
    you operate at a faster baud rate, you run a risk of
    overflowing the datacomm buffer. Since we can't use
    the ENQ/ACK handshake in compatibility mode, we
    need the datacomm buffer to help the terminal keep up
    with the data stream.

3. Tektronix terminals have the capability of selecting
    three different combinations of terminators following
    input of cursor address information. This selection is
    hardwired on the TC-2 board in the Tektronix terminal,
    but I suggest you use trial-and-error as there are only
    three possibilities. Page 3-33 in the reference manual
    has the necessary escape sequences.

4. Try to use an HP standard RS232C cable (13232A, C or
    N depending on the situation) because we have found
    that some Tektronix cables have been modified and are
    no longer RS232C compatible.

5. Be sure that the G and H straps are open on the
    Keyboard I/F PCA. Otherwise DC1/DC2 handshaking is
    necessary. PLOT-10 software doesn't support hand-
    shaking, and the terminal can "hang up" if G and H are
    not open.

If you follow these steps, you should have no problems
demonstrating how the 2648A operates with your customer's
graphic software.

A Burroughs B1726 uses the HP2645A with Multipoint
By: Tom Lee/DTD

Phil Wajs, from HP Pointe Claire (Montreal) has succeeded
in installing 2645A terminals in an asynchronous multipoint
mode on a Burroughs B1726. The customer, a local service
bureau, has three 2645A's and two 13349 printer subsys-
tems. The Burroughs communications software, NDL (Net-
work Definition Language) had to be modified by the cus-

tomer. The connection to the 2645A is made through the Burroughs async adapter with 202 modem support. According to *Phil*, a similar adapter exists on all B1726 systems with communications capability. The same adapter is used for both asynchronous point-to-point and multipoint. The 2645A uses the 13260C communications card.

Current deliveries for Burroughs terminals are 5 to 6 months (at least in Canada) so 2645A's may be the answer for the customer that does not mind making some modifications to NDL.

How Your Hardcopy Image Can Grow

By: Rich Ferguson/DTD

"Now I want to make this perfectly clear, . . ."

Recently we've been discussing the advantages and disadvantages of raster scan graphics technology versus storage tube technology and as such we have identified a number of advantages that raster scan techniques have over storage tube techniques. Such things as selective erase, zoom and pan capability without CPU support, a very bright display and so on. There is another advantage with raster scan technology as it applies directly to the quality of the hardcopy output. All CRT tubes age with time and their performance decreases. However as it turns out with a storage tube the quality of the hardcopy resulting from the image on the storage tube screen is affected by the age of the storage tube where, with a raster scan device it is not.

The reason for this is as follows: since the image of a graphic picture is actually stored on the screen in a storage tube device the hardcopy device must read the image off the screen of the storage tube device. If the storage tube has deteriorated due to age or for some reason has some burn spots on it, these visual disparities will also appear on the hardcopy image produced.

In the case of a raster scan device however, the graphic data is picked off of the display electronics before it reaches the CRT tube. Because of this, the condition of the CRT tube itself has no effect whatsoever on the quality of the hardcopy output. It is completely independent. (For that matter, you could unhook the CRT tube on a raster scan device and still get the same hardcopy output.)

From a sales point of view this is important because most graphic users will indeed want hardcopy output. Think of the user that accidently burns his screen for some reason or another. With a storage tube device he is doomed to see that burn mark on every hardcopy image he produces. So in your sales situations, mention to the prospect the independence of the quality of the hardcopy output from the tube being used with the raster scan technique used in the 2648. This could make the difference between a sale and no sale.

Memory Lock or Set Tab: Lower Case "L" or Numeric "1"?

By: Tom Anderson/DTD

Jane Evans, CSG, has pointed out that many printers use the same representation for lower-case I's and the number 1. With the advent of complex, generalized escape

sequences, this can be confusing, aggravating, and annoying. For example, a program listed on the 9871A Printer would not differentiate between Memory Lock On (ESC l) and Set Tab (ESC 1).

Jane suggests that you resolve this dilemma by including a remark or comment next to any output statement using a lower case l or the number 1 in an escape sequence.

Thanks *Jane*!

Sales Aids

Second Level Responses
By: Tom Anderson/DTD

The 2648A Graphics Terminal 4-color flyer has generated over 2,000 second level responses to date! Remember, these are second level responses. Flyers are mailed to someone who clips an ad coupon or circles a bingo card. These flyers have postcards to request additional information. When we receive one of these postcards, additional literature is mailed, and a copy of the lead is sent to your District Manager within 3 days.

These postcards should be considered *HOT LEADS*, and we're counting on you to follow through. A quick phone call or a form letter introducing yourself as the local sales contact can pay big dividends.

GOOD SELLING!

I want to know more about your bright, easy-to-read 2648A Graphics terminal.
☒ Contact me to arrange a demonstration in my office
☐ Send more information about the 2648A

Name *F. Winfield Simplex* Title *Vice President*
Company *Duplex Electronics*
Address *One Simplex Way*
City *Simplex* State *Ca* Zip *92648*
Phone *555-2648*

Order Processing

European Orders for Terminals from DTD
By: Larry Roth/DTD

Now that HPG is the European Supplying Division for almost all 132xx accessories, you must remember what COCHISE will do when you order a 2640C, 2641A, 2645R, 2648A, or 2649A with accessories. COCHISE will automatically split the order, routing the terminal to DTD because it is the Supplying Division, and routing the accessories to HPG because they are the European Supplier. This will result in your customer receiving a terminal and accessories separately instead of integrated together. YOU DO NOT WANT THIS TO HAPPEN!

YOU must remind Order Processing to override the normal Supplying Division and use 42 as the Supplier for the entire order.

GENERAL SYSTEMS NEWS

Product News
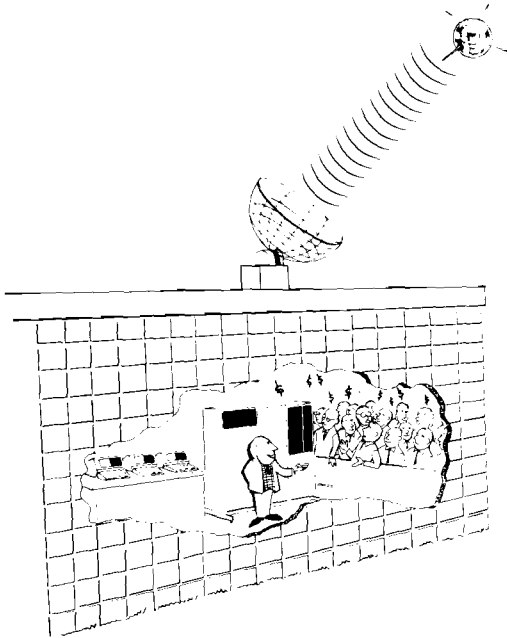
Customer Visits to Live Project Prelude (SBS) DEMOS
By: Larry Hartge/GSD

You can now begin inviting your customers to the Project Prelude experience as first described in the September 15 Newsletter. These "Prelude to the 80's" demonstrations will further establish the viability of distributed processing and confirm DS/3000 as "the" distributed system with 1980's capabilities and deliverable today!

There are two different one hour presentations to which you may invite your customers. The Executive Management Presentation has as its primary emphasis the advantages of teleconferencing with only secondary addressing of data processing and document distribution. This presentation is really appropriate only for top management of large organi-zations. Such executives should be invited to both the Management Presentations and the Data Processing Management Presentations—which has a much broader appeal.

Scenario: Executive Management Presentation

A narrated management meeting skit will portray business being conducted remotely. With live teleconferencing, management personnel at two separate locations will discuss a mutual problem. This problem will be examined by utilization of facsimile transmission and distributed data processing. The resolution of the problem will be affected by an action plan which is circulated via distributed processing systems.

Outline: Data Processing Management Presentation
I. Data Processing Limitations
   a. Past
   b. Present

II. Why Limitations Will Go Away
   a. Advancing Computer Technologies
   b. New Communications Channels

III. Data Processing Demonstrations—Highlighting:
   a. Distributed Processing
   b. Broadcast Processing
   c. Parallel Processing
   d. Load Levelling
   e. Remote Data Transfer
   f. Back-Up
   g. Data Distribution

IV. Future Implementation Considerations
   a. Hardware
   b. Software
   c. Business Organization

The time schedule has been tentatively set for only the December presentations, and the schedules appear in the following tables. You will be informed as to the November and January schedules in the next issue of this Newsletter. The designated District Sales Manager is responsible for coordinating *all* visits to that particular site; please work directly with him and not with the participating firm or SBS. Note that *all* times given are Eastern Standard time.

Executive Management Presentation

Dates/Time	Site	Participating Firm	Coordinating Dist. Mgr.
Dec. 2, 10:30-11:30am Dec. 2, 10:30-11:30am	Bellaire, Texas Harrison, NY	Texaco Texaco	Ralph Godfrey/Houston Walt Benedetto/Paramus
Dec. 7, 7:00-7:45pm Dec. 7, 7:00-7:45pm	Bellaire, Texas Harrison, NY	Texaco Texaco	Ralph Godfrey/Houston Walt Benedetto/Paramus
Dec. 12, 10:00-11:00am Dec. 12, 10:00-11:00am	Bellaire, Texas Harrison, NY	Texaco Texaco	Ralph Godfrey/Houston Walt Benedetto/Paramus
Dec. 21, 11:00-12 Noon Dec. 21, 11:00-12 Noon	Bellaire, Texas Harrison, NY	Texaco Texaco	Ralph Godfrey/Houston Walt Benedetto/Paramus

Data Processing Management Presentation

Dates/Time	Site	Participating Firm	Coordinating Dist. Mgr.
Dec. 5, 6:00-6:45pm Dec. 5, 6:00-6:45pm	Bellaire, Texas Harrison, NY	Texaco Texaco	Ralph Godfrey/Houston Walt Benedetto/Paramus
Dec. 12, 9:45-10:45pm Dec. 12, 9:45-10:45pm	Bellaire, Texas Harrison, NY	Texaco Texaco	Ralph Godfrey/Houston Walt Benedetto/Paramus

GSD Reduces Prices on Series I-to-Series II Upgrades

By: Dave Sanders/Jon Jacobson/GSD

On October 1, 1977, GSD will be offering two new products which substantially reduce the cost of upgrading an HP 3000 Series I system (or any pre-Series II HP 3000) to a Series II. It is now possible to upgrade a Series I to either a 192KB Model 6, or a standard 320KB Model 8. With these new upgrades your customer can now start with a $75,000 Series I, then upgrade later to a Model 6 or Model 8, and pay only 2%-8% more than he would have paid had he bought the Series II initially. He can now upgrade a Series I to a 192KB Model 6 for only $47,900.

These two new upgrade products represent price reductions of $15,000 (in the case of a 192KB Model 6), or $9500 (in the case of a 320KB Model 8) over pre-October prices.

These new products are also available to your 3000CX and pre-CX customers as well.

Pricing, Ordering and Availability

The two models and new prices will be on the October 1 Corporate Price List and should be available for shipment 8 to 10 weeks from the order date. The following examples illustrate the costs of these new products:

A. Series I to Series II Model 6

30306A Upgrade to 192KB	$52,500
-001 Power Supply	5,000
-132 Selector Channel	3,000
-200 Returned 128KB Parts	-10,000
-202 Returned Selector Channel Parts	-500
-050 Delete Isolation Transformer	-2,100
TOTAL NET PRICE	$47,900

B. Pre-Series II to Model 6

30306A Upgrade to 192KB	$52,500
-200 Returned 128KB Parts	-10,000
TOTAL NET PRICE	$42,500

C. Series I to Model 8

30409C Upgrje to 320KB	$77,500
-001 Power Supply	5,000
-132 Selector Channel	3,000
-200 Returned 128KB Parts	-10,000
-202 Returned Selector Channel Parts	-500
-050 Delete Isolation Transformer	-2,100
TOTAL NET PRICE	$72,900

D. Pre-Series II to Model 8

30409C Upgrade to 320KB	$77,500
-200 Returned 128KB Parts	-10,000
TOTAL NET PRICE	$67,500

NOTE: Pre-Series II upgrades assume a selector channel is not required (ISS based) and an isolation transformer is needed.

The Affordable Growth Path

The 30306A and 30309C provide a more attractive incentive to those customers needing to expand their HP 3000 to the capabilities of the Series II with the MPE-II operating system. The new models should also help Series I prospects by reducing the upgrade penalty allowing the customer to purchase the HP 3000 that offers the price/performance that makes sense at that time.

SELL MORE SERIES I's!

Model	Option	Description	Price	BMMC
30306A		HP 3000 Upgrade to a Series II Model 6, 120/208V, 60Hz, 3-Phase, 192KB Fault Control Memory.	$52,500.00	*
	001	Power Supply Upgrade to a Series II	+5,000.00	*
	132	Compatible Selector Channel NOTE: This is not a complete new Selector Channel.	+3,000.00	*
	015	230V, 50Hz, Single Phase Operation.	0.00	
	501	Expand memory to 256KB	+4,700.00	*
30409C		HP 3000 Upgrade to a Series II Model 8, 120/208V 60Hz, 3-phase, 192KB Fault Control Memory		
	001	Power Supply Upgrade to a Series II.	+5,000.00	*
	132	Compatible Selector Channel NOTE: This is not a complete, new Selector Channel.	+3,000.00	*
	152	Upgrade early version asynchronous terminal controller board (30060-60001) to present board (30032B-003)	0.00	*
	503	Expand memory to 384KB	+4,700.00	*
	504	Expand memory to 448KB	+9,400.00	*
	505	Expand memory to 512KB	+14,100.00	*

*NOTE: The monthly maintenance charges will be recalculated; based on the charge for the Model 6 or Model 8 that results after the upgrade is installed.

| Model	Option	Description	Price	BMMC
Trade Allowances Offered for 30306A or 30409C upgrades:				
	200	128KB Series I or Pre-Series II Parts returned.	-$10,000.00	0.00
	201	96KB Pre-Series II parts returned.	-8,000.00	0.00
	202	Series I or Pre-Series II Selector Channel returned.	-500.00	0.00
	050	Delete Isolation Transformer	-2,000.00	0.00

Sales Aids

The SSB's Are On Their Way

By: Rich Edwards/GSD

A tangible part of the new HP 3000 Software Service is on its way to all established HP 3000 customers. The SSB (Software Status Bulletin) began publication the first week of September after two preliminary issues were distributed to the HP field SE's for use with the new phone-in consulting service.

The following letter, sent to each customer along with the SSB, explains what the SSB is and how to use it. If you receive any calls or letters as a result of the letter, please follow up and sell the new services.
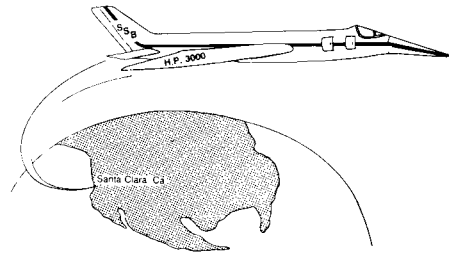
HEWLETT hp PACKARD

GENERAL SYSTEMS   5303 Stevens Creek Blvd., Santa Clara, California 95050, Telephone 408-249-7020, TWX 910-338-0215

September 6, 1977

Dear HP3000 Customer:

Enclosed you will find your first copy of the new HP3000 "Software Status Bulletin". This semi-monthly publication is intended to keep you up to date on the status of all known errors in MPE and HP3000 software subsystems. Suggested interim programming solutions will also be included (prior to updates on the quarterly M.I.T. - Master Installation Tape).
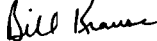
You will still receive the Communicator with its "Software Updates" section. The Communicator publication schedule will be timed to correspond to the release of a new MIT. Thus, from now on you will be getting both current information about known software problems twice a month through the "Software Status Bulletin" (SSB) as well as a full description of all formal updates through the Communicator.

A few words about how to use your new SSB.....Twice a month you will receive a new SSB which completely obsoletes your previous copy. All information will be compiled in a cumulative fashion until the problems are resolved through an update to the affected software. Information on the update itself will appear in the Communicator.

As part of the announced change in HP3000 software services and software pricing last month, HP3000 customers will be able to call Field System Engineers for information/help under the phone-in consulting service. For full details on the new software services, please contact your HP Sales Representative. A new brochure, "HP Customer Support for HP3000 Systems", has been written to describe all of the available support services - hardware maintenance, software support, software consulting, software documentation, software training, and the HP3000 Users Group. Your Sales Representative will be happy to give you a copy of this new brochure and review it with you.

We are looking forward to seeing many of you at the HP3000 Users Group International meeting in Seattle during the week of September 26-30, 1977.

Sincerely,

Bill Krause
Marketing Manager
General Systems Division

HP 3000
SOFTWARE STATUS
BULLETIN

06 SEPTEMBER '77

HEWLETT hp PACKARD

GENERAL SYSTEMS DIVISION
Santa Clara, California

THIS DOCUMENT SUPERCEDES
ALL PREVIOUSLY DATED VERSIONS

Using Files—A Guide for New Users of HP 3000 Computer Systems
By: Sandy Martensen/GSD

The title of this article is also the title of a new and informative manual.
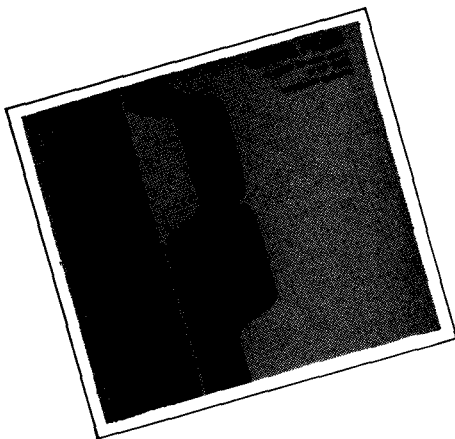
The guide is addressed particularly to the new user of HP 3000 systems, but since it's filled with examples, it can be useful for experienced users as well who may have forgotten how to perform certain tasks.

It shows you which commands, subsystems and utility programs you need to manipulate files on the HP 3000. The concept of device files is explained, along with basic file terminology, the general structure of files, and group and account file security.

The Using Files guide is short on philosophizing and long on examples. Specific tasks, with an emphasis on typical commercial data processing needs are shown:

- creating, deleting, and renaming files

- copying data to and from devices

- copying and combining files including moving them to other groups and accounts

- using files in production jobs

- sorting files

- performing backup and recovery of files

- listing information about files, groups, and accounts.

A few KSAM examples are also included, along with an extensive glossary of HP 3000 terms.

I think you will find this guide very useful. You may purchase Using Files (#30000-90102) for $4.50.

An HP 3000 Manual Is a Selling Tool?
By: Ed North/GSD
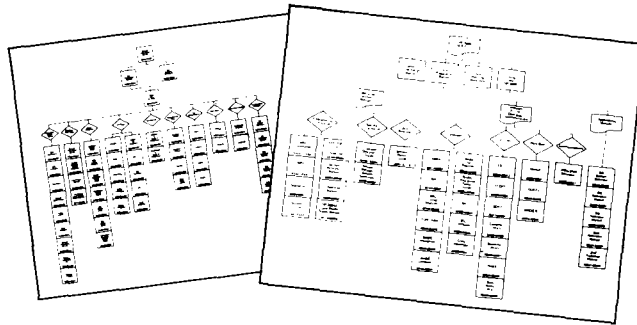
You bet! Our customers have stated the HP 3000 manuals are the best they have read, bar none! They are well written, loaded with examples, and are constantly updated by GSD's manual writers.

Manuals can be an effective sales tool in winning the technical evaluators in a 3000 sales situation. Two especially good documents are the General Information Manual (GIM), now free through the literature distribution depot, and Using the HP 3000. The GIM provides a thorough hardware and software description of the HP 3000 including MPE II, programming languages, utilities, data base, and communications.

Using the HP 3000 is a step-by-step guide for the first-time user which shows her or him how to log on and off, how to use the Editor and how to use other languages.

The following charts show all the manuals available for the Series I and II and their part numbers. Single manuals may be ordered from Corporate Parts Center. A complete set may be ordered from GSD (except Education manuals) by ordering 30381A for the Series II or 30321A for the Series I [Compiler and Data Management (IMAGE, KSAM, INDEX, etc.) manuals may be ordered as options].

We have got the best! Use them before as well as after the sale.
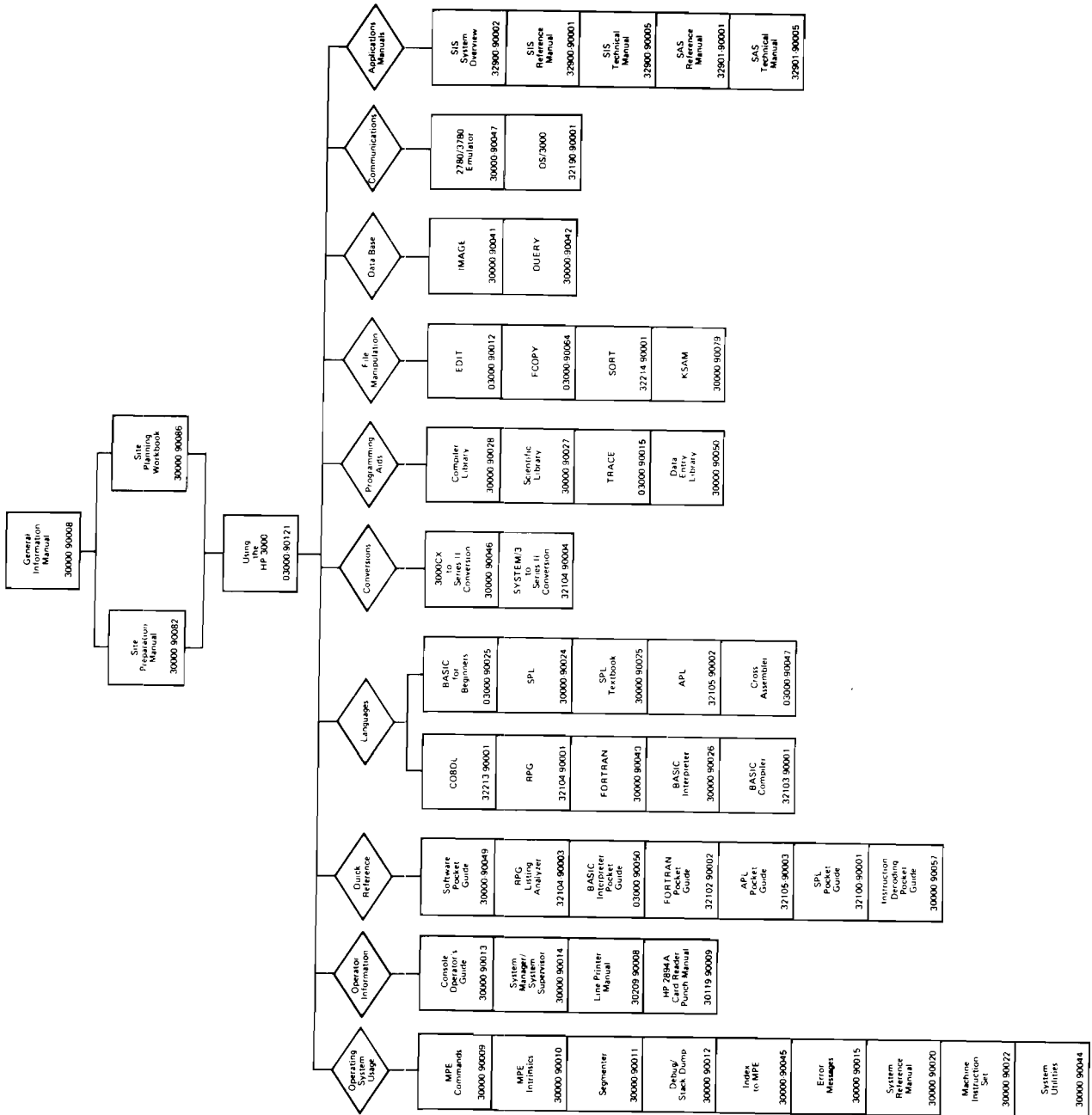
GOOD SELLING!

Figure 1. HP 3000 Series II Documentation

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                              ┌─────────────┐
                              │   HP 3000   │
                              │  SERIES II  │
                              └─────────────┘
```

General Information Manual — **Site Preparation Manual** — **Site Planning Workbook** — **Using the HP 3000**

Operating System Manuals — **Languages, Utilities, Data Base, Communications** — **Applications Manuals**

Programming Information — Operator Information — Quick Reference — Languages — Utilities — Data Base — Communications

MPE Commands 30000-90088	SYSTEM 3 to Series I Conversion 32104-90004	Console Operator's Guide 30000-90090	Software Pocket Guide 03000-90126	COBOL 32213-90001	BASIC for Beginners 03000-90025	EDIT 03000-90012

Data Base	Communications	Applications
IMAGE 30000-90041	2780/3780 Emulator 30000-90047	SIS System Overview 32900-90002

Programming Information:

MPE Commands — 30000-90088
MPE Intrinsics — 30000-90087
Segmenter — 30000-90011
System Utilities — 32000-90008

SYSTEM 3 to Series I Conversion — 32104-90004
System Reference Manual — 30000-90020
Lineprinter Manual — 30209-90008
HP 2894A Card Reader Punch Manual — 30119-90009

Operator Information:

Console Operator's Guide — 30000-90090
System Manager/System Supervisor — 30000-90089

Quick Reference:

Software Pocket Guide — 03000-90126

Languages:

COBOL — 32213-90001
RPG — 32104-90001
RPG Listing Analyzer — 32104-90003
FORTRAN — 30000-90040
BASIC Interpreter — 30000-90026
BASIC Compiler — 32103-90001

BASIC for Beginners — 03000-90025
BASIC Interpreter Pocket Guide — 03000-90050
SPL — 30000-90024
SPL Textbook — 30000-90025
Cross Assembler — 03000-90047

Utilities:

EDIT — 03000-90012
FCOPY — 03000-90064
SORT — 32214-90001
Compiler Library — 30000-90028
Scientific Library — 30000-90027
TRACE — 03000-90015
Data Entry Library — 30000-90050

Data Base:

IMAGE — 30000-90041
QUERY — 30000-90042
INDEX — 30000-90095

Communications:

2780/3780 Emulator — 30000-90047

Applications:

SIS System Overview — 32900-90002
SIS Reference Manual — 32900-90001
SIS Technical Manual — 32900-90005
SAS Reference Manual — 32901-90001
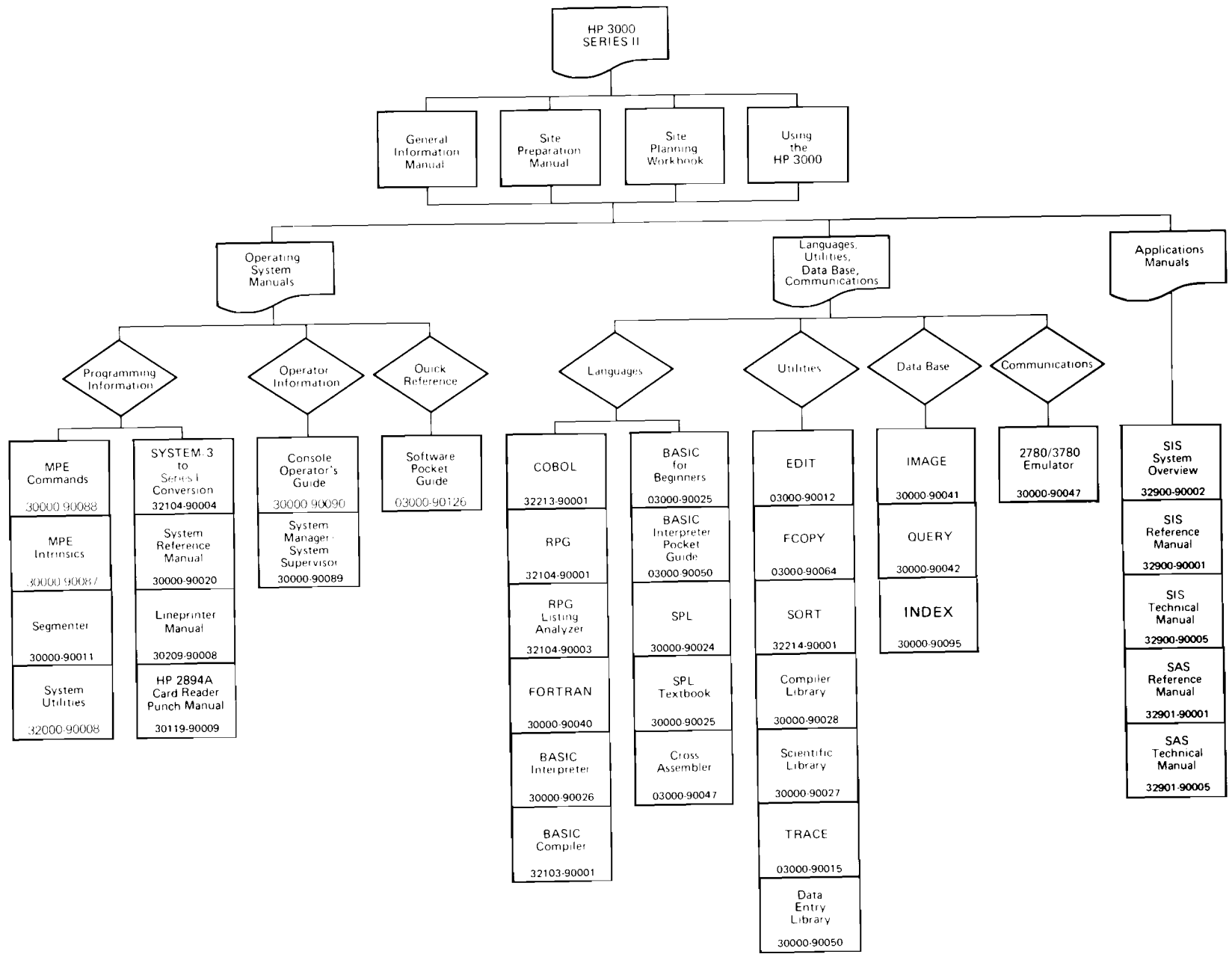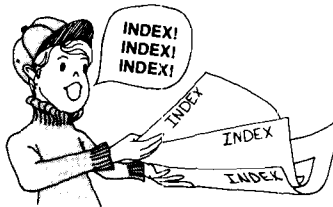SAS Technical Manual — 32901-90005

Figure 2. HP 3000 Series I Documentation

User's Group Newsletter Indexes Available
By: Carol Budkowski/GSD

Need to find out about computer uses in higher education? Interested in articles on computer assisted instruction? Well, look no more!

Now available on request are complete indexes for the *Hewlett-Packard Educational User's Group Newsletter*, Volumes *III-VIII*.
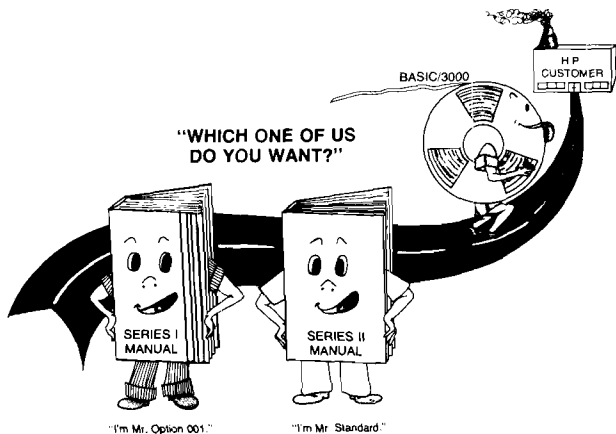
Obtain your *free* copy by writing the:

Editor
HP Educational User's Group Newsletter
5303 Stevens Creek Blvd.
Santa Clara, CA 95050

Order Processing

Don't Forget Option 001 on Series I Orders
By: Ross Hunt/GSD

"WHICH ONE OF US DO YOU WANT?"

BASIC/3000

HP CUSTOMER

SERIES I MANUAL

SERIES II MANUAL

"I'm Mr. Option 001."

"I'm Mr. Standard."

A minor omission is causing your Order Processing and GSD Order Processing departments extra work on software orders for Series I's and pre-Series II systems.

The specific problem occurs when ordering BASIC/3000 (32111A), FORTRAN/3000 (32102B) or the Scientific Library (32205B) for a Series I system. Many orders are omitting option 001 which is the option that replaces Series II manuals with Series I manuals. If omitted, your customer would receive a manual that discusses 4-word extended-precision numbers for their 3-word machine. This is a no-charge option and only applies when ordering the previously mentioned three software products.

GENERAL NEWS

Thanks to You— It's Working . . . Education Sales Up 100%
By: Gary Stump/GSD
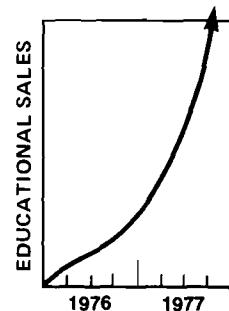
A year ago when we set our sales targets for FY'77, even I thought they were a bit optimistic. We had committed to increase Educational sales by 100% over FY'76. Sales to schools had remained relatively level for the three previous years.

Thanks to *your* efforts we have reached our goal; in fact we may exceed it slightly. FY'77 is the best year HP has had since we began our involvement in the Education marketplace. Moreover, sales are up at DTD and DSD as well.

Our program is right on and thank you for all of your efforts. Next year we'll do it again.

THANKS!

HP GRENOBLE NEWS

Division News

Beefed-Up Support to the European Sales Force
By: Pierre Ardichvili/HPG

If you are a European FE, here is good news for you: we are strengthening our sales support organization to help you sell more and easier.

As of September 1st, we have set up two Sales Development groups, one for DSD, and one for Terminals, and a function of Product Management for DSD.

This latter function will be fulfilled by Guenter Kloepper; it will ensure that we know about DSD and its products just as if we were right there!

The DSD Sales Development group, composed of Jack Griffin, Henri Ajenstat and Georges Retornaz, will keep working for Guenter until a manager is appointed.

The Terminals group, headed by Francis Marc, will include Richard Franklin, (our well-known 3070 specialist), and two newcomers, Maurice Poizat from our HPG lab, and Christian Graff from our EDP operation.

All the members of that group will be responsible for the support of all CSG terminals, whether they come from DTD, Boise or Grenoble.

I can guarantee that you will see us often in FY'78!

HP 2240A Has No Secrets for European SE's
By: Henri Ajenstat/HPG

The first seminar on the HP 2240A, our new Measurement and Control Processor, just took place in Grenoble.

Twelve SE's representing most of European sales regions attended an extensive 3 day course prepared and run

by Dieter Schmidtke. In order to permit maximum access to the 2240 demo unit, two separate sessions were organized. The participants had the opportunity to play with the demonstration package and also to develop their own programs in BASIC and FORTRAN.

On the menu of the seminar were:

- the 2240 (introduction, competition, components, programming);

- the demo-box (explanation, hands-on experience);

- measurement and control basics;

- 2240 product support and marketing plans.

As a result of this course, each major European sales region now has its local expert on the 2240, and we count on them to help us promote this great product.

The photos below reflect the interest and enthusiasm communicated by Dieter to our System Engineers.

First group of SE's (from left to right) Bent Andersen, Giuseppe Bordonzi, Karl-Heinz Van Husen, Andreas Rodhe, Yvonic Laneouse and Dieter Schmidtke.
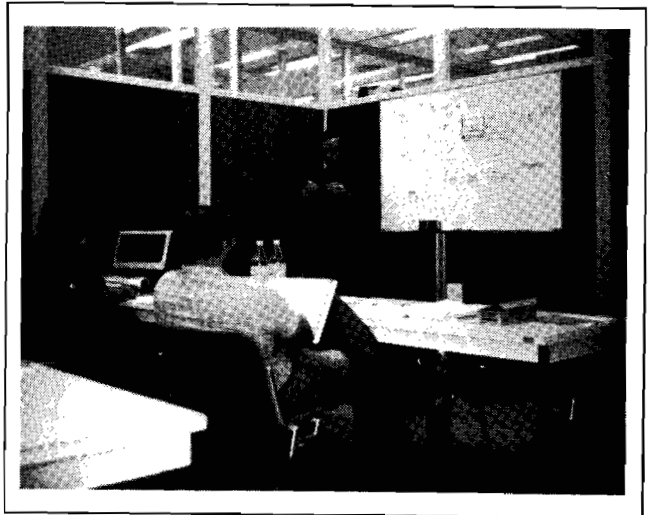
With the second group (from left to right) *Pierre Ollivier, Frank Slootweg, Marc Van Der Bossche, Horst Dworschak, Jacques Lassoury, Fred Bennett, Peter Sipos* and *Dieter Schmidtke*.
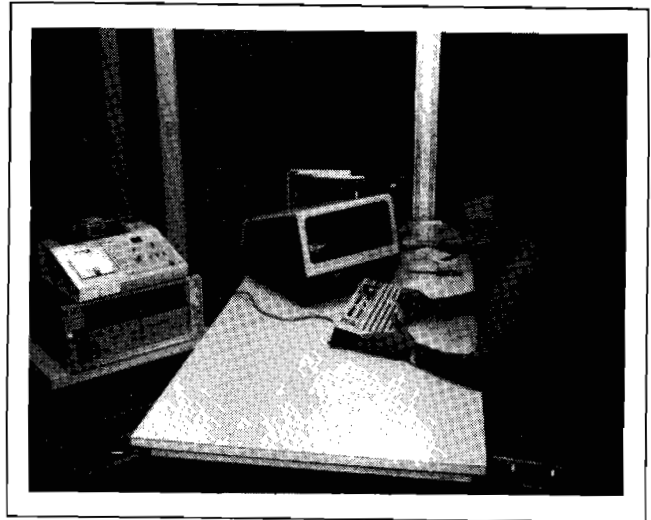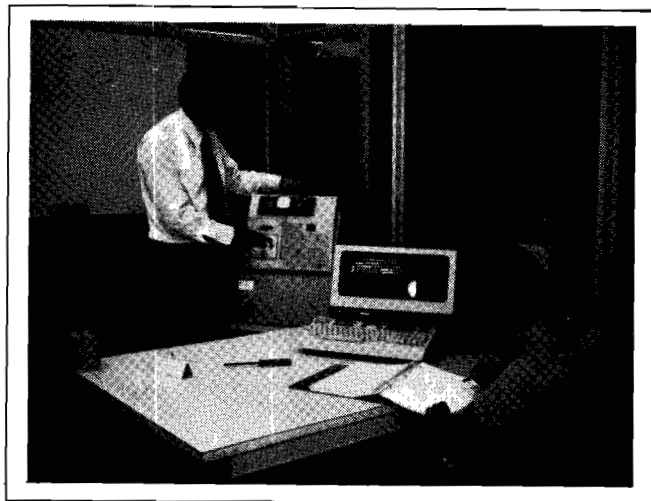

Horst Dworschak from Vienna exercising his talents on the demonstration unit.

Jacques Lassoury caught in the middle of a homework assignment.

Pierre Ardichvili (Marketing Manager) outlining DSD product strategy.

One happy *Dieter* exhibiting the 2240 demo-fixture.