

Computer News



HP DSG/3000: Easy Graphics

Computer News

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On the Cover

HP Decision Support Graphics/3000 (DSG/3000), for use with HP graphics terminals and four-color plotters, single-pen plotter and printer/plotter, can generate various graphs to quickly convey meaning to complex data. Article begins on page 11.

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HP Computer Museum
www.hpmuseum.net

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CMG



The behind the scenes effort of SE, Fred Stone, who modified programs he wrote for an earlier swim meet in Florida, ensured timely availability of information on swimmers.

HP 250 Aids Olympic Effort

By Bob Ingols/CMG

Hewlett-Packard helped support the US Olympic Swimming Team by loaning computer equipment and people for the 1980 US Long Course Swimming Championships held July 29 — August 1 in Irvine, California. This meet replaced Olympic trials and National Championships. Swimmers competed against medal winning times in Moscow and were honored by the President as our honorary 1980 Olympic Swim Team.

An HP 2645 and HP 2631 were connected to a remote DEC PDP-10 for providing up-to-date "heat sheets", listings of swimmers, times and lanes, for participants and spectators.

The HP 250, with a memory better than Howard Cosell's, was used by the pool announcer for on-line terminal access to biographical and

statistical information on the swimmers. We also provided printouts of this information for key final events to ABC Wide World of Sports announcers, Keith Jackson and Mark Spitz, for use in their broadcasts.

Greg White and Paula Diggins, staff SRs at the Brookhollow office, volunteered their time to loan and operate the equipment. Programming was spearheaded by SE, Fred Stone, who flew in from HP Orlando. Eddie Jira, LA Airport, provided local SE support to assure the successful operation of the 250. All worked long hours and were greatly appreciated by the meet directors.

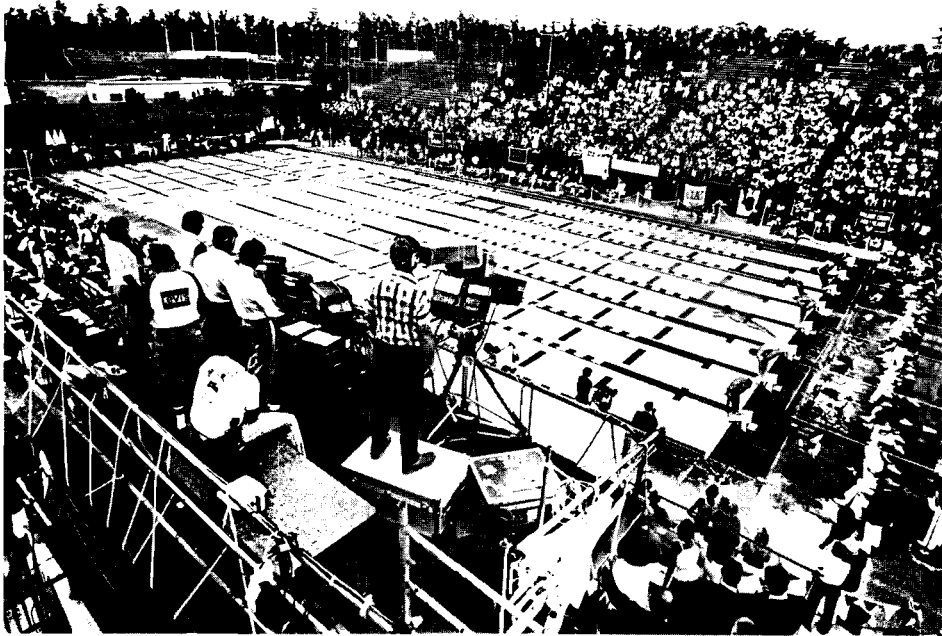
HP is proud to support events like this. Thanks to all involved for this volunteer support of amateur swimming.



Of the total 34 events at Irvine, 26 were Olympic events. Three world records were set: in the men's 200 metre butterfly; men's 200 metre individual medley; and the women's 200 metre butterfly.

In addition, eight US records were set. And to top off the meet and swell the pride of participants, 15 swimmers in nine events beat the Moscow Olympics gold medal times; 25 swimmers in 16 events beat the Moscow silver medal times; and 22 swimmers in 14 events beat the Moscow bronze medal times.

In the shining event of the Championships, the men's 200 metre butterfly, the first two place winners beat the world record, and the first three place winners beat the Moscow gold medal time of Sergey Fesenko of the Soviet Union. The fourth to eighth places all beat the Moscow silver medal time.



At the Irvine meet

Customer Self-Maintenance Packages

By Roger LeMay/CSD

Do you have a technically sophisticated customer who is considering doing his own maintenance on HP 1000 systems and peripherals? If so, then you should call CSD Sales Development for advice on helping this type of customer be successful with a new self-maintenance program. We have developed a new Self-Maintenance Package (SMP) to help your customer make intelligent decisions on stocking spare parts and determining the documentation, tools, test equipment and training required.

A basic SMP contains several sections. Section I consists of an instruction letter which will help you properly set your customer's expectations as to HP's and the customer's responsibilities in self-support operations. Section II consists of spare parts lists; Section III consists of CSD compiled historical usage data based on actual field repairs of the products requested; Section IV, and V cover test equipment and training applicable to maintaining the equipment configuration specified.

To help you with an SMP we need several things. First, we need a complete equipment configuration including all options, in writing. Second, we need a call or a letter from you giving us some background on the account to help us tailor the package to your customer's needs. Third, we need a minimum of three weeks lead time to prepare an SMP. Many of these lists must be prepared by hand and we usually have many requests to respond to in the same timeframe. The more we know about the account the more we can help you, so plug us in as soon as you can.

CSD

FRC Program Yields Savings

By Chris Kryzan/CSD

HP's newly offered Field Repair Center Maintenance Agreement has been well received by customers, according to an article in *Computerworld*, July 28, '80. According to the article, Long's Drug Store, with its data center headquartered in Walnut Creek, California, cites savings of approximately \$16,000 per year under this plan. HP equipment at the site includes five HP 3000 mainframes, two HP 2100 computers and about 90 model 2640 and 2649 terminals.

Previously these terminals were supported under a 24 hour/day, 7 day/week plan with a four hour response time, an approach the customer felt "was really overkill." Now, however, the flexibility afforded by HP's new service agreements allows the customer to realize a significant savings by returning these units to HP for repair. Currently seven offices are designated as Field Repair Centers in North America and 13 in Europe.

Approaches such as the Field Repair Center now allow HP customers to custom-tailor support to fit their individual needs. CSD's success with its support strategies promises to lead to success in your sales efforts.

Technical Computers

DSD

Low Cost L-Series System

By Dave Aune/DSD

Since the introduction of the L-Series there has been a strong demand for a lower cost system than the Model 10. Original introduction plans included the Model 9 (a dual floppy based system) for \$16,500 to fill this need. Problems with floppy wear and drive availability however, prevented the Model 9 introduction. Lately, however, Greeley Division and others have been making great progress toward solving these problems. The following discussion summarizes where we are now and where we expect to be.

Q: Will the L-Series Model 9 ever be introduced?

A: Yes. As soon as floppy availability improves.

Q: When will that be?

A: More drives should become available for use in DSD products sometime this fall.

Q: What do I do until then?

A: The 9895A floppy disc unit uses a different floppy drive which has no availability problems. Best of all the 9895A is supported on the L-Series right now. For many applications, the combination of a 9895A and a 2103L is a good solution.

2103L	Box+CPU+Memory	\$4,450
12005A	Serial Interface	600
-001	Cable for 2621A	65
12013A	Battery Backup	425
12009A	HP-IB Interface	900
9895A	Dual Floppy	6,500
2621A	Terminal	1,495
24397A	Diagnostics	200
92070R	Right to copy RTE-L	1,000
		<hr/>
		\$15,635

L-Series Opens New Market in Communications!

By Joe Hess/DSD

Communications applications account for nearly 30% of the early purchases of HP's new L-series microcomputer. Although not a traditional HP 1000 stronghold, communications customers have found the powerful I/O capabilities of the L-series to be irresistible!

The Communications Market

The market is best defined by customers who are more interested in moving or restructuring data than in processing that data. This type of application has typically been dominated by specialized hardware and terminals which are often attached to very large computer systems. The spectrum of the market ranges from high volume OEMs who build standard communications products such as IBM 3270 terminal emulators, to sophisticated systems houses which offer the capability to connect different computers where the link not only transfers data, but changes formats and performs some calculations as well. If you are hearing buzzwords such as terminal concentrator, intelligent modem or terminal, configurable link, or message switcher, you are in the communications marketplace!

As a pleasant aside, the volume of business in this marketplace for a typical account is usually quite high, so your sales prospecting efforts pay handsome rewards! DSD has booked orders from several communications customers which promise follow-on business measured in the hundreds of systems per year!

Communications Customer Needs

Typical communications customers require these essential items:

- High speed I/O
- Low cost
- Reliability
- Flexible configuration

Not only does the L-Series meet all these requirements, but with the addition of DS/1000 as a supported product on the L, it is even more attractive. The DMA per channel capability of the L and the unique distributed intelligence architecture are powerful tools for the communications oriented customer. Of course the reliability of the L (over 10,000 hrs MTBF for 2103L) and the tremendous (and expanding) flexibility of the L-series I/O card selection also make the L an obvious choice.

What to Expect

You may find that the competition is also somewhat different in this marketplace. Customers have often been forced to design their own processors with chips or other board computers from semiconductor houses like Zilog, Intel, or Motorola. Yet the lack of a total solution, worldwide support, and growth path, often make the L a virtual lock-out once the customer understands its capability!

The opportunity for the L-Series in the communications marketplace is great. As one customer said, "If we hadn't discovered the L-Series, we would have had to invent it!"

In fact, market acceptance for the L-Series has run ahead of field training and documentation of this market's applications. Also, starting with DS/1000 for the L-series, DSD and Roseville have aggressive new product introduction plans for this market. We have a lot of information on communications here in the factory which we will forward to the field with future NPT's and training. If you need help now, don't hesitate to call.

HP 1000 Ordering Information Booklet Error

By Ted Proske/DSD

In the August 1, '80 revision of the HP 1000 Computational Products Ordering Information (HP Literature Stock Number 5953-4262) 1600 bpi Mag Tape media option 051 was mistakenly omitted from the options listing for the 92834 FORTRAN 4X product on page 13 of the Ordering Information booklet. This 1600 bpi media option (051) is available for the 92834A product despite its omission from the ordering information booklet. The error will be corrected at the next revision.

Software Development and Optimization Tools

By John Moss/DSD

As an HP 1000 SR, you have some very powerful software development and optimization tools to sell — tools which can give you a real advantage over the competition!

Software development can be accelerated and many software problems debugged or avoided altogether through the use of the HP 1610A or 1610B Logic Analyzers from Colorado Springs Division. These powerful tools, together with the appropriate HP 1000 interface (10285A for the L-Series, 10278A for the M-, E- or F-Series, also from Colorado Springs), provide the capability to monitor memory, I/O or DMA transactions within the computer to capture certain activities to determine that the computer is executing as desired. This capability, combined with the analyzer's extensive triggering, data collection and time measurement features, allows the programmer to set breakpoints, trace program flow and measure real time between specific events.

The RTE Profile Monitor, which becomes available as a standalone product (92083A) on October 1, '80, allows customers to monitor and analyze the execution of their applications programs to determine where the computer is spending the most time. Thus isolated, inefficient routines can be recoded to run faster. Often, just recoding more efficiently in the original high level language can double the speed of execution, while recoding in Assembly or Microassembly may improve it by an order of magnitude.

The DSD lab uses both of these techniques to speed development and improve the performance of our software products. For example, the 1610A/B were used extensively while developing RTE-L and the Profile Monitor is used routinely to improve our language compilers before release. Customers, too, have had notable success: a large VEU was able to double his throughput by profiling and recoding parts of his application software; a major OEM used a loaned 1610A to find a flaw in his code that was crippling performance. The OEM was so enthusiastic about the 1610A that he bought three!

DSD now offers training for SEs who wish to learn more about this high potential area. SE Level III deals extensively with debugging and optimization techniques, including hands-on experience with the Logic Analyzer and the Profile Monitor. The Computation and Program Optimization course combines training on the internals of EMA and VIS (microcode) with the Profile Monitor. Refer to the DSD Training Handbook (all Technical SEs and their managers have copies) for more information on course content.

To the best of our knowledge, no other computer manufacturer can offer as complete a set of program development and optimization tools as a single vendor solution. The RTE Profile Monitor at \$2,000 and the 1610A/B at \$11,000 and \$12,500, respectively, provide superior price performance and can pay for themselves in a single usage!

Correction to "New Literature for DS/1000-IV Introduction" CN Aug. 15

By Ted Proske/DSD

The literature stock number for the DS/1000-IV Performance Brief is 5953-4264, not 5953-2854 as published in the August 15, '80 issue of *Computer News*.

L-Series HP Nametag Upgrade Kit Offer

By Jim Anderson/DSD

If you haven't already done so, be sure to upgrade your HP nametag with an official L-series nametag upgrade kit.

This specially designed kit upgrades your HP nametag by adding an SOS processor (just like the one used in the HP 1000 L-Series) to your badge.

The result of a \$30-million development program, your upgraded badge will be among the newest of over 150 products now using SOS technology. It will include a complete SOS computer-on-a-chip, less than a quarter-inch square and containing over 12,000 active elements. Your badge will execute the HP 1000 base instruction set, making it compatible with the entire HP 1000 computer product line. Incidentally, without SOS technology, your name badge would measure 18 by 14 inches and weigh over three pounds!

Order your badges by phone or by COMSYS (don't use HEART) from your DSD sales development engineer today!

DCD

Free 9845B/C Data Base Package for Customers

By Kerry Pike/DCD

DCD is looking for IMAGE/45 applications that can be used as references and application stories. Find a good use of data base on a 9845 and your prospect/customer can submit an application for a free DBMS — IMAGE/45, QUERY/45 and utilities. This is a \$5,000 value being offered.

To apply, fill out the application form opposite, using the following guidelines:

- Manufacturing companies
- Applications on 9845B/9845C, preferably a new order
- 7906 or larger disc as part of the system configuration
- Send application to Rick Stahlin, 3404 E. Harmony Road, Ft. Collins, CO. 80525
- Applications must be postmarked by midnight, October 31, '80.

Strings attached:

- Customer must be willing to be used as a reference sale
- Give DCD the opportunity to write up the application as a success story. We're not implying that we *will* write the story, but we want the *right* to do it. Customer should keep quantitative records on dollar and time savings resulting from using IMAGE, and agree to release these results to HP for publication.

Who wins:

- There will be one DBMS package awarded per area.
- The package will be awarded for a variety of technical applications (e.g., circuit analysis, computer-aided drawing, statistical analysis) in different disciplines.
- Each SR who uses the promotion to develop customer interest and awareness in desktop computers and the sophisticated software

capability they offer, wins increased customer rapport and sales potential.

We hope this program can be used to close some pending sales, as well as to form a source of references.

Free Data Base Application Form

Customer Name/Division: _____

Department: _____

Address: _____

Phone: _____

Responsible Manager: _____

System Configuration: _____

Existing 9845 or New Order: _____

Application Description: _____

Comments: _____

SR: _____ DM: _____

SE: _____ ASM: _____

CE: _____

Business Computers

BCG

Business Computer Group Organization Changes

By Ed McCracken/BCG (Business Computer Group)

The growth of HP business computer activity and the need to concentrate our CPU and operating system developments make this the appropriate time to establish the Business Computer Group, consisting of four divisions and several programs as outlined below.

Computer Systems Division

This new division will have overall responsibility for a recently defined program to consolidate the on-going developments of Hewlett-Packard's high-end CPUs and operating system. This includes responsibility for the existing HP 3000 computer family.

During this start-up phase, I will act as Computer Systems Division General Manager in addition to my role as Group Manager. Bob Frankenberg, R&D Manager from Data Systems Division, will head the hardware development lab and Howard Smith will manage operating systems development.

Information Systems Division

This new division will have responsibility for developing and marketing our business software tools. This includes commercial languages, data

base management and other EDP tools and office systems products including the HP 300. This is HP's first software division and I've asked Matt Schmutz to be the Information Systems Division General Manager.

General Systems Division

GSD will now have responsibility for the new market that is developing for smaller computers that cost less than \$25,000 and are more powerful than today's terminals. This division's major product responsibilities are the HP 250 and other small systems currently under development for the business computer market. GSD will continue to manufacture the current HP 300 hardware. I have asked Bill Krause to be the General Manager of GSD.

Boeblingen General Systems Division

BGD will continue with its current R&D, marketing and manufacturing responsibilities under the direction of Klaus-Dieter Laidig.

Data Communications Program

I've asked Andre Schwager to head this newly formed R&D and marketing center with responsibility for HP's strategic direction in computer systems data communication.

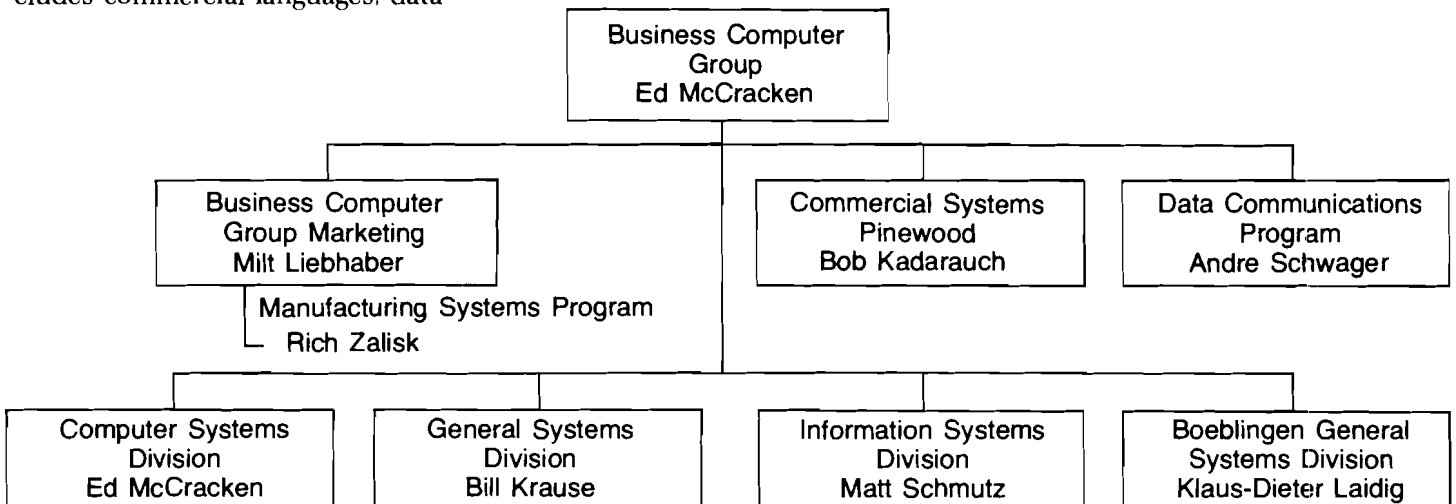
Business Computer Group Marketing

As Business Computer Group Marketing Manager, Milt Liebhaber will head a business computer marketing council with responsibility for our overall strategic and tactical marketing plan including pricing, product positioning, field support and training, and marketing communication. In this role, he will have a strong coordination responsibility with the Computer Marketing Group and Council and the Technical Group. In addition, he will continue to manage the Manufacturing Systems Program which has responsibility for the manufacturing applications software development and marketing activities.

Commercial Systems Pinewood

We are starting a software R&D and marketing center in the UK under the direction of Bob Kadarau. Early involvement will be in the areas of office systems and data communications with special emphasis on the European markets.

The division managers will be providing additional details on their organizations. I'm sure you join me in congratulating Howard, Milt, Matt, Bill and Andre on their new assignments.



★ HP 3000 Series II Upgrade Price Reductions

By Larry Turner/CSD

In developing Campaign '80, we looked at what could be done for existing customers in terms of upgrades which would encourage moving up to higher performance levels. Availability and small quantity related costs have not allowed across the board reductions.

However, we were able to come up with some significant price reductions for the owners of HP 3000 Series IIs. The Series II to Series III upgrade "30417A" is now reduced from \$40,000 to \$34,000, and the memory return credit prices are unchanged which makes upgrading even more attractive.

Your customer desiring to expand his/her Series II Model 6 beyond 256 Kbytes can now purchase the 30411U

refurbished memory expansion kit, including 64 Kbytes, for \$5,000 instead of \$7,000. In addition, the 30008U refurbished 64 Kbytes memory expansion has changed from \$2,800 to \$2,000.

These price reductions should encourage all of your installed Series II customers to order a performance upgrade today.

★ 7910 Upgrade Kit for HP 250

By Stacy Plemmons/GSD

When we shifted from selling dual and triple floppy disc-based HP 250s to Winchester disc-based 250s, many of our installed customers demanded an upgrade for the current configuration. Product 45012U, a field upgrade kit, was announced September 1 to meet this demand. First shipments are expected by November 1.

Specifics on this kit are:

Components

- 7910K Disc drive
- Power Supply
- Cables
- Manual Updates
- Mounting hardware for old and new HP 250 tubs
- Installation

Price:

- 45012U — \$6,750
- Option 001 Return one floppy drive — \$1,500
- Option 002 Return two floppy drives — \$3,000

Training on this kit and its installation was accomplished during the recent TSE Update Training course. In addition, the factory CE organization is producing an installation and procedure manual for field distribution. Please refer to your September 1 price list for ordering specifics on this upgrade kit.

CSD

HP 3000 Honor Roll

By Sheri Costa/CSD

Congratulations on your outstanding performance for the month of July.

HONOR ROLL JULY, 1980


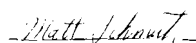
NAME	OFFICE	NAME	OFFICE
Ian Blaby	United Kingdom	Mark Lukowski	Toronto
Jim Banish	Baltimore	Dennis McDonnell	Neely Santa Clara
Lyle Bass	Englewood	Bob Metz	St. Paul
John Burisch	Louisville	Art Monk	Calgary
Ed Case	Kalamazoo	Pierre Naggiar	Knoxville
P. Chamoun	Brazil	Barry Poff	Richardson
John Conroy	Airport	Henry Potts	Louisville
Russell Dodd	King of Prussia	Phil Sampson	United Kingdom
Steve Evans	Salt Lake City	Mike Shope	Paramus
Cliff Falcon	Hanover	John Smith	United Kingdom
Allyn Field	Richardson	Ken Stone	Columbus
Les Flammer	Neely Santa Clara	Mark Verbofsky	Fullerton
John Hammon	Pittsburgh	Bruce Walker	Rockville
Niles Howard	Greensboro	Steve Wieber	Rolling Meadows
Jim Jaskovsky	Bellevue	Bob Woolbert	Fullerton
Dari Lille	Italy	Stu Yellen	Neely Palo Alto
Jorge Llanderal	Mexico City		

HP 3000 PROGRAM OUTSTANDING SALES REP OF THE MONTH

JULY 1980

This is to acknowledge that Dennis McDonnell of our Neely Santa Clara Office achieved the highest HP 3000 Order Performance for the month of July, 1980.

Congratulations from the entire HP 3000 Program!



 HP 3000 Sales Manager HP 3000 Program Manager

Helping You Sell During the Economic Downturn

By Mike Hess/CSD

In an economic downturn, companies are hard pressed to make the cash outlays necessary to purchase computers unless they can be convinced that it is truly beneficial to the company. Sales Development at Computer Systems Division (formerly General Systems Division) has developed a solution to help the SR sell during the present recession and also prepare customers to be in a position to take advantage of the expansion when it comes.

"How to Turn Economic Uncertainty Into Competitive Advantage" is an upbeat, colorful slide presentation (23 slides and a narrative) designed to show the customer how vital the business computer is during economic downturn. It demonstrates, what a business computer can do to control inventory levels, manage accounts receivable, assist the company in preserving good cash flow, and create opportunity out of recession while helping the customer gain competitive advantage during the transition to an expansion cycle. The narrative (20-60 minutes) can be tailored to the specific concerns of the customer. It covers both periods of an economic cycle: recession and expansion. The focus of the presentation is commercial applications.

For more information, contact Sales Development, CSD, Cupertino, at (408) 725-8111 ext. 4821.

Flexible DISCCOPY/3000 FTM Error

By Robin Rakusin/CSD

Before you begin quoting HP Flexible DISCCOPY/3000 to your customers, please note the following correction to the Field Training Manual regarding ordering information:

On page 13, the HP 32199R "Right To Copy" 32199A price should be \$260 (not \$250). The HP 32199A price is correct at \$650.

ISD

HP DSG/3000: A User Profile

By Jutta Kernke/ISD

DSG/3000 is more than just a product to sell or support. It is an invaluable tool for efficient and timely management decision making.

Right here at HP, for example, managers need to take advantage of the large amounts of computer generated information available to them. They want the most critical information relevant to the decisions they need to make. Business charts can summarize information for more rapid interpretation and DSG/3000 can help them in their planning process and day-to-day operations.

Milt Liebhaber, Business Computer Group Marketing Manager, has found DSG/3000 so useful that he cannot understand how any HP manager can be without computer graphics. He uses graphs produced by DSG/3000 to compare the sales of the HP 250, 300, and 3000 product lines by geographic regions, to focus on trends and inter-relationships, and to see immediately how business is doing for his divisions.

When asked to give a presentation on HP business computers, Milt just picks up his "blue binder" of business charts portraying the most current information available. His graphics portfolio of multi-color overhead transparencies is produced periodically against up-to-date information stored on the HP 3000.

Each month, Milt receives information on fiscal year-to-date percentage of quota and dollar sales, monthly sales and monthly percentage of quota for the three computer product lines broken down by sales region. Whereas in the past, he had to study and analyze these lengthy reports, now with DSG/3000, he can easily detect trends and see immediately how each region is doing.

Pie charts break sales into segments by region for simplified comparison of North America with Europe, ICON and Japan. Not only can each segment be differentiated in color and texture, but a region over quota can be exploded to highlight the success.

GSD

7910 Winchester Discs with HP 250 & HP 300

By Bob Ashford/GSD

A reminder that only those options listed in the HP 250 and HP 300 price configuration guides are supported!

Though the Corporate Price List shows several 7910 Winchester disc options, only those shown below should be ordered as part of your HP 250 or HP 300 systems configurations.

Winchester Discs

HP 250: Opt 012A (factory installed), or . . . 45012U (field upgrade-available September 1)

HP 300: 31032A (factory installed only)

Recommendations for HP 300 Configurations

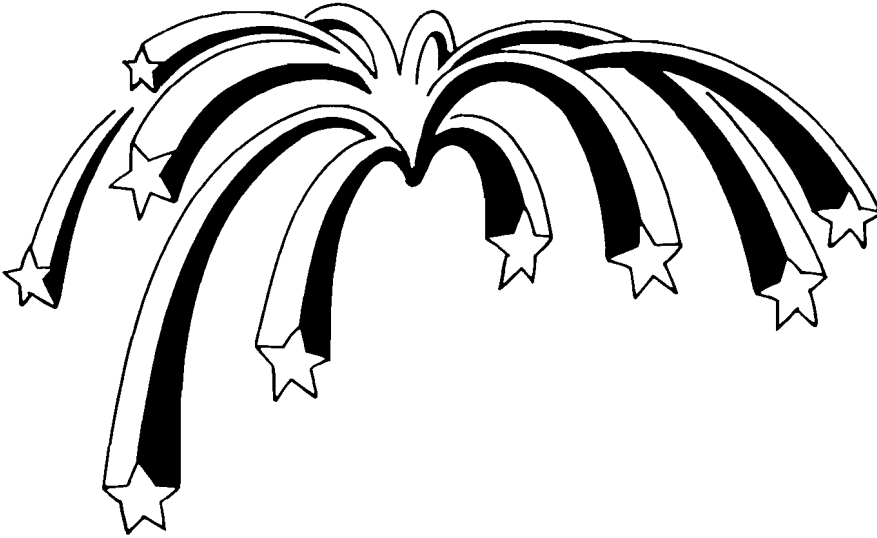
By Ken Filcoff/GSD

Due to a number of recent inquiries regarding the appropriateness of the three HP 300 model configurations, we would like to remind you that the Model 10 7910-based HP 300 should be used in a run only environment — not for program development. The larger Model 20 (100 Mbyte-based system) and Model 30 (240 Mbyte-based system) when equipped with 384Kb of memory will provide adequate disc space and performance for program development.

For the use of Workstations (31033A) with the HP 300, 640Kb of main memory is recommended for one Workstation and 768Kb of main memory is recommended for two Workstations.

Terminals

DTD



Million \$ Winners!

By Rich Ferguson/DTD

The day we've been waiting for ... the names of our million dollar winners are revealed. We weren't kidding when we said we would give away \$12 million. Look at the table full of money below.

About the money: it is chips of genuine United States currency. The chips come from legal tender which has been withdrawn from circulation by the Federal Reserve System as officially authorized by the Department of the Treasury.



Carl Flock has never been happier.

Tony Lapone from the King of Prussia office deserves special thanks. He sold the most dollar volume worldwide.

Many thanks to those of you who sell our products. We hope the contest was fun, as we intended it to be. Who knows what we'll give away next time!

Note: The names of our ICON winners will be published in a subsequent issue of *Computer News*.

Europe

1. Phil Sampson (Million Dollar Winner)
2. Fritz Czauifal
3. P.A. Kunz
4. Mike Daymond
5. Herbert Herdlicka
6. Les Bunce
7. Jukka Harju
8. Rolf Mecklenburg
9. P. Scoggins
10. Roger Chalke

Eastern Sales Region

1. T. Lepone (Million Dollar Winner)
2. T. Montella
3. R. McNabb
4. R. Watson
5. K. Souza
6. T. Papson
7. W. Schneider
8. J. Banisch
9. M. Wiseman
10. S. Holland**
10. B. Sanzo** } tied

Neely Sales Region

1. D. McDonnell (Million Dollar Winner)
2. J. Wilhelm
3. R. Okada
4. S. Evans
5. G. Workman
6. E. Savarese
7. L. Bass
8. B. Guhl
9. N. Alexander
10. J. Conroy**
10. J. Jaskovsky** } tied

Tony Lapone receives his award from Dave Williams of DTD Sales Development.



Midwestern Sales Region

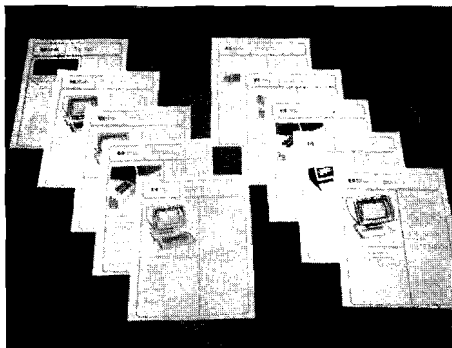
1. Dave Eggum (Million Dollar Winner)
2. Eddie Slaven
3. Harlan Proehl
4. Harry Elston
5. Ray Vanderhulst
6. Tom Hughes
7. Ed Quarnstrom
8. Jim Leath
9. Greg Linder
10. Ed Case

Southern Sales Region

1. Jim Cooper (Million Dollar Winner)
2. Niles Howard
3. Jim Tucker
4. Frank Simms
5. Giora Stein
6. Dennis Lamb
7. Bob DeWitt
8. Ron Cornett
9. Bill Shafer
10. Luis Suarez

Canada

1. Gerhard Schmid (Million Dollar Winner)
2. P. Pelletier
3. E. Muzzatti
4. M. Lukowski
5. T. Walker
6. A. Monk
7. P. Weaver
8. F. Angrignon
9. R. Fisher
10. B. Tessier



Special Terminal Products

By Rich Ferguson/DTD

An assortment of Special Terminal Application Briefs describing several of the most popular Special Terminal products are now available. Why are these products special? They are the enhancements to our standard products that customers have requested most often. These products demonstrate the range of flexibility that has been designed into our standard products while providing the uncompromising quality and reliability that our customers depend upon. Our standard warranties apply to these products.

Use these application briefs to promote special products to your customers. The products are easy to order (a HEART override is required)

and they are even easier on your customer's pocketbook, since they are discountable at the same rate as your customer's terminals.

Watch for these application briefs in your mail. If you have questions or comments, call your DTD Sales Development contact. Be sure to let us know about other features that have been popular with your customers that we could also consider as a special product.

Revised Cabling Manual Available

By Terry Eastham/DTD

A revised Data Terminals Cabling Manual (P/N 5952-2047) is now available. It has a blue cover and obsoletes the old red cabling manual (P/N 5952-9975).

So if you want the inside scoop on all the cables produced by DTD (including the new 13242 series), order this manual today.

Information about recommended cable applications, pin-to-pin connector (sex!) diagrams, part numbers, and interface standards (RS-232C, RS-449, CCITT V.24, etc.) is included. Both 262X and 264X type cables are covered (plus a few more!).

Graphics Workstation Pricing

By Gene Lee/DTD

From the feedback we're getting here at the factory, the Graphics Workstation, consisting of an HP 2647A Intelligent Graphics Terminal and an HP 9872B Plotter, is a hot selling combination. Customers have even called sales offices to buy after only having seen the Graphics Workstation ad!

To save time in configuring and pricing a "typical" Graphics Workstation, clip out the configuration and pricing guide opposite to keep handy on customer visits.

Prices for a Typical Graphics Workstation

2647A	Intelligent Graphics Terminal (Includes BASIC, Multiplot/Slide software)	\$ 8,950
9872B	Four-Color Graphics Plotter	5,000
13296A	Shared Peripherals Interface	500
13232N	Terminal Cable (15 ft.)	75
17055A	Overhead Transparency Kit	85
		<hr/> \$14,610

U.S. prices: subject to change without notice.

Terminals

2626A Gives Dual Data Communication Ports

By Russ McBrien/DTD

Data Terminals lets you double down! The HP 2626A gives the user an "ace in the hole" with its unique and versatile dual data communication ports. Both ports are RS-232, teletype compatible. Port one comes with a 50-pin connector and port two has a 25-pin connector.

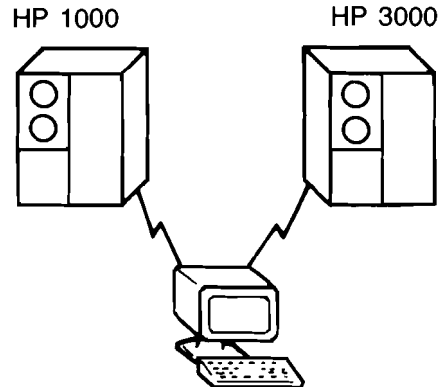
This one of a kind terminal feature allows the user to configure his/her system with new and unusual freedom.

The user can connect to two separate and entirely different CPUs and switch from system to system with just a keystroke. Because of this, the 2626A is especially useful in the design of redundant systems. An additional benefit of this configuration is that limited amounts of information can be passed from machine to machine. Imagine the time and effort to be saved this way.

The question: "Is it difficult to configure the ports to talk to non-HP systems?" No! Port configuration is done from the keyboard or computer. Also the wide range of configurations available allow connections to many types of equipment (DEC, Data General, CDC, Univac, NCR, etc.)

The data communication ports can also be used to increase user efficiency. With the terminal attached to two ports of the same computer, the user can have multiple jobs running at one time. He/she could have extensive processing controlled by one workspace and continue data entry in another. This configuration can also simplify the software needed for multiple activity jobs.

Computers are not the only things these ports can be connected to. Port 2 is especially suitable for attachment with an external printer (such as the HP 2631B). You can add a wide range of applications with the inclusion of an impact or letter quality printer.



Dual CPU Connection

2626As equipped with Option 50 (integral, thermal printer) have the potential of two printers available simultaneously.

Flexibility and ease of use are the key points to remember about 2626A's dual data communication ports. With a little imagination, dual data communication ports can take the 2626A into configurations where no terminal has gone before.

Correction to "Raster Dump Without Auto Form Feed!" CS Newsletter Oct. 15, '79

By Rich Ferguson/DTD

Yes gang, the 2647A will give you a raster dump to a hardcopy device without an auto-form feed at the end. What else can I say! Except . . . fantastic! This program was published in the CS Newsletter, Oct. 15, '79 and Line 160 had the semicolon missing, causing the output to look strange. Make this correction and what you want to see is what you'll get!

```
10 REM
20 REM
30 REM
40 REM
50 REM
60 REM
70 REM
80 REM
90 REM
100 REM
110 DIM A$ [255]
120 ASSIGN "GRAPHICS" TO #1
130 ASSIGN "HP-IB#6" TO #2
140 FOR I=1 TO 360
150 LINPUT #1 BYTE 0;A$
160 PRINT #2 BYTE 0;A$;
170 NEXT I
180 END
```

```
*****
*This routine performs a raster hardcopy to *
*HP-IB device #6. It can replace a "transfer *
*file from graphics to HP-IB#6" command in the *
*2647A. The advantage is that the automatic *
*form feed at the end of the transfer is *
*eliminated. For a full screen this subroutine*
*is only five seconds slower than the transfer *
*command in the command channel. Nice! *
*****
```

Editor's Note: Program listings are no longer published in Computer News. This one appears only as a correction to a previously published program.



Not bad for an amateur.

Scientists and engineers have more important things to do than draw charts and graphs. But now they can produce professional graphics for data analysis, scientific presentations and technical presentations in almost no time at all. Without writing a single computer program.

Picture your data the way you want it.

The key is a graphics workstation from Hewlett-Packard. Built around our HP2647A intelligent terminal, it's like putting an entire art department at your staff's fingertips.

Not only can you call up your standard alphanumeric data on measurement, test, and control jobs, but with a few simple keystrokes, you

can turn them into clear and helpful line and bar graphs, logarithmic charts, overhead transparencies, pie charts, and more. And with easy-to-use graphics commands in HP's Enhanced BASIC language, adding to more sophisticated applications is a snap.

Draw your own conclusions.

Just contact your nearest HP sales office for a 1-hour on-demonstration of our graphics products (we're listed in the White Pages). And bring your department's technical reports or other scientific data - we'll be glad to show

you just how professional an amateur artist can be. Or if you'd like more information first, just return the coupon.



Yes, I'd like more details about your graphics workstation. Please send me your brochure.

Name _____ Phone _____
 Title _____
 Company _____
 Address _____
 City/State/Zip _____
 Send to: Hewlett-Packard, Dept. Terminal Division
 Dept. 000, 15000 Flower Road, Loveland, CO 80540
 Attn: Ed Davis, Marketing Manager

New Technical Graphics Ad!

By Gene Lee/DTD

DTD has produced a technical version of the successful Graphics Workstation ad ("Not Bad for the First Day"). The technical version ("Not Bad for an Amateur") is being run in various technical magazines such as *Electronic Design*, *Computer Design*, *Electronic News* and others. Based on the excellent experience with the original ad, we expect a good response to this new one.

Customers have been very receptive and enthusiastic about HP's easy-to-use business graphics. The HP 2647A and 9872B Graphics Workstation combination sells itself!

New DTD Technical Documentation

By Diana Tingley/DTD

A new 66-page book, "2649A Terminal Applications Course Summary and Review", is now available. This book was originally designed to be part of the 2649A Customer Course, to be given to customers after they completed the course. Due to popular demand however, the book (P/N 13294-90023) is now also available as part of the Subscription Service to SES and TSEs. Get yours by signing up for the appropriate DTD Subscription Service. Send inquiries to Jef Nagle at SDC.

The book summarizes the major topics included in the 13294A 2649A Customer Course, including hardware and software architecture of the 264X product line, terminal bus protocol, memory mapped I/O structure, keyboard firmware, display linked list structure, character processing routines, initialization routines, and I/O processing routines.

HPG

DEC Customer Compliments the 3075

By Richard Franklin/HPG

For all you doubters, here's additional proof that the 3075 is the best general purpose Data Capture Terminal on the market. A DEC OEM has just finished testing and is about to install a PDP 1103 with six 3075s for a manufacturing control system in the food industry. This system will then be duplicated in five other sites.

Why HP? The reasons are those we often hear from people outside HP who are expert in the field of Factory Data Collection.

The following quotes on HP are taken from a final report on the customer's market survey:

For:

- "Robust"
- "Fundamental good design"
- "Partially waterproof (can be wiped with a damp cloth)"
- "Replaceable key mask"
- "Positioning of keys implies little or no effect on electronics by dirt or grease"
- "Wall mounting unit"
- "Good power supply system in the wall mounting unit"
- "Local HP service"

Against:

- "Cost"
- "Small display" (will now use CRT with large characters)
- "Fan cooled"

The customer's conclusion: "the most promising was HP with the careful design and sound construction."

No mention of the flexible options or on-line interactive capability! The message is clear: if you have a prospect who knows the market, HP Data Capture terminals will always be at the top of the list!

How to Read IBM Flexible Discs on an RTE-L System

By Joël Dubois/HPG

IBM flexible discs can be read or written on an RTE-L system using EXEC calls.

Ed Brumit's article in *Computer News*, June 15, '80, page 6, explains the difference between HP and IBM flexible discs and suggests the user define a special LU, with IBM parameters to read IBM flexible discs.

This is a good solution. The flexible disc unit is smart enough to determine which disc is inserted into the drive (IBM or HP).

This is not the case of DD.30 (RTE-L disc driver) which has been written for HP discs. This can give the user some trouble reading an IBM flexible disc. While making some tests, I discovered at least two of these problems. . . described here, with solutions, so that users don't have to waste their time:

1. Problem with last sector:

When a disc LU is defined, the user specifies the number of sectors per track (30 for HP, 26 for IBM). The sectors are numbered 0—29 for HP and 1—26 for IBM.

When the user tries to read or write one sector, DD.30 checks if the sector number that the user specifies in his EXEC call is correct. To perform the test, DD.30 checks if the value is strictly smaller than the number of sectors per track.

For HP, sector numbers 0—29 are smaller than 30. This test works for the HP convention, but not for IBM (last sector, number 26, is not smaller than the test I.E. 26 so the call is rejected and sector 26 cannot be accessed).

Solution:

At generation time for the IBM LU, specify 27 as the number of sectors per track. (But remember, there are only 26 sectors per track.)

2. Problem with buffer length

First, I'd like to remind the user of some details about the EXEC call on RTE-L when he accesses a disc LU (see manual P/N 92070-90007):

- bits 6-11 in the CONWD must be set.
- bit 13 is set in the CONWD to allow the user to analyse the errors.
- the starting sector must be an even number.

Now, let's discuss the buffer length (or the number of words to be read). HP flexible discs contain 256 bytes per physical sector (not logical or RTE sectors). IBM discs contain 128 bytes per sector. So:

- HP disc = 128 words/sector.
- IBM disc = 64 words/sector.

DD.30 takes the buffer length (in words) that is specified in the EXEC call and divides it by 128 to find out the number of sectors to read.

If the buffer length is 128 words, DD.30 will start a buffered read for 128 words, but the disc controller will discover an end of sector after 64 words for an IBM disc.

It will specify a transmission error and the program will be aborted. If the user does not want the program to be aborted, he sets bit 13 in the CONWD.

Solution:

Never use 128 words as buffer length. The user may specify 64 words, or a multiple of 64 (except 128). It works with a multiple of 128 words because the controller handles a request in two different ways:

- read a single HP sector (buffered read).
- read several consecutive sectors (unbuffered read).

If the user takes care of all these details and finds an ASCII to EBCDIC and EBCDIC to ASCII conversion routine, he should be able to read or write on any sector of the IBM disc.

Of course, some pieces of software will have to be written to access the information as an IBM file, because in this case, the user must know the format of the directory track on cylinder 0.

In conclusion, RTE-L does not support file access to IBM formatted discs, but if the user writes his own software, he will be able to read and write IBM discs through DD.30. The driver will not allow to format IBM disc, because some commands must be sent to the controller and DD.30 does not permit that.

New Terminals Marketing Organization in Grenoble

By Cyril Yansouni/HPG

Francis Marc has been appointed Marketing Manager Terminals for the Grenoble Division. Francis will be responsible for all terminals-related marketing activities in Grenoble, which includes worldwide responsibility for Grenoble Proprietary Product Line and European marketing support for the Transferred Terminal Products.

Previously, Francis was responsible for the European Marketing Support of HP Terminal Products and built an organisation which gained the respect of the European Computer Sales Force.

Boise

OEM Procedures

By Rich Suyehira/Boise

To expedite shipment of products from OEM warehouses, we have initiated a drop ship program. Our full font line printers, the 2613A, 2617A and 2619A are shipped directly from the OEM to your customer. This program has resulted in increased customer satisfaction and improved utilization of HP's assets.

The OEM printers are built to the exacting specifications of HP. To ensure that these specifications are met, HP source inspects each printer. HP sends a highly qualified technician to the vendor's facility to test 100% of the printers by first running each printer for up to two hours and then running a complete HP diagnostic.

If a printer fails during these tests, it is sent back to manufacturing for corrections. The inspector will then re-run the tests. If the unit passes, it is boxed and warehoused to await shipment. Shipment from the manufacturer's facility increases our ability to send the printer to your customer expeditiously. After the printer has been accepted by our source inspector, the OEM Administrator, located in Boise, prepares a shipping packet. Our traffic department routes the units to your specifications ensuring timely arrival of the equipment at your customer's site.

The day the printer ships, the interface (if ordered) and the accessory box, including 250 sheets of computer paper and VFU tapes, are shipped air freight from Boise. This explains why the accessories and interface arrive ahead of the printer. The objective is to provide customer satisfaction. By shipping the interface from Boise and the printer from the OEM we are better able to meet this objective. This program has been designed with your customers in mind in response to your feedback. Keep your sales department contact informed of its results.

Neophyte "Dinnertube"

By John Klonick/Boise

Notice: Will the person who lost their shorts at the Neophyte "Dinnertube" (August 6) please identify her/himself. Boise Division is eager to return this property. Contact Thad Webster at (208) 376-6000, ext. 2698. No questions will be asked.

New Boise SE Manager

By Bill Murphy/Boise

Steve Bolen will be leaving his post as Boise Division Service Engineering Manager to assume the Production Section Management responsibility for the 2608A line printer.

Wayne Eskridge, who has had recent assignments in our service organization as Product Support Manager and Service Engineer, will be our new Service Engineering Manager.

Please join me in wishing both Steve and Wayne well in their new roles.

Greeley



Everything You've Always Wanted to Know About Floppy Discs (Part 3)

By Al Herder/Greeley

How to Measure Reliability of 9895A Flexible Disc Drive

Our customer's perception of the reliability of his computer system components should direct the way that we present reliability data.

Reliability data is typically presented as either the percentage failure rate or Mean Time Between Failure (MTBF). The percentage failure rate is based on the actual 90 day warranty failures for mature products and on life test data for new products. The percentage is then extrapolated to represent a yearly failure percentage. MTBF, on the other hand, is the percentage failure rate divided into 2,000 hours of usage. (2,000 hours is our measure of one year of usage). Thus, the MTBF will vary according to each customer's actual usage of his product.

DMD

★ Correction to "7925T Add-On Disc Storage System Available" *CN*, Aug. 15, '80

By Kevin Magenis/DMD

In this article on page 29 of the August 15 issue, the final paragraph should have read: "*Will be listed on Schedule A-1 and A-4 only." not "*Will be listed on Schedule A-4 only" as it appeared. Sorry.

9885/9895 Reliability Comparison

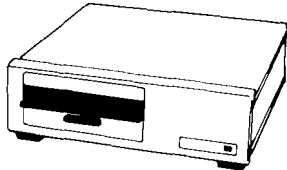
As with any second generation product, the normal tendency is to compare both performance and reliability of the new product to that of the established product. This is the case

with the 9895 Flexible Disc and its predecessor, the 9885 Flexible Disc. Shown below are the failure rate percentages and the resulting MTBF figures for the 9885 and the 9895 in comparable configurations.

Equivalent Capacity Comparisons

Single-Sided
Double-Density

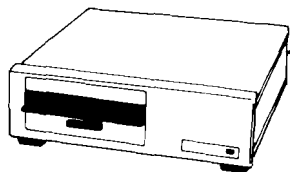
1/2 Mbyte
1 Drive
1 Head



9885M

35% failure rate
5700 hours MTBF
2.85 years MTBF

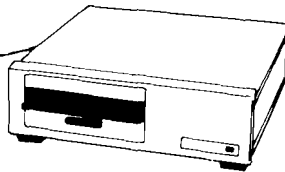
1 Mbyte
2 Drives
2 Heads



9885M

50% failure rate
4000 hours MTBF
2 years MTBF

No Equivalent

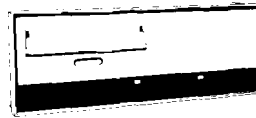


9885S

Double-Sided
Double-Density

No Equivalent

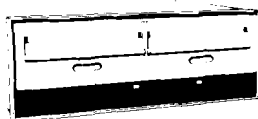
1.2 Mbyte
1 Drive
2 Heads



9895A Opt. 010

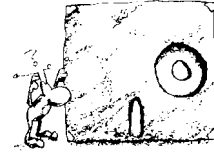
50% failure rate
4000 hours MTBF
2 years MTBF

2.4 Mbyte
2 Drives
4 Heads



9895A

80% failure rate
2500 hours MTBF
1.5 years MTBF



Media is the Key

Because the media in a flexible disc is in direct contact with the read/write heads, media wear is inevitable. If the media is used beyond the recommended life span for a given application, it can fail. When the media fails, data can be lost and the user typically perceives this as a failure of his disc product. Therefore, handling of media and media replacement frequency are key factors in user perceived failure of flexible discs. These topics were discussed in Parts 1 and 2 of this *Computer News* series on floppy discs (Handling of Media on page 15, July 1, '80 issue and Media Replacement Frequency on page 20, July 15, '80 issue).

92195 Discs are the One!

Since media wear is critical to the reliability of a flexible disc, we have undertaken extensive wear and magnetic performance tests on all lots of media in the 92195 Ten Packs of Discs. This is the only media currently recommended for use in the 9895A. Although 9885, 7902, and IBM 3740 formatted discs can be read on a one time basis, only the 92195 discs should be used on a regular basis in the 9895A.

The Bottom Line on Reliability

- The 9895A Flexible Disc is based around a new Control Data drive that has a stable head design offering increased storage capacity in a reliable unit.
- The new 92195A media has been engineered and tested to provide the best overall wear and data rate performance in the 9895A Flexible Disc.
- Proper handling and replacement frequency of the 92195A media is essential to achieving the "user perceived reliability" our customers have come to expect from HP.

Digitizer Digest

By Barbara Bennett/Greeley

CAD (Computer Aided Design/Drafting)

If your customer needs increased accuracy with results in hours instead of days, he has a lot in common with this major aircraft manufacturer.

Creating new aircraft designs, as well as modifying existing airframe designs, requires a high degree of accuracy and fast results. Using the HP 9845 Desktop Computer, the 9872 four-color Plotter, the 9885M/S Flexible Disc Drive and the 9874 Digitizer, this manufacturer can digitize airframe data and store it for recall when needed. The data can then be used to create a scaled, three dimensional image on the display screen. This image is checked for errors throughout the design process. Checking the design parameters at this stage avoids costly mistakes when the design is sent to a large mainframe computer for complex air flow analysis. The result — increased accuracy; turnaround time cut from three days to three hours!

Structural/Electrical/Architectural/Civil

An engineering construction company solves problems in more than one area utilizing a workstation comprising of a 2631 Printer, 2647 Terminal, four-color Plotter and the 9874 Digitizer, functioning off-line to the HP 3000 Series Computer. Drawings are digitized with the 2647 off-line, and the data is then transmitted on-line to the computer for analysis. The results are sent back to the 2647 for off-line plotting and printing of the results. The system is used in:

- Masonry wall analysis, truss design/stress analysis
- Flight simulation — assembles image modules for a sophisticated flight simulator; stores the data to form a library of modules for assembling pictures used in the flight simulator
- Cost control and estimating, scheduling and payroll.

San Diego

Print Forms, Character Enhancements, Graphics From HP 2648A Graphics Terminal

By Tom Tremble/SDD

With DTD's new E76 option to the 13296A Shared Peripheral Interface, and San Diego's 7310A Graphics Printer, you can have more than just a rotated picture.

In addition to image rotation, the option allows the terminal to send character set selection and enhancement escape sequences — as well as any other desirable peripheral control escape sequence — to a device through the Shared Peripheral Interface. This means that high resolution graphics, data display screens, forms and enhanced text can be combined on a single page. When printed on San Diego Division's 7310A printer, everything will appear just as it does on the terminal display! The graphic image may be printed horizontally, leaving room on the page for text, forms, or a second graphic image, at the top or bottom of the page. Or, the image may be rotated to print one image on each page. The printed image is not changed in size when it is rotated — only its orientation on the page. An escape sequence, "ESC* r 85 X 110 Y" to the printer prior to the graphic image will automatically center the image on the page. This may easily be done through a user-programmed softkey.

The 7310A is HP's top-of-the-line Graphics Printer. It offers a full 100 dots per inch graphic resolution, and full image reproduction on the 2647A and 2648A display in any orientation. In addition to its high speed text printing, the 7310A offers capability unsurpassed by any other HP printer available today:

- Bold, reverse print, and underline enhancements
- Variable line height
- Fixed and proportional character sets
- Worldwide language capability
- Optional math and line drawing sets matching the 264X series terminals
- Automatic page cutter with programmable page length
- Drop-in paper loading
- Choice of interface — HP-IB, Serial (RS-232C/RS-423A), or 8-bit parallel

Recommend the top performing 7310A for any remote graphic or text printing needs — your customer will appreciate the extra capability.

Ordering Information (US Prices Only)

HP 2648A Graphics Terminal	\$5,950
Option 007 Integrated Dual Cassette Tapes	1,600
HP 13231A Display Enhancements PCA (Includes Line Drawing Character Set for Forms)	250
HP 13234A 4K RAM Display Expansion (One or two recommended for large forms)	300
HP 13296A Shared Peripheral Interface (Option E76 Enhancement/Rotation ROM (Enter option by manual override)	100
HP 7310A Graphics Printer Option 011 Line Draw (Forms) Character Set	5,250 150
HP 10631A, B, or C HP-IB Interconnect Cable (0.5 metre, 1.0 metre, or 2.0 metre length) 1 metre HP-IB cable provided with 13296A	75

Call Tom Tremble, San Diego Division, (714) 487-4100 ext. 305 with any questions regarding the 7310A and applications with HP terminals.



Forms and typical output from a 7310A Printer

Using the 7310A as a Remote Forms/Text Printer

By Tom Tremble/SDD

One of the most impressive and versatile capabilities of the 7310A printer is its ability to print forms and display enhancements from a 2645A Display Station Terminal.

The 7310A is a graphics printer developed for the 2647A and 2648A terminals. With the terminal printer subsystem interface, option 240, it may also be used with a 2645A terminal for copying display screens, forms, program documentation and other text printing needs.

With the 2645A terminal and 7310A printer, your customers can quickly prepare application program documentation, user's guides (*Computer News*, July 1, '80, p. 25), periodic reports and other quick turn-around printing needs right at their desks, quietly and efficiently. Display enhancements are reproduced as they appear on the screen. Ordering and installing a 7310A

printer is easy. Simply specify the optional line drawing character set (option 010, \$150) and the printer subsystem interface, (option 240, \$155) when you order a 7310A. In addition to the printer your customer will receive a 13238A terminal duplex register card for the 2645A terminal, a 13232J interconnecting cable, and the correct interface and character set installed in the 7310A! Terminals without the optional integrated dual cassette tape cartridge will also need the 13261A device support firmware.

Your customer can easily install the 13238A terminal interface card and cable according to the instruction provided in Chapter 3 of the 7310A Interface Manual. With a few simple terminal keystrokes (GOLD-F3-F8-GREEN-F1) the terminal's entire display memory will be printed — with all the character enhancements just as they appear on the display. Many applications using data entry or display menus will put the terminal into format mode. To print such a display, just press the control and F5 keys

simultaneously (CNTL-F5) and home the cursor before printing. This turns off the format mode. After printing, press control-f4 to re-instate the format mode.

The 7310A is a highly capable, quiet, high speed, local printer. For almost any local printing need — data retrieval and display using query, management reporting, Materials Management/3000 displays, documentation preparation — whatever the application, the 7310A will enhance your customers computer system capability and help make him/her more productive.

PLOT/21 Potpourri

By Greg Elmassian/SDD

We have received a number of calls lately asking which option of PLOT/21 should be used with a 7225 and other plotters. Please note that the PLOT/21 *only* supports the 7221/A/B/S plotters! The systems that PLOT/21 is available for are the HP 3000 series, DEC 11 series (with RT-11 operating system) and the GE timeshare network. For any other computing system, your customer *must* have the PLOT/21 Software Conversion Guide (AN 229-1), available from SDD. Call your SDD RSE for help on any system not listed on the PLOT/21 (72021B) data sheet.

9862A Clearance Sale

By Don Harris/SDD

Do you have a customer with a 9825 or older desktop i.e., 9810, 9815, 9820, 9830? Here's a way to interest him/her in graphics at \$1,750. It's a steal! The original price was \$3,500. We have three brand new 9862A plotters that need a home. They have all their shots plus a full warranty! The 9862A was a B size, 11 X 17 inch plotter that was obsoleted about a year ago. There are special interface ROMs for the 9862A and you should make sure the customer already has one in his/her computer. They've been obsoleted too. Call your SDD RSE now to get a great deal for your customer.

Ensuring customer satisfaction involves much more than getting the right equipment to the customer at the right time. It begins long before an order is signed with a clear understanding by HP of what that customer needs and the HP representative properly communicating what HP can provide to meet that need.

The failure of both parties (HP and the customer) to sit down and set realistic expectations can spell disaster for any attempt at ensuring customer satisfaction.

The Computer Groups neophyte training program has been expanded to include a presentation on "How to Stay Out of Trouble." The workshop summarizes actual problem situations encountered with computer customers and explains how each could have been avoided.

The purpose of "How to Stay Out of Trouble" is to develop field awareness of the kinds of sales and service commitments which can cause customer dissatisfaction and lead to legal liability for HP. Field sensitivity to the potential problems, or "danger signals," outlined in this course will be increasingly important as HP expands its sales to the unsophisticated, non-technical buyer.

"How to Stay Out of Trouble" exposes the new SR to case studies illustrating the problems generated by overselling, selling futures and not dealing with customer confusion about the relationship between HP and the OEM software supplier. The course highlights the cost to HP and to the SR of resolving these customer problems, including lost sales, bad reference accounts and field time commitments. Rather than providing a list of legal "don'ts," the workshop emphasizes obtaining customer satisfaction by setting realistic expectations and offers advice on how to avoid problem sales situations.

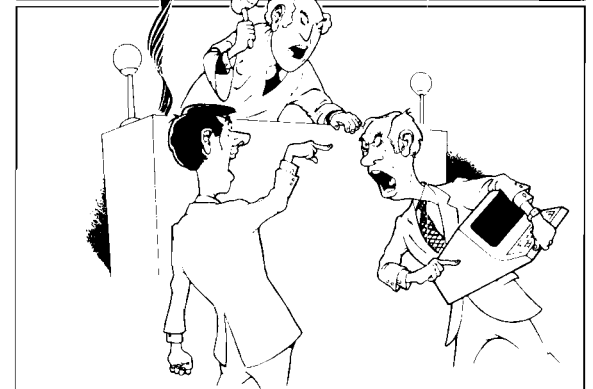
The presentation was prepared by the General Legal Department at the request of Bill Richion and has been enthusiastically received by the worldwide RSM's, area and staff managers and senior sales personnel. Although it was initially targeted for neophytes, the Legal Departments in Palo Alto, ICON and HPSA will be working with sales management to make the workshop available to senior sales and support representatives. A revised "How to Stay Out of Trouble" presentation focusing on factory marketing issues is under consideration.

How to Stay Out of Trouble: New Neophyte Course

*By Susan Carnahan/
Corporate Legal*

How to stay out of

TROUBLE



Editor's Note: Watch for additional articles on legal topics in future issues of Computer News.

Everyone is talking these days about how to be more productive. An SR in Columbus, Ohio, working with his local SE, has come up with a novel approach for improving productivity through more effective territory management.

In November '78, SR, Ken Stone and SE, Mike Anderson, designed a prospect data base. The main design criteria was to identify those items that would be most useful in maintaining information on prospects in a sales territory. Particularly, the type of system they were presently using, and an area to record the date and comments from the last meeting or phone call. A primary operating consideration was to use V/3000 to build the data base but to limit it to only one screen.

Many sources were utilized over the next several months to build the data base. Some of these

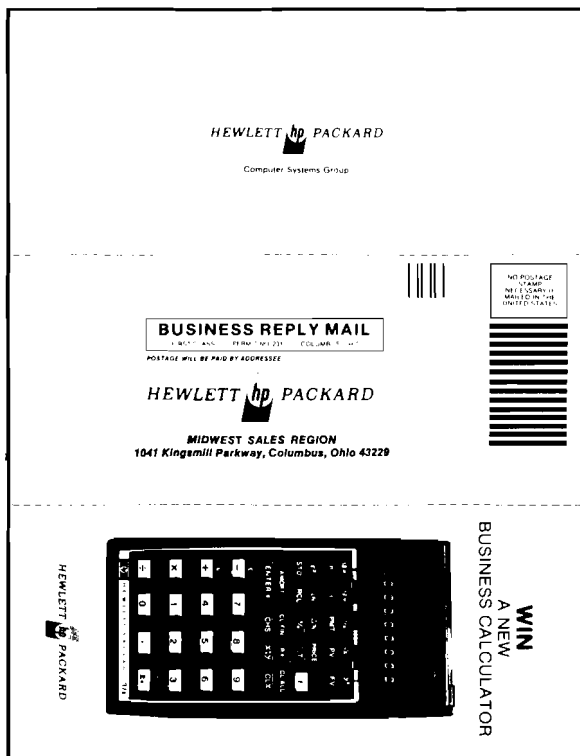
were: competitive users, as noted from sales calls; lists from computer industry sources; local DPMA members; and phone inquiries to companies who advertise in the local classifieds for programmers, EDP personnel or accountants with computer experience.

To complement the data base a Mini-Computer Survey Form was also created. The purpose of the survey was to:

- Identify prospects, and
- Fill out or maintain the accuracy of the data base

To give the prospects an incentive to fill out the questionnaire, a drawing was held for an HP37E. To date, four surveys have been sent out with an average 10%-15% response.

Designing a Prospect Data Base
By Lynn Gardner/GSD



Fold, moisten seal and mail - No postage required

HEWLETT-PACKARD MINICOMPUTER SURVEY

For a few moments of your time and some information, this form will be entered in a drawing for a free HP37E pocket calculator. The drawing will be held May 15, 1979 at our Columbus office. You need not be present to win.

	YES	NO
1. Are you familiar with Hewlett Packard Computer Systems?	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you use a Service Bureau?	<input type="checkbox"/>	<input type="checkbox"/>
3. What computer systems do you presently use?		
<small>TYPE</small>	<small>APPLICATION</small>	

4. Do you require Terminals?	<small>TYPE</small>	<small>CRT Display</small> <input type="checkbox"/>
		<small>Printing</small> <input type="checkbox"/>
		<small>Graphics</small> <input type="checkbox"/>
5. Do you foresee additional computer requirements?		
<small>Application</small> _____		
<small>Decision Time Frame</small> _____		
6. What resources will you use in evaluating a data processing decision?		
<small>Make own decision</small> <input type="checkbox"/> <small>Independent consultant</small> <input type="checkbox"/> <small>CPA firm</small> <input type="checkbox"/>		
<small>Other</small> _____		
<small>Name and title of person(s) in your organization responsible for the purchase of computers</small>		

7. Would you be interested in a demonstration of	<small>Small business computers</small>	<input type="checkbox"/>
	<small>On-line terminal oriented systems</small>	<input type="checkbox"/>
	<small>Data Base Management</small>	<input type="checkbox"/>
	<small>Terminals (data entry or graphics)</small>	<input type="checkbox"/>
8. How would you classify your business?		
<small>Manufacturing</small> <input type="checkbox"/> <small>Wholesale/Distribution</small> <input type="checkbox"/> <small>Service/Technical</small> <input type="checkbox"/> <small>Other</small> <input type="checkbox"/>		
9. Fill in your name and address for calculator drawing.		
<small>NAME</small> _____ <small>TITLE</small> _____		
<small>COMPANY</small> _____ <small>PHONE</small> _____		
<small>STREET</small> _____		
<small>CITY</small> _____ <small>STATE</small> _____ <small>ZIP</small> _____		

Thank you for your time.

The SR directly attributes winning four competitive sales situations (three against IBM and one against Burroughs) as a result of successfully implementing this data base.

Congratulations and thanks to Ken Stone for sharing his ideas with us. If you have any helpful sales tools to share, please contact your Sales Development Engineer at the factory.

Field Seminars: More Than a Sales Presentation

By Pat Butler/
NSR-Albuquerque

The Albuquerque office held a special seminar at Sandia and Los Alamos Scientific Labs on June 12 and 13 to introduce some new products to our customers. We had several concerns, the greatest being that the ISE show had just been in town, and many people had seen some of the new products there. How to attract people to another show was the underlying question.

We decided the best way to attract people was to give them something besides a sales presentation. We ended up with five seminar topics for customers:

- Distributed systems networks for scientific processors
- Automatic data acquisition and logging
- Systemization of test instrumentation using HP-IB
- Data base management for scientific data
- Effective use of color graphics.

These topics were chosen to stimulate interest by providing a way to let customers learn something, as well as to see the new products. The seminars were held in one room, and the demos were set up in another. The show was considered a great success; we held it at the two locations, and had record turnout at both.

This was a combined SF01/02 effort. Guest speakers, Paul Asmus (LID) and Jack Frost (DCD), did an excellent job in presenting automatic data acquisition and color graphics. Local SEs, Larry Smith and Pat Butler talked about distributed systems and data base management respectively. Dick Kline from Fullerton discussed systemization. The teamwork provided enhanced customer exposure to the entire product line and insight on how to put everything together. It should pave the way for increased sales.

On May 27—31, HP Taiwan hosted a solo show at the US Training Center in Taipei.

The show presented both HP commercial and technical products to customers and potential customers from various fields, such as education, government, manufacturing, business, banking, etc.

For the commercial system, the Chinese Character system (CIOS) and HP 3000 DATACAP were demonstrated along with the interactive communication between the HP 250 and the HP 3000.

The graphic system (Penny, 9845, 9874 and 9872), and the HP-IB system (9835, 2240A and 2240A demo box) were shown to technical customers. In addition, the data capture terminal with its manufacturing application on the HP 1000, and the new L-series computer system were demonstrated.

To acquaint our visitors with our outstanding products, several seminars were held during the show. The topics for the seminars were DS, MM/3000, Graphic/1000, HP-IB, 2240A measurement and control processor, data capture and IMAGE, structure and HP 1000 L-series.

The show proved a great success with 5,000 people attending. About 20 qualified sales leads for computers resulted.

HP Taiwan Computer Show

By Margaret
Chang/HP Taiwan



L to R: Mr. Fung-Ming Chen, Computer Sales Manager, Mr. Yang-Yao Sung, Chief of the Patent Sect. of the Bureau of Standards, Ms. Hsu-Hung Yu and Mr. Wen Ko, GM HPT.

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