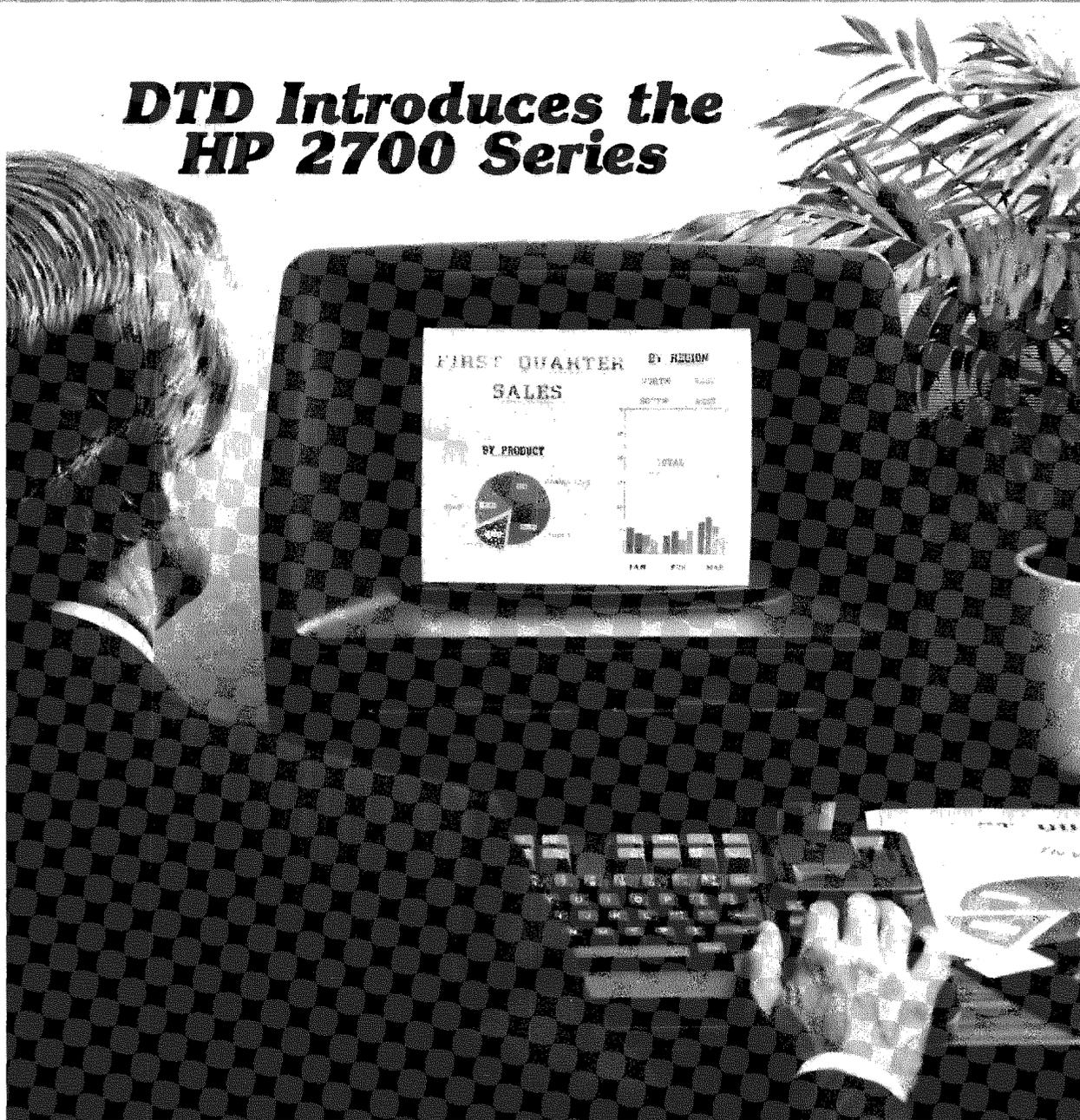


Computer News

For HP Field Personnel
August 15, 1982

DTD Introduces the HP 2700 Series



For Internal Use Only

CMG	Computer Marketing Group
CMG/ 3PP	Computer Marketing Group/ Third Party Program
CSD	Computer Support Division
CSE	Computer Support Europe
CSO	Computer Supplies Operation
SRO	Systems Re-Marketing Operation
TCG	Technical Computer Group
DSD	Data Systems Division
RVD	Roseville Division
YCD	Yokogawa Computer Division
DCD	Desktop Computer Division
BDD	Boeblingen Desktop Computer Division
CVD	Corvallis Division
PCD	Personal Computing Division
GTO	Grenoble Technical Systems Operation
BCG	Business Computer Group
BCG/ AS	Business Computer Group/ Application Systems
CSY	Computer Systems Division
FSO	Financial Systems Operation
IND	Information Networks Division
MSO	Manufacturing Systems Operation
CSP	Commercial Systems Pinewood
BGD	Boeblingen General Systems Division
DFD	Data Terminals Division
GSD	General Systems Division
HPG	Grenoble Division
CPG	Computer Peripherals Group
BSE	Boise Division
COL	Colorado Springs Instrument Group
DMD	Disc Memory Division
GLD	Greeley Division
SDD	San Diego Division Instrument Group
VCD	Vancouver Division

Computer Marketing

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4	CSD	Power Line Conditioner Available for HP Desktop Computers What is Third Party Maintenance? REV UP with Support! New CSD Sales Development Team
5	CSO	HP 125 Software Shipped Off-the-Shelf
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Technical Computers

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6	DSD	New DSD Sales Development Manager HP-85 Service for HP 1000 Literature to Help You Sell More HP 1000s New RTE-6/VM Performance Data Available HP 1000 International User's Group Benefits Your Customers DSD Current Sales Aid List Now Available HP 1000 A-Series is Really on GSA!

9	RVD	Qualifying 2250 CDA Sales RVD Leads in Coordinated Shipments
9	DCD	HP 9826 and 9836 Support HP 2601A Printer BASIC Extensions 2.0 Explained Desktop Computer Language Support Increased Update Your Desktop Computer Sales Handbook! Shared Resource Management Technical Supplement Available IC Test Data Collection Over Data Link Saves

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14	CSY	Series 64 Gets Results — Fast Two Meter Cable Now Shipped with Series 64 HP 250/20 Homes In on Wang
16	IND	DSN/DS for the HP 1000: Performance Results for A-Series Point-to-point Connections HPTOOLSET SE Starter Kit HPTOOLSET Sales Brochure Now Orderable

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

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HP 2700 Hardcopy
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Now Available on HP 125
New VisiCalc Sales Tool for
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Standalone Accounting
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On the Cover:

DTD's new HP 2700 Series of high-performance color graphics terminals performs complex functions which off-load graphics calculations from a host computer, displays multiple views using zoom and pan capabilities, and offers users a choice of 4,096 colors. See articles starting on page 21.



Information on data communications products for the HP 1000 will now be found under the Information Networks Division (IND) section of Business Computers. IND currently has tactical and product responsibility for DS, IBM, and X.25 communications for the HP 1000 computer family even though it is actually a part of Business Computer Group. So look for articles on DSN/DS, DSN/IBM and DSN/X.25 for the HP 1000 under the IND section.

Karen Campbell, Editor

3PP

Data Collection for Next OEM Guide

Roger Lemay/CMG

Data collection for the September edition of the new OEM Capabilities Guide is now underway. Data kits have been sent to all OEMs that participated in the first catalog in June as well as all North American third party and technical SRs responsible for supporting OEM accounts.

Overall, customer reaction to the first catalog was very favorable and new forms are beginning to come in. Although the first OEM Capabilities Guide was a good start, we would like to see a substantial increase in the number of companies participating in the second edition with a special emphasis placed on gathering data from our major OEM customers. If you handle an OEM account, you have an obligation to your customer to make sure they are represented in this publication. Only you can help us make the September edition a success. Please contact your customers soon to make sure they can return their new forms before the deadline. For additional copies of the kit, contact Cheryl Downey at COMSYS 0000. All completed forms must be returned to CMG by August 23 to be included in the next edition.

CSD

Power Line Conditioner Available for HP Desktop Computers

Cindy Politica/CSD

HP's 35035A, 1.8KVA, 60Hz Power Line Conditioner is now supported on HP desktop computers. The conditioner regulates output voltage, to within the tolerance of the HP system, and protects against both common mode and transverse mode noise. These voltage regulation and noise protection capabilities contribute to increased system reliability and uptime.

Customers installing their desktop computer at a site which is susceptible to power disturbances or utilizing their system for a critical application will appreciate the single vendor solution provided by the 35035A.

Note: The 35035A is compatible with HP 9815, HP 9825, HP 9826, HP 9835, HP 9836 and HP 9845 Desktop Computer Systems.

What is Third Party Maintenance?

Dana Stuckwisch/CSD

A new sales amplifier is on its way to the offices, entitled Third Party Maintenance. This document defines what a third party maintenance is and how you can sell against one. It also profiles one third party that has been competing against HP in Neely and Texas. This third party — Datagate — has plans to expand into other parts of the country. As competition from Datagate and other parties gets tougher, we must sell

more aggressively against them. This document will help you do just that. If you have any questions or need help dealing with a third party call your sales development contact at CSD.

REV UP with Support!

Chris Kryzan/CSD

CSD is ready to help you get a head-start in the 4th quarter with a special promotional campaign which will help you get more orders. When this program is put into place in the US on August 15, you'll be able to spend less time selling support for workstation products and more time selling products. This is possible now with the introduction of the new short-form CSSA.

REV UP is the name of the campaign, and it's designed to add significantly to the corporation's fourth quarter revenues. It focuses on a pilot test of CSD's new National Telemarketing Center as a means of making support for workstation agreements as easy to order as it is to pick up the phone and dial 800-835-HPHP!

Your District CE Manager will help you get started using Telemarketing Listing Cards to take advantage of this new marketing approach. These cards should be given to your customers after you've determined that they are a good candidate for a workstation support contract and have given them a Workstation Planning Guide. If a customer would ordinarily place their products on a support contract using the long-form CSSA, they should not be pursued under this program.

By calling the toll-free (800) number listed on the card, your customer can reach a Support Specialist knowledgeable about the range of workstation support services and how

they fit your customer's needs. Their order for support can be easily placed over the phone.

Ask your District CE Manager for more information on how your customers can take advantage of this opportunity, and REV UP with Support!

New CSD Sales Development Team

Olen Morain/CSD

Three new people have joined CSD Sales Development.

Bob Fillhouer: Bob comes to us from our CE Training Group where he is currently involved in CE training for our Desktop Computer Products. Bob's technical knowledge of the HP 3000, 1000 and 98xx combined with his knowledge of the field organization are welcome assets to Sales Development.

Deborah Nelson: Deb joins us from Northwestern University where she earned her BSIE. She was a co-op student at Western Electric and we are fortunate that she brings this work experience to Hewlett-Packard.

Rich Taylor: Rich joins us from Neely Brisbane where he has been working as a SEED in a permanent part-time position. Rich just received his BSIE from Stanford University and through his Neely experience has decided that a career in marketing is the only way to go.

Please join me not only in welcoming these new people but also in congratulating Kathy Humphrey in her promotion to the position of Regional Sales Development Manager. Kathy has been with CSD Sales Development since July 1980 and has done an outstanding job in assisting both our Eastern and ICON sales regions. Bob, Deb, and Rich will report to Kathy.

CSO

HP 125 Software Shipped Off-the-Shelf

John Herrgott/CSO

Many of your customers bought their HP 125 with the understanding that they would buy the software later, when it became available. Now US customers can get the software they need — *fast* — from CSO.

We have all of the following HP 125 software in stock:

- 45531A VisiCalc/125
- 45532A GRAPHICS/125
- 45533A WORD/125
- 45534A LINK/125
- 45535A BASIC/125
- 45536A PROGRAMMING PACKAGE

In addition, CSO will carry the New HP 125 HP PLUS software, just released by GSD. These packages are described in the new *HP Computer User's Catalog* which will be released this autumn:

- 45550A CONDOR 20-1 Data Base System
- 45550E CONDOR 20-2 Data Base System
- 45550K CONDOR Upgrade Kit
- 45560A WORDSTAR/125
- 45561A SPELLSTAR/125
- 45562A MAIL MERGE/125

To order HP 125 software, have your customer call 800-538-8787 Toll Free. In California, Alaska and Hawaii call 408-738-4133 collect. Note that your customers can also order supplies for their HP 125 when ordering software.

SRO

SRO Systems

Hal Eubanks/SRO

Systems Remarketing Operation (SRO) sales are continuing to grow rapidly thanks to your selling efforts! It is most gratifying to see a repeat business trend already developing. Udaya Chandra, Airport Office, for example, has sold three HP 3000 Series III R Systems to three different customers.

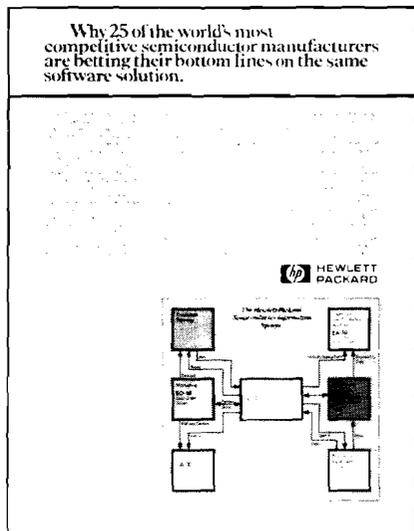
The HP 3000 Series 30R and 33R Systems continue to be very popular with price sensitive, first time HP customers. The advantages of industry compatible tape drives and disc drives with removable media make these systems ideal for situations where fast backup is required and where there is a need to exchange data with other computers conveniently.

The customer base for HP 3000 Series III R Systems is still growing! OEM, installed base and new customers all find the III R to be a winning solution. Wayne Diehl, Richmond Office, sold a Series III R System to a customer that has an installed base of 13 Series III! Customers who already have a Series III R know its performance and reliability while many new customers find the Series III R has the capabilities they need at the price they want. SRO now offers unlimited slave disc drives with the Series III R system allowing you to offer even greater value. Keep the Series III Memory Expansion Kit (Product No. 30418AR), now available from SRO, in mind as another great way to expand the capabilities of existing systems. For price and performance the Series III R is a winner. 

TCG

New SMC Ad Sells "Total Solution" for IC Manufacturing

Bojana Fazarinc/TCG



The primary objective of this new ad for the HP Semiconductor Information System is to generate qualified leads.

Directed to top/middle management of semiconductor manufacturing companies or operations, this ad offers readers a software solution to give them control over every phase of their manufacturing process.

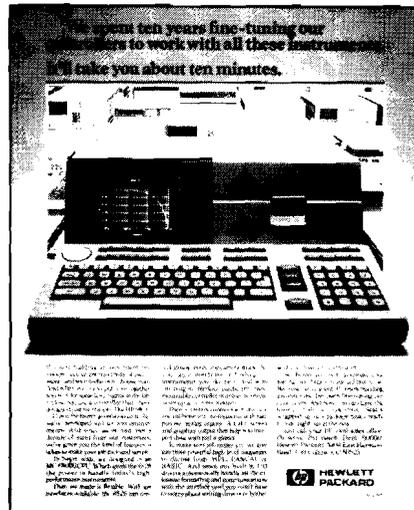
Engineering and production managers, and MIS directors will also be part of the audience for this MPN-related message.

All inquiries will be handled by the SMC operation.

From mid-July, watch for this ad in *Electronic News* and *Electronic Business* magazines.

New TCG Ad Positions HP 9826 as Ideal Instrument Controller

Bojana Fazarinc/TCG



Pictured above is a new ad promoting the HP 9826 as the ideal instrument controller for a variety of test environments.

This ad is designed to build preference for the 9826 among scientists, engineers and engineering managers at large companies as well as in the OEM market.

A long list of features and HP's decade of experience in instrument control is emphasized in this one-page ad, scheduled to first appear in August.

The ad will run in *Electronic Design*, *Science*, *Aviation Week*, *Quality* and *Oil and Gas Journal*, providing exposure to some traditional and new audiences.

This ad may run in some parts of Europe.

Limited quantities of reprints for both the 9826 ad and the SMC ad in the previous article are available. We are interested in your response to our ads and any feedback you get from prospects.

DSD

New DSD Sales Development Manager

Dave Yewell/DSD



Melanie Fox... where have you heard that name before? Oh yes, the DSD training taskmaster. Many of you SRs have been through the product training course here at DSD, and Melanie has worked extremely hard over the past two years to make it the number one product training course.

Well, results mean opportunity and Mel has been promoted to Sales Development Manager for Eastern and Southern here at DSD, effective July 12.

Carlos Avila has accepted a promotion also, to Manufacturing engineering manager of the DSD Fab Shop.

Please join me in congratulating Mel and Carlos in their new jobs. Give Mel a call and get her involved when you need us. We are here to help you make quota!

HP-85 Service for HP 1000

Steve Willens/CSD and Jim Pinsky/DSD

The release of the HP-85 Service System will now allow support of HP 1000 box computers without system consoles. Designed as a portable service tool which emulates a subset of the operation of an HP 2645A terminal, the HP-85 may be carried on site and used as a temporary system console for loading and executing diagnostics. With this new capability HP will now provide maintenance contracts on HP 1000 box computers without system consoles or terminal interface cards (12966A for M/E/F-Series; 12005A for A/L-Series).

Although a diagnostic load device will not be required for support of M/E/F/L/A hardware, it is still necessary for software updates. Thus, a system customer requiring hardware *and* software support will still be required to have an HP terminal as a system console and software load device. The following table describes the acceptable software load devices for the corresponding operating systems:

Op Sys	Load Device
RTE-M	264X w/Opt. 007 (req'd) 9885A
RTE-IV	264X w/Opt. 007 (req'd) 7970B/E
RTE-IVB	264X w/Opt. 007 (req'd) 7970B/E
RTE-6/VM	264X w/Opt. 007 (req'd) 7908/11/12 w/Linus
RTE-L	9895A, 7970E, Integral Dual Flexible Disc Drive
RTE-A.1	9895A, 7970E, 7908/11/12 w/Linus, Integral Dual Flexible Disc Drive

The 264X requirement for M/E/F Computers under RTE-6/VM and RTE-IVB is being evaluated. It is planned that by January 1983, a 264X will no longer be necessary for software distribution and support for these systems.

In response to the new HP-85 Service System policy, DSD started shipping the 12992C Loader ROM "standard" in all E/F-Series computers. (The M-Series is not being considered at this time; problems in manufacturing.) This ROM allows loading of diagnostics from the system console CTU (HP-85 Service System) to the CPU. This means that in a system without a terminal interface, the CE will be required to bring out an interface card with the ROM and install it before servicing. If the customer is currently on a hardware support contract (BMCC, SMMC) or on warranty HP will, at no charge, install the ROM at the time of the service call. Customers receiving Time and Material service should be encouraged to purchase and install the loader ROM. In this situation it should be stressed that HP will be able to provide more rapid service (by using the HP-85 Service System), thereby decreasing the cost of each service call. In the future this will benefit the customer by lowering the overall maintenance costs.

With this new policy some customers may wish to purchase maintenance contracts on HP 1000 box computers which were previously unserviceable by HP. In this case the 12992C loader ROM should be installed in the computer as part of the normal pre-contractual inspection and upgrade.

This new policy should increase overall customer satisfaction with the support of HP 1000 computers.

Literature to Help You Sell More HP 1000s

Ted Proske/DSD

Four important pieces of literature have just been completed and sent to your office:

- "RTE-6/VM Performance Brief" (P/N 5953-2846) discussed in Jim Williams' article in this issue
- "HP 1000 Peripherals Selection Guide" (P/N 5953-2891), which now covers A-Series peripherals and includes a helpful compatibility matrix of all active HP 1000 peripheral devices
- The new "Symbolic Debug/1000" data sheet (P/N 5953-2845), which describes powerful, new, on-line debug capabilities for HP 1000 FORTRAN and Macro programs
- The June 1982 revision of the "HP 1000 System Designer's Guide". This update adds the computers section, the M/E/F-Series and A/L-Series compatibility matrices, and the updating of several existing sections to add A-Series coverage and new peripherals.

The System Designer's Guide continues to be available as DSD Sales Aid Kit SA-307 for purchase for your customers who want to do some of their own HP 1000 system designing. The price is \$20, which includes the current guide, all current updates, including the June 1982 update, plus additional updates or new revisions for one year.

New RTE-6/VM Performance Data Available

Jim Williams/DSD

New performance testing on RTE-6/VM has been completed and included in a new, rewritten version of the RTE-6/VM Performance Brief, (P/N 5953-2846) distributed to all offices. The Large Program Conversion and Guidelines sections have been expanded considerably with new information.

A new section, titled Logic Analyzer Performance Test, has been added. This section reveals some dramatic new performance information on RTE-6/VM which, up to now, has been conservatively estimated. The HP 1610 Logic Analyzer was used to measure more precisely the system overhead associated with certain internal system functions. The programmatic tests accomplished previously, and reported in the General Performance Test Section, are susceptible to certain inaccuracies. RTE-6/VM, using the Operating System Accelerator Firmware, showed improvements in system performance over RTE-IVB up to 93%. Some examples excerpted from the Performance Brief are:

- 45% improvement in interrupt response time ($83 = \mu s$ vs. $150 \mu s$)
- 93% improvement in time to go privileged ($11 \mu s$ vs. $150 \mu s$)
- 52% improvement in time to return to an unprivileged state ($58 \mu s$ vs. $120 \mu s$)

These are very large improvements in areas that our customers who are currently supporting or developing real time applications will have interest. The RTE-6/VM Performance Brief contains many more details, and should be widely distributed to customers.

HP 1000 International User's Group Benefits Your Customers

George Low/DSD

The HP 1000 International Users Group was formed in 1980 and is now about 2000 members strong, and growing. Your customers can gain many benefits from being a user group member, including:

- Access to Contributed Software Library CSL/1000 (formerly known as PLUS/1000), with hundreds of useful programs (and many games). Two tapes are distributed to members annually.
- Copy of the user's group bimonthly publication, *INTERFACE/1000*, which provides the latest information of hardware and software products for the HP 1000, including HP PLUS programs. Also featured are many technical articles, user profiles, user forum for technical interchange, and product evaluations.
- Invitation to attend/participate in the North American and European International Conferences. The next conferences will be held at the R.M.S. Queen Mary in Long Beach, CA, (August 30, 31, and September 1, 1982) and in London, England in April, 1983.
- Copy of all conference proceedings and CSL Catalog.
- Voting privileges not only on membership matters, but on items addressed by Special Interest Groups such as the Systems Improvement Committee, which leverages inputs to DSD.

Get the HP 1000 International User's Group application form for your customers to join the IUG today; they'll thank you tomorrow. Your customers may also wish to join the Local User's Group in their region. Application forms are available from:

HP 1000 International Users Group
289 South San Antonio Road,
Suite 205
Los Altos, CA 94022
ph: 415-941-1934,
Telex: 348369 EXECUITE LTOS
or call George Low at DSD x2030.

HP 1000 INTERNATIONAL USERS GROUP			
APPLICATION FOR MEMBERSHIP			
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TYPE OF MEMBERSHIP		OTHER SERVICES	
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<input type="checkbox"/> Individual Member (includes:	\$30.00	<input type="checkbox"/> Library subscription only	\$100.00
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<input type="checkbox"/> 2. membership in the Special Interest Groups (SIGs)		<input type="checkbox"/> Addt'l name (maximum 3 names) mailing	\$20.00
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<input type="checkbox"/> 3. 2 computer tapes (maximum 2 tapes)			
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HP 1000 A-Series is Really on GSA!

Bill Fallon/DSD

Judging from the great number of orders you have been transmitting to us, we know you know that the A600 and A700 computers and software have been added to the GSA ADP Catalog. But in case your buyer is even a little skeptical, the official word is: Supplement 3 to GSA Contract GS-00C-03010 was approved by GSA effective June 24, 1982. Remember the entire A-Series hardware and software, including Options 300, 600 and 700, are now available, so check SODA to verify products and options.

And this is the time of year you can help your government buyer order his/her requirements before the end of the government fiscal year, and before related procurement funds expire on September 30.

Now is the time to sell the A-Series to your government accounts!

RVD

Qualifying 2250 CDA Sales

Randi Iten/RVD

Because of the high speed of the Continuous Data Acquisition program (see June 1 issue of *Computer News* for CDA overview), there are several MCL features that are not available when using CDA.

In short, CDA takes readings from 2250 function cards (up to 50K Hz. unpaced analog, 45K Hz. paced analog, 22K Hz. unpaced digital, 20K Hz. paced digital) and stores the data in one of three ways:

- Return data is written to 2250 memory and when the memory is full the oldest data is over-written. This is called History Mode CDA and provides a snapshot of input readings prior to CDA termination
- Return data is written to a disc file and when that file is full, the old data is over-written
- Return data is written to a disc file and when the file is full, CDA terminates.

These last two are considered Normal Mode CDA. They use GRAB which is also in the Automation Library and executes on the host.

When selling CDA it will be helpful to know about some limitations of the product so the customer has the correct expectations. Here are a couple of constraints you should know about.

Scan mode pacing and external pacing are not allowed in a CDA series. Channel mode pacing and free run readings are allowed. You can use an external trigger to initiate a CDA series; you just cannot use it to pace readings. You cannot timestamp readings. Analog and digital data cannot be read in the same CDA series. In History Mode all readings must be from a single channel (BLOCK mode).

Please give us a call if you have any concerns or questions when qualifying a CDA sale or any other 2250 related sale. There are many customers that are currently using CDA successfully, and I hope these guidelines will make it easier for you to be successful.

RVD Leads in Coordinated Shipments

Brice Clark/RVD

During the past 84 weeks, Roseville Division has achieved the best coordinated shipment record in the Computer Group. For 82 out of the last 84 weeks, RVD generated no unbilled inventory for the corporation due to missing a coordinated shipment window.

In addition to our leading position on coordinated shipments, RVD is also meeting the original acknowledge date on more than 80% of all other orders.

DCD

HP 9826 and 9836 Support HP 2601A Printer

John Abegg/DCD

The HP 2601A Daisywheel Printer has passed all the requirements to become a supported system printer on the HP 9826A and 9836A Desktop family. This means we now support a typewriter-quality printer.

When ordering the 2601A for use with the 9826A or 9836A, be sure to order Option 826. This option assures that jumpers inside the 2601A are set correctly for operation with the 9826A and 9836A Desktop Computers. The 98262A RS-232-C Interface with Option 002 is used to connect the 2601A to the 9826A or 9836A.

BASIC Extensions 2.0 Explained

John Abegg/DCD

The HP 9836A Field Training Manual mentions Extended BASIC. BASIC Extensions 2.0, as it is called, will be sold as a binary program (a very large binary). This will attach itself to the existing BASIC 2.0 operating system, whether the existing OS is RAM or ROM. We are still trying to make the November 1 price list.

These extensions provide the following capabilities.

- Entry and editing enhancements
- Debugging extensions
- Matrix operations
- String utilities
- Timer routines and event controls
- I/O enhancements, including DMA and fast handshake
- Buffered I/O capabilities
- Formatting enhancements
- Mass storage enhancements
- Command set 80 disc support
- BCD interface support
- Shared resource manager support
- Graphic extensions for the color video interface.

The BASIC 2.0 extensions include more than 200 additions, made as either new keywords or extended syntaxes. For more information, please contact your DCD Sales Development person.

Desktop Computer Language Support Increased

John Boose/DCD

Here is an update on DCD plans in the area of desktop computer language support.

Our current desktop computer support services (SIS) do not include automatic software updates. When SIS was introduced, our operating systems had existed for some time and were reasonably stable; software/firmware updates were not needed.

The advent of the HP 9826/36 with multiple evolving languages has changed this situation dramatically. Because we realize customers are not happy with the lack of updates, we are working with CSD on ways to solve the problems.

To begin with, an SSS product will be implemented to provide updates on the 68000-based products — Pascal, BASIC, and HPL. SSS will be a complementary service to the current SIS. It will provide software and manual updates to customers who do not want or need the PICS service provided by SIS. System revisions will be made once a year, and SSS subscribers will automatically receive updates.

Note that revisions are not the same as enhancements. Specifically, the planned extensions to BASIC 2.0 (MAT commands, buffered I/O with DMA and overlap, CS-80 disc support, etc.) will be capabilities that are added to the existing BASIC system. They will be offered initially only in soft form that will be loadable with either the soft or ROM core system currently available. This is analogous to option ROMs on the HP 9845. Thus, SSS subscribers wouldn't automatically receive the extensions, which are purchased and supported separately from the core system.

Again, BASIC, its extensions, HPL, and Pascal will all be revised yearly. SSS will update subscribing customers automatically to the most current revision. We will continue to support the current system, plus one revision back. As we introduce new languages and operating systems, this policy will also apply to them.

Another consideration — ROM systems are inherently much more expensive to update than soft systems, and cost more than diskettes. This should be stressed at the start of a sale. The long-term ownership cost will be much higher for ROMs than for soft systems, which may offset the convenience of ROMs for many customers. There are many environments where ROMs will still be preferable to soft systems, but for most mild environments, such as R&D labs, soft systems will be a better choice.

Further, because of the volatile nature of system software, we will probably not commit a system to ROM until it has been released for six to 12 months, so that its stability is demonstrated. Intermediate enhancements to BASIC will likely stay soft until the next major revision of the main system, when they will be converted to ROM.

HP's Pascal will never be converted to ROM.

Implementation of ROM updates is under consideration. Customers on the support service will be provided with a way of purchasing the ROM to upgrade at a significant discount from list price.

Generally, we should make the customer aware that he should not expect new enhancements to run against the current ROM system. For example, it may be necessary to roll the core system in order to get an enhancement to work. This new enhancement would not run on a ROM system until the next ROM update.

Details on pricing, timing, and administration are still being worked out. If you have questions, please contact John Abegg or Martin Nielsen at DCD.

Update Your Desktop Computer Sales Handbook!

Kim Boehm/DCD

While you are waiting for the new issue of the Desktop Computer Sales Handbook, scheduled to appear in November, you may want to make the following changes in your May 1, 1982, issue.

On page 4-6, delete discontinued P/N 09825-12500 AC Circuit Analysis and P/N 09825-12510 6800 Microprocessor Assembler.

On page 4-7, delete discontinued P/N 09825-15040 Stepwise Regression.

On pages 5-5 and 7-7, add these manuals: P/N 98256-90000 256K RAM Installation Note, and P/N 98627-90000 Color Video Interface Installation Manual (prices to be advised).

On page 6-7, delete discontinued P/N 09835-12560 Microprocessor Development Software.

On page 8-6, add under the title "Following Manuals Supplied Only With 9845B/C Opts. 175, 275, 280": P/N 09845-91055 Image Programming Manual (Opt. 280), and P/N 09845-91056 QUERY User's Manual (Opt. 280) (prices to be advised).

On page 8-17, delete discontinued P/N 09845-10600 Linear Programming and P/N 09845-10620 Text Management.

On page 10-15 under sections A and C, for the 9845B/C, change the Recommended section to read: 98412A ROM (I/O ROM)

For 9845B Opt. 100
98411A
98470A

The 9884A Tape Punch, listed erroneously on page 11-61 as discontinued, is still available.

On page 12-18, change the 9826 SIS PART number to the following numbers:

98081K SIS for 9826/36 (Must add language option below) \$40.00/mo.

98082K SIS addition for HPL language system \$20.00/mo.

98083K SIS addition for BASIC language system \$25.00/mo.

98084K SIS addition for Pascal language system \$40.00/mo.

On page 9-3, change the 82939A Serial Interface listing to read:

82939A RS-232 Serial Interface with female connector (DCE: modem emulator) \$395.00

Opt. 001 with male connector (DTE: terminal emulator) NC

Opt. 002 with unterminated cable (current loop) NC

On page 12-16, P/N 98510A, 9826/36 O&P Course, should be listed in a separate section instead of in the 9845 section.

If you know of any other corrections, please contact Kim Boehm at DCD, ext. 3330, so we can include them in the next handbook issue.

Shared Resource Management Technical Supplement Available

Gretchen Tobin/DCD

A technical supplement on Shared Resource Management has just been printed and is on the way to your office. This piece of literature includes the technical information necessary for an SRM prospect to make a purchasing decision.

The supplement covers how to use an SRM network and how to modify programs to be used on the network, plus an explanation of the SRM file structure, link specifications and ordering information.

You can order additional copies of the Shared Resource Management Technical Supplement (P/N 5953-4621) by contacting Dave Asplund at the Corporate Literature Distribution Center.

IC Test Data Collection Over Data Link Saves

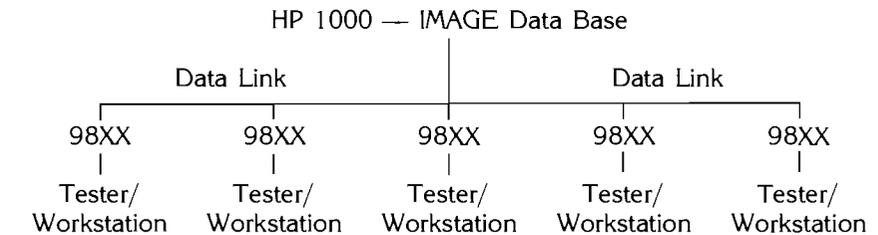
Sue Bodoh/DCD and
Jeff Hirschl/DCD

An IC test data acquisition system was recently installed at HP's System Technology Organization (STO), Fort Collins, Colorado. A similar system could solve some of your customers' problems and help your quota.

In the accompanying block diagram of this system, any of the HP 98XXs can be a 9826, 9835, 9836, or 9845 desktop computer.

As shown in the diagram, each tester or workstation is interfaced to a desktop computer, which is in turn connected to a central HP 1000 over Data Link. Although only five stations are shown in the diagram, many more can be supported by a single HP 1000. Two-way data communication is possible between each respective tester or workstation and the IMAGE data base on the HP 1000.

The two-way communication allows, for example, collection of data from a tester that locates bad chips among many on a wafer of newly-produced ICs. The same data may then be sent to an "inker" station that physically marks the bad chips, or to an engineer's workstation for analysis. Reports required by engineering and management, such as control charts, may be produced either at a desktop or locally at the HP 1000.



Data Link provides an inexpensive means of connecting a large number of stations scattered throughout a facility to a central point. System expansion is easily accomplished, and a great number of cables and HP 1000 interfaces are eliminated. System throughput is reduced compared with a point-to-point system because all stations must share one communication line. However, the problem is not significant in this application, because each station requires the line relatively infrequently, and a reasonable amount of delay can be tolerated.

Each desktop maintains a spool file on its local disc to allow for data collection in the event it cannot communicate with the HP 1000.

Typically, space is provided in the spool file for about one to two days of data. This allows ample time to correct the problem, after which the data is transmitted from the spool file. Because the HP 1000 treats each desktop as an independent unit, failure of one desktop does not stop the others from communicating with the HP 1000.

Overall, this system provides a versatile, flexible, and relatively inexpensive solution to the manufacturing data acquisition problem. It also allows communication between desktop computers and IMAGE data bases on the HP 1000. This system has been collecting IC process data for more than two months at STO, and has already produced control charts and other reports to aid manufacturing engineers in process improvement. 

BCG

More Series 64 Benchmark Results

Chris Olson/BCSC

Are three master disc drives better than one? You betcha! In a recent benchmark run for a company in Australia, a 36% performance improvement was achieved by adding two additional masters to the system. The benchmark consisted of running one, two, four, and eight jobs concurrently on an HP 3000 Series 64 with one 7933H disc drive and then repeating this on a 64 with one 7925M and two 7933Hs.

As can be seen from the results shown here, the elapsed time of the jobs run on the system with three master discs was significantly lower than those run on the one-master disc system. The performance improvement was achieved on the three master disc system because up to three I/Os could be overlapped, one per disc, as opposed to only one I/O on the one master disc system.

No. of Jobs	Elapsed Time		Performance
	1 Master Disc	3 Master Discs	Improvement
1	217 sec.	182 sec.	16%
2	412 sec.	299 sec.	27%
4	855 sec.	544 sec.	36%
8	1788 sec.	1140 sec.	36%

The key message here is that in order to take advantage of the processing power of the Series 64, the number of master disc drives and

the ability to spread files among these discs must be taken into consideration.

HP Decks DEC in Benchmark

Becky McBride/BCG

What happens when an HP 3000/64 is stacked against a DEC VAX 11/780? In a benchmark run in the Business Computer Sales Center for a university in Canada, the Series 64 won hands down! The test simulated a daily system load of the student, administrative, and scientific/research environments. Hardware configurations were similar, except that the VAX system ran with two

discs on the same channel and 8Mb main memory while the HP Series 64 ran with three 7925M discs on two channels and only 3Mb main memory. Both systems used two additional systems to simulate terminal activity — PDP 11/34s running RTE on the VAX and two Series 44s running TEPE on the Series 64.

The benchmark mix consisted of the following run simultaneously:

- 99 student sessions editing compiling, and running FORTRAN, BASIC, and COBOL programs (the VAX system could only run 95)
- Five administrative sessions — two which were updating a database while the other three were performing inquiries to that database
- One scientific background batch job which was a Monte Carlo simulation mainly performing integer calculations.

The results listed here compare the overall response time of the two systems. One reason why the response times are so much better on the Series 64 is because of the ATP. It interrupts the CPU only when a line of data has been received from a terminal rather than interrupting for each keystroke which is how the VAX system handles terminal activity.

	DEC VAX 11/780	HP 3000 Series 64
Minimum	0.0	0.1
Maximum	584.24	80.56
Mean	2.76	0.21
Standard Deviation	17.04	1.68

The batch job ran in 41.7 minutes standalone on the DEC and 173 minutes on the HP. However, when these jobs ran with all the sessions active, the estimated time to complete the job on the 11/780 was 1640 minutes while it was only 540 minutes on the Series 64. The reason for this is that with 104 active sessions on the Series 64, the CPU was only 68% busy leaving 32% for the batch job, while 100 sessions on the VAX utilized much more of the available CPU power.

As more Series 64 competitive benchmarks are run, the HP 3000 is continuing to meet the requirements of our customers by providing them with the ability to process a wide variety of tasks on a single system.

Consultants Program at BCG

Lynn Gardner/BCG

Many of you have had questions regarding the Consultants Program at BCG. These seven key questions should answer all the basic issues. Please feel free to call us and ask more at any time.

- Q:** What are the program's basic objectives?
- A:** There are four — to keep consultants informed about HP products and services, answer questions of consultants, find and recruit consultants in areas where HP needs help or assistance, and provide the field with information and tools to be more successful working with consultants.
- Q:** Who participates in the program?
- A:** Names of consultants who participate in the program are gathered from the field sales offices. Generally speaking, any consultant (large or small) that is influential in the sales cycle, or which the HP Sales Rep/District Manager want to have updated on a regular basis, are eligible to participate in the program.
- Q:** What information does HP provide consultants?
- A:** The initial phase of the program has emphasized education of consultants on BCG products and services. The Consultants Reference Guide and *Computer Advances* were used to achieve this goal. The Consultants Reference Guide (a 2-volume set of binders), was designed as a mechanism to keep consultants informed about HP products and services. It is regularly updated and distributed free of charge to consultants recommended by the local sales organization.

Participants in the consultants program are placed on the *Computer Advances* mailing list to receive general information on HP Computer Group products. This vehicle is used as a supplement to the Reference Guide updates.

To get your consultants on the mailing list for either of these, contact Lynn Gardner.

- Q:** What is included in the Reference Guide?
- A:** The Guide contains currently available sales literature for HP Business Systems, software, peripherals, and services including:
- Product information guides
 - General information manuals
 - Specification guides
 - Price lists
 - Configuration manuals
 - Data sheets
 - Management brochures and flyers.
- Q:** Who handles factory visits?
- A:** The BCG Consultants Program welcomes consultants to visit our Cupertino facility. Contact Lynn Gardner for assistance.
- Q:** Who is included in the Consultants Program database?
- A:** We currently have the new 1982 Consultants Directory listing available for the field. The Directory contains the names of over 500 consultants internationally. Contact us for a copy.
- Q:** Who do I call for questions or assistance?
- A:** Your friendly, cheerful support person is:
- Lynn Gardner
Business Computer Sales Center
TELNET 1-725-4397
COMSYS 4701

We are continuing to improve and expand the program's capabilities. Your assistance would be appreciated. If you have any additional names of consultants or want to discuss the program, please let me know.

CSY

Series 64 Gets Results — Fast

Audrey Dickey/CSY

How much work can an HP 3000 Series 64 do? That's a question that they are still asking at a large marketing research firm in the east. When the Series 64 was installed, there were many complaints from the operators, but the complaints were music to the ears of the customer. Programs which used to take from a half to a full hour were being completed in a matter of minutes. Unfortunately, the operators couldn't keep up with the programs in getting tapes mounted and ready. The customer was forced to dedicate an operator to the Series 64.

The customer was not too surprised at this performance, however. During the buying cycle, the choice to be made was whether to keep their IBM 4341 or buy the Series 64 and phase out the IBM machine. They were amazed at the results of the benchmarks and were convinced the way to go was with the Series 64.

The customer, which specializes in doing research for wholesale and retail foods firms, purchased the Series 64 to replace a Series II. In addition to the Series II, this firm also has two Series III machines. The firm sends out questionnaires to housewives who record their food purchases. These questionnaires, some

60,000 in number, are returned to this firm, where data editing is performed on the HP 3000s. Later, the cleaned-up data goes to an IBM 4341, where statistical programs produce the final figures. The results are then shipped back to the HP 3000, where reports are printed on a 2680 Laser Printer. This printer, by the way, replaced a Xerox 1200.

Editing data is not all the Series 64 does. The customer is also doing word processing and program development in the area of accounting, as well as phasing in the functions formerly performed by the IBM 4341. In addition, the customer has an on-line data service which allows users to dial up and look at their own data. Even with all these applications running, the Series 64 still has lots of processing room remaining.

Another surprise to the customer was the speed at which the machine was installed. Although a few minor problems surfaced a little while after installation, by and large everything is running smoothly at this installation. The customer has monthly status meetings, which hold no fear for Sam Winkfield, the SR from the Woodbury, Long Island office who is letting us share this success story with you!

Two Meter Cable Now Shipped with Series 64

Audrey Dickey/CSY

Currently, a one-meter HP-IB cable is shipped with every HP 7933H disc drive. However, when the 7933H is the first drive on a GIC on a HP 3000 Series 64, the one-meter cable is too short to connect the disc to the GIC. For this reason, CSY has begun shipping one two-meter HP-IB cable with each Series 64. This will allow

the CE to connect one 7933H on the system and thus get the system up and running.

Should additional HP-IB cabling be needed, a two-meter HP-IB cable is P/N 10833B and the four-meter cable is P/N 10833C. Both are available from Computer Supplies as well as directly from Santa Clara Division.

Systems shipped prior to June 29 did not include a two-meter cable. If your customer needs a two-meter cable and did not receive one, contact your Sales Center engineer to have one shipped.

HP 250/20 Homes In on Wang

John Whitesell/CSY

With the \$3000 price decrease effective August 1, the low-end HP 250 system is now, for the first time ever, within 10% of Wang's "comparable" offering, the base 2200 LVP system.

In the past, the HP 250 has normally been 25-35% more expensive (US prices) than one of our largest competitors, the low-end Wang LVP. Even at that large a premium, you were often able to win with the HP 250, not only because of HP's service and support but also because of the HP 250's ease of use and superior data base management system. Now, with only a 10% premium, you can go for a faster close!

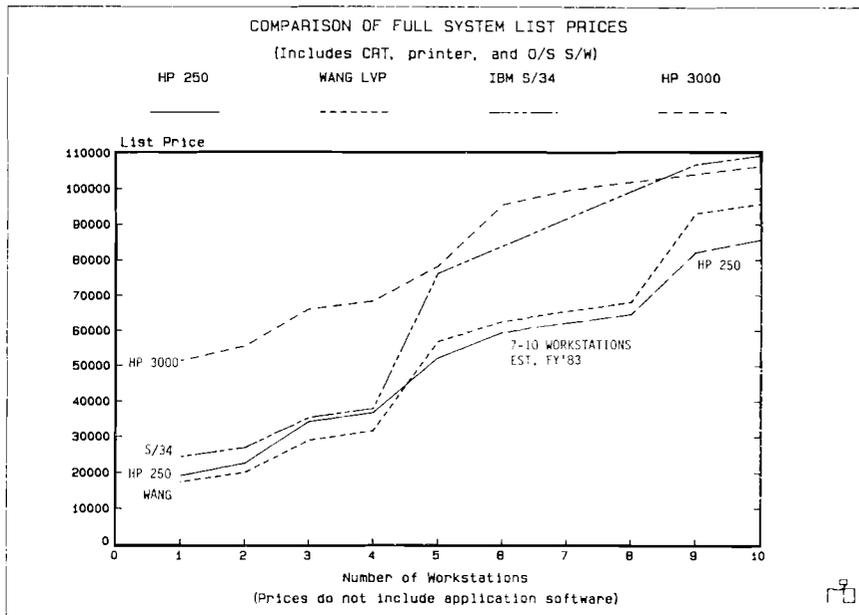
As you compare the two low-end systems more closely, the HP 250/20 looks even better. First, Wang charges \$1500 extra for its IDEAS utility package; the utilities come free with the HP 250. Second, the base 2200 LVP has just a 2Mb disc (vs. a 4.7Mb for the HP 250), four I/O slots (vs. five for the HP 250), and a 120-cps printer (vs. 180-cps for the HP 250).

Yes, Wang does have a less expensive, application-software-compatible system, the SVP. But the SVP is limited to a single terminal and involves a processor change (upgrade cost is generally \$10,500 to \$14,500) to grow to the LVP. With the HP 250, of course, no processor swap is required.

And Wang's word processing software is nice, but it's also expensive — \$2000 for the basic word processing package. Not only does HP have a text processing package for \$750, but also some HP 250 OEMs have nice word processing packages for a lot less than \$2000. By the way, have you heard about PLAN/250, a VisiCalc-like package that an OEM has available on the HP 250? Many people that have seen it demonstrated have given it very good reviews. For more details, see page 68 of the new HP OEM Capabilities Guide.

With the recent support of the HP 7911/12 disc drives and new 64K RAM memory, the larger HP 250 systems are now actually *less* expensive than comparably configured Wang LVP systems (see the following comparison chart). In the mid-range, Wang is still 15-20% less expensive in list price, but our much more convenient, high-speed tape cartridge backup, plus a proven HP 250 data base manager and user-friendly operating system, should help make up the difference. And remember, Wang's add-on main memory costs a lot! Plus the HP 250 offers OEM discounts of up to 35%.

Clearly, we don't expect Wang to stand still. But just as clearly, neither are we! All in all, I think you'll agree we're getting increasingly competitive. Sell HP 250's . . . the data, words, and graphics Small Business Computer!



“Percent Overhead” gives the amount, from 0% to 100%, of the otherwise-available CPU time on the master node which was consumed by DS/1000-IV during the test. CPU overhead is lower with larger user buffer sizes, as the ratio of control information to user is lower.

“Transit Time” indicates the total amount of time it takes for a user buffer to be transmitted to the slave program, acknowledged by that program, for the acknowledgment to be transmitted back to the master program, and for the program to generate the next request. Transit time, therefore, includes some processing time on both the master and slave nodes, but that is a relatively small amount in all cases. Transit time versus user buffer size is an approximately linear relationship, as transit time is closely related to the length of the message.

The following graphs are part of the A-Series performance documentation which can be found in the August 6 edition of *Support Update*.

IND

DSN/DS for the HP 1000: Performance Results for A-Series Point-to-Point Connections

Suzanne Hernandez/IND

Performance testing for the A-Series processors running DS/1000-IV has been completed, and the test results are impressive! These results indicate that the A-Series processors running RTE-A.1 yield the same level of performance within 5% as F-Series processors running RTE-IVB. (This is to be expected, as DS/1000-IV is dependent upon CPU cycle times which are approximately the same — 1 MIP — for the A600, A700, and F-Series processors.)

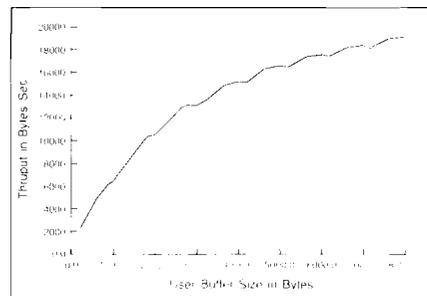
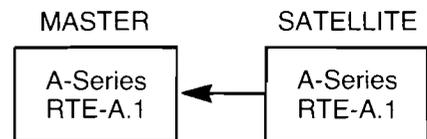
The goal in performing these tests was to determine the:

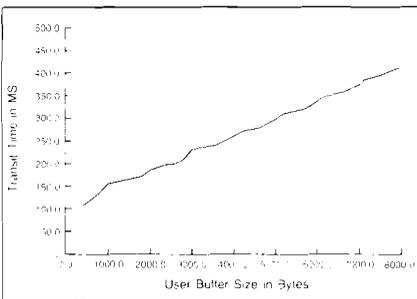
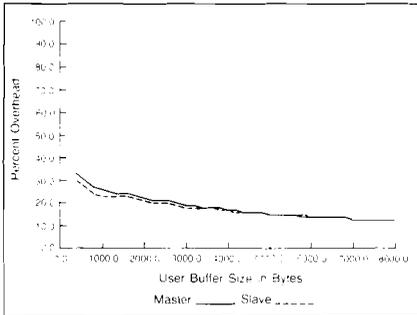
- User-level throughput of DS/1000-IV
- CPU overhead incurred by DS/1000-IV

- Time required for a user buffer to travel a DS/1000-IV link.

“Throughput” refers to the aggregate total user buffer rate through all the DS/1000-IV links in the network. User throughput indicates the rate at which the user’s data or files are transferred, not the physical data transmission rate across the line which includes control and addressing information, and therefore is a higher number.

User throughput curves level off as the user buffer size increases and the data transfer rate begins to approach the physical capacity of the communications link.





The A-Series performance documentation supplements the DS/1000-IV Performance Brief (P/N 5953-4264) and the DS/1000-IV Performance Brief Supplement for Multidrop DS/1000-IV Connections and L-Series Point-to-Point Connections (P/N 5953-2881).

HPTOOLSET SE Starter Kit

Dick Wong/IND

All HP 3000 SE district managers and PICS centers will soon be receiving their HPTOOLSET SE starter kit, an additional sales tool to help you sell HPTOOLSET to your COBOL customers.

The starter kit includes:

- HPTOOLSET Reference Manual (32350-90001)
- HPTOOLSET Demo Guide
- HPTOOLSET Instructor's Guide.

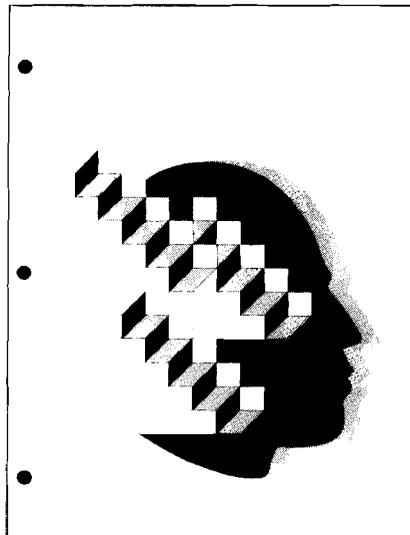
The demo guide shows how your SE can begin demonstrating

HPTOOLSET using a COBOL II source program supplied by your SE. HPTOOLSET does not require the CIPER MIT so check with your Field Software Coordinator as to availability of both HPTOOLSET and the CIPER MIT.

The instructor's kit consists of hard copies of overheads and instructional text taken from the HPTOOLSET training class given to our alpha and beta test sites. These may be used by your SE to prepare customer presentations and consulting.

HPTOOLSET Sales Brochure Now Orderable

Dick Wong/IND



The HPTOOLSET sales brochure entitled, "The HPTOOLSET Program Development System" is now orderable P/N 5953-7464. This brochure, which you recently received in the HPTOOLSET field information packet, takes you step-by-step through the development of a COBOL II program using HPTOOLSET's productivity tools

and provides an excellent instructional overview of HPTOOLSET. Now it is also available to your HP 3000 customers.

Together with the HPTOOLSET data sheet (P/N 5953-7446) — which provides a more detailed description on the HPTOOLSET productivity tools, as well as additional customer presentation material included in the HPTOOLSET SE Starter Kit — these sales tools will help you successfully sell HPTOOLSET to your customers.

CSP

HPMAIL — Internal Price \$200

Trevor Wing/CSP

HPMAIL was announced in April, introduced on the May 1 CPL and first customer shipments have already left Commercial Systems Pinewood!

Both customer and internal orders for HPMAIL (P/N 36570A) should be transmitted to CSP where an individual product tape will be manufactured for each order. Each product tape will contain a customized main menu with the customer's or HP entity name created in the form. In the case of customers' orders, the product tape and documentation package will be shipped directly to the customer. A COMSYS also will be sent to the Account SR informing him/her that shipment has taken place. HP internal orders will be handled in exactly the same way. The customized product tape and documentation package will be shipped to the HP entity specified on the order. Alternatively, HP entities may copy tapes supplied to internal entities and order the support materials separately.

HPMAIL Product Package

	Product No.	Part No.
Product tape	36570A	
1 hard cover reference manual		36570-90002
10 paperback reference manuals		36570-90001
20 "Using Electronic Mail" pamphlets		36570-90006
50 HPMAIL flyers		36570-90005
10 overhead slides		36570-90003
1 hard cover administration manual		36570-90004
HPMAIL implementation plan		

The package shipped for internal orders will be identical to the customer package which contains the items listed in the table above.

Following our office systems business strategy that Interactive Office products should be used within HP, internal orders will be given high priority. HP entities will be billed for management reporting purposes at \$200 for the complete HPMAIL customized tape plus documentation package.

Support for HPMAIL installed at internal sites should come from the SEO in the normal manner via SSS or CSS contracts with the local support group. An implementation consulting package is also available from the SEO. Corporate OUSG and IND support are working to define an internal HPMAIL network which your local electronic mail system can become part of later. Corporate OUSG have already defined a node name convention which will allow your local mail system to key into the company network later (contact Corporate OUSG to obtain your node name).

Ordering information

HP entities should order HPMAIL using P/N 36570M using HEART I2 order type, with duplicate M02 production cost for your internal accounting purposes.

Electronic Mail — How to Win Against the Competition

Trevor Wing/CSP

Our experience in competitive situations has shown that, in most cases, competition for HPMAIL is coming from our traditional DP competition — IBM, DEC, Wang, Prime. To win against these vendors use two approaches. First, HPMAIL standalone is far more competitive feature-for-feature than any other electronic mail system offered by any of these vendors. Second, stress our wide range of Interactive Office products, unmatched by IBM, DEC, Wang and Prime. All these vendors offer WP, EM and filing, *none* offer products that compete with the ease of use and functionality of INFORM/3000 or our new Business Graphics products HPDRAW and HPEASYCHART. Business Graphics and Information Management are both very powerful tools for the business professional and provide very impressive demonstrations. By proposing the Interactive Office, specifying Word Processing, Electronic Mail, Business Graphics and Information Management, you will set a standard that IBM, DEC, Wang and Prime will find very difficult to match.

In the pure electronic mail area, HPMAIL has many advantages and additional features over all the current competitive mail systems. For an electronic mail system to be able to cope with the needs of large multinational customers or the growth of small customers it must be able to expand to handle possibly hundreds of workstations. An electronic mail system that cannot be truly distributed across systems, and therefore geography, is not realistically suitable for more than small local user groups. HPMAIL is a true store-and-forward distributed mail system running across any HP 3000 DSN/DS network with any combination of system-to-system connection types. Computer based electronic mail systems co-exist with other office systems products and DP applications, and as such the ability to be usable from a wide range of office and DP workstations is very important. Many competitive mail systems require sophisticated expensive WP type workstations that make wide usage of electronic mail very expensive indeed and prohibit the use of traveling dial-up terminals for home or field based personnel.

Most of the competitive mail systems only allow a user to send simple message text to another user (strictly speaking electronic messaging). HPMAIL is a true electronic mail system allowing users to send and file virtually any item resident in the MPE file system: WP documents, graphics files, software updates, forms files, VisiCalcSM reports, etc. Many customers find the Network File Transfer capabilities of HPMAIL as invaluable as the messaging capabilities also provided.

Mail progress tracking is an important feature provided by HPMAIL allowing users to monitor the progress of mail sent — even being notified when the recipient has read the message. Many of the competitive mail systems do not provide this feature.

So, in a competitive situation sell:

- Compatible range of networked hardware
- Wide range of Interactive Office products
- Full store and forward networked mail system
- Access from any RS-232C terminal including portable traveling terminals
- NTF of general system files
- One system/workstation for office functions and data processing functions.

Feel free to give factory marketing a call on 3446-3199 (01144 prefix from the US) if we can help in a particular competitive situation.

BGD

HP 3000 International User's Group Conference

Matt Cuson/BGD-ESC

Mark October 25–28 on your calendar for the HP 3000 International User's Group Conference. It will be held this year in beautiful Copenhagen. Conference logistics are handled through Spadille ApS, Sommervej 3, DK-3100 Hornbaek, telephone 45-220-2496. If you would like to attend (either as an interested party or as a speaker) you can register directly with Spadille in Denmark or through the IUG in Los Altos, CA.

The theme of the conference is "System Security in the Eighties". Over 50 papers will be presented during the week, 15 of which will be from HP.

Registration starts on Sunday, October 24 and the first sessions start at 2:00 pm the next day. Tuesday afternoon is reserved for the exhibition, where more than 20 vendors will display their products. HP will have a booth of over 60 square meters showing all of HP's latest software and hardware products.

Whether you are in R&D, product management, sales, or just a fan of the HP 3000, you will find what you need at the Copenhagen conference!

HP 3000 Aids in IC Design

Angela Ramsay/BGD

Another way business computers are used in Boeblingen — and this time it concerns the editing of data and graphics in a technical environment. The Boeblingen Instruments Division is using the HP 3000 on a daily basis to run a computerized system for schematic drawing. The system, developed by Design Aids in Cupertino, CA, is an interactive editor designed to assist engineers in entering and editing circuit schematics. The multi-user feature of the HP 3000 and the award-winning IMAGE data base system mean that data can be entered into one central data base, which can then be accessed by all parties involved in the project.

Before the introduction of the new HP 3000 controlled design aids in Boeblingen, correction time took just as long as creation time for a circuit schematic. The R&D engineers made corrections to a circuit which were then passed on to the market-

ing department. The marketing department then updated the circuit diagram manually using an outside draftsman. As is inevitable in the creation of a sophisticated circuit, the design would be modified several times, each time requiring a tedious correction loop. More corrections would emerge at production stage, once again meaning time-consuming the expensive corrections.

Since the implementation of the computerized system, many of the previous problems have disappeared. The original design is input by a design engineer once and need never then be touched. This eliminates many of the mistakes which before occurred because the design had to be recreated by different people, some of whom may not have been familiar with the technical background. Any corrections/modifications are made online, meaning all parties involved are always completely up-to-date with the current status of the project. No more communication problems! Hard copies may be plotted out in the desired size in a matter of minutes. No more reduction expense! Furthermore, the finished schematic can be plotted directly on to positive film which can be used for the production process. Again, cost savings!

This may not be a standard HP 3000 application, but just as in a business environment, the ability to edit graphics readily is proving invaluable. The use of the HP 3000 has rationalized the work process for many people in BID. Money is saved, turnaround time for projects has improved, and everyone has fingertip control of the work in hand. Are your prospects aware of what the HP 3000 could do for them?

BGD Uses the Laser Printer for Manual Production

Mike Barlow/BGD

BGD is in the process of producing substantial amounts of documentation for as yet unreleased software products. When planning the project some 12-18 months ago, a basic decision was made to print all documentation on the 2680A Laser Printer. We have now discovered what that decision meant — time savings of about 25% compared to traditional production methods, and cost savings of more than 10%!

Although the actual numbers will vary from one organization to another depending on the complexity of the documentation, *any* organization can achieve significant savings whatever their special needs are for diagrams, photos, etc., irrespective of the quantity of manuals they wish to print. For BGD, the greatest savings of time and money came from completely avoiding the typesetting process. When we go on to update or translate the documentation, the benefits of using the laser printer will be even more impressive as the savings will be achieved each and every time.

BGD's special need was to be able to automatically include a specific VPLUS/3000 form in the middle of a page of text on the 2680A. We achieved this by writing some special routines, which we hope to make publicly available next fiscal year.

European OEM Software Catalog

Matt Cuson/BGD-ESC

The Third Party Group of the European Sales Center announces the European Commercial OEM Software Catalog. This new sales tool for the field sales team contains a listing of software packages for the HP 3000 and HP 250 which are available from European OEMs. Every Third Party specialist received a copy during the Success '82-'83 Tour.

The OEM catalog complements the HP PLUS Software Catalog which was sent to the field in May. The objective of the new catalog is to increase the availability of software which runs on HP commercial systems. Unlike HP PLUS, the OEM catalog only lists software and does not provide any merchandizing support. The catalog provides several benefits:

- HP SRs have a source of European software information at their fingertips
- HP OEMs can easily locate other OEMs interested in cross-licensing
- Third Party specialists have another mechanism to attract new OEMs.

These benefits mean that sales productivity can increase, since the time a salesman spends searching for the right package is decreased. Cross-licensing will aid existing OEMs in terms of revenue income because their potential market and sales force will be increased. Finally, the OEM Software Program will encourage more OEMs to work with HP equipment.

The Third Party specialist will be the keeper of the catalog and will locate other OEM packages suitable for inclusion in the catalog. Product

information will be typed onto a form (similar to the HP PLUS format) and sent to the European Sales Center to be included in regular catalog updates.

I expect the catalog to grow very quickly from the current 120 entries and become a valuable tool for HP FEs, Third Party specialists and OEMs. The European Commercial OEM Catalog is one example of HP's commitment to the continued success of the HP OEM program — contact your Third Party specialist and take a look at it.

Increased I/O Flexibility for HP 250 Model 35

Thomas Lang/BGD

(For Europe only) From the end of July onwards all HP 250 Model 35s will be shipped with a slightly modified back panel. The new panel can accommodate the DSN/INP interface and still leave room for two asynchronous interfaces with five ports each.

Although there will be no upgrade kit for earlier HP 250-35 systems, you will be able to offer all future customers the same I/O capabilities on all HP 250 systems. This is just another factor which makes up the combined strength of the HP 250 Models 20, 30 and 35. Best of all — you can offer this increased flexibility at no extra charge! 

DTD

Introducing High Performance Color Graphics

Peter Taylor/DTD



Data Terminals Division's new HP 2700 series of terminals offers graphics performance unparalleled in HP's graphics product lines.

The HP 2700 series of terminals features two models for business and two models for technical applications:

- Model 65 Presentation Graphics Workstation
- Model 60 Decision Support Workstation
- Model 55 Technical Design Terminal
- Model 50, the expandable base unit.

Local Picture Manipulation Means High Performance

By storing the graphic image in vector form in the terminal, the HP 2700 allows the user to pick, move, scale, or rotate an object using local graphics manipulation. The host CPU is free for other uses. This distribution of graphics intelligence significantly increases system performance, reduces data communications and eases graphics program development.

2500 Square Feet of Plotting Space

THE X, Y coordinates that are stored in the vector list can have the values + or - 16,383, thereby providing a 32K x 32K addressable resolution. This calculates out to more than 5000 individual screens or more than 2500 square feet of plotting space based on the screen's dot resolution! The user can easily select what part of this huge addressable space is brought to the screen by interactively zooming and panning. Either the entire image can be seen at low magnification or the small pieces of it can be seen at high magnification.

By storing the detailed image locally, the user has almost immediate access to a large amount of graphic information without waiting for or burdening the CPU.

High Quality Color

The HP 2700 color terminals can display 16 of their 4,096 different colors on the screen at one time. By rotating a thumbwheel, a user can mix colors while watching instantaneous color changes on the screen. Selected colors can be stored in the terminal as a palette and recalled with a single command.

The HP 2700 raster display provides a bright, vivid image even in the ambient light found in the typical office.

Price and Availability

The basic Model 50 is priced at \$19,900 in the US. Model 55, for the technical user, sells for \$24,000 and Model 60, the decision support workstation, is priced at \$24,000. The presentation graphics workstation, Model 65, featuring both *HP AUTOPLOT/2700* and *HP PAINTBRUSH/2700* software, sells for \$28,000.

First deliveries are planned for October 1982.

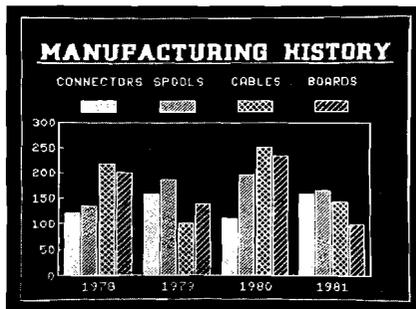
Computer Terminals

Graphics Made Easy on the HP 2700

Sarah Jane Militello/DTD

Two powerful and easy to use software packages are available for the HP 2700 series of high performance color terminals: AUTO PLOT/2700 and PAINT-BRUSH/2700.

AUTO PLOT/2700



AUTO PLOT/2700 is a powerful application software package which provides an extremely friendly menu driven interface for high quality decision support graphics including: pie charts, bar charts, line charts, log charts and scattergrams.

Since all the chart types use the same data menu, your customer can choose between a pie, bar, or linear chart and see the results in a matter of seconds. Text slides may be designed in a totally interactive environment as well. Therefore the user avoids costly and time consuming software investments and no CPU time is needed.

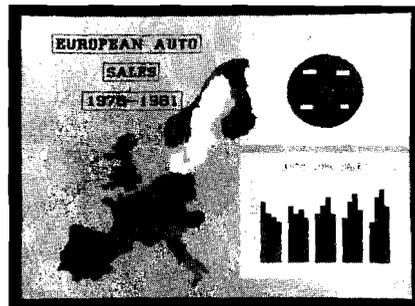
In addition to the menu driven interface which allows a customer to point to a portion of a chart with the graphics cursor and then change its color, size, shading, and font in seconds, whole charts can be moved, scaled, and combined with other charts and text to form a complete graph.

Once designed, the finished chart can be copied to a plotter, RGB out-

put camera, or raster dump printer. AUTO PLOT/2700 also allows unattended plotting and printing of multiple copies of up to 17 different charts on HP plotters and printers with the chart advance feature.

Fast chart generation with AUTO PLOT/2700 increases user productivity and results in better decision making.

PAINTBRUSH/2700



PAINTBRUSH/2700 does for the creative chart maker what word processing has done for the typist.

It provides a means for drawing, editing, and combining pictures, including AUTO PLOT/2700 charts. The user can also edit pictures generated by host software.

The 13273 Data Tablet is an ideal companion to PAINTBRUSH/2700. Using the graphics tablet, the user can select the color and "brush tip" desired and then freehand draw as if using a paint brush on paper. If a mistake is made all one has to do is hit the "UNDO" key!

For the less artistic person, aids similar to a ruler and compass on graph paper are available. Straight lines, circles, rectangles, and arcs are all available at the user's fingertips to help build that perfect picture. Therefore, no programming knowledge is required and the cost to generate quality presentation graphics is cut dramatically.

While in PAINTBRUSH/2700 your customer can select different pictures or part of pictures to move,

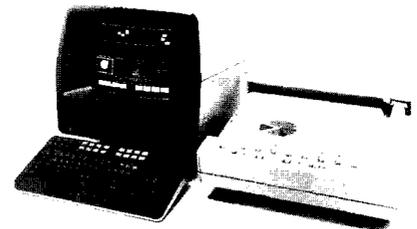
rotate, scale or copy. The user can also add and edit graphics text labels. This allows the modification of pictures such as a schematic, PC layout, pie chart, or floor plan with little or no CPU time usage.

As with AUTO PLOT/2700, the final picture created in PAINT-BRUSH/2700 can be copied to a plotter, RGB output camera, or raster dump printer.

The result is impressive speed and flexibility for the generation of professional presentation graphics.

HP 2700 Hardcopy

Pam Leitnerman/DTD



The HP 2700 supports a variety of output devices for both alphanumeric and graphics hardcopy. An RS-232C serial port for plotters or printers is standard. This makes the HP 2700 the first HP terminal that can transfer raster information directly to an RS-232C printer, or vector information directly to an RS-232C plotter. Of course, an attached RS-232C graphics printer can be used to print HP 2700 alphanumeric as well.

For your customers who need shared peripheral capability, an optional shared peripheral interface is available for \$1250. This allows multiple HP 2700 models to share the same HP-IB hardcopy devices and permits multiple devices to be daisy-chained together.

An optional RGB video output interface is also available for graphics output to compatible monitors and cameras. Thus a 35mm slide can be generated directly from a screen design.

Following is a list of non-HP peripherals which are compatible with the HP 2700.

Color Printers

Drivers for the following non-HP color raster printers are included in the standard HP 2700. They interface to the HP 2700's second RS-232 port.

Company:

PrintaColor
P.O. Box 52
Norcross, GA 30091
ph. 404-448-2675

Model:

GP 1024

Cable:

13242G

Company:

Ramtek
2211 Lawson Lane
Santa Clara, CA 95050

Model:

4100

Cable:

13242N

Cameras

Cameras interface to the HP 2700 via the optional RGB Video Interface.

Company:

Matrix Instruments
230 Pegasus Ave.
Northvale, NJ 07647
ph. 201-767-1750

Model:

2000/3000

Company:

Dunn Instruments
P.O. Box 77172
544 2nd Street
San Francisco, CA 94107
ph. 415-957-1600

Monitors

50/60 Hz interlaced color monitors interface to the HP 2700 via the RGB Video Interface option. Compatible monitors are available from

Company:

CONRAC
600 North Rimsdale Ave.
Covina, CA 91722
ph. 213-966-3511

Company:

BARCO
5128 Calle De Sol
Santa Clara, CA 95050
ph. 408-727-1506

Model:

CDCT 3/51

For more information, call your Sales Development contact.

HP 2700 Sales Aids

Bruce Miller/DTD

With the excitement of the introduction at SIGGRAPH in July, the HP 2700 Color Graphics Terminal will generate a number of inquiries from both new and existing HP customers. To further create attention and sales leads, we have undertaken several other activities.

Advertising was started in August with two captivating ads, one oriented toward technical users and the other toward business applications. The technical ad initially appears in *Mini-Micro Systems*, *Computerworld*, and *Computer Design* with emphasis on the local graphics power of the terminal to offload a host computer. Watch the August and September issues of *Business*

Week where we are dramatically illustrating the presentation graphics flexibility of AUTO PLOT/2700 and PAINTBRUSH/2700.

In addition, we recently completed a number of press visits at DTD where we had the opportunity to personally discuss and demonstrate the HP 2700 terminals to editors from most of the leading computer publications.

As our media coverage continues, we expect the leads to flow into your offices. The HP 2700 data sheet and brochure are orderable from Literature Distribution to help in your response.

P/N	Description
5953-2093	Four-page Color Brochure, "HP 2700 Series High Performance Color Graphics Terminals"
5953-2094	HP 2700 Data Sheet

Terminal HP 1000 Computer Cabling Matrix

Mark Priestley/DTD

SRs have had many questions recently on the configuring of terminal products to the HP 1000 computer. We have developed a matrix to simplify the configuring of terminals onto the 1000. More details on these configurations and information on the less common interfaces can be found in the communication portion of your HP 1000 configuration guide. Also, we at DTD are most happy to answer any questions you might have on your configuration.

DTD — HP 1000 Cabling and Interface Option Matrix††

	Computer Interfaces/Terminals	264X: 307X**	262X*	2621B: 2382A	Port 2 of††† 2626A/W or 2624B
Point-to-Point Communication A&L Series	12005A	Opt. 005	Opt. 001	Opt. 002 and 40242C	Opt. 002
	12005A** Opt. 003	13232N†	13222N	40242M	40242M
MUX Communications A&L Series	12040A- 12828A	13232A/M/N/Y	13222M-N-Y	40242M	40242M
	12040A** -12828A- -30062B	13232A/M/N/Y	13222M-N-Y	40242M	40242M
Point-to-Point Communication M/E/F-Series	12966A	Opt. 001	Opt. 005	Opt. 002 and 40242Z	Opt. 002 and 40242Z
	12966A Opt. 002**	13232N	13222N	40242M	40242M
MUX Communication M/E/F-Series	12792A- 12828A	13232N/Y	13222N-Y	40242M	40242M
	12792A** -12828A- 30062B	13232A/M/N/Y	13222N-Y	40242M	40242M

* Does not include 2621B, but does include first port on 2626A/W and 2624B.

** This interface card configuration is used only when you wish to have a computer terminal connection through a modem. Especially note that modem connections via the 12040A or 12792A multiplexor is passive — it does not support modem control.

*** The preferred I/F to use between a 1000 and the 307X terminal is multipoint rather than point-to-point.

† The N cable is the standard cable recommended when one connects to a US modem; the M cable is recommended when one connects to a European modem.

†† The option numbers in the matrix are options to interface cards only

††† The RFI cables are recommended in matrix because they provide RFI filtering; some 13242 cables will also work.

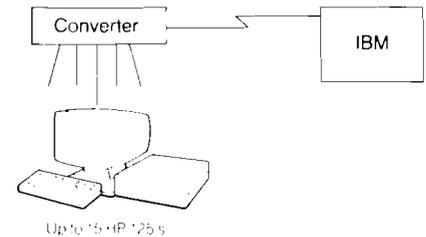
Cable Descriptions

- 132X2A — 103/202 modem cable only (15 ft.)
- 132X2M — European modem cable (15 ft.)
- 132X2N — US modem cable (15 ft.)
- 132X2Y — EMP Protect cable provides protection from lightning-induced transients on data communication line. (15 ft.)
- 40242C — Extension cable RFI filtering (17 ft.)
- 40242M — US modem cable RFI filtering (15 ft.)
- 40242Z — Modem bypass cable RFI filtering (15 ft.)

GSD

Synchronous Communications Now Available on HP 125

Mary Etta Port/GSD



"The HP 125 is great, but . . . we need synchronous communications with our IBM mainframe!" Now you can answer your customer's objection with confidence. IBM 3270 binary synchronous communications is now available on the HP 125. Datastream, an independent vendor, has added the HP 125 to their list of supported devices for IBM bisynchronous 3270 protocol converters. This product represents HP's first referenced (not supported) third party hardware product for the HP 125.

"Translation" Process

Datastream's T7 product converts the HP 125's asynchronous ASCII data to IBM's bisynchronous EBCDIC (Extended Binary Coded Decimal Interchange Code) and vice versa. All CP/M based computers use ASCII to determine the bit pattern for character formation. On many IBM computers a *different* bit pattern for it's characters, EBCDIC, is used. Any data transferred between the CP/M (ASCII) system and the IBM EBCDIC system must therefore be translated from one code to the other.



The HP 125 appears to be an IBM 3270 terminal to the host system only when placed in remote mode *and* connected to the *IBM* mainframe.

The Datastream T7, operating in character mode, communicates in speeds up to 9600 bits per second. The product supports up to 15 HP 125s, and therefore is best suited for customers with many HP 125s in clusters or equipped with modems for remote access. T7s may be purchased with 7, 11, or 15 ports, respectively. Volume discounts are available from Datastream.

Logistics

The "black box", or protocol converter unit, can be placed near the mainframe or next to the HP 125 and is connected via the standard RS-232 port. Direct connections, private leased lines, or less expensive switched (dial-up) lines over modems may be used to link the two systems. Unlike conventional 3270 clusters that can *only* be directly attached or multi-dropped on leased lines, the Datastream product also allows *remote, dial-up access*. This provides casual users an excellent opportunity to get quick updates and perform data inquiries economically, without having to purchase expensive new terminals.

The 125, unlike other micro-computers, does not require any special software packages nor any hardware changes to be used as an IBM 3270.

Limitations

Unlike IBM's 2780/3780 terminal protocol, the converter boxes can not be used to gain programmatic access to tasks running on the IBM mainframe nor to transfer files. This is a basic limitation of IBM's 3270 protocol. Secondly, the T7 is limited to a subset of IBM Bisync and must be configured as having a 3271 or 3275 controller, not a 3274 or 3276.

Support

Support for the Datastream T7 can be obtained by contacting:

Datastream
1115 Space Park Drive
Santa Clara, CA
Ph. 408-727-2980

HP SRs may obtain further information by ordering P/N 5953-5803 (HP 125 Data Communications Technical Notes). An HP 125 Application Note for IBM 3270 Protocol Conversion is also available.

Now you can go into those IBM accounts and sell the Datastream T7/HP 125 synchronous solution!

New VisiCalc Sales Tool for HP 125

Mary Etta Port/GSD

A VisiCalc command structure chart for the HP 125 is now available. The one-page command summaries are helpful when demonstrating or operating the HP 125. The structure chart includes sub commands and brief explanations for each command. The 8-1/2" x 11" size allows the chart to fit neatly inside a 3-ring binder or sales promotional materials given to customers.

A supply of these sheets was shipped to all HP domestic and ICON offices in June. SRs may order more via sales literature order forms (SLOs) and their literature departments (P/N 5953-5802).

You'll find these handy charts invaluable for familiarizing your prospective customers with the power and flexibility of VisiCalc!

Standalone Accounting Package Offered on HP 125

Mary Etta Port/GSD

Studies have shown that more small businesses fail due to the lack of timely financial reports than any other reason. A new software package, General Accounting on the HP 125, now offers a solution to the problems of small businesses — including the need for financial reports upon request. BPI Systems, Inc. has tailored their General Accounting software to HP specifications to take advantage of the HP 125 hardware.

The General Accounting System includes integrated subsidiary ledgers for Accounts Receivable (containing up to 800 customer accounts), Accounts Payable, (containing up to 200 vendor accounts), and Payroll Accounting.

Easy to Install and Learn

The complete General Accounting System has been installed in many businesses in less than three hours — most are in operation the same day. Converting from a hand or mechanical system is a simple process where the company can select the combination of journals and ledgers most suitable for its particular business. The chart of accounts and financial statements can be entirely customized to meet individual needs.

General Accounting is an easy-to-use, comprehensive accounting system designed for users without prior computer experience. The owner's manuals and computer's messages are written in clear, ordinary business and accounting language. They contain step-by-step instructions concerning every phase of system operations.

Computer Terminals

The HP 125 "special function keys" are used throughout the General Accounting software, taking advantage of the system hardware.

Benefits

In addition to reducing clerical book-keeping time, timely financial reports allow better control over important areas such as accounts receivable and accounts payable.

The difficult tasks of accounting and statement preparation are accomplished by simply making entries in selected journals. The posting of ledgers, and the closing of books are completed entirely by the computer system. Thus, financial reports can be produced at any time.

The system automatically generates an audit trail which provides a continuous tracking of all transactions. Totals on the financial and sub-ledgers may be traced back to the general ledger and the journals by easily identifiable folio references.

Journals, Reports, and Ledgers

GA is a double entry bookkeeping system providing automatic double entry control in all six journals and registers. These journals post automatically to the ledgers. The six available journals include:

- General Journal
- Cash Disbursements Journal
- Invoice Register (for companies using cash registers to record sales)
- Cash Receipts Journal
- Merchandise Purchases Journal
- Cash Sales Journal.

After completing journal entries, the proper ledgers are automatically posted, financial statements are prepared, and the books are "closed". The important A/R and A/P ledgers are totally integrated with the system.

Reports and ledgers available in the system include:

- Balance Sheet
- Profit and Loss Statements (up to 10 departments)
- General Ledger
- Accounts Receivable Ledger (showing each customer's monthly transactions and balance)
- Accounts Payable Ledger (unpaid invoices in chronological order)
- Payroll Ledger (monthly, quarterly, and year-to-date summaries)
- Numerical Payee List
- Alphabetical Payee/Customer/ Vendor Lists.

Support

Although purchased from HP or an authorized HP dealer, the BPI package is supported directly by BPI Systems, Inc. in Austin, TX. The \$450 package price *includes phone-in support* from BPI with separate lines for end-users and dealers. BPI's support organization and on-line phone responsiveness is superior.

Peachtree Accounting Software, Too!

In addition to the BPI software, Peachtree Systems, Inc. has adapted their more advanced accounting software (and other office oriented software) for the HP 125. This software also comes under the HP Plus program, however, it is *neither distributed nor supported by HP*. As "referenced" software, it has been given "HP's stamp of approval" for use on the HP 125. A more powerful, flexible, yet more difficult-to-install package, the Peachtree Accounting Series includes:

- General Ledger
- Accounts Receivable
- Accounts Payable
- Inventory Control
- Invoicing
- Payroll.

The HP 125, HP's small business computer, now truly meets the needs of small business with these two outstanding accounting solutions! 

BSE

Heavy Paper for Your Laser Printer

Tom Old/BSE

A common request for the HP 2680A Laser Printer is to print on paper heavier than 90 g/m² (24 lb.). Yes, it can be done, with certain restrictions. Application Note 413-1, "Printing on Paper Greater than 90 g/m² (24 lb.) Using a 2680A Laser Printer", is now available to answer your questions on this subject. Order it through Literature Distribution Center using P/N 5953-7118.

Sales Literature Update

DeLona Lang Bell/BSE

Sales literature can be a useful tool throughout the sales cycle. Following is a list of tape drive and printer sales lit which is available through Corporate Literature:

Item	P/N
<i>Tape Drives</i>	
Magnetic Tape Application in the Telephone Industry	5952-9412
7971 Data Sheet	5953-7103
7976A Data Sheet	5953-7100
7970B/E Data Sheet	5952-9435
<i>Line Printers</i>	
2611A Data Sheet	5953-7117
2608A Data Sheet	5953-7102
2608S Data Sheet	5953-7112
2617A Data Sheet	5952-9451
2619A Data Sheet	5952-9448

2680 Laser Printer/2685 Print Station

2680 Color Brochure	5952-9460
Application Note 412: Using Heavy paper on the 2680 Laser Printer	5953-7118
2680 12-page Print Sample (Does not show graphics capabilities)	5952-9466
2680 Seminar Planning Kit (Used to help prepare for seminars; printed on 2680 Laser Printer)	5953-7104
2680 Portfolio Jacket (Gold embossed folder holds 2680/85 literature)	5953-7109
2680 Paper Spec Guide (Sample of manual printed on the Laser Printer)	5953-7110
2680 Data Sheet (includes graphics capabilities)	5953-7116
Application Amplifier: How an Insurance Company uses the 2680 Laser Printer	5953-7101
2685 Color Brochure Introduces management to 2685 Print Station)	5953-7106
Words, Data, Graphics Print Sample (Text and Graphics on the Laser Printer)	5953-7115
Words, Data, Graphics Color Flyer (Introduces Laser Printer text and Graphics)	5953-7114
Application Note 411: Converting from Line Printer to Laser Printer	5953-7103

HP 2608S — CPU Efficiency on HP 3000

Jim Skog/BSE

The HP 2608S system line printer offers a performance advantage over its predecessor, the HP 2608A.

A new printer protocol (CIPER) increases CPU performance by passing data from the spooler to printer in 1000 byte blocks. The average CPU utilization for the 2608A and 2608S is:

Average CPU Utilization for HP 3000 Series 44	
2608A	12-15%
2608S	3-5%
2-2608S	9-12%

The lower average CPU utilization benefits all 3000 users, especially on HP 3000s with heavier loads. Together with lower maintenance costs, recoverability and improved print quality, the 2608S is the best choice for your HP 3000 customers.

No Price Increase on Option 340

DeLona Lang Bell/BSE

The July 1 issue of *Computer News* listed a price increase for Option 340. There is no price increase on this option. However, the HP 7971 base was correctly listed as having a price increase from \$10,000 to \$11,000.

COL

Reduced Cost HP 1360 — InteGraL/60 Course

Jim Abrams/COL

When the HP 1360 Graphics System was introduced earlier this year, we began developing a technical course to provide users with information ranging from the basics of computer graphics to developing sophisticated applications based on the InteGraL/60 software. The course primarily focuses on information to assist users in developing effective, well-structured graphics applications.

The course will be three days beginning October 4, 1982 and is open to 02 SEs and customers. The only cost to be assumed by the participants is transportation to and from the Colorado Springs facility and room and board while here.

Please contact Wanda Ray 303-598-1900, ext. 2015, TELNET 1-598-2015 for more information or to enroll in the course. Reservations will be taken until September 15, 1982.

GLD

IBM 3740 Data Exchange on HP-87

Renee Gehrig/GLD

The HP-87 can now be used for Data Exchange Applications. All Series 80/9895A Data Exchange Utility Pacs (P/N 88095A) now contain both the HP-83/85 and HP-87 Data Exchange Utilities.

For those people with customers who have a pac that was shipped before August 1, the following changes must be made for the HP-87:

1. Load the existing "IBMINIT" program into the 87 and wait for the 87 to complete the translation.

2. Insert the following lines:

```
510 GOSUB 9950
9950 FOR I9 = 1 TO LEN(I$)
9955 IF
    NUM(I#[I9,I9])<=127
    THEN
    T#[I9,I9]=I1#[NUM
    (I#[I9,I9])+1,NUM
    (I#[I9,I9])+1]
9960 NEXT I9 @ RETURN
```

3. Edit the following lines to read as follows:

```
10 DIM
    I#[128],I1#[128],
    T(5),V#[10],B#[128],
    T#[128]
600 GOSUB 9950 @ GOSUB
    9400
640 GOSUB 9950 @ GOSUB
    9400
680 GOSUB 9950 @ GOSUB
    9400
780 GOSUB 9950 @ GOSUB
    9400
```

```
814 GOSUB 9950 @ GOSUB
    9600
840 GOSUB 9950 @ GOSUB
    9600
DELETE LINES 9465, 9477, 9660,
9666
9472 OUTPUT C3 USING
    "#,128A";T$
9664 OUTPUT C3 USING
    "#,128A";T$
```

4. Store the program as "IBMINIT87".

5. Load the existing "DCPAKG" program into the 87 and wait for the 87 to complete the translation.

6. Insert the following lines:

```
9950 FOR I = 1 TO LEN(I$)
9955 IF NUM(I#[I,I])<=127
    THEN
    I#[I,I]=I1#[NUM
    (I#[I,I])+1,NUM
    (I#[I,I])+1]
9960 NEXT I @ RETURN
```

7. Edit the following lines to read as follows:

```
6064 ... @ H#[H1+2,H1+2]
    =CHR$(0)
9465 IF F1=1 THEN GOSUB
    9950
9660 IF F=0 THEN GOSUB 9950
DELETE LINES 9477 AND 9660
```

8. Store the program as "DCPAK87".

These changes are necessary because the "CONVERT" statement in the HP-87 I/O ROM does not work if the data strings are longer than 80 characters.

If you have any questions or comments please feel free to contact GLD Sales Support at 1-303-226-3800 ext. HELP or TELNET 1-226-HELP.

VCD

LOGMARS Update

Gary Peck/VCD

Our article on LOGMARS in the August 1 issue is possibly in error. While we hope to have governmental approval soon that will make the article correct, we don't have it yet. Therefore, for an interim period, please check with us directly on this issue.

Barcode Upgrade Kit Now Available

Al Grube/VCD

Your customers can now order an upgrade kit that will add bar code printing capability to their HP 2631G Impact Printers. For \$995, 26094G with Option 200 converts 2631G Printers to 2631G Option 200 Factory Data Printers.

This kit should be CE-installed and includes a Bar Code Printing Guide, demo tape, OCR ribbon (for highest possible print quality), and installation instructions. CE installation charges are not included in the price of this upgrade kit.

VCD Order Processing Reorganized

Mike Polansky/VCD

Order Processing in Vancouver previously was organized on a product basis. Your OP contact was determined by the product in question.

The new structure is based on sales regions. This new, more streamlined, organization means that a person in

a particular region has only one contact at the Vancouver Division. The new structure is as follows:

OP Contact	Sales Region
Gayle Anderson	Neely Sales Region
Connie Haralampus	Southern Sales Region, Southeast Europe (including Middle East and Africa)
Eileen Demarais	Eastern Sales Region, Canada
Rick Godinez	European Europe, Latin America
Alethea Hone	Northern Europe, U.S. Factories
Eva Grant	Japan, Coord. Shipments

The First DSN/Data Link Printer for HP 1000 Models 45 and 65

Web Augustine/VCD

For your customers who have installed DSN/Data Link communication networks on HP 1000 Models 45 or 65 Systems and wondered about hardcopy output, the Vancouver Division has a solution. The popular HP 2673A Intelligent Graphics Printer is now available with a DSN/Data Link interface option.

This is the *first* printer to be designed with this interface. Since the 2673A can be connected directly to the data link, the printer is not limited to being slaved to a terminal or desktop computer. This capability allows one printer to be shared among several workstations — saving money and valuable desktop space. Terminals aren't tied up during printing and are free to accomplish other tasks.

Unlike a terminal that requires an external Data Link Adapter, the DSN/Data Link interface is integral to the 2673A Printer. The 2673A can connect to any node in a data link configuration through the cable that is provided with the printer.

The 2673A receives data asynchronously at up to 9600 baud. Built-in diagnostics and error checking routines ensure that the printer is functioning correctly on the data link.

Printer output is fast, clean convenience copy — useful in producing a listing of a program under development or a quick copy of an Edit file. In addition, the 2673A's printing quality and fan-fold paper capability make it ideally suited for internal memos.

Text printing using a highly-readable 9x15 matrix cell allows true character descenders. The bi-directional print speed is 120 characters per second. Raster graphics can be printed with 90 dots per inch resolution.

User-convenience features of the 2673A include:

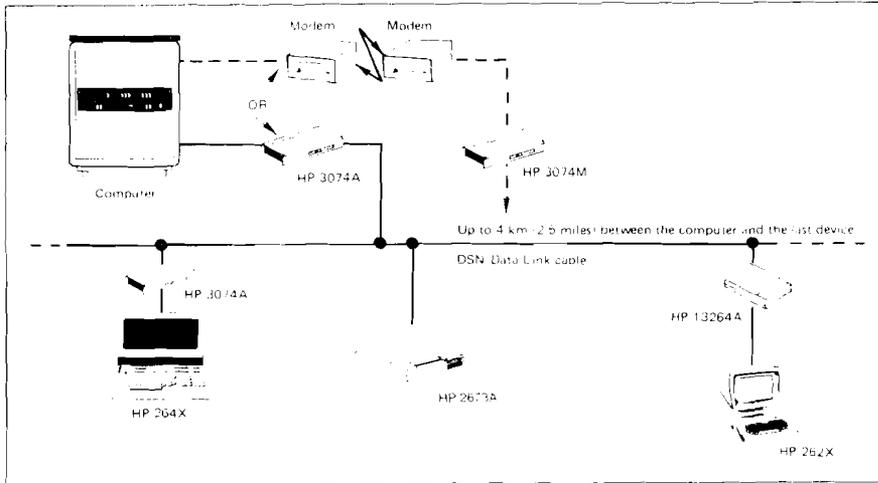
- Four print modes
- Selectable margins
- Tabs
- Page format
- Character sets.

These features can be selected through the interactive control panel. Once chosen, they are stored in the 2673A's non-volatile memory, and retained even after the power is turned off.

Quiet thermal printing makes the 2673A suitable for any working environment, from the factory floor to an R&D development area.

Since this is the first printer offered for DSN/Data Link configurations, an Application Note is available explaining how to install the printer on a data link. See the 2670 Series Data Sheet (P/N 5953-6260(54)F) for more specific product information.

Computer Peripherals



Tell your 1000 Models 45 and 65 customers about this exciting new addition to the peripherals available for DSN/Data Link systems. They will appreciate the convenience and the capability of the 2673A Intelligent Graphics Printer.

Ordering Information

2673A Intelligent Graphics Printer \$2195
 -039 DSN/Data Link Interface Option +250.

These new printers enhance the versatility of HP handheld and portable computers. When used in an HP-IL loop with a controlling device such as an HP-85 or HP-41C/CV, the printers are automatically configured into the loop. They are then available to print high quality text or graphics (2671G) generated from any device in the loop.

With HP-IL, the 2671A or 2671G become appropriate printing devices in a workbench area with other HP-IL instrumentation such as the HP 3468A Digital Multimeter from Loveland. Quiet thermal printing makes these printers suitable for laboratory and other technical applications.

Basic features of both printers include:

- Bi-directional 120 characters per second printing
- High quality alphanumeric characters
- Two print pitches
- Flat fanfold paper.

In addition, the 2671G features high quality raster graphics with 90 dots per inch resolution. See the 2670 Series Data Sheet (P/N 5953-6260(54)F) for more specific product information.

If your customer is interested in HP-IL, the 2671A and 2671G are excellent printing solutions.

Ordering Information

Item	Description	Price
2671A	Alphanumeric Printer	\$1195
-048	HP-IL Interface Option	N.C.
2671G	Graphics Printer	1495
-048	HP-IL Interface Option	N.C.



Two New HP-IL Printers

Web Augustine/VCD



The HP offering of Hewlett-Packard Interface Loop (HP-IL) peripherals has been increased by two with the introduction of HP-IL interfaces for the HP 2671A Alphanumeric Printer and the HP 2671G Graphics Printer.

These are the first 80-column thermal printers available for HP-IL systems. They complement the HP 82905B HP-IL Printer recently introduced by the Personal Computer Division.

Domino's Pizza — A Win Over IBM with GA/3000

Martha Linenburger/FSO

SR Mike Crochet, New Orleans Sales Office, has successfully converted an IBM System 34 customer to HP with the help of General Accounting/3000.

With an expected 35 retail outlets in the Mississippi-Louisiana area by the end of 1982, and sales at \$12M, Domino's Pizza had outgrown the IBM-based accounting services provided by its parent company. The "easy choice" for Domino's was to purchase another 34.

Mike's Problem: How to win against IBM.

Buying Factors

Mike identified the company controller as the decision maker. From their discussions, he determined that Domino's needed the flexibility of the HP 3000 and GA/3000. Since hardware price was a major consideration, he proposed a refurbished Series 33.

Features which contributed to Mike's win against IBM include:

- Data base management flexibility
- On-line interactive capabilities
- HP support
- Excellent GA/3000 documentation.

Single Vendor Solution

Significant to Domino's decision to choose HP was our ability to provide both hardware and financial software. Domino's Controller finds it desirable to be able to "call only one person if there's a problem." Pleased with their existing equipment and HP support, Domino's is now considering other HP hardware and software purchases.

Productivity Gains

Domino's estimates that clerical productivity has more than doubled with the installation of GA/3000. For example, Domino's can now consolidate vendor payments, reducing monthly checks for four vendors alone from 304 to 16. Management information and control also have improved significantly due to HP data base management flexibility and on-line interactive features.

Successful Conversion

Domino's conversion was completed within six weeks. Smooth conversion was aided by Domino's accounting staff attending HP GA/3000 training classes.

Selling a Solution

Mike provided Domino's staff with a General Accounting/3000 General Information Manual (GIM) for review. He also invited Domino's team to the local Productivity '82 show, where they received a demonstration of GA/3000.

Mike feels that his limited accounting background was not a handicap in selling GA/3000. Instead, his sale demonstrates his belief that "It's the SR's job to sell solutions and HP as a company, while the GIM and SE Financial Specialist handle the detailed financial questions."

Potential HP 3000 customers are often interested in financial software. GA/3000 can help you successfully attract these new customers to HP.

German Optical Company Selects HP Products

Angela Ramsay/BGD

A leading German optical company has decided that HP is the best company to solve their DP problems. Ten companies were in the running for this major deal, but in the end the customer found that our products offered them the best results right across the board. Delighted to find a single vendor solution, the company has now signed a contract for 90 HP 125s, 12 HP 3000s and a whole host of peripherals, all to be delivered within the next nine months!

The company in question has branches worldwide, including 12 distribution centers in Germany. Their requirements involved the collection of data both on-line and off-line and an efficient way of keeping track of inventory (there are over 40,000 different lens types alone). However, perhaps an even more important requirement was for a comprehensive networking system to keep the head office in Munich in touch with the branch offices and enable remote stock control from location to location.

Using the HP 125 as an intelligent terminal in conjunction with the HP 3000 means that data can be collected on-line and off-line and the company gets a very fast response time. In addition, the use of our DSN products to link the 12 distribution centers not only gives the company the required remote inventory control capabilities, it also enables the company to run system back-ups on the HP 3000s in the branch offices from the Munich headquarters.

As well as being able to fulfill all special requirements, the company was also impressed by the features which have come to be part and

parcel with the HP name — ease-of-use and reliability. They were also attracted by the good ergonomic design and the graphics tablet we supplied.

Congratulations go to all in the Munich office who helped build the foundations for this longterm partnership. Yet another example of HP contributing to the success of a European company!

Finnish Company Increases DP Capabilities with HP

Angela Ramsay/BGD

The northern outposts of Hewlett-Packard in Europe have produced a success story that can teach us all a lesson. Timo Ratilainen, a Finnish commercial SR, has succeeded in winning a new customer away from IBM in a big way — to date orders have been placed for three HP 3000/64s, one HP 3000/44 and nearly 200 terminals! The company also plans to buy five more systems in the future.

The customer in question is a Finnish chemical company with headquarters in Helsinki and nine factories scattered over the country. Until recently, a few IBM 370s and a Data General Eclipse running batch orientated applications satisfied their DP needs. When they decided to increase their DP capabilities, the company looked first to IBM, with HP being one of several "others". However, the proposal we came up with sufficiently convinced them of our ability to solve their problems that we were placed on a shortlist, along with Honeywell and IBM, and were eventually chosen as their DP partner for the future.

In order to convince the prospect that we could give them a system tailored to their needs, Timo put together an offer based on the 3000 family and application packages from five Finnish software houses. He then approached the decision makers in the company, in particular the Financial Director. The selling points he emphasized were the ability to solve specific problems using the software packages, the DSN philosophy and the growth path offered by the 3000 family. Demos were run using data from the chemical company and the software packages at the HP Finland demo center. The company was impressed by the system's ease-of-use (particularly over the IBM 4300). However, the management only really wanted to know one thing: "Can it do the job efficiently?" It could, and the company is now a committed HP 3000 user.

With this one deal, Timo has formed the basis for a longterm working relationship between HP and the new customer. He has also secured his own quota for the next two years — nice work Timo!

HP 3000 Behind Dutch Company's Success

Angela Ramsay/BGD

A leading Dutch company reports that the HP 3000 saves them a million Dutch Guilders each year (about \$380,000). The company is a chain of 41 cash and carry wholesale stores with branches in The Netherlands, Belgium, The UK, Spain, South Africa, Brazil and the US. At almost all of these high-volume, self-service wholesale outlets, two HP 3000 systems control day-to-day operations.

HP data capture terminals at each check-out point mean that data on all articles sold can be immediately accessed. This in turn leads to excellent inventory control and means that the company can make informed buying decisions.

The company was delighted to report impressive cost savings from the moment the systems were operational.

The main reason the company chose HP was our service and product reliability. When you have queues of customers waiting at a check-out point, you just cannot afford downtime!



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