Computer systems newsletter

For HP Field Sales Personnel

Vol. 3 No. 3
Dec. 15, 1975

DIVISION NEWS

NEOPHYTE TRAINING

by Hugh Amick – DSD

While the dust from the Senior Sales Seminar was still settling, we were off and running again with neophyte training. The training was split into two periods of 2 weeks each, November 30 thru December 12 and January 11 thru the 23rd. For the first period, seminar, workshop and lab work involved minicomputers, real-time operating systems, data acquisition, microprogramming, AMD products,2000/ ACCESS and Data Terminals.

The fifteen attending neophytes apparently have succeeded in making it through the first training period with their livers and sanity intact despite cocktails, breakfasts, rigorous testing, more cocktails and even an occasional learning experience.

Hopefully we haven't scared anyone off and all neophytes will return for the 2nd half action of January 11 when they will tackle contract selling, the HP 3000 and more data terminals.

Attendees:

ESR

Steve Harksen	Rockville
John Harris	Rockville
Blair Metz	Rockville
Harvey Flatt	Rockville
Ray Innella	King of Prussia
Sandy Elfron	Paramus
Dominick Abbondanza	Rochester
Ken Blake	Rochester

MSR

Dave Polley	St Paul
Mike Merrill	St Paul

NSR

Hunter Wylie	Santa Clara
Wayne Domke	North Hollywood
Dick Russell	Santa Clara

HPIC

Lee Chin Hong	Singapore

DSD

Carlos Avila	Cupertino

Dave Bunch (DSD-Sales Dev.) explains the finer points of oven testing to Wayne Domke (NSR), Dominick Abbondanza (ESR), Ray Innella (ESR) and Dave Polley(MSR).

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In This Issue . . .

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

Neophyte Training (cont.)

Steve Harksen (ESR), Mike Merrill (ESR) and Ken Blake (ESR) at work during lab session.

HEWLETT hp PACKARD

JOIN THE 9600 SWEEPSTAKES! FIRST WINNERS ANNOUNCED!

by Pete Palm – DSD

Thanks to those at the recent Senior Sales Seminar, over 60 reference account information sheets have been collected for 9600 based systems. Forty are measurement oriented. Twenty are non-measurement oriented. They include applications in all areas and from all parts of the world. Ask your Sales Development contact for details. We will publish a complete list soon.

9600 Sweepstakes participants filled out forms like the one on the last page of this Newsletter. First round winners include *John Malone* (Skokie, Illinois), *Doug McArthur* (Highpoint, North Carolina), *Pitt Schulthoff* (Hamburg, Germany), and *Marya Daniels* (Paramus, New Jersey).

Sweepstakes Round II begins Jan. 1, 1976. Tear off the last page of the Newsletter, fill it out and mail it in. The best application this month will receive a gift certificate --- ask *Marya Daniels*. She's still recovering from her Ali Baba's Massage Parlour trip.

Marya Daniels' Gift Certificate to Ali Baba's Massage Parlour

John Malone with his 9600 Nightcap!

HEWLETT hp PACKARD

SALES ENGINEERS' CORNER

TERMINAL TIGER OF THE MONTH

by Rich Ferguson – DTD

Congratulations to *Dick Olson* in our Neely, Santa Clara Sales Office. Because of *Dick's* superior salesmanship in selling a ton of terminals to Fairchild Microsystems, he is our super salesman of the month.

Fairchild has just signed an OEM agreement for 250 terminals for use in their micro-processor program development system. Last input was that it even looks like they will exceed their 250 quantity commitment by quite a margin. The bulk of these will be 2644's.

The heart of this program development system is an F-8 formulator made by Fairchild Semiconductor. The 2644 will be used as the console for the system.

Congratulations, again, to *Dick* for a job well done!

Thanks for selling terminals.

HEWLETT hp PACKARD

.....and a Happy New Year! 1976

3000'S SELL LIKE HOT-CAKES IN TORONTO

by Larry Hartge – GSD

Hot-cakes have become the fastest selling standard in the baking industry and the Sales Team in Toronto is trying to make the 3000 the fastest selling standard in the computer industry via a superb sales effort. This group of Canadians is selling the big ticket 3000 as if it were an inexpensive/hot-cake — as witnessed by the following closes:

3000CX "Upgrades" a System 3 with a Cost Savings

The International Nickel Company (INCO) of Canada has just placed an order for a Hewlett-Packard 3000CX Model 300 Mini-computer system and is expecting delivery soon. The system will provide Remote Job Entry to an Ottawa-based service bureau and the INCO New York office as well as providing Scientific time-sharing and local batch processing. The 3000's capability of providing Multi-terminal access to a Data Base using COBOL, RPGII, FORTRAN, and/or BASIC while simultaneously supporting RJE makes it possible for INCO to replace an existing IBM System 3 HASP Work Station with the HP 3000 and achieve significant cost savings. The initial applications will consist of Process Modeling, Statistical Analysis, Instrument Data Reduction, and Corporate Modeling. *Mr. J. Smith,* INCO's Data Processing Manager, states that he plans to make extensive use of IMAGE, the 3000's Data Base Management System.

The HP sales team included *Andre Wolder,* the F.E., *Paul Balnys,* the S.E., and *Pauline Allen,* the secretary that assured a uniform HP sales effort. Through their diligent efforts, INCO was convinced that Hewlett-Packard and the 3000CX could do the job.

Lf to Rt – Paul Balnys, Pauline Allen, and Andre Wolder

Bruce Haskett Sells His First 3000!

Conestoga College, a junior college in Kitchener, Ontario, went to tender to replace an aging batch oriented Honeywell/115 system. The college decided that they needed a batch/timesharing system to fill both the Administrative and Educational needs of the college.

Thirteen suppliers, including the usual competition were invited to bid. By benchmarking and using reference accounts, most of the competition were eliminated, although Honeywell fought to the bitter end to keep the account.

Hats off to *Bruce Haskett,* F.E., (a former staff engineer), *Paul Balnys,* S.E., and *Pauline Allen,* Secretary; the team that made it happen!

Lf to Rt – Paul Balnys, Pauline Allen, and Bruce Haskett.

Andre Wolder Scores ANOTHER 3000!

"The Ontario District Sales Team does it again to Competition! Led by *Andre Wolder,* F.E. in Toronto, *Paul Balnys,* S.E., *Dave Walmsley,* S.E., and *Valerie Colosimo,* Secretary, landed an HP 3000 ($200K — U.S.) at The Hospital for Sick Children in Toronto in record time — four (4) months from first contact to booking the firm order in November.

The 3000 will initially be used to implement an on-line patient admitting system. Patient Information will be maintained in a data base. As various tests are performed on the patients, the data base will be updated with the laboratory results. Terminals for enquiry and updating will be located throughout the hospital in the appropriate departments."

Competition was Data General, D.E.C., IBM, and Honeywell. With the HP 3000 multiprogramming, multi-lingual, batch/terminal, Cobol, Image/Query combination, backed by super S.E. and secretarial support, the competition had lost even before the race began.

Lf to Rt – Paul Balnys, Dave Walmsley, Valerie Colosimo, and Andre Wolder

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PRODUCT NEWS

KODAK MTRS HAPPENINGS

by Frank Jackson – DSD

To clarify any misunderstandings about Kodak Mag Tape reformatting systems, the following marketing guidelines still apply:

1. Kodak sales personnel have marketing & sales responsibility in the U.S. Domestic orders for Kodak MTRS systems will be handled completely by Kodak.

2. International Kodak organizations will ask their local HP offices to order MTRS systems for their customers by one of the current hardware configurations.

HARDWARE

Kodak has changed the configurations as follows:

2108A	CPU
2102A	Controller
3 ea 2102A-008	24K memory
12897A	DCPC
12903B	Rack slides
12973A	Multi-format mag tape
2860B	Single bay cabinet
2860B-001	60 Hz power controller
13185A	KOM interface
12531D-004	Console interface
2644A	Mini Data Station
13231A	Display enhancements
13231A-202	Line drawing set

ORDERING INFORMATION

Product #93727A includes above hardware and mag tape ROM, diagnostic mag tape and system integration.

93727A Option H01 2nd mag tape (12973A-010) and 2860D 2-bay cabinet:

Prices F.O.B. Cupertino, California:

93727A	$35,025
93727A OPT H01	+10,135

MTRS SYSTEM SOFTWARE

Kodak has complete responsibility for the Kodak MTRS software and is the only supplier of the current revision.

NOTE

HP 2022B MTRS has now become obsolete and will be removed from the HP Corporate Price List.

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QUESTIONS AND ANSWERS ON RTE-III MARKETING

by Van Diehl – DSD

1. Does RTE-III obsolete RTE-II?
   Definitely not. RTE-II is our super "compact" system, for applications requiring 16K to 32K words of memory. More than 1000 installations of RTE and RTE-II are living testimonials of customer acceptance of the RTE-II architecture.

   RTE-III is offered for the application requiring 32K to 256K words of memory.

2. Is RTE-II upward compatible to RTE-III?

   Certainly. All user application programs will operate in RTE-III, except for privileged interrupt drivers. The only difference between RTE-III in relation to RTE-II is memory management. RTE-II will support two partitions for disc resident programs (typically of 6 to 10K size) and RTE-III will support up to 64 partitions that can be up to 16 to 19K in size.

3. Can programs that are larger than 16 to 19K be executed by RTE-III?
   Only if they are segmented.

4. What is *great* about RTE-III?
   a. Support of up to 512K bytes*
   b. Large number of partitions
   c. Member of upward compatible family of real time operating system that have more than 1000 known installations — RTE-C, RTE-II and RTE-III.
   d. Multi-terminal monitor
   e. FORTRAN, ALGOL and Multi-User Real Time BASIC
   f. Multi-Stream batch program development
   g. Input/Output Spooling
   h. Support of lab and industrial subsystems
   i. Distributed System Support

5. Can we mix 7900 and 7905 in the same system?
   Yes. Note that each require separate controllers. The combined bandwidth of 7900 and 7905 is about 101% of the CPU bandwidth. Therefore the driver will automatically retry the transfers that were unable to be completed.

6. Is RTE-III upgradeable from RTE-II?
   Yes. It will cost $1500 for RTE-II owners (92060-001) and $1000 for RTE-II/BSM owners (92060-002).

7. Can RTE-III be copied?
   No. RTE-III is copyrighted. (OEM's will be able to copy for every CPU purchased from HP.)

8. Are listings and sources delivered with the package?
   No. Separate accessory numbers exist for listings and sources. 92821 for RTE-III listings and 92822 for RTE-III sources. There is no price yet for these packages. They will be released in January.

* Requires memory extender and 16K memory modules.

(Continued on page 5)

Q. & A. on RTE-III (cont.)

9. What is the major factor that will influence the purchase of a real time operating system?
   Vendor experience. HP has more experience with real time software than any other mini computer manufacturer. RTE was invented in 1968. DEC RSX-11D was invented in 1973.

10. Is RTE only good for lab and industrial measurement and control?
    Certainly not. RTE multi-programming, multi-lingual, multi-terminal, batch and data management capabilities makes it the ideal system for scientific computation and for transaction processing application.

11. Did we improve the user documentation of RTE-III from RTE-II?
    Yes. Refer to RTE-III documentation map in this Newsletter.

12. How do customers get the 7905 driver and generator?
    Both 7900 and 7905 generator and driver are included in the RTE-III package. Existing users can order them by the following kit numbers: 92001-14008 (RTE-II kit) or 92060-14003 (RTE-III kit). Each kit contains 7905 driver, appropriate generator, and manual.

13. How much memory will the 9600 systems support?

with the 2108	192K	16K modules
with the 2112	128K	16K modules

HEWLETT PACKARD

STATUS OF 2000 TIME — SHARE BASIC CONTRIBUTED LIBRARY

by Brenda Mapp – GSD

This article answers questions regarding the 2000 TSB Contributed Library.

1) Will the current TSB Contributed Library program documentation and Mag. Tapes be shipped with each 2000/Access?

   No, the TSB Contributed Library is not included on the Software Material List of the ACCESS System.

2) How can my customers get the TSB Contributed Library?

   Programs written in BASIC for use on 2000 E/C/F Systems are documented in 5 regular volumes and an addendum, plus additional user manuals for certain major, individual programs. The volumes are organized by subject classification; each volume has a corresponding Mag. Tape which contains the software.

   The volumes of the Library and each matching Mag. Tape of software are separately purchasable. Your customer may place his order through your sales office or by using the Direct Mail Order Procedure (Corporate Parts Center - Mountain View, Calif.).

The following list identifies the separate components of the TSB Contributed Library and their prices.

Volume I (100) Data Handling
(200) Testing, Debugging and Programming Aids.

Order Numbers:

Volume I (documentation) - 36000-91001, $10
(Mag Tape)* - 36000-10001, $25

Volume II (300) Math and Numerical Analyses
(400) Probability and Statistics
(500) Scientific and Engineering Applications

Order Numbers:

Volume II (documentation) - 36000-91002, $10
(Mag Tape)* - 36000-10002, $25

Volume III (600) Management Sciences and Operations Research
(700) Business and Manufacturing Applications

Order Numbers:

Volume III (documentation) - 36000-91003, $10
(Mag Tape)* - 36000-10003, $50

Volume IV (800) Education

Order Numbers:

Volume IV (documentation), 36000-91004, $15
(Mag tape),* 36000-10004, $50

Volume V (900) Games

Order Numbers:

"What to do After You Hit Return", 36000-91005, $6.95
(Mag Tape)* 36000-10005, $25

Addendum to Volumes I-IV

Order Numbers:

Addendum (documentation), 36000-92001, $15
(Mag Tape),* 36000-10006, $50

3) Will there be a 2000/ACCESS Contributed Library?

   Yes, a project is currently underway to organize an ACCESS Library within the Contributed Software Center. It is our goal to have that portion of the current TSB contributed software which will run on the ACCESS system without reprogramming, available May 1st as a separate Contributed Library. It is planned that the ACCESS Library will *not* be shipped as part of the system, but will be purchasable as separate documentation and Mag Tapes.

HEWLETT PACKARD

THE HP 3000 CONTRIBUTED LIBRARY

by Brenda Mapp - GSD

The following lists available part numbers and prices for the HP 3000 Contributed Library.*

1.	HP 3000 Contributed Library A Guide for Contributor	5952-5564(22)	N/C
2.	HP 3000 Contributed Software Index and Catalog, Vol. 1	36995-90001	$ 7.50
3.	HP 3000 Contributed Library Magnetic Tape, Vol. 1	36995-10001 (800 BPI)	$50.00
		36995-11001 (1600 BPI)	$50.00

*Additional options listed in Volume 1, Index and Catalog; will be available pending permission to reprint extended documentation.

2640A FIRMWARE UPGRADE KIT BRINGS SERIAL PRINTER CAPABILITY TO 2640A TERMINALS

by Jim Elliott - DTD

Now your 2640A customers can upgrade their 2640A terminals to accommodate the serial printers that have RS232C interfaces. Once the kit has been installed, the user need only purchase the 13250A interface plus cable and the terminal is ready to go. Field installation can be performed by the knowledgeable customer or by qualified HP field personnel.

All 2640A terminals having option-015 with serial prefix number less than 1551A and all standard 2640A terminals with serial prefix number less than 1610A will require this kit (part no. 02640-60117) in order to use the 13250A as a serial printer interface. And with over 3000 — 2640A's out there, that's a lot of add-on/upgrade sales potential. It's also priced right — only $150.00.

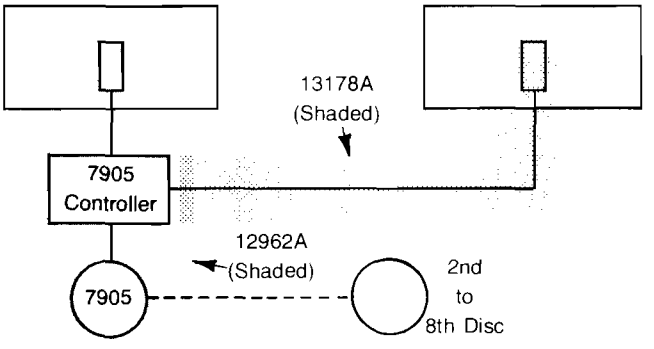
MULTI-CPU KIT FOR 7905A RELEASED

by Vijay Kapoor - DSD

13178A, the multi-CPU (for the time being, dual-CPU) 7905A kit is now released and shipping. The kit consists of an interface card and associated cable to connect the 7905 controller to a second 2100/21MX. This allows both processors to share a bank of up to eight 7905's.

We have in excess of 25 orders for 13178's already. There appears to be interest in the kit both from the standpoint of data base sharing as well as redundancy. As I communicated to you recently, a task force is currently consolidating and evaluating our product offerings in the above application areas. We will detail our product potential in due course. In the meantime, let me summarize the RTE software support for the multi-CPU kit.

7905 Drivers under RTE-II and RTE-III are currently configured for multiple CPU's. The configuration shown will operate under RTE, *provided* the two CPU's do not share files on the 7905. Space on the disc(s) can be partitioned such that some subchannels are dedicated to one CPU and the remaining to the other CPU.



What is the value of such a configuration? If the two processors together do not need more than 15M Bytes, then it saves your customer $13,500 ($15,000 for subsystem less $1,500 for 13178A). For instance, a customer currently having a non-disc based RTE may want to buy an additional disc based system. If so, he gets to convert his older system to a disc-based system for $1,500 extra.

Shared discs are much more useful, of course, if common file areas on the disc are accessible to both CPU's — for true data base sharing. That will be the subject of an article in the next newsletter. Good selling!

FOREIGN POWER CORDS

by Bill Senske - DSD

Have you been having trouble getting the right power cord delivered with your computer?

The appropriate power cord will be shipped from Cupertino for the "Delivered to country". In the case where your computer should be trans-shipped to some other country, you must specify the final destination country in the comments area of the heart order or order one of the standard Corporate "900" options.

NEW 13250A ASYNCHRONOUS DATA COMMUNICATION/SERIAL PRINTER INTERFACE NOW AVAILABLE FOR 2640 SERIES TERMINALS

by Jim Elliott – DTD

The 13250A interface expands the capability of the 2640 series terminals by offering two uniquely new capabilities.

First, use it as a communications interface. The features you get are:

- Standard baud rates between 110 - 2400
- Custom baud rates between 37.5 - 2400 within a 1% tolerance
- 20Ma DC current loop communications capability
- RS232C communications capability
- Switch-selectable parity
- Transmit/receive handshake capability
- Split speed transmit-receive capability

It can be ordered with the terminal as a 2640/44 option 020 at the price of $100. Ordered this way it will delete the standard interface in the terminal.

Second, use the 13250A as a Serial Printer Interface. Now all those low-cost serial printers out there with an RS232C interface can listen to the good stuff 2640 series terminals are saying. The features you get are:

- Switch-selectable speeds from 10-240 cps.
- Uses standard RS232C Interface (male or female connection)
- Operates with printers requiring handshake or fill character protocol
- Switch-selectable number of stop bits.

All 2640A terminals having option-015 with serial prefix number less than 1551A and all standard 2640A terminals with serial prefix number less than 1610A will require the 2640A Firmware Upgrade Kit (Part #02640-60117, price $150.00) in order to use the 13250A as a serial printer interface.

The 13250A is now available for consignment purchase. Standard product availability is eight weeks ARO. Price is $200.50 vs. FOB Cupertino.

HEWLETT PACKARD

CUSTOMER TRAINING — GSD

by John Price – GSD

1. **SEAT AVAILABILITY:** The number of seats remaining in each of the next two open classes for all GSD courses, now regularly appears in the weekly AVAILABILITY SCHEDULE published every Friday. The count of available seats is made every Tuesday morning for the training program at both the Eastern Training Center (Rockville) and the GSD Training Center; the information is to be found in the General Systems Notes section of the Availability Schedule. Training Registration Coordinators in each Sales Office should use the AVAILABILITY SCHEDULE, a guide to upcoming course availability, before placing customer enrollments with the Training Center Registrars.

2. **COURSE PRICES:** Effective Jan. 1, 1976 all GSD Customer Training courses are priced at the rate of $100/day. When quoting a program of customer training use the table of course prices listed below. Note that GSD course prices appear on the new Computer Systems Group Course Schedule now in your hands.

Course Number	Course Description	Price	Length (Days)
22962A	3000 Commercial/ Business User	$500	(5)
22963A	3000 Scientific/ Engineering User	500	(5)
22964A	3000 System Management	300	(3)
22956A	3000 Image	500	(5)
22973A	2000/Access Data Entry, FM & RJE	500	(5)
SEMINARS			
22974A	Minicomputers in Manufacturing	200	(2)
22975A	System 3 Conversion	200	(2)

3. **CUSTOMER TRAINING SCHEDULES:** The November 1975 - April 1976 offering of classes for the four divisions - AMD, BOISE, DSD, and GSD - is now published in a colorful informational and promotional document called "COMPUTER SYSTEMS GROUP COURSE SCHEDULES". A personally addressed copy was sent to all field sales and service engineers from Cupertino the week of November 17th. Bulk shipments for Literature shelves were also sent to all domestic and ICON sales offices. Each of the five Training Centers has extra copies if you need them.

4. **ON-SITE COURSES:** GSD and the Eastern Training Center are prepared to conduct a very limited number of on-site customer courses during FY '76. However, we are intentionally not promoting that capability to customers.

   On-site courses for the HP 3000 and 2000/Access are scheduled at the descretion of the GSD Product Support Dept. or the Eastern Training Center. They are available only by special quotation. Courses are normally scheduled 90 days in advance; the typical quotation is $3750/week.

   GSD courses that can be taught at customer sites are those that are regularly scheduled at the Training Centers. Special courses covering programming languages, the internals of the operating system, etc., are not available.

   Quotation of on-site courses for GSD products are made by the following people:

Eastern Training Center - Rockville
Ms. Jean Mitchell
(301) 948-6370

GSD Training Center
Mr. Dick Sleght
(408) 257-7000
(408) 249-7020 (Beginning 1/5/76)

HEWLETT PACKARD

SALES AIDS

2644A COLOR VIDEOTAPE MAY BE JUST WHAT YOU NEED

by Jim Elliott – DTD

Ever get that appointment with top management only to find that you have just 15 minutes to introduce yourself, present your product, and make your exit?

Or have you ever been requested to demonstrate the stand-alone features of the 2644A to an audience of, say, 15 people, in 15 minutes or less?

Or have you ever had the opportunity to tell the buyer's service people how well the 2644A is put together and tested at the factory, in 10 minutes or less? Any of the above requests would be tough to perform, but with the right tools none would be impossible.

(Continued on page 8)

The new 2644A full-color videotape comes in three parts and is tailored to help with the above types of requests. The first part is an 8-minute dramatization that can inform top management how the 2644A can save the company money and improve production. It is application-oriented and is designed to stimulate ideas and prompt additional questions. The second part of the videotape presents the *features, advantages,* and *benefits* of the stand-alone capabilities of the product. Even though it's a short 15 minutes in length, the action comes at a pace that doesn't overwhelm the customer — yet it isn't so slow and repetitious that it gets boring to watch. The third segment is about how the 2644A is constructed. Many of the scenes are shot right on the factory floor, which lends a great deal of credibility to the tape.

So . . . if you find yourself in one of the above selling situations, reach for the 2644A color videotape; it may be just what you need to help you close that big 2644 deal.

HEWLETT PACKARD

SELLING TO CATERPILLAR TRACTOR

by Joe Schoendorf – DSD

We currently have a contract with Caterpillar Tractor Company in Peoria, Illinois who has several HP computer systems working in their diesel production area testing the diesel engines.

Last week we met with *Dick Adamson*, Supervisor of Contracts, Purchasing and Materials Management at the main plant in Peoria. We asked him how to best increase our sales to Caterpillar on a worldwide basis. He responded in a letter: "Each user, at present, pretty well decides on his own what equipment will be purchased for his area." He continued: "Enclosed are the lists of facilities which I promised you. I will send a memo to each facilities' Purchasing Agent to make him aware of the available discounts and suggest he route a copy through the Data Processing section." (See lists below.)

Caterpillar, as a manufacturer of construction equipment used in road building, farming, and mining, is a booming organization whose profits have been up substantially even during the recession. I strongly believe this company to be good prospect material.

DOMESTIC LOCATIONS OF CATERPILLAR TRACTOR CO. AND ITS SUBSIDIARIES

CATERPILLAR TRACTOR CO.

P. O. Box 348
Aurora, IL 60507

Basic Engine Division
Peoria, IL 61602

P.O. Box 3190
Davenport, IA 52808

27th Street & Pershing Road
Decatur, IL 62525

P. O. Box 16023
Stockyards Station
Denver, CO 80216 (Parts Dept.)

600 West Washington Street
East Peoria, IL 61611

Industrial Division
Peoria, IL 61602

P. O. Box 504
Joliet, IL 60434

Mapleton, IL 61547

P. O. Box 18610
Memphis, TN 38118 (Parts Dept.)

P. O. Box 728
Milwaukee, WI 53201

P. O. Box 339
Morton, IL 61550 (Parts Dept.)

800 Davis Street
San Leandro, CA 94577

P. O. Box 787
York, PA 17405

Technical Center
Peoria, IL 61629

Project 400
Peoria, IL 61629

Defense Products
Peoria, IL 61629

TOWMOTOR CORPORATION

P. O. Box 198
Dallas, OR 97338

7111 Tyler Blvd.
Mentor, OH 44060

WORLDWIDE LOCATIONS OF CATERPILLAR TRACTOR CO.

FAPS
P. B. 130
112 Ave de Rouen
27200 Vernon, France
(Robert Jacques)

Caterpillar Tractor Co. Ltd. (J. S. Fergusson)
Glasgow, Scotland
G2 1JP

Caterpillar France S. A. (R. D. Petri)
BP 55 Centre De Tri
38041 Grenoble Cedex
France

Caterpillar Overseas S. A. (H. Banister)
P. O. Box 1
B-1850 Grimbergen
Belgium

Caterpillar Belgium S. A. (R. C. Carver)
Boite Postale 1
B-6200 Gosselies (Belgique)

Caterpillar Brasil S. A.
Caixa Postal 137-ZC-00
Rio de Janeiro, GB
Brazil

Caterpillar Brasil S. A. (M. J. Bonduki)
Caixa Postal 8239
Sao Paulo, Brazil

Caterpillar of Canada Ltd. (R. W. Sionneger)
1550 Caterpillar Road
Mississauga, Ontario, Canada
L4X 1E7

Caterpillar Tractor Co. Ltd. (R. Humble)
Birtley
Co. Durham DH3 2QU
England

Caterpillar Tractor Co. Ltd.
55 St. James's Street
London, SW1A 1LA
England

Caterpillar Tractor Co. Ltd. (R. H. Richardson)
Desford, Leicester, LE9 9JT
England

Caterpillar Far East Ltd.
G. P. O. Box 13069
Hong Kong
B.C.C.

Caterpillar Mexicana, S. A. de C. V. (E. Reyes)
P. O. Box 2781
Monterrey, N. L., Mexico

Caterpillar Far East Ltd.
Singapore Parts Dept.
P. O. Box 105
Jurong Town Post Office
Singapore 22
Republic of Singapore

Caterpillar (Africa) (Pty) Ltd. (S. J. Hockley)
P. O. Box 11481
Johannesburg
Republic of South Africa

Caterpillar Overseas S. A.
P. O. Box 408
1211 Geneva 3
Switzerland

Caterpillar Mitsubishi Ltd.
Tokyo Office
Aoyama Building
2-3 Kitaaoyama 1 - chome,
Minato-ku, Tokyo 107
Japan

Caterpillar Mitsubishi Ltd. (R. W. Bedwell)
3700, Tana, Sagamihara-shi, Kanagawa-ken 229
Japan

Caterpillar of Australia Ltd. (W. A. Eardley)
P. O. Box 35
Niddrie,
Victoria, Australia 3042

HEWLETT PACKARD

Computer Museum

We're #2

by LeRoy Nelson - DSD

You must be continuing to do a successful job for our customers. Here is a sample of what they say in a very recent Electronics News survey. The following data is a 21% response to a questionnaire mailed to a systematic sampling of their subscribers.

69.4% of Electronic News Subscribers are involved with *Computers*

*47.5% are involved with computers for their company's internal use

*52.5% are involved with computers as part of the products their companies sell

Which of the following minicomputer companies would you prefer to do business with?

	% Computer Users
Digital Equipment Corp.	47.4
Hewlett-Packard	**42.3**
IBM	32.0
Texas Instruments	21.6
Data General	19.6
Honeywell	17.5
Burroughs	15.5
Varian	11.3
General Automation	10.3
Interdata	10.3
NCR	10.3
Xerox	10.3
Control Data	9.3
Wang	9.3
Computer Automation	8.2

	% OEM Subscribers
Digital Equipment Corp.	45.1
Hewlett-Packard	**27.4**
Data General	15.0
IBM	13.3
Interdata	11.5
General Automation	10.6
Honeywell	10.6
Modular Computer Systems	9.7
Burroughs	8.8
Sperry Rand (Univac)	6.2
Xerox	6.2
NCR	5.3
Texas Instruments	5.3
Wang	5.3
Computer Automation	4.4

For scientific applications, which computer company would you prefer to do business with?

Hewlett-Packard	**34.5**
IBM	23.6
Control Data	21.8
Digital Equipment Corp.	18.2
Data General	10.9
Honeywell	10.9
Xerox	10.9
Digital Computer Control	7.3
Texas Instruments	7.3
Varian	7.3
Wang	5.3
Interdata	3.6
Modular Computer Systems	3.6
Burroughs	1.8
General Automation	1.8

Digital Equipment Corp.	25.3
Hewlett-Packard	**24.0**
IBM	21.3
Control Data	18.7
Sperry Rand (Univac)	13.3
Data General	9.3
Honeywell	6.7
Texas Instruments	6.7
Xerox	6.7
Electronic Associates, Inc.	5.3
Wang	5.3
Computer Automation	4.0
Digital Computer Control	4.0
Harris	4.0
Modular Computer Systems	4.0

(Continued on page 10)

For business applications, which computer company would you prefer to do business with?

	% Computer Users
IBM	54.3
Burroughs	28.6
Honeywell	21.4
Digital Equipment Corp.	11.4
Hewlett-Packard	**11.4**
Control Data	8.6
NCR	7.1
Xerox	5.7
Data General	4.3
Digital Computer Control	4.3
General Automation	4.3
Sperry Rand (Univac)	4.3
Computer Automation	2.9
Harris	2.9
Interdata	2.9

	% OEM Subscribers
IBM	55.7
Burroughs	25.3
Honeywell	17.7
NCR	15.2
Sperry Rand (Univac)	15.2
Digital Equipment Corp.	11.4
Control Data	10.1
Xerox	8.9
Hewlett-Packard	**5.1**
Data General	3.8
General Automation	2.5
Wang	2.5
Digital Computer Control	1.3
Harris	1.3
Modular Computer Systems	1.3

For control applications, which computer company would you prefer to do business with?

Honeywell	25.5
Digital Equipment Corp.	23.5
IBM	23.5
Hewlett-Packard	**17.6**
Data General	13.7
Texas Instruments	13.7
General Automation	11.8
Digital Computer Control	9.8
Varian	7.8
Interdata	5.9
Burroughs	3.9
Cincinnati-Milacron	3.9
Control Data	3.9
Electronic Associates, Inc.	3.9
Computer Automation	2.0

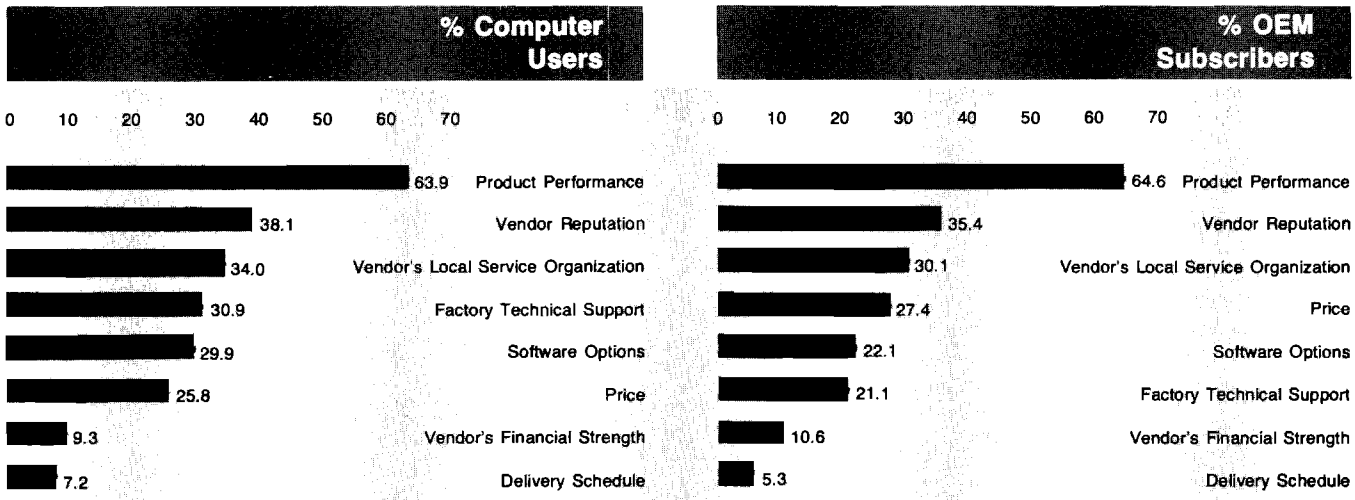
Digital Equipment Corp.	32.5
Hewlett-Packard	**17.5**
Honeywell	15.0
IBM	12.5
General Automation	10.0
Modular Computer Systems	8.8
Sperry Rand (Univac)	8.8
Data General	7.5
Control Data	6.3
Electronic Associates, Inc.	6.3
Interdata	6.3
Cincinnati-Milacron	5.0
Computer Automation	5.0
Lockheed	3.8
Texas Instruments	3.8

For communications applications, which computer company would you prefer to do business with?

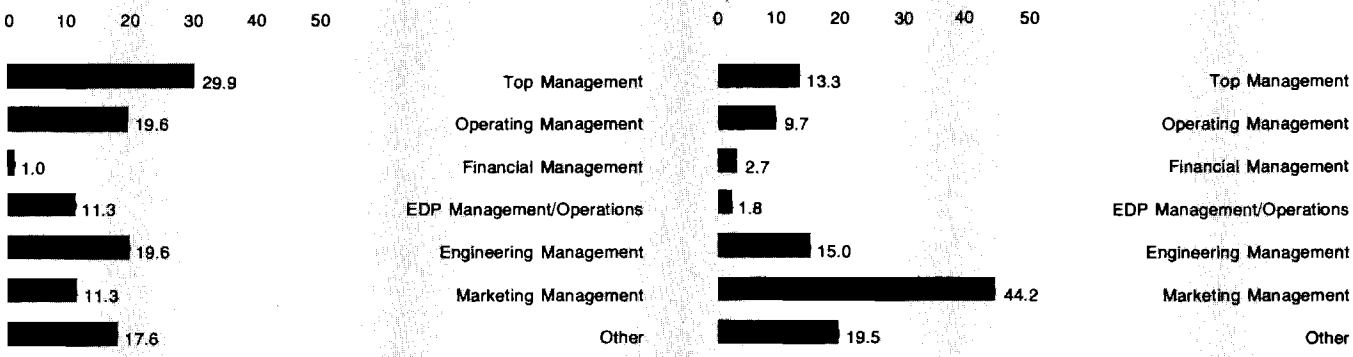
IBM	31.0
Digital Computer Control	14.3
Honeywell	14.3
Digital Equipment Corp.	11.9
Hewlett-Packard	**11.9**
Interdata	9.5
Control Data	7.1
Raytheon Data Systems	7.1
Burroughs	4.8
Cincinnati-Milacron	4.8
Data General	4.8
Harris	4.8
Varian	4.8
Xerox	4.8
Computer Automation	2.4

IBM	24.6
Digital Equipment Corp.	15.9
Interdata	14.5
Sperry Rand (Univac)	14.5
Data General	10.1
Modular Computer Systems	10.1
Control Data	7.2
Honeywell	7.2
Burroughs	4.3
Harris	4.3
Hewlett-Packard	**4.3**
Xerox	4.3
General Automation	2.9
Prime	2.9
Raytheon Data Systems	2.9

Which of the following factors do you consider *most important* when *selecting* a minicomputer vendor?



Which of the following best describes your responsibility?



Geographical Response

Area	Electronic News U.S. *Circulation*	Electronic News Survey *Response*
New England	11.74	11.19
Mid-Atlantic	25.35	23.60
East North Central	12.09	13.38
West North Central	3.94	4.62
South Atlantic	10.59	9.00
East South Central	1.08	2.19
West South Central	4.93	5.60
Mountain	4.16	4.62
Pacific	26.12	25.06

HEWLETT hp PACKARD

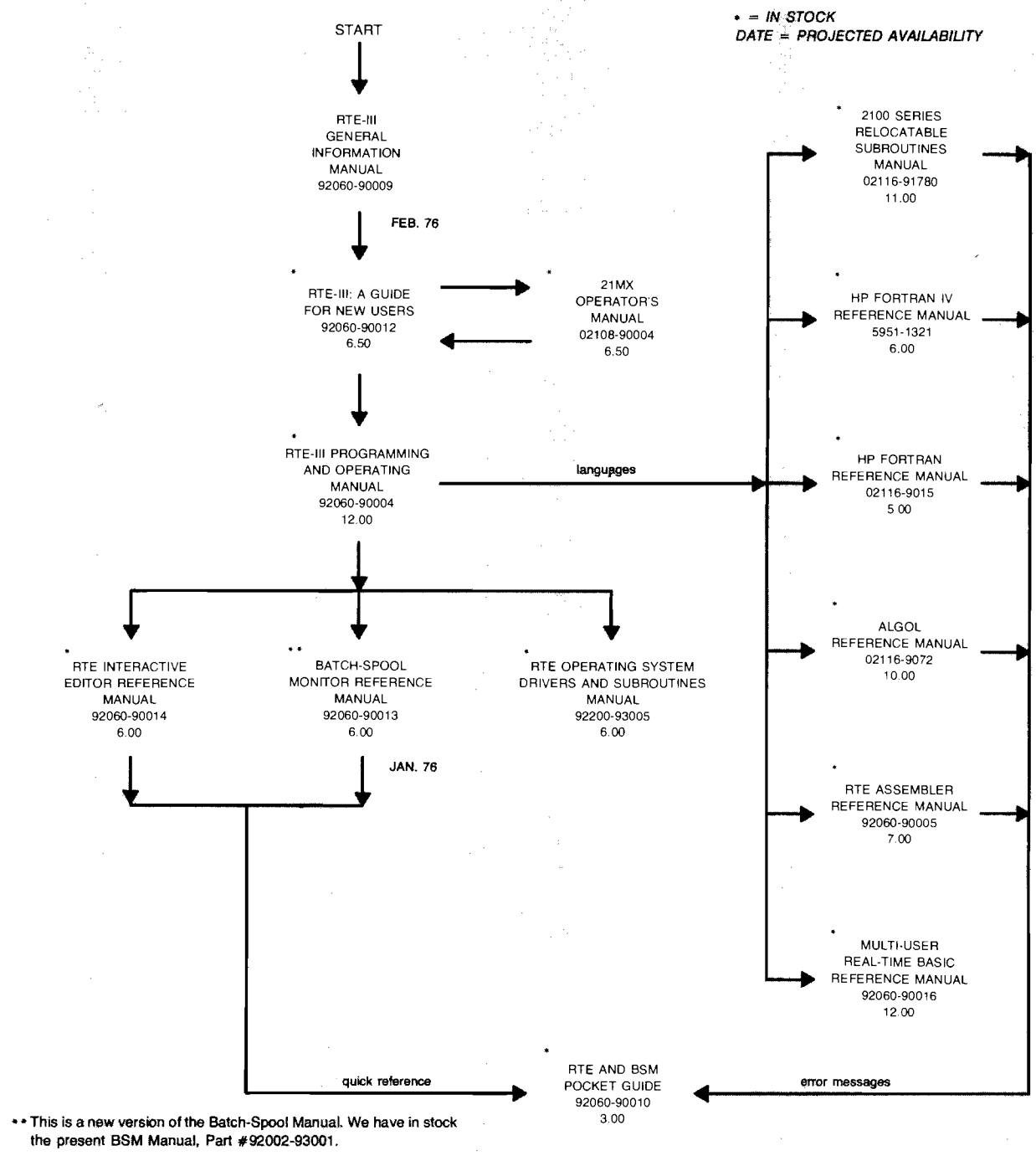
RTE-III DOCUMENTATION

by Van Diehl – DSD

Shown below is the documentation map for RTE-III, including part numbers and prices. The driver and subroutine manuals are a collection of small manuals - one for each peripheral. Unless otherwise indicated, the manuals are for use with RTE-II and RTE-III.

Van Diehl (LF) Bob Blake (RT)

RTE-III DOCUMENTATION MAP

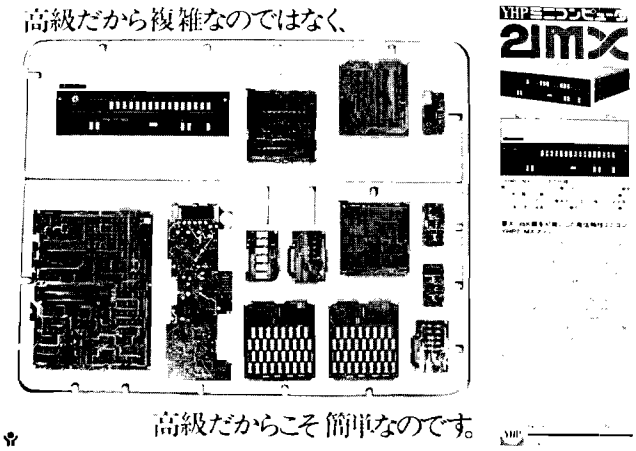


** This is a new version of the Batch-Spool Manual. We have in stock the present BSM Manual, Part #92002-93001.

21MX AD WON A PRIZE IN JAPAN

by Kai Wu – INTL

The color ad piece produced by *Hajime Imano* of YHP has been recognized as one of the best works in the magazine ads category in the recently held Industrial Advert sing Contest in Japan. The photo shows *Imano* with the citation and trophy (cash prize of 30,000 yen is not shown) and his work.



HEWLETT hp PACKARD

HP JOURNAL ARTICLES ON RTE

by Van Diehl – DSD

Don't miss two excellent articles on RTE-II and RTE-III in the December issue of the HP Journal. They are:

- A Real-Time Operating System with Batch/Spool Capabilities, by *George Anzinger* and *Adele Gadol*.
- Real-Time Executive System Manages Large Memories, by *Linda Averett*

Make sure that all your prospective RTE customers get a copy of that issue of the Journal.

HEWLETT hp PACKARD

COMPETITIVE CORNER

TOTAL ON A SYSTEM/3

by Bob Lewin – GSD

Gary Davis, of the Farmington Hills sales office, had the opportunity to talk to an IBM System/3 model 15 customer using CINCOM's data base management system — TOTAL. *Gary's* overall impression was that HP's IMAGE was superior. We believe some of the negative points about TOTAL are:

1. No inquery capability.
2. Updates to TOTAL data bases were slow.
3. Higher maintenance cost for TOTAL, i.e. customer paid $10,000 purchase price plus $700/year maintenance starting in the second year.
4. Security is only at the data set level.
5. When running TOTAL under CCP, the amount of core needed *per terminal* is between 5-9.5K bytes.
6. Customer needs to order and rent the Assembler compiler from IBM before using TOTAL.
7. There are no restructuring tools provided with TOTAL on a System/3.
8. TOTAL seems to create an abnormally high number of synonym records, i.e. 30%. This would certainly slow down the speed of processing data through TOTAL.

Once again, just as our comparison of hardware and system software show superiority, so does our data base management system — IMAGE. However, the world changes fast. Always remember to use the above information to have your customer ask questions. Never give him this as fact. It may change!

HEWLETT hp PACKARD

INTERDATA COMPETITION?

by Dave Hancock – DSD

The last issue of this newsletter carried a success story from our Australian sales team who displaced an Interdata 7/32 with an HP RTE system at the Royal Australian Survey Corps. As a sequel, *Mike Woodhams*, our man in Melbourne, has passed on some competitive information regarding the Interdata installation. As you read these observations, keep in mind that they could be problems unique to this particular site (personnel, etc.) and the parity problem could happen to any one. Still, these comments give you some questions to have your customer ask when encountering Interdata. Here are *Mike's* comments:

(Continued on page 14)

Interdata Competition (cont.)

The ARMY SURVEY REGIMENT at Bendigo in Victoria, returned their INTERDATA 7/32 in September after about a 3 month trial period. It is to be replaced by an HP RTE-III system, value over US$100K, consisting of 80k words memory, two 7905 discs, two 7970 9-Track tapes, 300 Lpm line printer, plus the standard peripheral gear for RTE. It is to be used for general program development work.

Some of the problems encountered with the Interdata machine were

1. *Chained Files*

   The "Chain" often broke, with the user then losing the rest of his file.

   Parts of the disc directory were sometimes output in the middle of a source listing.

2. *FORTRAN Compiler*

   A 1200 card source program took 50 minutes (!!) to compile. After 3 months work on file structure etc., Interdata personnel had helped to trim this to 12 minutes. The same 1200 card program took only 3 minutes 50 seconds with the RTE-II FTN4 Compiler on our 21MX.

   Subroutines must all be compiled separately!

   The 1200 card program mentioned above blew 10 megabytes of disc storage when it was compiled. It seems that with unchained files, only 1 record is placed in each 256 byte sector. Thus when the FORTRAN Translator produced a CAL listing (COMMON ASSEMBLY LANGUAGE) in the disc scratch area it placed only 1 CAL instruction in each sector.

   COMMON had to be manually calculated and inserted by operator instructions for each program.

3. *Hardware Bugs*

   A mysterious parity error kept occurring at random times, knocking the system down. The source of the parity error was not located before the machine was evicted.

4. *Operating System*

   The Army programmers expressed amazement at the ease of use of RTE compared to the Interdata operating system, which required many more operator instructions for the equivalent task.

Please let me know if you have encountered similar levels of performance. Sell advantages of HP RTE!

HEWLETT PACKARD

INTERNATIONAL NEWS

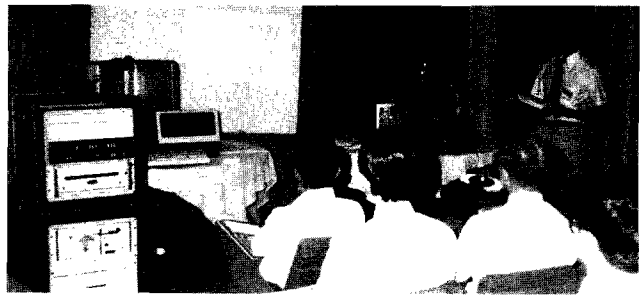
HP IS NUMBER ONE IN TAIWAN!

by Dave Hancock – DSD

Hats off to *Robert Liu* and the rest of the energetic HP staff in Taiwan. HP has continued to expand its position of number one in computer installations there. DEC, D.G., and even IBM have a long way to go to catch HP.

At their 1975 National Computer Exhibition, *Barry Klaas* had the pleasure of helping them exhibit our products, particularly the RTE Distributed Systems. Combined with the exhibit was a most successful seminar on "How to Improve Efficiency and Quality with Computerized Systems," the overhead slides for which are available from Data Systems. The seminar and exhibit have resulted in over $100K of new orders.

Dignitaries visit the HP booth at Computech 75. In the center, Robert Liu points out the features of the RTE Distributed System to U.S. Ambassador Leonard Unger. Lok Lin, Country Manager, on the left explains RTE capabilities to Minister of Economics Affairs Sun Yun-Suan. Barry Klaas, on the right, and Shu Shien-Siu, Chairman of the National Science Council discuss applications. On the left Alice Chen and Ellen Tchou take the orders. This picture appeared with a feature article about the exhibit in the China Post.



Barry Klaas presents the RTE seminar to customers attending the show.

HEWLETT PACKARD

EDUCATIONAL NEWS

THE LATEST EDUCATION LITERATURE

by Jean Danver – GSD

New User Services Publications

- User Services Flyer (5952-4522) 11/75
- 1976 Computer Curriculum Catalog (5952-4542) 11/75
- Computer Curriculum Materials Price List (5952-5488) 11/75

New Data Sheets

- Student Information System (5952-4450)
- Student Assignment System (5952-4658)
- College Information System (5952-5559)
- Instructional Management Facility (5952-4599)
- Instructional Dialogue Facility (5952-4598)
- HP Math (5952-4600)

Educational Literature is now up-to-date. The data sheets contain the information you need to know for both the 2000 Access and 2000F.

The 1976 Computer Curriculum Catalog contains all our current books and all of those scheduled to be released during the coming year. A membership form for joining the Educational Users Group is attached to the User Services Flyer. Besides describing the Users Group this flyer contains descriptions of the other services we have to offer such as the Clearinghouse and the Contributed Library.

HEWLETT PACKARD

JOIN THE 9600 SWEEPSTAKES AND BUILD OUR 9600 REFERENCE FILE!! COMPLETE ONE FORM PER SYSTEM AND SEND IT IN. EACH MONTH THE CONTRIBUTOR OF THE BEST APPLICATION SHALL RECEIVE A GIFT CERTIFICATE.

9600 REFERENCE ACCOUNT NUMBER: ORDER # _____ ORDER DATE _____

CUSTOMER _____ SALESMAN _____

ADDRESS _____ RICT OFFICE _____ INSTALL DATE _____

SYSTEM (CIRCLE SYSTEM)

[A] 9600 [C] 9601 [E] 9602A [G] 9610 [I] 9700 [K] M/210, M/230, M/260, etc.

[B] 9640 [D] 9603 [F] 9604A [H] 9611A [J] S/110 [L] 21MX, 2100's DISComputers

APPLICATION TYPE (CIRCLE PRIMARY ONE; CHECK MARK OTHERS)

DISCRETE MANUFACTURING

[A] PRODUCT TEST -ELECTRICAL
[B] PRODUCT TEST -ELECTRO/MECH.
[C] LAB DATA ACQUIS.
[D] SCIENTIFIC COMPUTING
[E] TERMINAL DATA COLLECTION
[F] MATERIAL MOVEMENT
[G] PRODUCTION MONITORING

BUSINESS

[H] TRANSACTION PROCESSING
[I] EDP
[J] RJE

GOVERNMENT

[K] LAB DATA ACQUIS.
[L] SCIENTIFIC COMPUTING

PROCESS MANUFACTURING

[M] PRODUCT TEST
[N] PROCESS CONTROL
[O] LAB DATA ACQUIS.
[R] SCIENTIFIC COMPUTING
[S] TERMINAL DATA COLLECTION
[T] MATERIAL MOVEMENT
[U] PRODUCTION MONITORING

OTHER

[V] DATA ACQUIS.
[W] DATA MGMT.
[X] MISC. (DESCRIBE) _____

EDUCATION

[Y] LAB DATA/DATA ACQUIS.
[Z] EDUCATION SCIENTIFIC COMPUTING

HP ADVANTAGE (CIRCLE PRIMARY ONE; CHECK MARK OTHERS)

[A] PRICE
[B] MEASUREMENT PERFORMANCE
[C] OPERATING SYSTEM PERFORMANCE
[D] LOCAL HP SUPPORT
[E] END USER/OEM DISCOUNT
[F] HP CORPORATE STRENGTH
[G] DELIVERY

COMPETITION (CIRCLE PRIMARY ONE; CHECK MARK OTHERS)

[A] RT 11/10 & LSI II
[B] RT 11/40
[C] RSX (S) 11/10
[D] RSX (M) 11/10
[E] RSX (M) 11/40
[F] RSX (D) 11/40
[G] 11/70
[H] PDP-8's
[I] RSX (S) 11/40
[J] DECNET
[K] DEC OTHER
[Q] OTHER _____

DATA GENERAL

[L] NOVA 2
[M] 800's
[N] ECLIPSE

MODCOMP

[R] II MAX II
[S] II MAX III
[T] IV MAX IV
[U] MAXNET

IBM

[V] SYSTEM 7
[W] SYSTEM 7-DIS-370
[X] OTHER
[Y] HP SOLE SOURCE

ANALOG MEASUREMENT (CIRCLE PRIMARY ONE; CHECK MARK OTHERS)

2313B HI-LEVEL

[A] 1-32 [D] > 20K Hz
[B] 33-64 [E] DAC
[C] > 64 [V] PACER

2313 LO-LEVEL

[F] 1-32(SS) [I] 1-32(RELAY)
[G] 33-64(SS) [J] 33-64(RELAY)
[H] > 64(SS) [K] > 64(RELAY)

DIGITAL VOLTMETERS

[L] 2402/2911 [Q] 3480/2912
[M] 2402/2912 [R] 3490
[N] 3480/84 [S]

PLUG-INS

[T] 91000
[U] 12555A DAC

DIGITAL I/O (CIRCLE PRIMARY ONE; CHECK MARK OTHERS)

6940B

[A] STATUS IN (TTL)
[B] EVENT SENSE (TTL)
[C] STATUS OUT (TTL)
[D] RELAY OUT

6940B

[E] ISOLATED IN (10-50 VDC)
[F] EVENT SENSE (CONTACT CLOSURE)
[G] EVENT COUNTER [I] TIMER
[H] STEPPER [J] FREQUENCY REFERENCE

PLUG-INS

[L] 12930A UNIV. INTFC. (16 BIT)
[M] 12604A 32 BIT INPUT
[N] 12556A 40 BIT OUTPUT
[Q] 12551A RELAY OUT
[R] 12597A DUPLEX REG.
[S] 59310A HP-IB
[K] 12566B MICRO CIRCUIT

SOFTWARE (CIRCLE PRIMARY ONE; CHECK MARK OTHERS)

MEMORY ONLY

[A] BCS
[B] RTE-B
[C] RTE-C
[D] RTE-M

RTE-II

[E] BSM/FORTRAN
[F] BSM/BASIC
[G] NO BSM

RTE-III

[H] FORTRAN
[I] BASIC

RTE-I

[J] FMGR
[S] NO FMGR

DOS

[K] DOS ONLY
[L] DOS/TCS
[M] DOS/TCS/IMAGE

WRITABLE CONTROL STORE

[N] RTE
[Q] BCS
[R] DOS

FOLD OVER & STAPLE

DISTRIBUTED SYSTEMS (CIRCLE PRIMARY SATELLITE; CHECK MARK OTHERS)

HARDWIRED LINK
[A] BCS
[B] RTE-B
[C] RTE-C
[D] RTE-M
[E] RTE-II/III

MODEM LINK
[F] BCS
[G] RTE-B
[H] RTE-C
[I] RTE-M
[J] RTE-II/III

REMOTE STATION
[K] 9611R
[L] 9603R
[M] OTHER _____

RDTS
[O] RTE-C
[P] RTE-II
[Q] LINKED TO _____

[R] NO DISTRIBUTED SYSTEMS

[N] DISTANCE TO SATELLITE/REMOTE _____

MEMORY/DISC (CIRCLE ONE)

MEMORY ONLY

[A] 8K
[B] 16K
[C] 24K
[D] 32K
[E] 40K
[F] 48K
[G] 56K
[J] 64K
[K] 72K
[L] 80K
[M] 88K
[N] 96K
[Q] 96-128K
[R] 136-256K

PERIPHERALS (CIRCLE PRIMARY IMPORTANCE)

[A] 7900 DISC
[B] 7905 DISC
[C] 7970 MAG TAPE
[D] 7972 MAG TAPE
[E] CARD READERS
[F] PLOTTER
[G] SPECIAL SYSTEMS (DESCRIBE)
[H] LINE PRINTERS
[I] 1-3 TERMINALS
[J] 4-8 TERMINALS
[K] > 8 TERMINALS
[L] 16 CHANNEL MUX 12920A

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ATTENTION: 9600 PRODUCT MANAGEMENT

EXTRA COMMENTS (Application detail, "1 of N systems", press release date, ad date, application note #, etc.)

PLEASE FOLD UNDER