FRANKFURT

REINHARDT HELMUT

For HP Field Jales Personnel

Vol 2 No. 23 Sept. 5 1975

DIVISION NEWS

OUT OF SIGHT

by Dick Byhre



Here he is folks! Ed Hayes, our new TPD (Terminal Products Division) Marketing Manager christening the 1000th 2640A to roll off our assembly line.

Ed presented RCA Global Communications Inc. the gold bezeled 1000th 2640A in a ceremony at the firm's headquarters in New York City on August 8.

As we approach the end of August, Larry Mitchell's fantastic manufacturing team is pushing out the 1600th.

So, sell the winner we can deliver!

DSD/GSD/TPD ANNOUNCE MARKETING DEPARTMENT MANAGERS

by Joe Schoendorf

Those new abbreviations represent the three newest divisions in HP — Data Systems, General Systems and Terminal Products. As we move towards a formal split some time

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around November 1, several marketing department managers were named this week.

At Data Systems, *Ted Doyle* — Marketing Manager, named *Joe Schoendorf* Sales Manager; *Bob Brannon* Product Marketing Manager; *Tom Winker* Customer Engineering Manager; and *Judy Perdue* as Order Processing Manager.

At General Systems, *Bill Krause* — Marketing Manager, named *Don Barkley* Sales Manager; *Dave Sanders* Product Marketing Manager and *Jerry Peterson* as Customer Engineering Manager.

And at Terminal Products, *Ed Hayes* — Marketing Manager, named *Dick Byhre* Sales Manager; *Jim Sebring* as Customer Engineering Manager; and *Fran Codispoti* as Order Processing Manager.

(Continued on page 2)

DSD/GSD/TPD ANNOUNCE MARKETING DEPARTMENT MANAGERS - (Continued from page 1)

The current goal is to move General Systems Division into their new Santa Clara home sometime as soon as possible after November 1 — Terminal Products Division will be broken out later in the year.

By the time you receive this, we hope to have your Sales Development teams operational by Division. During the transition period we'll all be wearing three hats, and trying not to drop the ball. Our goal is to finish FY 75 on a strong note for all three of the new Divisions.

PRODUCT NEWS

2570/2019 COUPLER CONTROLLER

by Charles Dixon

Due to steadily decreasing sales, we are forced to discontinue production of the 2570/2019. The coupler controller will no longer appear on the Corporate Price List after November 1.

Please make your present 2570/2019 customers aware of the above situation and the fact that we are offering the items listed below (during Sept. and Oct.) at a 10% discount.

| 2019 Opt. | Alode | List Price 5 | Remaining inventory |
|-----------|--------|-----------------|---------------------|
| 202 | 12822B | 2200 | 6 |
| 001 | 2570A | 2230 | 13 |
| 140 | 12799B | 660 | 10 |
| 120 | 12798B | 770 | 17 |
| 100 | 12797A | 825 | 8 |
| 160 | 12800A | 660 | 6 |
| 180 | 12801A | 495 | 6 |
| 220 | 12803A | 660 | 10 |
| 241 | 12804A | 550 | 6 |
| 341 | 12811A | 1720 | 8 |
| | | | |

Please order these items as *List Price* Options to the 2019 and apply a 10% discount as a quote adjustment.

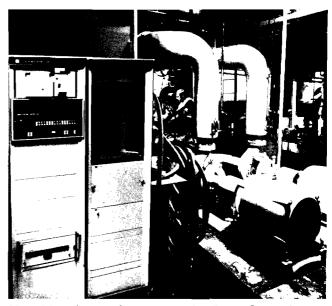


INDUSTRIAL MEASUREMENT SYSTEMS START TO FLOW!

by Peter Palm

On August 22, 1975 the 9611A Industrial Measurement and Control System and the 9603R and 9611R Remote Industrial Measurement and Control Stations were released to manufacturing. A new level of confidence in testing and reliability

has been achieved through new thorough test procedures. new measurement test fixtures and on-line diagnostics. Your orders, deliveries, and installations for 96MX Systems and Measurement stations should now flow much more smoothly allowing you more time for new business. 9611A and Remote Station Data Sheets, Configuration Guides and slide presentations are in sales offices or were sent to you in June. System manuals with details on installation, software and hardware are: 9611A (09611-93001) & HP 9603R/9611R (09611-93005) Remote Measurement and Control Stations Installation and Service Manual.



New 9611A's installations are St. Regis Paper (process control), and Fiat-Allis (product test). A 9611R is installed at Westinghouse for nuclear research.

RTE SOURCE & LISTINGS

by Van Diehl

The following listing and source tapes are now released and have price approval:

| 92801A | 2300C | (RTE/C) | Listings | \$ 500.00 |
|--------|---------|----------|----------|------------|
| 92802A | 92001A | (RTE-II) | Listings | \$ 750.00 |
| 92805A | 2300C | (RTE-C) | Sources | \$ 3000.00 |
| 92806A | 92001 A | (RTF-II) | Sources | \$ 4000.00 |

At this time we are not releasing listings and sources for RTE-B, BSM and Multiuser Real Time Basic because these products are written in SPL-2100, an unrelased product.

The following Distributed Systems listings and sources have price approval, but are unreleased:

| \$ 500.00 | Listings | (CCE) | 91700A | 92809A |
|------------|----------|--------|--------|--------|
| \$10000.00 | Sources | (CCE) | 91700A | 92810A |
| \$ 500.00 | Listings | (SCE3) | 91703A | 92811A |
| \$ 5000.00 | Sources | (SCE3) | 91703A | 92812A |
| \$ 500.00 | Listings | (SCE4) | 91704A | 92813A |
| \$ 5000.00 | Sources | (SCE4) | 91704A | 92814A |
| \$ 500.00 | Listings | (SCE5) | 91705A | 92815A |
| \$ 5000.00 | Sources | (SCE5) | 91705A | 92816A |

(Continued on page 3)

RTE SOURCE AND LISTINGS - (Continued from page 2)

We expect to have these products available by October 1, 1975.

The following terms and conditions apply for listings and sources:

Listings:

Listings are available as separate priced items for documentary or archive purposes only. Listings will be available only via microfiches. Listings are copyrighted and cannot be reproduced without a license to copy from HP. Listings products do not have any warranty or support associated with them.

Sources:

Sources will be available to users that require changes in the system. HP does not encourage such changes and only

> omputer Museum

provides sources as an additional service to our customers. Source tapes are copyrighted and as such cannot be reproduced without a license to copy from HP. This license is given to our OEM users; OEM's can copy the binaries generated from RTE sources, modified or un-modified, once for each 21MX purchased.

Source tapes do not have any warranty or support specifically associated to it. Therefore, the translated binary from these sources are not supported.

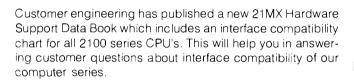
Listings and Sources are not updated via subscription or maintenance contracts but must be repurchased if necessary.

RTE-III listings and sources have not yet been released to manufacturing or have price approval. It is expected that they will be available in October/November.



2100 SERIES INTERFACE COMPATIBILITY

by LeRoy Nelson



INTERFACE COMPATIBILITY

| | INTERFACE | PERIPH- ERAL | DIAG. AVAIL. | 00A/S | 21 | 114 | 15A | 2 | 211 | 6 | 2105,08 |
|--------|---------------------------|-----------------|-----------------|-------|----|-----|-----|---|-----|---|---------|
| | | | | 210 | Α | В | 21 | A | В | С | 210 |
| 12531A | Serial TTY | 2752 | Yes | x | x | x | x | х | x | × | |
| 12531B | Buffered TTY | 2752/2754 | Yes | x | X | Х | X | Х | Х | × | X |
| 12531C | Buffered TTY | 2752/2754 | Yes | X | X | X | X | X | X | X | X |
| 12531D | High-Speed Terminal | | Yes | X | Х | X | X | Х | Х | X | X |
| 12532A | Tape Reader | 2737 | Yes | X | Х | X | X | Х | Х | X | X |
| 12536A | Tape Punch | 2753 | Yes | X | X | X | X | Х | Х | X | x |
| 12538A | Mag, Tape I/O | 2020 | Yes | l | | X | X | Х | X | X | |
| 12539A | Time Base Generator | 1 2.44 | Yes | x | X | Х | x | Х | Х | X | Н |
| 12539B | Time Base Generator | 1 | Yes | x | X | х | x | Х | Х | X | X |
| 12539C | Time Base Generator | | Yes | X | X | Х | x | Х | Х | X | Х |
| 12540A | Bell System Dataphone I/O | 1.0 | Yes | X | x | х | x | Х | X | X | |
| 12549A | General Purpose Register | GP | Yes | | X, | Х | X | Х | Х | X | Х |
| 12551A | Relay Register | GP : | Yes | X | X | X | X | X | Х | X | X |
| 12551B | Relay Register | GP : | Yes | X | X | X | X | Х | X | X | X |
| 12554A | 16-Bit Duplex Register | GP | Yes | Х | X | Х | Х | Х | X | X | X |
| 12555A | D/A Converter | GP | Yes | | Х | Х | Х | Х | X | Х | |
| 12555B | D/A Converter | GP | Yes | X | X | Х | Х | X | X | X | Ш |

| | INTERFACE | PERIPH- | DIAG. AVAIL. | S/WO | 21 | 114 | 15A | : | 211 | 6 | 90/50 |
|--------|---------------------|------------|-----------------|------|----|-----|-----|---|-----|---|-------|
| | | | | 210 | Α | В | 2 | Α | В | С | 21 |
| 12557A | Cartridge Disc | 2870/2871 | Yes | х | | x | х | x | x | x | υ |
| 12559A | Magnetic Tape | 3030 | Yes | x | | x | Х | X | X | Х | Н |
| 12560A | Digital Plotter | 2791 | Yes | x | Х | x | Х | Х | Х | Х | u |
| 12565A | Disc File | 2883/84/85 | Yes | x | ļ | x | X | X | Χ | х | lχl |
| 12566A | 16-Bit Microcircuit | GP | Yes | | X | x | Х | X | X | X | П |
| 12566B | 16-Bit Microcircuit | GP | Yes | X | X | x | Х | X | X | X | (x |

| 12578A | DMA* | 1 1 | V | 1 1 | T. | 1.7 | 120 | lv. | ı | 1 1 |
|------------------|--|------------|------|---|---|-----|-----|-------|-----|------|
| 12576A | | | Yes | | | 0 | X | 0 | ^ | |
| 12582A 12584A | Direct Memory Increment 16-Port TTY Multiplex | ļ ļ | Yes | | | | | | l, | ١, , |
| 12584B | | | Yes | XX | | 0 | 0 | 0 | 10 | U |
| | 16-Port TTY Multiplex | | Yes | x x | SI. | S | 0 | C | 0 | 빈 |
| 12584C | 16-Port TTY Multiplex | | Yes | | Y. | X | 0 | C | Č | M |
| 12587A | Async Data Set | | Yes | X X | SIS | Č | S | Č | Č. | 9 |
| 12587B | Async Data Set | | Yes | XP | \ X | Ľ | X | Č | X. | 뗏 |
| 12589A | Auto Dialer | | Yes | X | (X | X | X | X | X | ĮΨ |
| 12593A | I/O Extender | 2151 | Nο | 1 2 | (X | | | |] | Н |
| 12594A | I/O Extender | 2151 | No | | JŁ. | Х | | | | П |
| 12595A | Multiplex I/O | GP | No | X | ďΧ | | | l | | П |
| 12596A | I/O Extender | 2151 | No | | | ١. | X | X | X | П |
| 12597A | 8-Bit Duplex Register | GP | Yes | X | (X | X | X | Х | X | ĮΧĮ |
| 12602A | Optical Mark Reader | 2761-007 | Yes | 1 | X | X | [X | X | X | U |
| 12602B | Optical Mark Reader | 2761-008 | Yes | X | (IX | X | lΧ | IX. | IX. | ш |
| | 3 Disc Memory | 2770/71/72 | Yes | | X | X | Х | X | X | U |
| 12607A | DMA | - | Yes. | | X | | | | | |
| | 3 Disc Memory | 2773/74/75 | Yes | X | | X | | | X | ΙU |
| 12610C | Disc Memory | 2766 | Yes | X | X | Х | Х | | | ΙU |
| 12612A | I/O Extender | 2150 | Yes | | | | | X | X | |
| 12616A | High-Speed I/O Chan | GP | Yes | | X | 1 | | | | |
| 12617A | Line Printer | 2778 | Yes | X | (X | X | X | Х | X | Н |
| 12618A | Sync Data Set | | Yes | (X) | (X | X | X | X | X | U |
| 12620A | Breadboard | GP | Yes | X | (X | Х | X | Х | X | X |
| 12621A | Sync Data Set (Rcv) | | Yes | $ X\rangle$ | (X | X. | X | Х | X | U |
| 12622A | Sync Data Set (Xmt) |] | Yes | × > × > × > × > × > × > × > × > × > × > | ٧X | X | X | Х | X | U |
| 12653A | Line Printer | 2767 | Yes | X | (X | Х | Х | Х | X | X |
| 12845A | Line Printer | 2610/1614 | Yes | X X | (X (X | X | X | X | X | X |
| 12849A | Controller µCircuit | 2870 | Yes | X | (X | X | Х | Х | Х | |
| 12875A | Processor Interconnect | | Yes | X | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | X | X | X | X | x |
| 12875B | Processor Interconnect | ľ | Yes | X > | (X | X | X | Х | X | x |
| 12880A | Keyboard-Display Term. | 2600 | Yes | X > | ١X | X | X | Х | Х | x |
| 12882A | Card Reader | 2891 | Yes | XX | ١X | X | X | Х | X | ΙX |
| 12889A | Hardwired Serial I/O | | Yes | X > | (X | X | Х | X | х | x |
| 12894A | Multiplex I/O | | No | X 2 | ďΧ | ы | | | | H |
| 12895A | DMA | [[| Yes | X | 1 | | | | | ш |
| 12908A | WCS | l i | Yes | X | | F | | ĺ | | |
| 12908B | WCS** | l i | Yes | X | : 3 | | | | | ΙxΙ |
| 12909A | PROM Writer | | Yes | x | | 1 | ŀ | | | x |
| 12909B | PROM Writer | | Yes | 18 | T | 1 | ١. | | | v |
| 12920A | Async Multiplexer | | | $\langle x \rangle$ | ďχ | X | X | х | X | |
| 12920B | Async Multiplexer | | | X | (X | X | X | Х | X | X |
| 12930A | Universal Interface | GP | Yes | X | (X | Х | Х | Х | Х | X |
| 12966 | Async Data Interface | | | X. | ۲. | 1 | Х | X | x | Х |
| 12967 | Sync Data Interface | | | X | «X | 1. | X | Х | x | x |
| 12968 | Async Data Interface | | | X | 1 | ŀ | Х | Х | x | x |
| 12978A | WCS | | | X | 1 | | | l | | x |
| 13181A | Digital Mag. Tape Unit | 7970 9T | Yes | 11. | (x | X | X | X | x | x |
| 13182A | Digital Mag. Tape Unit | 7970 7T | Yes | XXX | (X | Х | X | x | x | X |
| 13183A | Digital Mag. Tape Unit | 7970E | Yes | X | X | x | Х | x | X | X |
| 13184A | Digital Mag. Tape Unit | 7970E-215 | Yes | X | X | x | х | x | X | X |
| 13185A | Microfilmer | | Yes | x | | | | | | ιû |
| 13210A | Disc Drive | 7900/7901 | Yes | X | Х | х | х | x | х | |
| | | 1 | | يلبا | Ų. | با | | لـــا | لنا | ij. |
| II Untest | red | | | | 1.7 | | | | | |

U Untested

^{*2116}A serial prefix 803 or 807

**Should be Date Code 1436 or higher for 21MX



21MX PRODUCT OPTIONS

by LeRoy Nelson

To simplify the ordering of the 21MX computers and memory, we are removing the options to the processor and memory module numbers. This means that in all cases the disappearing options will be ordered as line items and the prices are exactly the same.

OPTIONS TO BE REMOVED ORDER LINE ITEMS

| 2102 | 2A |
|------|----|
|------|----|

| -001 Dual Channel Port Controller | 12897A |
|-----------------------------------|--------|
| -003 Memory Protect | 12892A |

2105A

| -003 Fact FORTRAN | 12977A |
|-----------------------------|--------|
| -005 Writable Control Store | 12978A |
| -014 Disc loader ROM | 12992A |

2108A

| 2108A | | | |
|-------|------------------------|------------|---------------|
| -003 | Fast FORTRAN | | 12977A |
| -004 | Dynamic Mapping | | 12976A |
| -005 | Writable Control Store | | 12978A |
| -006 | Dynamic Mapping and | FFP 12976A | + 12976A -003 |
| | Disc loader ROM | | 12992A |

2124B

| -003 Fast FORTRAN | 12977A |
|------------------------------|-------------------------|
| -004 Dynamic Mapping | 12976A |
| -005 Writable Control Store | 12978A |
| -006 Dynamic Mapping, and Fl | FP 12976A + 12976A -003 |
| -014 Disc Loader ROM | 12992A |

These will be removed from the November 1 price list, but orders placed before that date are not affected.



PINFEED CONSOLE OPTION FOR 3000CX SYSTEMS

by Marc Matoza

Many requests have been coming in to add a pin feed option to the 3000CX systems. It can now be ordered through the specials group as Quote Number 226-75. Priced at \$225, models 50CX (3000C), 100CX (32400C), 200CX (32401C), and 300CX (32402C) can be ordered without increasing the monthly maintenance price.



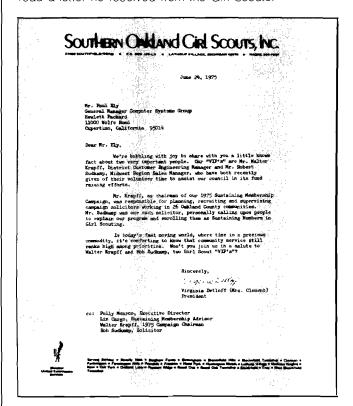
SALESPERSON'S CORNER

RSM BOB SUDKAMP RECEIVES AWARD FOR COMMUNITY SERVICE

by Jim Eckford

At the recent Quota Setting meetings in Cupertino this year,

a new tradition may have begun. Paul Ely reminded us of HP's seventh corporate objective (community service) and read a letter he received from the Girl Scouts.



Following this he introduced a visitor who presented *Bob* with an award. The award was an etching depicting the fine service performed by *Bob* the past year. *Wally Krapff*, who was not present, was also honored as a credit to Hewlett-Packard's seventh objective.







HP Computer Museum www.hpmuseum.net

For research and education purposes only.

THE UNIVERSITY OF WISCONSIN LOVES HP



It certainly looks that way, thanks to the efforts of Ron Tarkowski from our Milwaukee Branch. A Volume End User Purchase Agreement seems to be the key to Ron's success. It has helped this state university acquire two 2000 Access systems for UW Parkside and UW Whitewater, as well as a 2000 Access upgrade for UW La Crosse 2000E; all this follows an order by Tom Rappath last June of a 100 CX system for UW Riverfalls. (See article in DSN Volume 2, No. 19). UW Parkside and Whitewater were both sealed bids. HP won over DEC and BASIC Timesharing based not only on the 2000 Access' own merits which is natural, but also because HP already had a large 2000 system installed base, and has lots of contributed software to offer. Now hear this! Because of the discounts earned under the terms of the VEU Purchase Agreement, HP became the low bidder as well! The University's purchasing department pointed to the fact that our contracts were the easiest to understand and the most flexible they have come across. They also praised HP's responsiveness. Ron comments that the future looks very good for HP in Wisconsin. Congratulations to Ron for a continuing success.

NOTE to our Non-American Readers: Besides it's universities, the State of Wisconsin is well-known for it's cheeses which is a major industry there.





RTE REPLACES 1130 AT SPRAGUE ELECTRIC

by Bob Kresek





Recently, the sales team of the Lexington office signed a volume end user agreement with Sprague Electric Company of North Adams, Massachusetts. The agreement is for five (5) 9640A systems with good potential for additional followon. It took a concerted effort on the part of John Arserio, Field Engineer; Manny Perry, Systems Engineer; Maurice Cote, Systems Engineer; and Bob Dulong's Customer Engineering Group to consummate the contract. The sale began last July and was closed in late April of this year.

The systems will be used as multiple terminal work in process data gathering systems. The RTE operating system was chosen due to its proven capability and the ability to support future control instrumentation like the 6940A multiprogrammer. Data collected by the 9640A during the day will be transmitted via RDTS to the IBM 370/145 at North Adams. The first system will be located at Sprague's Concord, New Hampshire facility where an IBM 1130 will be replaced in addition to the work in process tasks.

DEC and IBM were our competition. IBM was quickly eliminated due to price and poor outlook for future instrumentation add-on. DEC was unable to compete in Real Time because RSX-11D was too expensive and RSX-11M was not released yet. They proposed RSTS-11 timeshare but future instrumentation add-on was nearly impossible. They vascillated between operating systems too much. HP stuck to RTE as the only way to go and won.



2615A CRT FIRE SALE REVISED

by Jim Elliott

Be a winner, use the 2615A CRT to close that sale! For the customer that needs an RS-232 ANSI compatible terminal with a simplified, detachable keyboard and user accessible brightness control, this product will be a sure clincher. And the price is right! At 47% below list, the new price of \$1500.00 is unbeatable. And remember, your customer gets HP service and support along with the assurance of system compatibility.

1ST 3000 SALE TO EASTERN BLOC

by Rene Alder



August heralded the sale of a HP 3000 to the Soviet Institute of Oceanology. Pictured is the HP Vienna Systems Group celebrating their first 3000 in Eastern Europe. On the roof of the office, with the Blue Danube behind, are (left to right) Rene Alder (Systems District manager), Hanne Hochmayer (Secretary of the Group). and Frank Cole (Field Engineer USSR). Do we need to mention that the drink is best Soviet Vodka?



SALES AIDS

DEC SOFTWARE PRICES

by Van Diehl

The latest information in our possession on DEC listings and sources prices for the real time packages are:

(a) Listings in microfiche:

| RSX-D | All Programs | \$ 2,300 |
|-------|------------------|----------|
| RSX-D | Utility Programs | \$ 1,500 |
| RSX-D | Fortran Compiler | \$ 300 |
| RSX-D | "EXEC" Routines | \$ 500 |

(b) Sources (in 9-track or 7-track magrape or disc cartridge)

| RSX-11D | All Programs | \$12,500 |
|---------|------------------|----------|
| RSX-11D | Utility Programs | \$ 7,000 |
| RSX-11D | Fortran Compiler | \$ 500 |
| RSX-11D | "EXEC" Routines | \$ 5,000 |

USING 9600 SLIDE PRESENTATIONS EFFECTIVELY

by Joe Schoendorf

Last month we distributed the long awaited 9600 customer presentation slide kit to all Field Engineers. Enclosed is a report from *Roy Toth* of the Detroit office on how he has successfully used this material.

Note two key statements:

- 1. It has enabled him to meet managers that he would "probably have a difficult time meeting any other way."
- 2. He supplements his presentation with the RTE-B video tape which has "uniformly been an attractive attention getter at any manufacturing facility."

(Tech. Ed. Note – This video is perhaps the best video on the 9600 done to date, especially for newer computer users).

INTEROFFICE CORRESPONDENCE



MIDWEST SALES REGION -- 23855 Research Orive, Fernington, Michigan 4802.

From: Roy Toth/Farmington
To: Jim Eckford/Cupertino

Date: July 22, 1975
Subject: Presentations of "How
To Improve Manufacturing
Efficiency"

Jim, this might give you some idea of how I've used your slide presentation on "How To Improve Manufacturing Efficiency and Quality" at various facilities of General Mocors. Depending on the facility. I tried to single out a Plant Engineer, a Purchasing Agent, or in some cases a Plant Manager and arranged to spend about one hour introducing to him Hewlett-Packard and our product line. I try to find out if within his facility he or other managers have short to mid-range plans for using automatic equipment. I suggest the slide presentation and explain to him the nature and content of the presentation. Emphasis is placed on the considerations and justification aspects for using automatic equipment. I have most recently been leaving a xerox copy of the presentation with him, followed by a letter outlining the format and some selected references within General Motors where we have successfully done this. In virtually 100% of our approaches we have been successful in getting permission to make the presentation and, more important, a very positive reaction to the presentation.

The format I have found successful begins with a very brief introduction to Hewlett-Packard Company followed by the cost justifications of using automatic equipment. Depending on the audience, I may or may not use the history lesson portion of the presentation. During the application portion I will incorporate the RTE-B video tape. This video tape has uniformly been an attractive attention-getter at any manufacturing facility. Needless to say, I also incorporate a brief overview of our product line.

Jim. I guess the one message that 1 want to leave with you is that this presentation has enabled me to get and meet managers that I probably would have a difficult time meeting any other way. It is a good reason for drawing these people together for one to two hours and having them leave feeling they have received something. In every instance we've been sincerely thanked for our efforts and in some cases encouraged to meet with other recommended groups. This approach definitely makes the customer feel that Hewlett-packard understands his problem, and just as important for those instances where this material is not new, it has been looked upon as additional reinforcement. When and where appropriate, I encourage Data Systems to continue putting together these kinds of quality video tapes and slide presentations.

Regards





QUESTIONS ON THE 2640A SERIES TERMINALS. PART II OF A SERIES

by Jim Elliott

"The 2640A and 202 Modems"

1. What does it mean to say that the 2640A is 202 modem compatible?

Ans. The 2640A has been tested to be compatible with the Bell 202-C modem (or equivalent) operating within the Direct Distance Dial Network. This modem is a medium speed (typically 1200 Baud Max), asynchronous, binary device.

2. I'm operating the 2640A in character mode with the Data COMM switch in the half-duplex position using a Bell 202-C modem, yet I can't communicate with my computer. Why?

Ans. There are two possible reasons for this di-

- (a) Line turn-around is required in half-duplex operations. The 2640A implements line turn-around via the reverse channel of the 202-C modem. However, reverse channel is normally an option to the 202-C modem. Please verify that your modem has this option.
- (b) The 2640A requires that the remote computer have software support for its line turn-around control procedure. Make sure that your computer system recognizes requests for line turn-around via the reverse channel of the modem. (HP 3000 and DOS III has this software support).
- 3. I'm operating in Block mode with half-duplex on and using the Bell 202-C modem and I can't communicate with my computer either?

The 2640A requires a handshaking arrangement in order to communicate with your computer in Block mode. This communications protocol involves alternately sending then receiving and sensing unique control codes exchanged between the 2640A and your processor. There are basically two things that must happen in order to transmit information from the terminal to the computer. And they are:

- (a) The information transfer must be enabled.
- (b) The actual transfer is triggered by the computer.

There are two ways to enable a transfer:

- (a) Either the operator presses the ENTER key which transmits a control R [R^c] – (This is an ASCII DC2) or
- (b) the computer transmits an ESCd.

Once the transfer is enabled, the computer must then trigger the transfer. This is done when it sends a control Q (Q^c) or what is called an ASCII DC1 to the terminal. A block of information is then transferred to the CPU.

However, when using a 202-C modem, the computer need not actually transmit a DC1. When the computer requests a line turn-around via the reverse channel, this action triggers the block transfer.

The message, then, is to make sure that your computer software supports the handshaking protocol required by the modem and the 2640A Block transfer design criterion.

Hope this brief explanation helps.



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by Carol Scheifele



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"THE NEWS" APOLOGIZES FOR LATE DELIVERIES

by Len Souza

This article appeared in the Valley (San Fernando, California) "Green Sheet" Newspaper - Front Page! Thought you might be interested.

"'The News' apologizes for late deliveries.

The entire staff of The News offers an apology to our readers because the paper is late.

It is not being delivered on time because of a computer breakdown, a computer manufactured by the Digital Equipment Corp., headquartered in Maynard, Mass. The particular unit is described as a PDP 11/45.

We bought two identical computers, one for the business office and one for the composing room, so that if one failed, the backup unit could fill the gap. Neither worked properly last night.

Again, we are sorry."

EDUCATIONAL NEWS

2000 ACCESS EDUCATION SOFTWARE

by Jean H. Danver

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| 22694A | CIS | \$8000 | Sept. 1 |
| 22689A | EBA | \$8000 | Sept. 15 |
| *22688A | EPS | \$8000 | Dec. 1 |
| *22692A | CWF | \$2500 | Jan. 1 |
| 22699A | IMF, IDF, Math D&P | \$3000 | Sept. 1 |
| *22698A | IMF, IDF, CWF | \$3500 | Jan. 1 |
| 22697A | IMF, IDF | \$2500 | Sept. 1 |
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Address inquiries and comments to: Joey McHugh — Editor Sales Development — Building 40

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11000 Wolfe Road, Cupertino, California 95014 U.S.A. John Kobis — Art Director * Joe Schoendorf — Technical Editor