

data systems newsletter

For HP Field Sales Personnel

DIVISION NEWS

DATA SYSTEMS DIVISION NAMES SALES DEVELOPMENT ORGANIZATION

by Joe Schoendorf

While we are still in a transition mode in the DSD split and concentrating on helping you reach 100%, we have begun to shape our Sales Development Organization for next year.

Joe Schoendorf
Sales Development Manager x2310

Joey McHugh
x2347

Jim Eckford
Eastern, Midwest,
Canada x2552

Doug Hanson
Southern, International
x2557

Bob Hoke
Neely, Midwest
x2500

Ann Myrberg
x2585

Jim, Doug and Bob are all senior members of HP marketing and know how to help make you successful. They will be naming their organizations shortly. We are trying to minimize changes, but we will have to hire some new people.

For emphasis, we are still in transition, so please continue with your regular contact until further notice. We don't want to drop balls. Let's finish at 100%!



SHORT SHIPS

by Ken Newton

Our Shipping Department makes every effort to ship each order accurately and precisely as ordered. However, we are shipping at twice the volume of only one year ago and foulups do occur. When they do, we want to remedy the situation immediately. If it happens to you, TWX a list of missing items to your Order Coordinator in Cupertino or

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simply to the "O.P. Supervisor, Data Systems Division" and we will ship them at our expense, usually within a day or two, as soon as we have verified the misshipment.

Some words of caution — we have had some claims of missing equipment, software, manuals, cables, etc., where the customer was mistaken about what he thought he should have received and also where items, especially small ones, were misplaced in his Receiving Department. Please check these possibilities *before* TWX'ing the factory for replacement.

For damaged equipment, have the carrier perform a damaged goods inspection (this must be done within 15 days of receipt or no claim will be paid) and notify your Order Coordinator at Data Systems Division. For FOB — destination shipments, the claim will be filed by Data Systems — Cupertino. On FOB — origin shipments, the claim must be filed by the customer. If you have any problems with the carrier, call the Traffic Manager at Cupertino, *Wes Brooks*.

To reduce future short shipments, we have initiated an additional Quality Assurance check in our Shipping Department beginning September 2. Shipments after this date will be checked by QA just prior to departure to verify that shipping papers, packing lists, and the items actually shipped are identical.



HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

GENERAL SYSTEMS DIVISION MARKETING ORGANIZATION

by Bill Krause

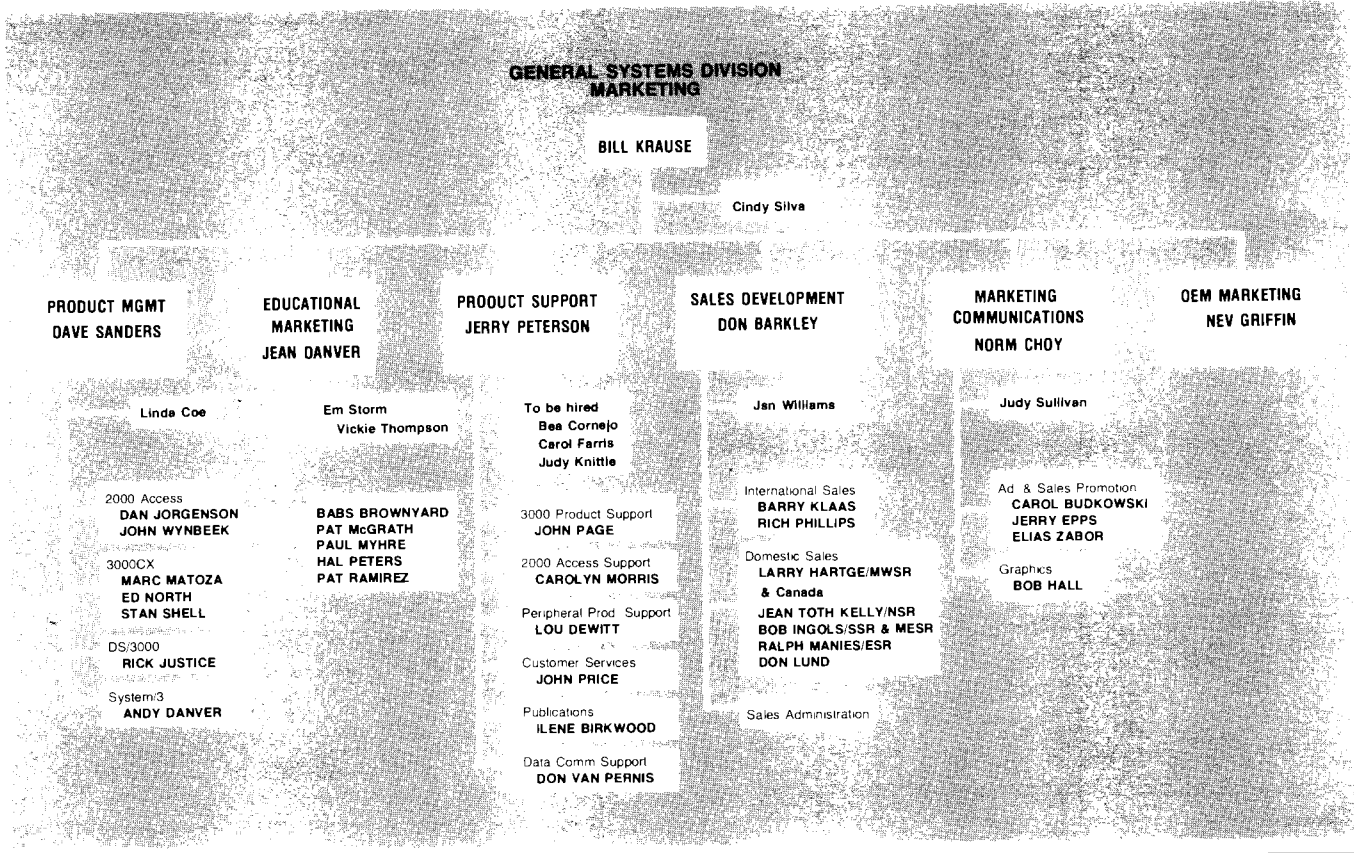
I thought it would be helpful to let you know how our Marketing Department for General Systems Division is shaping up. We are planning to move to our new Santa Clara facility some time during the month of November 1975.

As I discussed with the Regional Sales Managers during quota setting in August, we are doing a thorough job of preparing for the move so as not to get behind in any of our

shipments or drop the support ball on any of your critical sales situations. To insure this, many of our Sales Development people will be operating in an overlap mode for the interim period between now and the move.

The following chart should help you identify the key contacts in our new organization. I think we have an excellent group of people, and I hope all of you are as enthusiastic as we are about the FY 1976 sales opportunities for 3000CX Mini DataCenters and 2000 Access Systems.

HEWLETT  PACKARD



OUR HEROS

by Joe Schoendorf

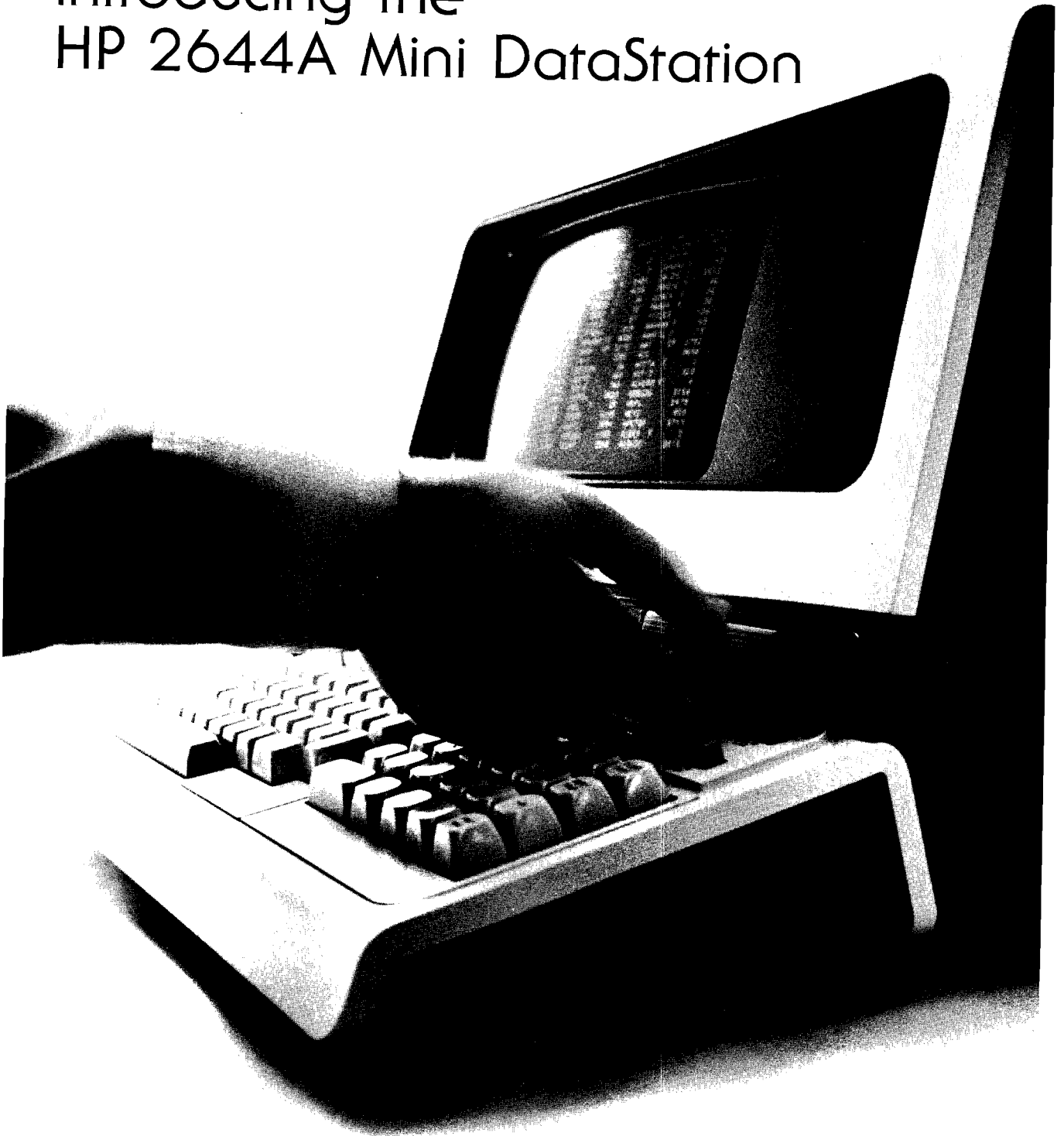
We are preparing a hero board at DSD to recognize your strong 1975 performance. Every DM who finishes over 100% before Oct 31 will be suitably recognized. So far I have the following inputs:

District Manager	Region	Month Over 100%
Ted McCarthy	Eastern	July
Pat Tucciarone	Eastern	July
Mike Leavell	Neely	August
Al Semmelroth	Midwest	August

Who else is a hero? . . . Anywhere in the world.

PRODUCT NEWS

Introducing the HP 2644A Mini DataStation



2644A MINI DATASTATION — ANNOUNCED

As a result of the 2644A's successful press tour, the following press release will appear in the October issues of the major monthly trade magazines.

BUILT-IN MASS STORAGE TURNS CRT TERMINAL INTO "MINI DATA STATION"

With 220,000 bytes of built-in mass data storage, the newest Hewlett-Packard CRT terminal, Model 2644A, can perform on a stand-alone basis many operations normally requiring connection to a computer. Two fully-integrated tape transports, using the newly-developed miniature version of the 3M data cartridge, provide enough data storage for a day's hard work at the keyboard. For data entry, forms can be stored on one mini-cartridge and selectively retrieved in seconds. Program preparation, editing, tape copying, and tape-to-printer operations are all within the stand-alone abilities of the microprocessor-controlled 2644A. Thus it will be marketed as the HP 2644A "Mini Data Station."

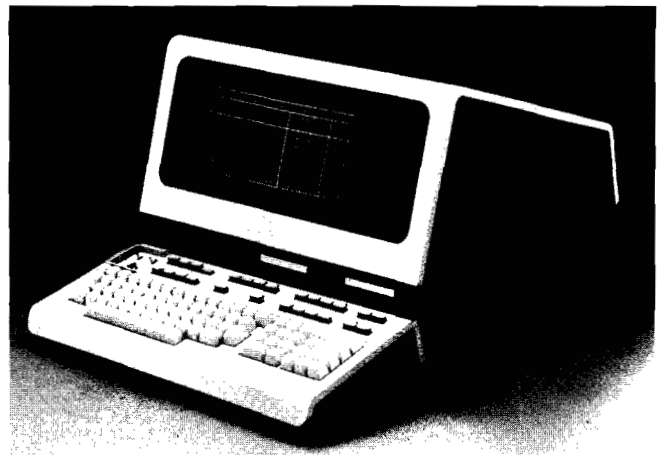
Protected fields, video high-lighting, and elaborate editing capabilities make it easy to enter data from the keyboard to the display, and to satisfy quickly that all is as desired. Now confirmed, the entered data then may be stored on a second mini-cartridge by pushing a single button. Later, full mini-cartridges of data can be batch-transmitted to a computer system. The 2644A includes a range of microprogrammed instructions sufficient to exercise all its data-handling capabilities.

With all these stand-alone abilities, the 2644A reduces on-line time costs, cuts line charges in remote operations, and greatly lessens demands on computer resources.

Single-function and prefix keys speed operation

Single keys execute the most common tape data transfer commands. Touching any "File" button, f_1 through f_8 , automatically calls up the appropriate one of the first 8 files on a cartridge. Typically these are forms. "Read" and "Record" are single-button functions.

Two prefix keys speed operations. Input/output functions are quickly assigned by first touching the green prefix key, then the appropriate input and output device keys. Data path architecture of the 2644A is generalized so data may be moved readily among any of the station's functional units, between cartridge tapes, from the keyboard, to or from the display's semiconductor memory, to a printer, to or from the RS232C data communications interface.



A gold key is the prefix for quick access to extended operations. For example, "Gold Key + find file key + file-number + cartridge ident key" calls up any of 255 files at search speed (60 ips). File records may vary in length from 1 to 256 bytes, stored in ASCII or binary format.

First application of 3M mini-cartridge

The 2644A is the first product to use the new 3M mini-cartridge. Its major advantages are simplicity, reliability, assured interchangeability, and compactness. Of shirt-pocket size (3" by 2 1/2" by 1/2"), it is easily stored and mailed. Yet, Hewlett-Packard finds, it has longer life and better interchangeability than the company has experienced with cassettes. In the 2644A application, 110,000 bytes of serial information are recorded single-track on each cartridge, using the full 0.15" width of the mini-cartridge's 140 feet of tape at a density of 800 bpi. Tape speed is 10 inches per second, so transfer rate to or from the display is up to 8000 bits (1000 bytes) per second; since search is at 60 inches per second, average access time is 10 seconds. One cartridge contains the equivalent of 1000 feet of paper tape.

2644A has all the benefits of 2640A

2644A has the same high-resolution 5" by 10" display as the HP 2640A, introduced last fall. Within the enhanced display 1920 characters can be presented in a 24-line by 80-column format. A 9 x 15 dot character cell shows large characters accurately, removes ambiguity and relieves operator fatigue. Inverse video (black on white), blinking, half-bright, and underlining may be employed in all their possible 16 combinations. The 2644A can display multiple character sets. A 128-character Roman set, including lower case and displayable control characters, can be used along with as many as three additional character sets. A math-symbol set is available, and a line drawing set which can be used to generate the user's entry data forms on the 2644A display.

Full editing capability is provided to correct data before transmission or recording. Standard features

include character and line insert and delete, cursor sensing and positioning, programmable protected fields for forms, off-screen solid-state-memory storage with scrolling and page-select, tabulation, 8 special-function keys for user-defined routines, and a positional memory lock.

Like the 2640A, the new 2644A uses an ASCII RS232C communications interface and can transfer from semiconductor memory at rates up to 2400 baud (9600 baud on binary output).

Price and delivery

U.S. price of the 2644A Mini DataStation is \$4400 in quantities of six; volume and OEM discounts are available. Deliveries start in October.

CHARACTER/BLOCK MODE WITH EDITING, FORMS MODE

The 2644A transmits character-by-character as an interactive terminal and is capable of operating on a block at a time. Local editing allows the terminal user to verify and correct data before transmission to the CPU. Standard features include character or line insert and delete, cursor sensing and positioning, programmable protected fields for forms, off-screen storage with scrolling and page select tabulation, displayable control codes, 8 function keys for user defined routines, and a positional memory lock. Optional math and line drawing character set enhance display presentations.

MODULAR ARCHITECTURE, MICROPROCESSOR CONTROLLED

Microprocessor implementation and single bus architecture produce a terminal with a wide range of capabilities. Engineered for high reliability and ease of service, the 2644A's TEST button gives the user a GO/NO-GO verification of proper operation.

Features

Interactive CRT terminal

- Enhanced high resolution display
- Character/block mode with editing, forms mode
- Modular architecture, microprocessor controlled

Fully integrated mass storage

- Dual mini cartridges
- Stores up to 220 kilobytes formatted data (ASCII or binary)
- Fast access, data transfer

Mini data station

- Easy to use — on-line or off-line
- Flexible, powerful multiple data paths
- Compact, desktop system
- High reliability, serviceability

ENHANCED HIGH RESOLUTION DISPLAY

The 2644A displays 1,920 character in a 24 line by 80 column format on a 5 inch by 10 inch display. A 9 x 15 dot character cell allows large characters to be represented

accurately. Dot shifting for smooth characters, wide character and line separation, inverse video, and optional plug-in character sets with underlining, half-bright, and blinking are features engineered to increase clarity and ease sessions at the terminal.

MINI CARTRIDGE



The 2644A contains two tape transports which utilize the unique Mini Cartridge. Shirt-pocket size, each cartridge contains precision tape guiding mechanics to assure interchangeability. Control of tension by an isoelastic band allows constant speed drive by a single motor. Full width recording increases data reliability and reduces dropout sensitivity.

STORE UP TO 220 KILOBYTES FORMATTED DATA (ASCII OR BINARY)

Variable length records (1 to 256 bytes) store data in ASCII or binary format. Up to 255 files may be addressed directly. Recording of 800 bits per inch allows many hours of typing to be stored on a single cartridge.

FAST ACCESS, DATA TRANSFER

Reading and writing of data are performed at 10 inches per second. Fast access of files is provided by high speed search of 60 inches per second for average access time of 10 seconds.

EASY TO USE — ON-LINE OR OFF-LINE

Eight user function keys can call CPU subroutines to tailor an on-line 2644A to a specific application. In local mode, these eight keys retrieve and display the first eight files on the selected cartridge, and a single key records displayed data. Green and gold prefix keys simplify generation of data transfer commands.

FLEXIBLE, POWERFUL MULTIPLE DATA PATHS

RS 232C communications interface transfers data at rates to 2400 baud. Multiple data paths allow data transfer between display, Mini Cartridge, keyboard, printer (optional), and communications line. Entered data can be printed and saved on a cartridge for future use.

COMPACT, INTEGRAL SYSTEM

Compact, desktop system with detachable keyboard reduces the need for special furniture. This low power, light weight unit is a direct benefit of the 2644A's modular mechanics and electronics.

HIGH RELIABILITY, SERVICEABILITY

Every element of the 2644A Mini DataStation has been engineered for reliability. The Mini Cartridge represents a significant reliability advance for low cost mass storage. The 2644A's self test and ease of maintenance insure rapid repair when needed.

(Continued on page 6)

2644A MINI DATASTATION ANNOUNCED - (Continued from page 5)

ORDERING INFORMATION

Part Number	Description	Price	Quantity
2644A	MINI DATA STATION Block or character mode, 64 character upper case Roman, 4096 bytes RAM storage, two cartridge tape transports (includes two cartridges), 110-2400 baud RS232C data communications, reverse video, 4 paper size Note: Interface cable must be ordered	\$5000 List	240 Monthly
-001	128 Character Set - Roman	+ 100	—
-006	Drives dual cartridge tape transport and electronics	-1200	-11
-012	Printer Subsystem	+3225	18
-016	Adds 8956A line printer, interface, and cable for connection to the 2644A	N/C	—
13231A	50 Hz DISPLAY ENHANCEMENTS Adds blinking, half-bright and underline and provides for addition of three 128 character sets (requires 1 option slot)	\$ 250	5 3
-201	64 character mathematic symbol set	100	—
-202	Adds display of integral signs, Greek letters, etc	100	—
13232A	64 character line drawing set Adds display of continuous horizontal and vertical line segments for forms, histograms, etc.	50	—
13232B	103/202 Modem Cable Adds male RS232 connector. For connection to 103/202 modem, hardwired to HP 3000, or hardwired to HP 2000 multiplexer	50	—
13232C	RS232C Cable Adds female RS232 connector	50	—
13265A	Character Set Generation Kit Allows user to define special characters for 2640/2644	200	—
		PRICE	QUANTITY
0162-0061	Mini Cartridge (purchased from customer parts center)	\$ 15	1-8
		15	10-99
		12.50	100+

Domestic USA Prices Only
Prices subject to change without notice



2644 MINI DATASTATION PRESS TOUR

by Ed Hayes and Carol Scheifele

The 2644A made its editorial debut recently in a centrifugal press tour to the following publications:

- | | |
|---------------------------------|---|
| Datamation | Electronic Design |
| Computer Design | Design Engineering |
| Modern Data | Canadian DataSystems |
| Data Communications | Government Purchasing Guide |
| Data Communications User | Canadian Control & Instrumentation |
| Computer Decisions | Canadian Electronics Engineering |
| Infosystems | |

Carefully padded in its protective plastic case, the CRT was skillfully wheeled by Ed Hayes and Tom Anderson of the Terminal Products Division's Marketing Team up and down airport corridors, in and out of elevators, and over bumpy steps. Was the lugging worth the effort? The 2644 brought a glow to all the editors' faces and if these glows warm as far as the writing hand, you will be seeing lots of press coverage. Every editor visited assured us of coverage! In fact, one editor was so excited he turned off all the lights in the meeting room to see what the 2644 looked like glowing in the dark. He was so impressed he promised us a "Product Spotlight".

The editors' reaction to the product was indeed positive. HP's standard of reliability and design quality was given. All predictably "oohed" and "aahed" at the appropriate moments -- like when Tom popped the case open and the terminal's compact and TV-like interior could be viewed or when the post self-test hieroglyphics appear on the display and the colorful LED's light up to indicate all's well (HP — the

first company to obsolete the need of service calls!), or when the mini-cartridge hummed softly to a file and the only sound you heard was that! The ease of viewing a high resolution, non-glare screen was another evidence of the human engineering considerations that the editors recognized, and were impressed by our generous use of color and the multi-function keys similar to HP's successful hand-held calculator lines were two of the 44's highlights. It was generally agreed that data entry was one of the natural areas that the 44 should sell into and do very well.

In terms of what we learned from our multiple presentations . . . be prepared for two questions repeatedly asked us:

- **"Why a mini-cartridge rather than a floppy?"** Your Sales Training Manual will fully cover this question. We view each as complementary. Floppy's drives were too large for our package. We may very well add a floppy peripheral to the line in the future. The editors were fully aware of the reliability of the large 3M cartridge and anticipated the same with our miniaturized version, which is exactly the case.
- **"Do you anticipate this new media becoming generally accepted in the industry?"** Editors tend to be skeptics anyway, but we told them that we expect and will encourage the cartridge to become a widespread medium. Note: IBM's announcement of their 5100 calculator strongly supports our use of tape cartridges and 3M.

There was a general assumption that the only reason we were manufacturing terminals was to incorporate them in our own systems. While we agreed this may seem logical, we explained that we feel the real opportunity to sell terminals is outside HP. The Terminal Products Division expects sales growth in excess of 100% next year. To accomplish this, we must sell outside of HP.

So . . . when you see your favorite publication praising our terminal, you'll know it is the result of the 2644 putting its traveling wheels on.

Here's further info on the introduction schedule for the 44:

- Sept 1** — Consignment units ordered
- Sept 16** — 44 introduced at WESCON in the U.S.
- Sept 19** — Consignment units begin shipping worldwide
- Sept 22** — 2644 introduced at SICOB, Bill Hewlett and Paul Ely in attendance
- Oct 1** — Corporate Price List, orders accepted. First customer shipments begin.
- Nov 1** — Ads appear worldwide

The 2644 is living up to all its' expectations — it's a winner!

During the middle of September you should begin receiving your sales package consisting of: spec sheet, brochure, customer grade color video tape and sales training manual. In addition, each office will receive with its' 2644 consignment units a demo cartridge tape which allows the terminal to demonstrate itself to your prospect and a "How to Use It" tape, which is a self-instruction tape for you and the customer. Also, an outstanding owner's manual in two color will be available with the 2644.

We've got another winner. Get those orders, sell the Mini DataStation! Get the gold with MIDAS!

3000 PROGRAMMABLE CONTROLLER

by Bob Blake

The 30300A and 30301A Programmable Controller using the 21MX is not a standard product and so must be quoted as a special. Your friendly Sales Development contact will be pleased to help you do this.

HEWLETT  PACKARD

91780A, RDTs — CORRECTION

by Bob Blake

The 6/75 Price Configuration Guide for the 9600 has a misprint on page 43. Prerequisite for U25 & U26 should read A02 through A15. In short, RDTs does operate under RTE-C.

HEWLETT  PACKARD

SALES AIDS

WESTERN ELECTRIC PURCHASE AGREEMENT

by Bob Blake

- HP 22-374
- Western G19662D



Western Electric Headquarters Purchasing has traditionally insisted upon a "single point order" Purchase Agreement. Since this is the least costly and most efficient way for us to operate, this contract calls for all orders to be placed by Headquarters Purchasing upon Paramus. The factory will only accept orders under this contract (honor the discount) when this procedure is followed.

Since Western Electric Regional Purchasing Offices and Western Electric Facilities have well-established internal channels to handle these procurement practices, this should cause you minimal problems. If you happen to be dealing with a junior (or shy) Buyer who is hesitant to contact Headquarters because he doesn't know who to call, direct him to Jack Guthline, Lloyd Power or Terry McQuade at Headquarters Purchasing. If there still seems to be a problem, Pat Tucciarone/Paramus can be a lot of help in communicating with Headquarters Purchasing.

Since ESR agrees that you receive full quota and commission credit on all End User orders, you are a winner on all such orders channeled through Western Headquarters. Because OEM products are usually developed by BTL and purchased by Western, it is unlikely that anyone (other than Alan Blackwood) will see these, but if you identify a potential, Pat Tucciarone/Paramus will cooperate in making it smoothly visible to Western Electric Headquarters.

Western Electric has consistently been one of our very best customers and so you'll find each factory group ready to take part in the solution of your problem.

HEWLETT  PACKARD

SALES ENGINEERS' CORNER

GARY STUMP — SUPER HERO

by Doug Hanson



To quote Ken Ferguson, Gary's District Manager in Houston, "I'm tired of reading about these guys who sold a 3000 this year. Gary sold two in one month."

That's right, both Dow Badische and College of the Mainland ordered 3000 systems from Gary in July. Also, according to Ken, all the right things were done in both sales and we should see additional business out of both accounts.

Dow is replacing a Honeywell 200 series machine. They will be using the 3000 in a business administration data processing plus time share application in a manufacturing environment. This is the second system purchased off an end-user agreement with Dow out of Williamsburg, Virginia.

Gary's second order was from College of the Mainland. This was a very competitive sale against the DEC 11/70, Burroughs 1700 and Univac 9030. The 2000 Access Educational Software packages proved instrumental in getting the order.

Congratulations Gary!

HEWLETT  PACKARD

EDUCATIONAL NEWS

CURRICULUM PROJECT TAKES ON THE SOCIAL STUDIES CLASSROOM

by Chris Doerr

Computer Curriculum Project

The Computer Curriculum Project is pleased to present you with the key to a whole new set of classrooms in your area! Five books are now available for use in high school social

(Continued on page 8)

CURRICULUM PROJECT TAKES ON THE SOCIAL STUDIES CLASSROOM - (Continued from page 7)

studies classes. These are fascinating units relevant to current problems such as the U.S. economy, crime, politics, etc. They can be used in history, government, and economics courses. So tuck a copy into your briefcase and impress your high school prospects with one more great thing HP is doing for education.

GROWTH AND DEVELOPMENT OF THE U.S.: 1790-1860

by **John G. Kolp**
Laboratory for Political Research
University of Iowa

This book guides students in a computer-related study of the American states from 1790-1860. Utilizing state-level population and economic data, students investigate the population growth of various states, the distribution and spread of slavery, the extent of the free black population, the settlement patterns of immigrants, and some of the economic factors which may have influenced these growth and distribution patterns.

The book is designed to be used as a supplementary text in introductory courses in American history taught at the high school, junior college, or beginning university level.

TESTING ECONOMIC HYPOTHESES

by **Loren J. Dunham**
Senior High School
Fairmont, Minnesota

This computer-based inquiry unit frees the student from a lot of computational confusion and lets them get directly at fiscal and monetary policy decisions that might affect the economy as a whole.

Five policy tools are included: government spending, taxation, reserve requirements, the discount rate, and open market actions. Students role-play a four-year term as President to try their hand at achieving a stable economy.

POLITICAL AWARENESS

by **Jim Hessler**
Palo Alto Public Schools
Palo Alto, California

Political Awareness is an introduction to some of the social science research on political socialization. Students answer a questionnaire concerning their own attitudes towards parts

of the political system and analyze their responses. These responses are then compared with those made to the same questions by Chicago students in 1962 in grades 2-8. After comparing the social scientist's data with that from their own class, students are instructed in their own data gathering effort. Step-by-step worksheet type materials and the INQUIR computer program are provided as aids to the development, administration, and analysis of their own survey.

INQUIR REFERENCE MANUAL

This reference manual describes a computer program called INQUIR, which was developed to assist in sorting and analyzing data collected by standard survey methods. INQUIR is used in *Political Awareness* and *Analyzing Crime*.

The INQUIR program provides computer support which makes it possible to organize, analyze, and present survey data with very little knowledge of statistics.

ANALYZING CRIME

by **Justin Green**
Laboratory for Political Research
University of Iowa

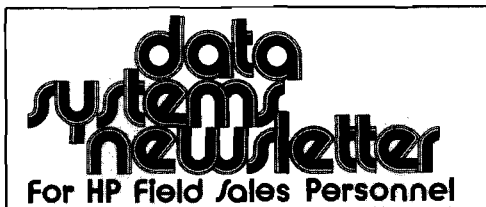
Analyzing Crime describes the criminal justice system by leading the student through a series of data analyses. Three topics are explored: the incidence of crime, the prosecutorial and adjudication process, and the penal system. Data from several sources are used to investigate these topics. The text can be used in a course on the legal system or in a judiciary unit in an American Government course.

Price List

Title	Product #	Price
Growth and Development of the U.S.: 1790-1860		
<input type="checkbox"/> Student Text	5951-7394	\$1.75
<input type="checkbox"/> Teacher's Notes	5951-7381	1.75
Political Awareness		
<input type="checkbox"/> Student Text	5951-7393	2.25
<input type="checkbox"/> Teacher's Notes	5951-7382	2.75
Testing Economic Hypotheses		
<input type="checkbox"/> Student Text	5951-7395	2.25
<input type="checkbox"/> Teacher's Notes	5951-7378	1.50
<input type="checkbox"/> INQUIR Reference Manual	5951-7389	1.50

If you would like a complimentary desk copy, check the box(es) above and mail to:

Em Storm
Computer Curriculum Project
Cupertino



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