Powerful 8600 Processor Unveiled

Datapoint announced on September 9 the introduction of its powerful, low cost 8600 processor which features "ergonomic" -- human factors -- design, plus a powerful central processor and a memory capacity of up to 256K bytes.

Additionally, Datapoint introduced a new 5¼ inch 20 MB disk system that features an integral cartridge tape drive; plus a new ergonomic video workstation.

Newest addition to the Datapoint family - *Designed with the user in mind, the Datapoint 8600 features a powerful central processor and a memory capacity of up to 256K.*

The 8600's circuitry includes the first integrated circuit on the market designed specifically to interface to a local network. The chip replaces the RIM box formerly used to interface Datapoint® processors to Datapoint ARC™ local networks.

The new RIM chip includes the equivalent of 7,000 transistors in a 40-pin package, and represents 18 months of development. The chip is custom designed for Datapoint equipment and uses NMOS (n-channel metal oxide semi-conductor) technology.

Ergonomic Features

The 8600's ergonomic features include a optional tilt-rotate base, plus a detached low-profile keyboard, allowing the user to configure a workstation for maximum comfort. Characters are displayed in a pleasant amber color on a dark brown background, and the use of a 7x9 dot matrix allows true lower case descenders and maximum legibility. Screen brightness can be adjusted to 16 different levels.

Datapoint Purchases International Distributors

Datapoint Corporation announced on August 4 the acquisition of seven TRW Inc.international distributors for Datapoint products, and indicated that equity acquisition of two additional distributorships in Canada and Spain is pending local government approval.

The purchase price for the nine equity distributors is approximately $85 million.

Evaluation of business alternatives in France is continuing.

The seven distributorships acquired include four that were previously wholly-owned by TRW and three that were jointly owned by TRW and non-U.S.companies. Datapoint had acquired total equity in Datapoint Denmark A/S, formerly DP Computers A/S, in February of 1981.

In addition to the equity acquisitions, Datapoint announced the purchase of rights under the master distributorship agreement with TRW for a direct marketing relationship with 20 independent international distributors. The master distributor rights were purchased for approximately $17.5 million.

Expanded Print Option Offered for Matrix Printer

An expanded print option providing 42 type sizes for the 160 CPS Matrix Printer was introduced September 1. This option also allows the programmer to design and download custom character fonts.

The option, to be available October 15, 1981, will be offered as an add-on for Datapoint's model 9621 and 9622 Matrix Printers, and can be ordered with new printers or installed as a field

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Ergonomic Workstation

Built with the same ergonomic features is the new Datapoint 8220 video workstation, which functions as a remarkably cost-effective full-function terminal when operating under RMS software. The 8220 offers the same screen, cabinet, and adjustable screen brightness as the 8600, plus powerful firmware diagnostics.

Hardware Configurations

The 8600 comes in four configurations: the 8601, the 8602, the 8620, and the 8630. The 8601 is a basic system designed to serve as an application processor in an ARC network. The 8602 has enhancements that allow it to support attached terminals and disk systems. An upgrade kit is available to convert an 8601 to an 8602.

Model Code	Description	Purchase Price (U.S.)
8601	*128K or 256K (optional) of memory *Serial port for printer or terminal *ARC processor	$7500
8602	*128K or 256K of memory *MFCA modem interface (option) *MPCA terminal interface (option) *Microbus Interface board for 9310 disk, or Peripheral I/O for 9301 disk (options) *ARC processor	$10950 (without options)
8620	*8602 with Peripheral Interface Board *10 MB Datapoint cartridge disk *1MB diskette *ARC or stand-alone processor	$28500
8630	*8602 with Microbus Interface Board *20MB fixed disk and tape system supports 100MB with extension disks *ARC or stand-alone processor	$33500
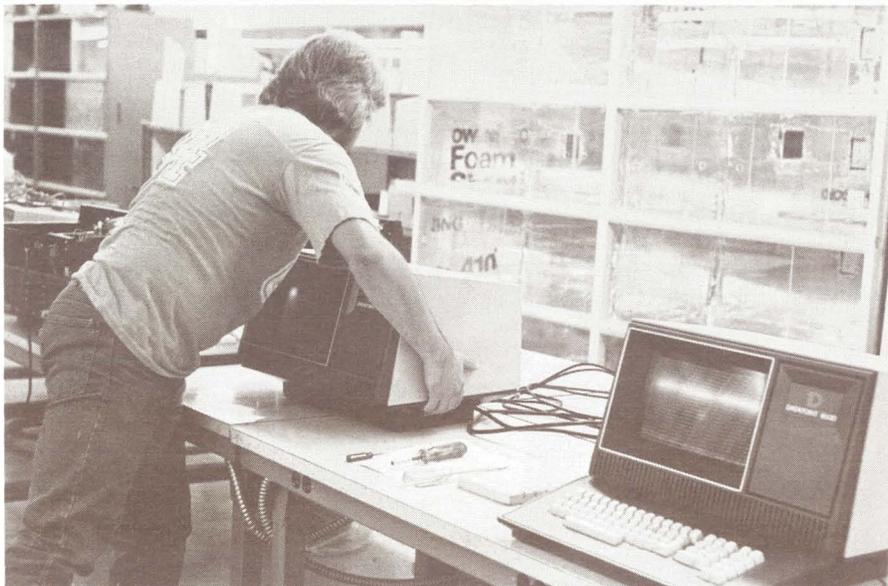
2

Disk Systems

The 8620 includes a standard Datapoint 9310 10MB cartridge disk drive and a 1411 1MB double-sided double-density diskette unit for backup. Three additional 9310 drives can be added, allowing the unit to support 40MB of hard disk storage.

For the 8630, an extension unit is available which offers either 20MB or 40MB of storage in one cabinet, using the tape cartridge and controller board of an attached 9301. Using a 9301 and two extension drives, an 8630 can support up to 100MB -- a remarkable total for such a compact stand-alone system.

The new 20MB disk system, the 9301, is a high technology fixed-media mini-disk system that uses special thin-film disks to store 20 million bytes on a stack of 5¼ inch platters. For back-up purposes, the 9301 has an integral cartridge tape drive that can transfer the contents of the disk to a single quarter-inch tape cartridge in 12 minutes. A specially designed signal-seeking read head is used to ensure tapes can be transferred between units without data loss.

Software Features

Operating with RMS will give the 8600 full multi-processing capabilities. For instance, COBOL, word processing, data entry and electronic mail could be handled simultaneously with RMS. Since the additional functions require only inexpensive video work-stations, RMS makes the 8600 a highly cost-effective way of implementing a multi-user automated office system.

Stand-alone 8620 and 8630 systems will be available with RMS only.

Software offered or planned for the 8600 include DATABUS, COBOL, FORTRAN, BASIC-PLUS, RPGPLS, Word Processing and Electronic Message Service Software. RMS-compatible versions of FORTRAN, BASICPLS, word processing and message services will be available in the early part of 1982, while an RMS version of RPGPLS will be available in September, 1981.

Top and middle: *Lineworker Robert Ibarra puts the finishing touches on a new 8600 terminal.* **Bottom:** *The finished terminals are tested in Quality Control.*

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Name That Reference Account!

As we all know, reference selling is a highly effective sales tool. Sales brochures and presentations are interesting, but for many potential Datapoint customers there's nothing more convincing than talking to peer companies solving similar business problems with Datapoint equipment.

Unfortunately this sales tool often degenerates into a frustrating game known as "NAME THAT REFERENCE ACCOUNT" whose playing time may well exceed that of Monopoly! What sources are available for obtaining reference accounts?

Your Office

First, the most effective source of reference accounts is right in your office. The customer base knowledge of branch salespersons and systems personnel is by necessity very high and the information current. Also any reference account found will naturally be geographically close to the prospect which will facilitate a site visit if required.

If the reference account being sought is unusual, such as an industry-specific application or rare communications protocol, you may need to broaden your search area. Regional staff such as senior analysts and S.E. managers have an overview of what's happening in their region due to their day-to-day support activities. Accounts located in the region are relatively close geographically.

Product Marketing

Lastly, if no suitable accounts are known in the region give us a call in Product Marketing. Due to our involvement in customer presentations and telephone support to salespersons around the country and contacts with other departments in San Antonio, we quite often can suggest potential reference accounts. Conversely we often informally solicit for likely reference accounts and request you to update us if you find our information to be outdated. While there are other potential sources, this covers the primary ones.

Current Information Important

Note that the currency of reference account information is vital. Don't use a reference account's name in pre-sales situations unless you've checked with the account's salesman recently. Even though they were pleased with their system last month, unanticipated problems with credit, billing, shipments, software bugs et. al. may make them temporarily undesirable as a reference account. It may require considerable creativity to explain why your prospect can't talk to Acme Armadillo Supply. After all, you described the wonders of their inventory control application in a presentation just last week. All contact with the reference account should be coordinated through the account's salesperson (i.e. do unto others...). In fact when Product Marketing gives out reference account information we refer you to the salesperson on the account to obtain the customer name.

"Two to Tango"

Why isn't reference account information more readily available? Put simply, "It takes two to tango." While we can obtain some information from existing corporate databases on what hardware complements are at which sites, and who has what software (i.e. 98XX only) we have no information on how the hardware is configured, what applications have been implemented, and what the current customer relations environment is like. YOU are the sole source of this information for your accounts.

Give us a Call

Approaches such as online systems accessible from the field have been tried in the past to facilitate exchange of such information, but failed primarily due to lack of input and updating. If you know of successful approaches to the problem of acquisition/distribution of reference account information, please let us hear from you. We need to work together to solve this problem, and are VERY interested in your input.

Many of you have had a phone call from us recently gathering information on your RMS customers for reference purposes. Thanks to your cooperation we now have a pretty good base of information on what these companies do, what applications they've got going, and what hardware configurations are involved. So when you need an RMS reference account, give us a call. Thanks to you, we both have a good chance of winning at "NAME THAT REFERENCE ACCOUNT"!!

Terry McDaneld

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upgrade by Datapoint customer service technicians in those existing units previously outfitted with a Matrix Enhancement Kit. The firmware allows the user to invoke the new printing options through software control directly from a computer keyboard.

Type Sizes Depend on Line Spacing

The height of the characters is controlled by the line spacing value. The user can select from among eight line spacing values, including 8, 6, 4, 3, 2, 1.25 1, and .75 lines per inch (LPI).

The horizontal spacing value determines the width of the characters, and the user can select from among 6 horizontal character spacing values, including 16.5, 10, 8.25, 5, 2.5 or 1.25 characters per inch. Use of the 16.5 CPI horizontal spacing value (which allows 132 characters in 80 columns) is restricted to the 6 or 8 LPI vertical values.

To thermally protect the printer, the firmware automatically slows down the printing throughput when exceptionally dense characters are called for.

Software Control

The firmware options are invoked through a menu-driven software package supplied with the option. The program resides in Datapoint's Disk Operating System, and queries the user as to which print option is desired, and presents an appropriate menu of alternatives on each step of the procedure. The program can also be used to set tabs on the printer, and print characters directly to the printer so the user can see what they look like.

Additionally, it can also be used to download user-designated character sets to the printer. The character sets themselves can be generated using a previously released Datapoint software package.

The Matrix Printer

The 160 CPS Matrix Printer, which comes in serial and parallel interface versions, is designed to provide low-cost dot matrix printing for dispersed business locations. It provides a 132-column format, bi-directional printing and print head slewing for maximum throughput. The standard character set includes all 96 ASCII characters on a 9 x 9 dot matrix with lower case descenders and true underlining.

Pricing

The option (Model Code 0061) list price is $200 (U.S.). If the option is installed in the field, the service charge is an additional $195 (U.S.).

With the option installed, maintenance for the Matrix Printer is an additional $3 per month (U.S.). Monthly lease pricing is an additional $10 for one year, $8 for two years and $5 for three years (U.S.). The rental price is an additional $12 (U.S.).

Office Systems Marketing Beefed Up
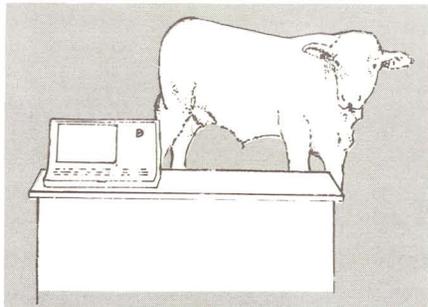
In the 4th quarter the Marketing Division aggressively added Office Systems Marketing Manager positions in every region, and those positions were filled quickly with highly qualified specialists with proven track records. This was done to increase the emphasis on Office Systems Marketing.

Our experience has shown us that it is extremely important to place proper emphasis on Communication Management

Products in the field as well as home office Marketing positions.

Office Systems Marketing Managers Appointed

The primary purpose of the Office Systems Marketing Managers is to coordinate the achievement of all of our critical Communications Management Product revenue, shipment, and booking goals for FY82. Additionally, the manager's job is to act as the focal point for the Region, as your interface into the Marketing Division, with orderly growth and management of the product line as the total goal.

By the same token, it is also of significant importance that we have a strong liaison in home office for those product lines. Therefore, I recently announced the promotion of Randy Pugh to the position of National Office Systems Marketing Manager.

Randy's function is to act as the liaison for feedback from the Field organization into the various channels of responsibility for Communications Management

Products in the home office environment. These channels include, but are not limited to, the development function in Dan Hosage's Office Systems Group, and the product marketing, sales support, and sales operation areas in the Marketing Division.

Randy is to be your single liaison point in San Antonio for any feedback you might have for us to improve upon any of our Marketing programs connected with Communications Management Products. With all the new product announcements, and in particular the ISX and KSX, the ongoing requirements for revenue producing sales of LDCS/SHARE, CASH, CDR, etc., we must all pull together to make it happen in FY82.

We look forward to your total cooperation and working together as a team to make those goals in a balanced, steady fashion in 1982. Good selling!

Glen Cavanaugh
Vice President,
Marketing Support

Congratulations to these salesmen of the month:

JIM MCGILL, April Salesman of the Month, is SMR in the New York Financial Branch of the New York Metropolitan Region. Branch manager is Dennis Hynes. Region Manager is Robert Churchville.

PAT CRESHAM, May Salesman of the Month, is SSR in the New York Financial Branch of the New York Metropolitan Region.

MILTON ROSBERG, June Salesman of the Month, is SMR from the Tampa Branch in the Southeast Region. Region manager is Tommy Williams.

BILL BOWMAN, Northwest Region, is the Regional Director for Q3 1981. The Western Operations Director is Len Julius.

Procedure For Request For Proposal (RFP)

Product Marketing has recently been asked to define the procedure for submitting RFP's. The Branch receives the RFP from the customer. The Branch's responsibility is to complete the questionnaire and return the answered RFP to the customer.

Usually, this completes the RFP cycle. If the Branch cannot complete the RFP, the Branch sends it to its Regional Office. If the Region does not have the technical resources, the Region will contact Product Marketing, and we will go to work on the request with all guns blazing.

Only when the Region has exhausted its resources does Product Marketing assist with RFP's. When Product Marketing has the answer or answers, we notify the Region, and they contact the Branch.

One last note. If the request is a government RFP, the Regions should direct it to Roy Mackrell. If it is a non-government RFP, Product Marketing should be directly contacted by the Region.

Jim Whitehouse

Datapoint Purchases International Distributors -
continued from page 1

"The acquisition transition has gone very well, thanks to the help that TRW and individual distributors have extended us in what otherwise could have been a difficult period," said Edward P. Gistaro, executive vice president of Corporate Development.

"We view the acquisition itself as a very positive move for Datapoint and its distributors," commented Harold E. O'Kelley, president and chief executive officer, "not only from the standpoint of a direct marketing relationship, but because we can now more effectively address the areas of product development and marketing support in the international marketplace."

In addition to Denmark, the distributors acquired by Datapoint are located in Australia, Austria, Brazil, the Netherlands, Switzerland, the United Kingdom, and West Germany.

Datapoint will maintain its European headquarters in London.

Hal Morrow

IEOS Now Runs on 1500 and 1550
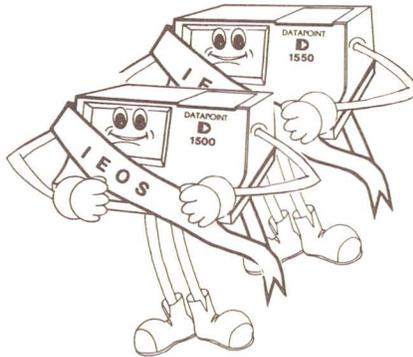
The full capabilities of IEOS are now available on 1500 and 1550 small systems.

The following model codes are required to order this new release:

Model Code   Media Type
9822   20793 - DSDD Diskette (1)
             20697 - SSSD Diskettes (5)

There is an installation guide available on the software diskettes, called IEOSTART/PRT. This will give you all the needed instructions to aid in setting up your new software.

Shannon Neal

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Do you know all the things your processor can do?

```
                                              256K
                                              8800
                                     256K
                                     6x40
                                     8601
                                     8602
                                     8800
                            128K
                            3820
                            6x20
                            8601
                            8602
                            8800
                   90K
                   3815
            69K
            5556
            3810
            6x10
```
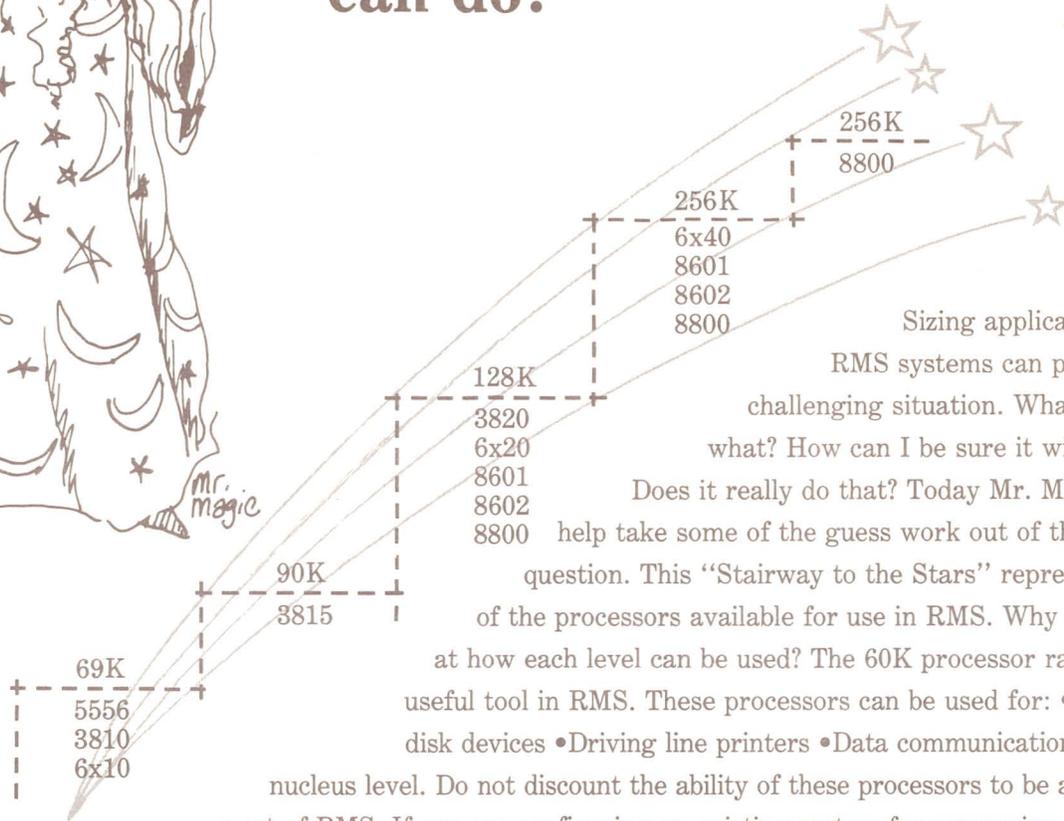
mr. magic

Sizing applications on RMS systems can present a challenging situation. What fits on what? How can I be sure it will work? Does it really do that? Today Mr. Magic will help take some of the guess work out of the sizing question. This "Stairway to the Stars" represents all of the processors available for use in RMS. Why not look at how each level can be used? The 60K processor range is a useful tool in RMS. These processors can be used for: •Driving disk devices •Driving line printers •Data communications at the nucleus level. Do not discount the ability of these processors to be an active part of RMS. If you are configuring an existing system for conversion to RMS, this group of processors can provide excellent support in the areas listed above.

As long as the volume of disk access does not require a File Management Task, the 60K processor will provide more than adequate support as a Data Resource Processor.

And what about data communications? Since the portion of the data communication system that handles the communications adapter can be resident anywhere in the system, the 60K processor can be used to handle one or more lines depending on the configuration required. It is even possible to run the User Communication Facility on a 60K processor; however, you must watch the configuration carefully to insure that enough memory will be available. Other tasks may be run on the 60K processor but, as with communications, you must be aware of the memory required to do the task.

The single 90K processor, the 3815, is the low end for the "workstation." As a rule of thumb we have been allocating 60K of user memory for each task requiring a workstation. After you have configured the nucleus for a 90K processor you usually have in excess of 60K available for the user. You can run any RMS task except the DATASHARE systems and certain parts of the FMS and BJF systems. These restrictions are documented in the release forms for the appropriate programs.

The 128K processors represent the "grey area" for workstation support. If you configure a normal nucleus for the 128K processor you will find approximately 90-140K of memory available. This is not enough for two workstation tasks (remember the 60K rule of thumb?). This processor could be used for a Data Resource Processor if disk is attached. It could also be used for a Datashare processor for a limited number of datastations.

Review the RMS Datashare Users Guide for the memory utilization of Datashare before using a 128K processor for Datashare. You could probably run one full workstation task and a communications task of some type on this processor. Maybe you could even drive an 8200 doing word processing and use the rest of the processor memory for a File Management Task. Use your imagination but remember the restriction is memory.

Wow! We finally made it to the 256K variety of processor. This beast will do almost anything. Data Resource Pro-

cessing with a healthy amount of memory for the File Management Task. Batched Job Facility controller. Communications processing. DATASHARE!! And, of course, enough memory after the nucleus is configured to support at least three workstations. That is, at least 216K of memory available under normal circumstances. You can cut up the pie any way you wish as long as you remember the rule of thumb and the DATASHARE sizing requirements.

Now the the BIG ONE. The 8800 gives you lots of flexibility in configuring an RMS system. The 8800 will provide an excellent Data Resource Processor because of its high speed disk handling capabilities. It can be configured with up to 1mb of memory to give you the memory you need to create large File Management Tasks or to run Batched Job Facility Execute Tasks in the node where the disk is located — no ARC delay in processing batch jobs. Attach some tubes and you have a DATASHARE processor or a workstation handler. Be careful not to overconfigure the number of terminals on the 8800 so that its full glory can come through — the ability to handle disk I/O rapidly.

There you have it. A small dissertation on the value of the various sizes of processors in an RMS system. Review this article when you are sizing systems. Remember to think MEMORY. Watch what you have available and what the user wishes to run on the system. Keep your pencil down on the order form and your eyes on Datapoint Marketing News for the next presentation by Mr. Magic.

Ted Rohling

Datapoint/ SHARE Enhanced
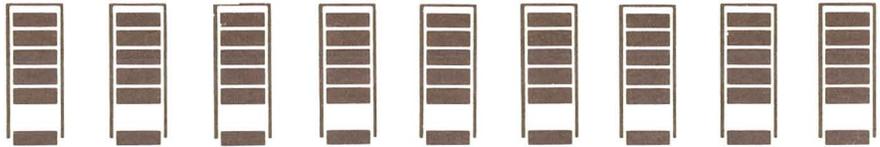
Two versions of Datapoint/ SHARE™ Communications Management software are available: 4.2 and 5.1. Many enhancements are common to both versions. Upgrade to SHARE 4.2 will be available only to those customers currently operating with SHARE 4.1.X. A $500 (U.S.) system support charge applies. Upgrade to SHARE 5.1, available to any existing user, requires an ISS (Intelligent Switching Subsystem) hardware charge at $2,000 (U.S.) in addition to the $500 system support charge.

Features and enhancements described below are applicable to both SHARE 4.2 and SHARE 5.1.

Integrated Billing Statement

With SHARE and IBS on a common ARC system, an interface passes long distance and/or local charges from SHARE to IBS during the post accounting function allowing IBS to prepare a comprehensive monthly statement of charges for each department in a corporation.

Telephone Directory Package

With SHARE and TDP on a common ARC system, an interface generates SHARE caller identity, subgroup and group database files from TDP data.

Subgroup and Group File

An 8-digit department code file has been added to the subgroup file to accommodate IBS and TDP data. The subgroup sequence number field has been expanded from three digits to four. An 8-digit division code field has been added to the group file to accommodate IBS and TDP data.

Rapid Caller Identity Lookup

The Revise Caller and Print Accounting commands with the ALL modifier, only display or print those caller identities that are defined.

Accounting

The Merge Accounting and Repair Accounting commands are less likely to produce duplicate accounting records when recovering from an aborted Merge Accounting routine.

Configuration Commands

All parameters in the configuration file except site configuration (LDCS™, SMDR, NONE) can be modified without deactivating calling. A new prompt is issued asking for the operator assisted (010) international call routing table number.

Mount Features

Two new commands, Mount Drive and Demount Drive, allow you to mount or demount any volume except the SHARE organizational drive. The Demount command requires an authorization code.

Display Holding Command

Allows the user to display callers in standby hold and callback queue.

Print Spooling

Available only to those users running in an ARC environment, two types of print spooling are available:

System Wide -- Spooling will take all output (monitor, error, and status messages) normally destined for the local printer and place it in a system print file.

By Command -- Routine print commands that normally print to the local printer can be placed in a command print file separate from the system print file mentioned above.

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Format Report

Features include the following:

- User-defined insertion of decimal points and dollar signs in numeric fields.

- Column subtotals, grand totals or both.

- Inter-column arithmetic: addition, subtraction, multiplication or division.

- Report most frequently occuring value within a specified field within a file.

- Count occurrences for individual values within a specified field (in a presorted file).

- Backup to a previous prompt by pressing the left arrow key.

- Handle records up to 256 characters long.

Define Selection

Call record types U, V, W, and X and speed numbers in the range 240-1099 can be monitored.

Display, Print, Delete File

Display File and Print File allow listing the file name/extension and physical file number (PFN) of all files on a drive. Subdirectory and file protection are also indicated. You may also list the space allocated (number of sectors) for each file. Delete File allows you to delete files with the use of an authorization code.

Run DOS or Load DOS

Use either command to reload DOS.

Revise Caller

SAME option allows you to revise multiple callers with common attributes.

Read and Write Cassette

Reading and writing to cassette while SHARE is running.

Speed Numbers

Range validation of speed numbers.

Information Calls

Routing of information exchange calls (555) through the exchange code table.

Warning Message

A warning message is printed along with the warning beep when accounting is forced to deactivate.

Index Caller

Index Caller command allows the user of a default caller ID whenever the caller ID file is being indexed.

Test Line

A "test completed" message is generated whenever a Test Line command completes successfully.

Print Accounting

International calls will be reported as 011 or 010 whenever Print Accounting is performed.

Features and enhancements described below are unique to SHARE 5.1.

Loadable Store

The SHARE micro (ISS) contains a loadable store RAM (Random Access Memory) for storage of the call processing program instead of the currently used PROM (Programmed Read-Only Memory) storage. In the event of a power outage or routine shut down, the ISS reloads itself using a cartridge tape loader built into the micro. Should reloading from the cartridge tape fail, the ISS requests a reload from the host. The SHARE host then performs a sequence that reloads the information automatically.

Remote Access Operator Intervention

Remote access calls (from rotary dial phones or push button phones not equipped with a polarity guard) can be automatically routed to a user-defined number (typically the company operator) after a set period of time. This permits the calling party to use the LDCS for placing long distance calls regardless of the type of phone being used.

Breaking Dial Tone - Remote Access Calls

On occasion, remote access calls cannot "break" dial tone. If this occurs, the ISS will remove "dial tone" from the line if no digits have been detected in the first 5 seconds. If after an additional 5 seconds, no digits are detected, the ISS can either generate a "reorder tone" or connect the caller to the company operator.

Other Common Carrier Access

This feature allows access to Special Service Common Carrier (SSCC) networks through the LDCS. Typically, the Other Common Carrier (OCC) provides the customer with a local telephone number and account code for access to the private network. Under SHARE, the user inputs the SHARE caller ID and desired long distance number. Then the LDCS connects the call to the proper output line and out-dials the local telephone number and access code automatically.

DISCLAIMER: Presently the ability to recognize signaling from the Special Service Common Carrier (SSCC) is not supported within the Other Common Carrier (OCC) access feature of SHARE 5.1. Due to the current limitation, Datapoint will not guarantee that all calls placed to an SSCC using the OCC access feature will be connected for completion to the destination telephone number. Additionally, the OCC access feature will not facilitate the use of United States Transmission Service (USTS) as supplied by ITT. This is due to the process used by USTS for inputting the user's authorization code.

Steve Ray
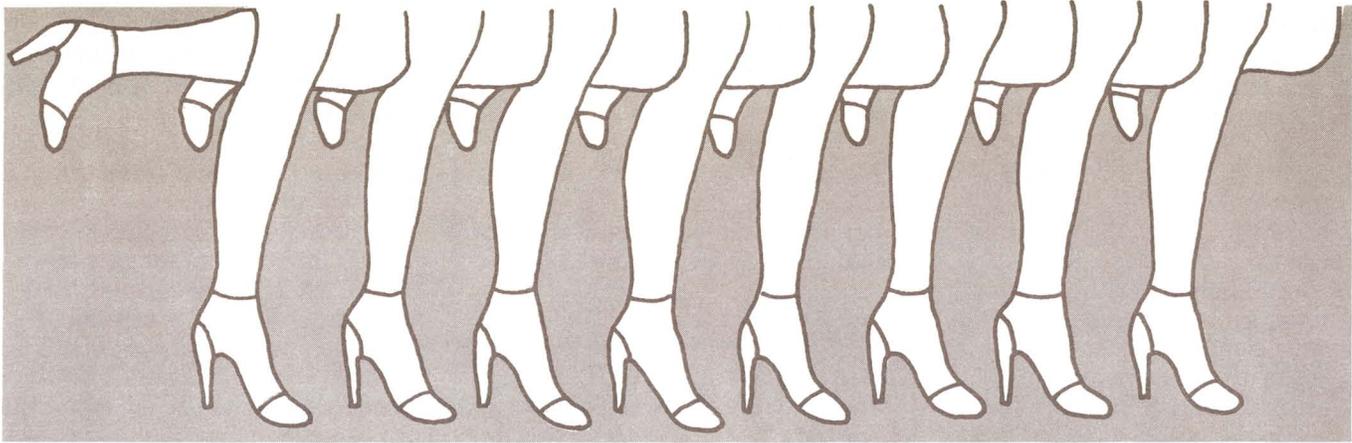
RMS/8800: At L'EGGS It's Looking Good

When you are running a $25 million mail order business and you are looking to triple your volumes over the next three years, you choose a computer system able to handle growth. L'EGGS chose ARC from Datapoint. And, more recently, they were among the first to convert from DOS to RMS™ and from their existing 6600-based local network to the 8800. A member of the RMS Blitz Team visited Winston-Salem and talked with Larry Page, director of systems for L'EGGS products.

Datapoint: Being a beta test site is normally an honor better bestowed on someone else. How come you volunteered?

Larry: Quite honestly, we had no real alternative. The sheer volume of data and the way in which we process it here at L'EGGS was beginning to stretch our DOS system to its limits and the projections for the future would only make the situation worse.

Datapoint: To say the least, your application sounds interesting. Could you take time to put it into perspective?

Larry: First, most people associate L'EGGS with hose packaged in "eggs" and delivered to retail outlets by good looking girls, excuse me -- good looking people. And, indeed, our retail sales reached $350 million last year. But, here in Winston-Salem, we also handle a thriving mail order business. Mail orders provide us with an outlet for "slightly imperfect" merchandise and for specialty items such as first quality white hose and stockings.

Datapoint: Stockings? Excuse me, but didn't stockings go the way of the dinosaur?

Larry: You would be surprised how strong the demand remains. Many people have an inherent loyalty to stockings and are extremely resistant to wearing panty hose. But it's not a market large enough to justify retail sales, yet it makes a significant contribution to the $25 million mail order sales achieved last year.

Datapoint: And, it's $25 million worth of orders that you are processing with your existing Datapoint equipment?

Larry: Yes. Our ARC consists of six 6040's serving as application processors, each with five workstations and three 6600's normally doing duty as file processors. Our task on a daily basis is to enter and process orders that, even today, can reach a peak of twelve thousand.

Datapoint: On a typical order, how many items are requested?

Larry: On an average, we see three items per order and as you might expect, entering these orders requires specialized application programs. After all, if you look at our current peak volume with our current configuration and our equipment to enter orders during an eight-hour day, orders have to be entered at the rate of about 80 per hour. My design criteria dictated that the limiting factor be operator proficiency and not processor bottlenecks. Our existing system achieves that goal.

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Datapoint: Then where is the bottleneck we talked about earlier? Is it your projected volumes?

Larry: To a degree our planned volumes could create problems at order entry time, but we could compensate by expanding our ARC to increase the number of data entry terminals and AP's. But our real problem occurs during the sixteen hours of the day we haven't discussed. When the entry clerks leave, the on-line system closes down and the batch system comes up.

Datapoint: What functions do the batch applications perform?

Larry: We take each order and commit inventory, back-ordering when out of stock. Additionally, the weight of each committed order is analyzed to determine the best possible method for shipping. We then generate picking lists to aid order fulfillment. And, we must produce reports for corporate and for this division. We also produce manifests for UPS. But our bottleneck is the customer file.

Datapoint: You must have a massive customer file!

Larry: We do, but it is not as massive as it might be. With DOS, we were caught between a rock and a hard place. Even with our customer file broken down into ten sub-files (using the last digit of the zip code), at around 38,000 sectors per data file we start running into problems. We just cannot allow the files to exceed that size. So at the end of the month, we purge customers who have not re-ordered lately.

Datapoint: As a result, most of your orders appear to be from new customers?

Larry: Right. Over 80 percent of the orders have the appearance of new business as opposed to repeat. And, here again, DOS ISAM is not the best at handling the add function. We spend three to four hours each night re-organizing our ISAM files. Even using "X" option indexing, we struggle to meet our 16-hour deadline. Can't expand. Can't add.

Datapoint: And, if anything goes wrong, like a power failure, you are in trouble?

Larry: Absolutely. And, looking down the road, we are calling for peak volumes reaching 30,000 orders per day, with the daily average being in the 24 to 26 thousand range.

Datapoint: Enter the 8800 and RMS?

Larry: Yes, we presented our dilemma to San Antonio and learned about RMS. If it could do what they claimed, then our bottleneck would disappear.

Datapoint: And, the 8800. How did you react to it?

Larry: Again, with some relief. Although we were not opposed to expanding our ARC by adding more processors, there is always the matter of economics to consider. Looking at entering 25,000 orders a day and using 6600's under DOS, we were talking about five or six additional processors for terminals, and even with RMS, an additional processor for file I/O. From sheer price/performance, the 8800 was most attractive to us.

Datapoint: How did you react to the need for conversion from DOS to RMS?

Larry: It was no big deal. It takes us less then an hour to convert a typical DATABUS®/DATASHARE® program and a little less for COBOL. Now, we did obey all the programming rules. Nothing fancy for us, mainly logical record I/O.

Datapoint: So conversion didn't bother you?

Larry: To the contrary, the conversion to RMS was quite beneficial. In looking at the facilities available under RMS, we found ISAM to be tremendously improved. As a result, we reworked our on-line order entry application to add customer records dynamically on-line.

Datapoint: You're saying that the capabilities of RMS encouraged you to look at the way you were doing things under DOS?

Larry: Yes. To really take advantage of RMS, it may be advisable to restructure and rework your applications. The benefits of our fine tuning far outweigh the time taken and the changes should not be of major significance.

Datapoint: So how does L'EGGS stand today?

Larry: We have three 8800 application resource processors, each with 768K and sixteen 8200 terminals attached, to handle our on-line entry and enquiry, plus application development. And we have two 768K 8800 data resource processors disk I/O. We've kept our customer file broken down into ten sub-files to get balanced throughput.

Datapoint: Is the system going to get the job done?

Larry: It did in San Antonio when we ran an on-line benchmark. We pumped the equivalent of 3,000 orders an hour through the ARC. We're quite sure it can get the job done, but we really have not tested the batch applications.

Datapoint: And, being a beta test site for not only a new operating system but also new equipment?

Larry: Let's say this: There have been good times and bad times. We've encountered some problems but Datapoint has worked with us. We've learned a lot and I believe Datapoint has learned a lot from us. The 8800's appear to be reliable and RMS is getting better every day. You could say -- things are looking good!

* *

L'EGGS is due to go "live" in mid-September and if all goes well, Larry Page will repeat and expand upon this interview during a video-tape session. The video tape will be released to the branches and be used as a training and educational aid for the sales force.

L'EGGS is also doing some very interesting things with a DOS ARC at a manufacturing plant in South Carolina. We will be looking at "Mail Order Live" and this other application later this year and we will be talking with Larry about his long range plans for an integrated ARC using ISX.™

Looks good, doesn't it?

Bob Harris

Computer Supplies Should Be Ordered Separately from Hardware, Software
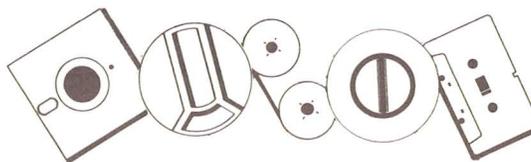
Computer supplies, listed in the Supplies Catalog (document number 80000), should not be added to an order that contains hardware or software. Supplies must be ordered separately.

To order supplies, follow these procedures:

For Customer Orders:

Both routine and emergency orders may be placed by calling the Customer Support Center (CSC) toll-free number 800-531-5770. Customers in San Antonio can call 699-7292; elsewhere in Texas 800-292-5100; in Alaska and Hawaii 800-531-5642.

Customer mail orders should be addressed to Datapoint Corporation, 9725 Datapoint Drive, MS-T82, San Antonio, Texas 78284; Attention: Customer Support Center.

For Datapoint Orders:

Datapoint offices must place routine supplies orders by completing the Inhouse Order Form (Document No. 60601) and mailing it to the CSC address above.

No phone orders will be accepted by the CSC. Emergency orders, which incur a 10% handling charge (or $10, whichever is greater), may be placed by calling Extension 4627 in San Antonio, and will be shipped to non-San Antonio locations. San Antonio personnel must pick up their emergency order at CSD Logistics (919 Isom Road). Walk-up service, available to San Antonio personnel, will incur a 25% or $25 handling charge.

For All Orders:

Routine orders will be shipped within 24 hours. Emergency orders will be shipped (or available for pick-up) the same day.

Software Services should no longer be contacted for supplies orders or supplies inquiries. Supplies inquiries should be caled in to the CSC's 800-numbers listed above. An answer to the inquiry will be provided within 24 hours.

Following these guidelines will assure prompt service.

Randy Mudarri

12

Extra! Extra!

ARCNET:
Another Word in Datapoint's Vocabulary

ARC — A modular computer architecture composed of hardware and software that utilizes separate yet inter-related units such as processors and peripherals; the primary advantage being the increase in net or aggregate capability each time a unit is added. The secondary advantage lies in high speed interconnection via coaxial cable allowing units to be placed where needed.

ARCNET — The local network component of ARC. Specifically, the coaxial link element that unites the ARC elements in a local network environment.

Another Word in the Datapoint Vocabulary—ARCNET

If you were lounging around the art-deco club in New York's St. Regis Hotel on September 9, you'd have noticed the place was full of Datapoint and Tandy personnel, as well as press and investment analysts.

The occassion? A joint announcement between the two firms that placed both in stronger positions for the future.

The announcement? Tandy stated that it will use the coaxial component of ARC to link its Model II microcomputers together in a local network. But that's just part of the story.

Some Background

Texas Peripherals—The Beginning

Tandy and Datapoint have had a joint 50/50 manufacturing plant in Midland, Texas, for the past two years. It supplies Tandy with 5-¼" diskettes and Datapoint with 8" diskettes.

What Tandy Needed—A Local Network

Tandy's Radio Shack computers had come up against a problem Datapoint knew a lot about. Their Model II microcomputer line couldn't grow to handle more applications without taking it into minicomputer class performance levels and seriously raising the software ante.

What Radio Shack needed was a way to link up their micros and add Model II units as needed — most of their applications were diskette based although a small 5MB hard disk is available.

A Tandy staffer mentioned that the local network concept seemed to be the near-perfect solution. The low cost of the Model II ($3,000) is based on a long production run on standard units. The software packages aren't designed for multi-user environments — their forte is one user, one processor. But times are changing for them too. Their customer base, composed of small business (and some major companies, too) were moving up from cassette (that's AUDIO cassette players, remember) to Model II diskette machines.

Their users' problems weren't unique. Once an application program was up and running the user was ready to load in the next — a task fairly difficult on these machines — and the next step was a killer. So the Radio Shack machines had evolved into little batch engines doing one task and then another.

The Local Network Circus

Until Xerox's Ethernet advertising struck, no one paid much serious attention to local networking. If you wanted to move some data, get a short haul modem or toss a tape across the room.

But the office of the future wasn't going to take tossing tapes around the halls. And the prospect of a slick coaxial cable to hang things on seemed like a neat idea. Local networking, as a concept, was born. Like solar energy, it seemed the only way to go.

Enter the Chip

While Xerox was blasting its capital away on advertising a product three years distant, Datapoint was finishing a process of reducing its local network interface, the RIM (Resource Interface Module) to a LSI chip. The RIM served for two years as the interface between the coax and the processor. This shoebox sized container held a

power supply, interface and logic necessary to run the RIM.

What emerged was an entire local network interface on a chip — a fairly spectacular achievement in view of the general chaos inside other companies simply trying to decide what the protocol on the coax will be. (Incidentally, the IEEE standards committee has still not reached agreement on what the Xerox/DEC/Intel Ethernet coaxial bus standard will be, which means their chip development hasn't even begun.)

So Datapoint simply decided on its own what an appropriate coax bus discipline would be and set forth. The Datapoint bus protocol has a faint resemblence to Ethernet although the basic effect is the same.

Re-Enter Radio Shack

Once the chip was done (and it's a Datapoint proprietary design) the cost of the RIM dropped. The new Datapoint 8600 series processors all incorporate the new RIM chip — the space occupied is so small that the entire local network interface fits on a small printed circuit board along with part of the 8600's processor.

(For more spell-binding scoop on this, see your 8600 product manual.)

Radio Shack had been shopping for a local network to use and had discovered that there really weren't any other networks that weren't spec sheet fantasies.

Datapoint's ARC was the number one installed system using a local network, but the bulkiness of the RIM and its singular application to Datapoint processors seemed to make it close, but no cigar. The chip changed all that.

The availability of a low cost chip plus the fact that ARC worked so well made Radio Shack ask Datapoint if it could buy the chip from Datapoint and use it as the local network standard for its TRS line.

Yep.

The answer was yes. Datapoint agreed to sell Radio Shack the chip. The circuit interface cards which interconnect the TRS Model II's together will be assembled in the Texas Peripherals factory in Midland.

In essence, Radio Shack selected Datapoint's interface over all others for the following rasons:

It Works. It Is Being Manufactured. Cost Is Low.

What Does Radio Shack Gain?

That's not a hard question. They received an almost instantly-workable local network interface which they will sell for $400. (Their press release is printed here.) No research and development costs, although they could have received the same deal from Xerox if they and Intel had finished their project.

On the down side, Radio Shack has a lot of soft-

ware development to do. None of their current software packages, application or otherwise, admit to the existence of a local network interface.

But the real gain comes from the fact that Radio Shack is the only personal/small business computer manufacturer that will have a working local network interface. Neither Apple, or North Star, or Ohio Scientific or Commodore have that capability.

As a side thought, Radio Shack considered that the local network was their single biggest way to overcome the multiple user application per terminal blockage — just like Datapoint thought four years ago.

What Does Datapoint Get?

A lot more than casual observers see. Let's look closely at the Radio Shack offering and see the whole system's structure.

Radio Shack to Radio Shack

Radio Shack chose to use the Datapoint terminology. Application processors, file processors and coax are all the same terminology. Radio Shack processors will access their diskette-based file processors or hard-disk file processor just like Datapoint does but on a much more primitive level.
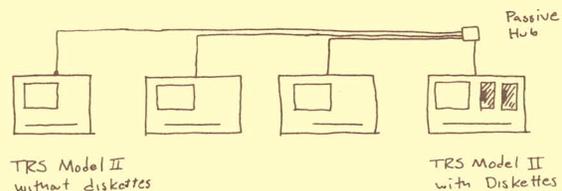
A Basic TRS Local Network using a Diskette Model II as a File Processor.
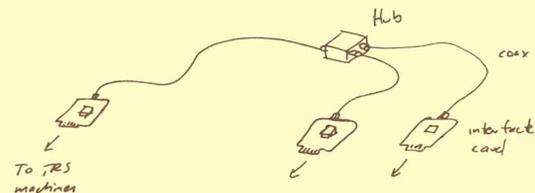
In the Tandy Radio Shack environment, ARCNET is composed of three elements: the coax, hub + the chip on the special card

Operation with a few application processors on a diskette based file processor will be slow but that's fine, since micro users aren't accustomed to the speed of commercial machines.

Radio Shack to Datapoint

One interesting aspect is the forthcoming ability for Radio Shack Model II machines to access a

Continued

Datapoint file processor.

Here's how it's done. Under RMS, a data pipe is constructed to read the RIM's connected to the Radio Shack Model II machines. Data received from the Radio Shack machines is converted as the packets come in into Datapoint file format and are stored on disk. This scheme works only under RMS and a utility to convert the TRSDOS format into RMS files must be available.

Most TRS users will probably migrate to a Datapoint hard disk for more storage

When a Datapoint FP is used, the files are stored in RMS format. Both processors may coexist on the network.
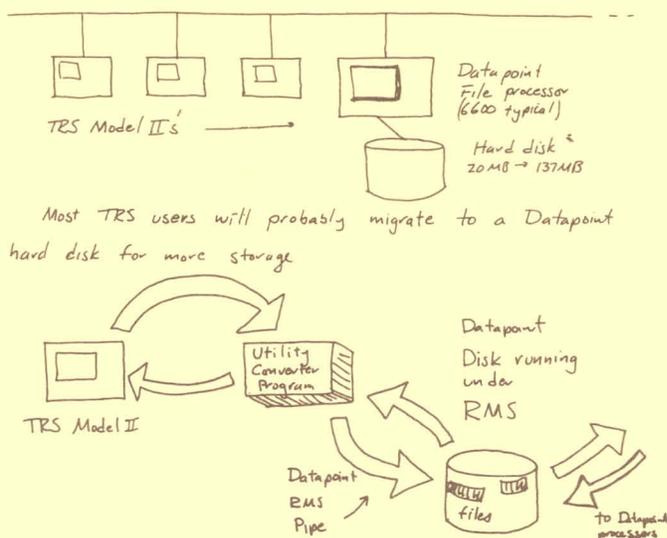
Mixed Datapoint and Radio Shack networks are definitely possible and probably likely.

ARCNET as a Concept

With the chip and some ancilliary circuitry, ARCNET could legitimately be considered a real tangible product, a first generation local network, if (and it is a big IF) the user takes the appropriate steps to interface the chip and its support circuitry to his own computer.

So ARCNET can be seen as a collection of three items: the coax, active or passive hubs, and RIMs. That's an ARCNET. Note that this doesn't include any software. If you want an ARC you have to have all the DOS or RMS software to make the system play together.
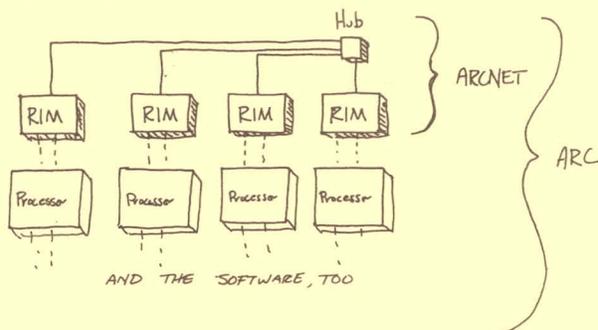
The shaded boxes show what ARCNET encompasses.

As we've said hundreds of times before, having a length of coax does not make an ARC and this still hold true.

The Impact to Datapoint

Very, very positive.

First, we gain in instant credibility. The world's largest manufacturer of personal computers selects our bus protocol for their operations — for them it has become a standard. That's three companies using the ARCNET protocol: Datapoint, Inforex, and now Radio Shack.

And Keep Grinning

Second, the population of networks to which our products can be attached will drastically increase. Industry sources estimate that Radio Shack has 300,000 machines installed so far. If we guess that they'll have 200,000 Model II's installed over the next two years and 30% of those (probably a low estimate) have ARCNET installed, that's 60,000 compatible networks. Figure that half of those have a Datapoint file processor on them. That's 30,000 incremental processors.

Not bad. You may argue that these numbers are low. They probably are.

And, More Important

Consider that Datapoint stuff works faster and better and is far more integrated than the Radio Shack equipment. We know that.

Consider that a Radio Shack applications processor costs about $3,000 and a Datapoint unit, about double that at $6,500.

If you were a Radio Shack user you now could easily migrate to Datapoint at a very low increase in cost. Remember that to a user who really needs a computer, an extra $3,000 for an applications processor that's faster and has better software is a small differential.

What About Large Corporations?

Most Fortune 1000 companies have micros appearing daily on the premises.

Only ARCNET can unite commercial Datapoint equipment and personal computer devices. If you were a large user, which business system would you now by? Datapoint, naturally.

Remember this, you have three things now which no one else has:

1. A working local network—ARCNET.

2. The hardware/software system known as ARC.

3. A local network now used, as a standard, by three firms, Datapoint, Inforex and Radio Shack.

Go into every large corporation and tell them this. It's what they need!

Gerry Cullen

Radio Shack and Datapoint Announce ARCNET for TRS-80 Model II Computer

Tandy Corporation announced that it will use ARCNET, the local network component of Datapoint's Attached Resource Computer, to provide a low cost high speed local network for its Radio Shack TRS-80® Model II microcomputer. ARCNET allows multiple computers to be linked into effectively large scale systems never before possible with microcomputers. Datapoint developed ARCNET as a part of its highly reliable, field proven Attached Resource Computer (ARC) system, in use since 1977.

ARCNET provides an inexpensive, efficient way to link a large number of computers together. Multiple TRS-80 Model II computers on an ARCNET can access common data bases, such as accounting, word processing information or electronic filing systems, and share the use of peripherals (printers, for example) throughout the network.

ARCNET can be installed at low cost, yet its high speed reliable operation is already well proven. It gives both existing TRS-80 Model II owners and new buyers a clear path for future expansion with the prospect that future hardware and software may be compatible. It provides a common data base to all users, allowing easy addition of sophisticated software to help managers with their business. It provides more computing power than is possible with a minicomputer of similar cost. And it can easily be configured to provide system redundancy so that the failure of any one unit will not halt operations.

Tandy will utilize the Datapoint ARCNET (Attached Resource Computer Network) protocols and software — and a new Datapoint LSI integrated circuit network interface component — to provide high speed, very low cost common-resource networking.

ARCNET permits up to 255 TRS-80 Model II (or future) computers and their peripherals to be interconnected. Yet ARCNET operates at so high a speed that even with a large number of processors in the network, a high throughput is maintained.

A TRS-80 ARCNET can also include Datapoint file processors, computers and peripherals. This permits adding Datapoint processors and peripherals, such as their 137 Megabyte disk memory and 900 line per minute printers, to a TRS-80 system, or TRS-80 application processors to a Datapoint network. Also, Tandy's recently announced bisynchronous communications software packages for the TRS-80 Model II permit linking an ARCNET system to certain IBM, DEC, and other mainframe equipment.

"Obviously, the size and power of the TRS-80 system has taken a quantum leap forward," stated Tandy Corporation president and CEO John Roach, "and Datapoint users have new flexibility in system configuration."

Only a few relatively inexpensive components are necessary to implement ARCNET with the new LSI network component from Datapoint.

An interface card is required in each computer on the network; it installs in existing card slots in the rear of the TRS-80 Model II. This card will be built by Texas Peripherals, a joint venture of Tandy and Datapoint, and sell for approximately $400."This price is substantially less," reports Roach,"than competitive network offerings."

The other necessary elements are common RG-62 coaxial cable and a junction box. Roach estimates that thirty feet of cable with connectors will retail for approximately $30. A junction box for up to four processors will cost less than $200, or an active junction box for larger systems will cost about $2000.

"Clearly," commented Roach,"this indicates Tandy's commitment to high speed, low cost local networking. We will implement ARCNET in our future product offering, which implies a high degree of compatibility between future products and the TRS-80 Model II. And clearly, it reveals a growth pattern for the TRS-80 Model II computer — the best selling computer in its class — for the office of today and the office of the future."

First delivery of ARCNET is forecast for the second quarter of 1982.
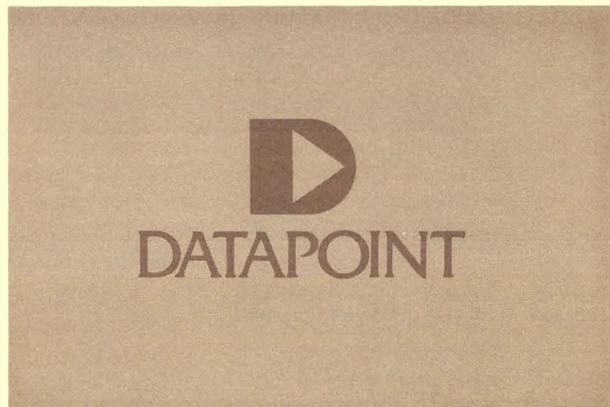
RMS 1.5 NOW AVAILABLE
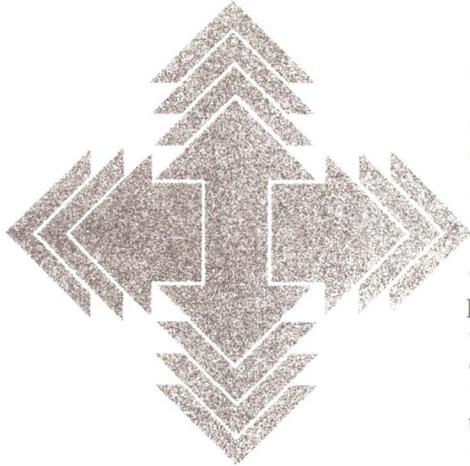
July 24, 1981 marked the availability of RMS 1.5, the most recent maintenance release of the Resource Management System. The major new items in RMS 1.5 are:

- Support of the 8600 as an Applications Processor
- 6600 and 3800 nucleus diagnostic loader
- BACKUP utility, which will back up any disk pack, including 135MB
- DCTAPE utility, which reads and/or writes industry standard 9 track magnetic tape formatted for transfer to other computer systems

Also, the following were modified to provide 8600 support or to fix bugs:
- CHAIN
- CONFIG
- FAR
- INDEX
- PACKGEN
- REFORMAT
- SORT

Included with the software release were updates to Volumes I, II, and III of the Utilities User's Guide.

Does your branch have RMS 1.5? How about all of your RMS customers? If not, contact Debbie Davenport at Software Services, X7320.

Carolyn Lusk

NEW from Customer Education
Custom Classes

Do some of your customers have special education requirements? Would they like an on-site, custom-tailored class? How about a one-week class which includes DATASHARE, Advanced DATASHARE, and ARC concepts? That class has been presented to a bank in Syracuse, New York. Or perhaps you need a DATASHARE/ARC class with total emphasis on security techniques. That has been done for a large customer in Pittsburgh. Got the idea?

Customer Education will work with you and your customer to provide the exact training your customer requires to ensure a successful Datapoint account. Call Peg Dolan, extension 7039, to discuss what you need and to get your request in now.

RMS/8800: Response to Questionnaire
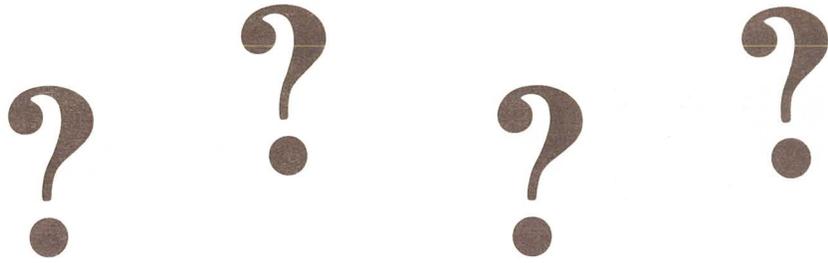
The results are in from the Systems Conference Questionnaire recently distributed to Datapoint SE's. The purpose of the questionnaire is to provide a channel of regarding areas of product concern, product needs and requirements, and product weaknesses and strengths as they apply to RMS and the 8800.

The information gathered will be valuable for evaluating where emphasis might be needed in Product Development, Sales and Support organizational structure, and Marketing Strategy. In short, it is to help provide an even more successful and marketable product in RMS and the 8800.

Many of the areas identified as areas of concern have been or will be resolved in upcoming releases of the product. Other issues are being investigated and resolved. Your help in providing feedback on the questionnaire is appreciated, and we are making every effort to put your suggestions to use.

Out of approximately 250 questionnaires distributed to SE's at the Systems Conference, 67 completed forms were returned. Of those responding, about one-half said they support both data processing and communications management products. Seventy-two percent of the SE's responding have RMS available in the office for demonstration. Thirty-five percent of them have actually done an RMS demo, while 62 percent have presented RMS and the 8800.

"On a scale of 1-10, how comfortable do you feel in dealing with the RMS and 8800 Products?" (1=Discomfort, 10 =Comfort)
1-3***************** 24.0%
4-6***************** 38.8%
7-10************** 37.3%

"What do you need in order to feel more comfortable with the RMS and 8800 products?" (Answers given are some of those currently being addressed.)

* More equipment and time to work on it
* More product brochures
* More training
* Re-entrant COBOL
* RMS experience
* Configuration guidelines
* Configuration tools
* More conversion techniques
* IEOS on 8800
* Future software release information

"What short term (6 months) features or capabilities does the product need to make it immediately more saleable?" (Answers given are those that are currently being addressed.)
* Word processing
* 8800 communications software
* 3270
* RPG
* Conversion utilities
* Increased documentation
* AIM/WP
* EMS
* COBOL large program support
* Greater DOS compatibility
* SNAP
* TABBED and partial I/O
* Higher level COBOL

"What features in the products are the most exciting to you?"

* 8200 can now be a multi-function workstation
* Device independence
* Performance
* Shared resources
* Multi-tasking
* Networking
* Security
* File Management System
* Expanded disk
* Flexibility

"Have we not made an RMS/8800 sale due to the lack of a feature? If yes, what feature was required?" (Answers given are those planned for release in Q1 and Q2.)

* 3270
* IEOS
* 8800 communications
* More installations
* EMS

"Do you have the tools you need to provide a proper level of sales support, both pre and post? What do you not have?" (Answers given are those that are currently being addressed.)

* Equipment
* Detailed training (sales/SE's)
* Experience on RMS/8800
* Benchmark data
* Presentations and slides
* Access to PRS
* Documentation

"What is needed to provide more comprehensive RMS/8800 training?"
* More classes in San Antonio and field seminars
* Video tapes
* Information on system analysis

Bob Harris
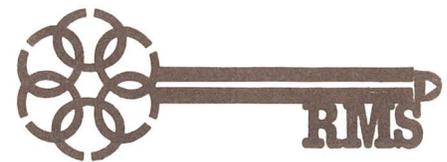
Software Release Summary

Symbol	Release Date	Description	DOS	UG	OBJ	Media
DCIOV1 2.3	7/01/81	ARC Direct Interface Option	D	50379*	9806	C(1)
ML15TC35 1.4	6/19/81	Burroughs Poll/Select Line Handler for DMBL15	H	50461	20634	ALL SSSD(1) DSDD(1)
EM3276S 1.1	7/22/81	SDLC IBM 3276 Emulator	DG	50639	9851	ALL C(1) SSDD(1)
DS61.2	7/27/81	DATASHARE VI	CDEG	50536*	9828	ALL C(4) SSSD(1) DSDD(1)
DBCMPLUS 3.2	8/04/81	DATABUS Compiler	CDEG	50321	20458 20459 40331	C(2) SSSD(1) DSDD(1)
DOS.D 2.7	7/27/81	DOS	D	50432	20581 40437	C(6) DSDD(2)
ARC 1.7	8/04/81	ARC	D	50299*	9801 20464	ALL C(1) DSDD(1) SSDD(1)
CHAREDIT 2.1	7/21/81	Character Font & Keyboard Translate Table Editor	ABC DEG	50604	20788	C(1) SSSD(1) DSDD(1)
EMGRTS15 1.1	7/21/81	Honeywell G-115 Emulator for 1500	H	50640	40463	ALL SSSD(1) DSDD(1)
EM3270 1.3	7/20/81	IBM 3270 Display Unit Emulator	H C G	50486-1*	9815 20681 40420 20682	ALL SSSD(1) SSDD(1) C(1)

*User's Guide not changed from prior release.

15

How Not to Edit a Library

Have you ever wondered what would happen to a word processing library if DOS EDIT were used on it? Perhaps a few of you have even tried it. Well, to say the least, it isn't a good way to go about editing a library.

What happens is this: The first three sectors (LRN 0, 1 and 2) are overwritten with the DOS edit header information. This typically wipes out the directory sectors of the WP library. Now, how do you fix this, since IEOS no longer recognizes it as a valid WP library?

Well, get youself a copy of DUMPMOD or MODDUMP.

What you have is a WP library which looks like this:

```
DRIVE:  0  FILE:  EDLIB/LIB  (260)      LRN:    0  (0000000)  PDA: 224,202
USER DATA SECTOR
0002000000000000011  0201100000000000000  0400000000000000000  0600000000011011111
   600056666666100       1244656164474474      4646646646646641      6614477314111202
   020320000000554       1400266510000010      0601501503005005      7550646460666332
   0    *0000000 ED      IT  2.6  1  8  9       6  15 15 30 50        75  &<>/N NNNSCR

DRIVE:  0  FILE:  EDLIB/LIB  (260)      LRN:    1  (0000001)  PDA: 224,203
USER DATA SECTOR
0002000000010111110  0200000110000000000  0400011111100111000  0600000000011111100
   6004444404021001      0410121467476667      6610121010121467      4766676710121010
   0305555545461351      3516256011001102      5145721112254021      0011323045721112
   0    %%%%%D%DVICE      %  JUN 19 8110:       51LEORIA  JUL 29      8113:38LEORIA

DRIVE:  0  FILE:  EDLIB/LIB  (260)      LRN:    2  (0000002)  PDA: 224,204
USER DATA SECTOR
0002000000000111110  0200000111000000000  0400011111100111000  0600000000011111100
   6000000000021001      0410121467476667      6610121010121467      4766676710121010
   0400000003461351      3516256011001102      5145721112254021      0011323045721112
   0         DVICE       %  JUN 19 8110:       51LEORIA  JUL 29      8113:38LEORIA
```

But, you know it should look like this:

```
            DUMP OF WORD PROCESSING LIBRARY BEFORE DOS EDIT

DRIVE:  0  FILE:  EDLIB/LIB  (260)      LRN:    0  (0000000)  PDA: 224,202
USER DATA SECTOR
0002003203310111110  0200000111111000011  0401111000011111110  0600033111002001111
   6007007700021004      4400220202442020      2202443022020224      4071210444500121
   0207027740461350      0030341453000045      3452000035245340      5074001000701400
   0         D DVICE          STATES    TE     STER     SUBTEST      %  LPHA   / ALPH

DRIVE:  0  FILE:  EDLIB/LIB  (260)      LRN:    1  (0000001)  PDA: 224,203
USER DATA SECTOR
0002003000000111000  0200000000011111100  0401110000000000011  0601111001111011111
   6007444444121467      4766676610121044      1214674766676710      1210446466455464
   0307000000256011      0011025145721100      2540210011323045      7211004534041221
   0         JUN 19       8110:51LEORIA        JUL 29 8113:38LE      ORIA  test libra

DRIVE:  0  FILE:  EDLIB/LIB  (260)      LRN:    2  (0000002)  PDA: 224,204
USER DATA SECTOR
0002003010000111000  0202222222211111100  0401110000000000011  0601111001111110110
   6007402444103466      4766676610121044      1214674766676610      1210445466464654
   0407033000511027      0011421245721100      2560220011320245      7211004544520470
   0    C    MAY 27       8114:12LEORIA        JUN 22 8113:02LE      ORIA  letter to
```

What to do? Well, it's easy. Using either of the aforementioned DUMP commands, modify bytes 003 through 011 of LRN 0 and LRN 1 to octal 001's. Like this:

```
         DUMP OF THE WORD PROCESSING LIBRARY AFTER MODIFICATIONS

DRIVE:  0  FILE:  EDLIB/LIB  (260)      LRN:    0  (0000000)  PDA: 224,202
USER DATA SECTOR
0002000000000000011  0201100000000000000  0400000000000000000  0600000000110111111
   6000000000666100      1244656164474474      4646646646646641      6614477314111202
   0201111111000554      1400266510000010      0601501503005005      7550646460666332
   0         000 ED      IT  2.6  1  8  9       6  15 15 30 50        75  &<>/N NNNSCR
```

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Then modify byte 011 in LRN 2 (which should be an octal 003 [End of Sector]) to 001 and write the modifications to disk. LRN 2 should then look like this:

```
DRIVE: 0  FILE: EDLIB/LIB (260)  LRN:2  (0000002)  PDA: 224,204
USER DATA SECTOR
0002000000000111110                    0002000000000111110
  6000000000021001      SHOULD BE        6000000000021001
  0400000003461351                       0400000014613510
         ↑DVICE                      0           ↑DVICE
```

After you have finished with the dump command, get into IEOS version 1.3.2. Version 1.3.2 is a must! Run the RECOVER command on the library. Please refer to the IEOS User's Guide for guidance.

Recover will indicate the directory sectors were bad and will ask if you want to change the library. You will have to say yes to have the directory reconstructed.

Please note, however, the library description will have been changed as well as all the document names. The document names will be renamed as follows: 00000x - x being an alpha character A-Z. Also be aware that any inactive documents in the library prior to the edit will be made current documents and also be renamed during this phase.

Now you know how to recon-

struct the edited library safely. Granted, there will be a little work to be done on your part to decipher which documents should be inactive and therefore deleted. But, the consolation is that you won't have to re-type all those documents. Happy editing!

Lee Hollow

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New Marketing Support Materials

The following new Marketing Support Materials are available through Software Services.

IEOS Quick Reference Card for Message Services -- document number 61010.

Message Services Section, IEOS Simplified User's Guide, Version 1.4 -- document number 50523.

Diskette Drive, Models 1401, 1403, 1404, Product Specification -- document number 61031.

Double Density Diskette Drive, Models 1411, 1412, 1413, Product Specification -- document number 60950.

Datapoint 8600 Processor Fly Sheet -- document number 61171.

Datapoint 20MB Disk and 20MB Tape Drive Fly Sheet -- document number 61208.

Datapoint 8620 and 8630 Systems Fly Sheet -- document number 61172.

Datapoint 160 CPS Matrix Printer Fly Sheet -- document number 60758.
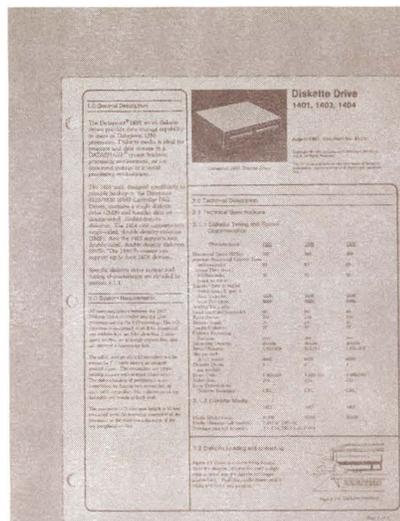
Document Number 61031
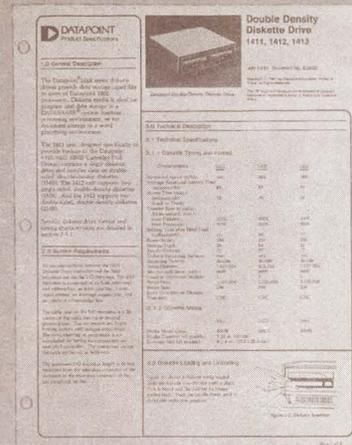
Document Number 60950

Document Number 61171
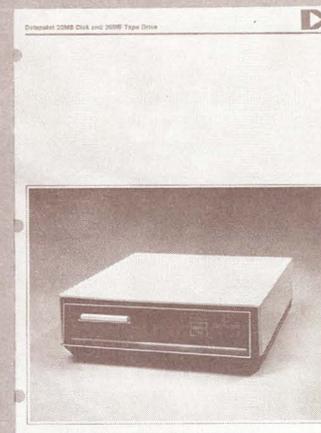
Document Number 61208

Document Number 61010

**Message Services Section
IEOS
Simplified User's Guide**
Version 1.4
Document No. 50523

Document Number 50523

Document Number 61172
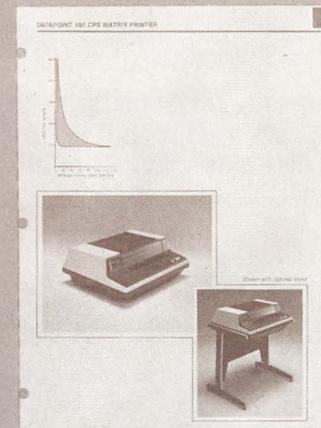
Document Number 60758

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AD

Schedule

September/October

'81

September Publications

Computerworld - 28th	Way Past the Drawing Stage
Communications News	ISX
Telecommunications	KSX
Modern Office Procedures	KSX
The Office	KSX

October Publications

Wall Street Journal - 4th	Systems That Work Together Now
Business Week - 26th	Systems That Work Together Now
Computerworld - 26th	Way Past the Drawing Stage
Datamation	Way Past the Drawing Stage
Communications News	KSX
Telecommunications	ISX
Modern Office Procedures	LDCS
The Office	KSX

Datapoint Systems Education

Class Schedule
September through October 1981
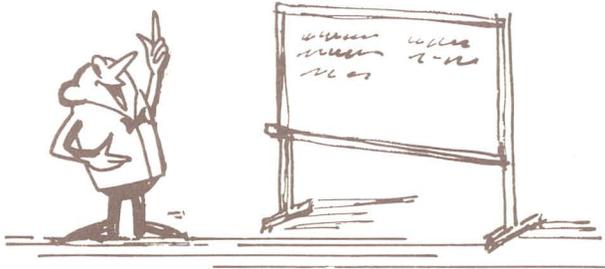
Course	Date
DATABUS/DATASHARE (5 days)	Sep. 14, Oct. 26
DOS/ARC (5 days)	Sep. 14, Oct. 26
DP Orientation (10 days)	Sep. 21, Nov. 2, Nov. 30
CMP Orientation (10 days)	Sep. 21, Nov. 2, Nov. 30
WP/EMS (5 days)	Sep. 14
EMS/Msg. Services (5 days)	Sep. 21, Nov. 2
Systems Orientation (5 days)	Oct. 5, Nov. 16, Dec. 14
Advanced DOS Systems (10 days)	Oct. 19
Data Comm 1 (10 days)	Aug. 10, Oct. 12, Nov. 30
RMSI - Transition (5 days)	Sep. 21, Nov. 30
RMS2-DB/DS/COBOL/Comm (5 days)	Sep. 28, Nov. 16, Dec. 7
Assembler 1 (5 days)	Oct. 5, Oct. 12
Assembler 2 (5 days)	Oct. 19
CMIS/IBP (5 days)	Oct. 12
ISX/KSX/CASH/CDR (5 days)	Sep. 14, Nov. 16
ASE Group 1, 2nd S.A. Phase	Oct. 26 (20 days)

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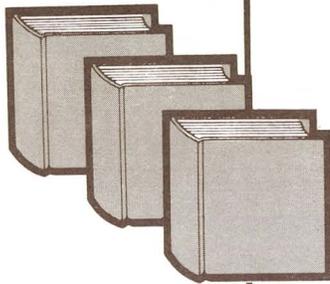
Sales Education
San Antonio
(formerly Marketing Education)
CLASS SCHEDULE
September 1981 - January 1982
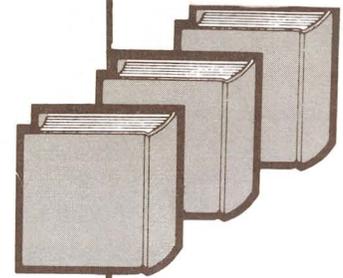
CLASS TITLE	DATES OF CLASS
Resource Management System™ Sales	Sept. 8 - Sept. 11
ISX/KSX/CDR	Sept. 14 - Sept. 18
Sales Orientation (DP)	Sept. 21 - Oct. 2
ISX/KSX/CDR	Oct. 5 - Oct. 9
ISX/KSX/CDR	Oct. 12 - Oct. 16
Sales Orientation (DP)	Oct. 12 - Oct. 23
Sales Orientation (CMP)	Oct. 26 - Nov. 6
CMP Cross-Training	Oct. 26 - Oct. 30
Sales Orientation (DP)	Nov. 9 - Nov. 20
Resource Management System Sales	Nov. 16 - Nov. 19
ISX/KSX/CDR	Nov. 16 - Nov. 20
CMP Cross-Training	Nov. 30 - Dec. 4
Sales Orientation (CMP)	Dec. 7 - Dec. 18
ISX/KSX/CDR	Dec. 14 - Dec. 18
Resource Management System	Jan. 11 - Jan. 13
Sales Orientation (DP)	Jan. 11 - Jan. 22
ISX/KSX/CDR	Jan. 25 - Jan. 29

Customer Education
Course Schedule 1981

CLASS	DATE	PLACE
Intro to Datapoint Programming	9/14	Arlington
	9/28	San Antonio
	10/19	New York
	10/26	San Antonio
Disk Concepts & Operations	9/14	Seattle
	9/21	New York
		San Antonio
		Los Angeles
	10/12	San Antonio
		Arlington
		New York
	10/19	Arlington Heights
	10/26	San Antonio
Disk Operating System	9/28	San Antonio
	10/12	Farmington Hills
	10/26	San Antonio
Resource Management System™	9/21	San Antonio
		New York
	10/5	Arlington
	10/12	San Antonio
	10/26	Arlington Heights
DATASHARE	9/14	San Antonio
		New York
	9/21	San Antonio
		Philadelphia
	9/28	San Antonio
		Arlington Heights
		Arlington
	10/5	San Antonio
		New York
	10/12	Atlanta
		San Antonio
		Seattle
	10/19	Los Angeles
		Philadelphia

CLASS	DATE	PLACE
Advanced DATASHARE	9/14	Boston
	9/21	San Antonio
	10/12	Arlington Heights
	10/19	San Antonio
Attached Resource Computer® (ARC)	9/21	Arlington Heights
	9/28	San Antonio
	10/19	San Antonio
Word Processing Concepts and Operations	9/14	San Antonio
		Arlington Heights
		New York
	9/21	San Antonio
	9/28	San Antonio
		San Mateo
	10/5	Arlington Heights
	10/12	San Antonio
	10/19	San Antonio
		San Mateo
		Arlington
	10/26	San Antonio
Electronic Message System (EMS)	10/5	San Antonio
Basic LDCS - Version 4	9/28	San Antonio
	10/19	Boston
	10/26	San Antonio
Advanced LDCS	9/14	San Antonio
Automatic Call Distributor (ACD)	9/21	San Antonio
	10/19	San Antonio

TRADE SHOWS

*Sep. 15-17	National Business Aviation Annual Convention (Computerware, Inc.)	Anaheim, CA
Sep. 15-18	Securities Industry Assoc.	New York, NY
Sep. 21-25	Telecommunications Association	San Diego, CA
*Oct. 1-3	Pacific Conference (GISI)	Reno, NV
*Oct. 2-4	National Office Products Show (Continental Data Systems)	Chicago, IL
*Oct. 7-8	Expo-81 Administrative Management Society (Datapoint)	Fort Wayne, IN
*Oct. 15-17	Professional Insurance Agents National Convention (MATRIX)	Washington, DC
*Oct. 18-21	California Independent Insurance Agents Convention (MATRIX)	Palm Springs, CA
*Oct. 19-21	Joint Meeting of American Society of Pathologists and American College of Pathologists (Medical Scientific International)	Las Vegas, NV
*Nov. 1-4	DPMA San Francisco '81 (Datapoint San Francisco Branch)	San Francisco, CA
Nov. 3-5	Federal Office Automation Conference (FOAC)	Washington, DC
*Nov. 4-6	National Oil Jobbers Council (General Info Systems, Inc. - GISI)	Philadelphia, PA
Nov. 17-19	SE Telecommunications Association	Atlanta, GA
Nov. 19-22	COMDEX	Las Vegas, NV
*Dec. 5-10	American Society for Hospital Pharmacists (Medical Scientific International)	New Orleans, LA
*Dec. 14-16	International Foundation for Employee Benefits Plans EDP Conference (ADSERV)	Hollywood, FL.

Any OEM or Datapoint Representative may rent the demonstration equipment, pending availability. Reservations are required six months in advance to ensure equipment usage on desired dates. For information contact Bonnie Cushman at (512) 699-7059.

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Model	Description	Qty.	Price	Maint.	Install.
4220	226 Processor, 5MB storage (two 2.5 MB Diablo Drives, 1 fixed, 1 removable cartridge). Controller. Multiport Interface, D/S software. Documentation		9000	205	500
4520	5500 Processor, 5MB Storage (two 2.5MB Diablo Drives, 1 fixed, 1 removable cartridge) Controller, Multiport Interface D/S Software, Documentation	1-3 4-10 11+	17750 16500 15550	234	650
4523	5500 Processor, 5 MB Storage (two 2.5 MB Diablo Disks, Controller, DOS Software Documentation	1-3 4-10 11+	16500 15250 14250	216	620
4530	5500 Processor, 48K Dual Disk and Controller, 20MB Multiport Comm Adaptor DATASHARE Software and Documentation	1-3 4-10 11-25 26+	24000 22500 21000 19500	331	775
4533	5500 Processor, 48K Dual Disk and Controller, 20MB DATASHARE Software Documentation	1-3 4-10 11-25 26+	22750 21250 19750 18250	313	755
4540	5500 Processor, 50MB Disk Stoage, Controller, Multiport Interface, D/S Software, Documentation		29450	497	1000
4543	5500 Processor, 50 MB Disk Storage Controller, DOS Software and Documentation		28200	479	970
4620	6600 Processor, 5MB Disk Storage Controller, Multiport Interface D/S Software and Documentation	1-3 4-10 11-25 26+	19950 18700 17700 16200	255	700
4623	6600 Processor, 5MB Disk Storage Controller	1-3 4-10 11-25 26+	18700 17450 16450 15000	221	670
4640/ 4644	Both: 6600 Processor, 50MB Disk Storage, Controller 4640: Multiport Interface, D/S Software, Documentation 4644: RIM, ARC Software, Documentation		36500	628 623	1000 1000
4643	6600 Processor, 50MB Disk Storage Controller, DOS Software and Documentation		35250	610	970
4740	256K Processor, Dual Disks and Controller, 50MB Multiport D/S Software and Documentation		39100	644	1000
4745	ARC File Processor 256K, Dual Disk and Controller, 50MB, RIM Adapor, ARC Software and Documentation		39100	639	1000
1131	Diskette 1130 Processor, 1 drive		2875	64	165
1132	Diskette 1130 Processor, 2 drives		3162	83	165
1133	Diskette 1130 Processor, 3 drives		3450	101	165
1134	Diskette 1130 Processor, 4 drives		3737	122	165
1174	Diskette 1170 Processor, 4 drives		5500	130	185
9381	Console Diskette Controller, 1 drive		2150	37	165
9282	Console Diskette Controller, 2 drives		2450	57	165
9383	Console Diskette Controller, 3 drives		2750	76	165
9384	Console Diskette Controller, 4 drives		3050	96	165
9385	Freestanding Diskette Controller, 1 drive		2150	37	165
9386	Freestanding Diskette Controller, 2 drives		2450	57	165
9387	Freestanding Diskette Controller, 3 drives		2750	76	165
9388	Freestanding Diskette Controller, 4 drives		3050	96	165
1108	Cassette 1100 Processor, 8K Memory		2200	75	80
2226	2200 Processor, 16K Memory		2400	113	100

Model	Description	Qty.	Price	Maint.	Install.
* 9260	600 LPM Printer 64 Char		13000	200	175
* 9261	600 LPM Printer 96 Char		13500	220	175
* 9280	300 LPM Printer 64 Char		8500	136	175
* 9281	300 LPM Printer 96 Char		9000	152	175
5548	5500 Processor, 48K Memory		10000	178	200
9350	Console Front-load 2.5MB Controller/Drive		2975	93	165
9351	Freestanding Front-load 2.5MB Controller/Drive		2975	93	165
9354	2.5MB Extension, Removable Cartridge. (no controller)		2400	57	125
9356	2.5MB Extension, Fixed Cartridge		2400	57	125
9357	Console Front-load 2.5MB Controller Drive, 4K Buffer Memory		3075	86	175
9358	Freestanding Front-load 2.5MB Controller Drive. 4K Buffer Memory		3075	86	175
9370	Freestanding 25MB Mass Storage Drive				
9371	25MB Mass Storage Drive Extension		7750	135	165
9373	Console 25MB Mass Storage Drive Controller		9950	178	250
9291	60LPM Printer, Parallel Interface		1995	56	165
9292	60 LPM Printer, Serial Interface		1995	56	165
9294	120 LPM Printer, Parallel Interface		1995	79	165
*9250	Console Servo Printer		1595	72	165
*9251	Freestanding Servo Printer		1595	72	165
9231	80 CPS Freedom Printer (Serial)	1-3	1750	41	165
9232	80 CPS Freedom Printer (Parallel)	4-10 11-25 26+	1600 1500 1395	41	165
*9235	160 CPS Freedom Printer (Serial)	1-3	1995	57	165
*9236	160 CPS Freedom Printer (Parallel)	4-10 11-25	1850 1725	58 57	165 165
*4640/9280**	4640 and 300 LPM Printer		41500	764	1000
*4644/9280**	4644 and 300 LPM Printer		41500	759	1000
*4643/9280**	4643 and 300 LPM Printer		40250	746	970
*4540/9280**	4540 and 300 LPM Printer		34450	633	1000
*4543/9280**	4543 and 300 LPM Printer		33200	615	970
* Print Pac I**	5556 RIM and (3) 300 LPM Printers		23000	452	675
* Print Pac II**	5556 RIM and (3) 600 LPM Printers		38450	644	675
* 4520/9232**	4520 and 80 CPS Printer		18500	275	650
3601	Datastation Terminal		995	21	35
3400	Acoustic Coupler		225	16	25
9401	Comm Adapter		450	18	25
9402	Comm Adapter		450	18	25
9404	Comm Adapter		450	14	25
9408	DATASHARE Modem, 1200 baud transmit 150 baud receive full duplex				25
9409	DATASHARE Modem, 1200 baud receive 150 baud transmit full duplex		450	18	25
9420	Comm Adaptor		450	14	25
9460	Comm Adaptor		450	18	50
9551	9 Track 800 BPI 8.5 in. Reel		4500	77	165
9581	9 Track 1600 BPI 8.5 in. Reel		7500	97	175
9583	9 Track 1600 BPI 10.5 in. Reel		9000	91	175

Prices are U.S. Dollars
**Special Ordering Information.
Those others that are bundled need to be ordered as individual lines items on Order Entry Form #60719.
*Temporarily out of stock.

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