

NEWS

International Telex Management System Automates Telex Operations

The International Telex Management System (ITMS) automates telex message creation, gives Datapoint® workstations telex sending and receiving capability, and permits conventional telex machines access to selected Datapoint databases. In limited distribution for a year prior to its general announcement, ITMS can be used in the United States and has been tested to PTT (Post, Telegraph, Telephone) specifications in six European countries, with several other countries currently in the approval process.

The user is provided a broad range of communications options when using ITMS in conjunction with Datapoint's ARC® (Attached Resource Computer™) local network. The range of remote access for network users is extended to international telex, and telex stations can gain access to the network.

ITMS includes a Hardware Interface Module (HIM) and associated

software that will allow it to be used on Datapoint processors in either a stand-alone configuration or as a component of an ARC local network. Datapoint has more than 4,800 ARC local networks installed worldwide.

Operating as a stand-alone system, ITMS requires a Hardware Interface Module, a Datapoint processor, a multi-port communications adapter and disk storage. The addition of a Resource Interface Module allows integration with an ARC local network. Each Hardware Interface Module permits interface to four telex lines.

A Telex Management System

"The International Telex Management System completely automates a company's telex room operation," said David C. Ruberg, Vice President of Software Products Division. "Conventional telex message input stations are replaced by low-cost non-intelligent terminals, or by most

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Datapoint's International Telex Management System

Price Reductions on 8620 and 10MB Disks

The 8620 System (8602 128K with 9310-1401) price has been reduced from \$23,950 to \$16,500. This price change is permanent and effective June 30, 1982.

Additionally, due to large inventories of 9310/20 10MB extension disk devices, between now and the end of Q1 (Oct. 30, 1982), the 9310 will be offered at \$5,500 and the 9320 at \$5,900 when ordered as an extension drive to a 9310/9320 system (i.e., 1554, 1555, 1816, 1817, 1818, 1819, 1820 and 8620). There will be no lease rate or quantity pricing reductions for these extension drives during this special period; they remain as in the price schedule. All orders at this

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SHARE Enhanced in New Release

SHARE™ 6.1, scheduled for release Aug. 16, features the following enhancements.

- * Expanded Routing Tables. The number of system wide routing tables is increased from 64 to 96.

- * Expanded Exchange Code Tables. SHARE 6.1 increases the number of exchange code tables from 78 to 320.

- * ITT Interface. The ITT interface allows customers dial-up access to Other Common Carriers that require a dialing pattern like ITT's "Dial Up City Call Service".

- * Input Line Analysis. A new report indicating the percentage utilization of all input lines during the day, this report is similar to the

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1550 vs. Personal Computers: The Questions That Must Be Asked

"Your 1550 is too expensive. I can buy a personal computer and do the same job."

Sound familiar? What can you say when someone makes such a statement?

Most prospects who make this kind of comment do not know what they are getting into. You can help a prospect understand why a personal computer may cost more than anticipated and may not do the job that is expected. Just ask him a few questions like:

What happens when your personal computer breaks?

Most personal computers are sold thru dealers who are also responsible for maintenance, just like your television. Would you put your business in the hands of a TV repairman? Because dealers will almost never offer service out of their area, if you have systems geographically dispersed, you could be in trouble.

How are you going to do your backup?

Most personal computers are sold with one diskette only: therefore, it is nearly impossible to do a backup. Can he afford not to have back-up? Some personal computers do not even check for parity on diskette or in memory. This makes data integrity questionable.

Ethernet's Latest Push: No Charge

A report from the field shows that Xerox may be offering Ethernet installations at no charge for six months to entice large corporate users to install their local network.

The offer includes no installation charge, no monthly maintenance charge and no lease charge with full-time SE support also included at no charge. The customer has the choice of picking up the lease or cancelling at the end of six months with no penalty.

The free trial program apparently exists under the marketing plan of

What happens when you need more storage?

Personal computers are very limited in their expandability and usually can support only one user. The 1550 can be expanded from 1MB to 40MB and support up to four users.

Can you communicate?

Most personal computers have the ability to communicate TTY and nothing else — often at the cost of more hardware and more software. The 1550 can communicate to almost any host at no extra charge.

Who fixes bugs in the software?

Where is no S.E. support to help fix a problem. A user will have to live with or work around any bugs.

Cost is the most important thing to the personal computer manufacturer. They build them cheap and they are cheap in every respect. The diskette in many personal computers is one 5¼ inch drive — not because that's enough diskette storage, but because it's less expensive to build.

Datapoint does not build cheap systems, but we do build quality, expandable ones. We stand behind our systems with world wide hardware and software support. In the long run, the 1550 is not only more capable but can be less expensive than a personal computer. □

*Rafael Maymi
Ext. 7151*



Datapoint 1550

installing at least six major sites in applications which display the most application potential.

Custom Programming Too

On top of all this expense, Xerox has been reported to be offering custom applications programming as a deal closer, again with no back-out penalty.

Expensive Selling Techniques

Ethernet hasn't been the raging success for which the seven-year multi-million dollar research program and megabuck advertising program called.

While selling against someone offering something for free is indeed

difficult, it should be apparent to the user community that Ethernet could have well reached "sink or swim" time, and this program could really be designed as the ultimate product acid test: see if you can give them away!

Beware

Beware: The Xerox man is coming after your ARC installations. There appears to be no new software or hardware from Xerox that meets the Datapoint capability but their pitch is strong.

Again, we're selling stuff that works, and they're selling futures. □

*Gerry Cullen
Ext. 5063*

Price Reductions continued from page 1
 special price must be requested for delivery prior to Oct. 30, 1982.

Coupling these two announcements together, a customer can purchase a 20MB 8620 System for \$22,000. In this regard, current 8630 customers may want to cancel their 8630 order and purchase an 8620 system with the additional 9310. Requested delivery date must be ASAP for the replacement order.

The following table provides the storage/cost relationship between 8620 and 8630 systems.

There will be an update to the price book soon.

For more information, contact Product Marketing, Small Systems at Ext. 7151. □

*Rafael Maymi
 Jim Whitehouse
 Ext. 7151*

New Supplies and Accessories Catalog Published

The new edition of the Datapoint Supplies and Accessories Catalog (Model Code 80000) will be published in August and mailed to all customer sites and field personnel. The products illustrated include magnetic media, printer supplies, cables and connector kits, integrated office furniture and many other products.

The catalog provides the model code and description for each product and indicates on which Datapoint hardware model the product is used. Ordering procedures are also detailed.

Pricing information is contained in the Supplies and Accessories Price List which is included with each catalog. □

*Randy Mudarri
 Ext. 5380*

PRICING INFORMATION

Model Code	Qty 1-3	Qty 4-10	Qty 11-25	Qty 26+
8620	\$16,500	\$15,675	\$14,850	\$14,025

Lease Price

Model Code	Maint	Instl	Rent	1 Yr	2 Yr	3 Yr
8620	\$209	\$430	\$770	\$615	\$550	\$505

Storage	8620	8630
10MB	\$16,500	—
20MB	\$22,000	\$33,500
30MB	\$27,500	—
40MB	\$33,000	\$41,500

CBG Version 1.3 Released

Color Business Graphics Version 1.3 has arrived. This is CBG for now and the foreseeable future.

New user's guides are available reflecting the features in this release (M/C 50651). Software model code is 9850.

Admittedly, the product does not contain all the features originally promised; however it is still the best color business graphics system on the market today. It is a product you can sell and support with pride.

These statements are based on first-hand experience with competitive products. At the recent National Computer Graphics Association conference in Anaheim, our competition was there, as well as the leading consultants in the graphics industry. In side-by-side comparisons, Datapoint's CBG is a superior product.

Why?

1. Our system is by far the easiest to use.

2. Our system is the only business graphics system which has both DRAW and CHART capabilities.

3. Our system offers color flexibility found only in systems costing much more.

4. Our system offers the widest range of peripherals maintained by a single vendor.

5. Our system provides a superior LIBRARY function.

6. Our PLAYBACK phase is superior to any other presentation format available.

7. Our data file interface is the most powerful available in a stand-alone system.

8. Our system is the only system which is integrated with other functions associated with office automation.

In addition to being the best color business graphics system on the market, CBG is also the best

attention-getter Datapoint has ever had. This product draws a crowd at every trade show where it is shown — not only at NCGA but also Interface (Dallas), Office Automation Conference (San Francisco) and Syntopian (Kansas City).

We use CBG to get people's attention and then we use CBG to tell the Datapoint product line story. It works!

I encourage you to use the system for customer presentations, not only for CBG but for every product in the product line.

Be creative. Use customer logos. Chart customer financial data. Configure systems.

Use the PLAYBACK phase for the presentations. The monitor has the greatest impact as a presentation vehicle.

This system will help you close business.

Green — now that's a nice color. But only one of over 16 million you can generate. . . □

*Al Malinger
 Ext. 5191*

CASH: The Foundation of Specialized Services

Selling professionals have a skill for diving to the bottom line of most issues, and their questions regarding Datapoint's Call Accounting System for Hotels (CASH) fall precisely on the fundamental question: Will the CASH product help us book any business?

The simple answer is yes. The subsequent "Who? How much? And why?" take some explanation.

OEM's Need Special Qualifications

With some exceptions, CASH business is third-party business, and these third-parties are a specially qualified group — OEM's who are geared to install and support the product in line with needs of the hotel industry. CASH must be a specific inclusion in their OEM agreement, and they must purchase the source code for the product in order to provide full system support and any additional features which their customers may request. And the success of these OEM's depends upon the added value of additional services.

CASH is the foundation of these specialized services. It performs the call costing and reporting task. Controlling the variables of this task, however, are the role of the OEM. Regulatory compliance, call revenue planning and accounting are complex issues. Coupled with the training and servicing needs of hotels, they require special marketing and management experience and focus. This is the advantageous "added value" which the OEM's give to the basic software and hardware from Datapoint.

Many members of hotel management, including those of large chains, have been in a wait-and-see position as issues continue to surface in this developing marketplace. There was a flurry of interest generated last summer with the FCC's permission of resale and the AT&T decision to discontinue its payment of commissions to hotels for collecting for long distance calls. This interest died down considerably as the commission was extended for another year, allowing hotels to continue operating as previously without any additional revenue loss.

The current cut-off of the commission is now January 1, 1983, and renewed interest in hotel call accounting systems will increase as that date approaches, as our OEM's are already experiencing.

The Exception to the Policy

The exception to the "OEM-only" policy regarding CASH is that it may be sold directly to end-user purchasers of the Long Distance Control System. The logic behind this exception is that these customers are large enough to have a telecommunications staff for the system management requirements otherwise provided by the OEM, and that the amount of hardware on site for a full LD/CS/CASH system justifies directly-provided Datapoint systems support.

Hotels in the Communications Business

The hotel industry is just coming to terms with the new business it finds itself in. Most hotel managers have never had to deal with the issues of communications management. They paid their phone bill and operator staffs, collected long distance charges from guests on the basis of what the phone company told them to collect, and got a little money back in the form of commissions, which some-



what diminished the losses they incurred by providing phone service. This service is now a possible source of revenue, and the ways, means, and accounting models are just being formulated, and these will be tested over the coming months. It is a new business being built, and Datapoint OEM's marketing CASH are in at the ground level.

Questions regarding OEM agreements involving CASH should be directed to Len Julius, Ext. 5163. □

*Ray Owens
Ext. 5219*

Informatica Ltda. to Distribute Datapoint Products in Colombia

Informatica Ltda. has been named a non-exclusive distributor of Datapoint® products in the Republic of Colombia. Informatica Ltda. is located in Manizales, Colombia, with a branch office in Bogota.

Jorge Eduardo Gomez is president and managing director of Informatica; Carlos Montes is vice president. Both men have extensive training and experience in the computer industry.

Informatica Ltda. was founded by Gomez and Montes in 1977 and initially functioned as a service bureau, supplying customers through-

out Colombia with a variety of software, timesharing and other related data processing services.

"We are very pleased to be associated with Datapoint," stated Gomez. "Datapoint offers an extensive range of data processing and communications products, and is considered one of the leading suppliers of integrated office products. We feel that, coupled with our management and support experience, Datapoint will establish a very strong position in the local marketplace." □

4730 System Offers Unsurpassed Versatility

Not only does the 4730 run both DOS and RMS, but it will also "talk" to Burroughs, CDC, Univac, Honeywell, NCR, DEC, IBM and just about any machine capable of communicating.

What about programming languages? COBOL, FORTRAN, BASIC, RPG, DATABUS and ASSEMBLER, not to mention our on-line business transaction processing capabilities with DATASHARE, are just some of our well proven, off-the-shelf software offerings.

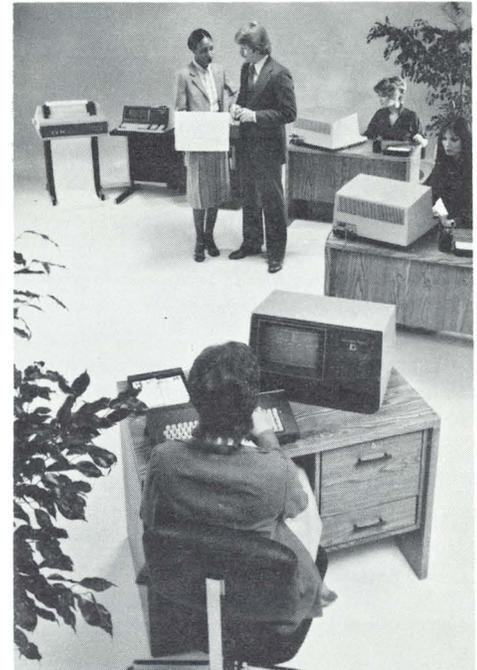
The 4730 system versatility remains unsurpassed. What other hardware configuration could possibly offer capabilities to include

stand-alone DATASHARE, stand-alone batch processing, channel adaptor for direct connections to IBM mainframes, a file processor for DOS/ARC or a Data Resource Processor for RMS?

This system is routinely used as a network controller for EMS. In addition, the 4630 and 4730 systems are an integral part of our "bread and butter" communications management products systems—such as LDCS and CMIS.

Most importantly—the 4630 and 4730 systems are readily available. □

*Steve Parrish
Ext. 7151*



A DATASHARE system with workstations.

ARCNET and Network Standards

On June 3, Standard Microsystems Corp. announced the "First Commercially Available Single Chip Local Network Controller." Through a license with Datapoint, SMC will sell the RIM chip to industry suppliers.

What is the significance of the RIM chip being available to the public? Just remember what George Kotelly, Senior Editor, wrote in the Feb. 17, 1982 issue of EDN: "A local-network standard will develop a huge market, not a lot of tiny ones, just as the IEEE-488 standard has done for programmable instruments. Companies make more money sharing a huge market rather than designing (individual) proprietary interfaces. Basically, economics is driving the local network standard, not (individual) technology."

With the SMC announcement, the RIM chip is now in the network standards race. Let's look at some of the details.

The Product

SMC is offering a low cost (less than \$100 in single quantity), single VLSI chip which contains a micro-programmed sequencer and all of the

logic circuitry necessary to allow and enable token passing and data transmission.

The chip establishes the network configuration and automatically reconfigures the network. It performs address decoding, CRC checking and generation, packet

The RIM established the hardware interface for coax linking of multiple devices and users.

acknowledgement and other network management functions. It interfaces to the host processor through a multiplexed address/data bus similar to an S-100. Interface to the coax network is via an external link transceiver.

A Few Words On Networking

Networking, in a classical sense, is the interconnection of multiple transceivers. The real issue at hand would more aptly be termed network management and control. Unless all parties on the network are exactly the same and do exactly the same thing,

the same way, management is essential.

Some form of control is essential even if these criteria could be met. The RIM (controller and transceiver) establishes the hardware interface for coax linking of multiple devices and users. A good analogy is the RS232C standard for interconnecting devices via a serial, synchronous line. It is the first step in establishing the ability for two or more users to conduct a joint remote transaction.

The other steps? Having established the link itself, some jointly recognized language is necessary or the receiver will get something that he can't recognize. These are the software protocols normally manifested as message headers or footers associated with link control. HDLC and SDLC are examples.

If the network has two users or devices, it can stop there. Add a third and still more management, aimed at controlling contention and routing, is required. This is the transport layer of the ISO Reference Model. It is exemplified by SNA and X.25. It will allow, with a bit more management or

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Multiplan Video Tape Aids Sales Efforts

Datapoint Marketing Education has recently finished production of a video tape highlighting the Multiplan Financial Modeling Package.

The short (seven minutes) tape points out the features that set Datapoint's Multiplan apart from modeling software packages offered by other vendors. It also emphasizes Multiplan's superior integrative abilities, which allow it to share information with Data Processing, Word Processing, Electronic Mail, Color Graphics, etc.

The tape, prepared under the guidance of Jonna Lee Masters' Educational Planning group, with Lisa DuBois and Deck Yoes directing and producing, can be used in many ways. It is suitable for internal use in familiarizing sales personnel with Multiplan, as well as for use in some customer sales presentations.

All sales offices, branches and regions that have video equipment will be sent one no-charge copy of the video tape. Extra copies may be ordered through Software Services by requesting model code 61394 for 1/2 inch, or model code 61395 for 3/4 inch versions.



Though the tape does not use professional actors (you'll probably recognize a few of your friends), the quality of the production is top notch. It is a perfect tool for showing how well Datapoint products integrate

with each other, which lets our customers get the most out of their systems. □

*Scott Cannon
Ext. 7151*

*"Multiplan" is a trademark of Microsoft, Inc.

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emulation, batch oriented transactions between users. It, like the link control, involves insertion of definitional data bits in any transmitted message.

If the network is to progress past batch transaction transmission, more is necessary. A few of the possible steps in advancing the capability of a network are:

- Common file structuring. If files can be structured commonly then they can be accessed by more than one user. Business can be conducted at the file level, rather than the bit level. This is economy of scale, since a file contains many bits.

- Multiple file/user access. If files are common in structure, further management can allow multiple users direct access to the multiple files of other users. A network could then move data more efficiently, in larger pieces. Only the requiring user needs to open, read, modify, or write files.

- Shared resource. Transmission costs. Moving data across the network ties up the network for other

users and requires overhead not necessary if you could be operating in a totally local node. In a network, a transaction can be accomplished by doing it yourself — and paying the efficiency penalty to do it — or getting someone else to do it or part of it. The latter is shared resource.

Public access to the chip will not solve these problems. It is the first step, however; a step that could well lead to some interesting consequences.

The Market

There are, by one count, 300 suppliers producing small business computers (and over 500 suppliers producing software for them). Personal computers, professional computers, microcomputers, minicomputers — the names and roles vary with time and user need. There are, however, some common denominators. They aren't big — in cost, physical size, or complexity. They are largely interactive. Users don't load in a large amount of data and then await a result. They don't

have high speed channels for I/O, because they don't need it.

What they need is the ability to be, at times, bigger than they are. We've seen this manifested with terminal support (more screens, more users) and communications support. The industry is establishing this extensibility of the small machine as an absolute requirement.

In the recent past, ranking executives from Tandy, Fortune and the Yankee Group have separately unequivocally stated that the small machines must be integrated. With over 300 different varieties, that integration is a prodigious task. It can be done. ARPANET has successfully allowed a level of interactive integration of large machines.

IBM, through sheer force of market resource, has achieved a type of integration through the large scale standardization to 3270 attributes (i.e., if every screen/keyboard device can look like a 3270, then we have integration). Hewlett-Packard had a measure of success with the HPIB bus

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Channel Adapters with IBM 43XX and 30XX Mainframes

Recently I have been receiving telephone calls asking if the channel adapter product can attach to the IBM 43XX series and 30XX series mainframe computers. The answer is Y E S !

The simple requirements are as follows:

1. An IBM mainframe with a byte multiplexor channel.
2. An IBM operating system correctly "gened" with the ability to use the appropriate unit record devices emulated by the channel adapter software (or someone who knows how to gen one).
3. A customer looking for the features provided by the Datapoint channel adapter hardware and software combinations under DOS.

If you have access to these three things you have a sure sale. Consult the user's guides for the channel adapter products, MLCI, DASP, CHIOUR and DCIOV1, for the particulars. □

*Ted Rohling
Ext. 7151*

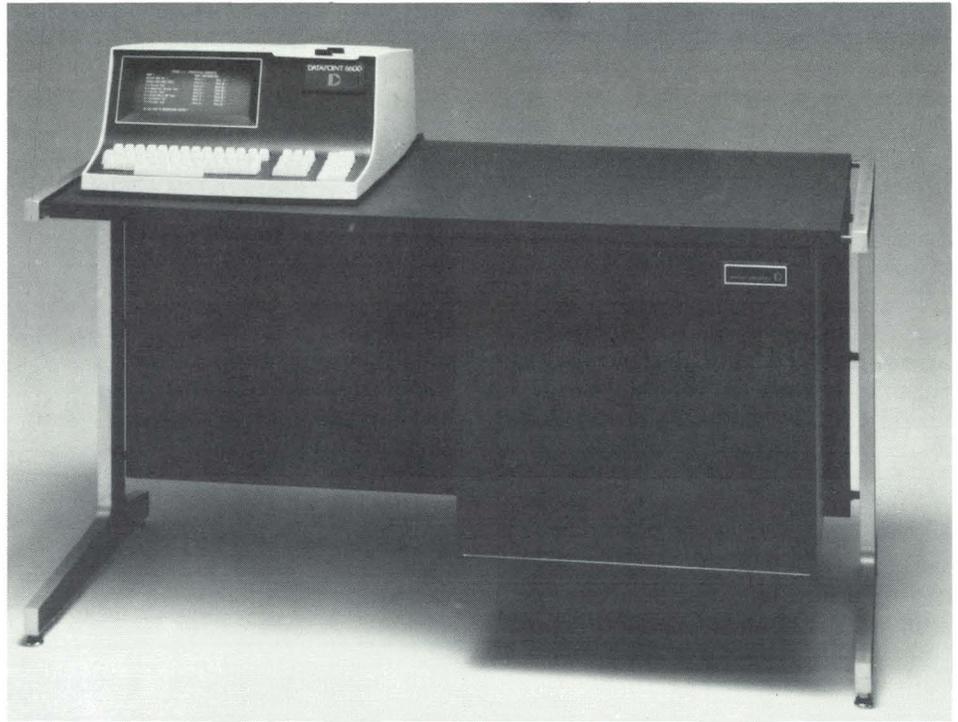
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which was later standardized. But no one has really solved the problem of interconnecting unlike devices.

ARPANET may expand beyond the current university/research user group, but it is special purpose and expensive. Each interconnect is unique and complex and unless

There are, by count, 300 suppliers producing small business computers.

there's a mainframe in your life, why try to look like a 3270? For the small computer supplier and user, there has to be a better answer. With annual shipment forecasts of five million (over a million in the "Personal Computer" area alone), the answer needs to be a good one. There's a message here.



Ethernet

Xerox claims to have a solution. By getting everyone to use the same interface (their chip, currently being developed by Intel) and network management (they have established and published specifications for all the controlling software), they could provide that integration. Xerox has sold over 140 licenses for Ethernet. Many went to some of the 300 system vendors (others went to suppliers wishing to build various network peripherals).

The Ethernet license allows access to Xerox's technology — hardware and network control software — but not much else. Ethernet installations, according to a Xerox spokesman in April of this year, number approximately 75. Ethernet nodes cost approximately \$2000 to interconnect, targeted at \$700 once Intel finishes their chip development. Ethernet would like to be the network integrator for those 300 machine types. It is unclear, at this time, that they will achieve that goal. Cost is high, for a common backbone.

Xerox used the relatively complex technique for contention based access, CSMA/CD. While other

network attributes (e.g., topology, baseband or common broadband) can be varied without major impact on the interface electronics, the control technique impacts these electronics directly. With IBM espousing token passing, a great industry rush to an interface standard that excludes token systems is unlikely.

Wangnet

Wang has publicly indicated that their network is a private link. They will develop gateway technology to private and public networks. They will probably unbundle at the interface to allow interconnect of special purpose peripherals (Wang has made two unsuccessful tries at Telex interface not unlike part of Datapoint's ITMS). Given the proliferation of Wang small computer clusters, in the IEO and the Fortune 500, networking is an idea of major interest. It will probably be WangNet and probably be private.

Ungerman-Bass

Ungerman-Bass's Net One is one of 50 or so advertised LAN's. Perhaps more importantly, U-B is marketing a

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Network Interface Unit (NIU). The NIU combines the controller and transceiver, with some net management logic and RS232C interface electronics. Success or failure in the market (the NIU is reasonably expensive and needs some population of installed networks to be fully viable) cannot be judged at this time. That U-B would undertake this effort is, however, an indicator.

IBM

As in the song, IBM "just keeps rolling along" (that's Old Man River, for younger readers). IBM has announced a baseband, token passing, closed loop network. Its universality is to be determined. It will undoubtedly adhere to SNA/SDLC architectural considerations, which will give it a degree of industry standardization at the start. IBM will be a factor. We're not sure how much. As a footnote, IBM has announced the upward compatibility (networkability?) of their Personal Computer.

IEEE 802

The local network sub-committee appears to have lost some momentum. The standard currently in draft is general and, based on inputs from IBM Research, under intense study. One suspects that the IEEE would welcome a standard trend from a viable supplier with installed systems.

Ma Bell

AT&T owns the phone network. With recent legislation, everyone is wondering what Bell is going to do with their still substantial control and always healthy budget. The Carterfone decision took Bell out of the exclusive interconnect business. A standardized, industry accepted interface could be a major step back to that position of strength. Fifty vendors all utilizing the same hardware interface would be a powerful incentive. Figure it out.

CP/M, MP/M, UNIX, Etc.

Common operating system software is establishing a level of standardization. Of itself, it does not solve the problem. CP/M* is single user, non-multi-tasking software,

without major communications support. MP/M is multi-tasking but has neither the level of maturity nor acceptance of CP/M. All CP/M packages are not the same, further limiting the transparency. Differences are normally transparent to the user and his application, but can be a factor within the system. Network communications begins and ends within the system. UNIX, which is five or six years old, is adaptable to networking and multi-tasking.

IEO

The three most important and generally agreed upon factors in the emerging and evolving IEO are:

The Multi-functional/Workstation Applications Software Office Integration (Networking)

The multi-functional workstation, whether it be a personal computer, shared logic terminal or low cost applications processor (Datapoint's front entry) is the hardware hub and

The user wants a network that will integrate not only his function, but also those of his suppliers.

key ingredient to the office of the future solution. Office buyers will demand turn-key capability, which means applications. Finally, the office user has been hit with

- A slow economy and personnel budget constraints.
- The beginnings of a major secretarial/clerical shortfall.
- Ever increasing pressure to reduce information float and get office data faster and more completely.
- A decentralization cycle, with more and more remote transactions.

The answer to that problem is distributed data processing, distributed data management, interactive communications, resource sharing and the security, transaction logging, and management to make it work — full integration.

One Conclusion

Datapoint—

- Is rapidly approaching installation of its 5,000th local network.
- Has added remote networking (ARCLINK™) capability.

- Already has a multi-operating system network.
- Has the lowest interconnect cost in the industry today.
- Has other companies operating on, or planning to operate on, an ARCNET: Inforex and Tandy.
- Was the first supplier to announce integration of a Local Area Network and a PABX.

We also offer a system — processors and peripherals — adapted specifically to network applications. Not stand-alone process control, not clustered word processing and not mainframe replacements for "front office DP", but networks and dispersed data processing.

The software that makes that network work is, of course, bundled and proprietary. We are not and cannot compete directly with Xerox if they want — as it appears — to do major business installing networks for those 300 system types.

All indications are that no one supplier — with the possible exception of an IBM, Phillips or AT&T with their established leverage — could do that job and Datapoint doesn't want or need it. However, the user wants a network that will integrate not only his function, but his suppliers. He wants what Xerox could offer with an industry accepted Ethernet.

From Datapoint, today, he can get:

- Proven technology.
- In-place networks (35% of the Fortune 20).
- Ability to mix several suppliers' hardware.
- The lowest interconnect cost.

It isn't the total answer, but it's not a bad start.

More Conclusions

SMC is a growing semi-conductor supplier specializing in special purpose micro-electronics. The chip is available, with supporting documentation, in quantity today. On the other side, over 75% of the 300 suppliers are in business because they can take, or have taken, available technology and developed a new use for it. They do it quickly, as three to six months for development is a long cycle.

It isn't stretching a point to project that a number of these companies would buy the chip, integrate it and

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offer a networkable product — this calendar year. They can offer it to any Datapoint customer — possibly. But they can also offer it to any user, with the added value of a built-in network interface. The more imaginative and aggressive ones will include link control software. Or integrate it with a S-100 bus, as close to a standard in small business machines as anything.

How about the Independent Sales Organization (ISO)? ISO's are in business to integrate commercially available components into a working system. The scenario in which Speednet — an imaginary ISO — takes the chip, an S-100, a handful of components and some software and develops a micro-net, is not a flight of fantasy. Datapoint has been successful with upward compatibility — gaining account penetration because we could interconnect with an installed mainframe.

How much can we increase that success by also being able to offer compatibility, if limited, to installed personal, professional and small computers generally? One suspects there is not much in the way of limit to that potential.

Epilogue

The Integrated Electronic Office™ is a multi-billion dollar industry. So are local networks, small business machines and distributed/dispersed data processing. The common denominators in all of those markets are:

- Cost and added value.
- Standardization.
- Networking.

The microcomputer revolutionized EDP. Could ARCNET have a similar impact? □

*Bob Harris
Ext. 5212*

**"CP/M" is a trademark of Digital Research, Inc.

Demo Software Available

Have you been bitten by the demo bug?

If you are having problems finding demo material for DOS, the solution can be found in Software Distribution. Order model code 20835 to get a 10MB rendition of the DOS demo material including such things as SUPERDEMO, a DB/DS demo, BASIC demo for BASIC programs, COBOL demo, communications emulators for comm demos and a raft of games.

As usual you will be billed for the media unless you provide it.

An RMS™ demo pack is in the works. Stay tuned to this publication for release information. □

*Ted Rohling
Ext. 7151*

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Datapoint processors, and can be decentralized throughout an organization. Record keeping and traffic flow management is performed by ITMS, thus retaining centralized control."

With ITMS, a message can be created at any workstation using text editing software. The message can be reviewed on the screen and easily modified if necessary without rekeying the entire message. Then it can be queued for transmission immediately, or stored for later delivery.

An ITMS system automatically performs several functions that would normally require the intervention of a telex operator, i.e., dialing and redialing a number, and sending and receiving messages. The telex room supervisor is able to control system operation by defining routing instructions and delivery priorities.

ITMS provides the ability to generate messages automatically. This feature is useful for the creation of multiple messages which differ by a variable. For example, a bank that sends out daily account balances to its customers can use ITMS to send the statements automatically. A DATASHARE® program can be written which searches a database to

supply the value for the variable for each account, then ITMS will transmit the statements automatically.

Text Editor and Mnemonics

Message creation and modification software features are supported by ITMS within the text editor. A message can be input, reviewed and edited on the screen. The editor limits the number of characters per line to the telex-defined maximum of 69 and indicates to the operator characters which do not translate to telex-standard Baudot code.

At any time, the supervisor can define mnemonics (symbolically assigned names) for workstation addresses, destination numbers, answerback codes and specific international record carriers. The mnemonic may also designate whether delivery should be immediate or delayed. Mnemonics can be modified by the supervisor as required. If a mnemonic is not designated for a particular address, the telephone number, answerback, carrier and delivery priority can be provided when the message is queued for transmission.

Transaction Logging

ITMS software will record statistics on the number of messages sent, trun-

cated or rejected. These statistics can be accessed by the supervisor for message cost reports.

Telex Machines As DATASHARE Terminals

Through the use of ITMS, telex machines can be allowed access to a Datapoint network database. A user may program ITMS to allow an interactive connection for database inquiry or data entry and to run DATASHARE programs.

International Communications

ITMS can be installed in several countries including the United States. The Hardware Interface Module (HIM) is designed to conform to regulations in France, the Netherlands, Norway, Switzerland, Belgium and the United Kingdom. Approval is underway in several other countries around the world.

Datapoint's International Telex Management System is available immediately. □

Hardware Interface Module Pricing

9171 HIM	\$18,255
Monthly Lease Pricing	
1 year	\$680.00
2 year	610.00
3 year	555.00
Maint.	185.00
Install	225.00

Data General Comprehensive Electronic Office

(The following was prepared by Software Products Division Strategic Marketing.)

Introduction

Data General has recently announced their entry into the office automation field, the Comprehensive Electronic Office. These offerings consist of a local network, and a set of new software products which run on existing DG hardware. These new software products run on any Eclipse or MV/8000 running under the AOS or AOS/VS operating systems.

The Xodiac Local Network

The XODIAC* local network is a coaxial cable based system utilizing baseband token passing technology. The network supports up to 32 nodes on a cable of no more than 1 mile in length. ARC allows up to 255 nodes on one network, and a maximum distance between the two *most distant* nodes of 4 miles.

The coaxial cable-based local network is a recent addition to the XODIAC network architecture that was previously in place. Data General claims that access to the local network, leased lines, and public and private X.25 networks is transparent to the user and the applications programmer.

HARDWARE

XODIAC Network Bus system	
4460 NBS Node (4461 & 4462)	\$ 3,400
4461 Wallbox	2,000
4462 Controller Unit	2,500

CEO Electronic Filing

The CEO file structure is very similar to that of a traditional office. Each user has a private file cabinet. Within each cabinet, the user may have an unlimited number of file folders, each of which can contain an unlimited number of documents.

Documents are discarded into a "wastebasket", but may be "uncrumpled" at any time before the janitor empties the wastebasket. The janitors schedule can be customized to suit each departments needs.

Users may search for documents whose names and locations are

Datapoint IEOS Vs Data General CEO

	DATAPPOINT	DATA GENERAL
Local Network	YES	YES
Clustered Word Processing	YES	YES
Electronic Filing	YES	YES
EMS	YES	YES
Financial Modeling	YES	NO
DDP	YES	YES
Calendar Management	NO	YES
Tickler	NO	NO
Data Communications	YES	YES

unknown by specifying query language constructs like "Display all documents received from John Doe since November 1, 1981". The ability to search for any keyword in the text of the document (AIM) does not appear to be present at this time.

CEO Electronic Mail

CEO electronic mail can send messages, documents, or graphics to local and remote users. Users may be identified by names, title or an alias. Mail may be certified (sender is notified upon receipt of mail), or returned if the user refuses the mail. Mail sent urgently will cause the receivers message count to blink.

When mail is received, it can be filed, reviewed, forwarded, or replied.

Electronically filed mail may be accessed by any of the methods mentioned previously.

CEO Administrative Support

The CEO Administrative Support package includes a calendar for each person. The calendar package will allow users to request a meeting time for a specified group of individuals, or the package can be allowed to find the first available time which the listed participants have free.

Calendars may also be established for department resources like conference rooms or audio visual equipment.

Access to calendars can also be restricted for security reasons.

Present Information Presentation Facility

The Data General PRESENT Package allows the user to query a database or a file based upon multiple selection criteria. PRESENT output may be in the form of text or graphics in a terminal, or on a hardcopy printer or plotter.

PRESENT software requires DG's CODASYL-compliant DG/DBMS database software, or AOS and AOS/VS files.

A major weakness of the product is the necessity for the user to enter the view mode in order for the document to be viewed in its printed format. In other words, the WP software must make a pass through the document in order for it to be correctly formatted.

CEO Word Processing

CEO word processing provides the common interface to all of the CEO products except the PRESENT software.

Important features include: an annotation feature which allows the user to incorporate comments into a document and indicate whether or not they are to be printed, an index function which automates the production of an index, and a placemark facility which allows users to easily jump around in a large document.

CEO word processing also offers a dictionary based upon the 75,000 word *American Heritage Dictionary*.

The spelling option lets users verify the spelling of an entire document or the screen display. Users may also define their own dictionaries with words relevant to their business.

CEO Software Pricing

Data General claims that all of the CEO products are available with lead times of 120-180 ARO.

The software prices are initial license fees which include installation and one year of software support.

Data General CEO Strengths

The CEO appears to be the most complete product offering currently available on the market. If the

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PRODUCT	INITIAL LICENSE
AOS CEO Word Processing	\$ 4,500
AOS CEO Spelling	1,000
AOS CEO Information Management	10,000
AOS PRESENT	3,000
AOS PRESENT with DG/DBMS option	6,000
AOS CEO Software Package	19,500
Includes CEO Word Processing, CEO Spelling, CEO Information Management, PRESENT, TRENDVIEW, INFOSII.	
AOS/VS CEO Word Processing	\$ 6,000
AOS/VS CEO Spelling	1,500
AOS/VS CEO Information Management	15,000
AOS/VS PRESENT	4,000
AOS/VS PRESENT with DG/DBMS option	11,000
AOS/VS Software Package	25,750
Includes CEO Word Processing, CEO Spelling, CEO Information Management, PRESENT, TRENDVIEW, INFOS II.	

TYPICAL SYSTEM CONFIGURATIONS 10 WORKSTATIONS	
HARDWARE:	PRICE
C/150 8622-TB CPU	\$ 47,000
768K RAM	4,290
1MB Diskette, 2 Drives	23,980
50MB REM Drive With Controller	30,000
(10)DG 450 Graphics Terminals	
(5) 55 CPS Letter Quality Printer @ \$5,900	29,500
TOTAL HARDWARE	\$134,770

MV/8000 CONFIGURATION 40 WORKSTATIONS	
HARDWARE:	PRICE
MV/8000-9360B	\$ 207,990
2 MB RAM	
I/O Processor	
Battery Backup	
800/1600 BPI Magtape	
190MB Disk	
(40) D450 Graphics Terminals	120,000
(24)55 CPS Printers	141,600
TOTAL HARDWARE	\$469,590

SOFTWARE:	License	Install
AOS/VS Operating System	\$ 4,200	\$ 1,575
AOS SNA	8,000	
AOS 3270	2,000	
AOS Hasp	2,100	
AOS COBOL	5,775	4,410
AOS RPG II	1,575	210
AOS Business Basic	1,050	4,830
Sort/Merge Utility	788	420
AOS CEO Package	19,500	
CEO WP, Spelling, Information Management, Present, Trendview, and INFOSII.		
TOTAL SOFTWARE (License & Instal)	\$ 56,433	
TOTAL SYSTEM	\$ 191,203	
COST PER WORKSTATION	\$ 19,120	

SOFTWARE:	License	Installation
AOS/VS Operating System	\$ 10,500	\$ 2,100
DG/SNA	2,000	N/A
DG/SDLC	8,000	N/A
Hasp	2,100	N/A
3270	5,775	N/A
AOS/VS BASIC	4,200	552
AOS/COBOL	10,000	800
AOS/VS RPG II	4,000	1,000
Sort/Merge	2,000	158
AOS/VS CEO	27,750	N/A
TOTAL	\$ 76,325	\$4,610
TOTAL SOFTWARE	\$ 80,935	
TOTAL SYSTEM	\$555,525	
COST PER WORKSTATION	\$13,763	

Cost Per Workstation Comparison

The following comparison uses the Data General configurations which were presented previously. The 10 workstation Datapoint configuration consists of:

- (1) 8630 DRP
- (1) 9303 20MB Extension
- (4) 8602 AP's with 256K and MPCAs
- (6) 8220 Terminals
- (5) 9611 30 CPS Printers

TOTAL PRICE \$110,520
Cost per workstation \$ 11,052

Cost Per Workstation Comparison

A valid 40 workstation Datapoint configuration would consist of the following:

- (2) 8630 DRPs
- (2) 9303 20MB Extension
- (2) 9304 20MB Upgrades
- (14) 8602 256K APs with MPCAs
- (26) 8220 Terminals
- (20) 9611 30 CPS Printers

TOTAL PRICE \$337,730
Cost per workstation \$ 8,443

SUMMARY—COMPARISON

# OF	DATAPOINT	DATA GENERAL
10	\$ 11,052	\$ 19,120
40	\$ 8,443	\$ 13,763

The OSI General Model for Data Communications

As the industry leader in networking, Datapoint is heavily committed to data communications. We are often faced with references to "the OSI model" or "the ISO model". Far too few of us have heard of this model, and even fewer know what it is in enough detail to support our networking and data communications claims of expertise.

The International Standards Organization (ISO) had previously established a model for data communications. The model is called the Open Systems Interconnection (OSI) general model for data communications.

The OSI model consists of seven levels or layers. Each layer is responsible for a different aspect of the communications problem. In principle, all seven layers are present in each node or usable device in a communications network. Each layer communicates with its counterpart in other devices, and with the layers immediately above and below it within its own device. The standards for communications between counterparts are called "protocols", and the standards for communications between layers within a device are called "interfaces".

The seven layers are defined in the chart to the right.

Let's track a data transfer from one user to another. Assume User 1 wants to send a memo to User 2 through a system which implements the ISO OSI model. User 1 sits at his terminal and prepares his memo. Then he presents his memo to Layer 7 of his system, the Applications or User Interface layer, for transmission.

Layer 7 puts the message in suitable form for reception by Layer 7 of User 2's system, and hands it to Layer 6 of User 1's system.

Layer 6, the Presentation Layer, knows that User 2's system uses a different file format than User 1's system. So Layer 6 attaches a flag to the memo so that User 2's Layer 6 can do a syntax transformation when it gets the data. Then Layer 6 hands the data to Layer 5.

Layer 5, the Session Layer, knows that User 1 is only one of several

Layer 1 - *The Physical Layer*. This layer handles the actual transmission of ones and zeros between devices, and involves standards for cables, connectors, and electrical signals.

Layer 2 - *The Link Layer*. This layer uses layer 1 to send blocks of data from a source to a destination. It is responsible for error detection.

Layer 3 - *The Network Layer*. Routing through intermediate devices is handled in this layer. It determines the paths that layer 2 will use to route data.

Layer 4 - *The Transport Layer*. This layer is responsible for error control. This includes detection and elimination of multiple-transmitted copies in a network where many paths exist from source to destination. It also handles several other forms of errors.

Layer 5 - *The Session Layer*. In a network where many users are sending data packets to many destinations, this layer keeps track of which blocks of data belong to which users. This is particularly important in time-shared devices which may originate multiple interspersed data blocks from the same device, but from many different users.

Layer 6 - *The Presentation Layer*. Syntax transformations from one format to another take place at this layer. It must take data, convert it into a new format, and retain all meaning.

Layer 7 - *The Applications Layer*. This is the user interface. The user should see a transparent window between him and another device or user. He pours his data in, and it comes out the other side of the window at its destination.

users at this time-shared device, and attaches a flag to tell User 2's Layer 5 who this message came from. It then passes the message to Layer 4.

Layer 4, the Transport Layer, tags the message so that if User 2's device receives more than one copy of the message, that fact will be detected and the extras discarded. This information is destined for Layer 4 of User 2's device. The message is then handed to Layer 3.

Layer 3, the Network Layer, breaks the message into data blocks and figures out how to route it through the network to its destination. The blocks may be sent redundantly in several different paths, and in fact the

exact routing may not be known at this time. Layer 3 does the best it can and hands the message to Layer 2.

Layer 2, the Link Layer, is responsible for transmitting the data blocks it gets from Layer 3. The major protocols involved here are token passing and CSMA/CD (carrier sense multiple access with collision detection). This Layer does the error management for the actual bits of the message, including error correction and detection codes. It then hands the bits of the data block to Layer 1 for transmission.

Layer 1, the Physical Layer, transmits the bits of the message out

continued on page 13

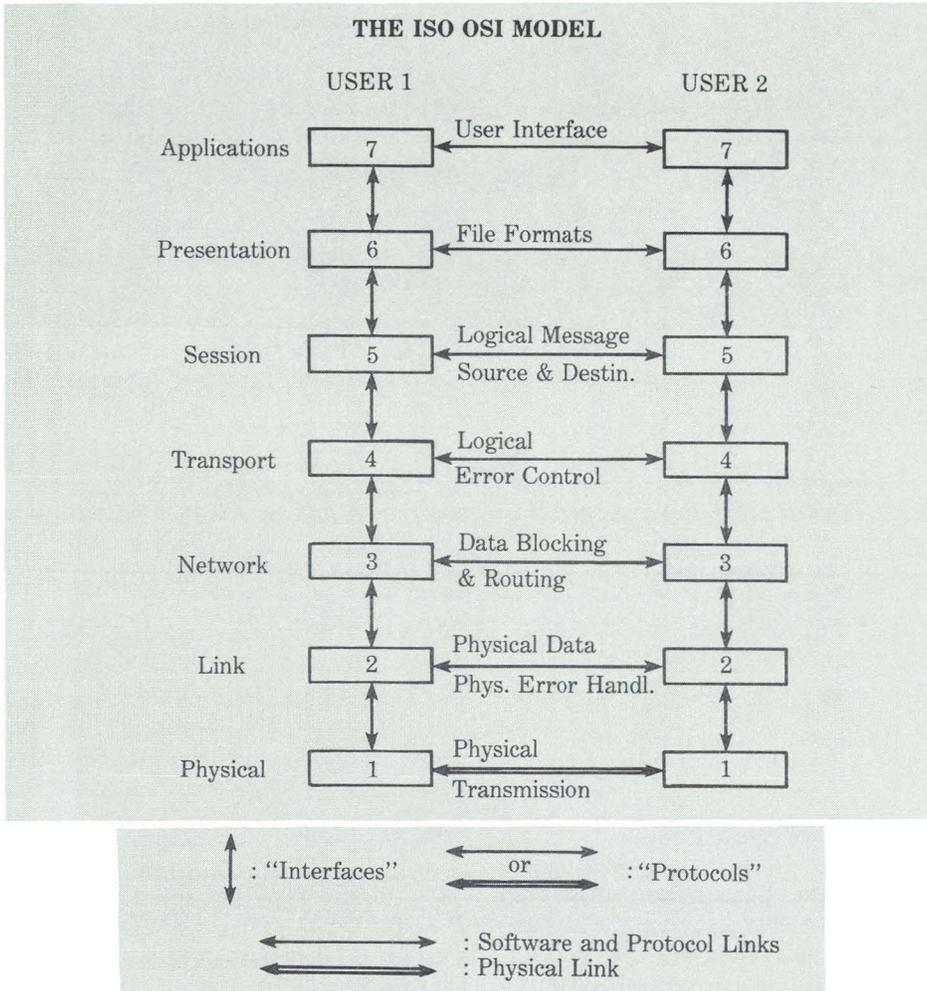
over the physical media connecting the two devices.

Layer 1 of User 2's device eventually receives the bits of the various data blocks comprising the message and begins passing them upwards through the Layer interfaces. The whole process described above is executed in reverse order,

and the message ultimately appears before User 2 on his device.

If the process operates effectively, User 2 will only be made aware of the memo from User 1. None of the other issues in the various Layers of the ISO OSI model will be seen by either user. □

Nick Lawrence
Ext. 7841



SHARE continued from page 1
current Traffic Analysis Report for output lines.

* Miscellaneous Enhancements. The Output Traffic Analysis Report from PRINT TRAFFIC command has column totals added to the columns entitled "Total Minutes", "First Choice", "Route Advanced" and "Number Calls Blocked".

SHARE 6.1 requires 128K to support one site and 256K to support two to eight sites.

SHARE 6.1 Product Specification (Model Code 61389) is being updated, along with the User's Guide and Quick Reference Guide (Model Code 61390). □

Tom Wallace
Ext. 5365

IEOS RFM Errata

There was an error on the release forms for 9821 and 9824 1800 IEOS WP and MS version 1.5.1. The release forms stated media for DSDD (Dual Sided Dual Density) as model code 20793. This is the DSDD media with setup for 1550 disk systems. The correct media model code for the 1800 DSDD should be 20829, which also includes setup.

Orders for 9821 or 9824 on DSDD media may have received the incorrect media. This has been corrected as of July 1. Please verify media on all received orders for these products. We apologize for the inconvenience. □

Lee Hollow
Ext. 7151

Data General continued from page 11

software is as complete and as capable as Data General claims, it certainly amounts to an impressive feature package. Integration of WP and DP at the workstation is also well implemented.

The CEO networking products appear to be much like ARC. Access to remote resources through any of the XODIAC's transmission media (X.25, leased lines, or coax) appears to be transparent to the user, and to the applications programmer.

Data General CEO Weaknesses

Data General's WP requires a pass through the document in "view"

mode to allow the user to see the document in its printed format. Our IEOS does interactive formatting on-line, what you see is what you get.

The lack of a financial planning package like our Multiplan constitutes a significant knock-off. Multiplan is one of our strongest software products, and its capabilities should be stressed in any situation where Data General is the competition.

Although Data General has a local network, the cost of their systems does not allow as smooth growth path as does ARC. The C/150 configured in the sample configuration which precedes this summary is one of the

smallest systems which runs the CEO software. The Data General user who "hits the wall" in performance as the last workstation is added is faced with at least \$47,000 for another processor assuming that it shares the existing disks. ARC allows expansion in \$14,550 chunks for a 256K 8602 with an MPCA.

Upgrading an existing Eclipse installation for the network will also not be cheap. Each node will cost \$3,400 for the network interface unit. □

Bernd Harzog
Ext. 7841

**PRESENT, "TRENDVIEW", and "XODIAC" are trademarks of Data General Corp.

An RMS Success Story: Business Requires Diversified Automation

In today's market a company has to be diversified to keep ahead in business. One approach is to automate where possible, but automated equipment installed today is all too quickly antiquated.

So for a company to remain diversified, the automation it installs must also be diversified. This equipment must be capable of growing as the customer's needs grow, without large

For a company to remain diversified, the automation it installs must also be diversified.

expenses for new software or hardware. All too often existing equipment must be replaced to allow for an increased workload or the addition of a new application.

This is a critical problem for a growing company. It is time consuming and extremely costly, especially for a company that relies upon the use of automated equipment such as data processing hardware for their livelihood.

One such customer located in Southern California started out approximately eight years ago doing farm billing and payroll accounting. To keep ahead of the business they were doing at the time and to allow for future growth, the company purchased three small IBM systems: two System 3 Model 12's and a System 34. These systems worked well for the business at hand (small account batch processing and a specialized facility management application), but growth was somewhat limited.

Acknowledging that diversity was a key to help further their success, in 1977 our customer seized the opportunity to become a Datapoint Rep and sell Datapoint 1130's as an answer to IBM's 3741 (key-to-disk system).

1130's Give Way to 4630's — Except One

As a Rep, our customer purchased five 1130 systems and placed them with various clients for data entry. A service bureau facility which allowed their clients to connect (via

DATAPOLL) for batch data processing services was also set in place.

This worked very well for our customer and their clients. The applications being used were basically data collection and general accounting functions. Once the data was captured, it was batch transferred to the IBM for further processing. Eventually, all processing was moved to the Datapoint system and the IBM's were used for just small account batch processing.

In 1979, our customer merged with a medical accounting company, increasing their diversity but also placing a greater load on the existing systems. To keep up with the new business, four of the 1130 systems were upgraded to 4630 systems, which allowed greater flexibility and more processing power. They have since added an ARCPAC in the main office and some 1800's as remote data collection sites.

One of the original 1130's is still in operation after 6 years of service to a client of our customer. It is running the same data entry applications it did when it was new, with perhaps a few new ones. The customer likes the 1130 so well, they simply don't wish to replace it.

Merger Caused Space Crisis

The merger with the medical firm increased all processing activities twofold. The farm billing packages were continued as medical billing applications were added. Our customer soon found that medical accounting files required larger amounts of disk space than did the farm packages.

With the increased amount of business, it wasn't long before the files were becoming too large to handle on one disk volume. They found they were having to purge data that should be kept (medical records must be kept for a specific amount of time, usually one year from origination).

The customer tried segmenting the files onto separate disk volumes. This worked for a while, but eventually became a problem too. The amount of work that was being done in the segmented files was causing severe problems in access and update time.

Each program had to be rewritten to accommodate multi-volume files. There were three processors (under ARC) dedicated solely to the medical applications. It soon became reminiscent of having three stand-alone processors and doing a nightly update to the master file. As it was, the time required to update the segmented files was nearly as bad. It was taking the customer two and a half days to complete the month-end processing. All activities to the service bureau facilities and any remote facilities had to be curtailed during this two and a half day period.

Conversion Inevitable

The problem was that no amount of file processors or stand-alone systems could extend the boundary of the disk volume enough to permit the size of file they required. Neither Datapoint nor IBM could provide the space required on their existing systems without segmenting the file or changing either hardware or operating system software. Conversion was inevitable. Now the question IBM or Datapoint? became the primary concern.

Both IBM and Datapoint could offer larger systems, but IBM could not allow them the modular growth Datapoint offered. Both companies would require a change in the

Both IBM and Datapoint could offer larger systems, but IBM could not allow them the modular growth Datapoint offered.

operating systems, but IBM could not offer the easy migration of application software from system to system, and required a large amount of rewriting and/or total replacement of hardware.

Datapoint offered a system with growth capabilities and minimal conversion that would not require new hardware to be installed. Only the operating software would have to be changed.

Datapoint's RMS could allow substantial growth with their existing

equipment, and when the time came for more equipment, the 8800 and 8600 could provide easy steps to more processing without more conversion. The conversion could be done in steps on the existing hardware without totally curtailing all data processing activities. This meant that daily business could continue without interruption.

The big benefits Datapoint's RMS offered were increased processing speeds, less software conversion, extensive growth capabilities and little or no hardware replacement. And, Datapoint provided both hardware and software to satisfy short- and long-term data processing goals.

Announcement Sells 8800

Our customer attended the announcement of RMS and the 8800 held in Los Angeles in October 1980. They were so impressed with the system capabilities that after the announcement had concluded they ordered an 8860. They planned to keep their existing hardware and convert it to RMS to get optimum usage.

The 8860 with 798K of memory and 472MB of disk, was installed in September 1981 and the conversion process began shortly after. It took two days to convert 120 RPG programs and little over five weeks to convert 80 DATABUS® / DATASHARE® programs. There were very few changes required to the RPG programs as the software was compatible between DOS and RMS.

The customer had been well informed of the problems involved with converting DATABUS programs and had planned around them. Several coding changes were made to the programs before conversion to help facilitate the conversion and to take advantage of the new capabilities RMS offered. They had no major upsets during the conversion, although they had some hardware problems during installation of the 8860 which were quickly corrected.

Essentially, they have grown very comfortable with the Datapoint systems. They have built a very good rapport with Datapoint sales and

The month-end process that took them over two days under DOS now can be run overnight.

support teams, and the Rep program works well for them. They will be celebrating their seventh anniversary as a Datapoint Rep very soon.

Our customer has high praise for the support teams both locally and in San Antonio. The customer's DP Manager commended both Lee Lance, SSA and Phil Hammons, SCA of the Southwest Region for their fine support both on location and over the phone.

RMS and the 8860 solved the customer's problem of the large files. They have not had any file problems since converting to RMS. The month-end process that took them over two

days under DOS now can be run overnight. BJJ runs the batch processing portion of the service bureau facility for the medical accounts. The master files are now updated and accessed at top speeds with little or no degradation.

Configuration Keeps Growing

The customer is very pleased with RMS and the 8860. They have been a beta site for Datapoint's many new software and hardware products.

Their configuration keeps growing. The present hardware configuration includes the 8860, 8600s, several 3800s and 1800s, thirty or more 8200 and 8220 terminals, not to mention several 4630's, 3600's and many printers with more still on order.

They are using DATASHARE/ DATABUS, RPG, some COBOL and 3780 bisynchronous communications to the original IBM's that are still running the small account batch processing and facility management systems. DATAPOLL® is being used to communicate to several of the remote sites under DOS.

Although the installation is almost totally RMS, they still support all their DOS clients by co-habiting the RMS and DOS ARC.

Future plans include several satellite systems to expand support to a rapidly growing medical center clientele. Hardware-wise, they have immediate plans for another disk drive (already on order) and more application processors. There is no doubt in this customer's mind that Datapoint and RMS are the answers to their future data processing needs.

I would like to extend our appreciation to the customer and support personnel for sharing another great success with RMS. □

Lee Hollow
Ext. 7151

ISX Installations

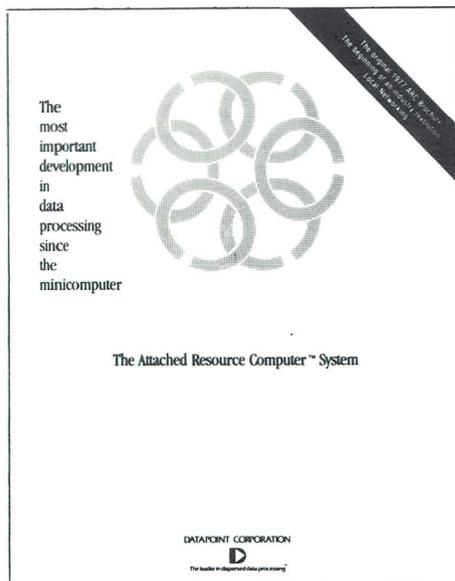
In the July issue of *Datapoint Marketing News*, it was stated that four ISX systems were installed at customer sites. The correct information is that ISX installation preparations are currently in progress at four customer sites. We apologize for the error. □

CMP Product Marketing
Ext. 5219

Original ARC Brochure Available Again

You requested it . . . here it is. We've reprinted the original ARC brochure. The banner on the cover is new, but the rest is as it was when Datapoint announced Attached Resource Computing in 1977. Use it with the new ARC brochure (document number 60534) to show your customers that Datapoint originated the concept of local area networking — and that we're still way ahead of the rest of the industry. Order your copies now.

Historic ARC Brochure
Document Number 61406
Price \$4.12



Foreign Device Interface Summary

The following chart summarizes the "Foreign Device Report" forms received to date. If you have customers who have successfully interfaced foreign devices, let others know by submitting a "Foreign

Device Report" form to Product Marketing. Forms may be obtained by calling Product Marketing X7151.

The reports will be summarized monthly in *Datapoint Marketing News*. Details are available from field

technical management, the field contacts listed below, and Product Marketing.

Let us know if the information proves useful! □

Lee Hollow
Ext. 7151

DEVICE	APPLICATION	SOFTWARE	USED CURRENTLY	DATAPOINT CONTACT
3M Whisper Writer	Serial System Printer	DOS.D	N	Stu McDougall/ Dave Hendon Detroit
Apple Corp. Apple 2+ Burrroughs L8000	Graphics interface for Visi-Calc. Manual account posting with communications through cassette	DS6 DS6/MLTC3500	Y Y	Roger Flores Des Moines Noel Patten John Mayo Nashville
Compugraphics 7700 Photo Typesetter	WP document printing for publications.	MTE55/3780	Y	Dave Hendon Bill Cook Detroit
Coulter Diagnostics S-Plus Blood Analyzer	Blood analysis breakdown results written to disk for later processing	DS6	Y	Henry Foster Vince Ayo Tampa
Data Terminal 571 Cash Register	Cash register system	MTE55/3780 ML3780	Y	Ellis Hillinger REP Seattle
DEC PDP8 Mini-computer	Transfer information to and from PDP8 and Datapoint.	SNAP3	Y	Leonard Mosley Ben Swayze New Orleans
EXTEL AH11R Matrix Printer	Electronic Message Unspooler	DS6	Y	Henry Foster REP Tampa
Gas Boys Gas Pumps	Magnetic Card reader for pump user ID and tracking.	DS5	Y	Thomas Joffrion San Antonio
IBM Selectric II Typewriter	File dump to typewriter for letter quality printing.	SNAP3	Y	Scott Cannon Product Marketing
INTERMAC 9300 Bar Code Reader	Library book tracking system	RMS DATABUS	Y	Thomas Joffrion Peter Schofield San Antonio
NCR 280 POS Terminals	Polled for transmission into an IBM 370 Mainframe via Datapoint 1800	ML3780	Y	Bill Snedeker Cindy Semrau Chicago
Panasonic Badge Reader	Work in Progress data collection	DS6	Y	Jack Arnold John Hawkins Ft. Worth
Panasonic Multi-drop Terminal Unit Badge Reader	Payroll Time Clock accounting.	DS6	Y	Bob Roth Denver
Perkin Elmer 310 Letter Quality Printer	Mortgage loan tracking system	DS6	Y	Henry Foster Don Martin Tampa
Summagraphics BIT PAD 1	Demo for Material Take-off handling.	DS5	Y	Thomas Joffrion San Antonio
Tally 1612 Matrix Printer	Pharmacy label printer 8-1/2" carriage	DS6	Y	Henry Foster Vince Ayo Tampa
Tally 160 CPS Matrix Printer	DOS-DATASHARE and RMS System Printer.	DS6/RMS 1.8	Y	Dave Hendon Stu McDougall Detroit
TI 745 and 746 Silent 700	Demo for Acturial Consultants (inhouse)	DS5	Y	Thomas Joffrion San Antonio
Toledo Digital Scales Produce Scales	Produce Packing manifest and order scheduling.	DS6	Y	Thomas Joffrion San Antonio
TYCOM 3055H/MTX Peripheral Dynamic Card Reader	Mark Sense cards for use in laboratory environment.	DS6	N	Henry Foster Vince Ayo Tampa
Visual Systems Microfilm Retrieval/ Projector Controller	Management of Microfilm description database.	DS6	Y	Dave Hendon Stu McDougall Detroit

Systems Education

Name of Class	Dates	
DATABUS/DATASHARE	Oct. 4, Dec. 6	Aug. 30
DOS/ARC	Oct. 4	1 Sep. 27
Systems Orientation	Oct. 11	2 Nov. 29
DP Orientation	Sep. 13, Nov. 8	3 Jan. 31, 1983
CMP Orientation	Sep. 13, Nov. 8	1 Jan. 31, 1983
IEOS with Multiplan	Sep. 13, Nov. 8, Dec. 6	Apr. 11, 1983
EMS/Message Services	Sep. 20, Nov. 15, Dec. 13	Jun. 13, 1983
Color Business Graphics	Oct. 11, Oct. 25	Sep. 13
Advanced DOS Systems	Sep. 16, Oct. 18	
DOS Data Comm	Aug. 23, Oct. 11	
RMS1-Transition	Aug. 16, Nov. 1, Nov. 29	
RMS2-DB/DS/COBOL/Comm	Sep. 20 (Washington D.C.), Oct. 11	
RMS3-RMS Assembler	Sep. 27, Dec. 13	
DOS Assembler 1	Aug. 16 (Washington D.C.), Oct. 18	
DOS Assembler 2	Dec. 6	
CMIS/IBP	Sep. 27 (Chicago), Nov. 29	
CASH/CDR	Aug. 30, Oct. 25	
Traffic Engineering	Sep. 20, Nov. 1, Dec. 6	
ISX Systems	Sep. 27, Nov. 8, Dec. 13	
ISX Database Collection	Oct. 18	
ACD	2 Aug. 16 (San Mateo), Oct. 25 (New York)	
Channel Adapter		Aug. 30
ASE Group 4 Phase		1 Sep. 27
ASE Group 4 Phase		2 Nov. 29
ASE Group 4 Phase		3 Jan. 31, 1983
ASE Group 5 Phase		1 Jan. 31, 1983
ASE Group 5 Phase 2		Apr. 11, 1983
ASE Group 5 Phase 3		Jun. 13, 1983
Business Systems Analysis		Sep. 13

The following classes will be scheduled pending minimum number of 10 students and available resources.

- LDOS 2 (Advanced-5 days)
- ISL Conversion Seminar (5 days)
- COBOL (5 days)
- RPG (5 days)
- BASIC (5 days)
- FORTRAN (5 days)

All classes will be held at the Systems Education Training Center, 4211 Gardendale, Suite A200, San Antonio, unless otherwise indicated.

These classes are now open to customers. Additional information about customer attendance can be found in the August/September Source Data.

For more information on Systems Education, call extension 7368 or write to mail station C01.

Trade Shows

Sep. 21-25	Telecommunications Association (TCA)	San Diego
Oct. 11-14	Information Management Expo (Info'82)	New York City
Oct. 17-20	Data Processing Mgmt. Assoc. (DPMA)	Chicago
Oct. 27-29	Federal Office Automation Conf. (FOAC)	Washington, D.C.
Nov. 8-10	S.E. Telecommunications Assoc. (SETA)	Nashville
Nov. 11-14	N.E. Computer Show	Boston
Nov. 30-Dec. 3	Comdex '82	Las Vegas
Feb. 21-23	Office Automation Conf. '83 (OAC)	Philadelphia
Mar. 15-17*	Federal Office Systems Expo	Washington, D.C.
Mar. 21-24	Interface '83 Miami	
Apr. 12-14*	Federal Data Processing Expo	Washington, D.C.
Jun. 1-3	Int'l. Communications Assoc. (ICA)	Anaheim
Jun. 14-16	Int'l. Word Processing Assoc. (IWPA)	San Francisco
Jun. 26-30	Nat'l. Computer Graphics Assoc. (NCGA)	Chicago

*One of these Federal shows will be attended. Final decision is pending.

Ad Schedule

Publication	Date	Ad
<i>Computerworld</i>	August 15	DATASHARE
<i>Datamation</i>	August	DATASHARE
<i>Communications News</i>	August	ISX
<i>Telecommunications</i>	August	ISX

Marketing Support Materials

Concepts of ARC Local Networking S.U.G.
Document No. 50694.

Datapoint Networking Perspective Brochure
Document No. 61384.

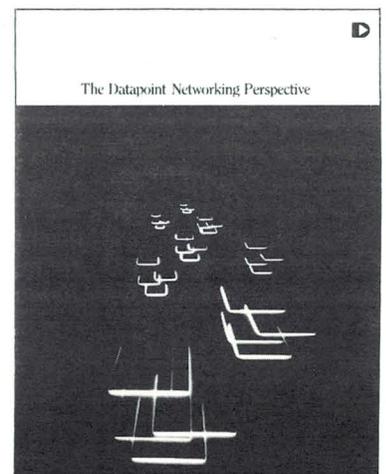
International Telex Management System Brochure
Document No. 61306.

Multiplan Slide Presentation
Document No. 61399

ITMS Slide Presentation
Document No. 61318

Datapoint Networking Video Tape
1/2" Document No. 61396
3/4" Document No. 61397

Equipment Catalog
Document No. 60001



Traditional Equipment

Model Code	Description	Maint.	Install	Price
Disk Systems				
4520	5500 Proc, 5MB Storage (two 2.5MB Wanco Drives, 1 fixed, 1 removable cartridge), controller, multiport interface	272	700	12225
4530	5500 Proc, 48K, Dual Disk and Controller, 20MB, Multiport Comm Adaptor	361	800	16000
4540	5500 Proc, 50MB Disk Storage, Controller, Multiport Interface	558	1000	18500
4620	6600 Proc, 5MB Disk Storage, Controller, Multiport Interface	267	700	14500
4640	6600 Proc, 50MB Disk Storage, Controller, Multiport Interface	628	1000	19950
4644	6600 Proc, 50MB Disk Storage Controller, RIM	623	1000	19950
4740	256K Proc, Dual Disks and Controller, 50MB, Multiport	644	1000	23500
4745	ARC File Proc, 256K, Dual Disk and Controller, 50MB, RIM Adaptor	639	1000	23500
Diskette Systems				
1131	Diskette 1130 Proc, 1 Drive	78	195	1600
1132	Diskette 1130 Proc, 2 Drives	102	195	1800
1133	Diskette 1130 Proc, 3 Drives	124	195	1900
1134	Diskette 1130 Proc, 4 Drives	150	195	2000
1174	Diskette 1170 Proc, 4 Drives	158	195	4300
9389	Diskette Extension	195	300	
1500 Systems				
1514	1500, 64K, .25MB Single Diskette Drive, 9310 Cartridge Disk Drive	147	250	7500
1515	1500, 64K, .25MB Single Diskette Drive, 9320 Cartridge Disk Drive	155	250	8200
1536	1500, 64K Memory, Two Diskette Drives (5MB Total)	78	200	4000
1596	1500, 64K Memory, 2 Diskette Drives, 160 CPS Printer	120	200	5200
1536/ 9231	1500, 64K Memory, 2 Diskette Drives, 80 CPS Printer	129	200	5000
1543	Diskette Expansion Module	33	195	1500
1800 Systems				
1802	1800, 64K Memory, Removable Keyboard, 2 Diskette Drives (1MB)(1412), ICA	125	200	5000
1842	Diskette Expansion Module	39	195	1500
Processors				
1108	Cassette 1100 Proc, 8K Memory	90	195	1500
2226	2200 Proc, 16K Memory	121	195	1500
5548	5500 Proc, 48K Memory	184	200	8000
Cartridge Disks				
9310	10MB Cartridge Disk Without 4-Port MPCA	80	195	6500
9320	10MB Cartridge Disk With 4-Port MPCA	88	195	7000
9367	Dual Disk and Controller, 5MB Console	99	195	4200
9368	Dual Disk and Controller, 5MB Freestanding	99	195	4200
9369	5MB Dual Disk Extension	79	195	3500
Disk Controllers and Drives				
9370	Freestanding 25MB Mass Storage Drive/Controller	205	250	6500
9371	25MB Mass Storage Drive Extension	155	195	6000
9373	Console 25MB Mass Storage Drive/Controller	205	250	6500

Model Code	Description	Maint.	Install	Price
Belt Printers				
9212	115-240 LPM Printer, 132 Columns	103	195	3900
9214	132 Col Printer, 230-340 LPM	120	195	4300
Freedom Printers				
9231/ 9232	80 CPS Freedom Printer, Serial or Parallel	51	195	1050
1090	Option, Serial Interface Upgrade		195	150
1091	Option, Parallel Interface Upgrade		195	450
300 LPM Drum Printers				
9280	Printer-64 Char/Single Channel Vertical Form Control	140	195	6000
9281	Printer-96 Char/Single Channel Vertical Form Control	155	195	6000
600 LPM Drum Printers				
9260	Printer-64 Char	200	195	9500
9261	Printer-96 Char	200	195	9500
Matrix Printers				
9621	160 CPS Printer, Serial	42	195	1875
9622	160 CPS Printer, Parallel	42	195	2100
45 CPS Printers				
9601	45 CPS Char Printer Serial	45	195	3300
9602	45 CPS Char Printer Parallel	45	195	3700
Datastation Terminals				
3601	Datastation terminal	25	35	995
8200	Datastation terminal	18	20	1100
Comm Adaptors				
3400	Acoustic coupler	18	25	200
9401	Comm Adaptor	20	25	200
9402	Comm Adaptor	20	25	200
9404	Comm Adaptor	16	25	200
9408	Datashare Modem, 1200 Baud Transmit, 150 Baud Receive, Full Duplex	18	25	200
9409	Datashare Modem, 1200 Baud Receive, 150 Baud Transmit, Full Duplex	18	25	200
9420	Comm Adaptor	16	25	200
9453	Comm Adaptor	16	25	200
9455	Comm Adaptor	24	50	200
9460	Comm Adaptor	18	50	300
9462	Multiport Comm Adaptor	18	50	375
9450	Comm Adaptor	14	50	200
Tapes				
9581	9 Track Tape 1600 BPI 8.5 Inch Reel	110	195	4000
9583	9 Track Tape 1600 BPI 10.5 Inch Reel (Replaced by 9584)			
9584	9 Track Tape 1600 BPI 10.5 Inch Reel	134	195	9000
Options				
5508	8K Memory Upgrade for 5500		195	250
Card Readers				
9504	80 Col, 300 CPM, 115 VAC	65	195	2500
9505	Power Option for 9504, 230 VAC			0
NOTE: No charge when ordered with 9504				
Multistation Adaptors				
9470	4 Port Multistation Adaptor	10	75	500
9471	8 Port Multistation Adaptor	15	100	800

Customer Education

Boston, Massachusetts

August 16 Introduction to Datapoint Programming
 August 23 Basic Word Processing
 August 30 DATASHARE
 September 13 Advanced Word Processing (DOS)
 September 20 Disk Concepts and Operations
 September 27 Resource Management System
 October 4 DATASHARE
 October 11 Basic Word Processing

Chicago, Illinois

August 16 Resource Management System
 August 23 Disk Concepts and Operations
 August 30 Advanced Word Processing (RMS)
 DATASHARE
 September 13 Introduction to Datapoint Programming
 September 27 Disk Concepts and Operations
 October 4 Resource Management System
 October 11 DATASHARE
 Basic Word Processing
 October 25 Introduction to Datapoint Programming

New York, New York

August 16 Basic Word Processing
 August 23 Introduction to Datapoint Programming
 Attached Resource Computer
 August 30 Advanced DATASHARE
 Resource Management System
 September 13 DATASHARE
 Basic Word Processing
 September 20 Introduction to Datapoint Programming
 Advanced Word Processing (RMS)
 September 27 Disk Operating System
 October 4 Resource Management System
 October 11 Disk Concepts and Operations
 October 18 DATASHARE
 Basic Word Processing
 October 25 Introduction to Datapoint Programming

San Antonio, Texas

August 16 Introduction to Datapoint Programming
 Attached Resource Computer
 Disk Operating System
 August 23 Advanced Word Processing (DOS)
 Advanced DATASHARE
 Resource Management System
 DOS SNAP
 August 30 Basic Word Processing
 Long Distance Control System
 DATASHARE
 September 13 Automatic Call Distributor
 Resource Management System
 Disk Concepts and Operations
 September 20 Basic Word Processing
 Introduction to Datapoint Programming
 Disk Operating System
 September 27 Advanced Long Distance Control System
 Attached Resource Computer
 Electronic Message System
 October 4 DATASHARE
 October 11 Basic Word Processing
 Advanced DATASHARE
 Resource Management System
 Disk Concepts and Operations
 October 18 Long Distance Control System
 Introduction to Datapoint Programming Disk
 Operating System
 October 25 Advanced Word Processing (DOS)
 Attached Resource Computer

San Mateo, California

August 16 Disk Concepts and Operations
 August 23 Introduction to Datapoint Programming
 August 30 Basic Word Processing
 September 13 DATASHARE
 Disk Operating System
 September 20 Resource Management System
 September 27 Disk Concepts and Operations
 October 4 Introduction to Datapoint Programming
 Advanced Word Processing (RMS)
 October 11 Basic Word Processing
 October 18 DATASHARE
 Resource Management System

Washington, D.C.

August 23 Basic Word Processing
 August 30 Disk Concepts and Operations
 September 13 Resource Management System
 October 4 Introduction to Datapoint Programming
 October 11 DATASHARE
 October 18 Basic Word Processing

Classes are subject to cancellation if minimum enrollment, 6 students, is not met. Notification of cancellation will be no later than 10 calendar days prior to class start date.

If you have a need for a class beyond this schedule please call, state your need, and we will attempt to place it on our next quarter's schedule.

Note: Effective immediately, registrations for all Customer Education classes will be taken by Customer Education in San Antonio at 512-341-3268. Please call San Antonio for information regarding classes or to register.

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DATAPPOINT

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Datapoint Marketing News is the monthly newsletter for Datapoint employees in the fields of marketing, sales, and support. Our goal is to convey vital marketing and product information throughout the organization.

Editor: Claudia McNutt