Mini News

News For The Employees of Data General

April 22, 1988

Profit, Revenues Increase In Second Quarter

Data General's net income for its second quarter was $17.2 million, or $.57 per share, including an extraordinary tax credit of $2.4 million, or $.08 per share. For its second quarter last year the company reported a net loss of $42.6 million, or $1.59 per share, including an extraordinary loss of $18.2 million, or $0.68 per share.

Revenues for the second quarter, which ended March 26, were $349.7 million, compared with revenues of $315.2 million for the second quarter last year, an increase of 10.9 percent.

Operating income for the quarter was $20.1 million, or 5.7 percent of revenues, compared with an operating loss of $9.0 million for the second quarter last year.

During the second quarter of 1988, the company realized a gain of $5.9 million before taxes resulting from the sale of a company facility in Austin.

Net income for the first two quarters of 1988 was $29.6 million, or $1.01 per share, including an extraordinary tax credit of $4.4 million, or $0.15 per share, compared with a net loss of $39.3 million, or $ 1.47 per share, including an extraordinary loss of $18.2 million, or $0.68 per share, for the same period last year.

Revenues for the first two quarters totaled $692.5 million, compared with $628.5 million for the same period last year, an increase of 10.2 percent.

Operating income for the six-month period was $37.7 million, or 5.4 percent of revenues, compared with an operating loss of $1.6 million in the prior year.

"Operating income has improved for the third consecutive quarter primarily as a result of increased shipments and the benefits of cost cutting measures implemented in 1987," says President Ed de Castro. "However, in the face of uncertain demand patterns, articularly in the U.S., we continue to monitor costs osely."

Data General, Motorola To Develop RISC Processor Version

Data General and Motorola have signed an agreement to develop an ultra high-speed version of the new Motorola 88000 RISC microprocessor family using ECL (emitter coupled logic) semiconductor technology.

The work will result in the development of an 88000 compatible processor chip set allowing system implementations operating in excess of 100 millions of instructions per second (MIPS).

At the same time, Data General also plans to use the 88000 architecture in future families of products. The company is a member of the 88open Consortium, an independent group of leading computer hardware and software vendors organized to promote and establish the success of Motorola's 88000 RISC architecture in the marketplace.

"Our commitment to the 88000 architecture is a key element in our corporate strategy of providing the industry's finest standards-based computer and communications products," says President Ed de Castro. "The Motorola CMOS 88000 chip set and the ECL version that Data General will develop provide computer users with mainframe computer performance at personal computer price/performance levels. We believe they will become the dominant core building blocks for systems designed to run the UNIX operating system."

According to industry investment analysts, the market for UNIX systems will reach $20 billion by 1991.

"Our intention is to offer our customers the best of both the standards-based and proprietary systems-based worlds," Ed says.

"While we plan to be in the forefront of developing new families of products based on this new RISC technology, at the same time we will continue to provide our customers with new generations of higher performing proprietary products. Both families of products will benefit from the same semiconductor technologies. We will also provide a migration path for our customers who would like to take advantage of this new technology."

ECL Technology

Under terms of the ECL development agreement, Data General and Motorola will jointly implement the ECL version of the Motorola 88000 RISC architecture. Data General will design the chip set at its Westboro headquarters. Motorola will manufacture the ECL 88000 in Phoenix and market the product worldwide through its Microprocessor Products Group in Austin.

ECL silicon manufacturing technology is employed by computer designers in building extremely fast circuits that provide very high performance in mainframes, superminicomputers and supercomputers. Computer circuits using ECL typically run many times faster than those employing CMOS technology. The CMOS version of the Motorola 88000, running at 14 to 17 MIPs, is the highest performance microprocessor presently available.

The ECL version is expected to be available in 1991. The ECL chip set will include an instruction set processor, memory manager, cache controller, system controller and system bus interface.

"Our plan is to develop an ECL chip set that offers both very high performance and the same high-level of integration as the CMOS 88000," Ed explains.

"Data General has been a leading-edge implementor of semiconductor technology for many years," says Murray Goldman, senior vice president of Motorola's Microprocessor Products Group. "The company's expertise in developing high-performance ECL-based systems will contribute significantly to the acceptance of the Motorola 88000 RISC architecture as an industry standard."

The current high-end and mid-range Data General superminicomputer systems, the ECLIPSE MV/20000 and ECLIPSE MV/15000 series both use ECL technology and were developed in close cooperation with Motorola.

Data General has been evaluating various RISC architectures over the past three years and concluded that the Motorola 88000 architecture is the first complete RISC implementation developed by a major semiconductor manufacturer. According to the company, the Motorola 88000 architecture offers cache/memory management units and on-chip high-performance floating point as well as multi-processor and fault-tolerant support as part of the architecture and processor.

Motorola's $2 billion Semiconductor Products Sector, which is based in Phoenix and includes the Microprocessor Products Group in Austin, is a division of Motorola Inc. It is the largest and broadest semiconductor supplier in North America with a balanced product portfolio of over 50,000 devices.

Data General, Motorola: A Look At The Strategy

Editor's Note: On Tuesday of this week, Data General executives met with the press, computer industry consultants and investment analysts to discuss the company's marketing and product strategies in light of Data General's development agreement with Motorola. Below are comments from Ward MacKenzie, vice president of Corporate Marketing.

"Data General was involved in two ways in the Motorola announcements:

"First, we are one of the first customers for Motorola's new 88000 series RISC chip products. Data General is part of the 88open Consortium of users formed around the new chip set. The company intends to produce a family of products based on the 88000 architecture.

"Second, Data General and Motorola have agreed to jointly develop the high-end bipolar implementation of the 88000 program architecture. Motorola will manufacture the ECL chip set and will market it worldwide.

"Our use of the Motorola 88000 series products, as well as our co-development agreement, will put Data General at the forefront of the industry-standard systems market.

"Data General recognizes that customers are not looking for new technologies; they are looking for solutions. And the path from a chip to a real world application with all the functions and capabilities customers want is not easily traveled. Data General believes this is a significant challenge and represents a significant opportunity for the company.

"Historically, customer needs evolve in direct relationship to available technologies. We have seen what some have called three "waves" in computing history -- the mainframe, the mini and the micro.

The Fourth Wave

"Each wave had its own characteristics and produced groups of successful companies.

"The mainframe wave was characterized by proprietary architectures and "home grown" applications. Computing costs were high. The minicomputer wave also developed along proprietary architectures. But by greatly lowering the computing cost per function, the minicomputer opened the data processing market to a broad range of users. Compatibility with a company's mainframe was not an issue. Availability of applications was more important.

"The microprocessor ushered in the third wave in the 1980s. And for the first time, de facto hardware standards began to emerge, such as the 80x86 chip and the Motorola 68000.

"The 1980s have been characterized as the PC era, but may more accurately be labeled the "shrink wrapped software" era.

"As we see it, there were two common elements that combined to stimulate new waves in the history of the industry:

"The first was lower cost levels, costs that were driven down even more during each wave by continuing improvements in engineering and by the economics of high volume production. The second was the availability of applications which customers needed.

Those two elements are at work again today.

"Data General believes that there is a new wave in computing on the horizon. That wave will be based on industry standards.

"This is where the 88K chips come into play. Such new technologies will enable vendors to create standard commodity 32-bit processors which will outperform anything we have seen before.

"Industry standard Unix will present an enormous opportunity for application developers to invest in a broad-based market. This combination of significant price/performance advances coupled with a rapidly growing availability of application software will provide opportunities for industry participants and for customers.

"Now let me explain how Data General fits into this developing picture. We have two objectives: First, to continue to provide our customers with a strong and growing line of proprietary systems. Second, to become the leading supplier of industry standard computer and communications systems. We believe we have set logical and clear goals in each of our major operational areas to support this strategic direction."

Proprietary Or Industry Standard?

"Data General's proprietary ECLIPSE MV/Family products are the foundation of the company and the base upon which Data General's success will be built.

"Even though technological advances may represent major customer advantages, there are two factors which slow these advances from creating a major short-term dislocation of industry's purchasing momentum. One factor is the significance of installed base investment in applications software; the second factor is the rate of maturation of the new technology."

"Data General's end-user customers, its independent software vendors and its Value Added Resellers have invested heavily in developing application solutions that run on Data General's proprietary systems.

"The second reason for continuing to maintain our investment in the ECLIPSE MV/Family architecture is more subtle. Industry-standard systems hold advantages for some customers today but in general, they do not today possess the functionality -- or breadth and depth of integration -- found in proprietary systems.

"Data General's proprietary systems have been carefully honed over the years such that today they represent robust commercial-grade environments. It will take time and industry-wide investment before industry-standard systems can compete with proprietary systems on the basis of breadth of functionality. Therefore, there are many applications where proprietary architecture will, for years to come, provide the best or the only practical system for customers to deploy as an applications solution.

"While Data General sees continued growth in its proprietary base, the company sees a major opportunity for new growth in standard systems.

"We have found that customers are demanding more and more industry-standard application packages and networking. And more and more cost-effective computing power," Ward told the audience. "With increasing frequency, particularly in the manufacturing and government markets, requests for proposals cover applications designed with standards in mind, standards that specify adherence in such areas as communications, network file management, data bases, windowing, ergonomics and transportable operating-system environments like Unix.

"The customer who develops standards-based applications is in a more flexible position to deploy applications onto the systems of multiple computer vendors. In addition, the customer with standards-based applications can assemble systems involving computer technology from multiple vendors at lower costs. Given these obvious advantages for the customer, Data General believes that standards will play the most important role in the industry in the 1990s.

Data General Unix - DG/UX

"Data General's native Unix product, DG/UX, was first announced in 1984. It continues to be a leader in providing both Berkeley and System V compliance. Data General will introduce Rev 4 of this product in the near future.

"The company is expected to make DG/UX the most robust Unix platform in the industry, one that will meet the needs of commercial as well as technical users. It will have all the features of AT&T System V Rev 4, and run on high performance RISC systems. It will be an ideal Unix applications development environment."

"Unix creates an enormous opportunity for vendors who write application packages. It is causing a great number of commercial as well as technical applications to be written to industry standards.

"As customers look for new packages to perform new applications, they will find libraries of applications developed to run on industry standard systems providing the largest and richest selection of applications from which to choose.

"Data General believes that the same factors which led to the shrink wrapped MS/DOS software market at the PC level will lead to a shrink wrapped Unix software market for more sophisticated business applications.

Greater availability of applications will strengthen Data General in the following major market sectors:
• In technical markets where Unix and the VME standard bus, which Data General will also employ, have become de facto standards;
• In government markets where Unix is being specified as the standard;
• In commercial markets where office automation and transaction processing systems will rapidly evolve with industry standard technology. Data General has a strong base in this market with more than 237,000 CEO office automation users worldwide.

• In communications where the company's developments with Nippon Telegraph and Telephone will include Unix and ultimately will include RISC systems.

The Data General Difference

"Data General realizes it must differentiate itself in the wave toward industry standards.

"Data General will differentiate itself from vendors of proprietary products by offering customers the advantages of industry-standard systems while providing them the return on investment inherent in the new RISC chip technology. Those advantages will be:

• access to industry-standard application packages,
• compliance with worldwide communications and networking standards,
• freedom to connect to other industry standard vendors' products,
• and maximum return on their investment.

"Data General will differentiate itself from others who embark on industry standard strategies by offering all of these benefits and features on the broadest and most fully supported array of industry standard products with the purest adherence to industry standards in the computer business.

"The efforts of many of the company's smaller-sized or similar-sized competitors seem to be focused on providing industry standards in narrow segments of the market such as workstations," Ward continued. "Many of these competitors are not large enough to have Data General's product line breadth and the resources to support industry standards for a broad base of customers.

"Let me summarize our strategy. Data General's intention is to offer its customers the best of both the standards-based and proprietary systems-based worlds. The company plans to be in the forefront of developing families of products based on this new RISC technology. At the same time, Data General will continue to provide customers with new generations of higher performing proprietary products, implementing in the same semiconductor technologies.

"We will also build the bridges that allow customers of the company's current proprietary products to move with us into the standards world when and if they choose to do so."

West Addresses Technological Aspects of Motorola Deal

Editor's Note: Tom West, vice president of the Systems Development Division, discussed Data General product strategy during Tuesday's meeting with the press, computer industry consultants and investment analysts. The following are his remarks.

"Data General has evolved a new product strategy to take us into the 90's. I'd like to add a little background, and then run through the technological perspective.

"In the mid 80's we found ourselves faced with a paradox. Our hardware product line was widely considered to be one of the best in the industry. It offered the leading price/performance, coupled with technical excellence. Our commercial software platform was said to be one of the strongest, and our integrated office automation software led the pack.

"But, despite these strengths, our market share wasn't increasing. So we took a long hard look at ourselves.

"We found that our market focus hadn't changed much since the success of 1984, but that the industry had changed. And, instead of taking a broad strategic approach, we were going for big opportunities, competing with companies that had 8 to 64 times our resources. Instead of differentiating our product line, we were adding products that looked just like the competition.

"We needed to do something about this before we moved into our next product development cycle, so we made some fundamental decisions.

"Firstly, we decided to get back to basics -- identify our traditional strengths and differentiators and take advantage of them. Secondly, we needed to get ahead of industry trends, and get closer to customers -- so that we would develop products in line with their demands. Finally, we needed to rebalance our new product portfolio with a strategy for the 90's designed to significantly increase revenue.

"Several fundamental strengths have helped Data General differentiate its products through the years:

• Simple, cost-effective designs;
• A small-team approach;
• Strategic partnerships with the leading technology vendors; and
• Short, aggressive development cycles.

"Our proprietary MV/program architecture seems to lend itself well to high-density design. And, over the years our designers have become specialists at developing highly-integrated computer systems.

"The mid-range ECLIPSE MV/15000 and high-end ECLIPSE MV/20000 systems all feature a CPU implemented on a single printed circuit board. At the low end, the ECLIPSE MV/2000 and ECLIPSE MV/1400 both implement a complete computer system on a single board.

"This has given Data General a major manufacturing cost differential over the competition.

"And working in strategic partnerships with leading semiconductor vendors allows us to design with emerging technologies *before* they're in the merchant market. By the time a technology is generally available, we are typically already shipping products implemented with it -- products which give our customers the price and performance advantages the new technology provides.

"We've been working this way for the past decade, and have become expert at it.

"The current MV/ line is implemented using Fujitsu 8000-gate CMOS arrays at the low end, and Motorola LS 2800 ECL arrays for the mid-range and high-end. Back in '86 when we first shipped these products, no-one else was using these technologies. Today, in '88, some of our competitors are just starting to get there. But others, including the largest, are *still* using earlier generations.

"Another aspect that differentiates product development at Data General is our use of small teams. Developers in teams of 30 or 40 can stay clearly focussed on the goal. They tend to be fast on their feet, and maintain short, aggressive development cycles.

"Small teams communicate more effectively, so the groups working on different parts of the system find it relatively easy to stay in constant contact, without massive management overhead. This ensures the optimal overall system design -- the best integration of the pieces.

"These traditional strengths are an integral part of Data General's development culture. Our newest strategy builds on them.

The Industry Today

"Looking at the industry today, what you see is a lot of confusion. An explosion of technological advances is bringing about a major change -- a change that's fundamentally altering the way companies will have to do business.

"The factor accelerating this change is the availability of components that offer a high level of integration at commodity prices... something that completely changes the economics of hardware and software design.

"Back in the 70's, the only commodity processors and operating systems were little more than toys. So, the best way to achieve low cost and quality was Through vertical integration -- do it yourself.

"But in the late 80's, that's changed. The availability of powerful 32-bit microprocessors is making it more expensive to develop new proprietary processors. Add to that commodity operating systems, standard busses and a host of commodity controllers and peripherals, and it may even be unnecessary.

"When off-the-shelf processors are available for as low as *$20 per MIPS* in 1990, you won't beat the cost curve with proprietary CPUs. And when 10-20 MIPS chip sets are available in commodity volumes, you can't differentiate yourself *just* by designing fast CPUs.

"Now, the name of the game for smart computer systems vendors is horizontal integration, and making the right technology choices.

"The wide availability of these products means that many of them are becoming defacto standards.

"Today's merchant micros bring with them a wealth of applications based on the standard platforms they support -- 286s supporting MS/DOS applications; 68Ks, 386s, and the new RISC architectures supporting UNIX applications.

"The change is also being fueled by what customers want -- and they're beginning to say it loud and clear. They want the superior price/performance that the wave of PCs and workstations brought them in the mid 80s, but they want those MIPS to run on commercial-quality, open, non-proprietary platforms.

"As customers have become more computer dependent, they are looking more and more to industry standards to reduce their risk, and give them a greater degree of vendor *independence*.

"Most customers want to put together a network of systems from a variety of vendors. They see industry standards as the means to run their applications on all the systems in the network. The vendor that can design products with that in mind is ahead of the game.

"Leveraging our traditional strengths and differentiators through the technological opportunities now available is, I think, *our* best strategy for the 90's.

"Instead of hitting the competition where they are, our plan will be to hit them where they ain't. Hopefully, we'll hit them where they can't get to.

"On the proprietary side this means continuing an aggressive development plan for MVs -- the next two generations of MVs are already under development. And we're evolving a more powerful AOS/VS, adding large-system features and support for fault tolerance.

"But over the long haul, we feel that even the best proprietary products from vendors other than IBM and DEC will have a difficult time differentiating themselves in new accounts. They won't be able to offer the broad selection of applications that customers want because they don't have the critical mass of installed base to attract applications developers. And anyway, *two* safe proprietary systems is probably plenty.

The Standards World

"We believe that, ironically, the **standards world** provides Data General with the best opportunity to differentiate ourselves. The marketplace is demanding it, and the technology is providing an **unprecedented** opportunity to do it.

"So we intend to build the best industry-standard product line we can. And we'll ensure application portability between our proprietary and our standards-based platforms.

"Our 1984 strategy consumed a tremendous amount of development resources, because we tried to match product lines with larger competitors. Our strategy for the 90's is driven by opportunity. We were careful in choosing which products we should develop. More important, perhaps, we also chose which products *not* to develop -- proprietary workstations; UNIX on proprietary architectures; distribution on proprietary; and major horizontals.

"This allowed us to realistically staff both our proprietary and our industry standard product development programs. We have an equal commitment to both platforms, and a balanced new product portfolio.

"To understand the nature of the new product opportunities we're starting to see, let me play with three scenarios.

What If ...

"**What If** a computer systems vendor today had
• An open, integrated office automation environment,
• Networked and interoperable with IBM systems,
• Running on a standard UNIX platform, and
• Supporting applications cleaved between workstations and servers?

And, *"What If* it ran on a hardware platform featuring
• A leading industry-standard RISC architecture,
• A broad dynamic range of processors (from tens to hundreds of MIPS), with
• Fault-tolerant systems and
• Symmetric multiprocessors?

"There would be practically no competition, and there would be significant and growing demand in the marketplace.

"*What if* a computer systems vendor today had:
• A broad range of scalable hardware products offering commodity price/performance, based on
• An industry-standard RISC architecture, with
• A high level of integration, open standard busses, and
• A strong industry-standard software environment featuring a real-time UNIX kernel?

"They would be able to sell them to the technical systems builder as boards, boxes and systems. Again with little competition, and significant and growing market demand.

"*What if* a computer systems vendor today had:
• A cost-effective graphics workstation,
• Networked to a high-end server, with
• The best computer-aided software development tools available,
• All 100 percent compatible with the leading commodity RISC architecture?

"They would have the software development environment of choice for applications targetted at the leading commodity RISC program architecture.

"Clearly the choice of platform is critical, and the range of directions we're seeing in the industry is quite wide.

"I'd guess that for larger companies, the choice of platform has less to do with the *optimal* solution than with satisfying the installed base and using the existing organization and infrastructure. These companies will be reluctant to commit to an alternative platform that might compete with their proprietary base. And they will not introduce new hardware which causes a large price/ performance discrepancy with the rest of the product line.

"For Data General, on the other hand, the development of a standards-based product line is a clean sheet of paper -- it's an opportunity that only comes around once every 10 or 20 years -- to build a contemporary product line from the ground up. So, w can go for the optimal solution.

"We've probably been working on this strategy for the past three years, and we've taken great care to make the right decisions.

"I feel that there is little question that RISC program architectures, plus contemporary optimizing compilers, offer a significant performance advantage over similar implementations of CISC architectures. Clearly, it all depends on the application, but I'd guess you see a 2:1 performance difference, and maybe even more.

"We defined three criteria that our choice of RISC hardware platform had to meet. First, we wanted a commodity micro -- a contemporary, highly-integrated chip from a leading semiconductor vendor for the low end.

"Second, the program architecture had to be scalable, so there could be a compatible high-end chip set that was as highly integrated as the low-end micro. This provides the broad dynamic range of product that is essential for the leading program architecture.

"Finally, the implementation had to include the full range of system-level hooks and features to support a broad range of system products. This is essential for the leading systems vendor who needs to turn the broad dynamic range of the program architecture in computer systems which effectively cover the range from workstations to mainframes.

"Having defined the prerequisites for our optimal solution, we were willing to wait for the right commodity solution to emerge.

"In the interim, we built up our knowledge base of RISC architectures and processors. We designed and implemented our own RISC microprocessor as a beta test for Fujitsu's 20,000-gate CMOS array, and the latest ultra-dense memory packaging. It has been running in our labs for over a year now, benchmarking at about 16 MIPS.

"We also analyzed each RISC micro as it came to market. But it wasn't until Motorola first disclosed the 88K to us, that we saw the second-generation RISC micro we were looking for:

• The first micro truly capable of supporting the broad range of systems products we want to develop;
• A microprocessor capable of supermini performance at PC price/performance levels.

"Implemented as a 17 MIPS CMOS chip running at 20 MHz, it has the multiprocessor and fault-tolerant system support we need.

"Applications developers can feel confident that applications conforming to the 88K standard binary interface will work on all implementations because the cache and memory management units are also on-chip.

"In comparison, Sun's SPARC has no cache or memory management unit. So systems vendors have to build their own, and applications vendors have to hope that all the different MMU's look the same to their software. I think it's unlikely that shrink-wrapped applications will run across multiple vendor's implementations.

"For the high-performance end, we are working in partnership with Motorola to develop an ultra-high speed version of the 88K using Motorola's ECL semiconductor technology.

"We expect the chip set to yield systems operating well in excess of a hundred MIPS -- mainframe performance at PC price/performance levels!

"The Motorola and Data General design teams involved in this have worked together before. They know each other's abilities; they know how to communicate across the inter-discipline barrier; and they understand how to build all the design tools to implement it in silicon.

"But when all's said and done, it's applications that determine success. The fact that the 88K is available in both a CMOS and an ECL implementation, offering a very broad dynamic range, and the availability of this sort of power at PC price/ performance levels, will help make it an attractive platform.

"But the commitment and energy of the participants in 88open -- the consortium of vendors who all intend to use the 88K -- will probably determine whether the 88K becomes the leading RISC platform.
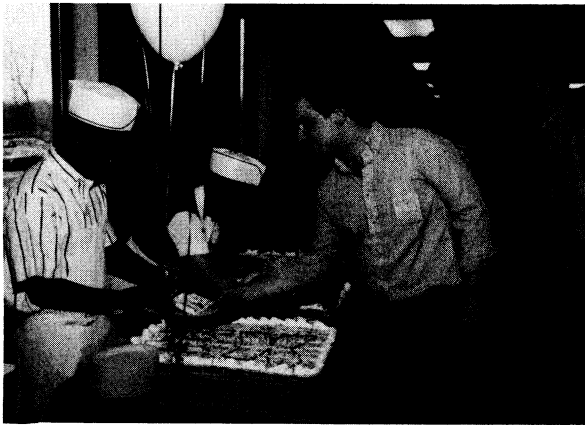
"We all intend to work hard to make the platform as attractive as possible to shrink-wrapped and third-party applications developers. Our goal is that the aggregate of new installations of these compatible products will look large compared to DEC's and even IBM's, and that it will make direct competition, like Sun's SPARC, look small.

"I'd just like to summarize a few of the key points.

"Changes in the computer industry infrastructure are opening up some enormous opportunities for the computer systems vendor who is willing and able to *make* the commitment; to *take* the fullest advantage.

"At Data General, we believe we are uniquely positioned to make the most of changes like these, if we can implement by the numbers. Historically, implementing by the numbers is what we have done *best*.

"And no-one has Data General's track record of working in strategic partnerships with the leading hardware and software technology vendors; partnerships which give us the earliest possible access to the best technologies the industry has to offer.

Westboro

Elite Cleaners Starts Operations At Data General

Elite Cleaners is now offering drop-off/pick-up dry cleaning operations at Data General in Westboro. Services provided will include same-day (if required) and next-day delivery service for cleaning, shoe repair services, and garment alteration services. Elite will be located at Mail Stop B-111, which is along the corridor between the main cafeteria and Lobby A. Quality Cleaners also will continue to offer cleaning services in their present location.

Telephone Tip On Leaving Messages

Even with the use of CEO comprehensive electronic office software, employees occasionally find it necessary to leave a verbal message requesting a call-back. When this happens, it is important, especially when calling someone outside of Data General, to leave your full name. Calls being returned to you often reach the switchboard operator where a first name is of little value in routing the call to the proper party.

At the same time, the switchboard operators have no facilities for taking messages from callers trying to reach Data General employees. Employees should make sure outside contacts are aware of this. It is essential that employees take all possible steps to ensure that their extensions are adequately covered in their absence by someone in the department. The Westboro telephone system provides several ways of helping someone do this, including call-forwarding, *T transfers, keyset groups, intercept groups and hunt groups. If you need help or information on any of these features, contact Mary Habacker at extension 6058 or via CEO at host system IMG010.

Data General President Ed de Castro addressed employees in the Westboro cafeteria last Friday as the company marked its 20th anniversary. Ed made the ceremonial first slice in a cake which was then served to employees. Cake, with enough of it available to go around for Westboro's 3,000 employees, also was served in the deli and pizzeria. Other Data General facilities across the U.S. celebrated the company's birthday with similar events.

Benefits

Auto Insurance Update

The Auto Plan currently offered through payroll deductions for Data General employees with the Metropolitan Insurance Company had a 5 percent group discount in Massachusetts. Effective January 1, 1988, unfavorable experience on automobile claims in Massachusetts forced Metropolitan to reduce that discount to 3 percent in this state. The reduction in the discount will be reflected in payroll deductions after the 1988 rates go into effect, based on an employee's specific renewal date. The Homeowners discount will remain at 5 percent in Massachusetts. This discount may vary in other states.

Training

The following software and hardware courses and technical seminars are offered by Educational Services for employees who want to enhance their skills with Data General systems and software.

MAY - JUNE TRAINING SCHEDULE

SOFTWARE COURSES

Date	Course Title	Number	Days
5/2	ECLIPSE Assembly Language Programming	S105	5
5/2	AOS & AOS/VS User	S209	5
5/2	INFOS II Utilization & Design	S306	5
5/9	Business Analysis & Requirements Definition (BARD)	E300	5
5/9	AOS/VS System Manager	S219VS	5
5/9	AOS/VS System Operator Using SMI	S224	5
5/9	AOS/VS System Programming, Part 1	S309VS	5
5/9	INFOS II Database Design & Analysis Workshop	S406	5
5/16	AOS/VS System Programming, Part 2	S310VS	5
5/16	DG/SQL Utilization & Design	S317	5
5/23	COBOL Programming with INFOS II	S107	5
5/23	COBOL Programming with DG/SQL	S117	5
6/7	CEO System Manager	S221	3
6/9	Using Advanced Features of MS-DOS to Manage Your System	S146	2
6/13	AOS and AOS/VS User	S209	5
6/13	DG/DBMS Utilization and Design	S316	5
6/13	AOS/VS Operator Training	SH109VS	5
6/20	AOS/VS Systems Manager	S219VS	5

TECHNICAL SEMINARS

Date	Course Title	Number	Days
5/4	C Language: An Introduction	SM131	3
3/13	RDOS Internal Structures	SM401	5
6/23	Systems Project Management	SM521	2

HARDWARE COURSES

Date	Course Title	Number	Days
5/2	ECLIPSE S130, S200, S230 Field Maintenance	H104	5
5/2	ECLIPSE S140/NOVA S/X Field Maintenance	H121	5
5/3	Local Area Network/Ethernet Concepts	H136	3
5/4	Diagnostic Operating System User	H101	3
5/9	MV4000/DC and SC	H150	4
5/9	ECLIPSE S140/NOVA 4 S/X Component Level	H321	10
5/23	AOS/VS for the Hardware Specialist	H209	5
6/2	DASHER D2XX, D4XX Field Maintenance	H221	2
6/6	Introduction to Data General 32-bit Computer Systems	H100/MV	10
6/20	ECLIPSE MV/4000 Field Maintenance	H148	5
6/28	6026 Magnetic Tape Drive Field Maintenance	H223	3

Activities

Join The Aerobics "Club"

The Data General Fitness Club continues its exercise program with upcoming sign-up days for the next session of aerobics. Employees wishing to enroll in the classes may sign up on either of the registration days being held Monday, May 9 or Tuesday, May 10 at 5:30 p.m. in the main cafeteria in Westboro.

Dancin' Aerobics and *Free Style Aerobics* are offered twice a week in the main cafeteria at 5:30 p.m. for an eight-week period. Dancin' classes will be held every Monday and Wednesday, beginning Wednesday, May 11. Free Style classes will be held every Tuesday and Thursday beginning Thursday, May 12. There will be no classes on registration days. All classes are taught by qualified instructors from the Greater Worcester YMCA.

The cost is $30 per person for the eight-week program. All payments must be made payable to the Data General Employee Activities Committee.

Check Out Weight Watchers

All interested employees are invited to shed some excess pounds, in Westboro, with the new and improved Quick Success program for 1988, the Weight Watchers At-Work Program.

Based on the New Quick Success Program, the At-Work program has been specially designed for people who do not seem to have the time to eat properly. Participants will learn how to eat better, stay motivated, handle stress and, most importantly, how to fit losing weight into a busy schedule.

The At-Work Program will be conducted on Wednesdays at 5:00 p.m. in the Westboro pizzeria. The cost is $50 pre-paid, per person, for the eight-week series. Employees interested in this program should contact Ann Castiglione via CEO at CE.AAC:BLUTO. Checks should be made payable to Weight Watchers. Pre-registration is required before May 4. Classes begin on May 4.

There has been an increase from $50 to $69 for the At-Work program, but since the Data General program has had continuous rollovers, the program has not been affected. The price will increase only if the program misses a rollover.

Have You Signed Up For The Golf League?

Practice and qualifying rounds for the Data General Golf League's 1988 season got underway this week and league play begins on Monday, May 16

The golf league plays every Monday evening after work during the late spring and summer months. The 40 league-players are divided into two flights, based upon handicaps. Within each flight, players are paired into two-person teams. The "A" flight will play on Juniper Hill Golf Course in Northboro. The "B" flight will play on Saddle Hill Golf Course in Hopkinton.

The size of the league is limited due to the availability of golf courses. Data General employees, wishing to become new league candidates either as a regular member or an alternate are encouraged to join. Alternates play as fill-ins for regular members who cannot play on a specific Monday. New golf league candidate handicaps will be determined by four qualifying rounds which will be held at both Saddle Hill and Juniper Hill on the following Mondays: April 18, April 25, May 2 and May 9. Competitive play will begin on May 16. It is important for new candidates to get as many practice rounds in as possible to establish an accurate handicap.

The membership fee is $20 for the season. This fee, together with funds from the Data General Employee Activities Committee, includes the cost of the annual end-of-year banquet and helps defray the cost of prizes awarded throughout the year. Alternate members do not pay any membership fee. New league candidates will pay the membership fee only if they are selected to become regular members.

All regular members, new candidates, and alternates must complete the following entry form and return it to Elwin Elliott at Mail Stop A-125 in Westboro by Friday, May 6. Returning *regular members only* must also include their membership fee of $20, payable to the Data General Golf League.

If you have any questions, contact Dale Powers, club president, via CEO at host system WEBO08 or at extension 8063 in Southboro, or John DiMambro, club vice president, at host system WEBO03 or at extension 4986 in Westboro.

DATA GENERAL GOLF LEAGUE ENTRY FORM

(please print)

Name: _____

Location and Mail Stop: _____

Tel Ext and Badge No: _____

Complete CEO address: _____

Check one of the following:

_____ Returning Member (enclose a check for $20, payable to the Data General Golf League).

_____ Returning Alternate Member (no payment required).

_____ New League Candidate
Check applicable block below:

☐ New candidate for regular membership (no payment required at this time).

☐ New candidate for alternate membership (no payment required).

Please return this form to Elwin Elliott at Mail Stop A-125 in Westboro by Friday, May 6. New candidates should send practice round score cards to Frank Stokes at Mail Stop 3400 in Westboro.

Enter Now For The Spring Dasher Races

Data General employees planning to enter the Dasher races on Friday, May 13, have until Friday, May 6 to register. Entry forms should be sent to the Dasher Road Race at Mail Stop E-111 in Westboro as soon as possible.

Included will be 3-mile and 10-kilometer foot races and a 15.5-mile bicycle race. Bike race participants are required to wear hard-shell helmets.

Anyone interested in serving as a race day volunteer may contact the Dasher Road Race Committee at Mail Stop E-111 in Westboro. The Dasher races are sponsored by the Data General Employee Activities Committee solely for Data General's employees.

MARKETPLACE

WANTED

rofessional, 25+, M/F, share 2 bdrm in Belmont, brick frpl, inexp. rent; 489-4098, leave message (Belmont).

Housemate, share 2-bdrm colonial, no pets, w/w, lndry, 10 min. to DG Webo, $350/mo + util.; 435-2535 (Hopkinton).

FOR RENT

Shrewsbury, small 1-bdrm apartment in duplex, yard, bsmt storage, no dogs, references, avail 6/1, $400 includes heat/hot water, 756-9242 leave message, (Worcester).

Summer Rental, Conway, NH area, waterfront, boat slip, 4-bdrms, 2-bths, May & June, $400/wk; July & Aug., $750/wk; 263-4745 (Acton).

Condo, Worcester/Millbury, 2-bdrms, 2-bth, appli., w/d, balcony, storage, avail. 5/1, no pets; $640 + utils, 481-5445 (Marlboro).

N. Conway, Cathedral Ledge, 3-bdrm, 3 bth, townhouse/timeshare, jacuzzi, pool, cable, slps 8, July 23-30, $750/wk; 485-0861 (Marlboro).

W. Yarmouth, cottage, 3 min. walk to beach, deck, inside shower, $350/wk; 835-6327 (W. Boylston).

Florida Condo, 2-bdrm, 2-bth, at Bonnita beach, avail. April-Dec., $600/wk; 692-5740 (Westford).

ki Chalet, White Mt., 3-bdrms, 2 bth, frplc, all util., $300/wk; $200/wknd; 696-6065 (Milton).

Summer Rental, New Seabury/Cape Beach, 4-bdrms, frnshd, ocean view, walk to beach/boating; June & Sept. $550/wk; July-Aug, $800/wk; 435-5148 (Hopkinton).

Chalet, Sunrise Lake, N.H., yr rnd, slps 8, $45/day mid-wk; $65/day wkends; $325/wk; 286-2653 (Revere).

Summer Rental, Falmouth, frnshd 3-bdrm ranch, deck, near beach/boating, avail. June-Sept, $400/wk; 651-2617 (Natick).

Summer Cottage, S. Yarmouth, 2/10 mi. to ocean, 4-bdrm, 1-bth, deck, o/s shower, $525/wk, 5/88-10/88; red. rates May, June, Sept.; 568-0897 (Hudson).

Dennisport, year-round, 3-bdrm w/enc. porch, f/p, deck, o/s shower, cable tv, furnished, 7/10 mi. to beach, $595/wk, $395/off season; 562-3274 (Hudson).

Summer Rental, Nantucket, Cisco Beach, 4 bdrms, frnshd, walk to beach, avail. Aug.-Sept., 769-5788 (Westwood).

Summer Rental, house in Eastham near Nauset Light Beach, avail. June-August $575/wk; 443-6165 (Sudbury).

Lincoln, NH, Loon Mtn Village, 3-bdrm twnhse, 2-bth, indr/outdr pools, VCR, cable, health club, tennis, 5/23-9/11, $450/wk; 384-3292 (Wrentham).

Summer Rental, Dennisport, new, 3-bdrm, 2.5 bth, porch, deck, frpl, balconies, cbl tv, dishwasher, w/d, walk to beach, $900/wk, up to 7/9 and after 8/20; 533-2184 (Medway).

Dennisport, efficiency w/patio, cable, pool, 2/10 mile to beach, $325/wk or $225/wk off-season; avail. long wkends, 435-3794 (Hopkinton).

Dennisport, 2-bdrm duplex w/deck, 1/10 mile to beach, $460/wk or $295/wk off-season; 435-3794 (Hopkinton).

San-San, Jamaica, 4 bdrm villa, prvt pool/beach/tennis, staff grps up to 8, off-season rates for April-June 15, & Aug. 15 - Dec., $700 to $1350/wk negtbl; 368-1604 (Clinton).

FOR SALE

Nashbar mtn bike, 18-spd, 21" frame, biospace cranks, 28 lbs, ridden less than 100 mi., 877-5551 (Framingham).

Butcher block kitchen table, 60" x 36", round wooden legs, 881-4282 (Ashland).

Mother of bride dresses, size 10, ea. worn once; 875-1478 after 6:00 (Framingham).

Items, ladies leather boots, 7-1/2-B, blk, $35; 8-B brown, boots w/boot liners, $40; raincoat, size 8, blk, $15; men's size 10, ski boots, $5; Hart skis, 6' 9", w/bindings, $5; old fashioned handcrank ice cream machine, $5; (401) 765-5521, after 6:00 p.m., (Manville, RI).

Couch, multi-color, indian print, $75; 877-5047 (Framingham).

Hitachi VCR, 4 prog/14 day, used twice, $250/BO; 764-3687 (Southbridge).

Olympus OM-2N Camera, w/50 mm F1.8 lens & filter; OSRAM BCS44 studio strobe flash, swivels 180, w/built-in wide angle screen w/4 computer settings, retail $475, asking $275; 473-5939 after 6:00 (Milford).

Furniture, Lawson-style sofa, oak-framed chair w/otto., bentwood rocker, $350/set, indiv. prices negot.; 653-5383 after 7:30 pm (Natick).

18" Herringbone Chain, 14K Yellow gold, 11.9 gr., $375; 756-7371 (Shrewsbury).

14' O'Day Minisail, fiberglass board boat, mainsail w/boom vang, daggerboard, kickup rudder, hicking stick & straps, $650/BO; (401) 781-7311 after 6:00 (Providence, RI).

15' Tri-Hull Boat, fiberglass, w/40 hp outboard motor, trailer, $1500; 231-4215 (Northboro).

Car seat, Century, deluxe model, 2 mos. old, $40; 881-4437 (Ashland).

Items, Hobart 60 qt. mixer, 7 yrs old, $4000; Vulcan dbl oven, newly reconditioned $1000/BO; 481-7629 (Marlboro).

Wellesley, 3 lg. bdrms, fin. bsmt, frplcd fmly room, $259,500; 237-0868 (Wellesley).

Condo, 1 lg. bdrm, btm floor, lndry, eat-in kitchen, $76,900; w/$1000 back for closing costs, 481-7629 (Marlboro).

Condo, 2-bdrm, loft, garage, cath. ceilings, 12' antique windows, w/property on river, appli, $145,900 negtbl; (603) 772-3659 (Exeter, NH).

Portable Computer, PC compatible, includes case, printer, some s/w, $1000/BO; (603) 778-9554 (New Hampshire).

Items, commercial upright freezer, 18 cu ft, w/doorshelves & lock, 2 yrs old, $500/BO; cntry style loveseat, brown, $75/BO; 883-2724 (Millville).

Items, Carver 2000 rec., sonic holograph, stereo AM, 200 w/ch RMS, $999; Panasonic KX-T2345 speaker phone w/memory, $30; 460-1075 (Marlboro).

Round Oak Table, natural wood, pedestal leg, 4 chairs w/bamboo seats, $400; 485-9620 (Marlboro).

Townhouse/Condo, 7 rm, 2-bdrm, fin. bsmt, 1.5 bth, deck, pool, tennis, close to mjr rts & Mass pike, 15 min. to Webo, $99,500; 795-0429 (Worcester).

Townhouse/Condo, 2-bdrm, 1.5 bath, lg lvngrm, dngrm, totaling 1,450 sq. ft., $127,500; 485-6369 (Marlboro).

Macintosh 512KE, w/new apple mouse & 800K internal drive, $750; external apple 400K drive, $150; apple imagewriter I, $250; complete system $1050; 449-4267 (Needham).

Grafton Hill, 3-fmly, 6-6-6, sided, 1st & 2nd remodeled, 4 car garage, driveway, priv. yard, 752-0816 (Worcester).

Items, mod. walnut bdrm set, w/queen sz headbd, dresser, armoire 2 mirrors, nite stand, 6 yrs. old, $475; mod. kitchen set, white formica tbl w/pedestal base, 4 swivel chairs, $75; 845-6268 (Shrewsbury).

'80 Subaru GLF Parts, BO; 234-9694 (Northbridge).

Contemp. Split, 3-bdrms, hdwd flrs, a/c, oversized deck, 1-1/4 acre wooded lot, cul-de sac, 10 mi. to DG, $202,900; 879-7544 (Ashland).

Townhouse, all appli., 2-bdrms, 1.5 bths, full bsmt, A/C, gas heat, pool, small complex, $124,900; 481-6321 (Marlboro).

AUTOS

'77 Volkswagen Rabbit, htchbk, many new parts, $550/BO; 853-7223 (Worcester).

'78 Plymouth Volare, 4-dr, auto, a/c, ps/pb, AM/FM/cass., $650; (603) 749-3186 (Rollinsford, NH).

'79 Honda Twinstar, 175 cc, 9K mi., 80 mpg, $400; 231-4215 (Northboro).

'80 Suzuki GS450L, new tire & battery, 7500 mi., $600/BO; 838-2896 (Berlin).

'81 AMC Spirit, AM/FM, 83K mi., $1000; 433-5660 (Pepperell).

'81 Honda Accord, 4-dr, 5-spd, a/c, AM/FM/cass., $2000; 456-8460 (Harvard).

'83 Toyota Celica Coupe, A/C, 5-spd, rust prfd, $5300; 747-1452 (Plymouth).

'84 Camaro, V-6, 5-spd, A/C, AM/FM/cass., black w/charcoal cloth int., 62K mi., orig. owner, $4900; 649-7735 (Tyngsboro) or 784-7055 (Sharon).

'84 Mazda 626, 2-dr, gray, 5-spd, A/C, AM/FM/cass., $4900; 393-3121 (Northboro).

'84 Toyota Pick-up, 2 wd, longbed, 5-spd, cap AM/FM/cass., 72K mi., $3000; 865-5460 (Suttom).

'85 Dodge Aries K 2-dr, dk grey, auto, ps/pb, A/C, AM/FM, cloth int., 33K mi., $5200/BO; 395-4593 (Medford).

'86 Toyota Corolla GTS, 5-spd, red, 30K mi., BO; 643-0923 (Arlington).

'86 Toyota Pick-up, 2-wd, 5-spd, longbed, w/bed liner & cap, 40K mi., snrf, warranty trans., $6500; 473-7036 (Milford).

'86 Toyota Supra, 12K mi., garaged in winter, cover included, $15,950; 473-6321 after 7:00 pm (Milford).

'87 Chevy S-10 Blazer, black, 4-WD, auto, o/d, $10,900; 481-5698 (Marlboro).

HOURS

Westboro Cafeteria, full breakfast, 6:30 a.m.-10:00 a.m.; lunch, 11:30 a.m.-1:30 p.m.; open from 6:30 a.m.-3:00 p.m. for beverages.

Pizzeria, serving from 10:00 a.m.-2:00 p.m.

Pumpernickel's Deli, Coffee & pastries, 6:30 a.m.-7:30 p.m.; full breakfast, 6:30 a.m.-10:00 a.m.; deli lunch, 11:00 a.m.-2:00 p.m.; Take-out, 3 p.m.-6:30 p.m.; dinner, 5 p.m.-7:30 p.m.

3400 Computer Drive Cafeteria, full breakfast, 7:30 a.m.-10:00 a.m.; lunch, 11:00 a.m.-1:30 p.m.; open from 7:30 a.m.-3:00 p.m. for coffee and pastries.

Milford, full breakfast, 6:30 a.m.-8:30 a.m.; lunch 11:15 a.m.-1:15 p.m.; open from 6:30 a.m.-3:15 p.m. for beverages.

Southboro, full breakfast, 6:30 a.m.-10:00 a.m.; lunch 11:15 a.m.-1:00 p.m.; open from 6:30 a.m.- 3:00 p.m. for beverages.