Interface
THE DATA GENERAL CORPORATION
EMPLOYEE NEWSLETTER
MAY 1983

Defense Department Language Implemented On ECLIPSE MV/Family Computers

Data General has become the first major computer firm to offer a full implementation of Ada, a programming language which holds special significance to the United States Department of Defense (DOD) and its contractors.

A family of Ada software development work centers, announced this month, is based on Data General ECLIPSE MV/Family computers and utilizes the company's new Ada compiler and the Ada Development Environment (ADE), both offered to Data General customers through an agreement with ROLM Corporation.

"The availability of production level Ada language capabilities will be very important to the defense community," says Business Group Senior Vice President Bob Miller. "With Ada, programmers writing Army radar software, for example, can talk with their counterparts writing similar software for the Navy because they will both be using the same language. Recent DOD directives recommend the use of Ada software on new defense programs. Data General can now provide a full range of 32-bit Ada development systems unmatched in the industry."

Ada language is similar in structure to PASCAL and particularly well-suited to real-time applications requiring concurrent processing. This gives Ada tremendous significance for the future in both scientific and laboratory markets, as well. By 1985, Ada will be the only programming language to be used by the DOD. Program standardization according to some estimates could save the U. S. $24 billion in computer training, hardware and programming costs by the end of the century.

Requiring all DOD agencies to use a common language also will make the U. S. military's computer systems more effective. For instance, the Army currently uses more than 40 languages. Because the armed forces are using so many different languages, too often computers from one branch of the service are unable to communicate with systems used by another branch. The single programming language will unify all DOD application programs and improve U. S. defense capabilities.

Dennis Paboojian, vice president and general manager of ROLM's Mil-Spec Computer Division, says, "The Department of Defense and its prime contractors now have the opportunity to benefit from a full implementation of the Ada language. It is anticipated that the use of Ada will contribute to reductions in defense software program costs and allow for the development of more complex applications in substantially less time."

The Data General Ada work centers will be used to develop, test and debug Ada applications. These work centers will be driven by the ECLIPSE MV/4000, ECLIPSE MV/8000 and ECLIPSE MV/10000 computers.

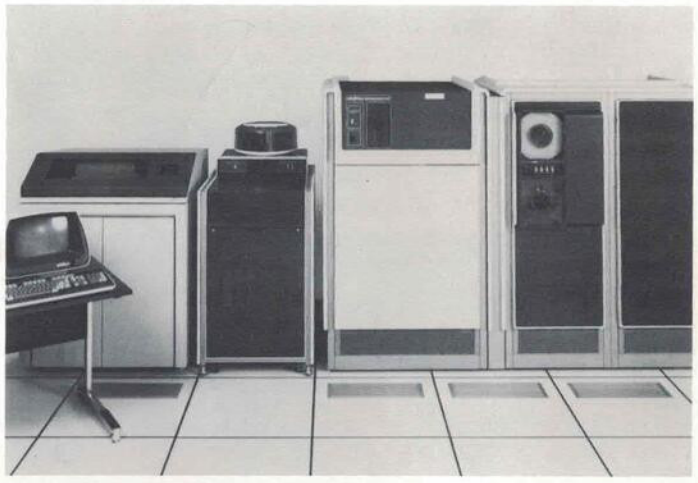
The entry-level Ada work center is based on the ECLIPSE MV/4000 computer. Higher performance, upwardly compatible configurations are based on the ECLIPSE MV/8000 computer and on the recently-announced ECLIPSE MV/10000 system.

DOD designed Ada with programmer productivity in mind. Large Ada programs can be written by teams of people working on separate parts that can be linked together, a feature crucial to military programs that can contain millions of lines of instructions. In today's defense environment, where reaction must take place in minutes, seconds or milliseconds, Ada supports real-time multiprocessing. It also gives programmers the ability to create tasks, activate and terminate them, pass information between them and synchronize their execution without resorting to error-prone assembly language programming.

A major cause of low programmer-productivity is the high cost of program maintenance, such as fixing bugs. Last year, alone, the DOD spent $2 billion to update, correct and enhance software programs. Ada provides compile-time and run-time checks to diagnose and correct programming errors that might otherwise be time consuming to find.

Another DOD concern is transportability: programs written on a Navy computer must be able to run on Army systems. Because ECLIPSE systems are fully program and I/O compatible with ROLM computers, the debugged Ada applications can be run on either Data General MV/Family systems or ROLM mil-spec computers.

Data General and ROLM will bring these work centers to customers across the U. S. this summer when the two companies open demonstration centers in several major cities.



The Ada work center (above) features an ECLIPSE MV/8000 computer and DASHER terminal.

Data General and ROLM: A Long-Term Relationship

Data General's introduction of a new family of Ada software work centers, based on ECLIPSE MV/Family computers and ROLM Corporation's Ada Development Environment (ADE), marks another chapter in a long relationship between the two companies.

ROLM, one of the world's leading suppliers of computer equipment for military use, has based many of its systems on Data General computers since shortly after the first NOVA computer was shipped. The 14-year-old company's first mil-spec computer implemented the architecture of Data General's original NOVA computer. A licensing agreement with Data General in 1969 gave it exclusive permission to manufacture and sell ruggedized (mil-spec) versions of that system. ROLM's adaptation of the NOVA computer design allows the system to withstand the severe conditions which computers are exposed to during military use.

That was only the beginning of a relationship which has spanned the histories of both companies. In 1972, Data General agreed to allow ROLM to market an extensive array of Data General software products for use on its mil-spec computer line. ROLM was given exclusive permission in 1976 to manufacture and sell ruggedized ECLIPSE computers. By 1981, that agreement included the ECLIPSE MV/8000 computer. ROLM has designed its equipment so that all Data General operating systems, high level languages and software development tools, as well as user programs developed on Data General computers, can be easily transported to ROLM mil-spec computers.

The market for mil-spec computers is predicted to grow to about $3.5 billion by 1985. ROLM's Mil-Spec Computer Division currently addresses about 20 percent of that market. ROLM has installed more than 5,000 mil-spec computer since 1969 to customers in the United States, Europe, the Middle East and Japan. Its customers are primarily U. S. and foreign government agencies, and industrial users.

Preparing For The Future By Learning From Its Past

Data General's 15th anniversary is a fitting occasion to reflect on how the company's past has helped to prepare it for the future. Some would argue that the computer industry's pace of change is so rapid that past experience is a liability on future developments. But, a look at Data General's history seems to argue with that assumption.

Since the first NOVA computer was shipped in 1969, Data General has acquired steam and momentum to become one of the world's leading suppliers of computer and peripheral equipment. Although that original NOVA computer was designed and manufactured with tools that are crude by today's standards, it became the base upon which a successful company was built. More than 125,000 Data General 16- and 32-bit computers have performed countless applications, helping business, industry, government and education to operate more efficiently and productively than ever before possible. Future products will lead to even greater advantages for computer users.

Instead of resting on high profit margins and fast growth, the company has continually invested in long-term growth and product development so that it may continue to be a competitive force in the computer industry. Starting on page 3, a look back into Data General's past will show how the company has prepared itself to meet the challenge of doing business in the 1980s and beyond.

Sales Team Honored At 12th Million Dollar Club

Data General Sales representatives and managers from around the world were honored recently at the 12th annual Million Dollar Club Conference. The 141 distinguished guests earned Club membership through their high sales volumes during 1982. This year's conference, held in St. Thomas, the Virgin Islands, included nearly 100 repeat winners.

The Million Dollar Club members participated in three days of discussions and workshops and heard presentations from Data General executives who outlined the company's goals for 1983 and beyond.

In keeping with the past two years, members of the Million Dollar Club were awarded signed and numbered art prints for their outstanding accomplishments. This year's print was created by Ouchi Makoto, one of Japan's leading artists.

Members of the Million Dollar Club are:

Area I

Region 1 *(Eastern Massachusetts and northern New England)*
Richard Dennehey *
Jerrold Kaplan *
Matthew Stevens
John Wells III *

Region 2 *(Central Massachusetts, Connecticut and New York)*
David Balch *

Region 3 *(New York City and Long Island)*
Michael P. Binder - Br. Mgr.
Fred Liebrader *
Jeff Strecker *

Region 4 *(Eastern Pennsylvania and New Jersey)*
Fred Beer *
Dave Bresler - Br. Mgr. *
Brian Ehrlich
Lew Kirschner *
Stan Levitt *
David E. Lund *
Art Mackin - Rg. Mgr.
Robert Rabiner *
Mal Sheinker *
Donald A. Yellen

Area II

Region 1 *(Tennessee, Georgia and Alabama)*
Ron Goldsmith
Jack Isbell *
Claude Lee
Claire Rosemond
Colin Thompson - Br. Mgr.

Region 2 *(Southeast states)*
George Martin
Jim Morton
John Salzer *

Region 3 *(Oklahoma and Texas)*
Don Bowen *
Allen Brown *
Cincha Davis *
Jim Henry *
Neil Knox - Br. Mgr. *
Noel Mason
Bill Ott
Rob Rury *
Marshall Stallings - Br. Mgr. *
Ivan Weiss

Region 4 *(Maryland and Virginia)*
Don Collins *
Allen Cromer
Norm Davis *
Frank Duss
Hank Firey - Br. Mgr. *
Herb Fox - Rg. Mgr. *
Peggy Hackenson *
Jim House *
Doug Michel *
Phil Smith *

Area III

Region 1 *(Northern California)*
Bob Dow
Don Faltings *
Don Flaherty *
Kit Sakamoto

Region 2 *(Greater Los Angeles and Hawaii)*
Wayne Dye
Gerry Gabel *
Ron Karlosky - Br. Mgr. *
Joan Kerestes *
Fred Lang - Br. Mgr. *
Bill Perkins *

Region 3 *(Southwest)*
Brian Conway *
Rich Gruenhagen - Br. Mgr.
Bill Hodgins *
Alan Mann *
Gary Morse
Bill Orum *
Ron Ralston *
Jim Warden *

Region 4 *(Pacific Northwest, Alaska, Utah, Colorado and New Mexico)*
Gerd Eysser *
Jim Hertzel - Rg. Mgr. *
Gary Hickman *

Area IV

Region 1 *(Illinois)*
Walker Finney
John Holmes *
Bob Krumstok *
Brad Zaba *

Region 2 *(Midwest states)*
Gene Altekruse *
Robert O. Andersen Jr. *
Skip Chandler *
Frank Gallo - Rg. Mgr. *
Dick Gillespie - Br. Mgr. *
William Goodreau
Paul Gubany *
Bob Kiburz - Br. Mgr. *
Dan Klaers *
Jim Mullowney *
Dan Sexton - Br. Mgr. *
Dan Tobin
Bill Wallace *

Region 3 *(Pennsylvania, Ohio, Kentucky, Michigan, West Virginia and Indiana)*
Dave Alioto *
Lee Bonneau *
Jack Bruckman *
Bob Nikora *
Bob Phillips *

Federal

Harry Carey - Br. Mgr. *
Donald Degnan
Al Fournier
Douglas M. Hurt *
Bill Malamphy *
James E. Palmer
Bryan J. Richards - Br. Mgr. *
James Webster - Br. Mgr.

Canada

Luc Noiseux - Montreal *
Bruce O'Mara - Montreal
Tom Reynolds - Toronto *
Dave Underwood - Ottawa
Henry Yee - Calgary

Nippon•Data General

Masaaki Arakawa *
Kenzo Hiruta
Kazuhiro Iwade
Nobuya Kawasaki
Tohru Kurosawa
Etsuro Nishiyama *
Ikuo Yoshida *

General Distribution Division

John Holmgren

Europe

United Kingdom

John Filmer - Ntl. Sales Mgr.
Peter Atkinson - Br. Mgr. *
Michael Butlin *
Les Calvert *
John Crooks
Philip Dowley *
Peter Lynch *
Stewart Roberts
David Stewart *
Peter Thornloe *

France

Jean Mouleyre - Cty. Sales Mgr.
Marcel Duroc
Philippe Pradel *

Spain

Emilio Flores Romero

Middle East

Mike Gallagher - Rg. Mgr.
Georges Hannouche (Mid East Data)
Jean Marie Lecourtier - Rg. Mgr.

Portugal (Cassel)

Nuno Ferreira

Sweden

Per-Erik Lundblad

Finland (Stromberg)

Timo Herttua *
Eija Tuokko *

Switzerland

Guido Mueller *
Andre Tharin *
Armand Ventura - Br. Mgr. *

Belgium

Didier Hees
Roger Schuyvinck *

Israel (Team)

Tom Granot
Zeev Kroizman *
Yigal Yaron

Americas/Far East

Australasia

Tom Bricklebank *
George Feher

** denotes repeat winner*

What Determination, Pride And Guts Can Do

A few years ago, a street fighter named Rocky Balboa captured the hearts and admiration of people around the world during his quest on the silver screen for boxing glory. That same drive and determination which helped Rocky stand toe-to-toe with an impossible dream is now being displayed by Al Fournier of Data General Sales.

A quadriplegic dependent on a respirator, Al has become a Rocky in the eyes of his family, friends and co-workers at Data General. His fight to become self-sufficient and return to work has become a battle that even Rocky would be proud of. Al is winning his uphill struggle and astounded medical experts by returning to work last month as a consultant to Data General in Baltimore. Although a nurse must accompany him to work, he believes further rehabilitation will put an end to that need.

Al's world changed dramatically last summer while sailing on Cheasapeake Bay with his wife, Barbara, and friends. Diving to retrieve a cushion that had fallen overboard, Al struck bottom and broke his neck. Quick thinking on the part of those he was with saved him from drowning. His wife and friends brought him to shore, while a waiting State Police emergency helicopter, alerted by radio from the sail boat, carried him to the University of Maryland Shock Trauma Unit for emergency treatment.

Al's fight had really just begun, though. Able to move only his head and neck, he remained at the Shock Trauma Unit until November, a respirator pumping air into his lungs. From Maryland, he was transferred to Craig Hospital in Denver, one of the world's leading rehabilitative hospitals for quadriplegics who must rely on artificial breathing apparatus.

To suddenly lose control of your physical abilities is a crushing blow, especially when you're as athletic as Al. Yet, come December, Al had a couple of goals to shoot for, although those around him considered them to be rather lofty. Upon notification that his high sales volume in 1982 had qualified him for the Million Dollar Club, the highest honor a Data General sales representative can achieve, Al was determined to go to the conference. He also set a personal goal to return to work so that he could continue to aid Data General.

"It was Al's dream to attend the Million Dollar Club," says Barbara. "His determination to

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Million Dollar Club Sales Representative Al Fournier receives well wishes from North American Sales Vice President Frank Keaney and Barbara Fournier.

Their Dream Became A Reality

The year is 1968. America is in the midst of a war that is becoming increasingly unpopular. Richard Nixon has started his first term as President of the United States. A bunch of old-timers calling themselves the Boston Celtics win the NBA championship, while America's best amateur athletes prepare for the summer Olympic Games.

Technological breakthroughs are placing the world in the midst of the greatest industrial revolution since the early part of the century. Hundreds of high technology firms are springing up across the United States. With four of every five start-up companies failing, launching a company with an unproven product is hardly a prescription to success. Yet, firm in their belief that business can use a 16-bit computer, Ed de Castro, Herb Richman, Dick Sogge, Fred Adler and Henry Burkhardt form Data General in order to turn their dreams into reality.

Their early beginnings were spartan, indeed, calling a former beauty parlor in Hudson, Mass., headquarters. A couple of folding tables served as the Engineering department, another table represented Manufacturing. Documentation and training materials were prepared on any available space.

But, they liked to work hard, and they knew that to be successful, they had to recognize and take advantage of their strengths, as well as identify and correct their weaknesses.

Toni Souza recalls that employees did everything in those early days. "What attracted me to Data General was the atmosphere," says Toni, who today is an Engineering Change Order planner in Westboro. "The company was small and everyone was very pleasant to work with. There were no job titles. Everyone helped each other out with their work, whether it was wire-wrapping a board or emptying wastebaskets and sweeping floors at the end of the day."

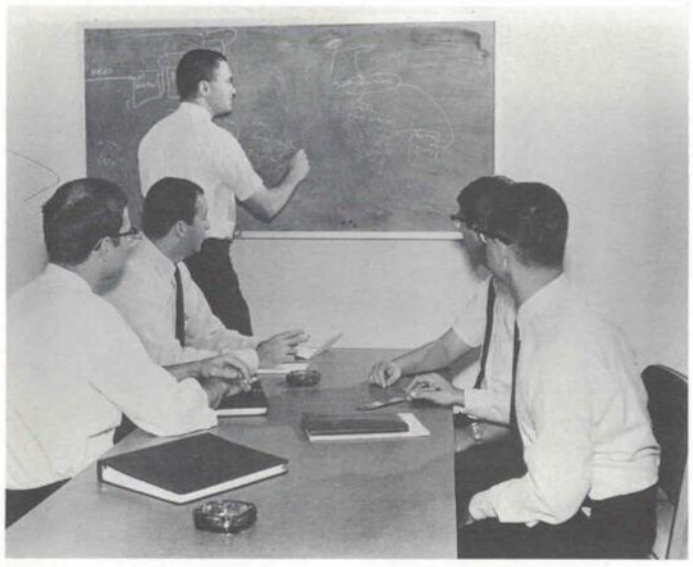
Know-How

Printed circuit boards (PCB) were tested using an unconventional method. Thanks to Dick Mangsen, who joined the company as a technician and wears badge number "9", a station was developed exclusively for PCB testing. "On my way home one afternoon, I purchased some lumber and built the company's first heat test station in my cellar," explains Dick, a section manager in Sustaining Engineering in Westboro. With a hair dryer placed next to it, PCB testing was conducted thanks to a little American ingenuity.

By September of that year, the first NOVA computer was unveiled, selling for about $8,000. For the first time, users of small computers have the additional flexibility of a multi-accumulator organization -- a feature normally reserved for large-scale systems. While the system is destined for the University of Texas, its public debut takes place in December at the Fall Joint Computer Conference in San Francisco, where it runs space war games for an intrigued audience of electronics wizards and customers interested in mini-computers.

Quick Growth

Despite their small surroundings, and the large number of competitors, Data General confounded the skeptics when the ideas of the company's founders took shape and orders quickly started pouring in. The rate at which the company grew even surprised its employees. No sooner had the company set up shop had its "headquarters" become outmoded.



Data General President Ed de Castro conducts one of the company's first staff meetings in 1968.

By the spring of 1969, the former beauty salon gave way to a facility in Southboro, which eventually came to be known as Building 1. When a reporter asked why a spot on Rt. 495 had been chosen rather than a location on Rt. 128, the electronics highway, company President Ed de Castro remarked, "We can't afford Rt. 128 prices." Actually, the location also afforded Data General an area from which to attract talented engineers, programmers, technicians and assemblers to develop and manufacture products for a burgeoning market.

As the company grew, the need for space became a prime concern. After Data General moved its operations to Southboro, construction was still going on at a fever pitch. With dust rising up around Building 1, earth-moving machines were clearing land on the 15-acre site where new buildings would go up to handle the company's quick growth.

"By the fall of 1969, our operations had expanded into Building 2," says Engineer Dick Mank, who joined the company in January that year as the company's 15th employee. "Having spent nearly 15 years with the company, there are a lot of things I remember, but the rate at which we grew was what always impressed me the most. The company was growing so fast you could feel it. Almost immediately after Building 2 was completed, construction was started on Building 3."

In 1969, Data General's manufacturing assembly line in Building 1 was based on folding tables.

Despite the hustle and bustle surrounding Building 1, employees were busy inside helping the company to meet the demand for NOVA computers. The company planned to ship a computer a day, and 1,000 a year by the end of 1970. This break-neck speed was wishful thinking according to most industry watchers, but not to Data General.

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TO: All Employees:

Anniversaries are a time to look back and look forward. Recently, I have done a little of both as we celebrated the company's 15th anniversary.

Looking back, I see the tremendous accomplishments of thousands of people working together to create an industrial firm of major proportions. Today, we are the 339th largest U.S. industrial corporation, providing nearly 15,000 jobs worldwide, and supplying hundreds of thousands of people with computing tools that make lives better.

Since 1968, we've added names like NOVA and ECLIPSE to the computer vocabulary of people in all parts of the world. Recently, with the announcement of CEO office automation software and the new MV/family of computers, we have accelerated our presence in the highest growths markets of the next decade.

Looking ahead, I see a continuing flow of new products, new markets, and new and more productive ways of conducting our business. I hope you will join with me in building our future on those things we have done well. The things we have done well certainly include providing an environment conducive to innovation, individual initiative to succeed and the ability to work together.

I'm sure you can cite many other characteristics of our success. In fact, as the company becomes larger, it is important that individual employees continue to voice their opinions and beliefs about the company in the same open manner they have over the years. In the next few weeks, some 200 employees representing all areas of the company will be asked to participate in meetings designed to help identify the strengths on which we will build our future. I hope you will cooperate, if asked to participate.

Together, I'm sure we can make the next 15 years as exciting and challenging as the past.

Edson D. de Castro

Ed de Castro

continued from page 3

From the company's start, Data General quickly proved it belonged. Sales in 1970 doubled those of 1969. Sales in 1971 were twice those of the previous year. By the summer of 1971, Ed de Castro told the New York Society of Security Analysts that Data General had become the second largest supplier of small computers in the world.

To ensure the company was prepared to handle the demand for computers, Sales offices were opened almost weekly at major cities around the U. S. and the world. European operations were established in 1970. The company's sphere stretched to California in 1972 when a semiconductor facility was opened in Sunnyvale, California, the heart of Silicon Valley. In the spring of 1973, the first assembly of core memory occurred in Hong Kong. And, construction on additional buildings in Southboro continued.

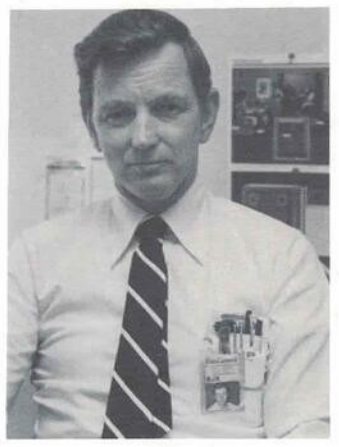
Computer Milestones

Shortly after joining the company in June 1969, Linda Skinner recalls attending the first company-wide celebration. "We had just sold our 100th NOVA computer and the achievement was recognized with a party in the Manufacturing department," explains Linda, who is now manager of Software Support Services. "We cleared away some of the folding tables and staged a celebration to mark the event."

Toni Souza

Dick Mank

Linda Skinner



Dick Mangsen

About 12 years later, Linda attended another computer-milestone celebration, but on a larger scale. The sale of Data General's 100,000th computer was recognized by thousands of employees, their families and friends during an evening at the Museum of Science in Boston. Data General accomplished that feat quicker than any other mini or mainframe computer firm.

Bright Future

In spite of a sluggish economy worldwide, Data General continues to grow. Today, the company has sales of more than $800 million, ranking 339th on Fortune Magazine's list of the 500 largest U. S. industrial corporations. Building 1 in Southboro has been joined by facilities from Germany to Thailand. The company's original NOVA computer line has grown into seven families of computer products -- ranging from a desktop computer to 32-bit systems that have the processing power of large-scale computers.

Depending on how you look at it, 15 years is short time or a long time. Compared to many of the large U. S. industrial corporations, Data General is still a kid. And, looking at it another way, when Data General was founded in 1968, more than 60 percent of the company's current North American workforce had yet to graduate from high school.

The company has prided itself on being able to offer its employees the challenge of being successful in the marketplace. Employees have responded to this challenge by making Data General one of the largest computer companies in the world. Data General has shipped more than 125,000 computers in just a decade and a half of operation. That's nearly 23 computers shipped to customers each day.

The company has established objectives and plans that lay the groundwork for Data General to grow just as it has the past 15 years. To continue to be successful in the future, Data General will focus its efforts on increasing sales, keeping customers satisfied with their products, being profitable and presenting employees with opportunities for personal growth and long-term challenges. Striving to meet these goals should make the next 15 years as successful as the first 15.

First Computer: It Almost Never Made It

Despite its success, its a good thing Data General's start was not an indication of what was in store for the company.

The work that went behind the development of the first computer truly was a team effort among the company's dozen employees. While one employee tightened the last few screws on the chassis, others produced the documentation and shipping invoice that would accompany the system on its journey to the University of Texas. Together, the "company" packed the system into its shipping crate and carted it to Boston's Logan Airport where it was loaded on a cargo plane, headed for the Lone Star state.

The joy that accompanied the sale was short-lived, however. Unfortunately, the system was lost in transit on its way to the university. Caught in the midst of an airline strike, the computer mysteriously disappeared, only to be discovered weeks later in a warehouse at Chicago's O'Hare International Airport.

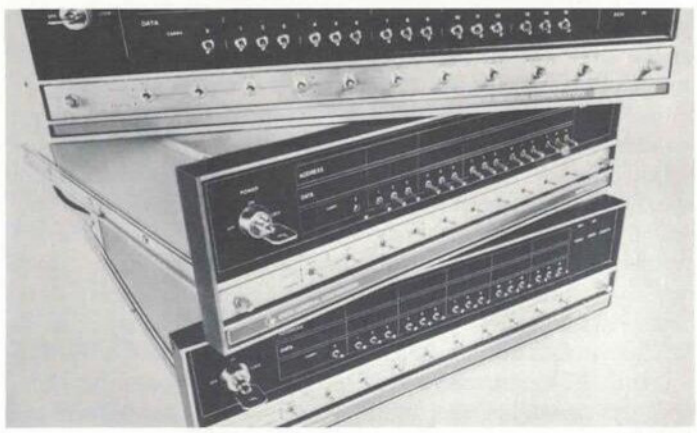
Fear not, though. While the missing computer was being traced, an alternate system was shipped in its stead to Austin. Once the original system was found and tested, it was delivered to Texas.

As fate would have it, Data General's first international sale got off to an equally inauspicious start. The system, headed for a customer in the United Kingdom, was stolen along with the sale representative's car while he made a quick stop on his way to install the computer.

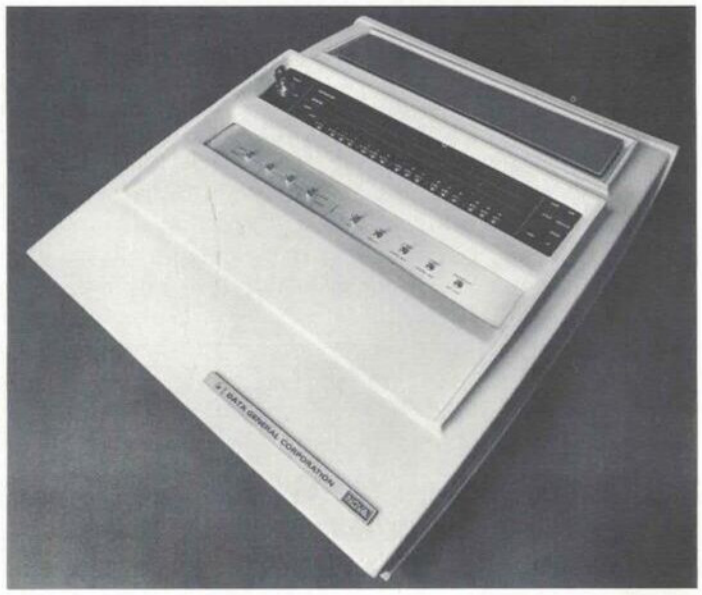
Every cloud has a silver lining, though, and so does this one. It seems that the car thief pulled off the road a couple of minutes after heisting the car to see what "free" options his new Triumph convertible came with.

One look into the trunk at the black metal box with its lights and switches was enough to make the poor crook decide he wanted nothing to do with the thing. So, he ditched the NOVA computer on the side of the road, where it luckily was found a short time later. The sports car has never been seen since.

During Data General's early days, employees performed all sorts of tasks. In 1969, Test Technician Bob Nemet (right) of Southboro helped to make sure Data General's 100th computer system reached its destination by helping a customer load the NOVA computer into the back of a station wagon.



This is how the SUPERNOVA, NOVA 1200 and NOVA 800 computers stacked up in 1971.



The first promotional photo of the NOVA computer.

An Innovator In A Unique Industry

To be a success in anything you do, it is best to be a leader. Since Data General started operations, it has taken an innovative approach to making the company an exciting and challenging place for its employees and creating a product line that offers customers high performance at a low cost.

When other companies were starting up, Data General did not follow the path of other novas. With the introduction of its first product, Data General immediately became known as a company that offered customers something different. When the NOVA computer was announced in September 1968, it was the first low-cost general-purpose computer to be built around medium-scale integration.

The system, barely more that five inches high, was designed for on-line use in laboratories. The entire central processor was contained on just two 15 by 15 inch boards, the first time boards of that size had been used. Today, 15-inch boards are industry-standard.

By 1972, Data General had become the first company to offer customers a computer with a CPU on just one board.

Aware that customers are interested in processing speed, Data General has consistently developed software with features usually only found on large computers. A FORTRAN 5 compiler lets NOVA computers run complex computations almost as fast as a large IBM computer.

New technology is needed to keep a company competitive with those around it. In 1973, Data General followed Horace Greeley's advice and went west to open a semiconductor research facility in Sunnyvale, California. Prior to that, no minicomputer company had ever designed or manufactured its own chips.

Computers talking to other computers was a feature that customers needed. International companies needed a way to access information between offices. XODIAC was the answer. What it means is that a person in one city can access a computer in a neighboring city or one continents away. For Data General, XODIAC, introduced in the fall of 1979, was more than just a new product, it marked the beginning of networking.

Using XODIAC software, users can operate strictly in a private networking format or they can extend their communications into the public domain using the X.25 international standard. It was the first time a compatible bridge between public and private communications environments had been offered to computer users.

The microECLIPSE chip.

But, technological breakthroughs were not the only characteristics Data General had become known for. With many employees being attracted to the company because of the challenges it offers, several programs were adopted to help employees work more productively and efficiently.

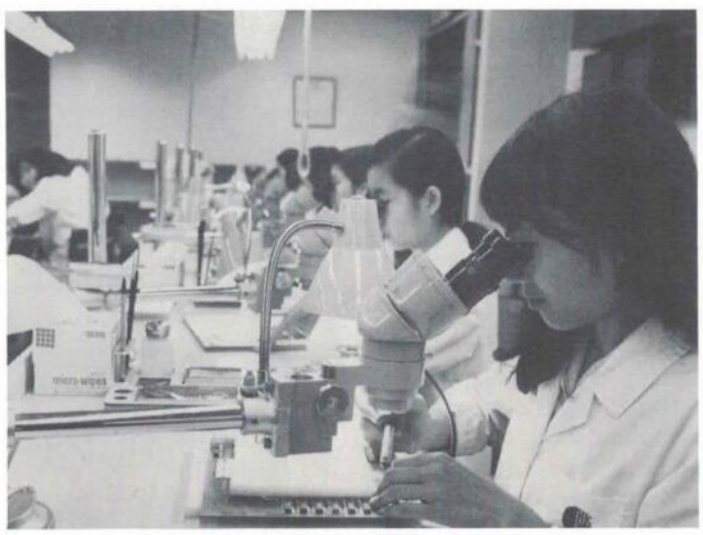
Data General is committed to helping employees reach their full potentials. The company is firm in its belief that employees be managed by good managers; receive interesting and challenging job assignments; and contribute to Data General's success.

To insure that employees are well-prepared to meet the demands of the computer industry, the Management and Organizational Development department brings employees training so that they can grow and flourish in careers that will benefit themselves and the company. So that managers may be able to better direct and guide employees, a week of training has been set aside for every Data General manager each year.

Data General has continually built upon its benefits program, adding features according to the interests and needs of employees. The company has offered its employees benefits which have helped them in times of good health and bad.

Employees have been given an opportunity to invest in their futures, as well as the company's, through the employee stock purchase plan. Since the company's early years, the plan has proved popular among all employees. Today, more than 60 percent of Data General employees own an interest in their company.

Data General produced the microNOVA chip at Sunnyvale beginning in 1976.



Data General-Hong Kong, circa 1974.

Milestones

April 15, 1968 -- Data General founded

September 1968 -- NOVA computer announced

March 1969 -- Data General moved to Southboro

November 19, 1969 -- Made first public offering of common stock

1970 -- Data General established Sales operations in Europe

March 1971 -- 1,000th computer delivered

March 1972 -- Field Engineering Depot opened in Manhattan Beach, California

April 1972 -- 2,000th computer delivered

July 1972 -- 3,000th computer delivered

October 1972 -- Sunnyvale plant opened

December 1972 -- 4,000th computer delivered

February 1973 -- 5,000th computer delivered

April 1973 -- Data General opened core memory assembly plant in Hong Kong

December 28, 1973 -- Data General listed on New York Stock Exchange

April 1974 -- 10,000th computer delivered

October 1974 -- First ECLIPSE computer announced

April 1975 -- Westbrook plant opened

March 1976 -- First microNOVA computer announced

June 1976 -- 1,000th ECLIPSE computer delivered

July 1976 -- Portsmouth plant opened

August 1976 -- First DASHER announced

November 1976 -- AOS operating system introduced

January 1977 -- Westboro headquarters opened

May 1977 -- First CS computer announced

November 1977 -- Research Triangle Park lab opened

March 1978 -- Clayton plant opened

June 1978 -- 50,000th computer shipped

August 1979 -- Joint venture agreement reached with Nippon•Data General

September 1979 -- Austin plant opened

November 1979 -- XODIAC and AZ-TEXT software announced

February 1980 -- Data Base Management System (DBMS) announced

April 8, 1980 -- Transaction Processing Management System (TPMS) announced

April 29, 1980 -- ECLIPSE MV/8000 computer announced

April 29, 1980 -- AOS/VS operating system announced

February 1981 -- Apex plant opened

February 1981 -- DASHER G300 Graphics Terminal announced

May 1981 -- 100,000th computer shipped

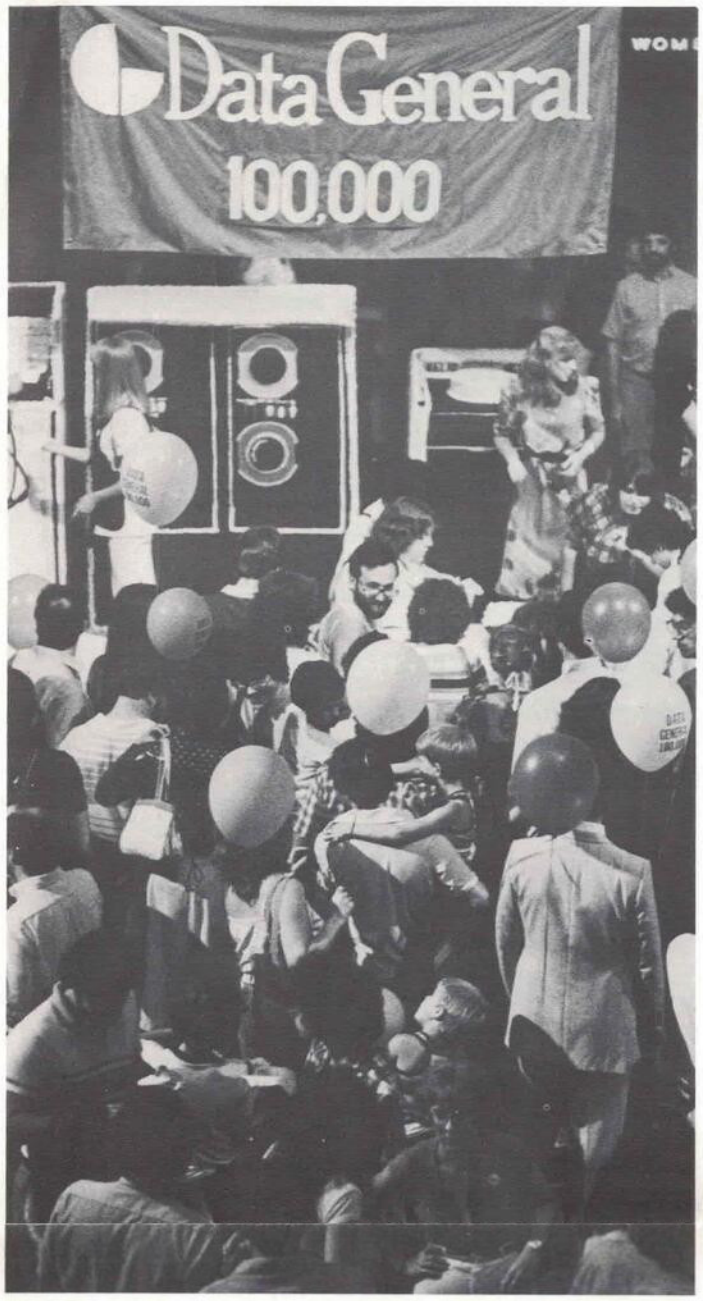
July 1981 -- Data General-Woodstock purchased

February 1982 -- Data General-Milford opened

March 1982 -- Data General acquires majority ownership of Nippon•Data General

November 16, 1982 -- ECLIPSE MV/40000 computer announced

March 2, 1983 -- ECLIPSE MV/10000 computer, GW/4000 Expert Workstation and DASHER G500 Graphics Terminal announced



Data General employees celebrated the shipment of the 100,000 computer in June 1981.

Data General went to all extremes for five years to get a traffic light installed at the entrance to its Southboro plant. In 1978, employees erected a phoney light at the intersection. The state of Massachusetts got the message and eventually the lights went up.

The Match Of The Century

January 14, 1972. Chess lovers everywhere are eagerly anticipating the Bobby Fisher-Boris Spaasky showdown to determine worldwide chess supremacy. Howard Cosell waits with baited breath to call the three-week match.

Meanwhile, in a corner room at Columbia University's Electrical Engineering and Computer Science department, a SUPERNOVA computer is matched across the board from an IBM 360/91 computer.

In the words of Howard Cosell, it's a true David versus Goliath event, a mismatch in the world of chess. The SUPERNOVA can fit in a brief case. The IBM 360/91 is one of the world's largest computers. The SUPERNOVA computer has a memory capacity of 32K bytes. The huge IBM system holds more than 2 million bytes of memory. Howard is so outraged over the matchup that rumor has it he may never broadcast chess again.

Shades of the Impossible Dream. By the game's sixth move, the SUPERNOVA gains a decided advantage. Then, the System 360/91, folding under pressure, blunders and trades a knight for a pawn. After 25 moves, its checkmate. The game ends in just 90 minutes with the SUPERNOVA recording an upset victory that will be remembered forever in chess history. For Data General, its a good way to advertise the versatility of its largest computer system.

That fall, the SUPERNOVA challenges Bobbie Fisher to a game. Its not known whether the match was ever held, but Fisher never picks up a chess piece again. Hmmm!

What's In A Name? Data vs. Dahta.

You say eether and I say eyether, You say neether and I say nyther; Eether, eyether, neether, nyther, Let's call the whole thing off!

Depending on who you talk to, Data General's 15,000 employees are broken into two kinds of people, those who say Data and those who say Dahta.

It's a controversy, of sorts, that started at the company's inception and has grown ever since. Regardless of what Data General facility you work in, it's likely that the word is never mouthed the same way twice. The word is not affected by regional dialects, either. Data General's New England employees seem to be split 50-50 on the word, while those in the South tend to favor Dahta, but by only the slimmest of margins.

You like potato and I like potahto, You like tomato and I like tomahto; Potato, potahto, tomato, tomahto, Let's call the whole thing off!

The American Heritage Dictionary is no help in solving Data, er Dahta, General's worldwide predicament. According to the book's Usage Panel, the small word, which can cause such a large problem, can be pronounced either way. When in doubt, ambivalence always works.

Whether its Westboro or Sunnyvale, Hong Kong or Paris, Data General employees have one thing in common: There are those who like Data and then there are those who like Dahta.

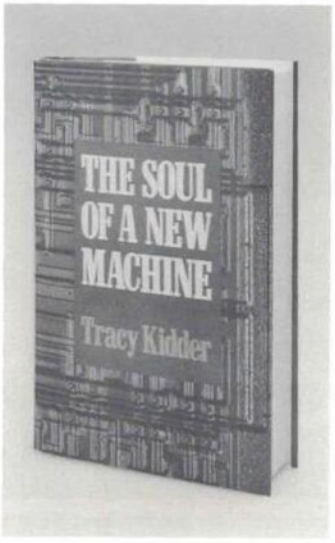
Data General's Soul Is In A Book

Every year, Data General spends millions of dollars in advertisements that bring the company's name and products to people around the world. Ads appear regularly in the "Wall Street Journal," "Computerworld," and scores of other business and trade publications. On American airwaves, Burgess Meredith described some colorful Data General computer applications, while John Houseman did the same Down Under. The ads are sleek, to the point and whet the appetites of customers.

It is practically impossible, though, to get across the work that goes into bringing products from the drawing board to reality. The fast-paced, high energy work which takes place in a computer company needs something larger than an ad, something that goes into detail, something that tells the story behind the story, something like: "The Soul of a New Machine."

The Pulitzer prize winning novel, which chronicles the development of Data General's ECLIPSE MV/8000 computer, is a best seller that has brought computers out of the back room and into the homes of people around the world. More than 100,000 hard cover copies of the book have been sold, it has been translated in 10 languages, including a excerpt that appeared in a Russian magazine, and a feature length movie may soon appear.

For Data General, the book has been used as a recruiting tool to attract talented engineers and programmers graduating from college. Recruiters are quick to point out that the challenging tasks which the ECLIPSE MV/8000 development team faced are everyday opportunities for Data General employees.



For A Job Well Done

Data General knows a good thing when it sees it. That is why the company strives to honor its employees for their outstanding accomplishments.

In 1974, the company began a practice which is now tradition: Employee Service Awards. Each year, Data General's five-year employees from plants and offices worldwide are cited at local luncheons for reaching the employment milestone. A characteristic of a successful company lies in its ability to keep its talented employees. Data General is doing a good job as nearly 1,700 employees who joined the company in 1978 will be recognized this summer.

Data General also is extremely proud of those employees who reach 10 years of company service. In 1980, the first group of 10-year employees reminisced about old times during a delightful evening cruise on the Boston Harbor. This month, more than 300 U. S. employees and their families will enjoy themselves in Florida during a weekend at Walt Disney World and Epcot Center.

Data General understands that everyone likes to be recognized for a job well-done. To honor those employees for exemplary performances, a series of awards conferences are conducted throughout the year.

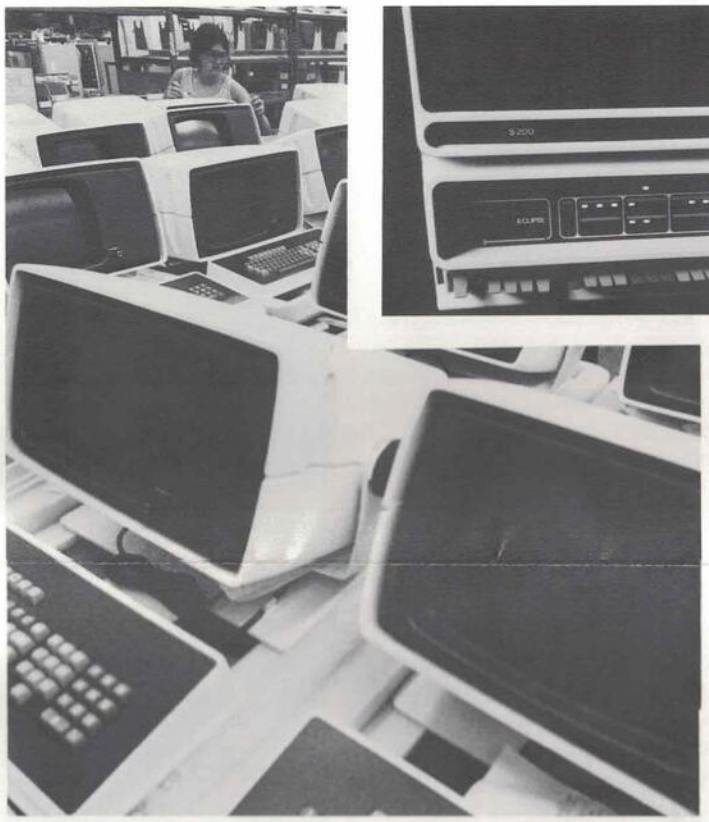
The company's top field engineers are cited during the annual Excellent Service Awards Conference. Last winter, the best of the computer industry's top field engineers received awards for their achievements. Gary Harmon of Palo Alto, California was awarded a CS/5 computer for his selection as Data General's top field engineer.

The Million Dollar Club was started 12 years ago when the handful of Data General sales representatives who sold more than $1 million in equipment in 1971 were feted at a restaurant in the Westboro area. The Club quickly grew into an event that every Data General sales person strives to gain membership into. This year, 141 sales representatives from around the world were selected into the Club for their high sales. They participated in three days of conferences, workshops and meetings in the Virgin Islands.

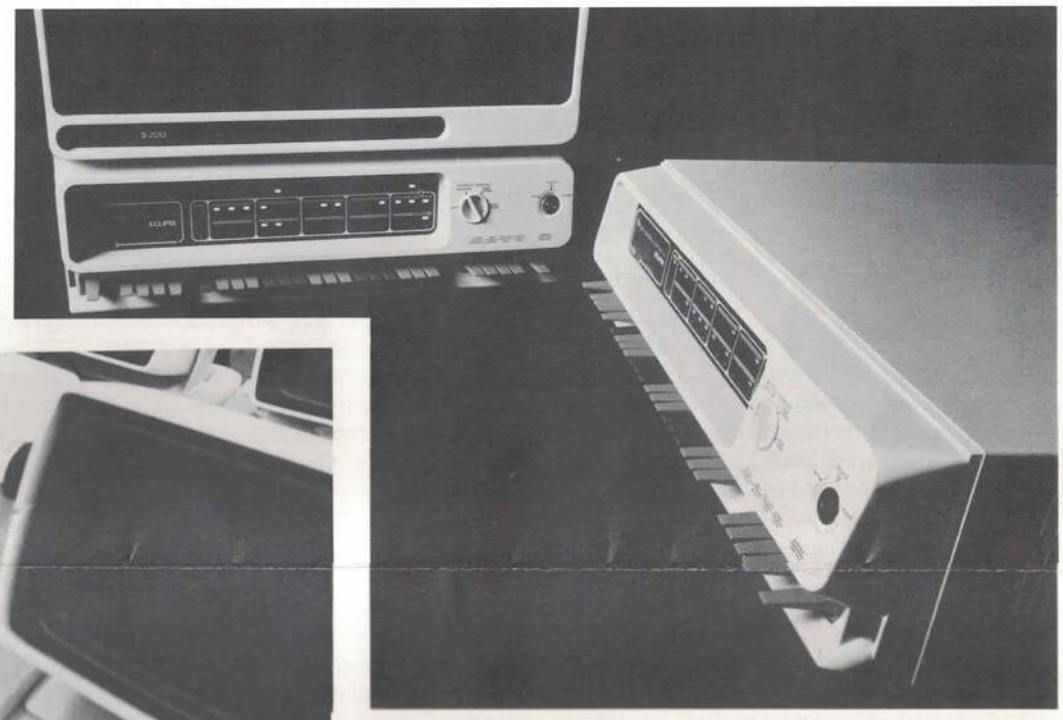
Data General has prided itself for developing a product line that combines the features of state-of-the-art technology, quality and price. To honor developers of those products, the Outstanding Development Achievement Awards were established. The award has been presented to the more than 170 Data General engineers, programmers, technical writers and editors who brought the NOVA 4 computer, the microNOVA MP/100 and MP/200 computers, MP/OS, the ECHO disc drive, the ECLIPSE MV/8000 computer and CEO software to market. The success of these products was due to the skills of Data General's talented employees.

Where The Logo Came From

When Data General shipped its first NOVA computer, the familiar Data General logo was imprinted onto the face of the 16-bit system. The logo was designed in 1969 by the Boston advertising agency, Hill, Holliday, Connors, Cosmopoulos, Inc. The company was looking for a contemporary corporate symbol that was simultaneously functional and aesthetic. The result: a black half-circle to represent the "D", and a red quarter-circle forming the "G".



DASHER terminals were first manufactured in Westbrook, Maine.



The ECLIPSE debuted in 1974 with the ECLIPSE S/100 and ECLIPSE S/200 computers.

A List Of Firsts

1968: First company to offer a 16-bit minicomputer using medium-scale integration and incorporating multiple accumulators in the central processor.

1969: First company to offer 15-inch circuit boards, now standard in the industry.

1972: First 16-bit minicomputer CPU on a single printed circuit board.

1973: First minicomputer company to establish its own semiconductor development and manufacturing facility.

1974: First minicomputer company to offer error-correcting memories.

1975: First minicomputer company to offer a standalone, asynchronous input-output processor as part of a standard product.

1975: First minicomputer company to offer 8K core memory unit on a single printed circuit board.

1976: First minicomputer manufacturer to offer a 16-bit minicomputer on a chip.

1976: First ANSI 74 COBOL programming language for small computers.

1976: First minicomputer company to develop its own 3330-type disc.

1977: First minicomputer company to develop "Winchester" fixed-media technology disc.

1977: First minicomputer company to use cache memories as an integral part of semiconductor memory.

1978: First minicomputer processor to support array and vector operations.

1978: First company to introduce multiterminal microcomputer COBOL.

1978: First optimizing compiler FORTRAN 5 for minicomputers.

1979: First minicomputer manufacturer to offer minicomputer-based PL/I.

1980: First public packet-switching networking product, XODIAC software for minicomputers, based on the X.25 international standard.

1980: First minicomputer company to put medium-scale minicomputer on a single chip.

1981: First minicomputer company to offer IBM SNA compatibility.

1982: First minicomputer company to offer a 32-bit high-performance, real-time operating system and a compatible, general purpose operating system for the same computer.

1983: First minicomputer company to implement a separate address generator within a computer.

1983: First minicomputer company to offer a graphics subroutine package that complies with the international Graphics Kernal System (GKS) software standard.

Special Systems: When Customers Need Something More

The growth of Data General's Special Systems group has closely paralleled Data General's rise in the computer industry.

From a handful of people occupying a corner of Southboro's Building 1 in 1975, the group has evolved to more than 200 employees located in Buildings 4 and 6, and a marketing office in Feltham, England serving European customers.

This group of marketing, engineering and manufacturing specialists is dedicated to providing customers with the hardware required to meet their specialized application needs. Product complexity ranges from simple adaptions to multiple-bay "start from scratch" engineering designs.

"Special Systems exists to enhance standard product sales," says Director David Wilson. "The group is another resource to help the sales force meet a customer's special computer needs. A significant percentage of Data General's Million Dollar Club sales representatives use Special Systems when their customers need something beyond standard product offerings."

David points out that employees and customers sometimes confuse the Special Systems group with the Systems Division. "Special Systems designs and produces special-purpose hardware," he explains. "The Systems Division provides customers with application software."

The group's engineers and

David Wilson

programmers work on all Data General products, from the microNOVA computer up to the largest ECLIPSE system. "There are currently more than 1,000 Special Systems products offered by Data General," comments Special Systems Product Marketing Manager Dick Pleau.

Among the wide group of products offered as "standard specials" are devices that can switch communications lines and peripherals between Data General computers. These switching units helped close the sale of 18 dual ECLIPSE MV/8000 computers to the Federal Aviation Administration (FAA) last year.

Special Systems' model 5775H High Speed Data Control Unit (DCU), engineered for a telephone company communications systems, had sufficient general appeal for it to be made available to Data General customers as a standard special. This product is compatible with the DCU/200 but executes four times faster.

Communications, sensor I/O and interface designs are major Special Systems strengths. Reservation system products designed for Agency Data, a division of American Airlines, typify the importance of Special Systems in providing its special services to close a sale.

Another major part of the group's product modification work is with display terminals, providing standard DASHER terminals with special-purpose features.

Among the products designed by Special Systems are terminals that have been installed in information centers, such as Georgia's Hartsfield International Airport, to provide international visitors with travel information in several languages. The hardware, including overhead display terminals and keypads for the telephone booth centers, was adapted by Special Systems engineers.

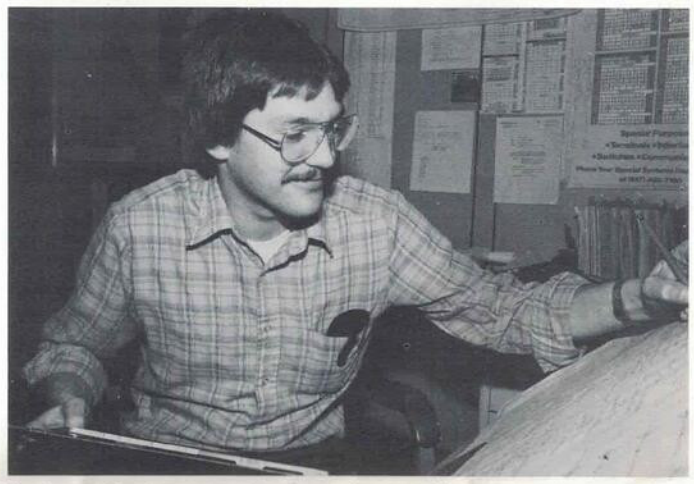
Terminals and displays headed for international customers often are tailored by the Southboro group to meet special language requirements. The group has designed terminals for use with languages such as Icelandic and Norwegian, as well as languages reading right to left, such as Arabic for use by Middle Eastern customers.

Special Systems regularly modifies terminals to perform additional functions. Terminals with high resolution characters, color and various screen sizes are offered as standard specials by the group.

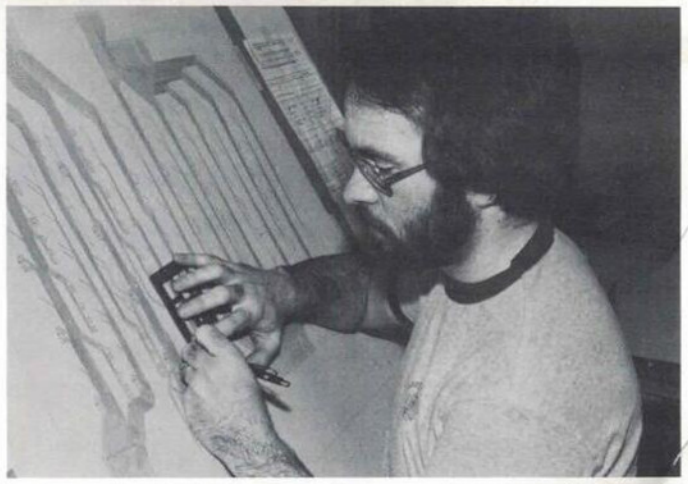
Products are not only designed by Special Systems, they are produced by a dedicated manufacturing facility. Engineering designs are released to Manufacturing for integration and final test with the customer's complete system configuration.

"All products developed and manufactured by the group," says David, "are built to the same high quality standards as other Data General products. Additionally, all products are designed with the same diagnostic features as standard products; this means that Field Engineering is able to service them as effectively as all other Data General equipment.

"We have been quite successful in helping many customers meet their specific computing needs," continues David. "Special Systems is a resource to customers when their needs go beyond that of the standard product line."



Engineer Jim Doustou designs a "special" communications switch for a Data General computer.



Designer Dennis McGarrahan draws a switch that will allow two central processors to share the same 'Winchester' disc drive

What Determination Can Do

continued from page 2

go to the Virgin Islands and return to work has helped him to come as far as he has in such a short period of time. His doctors have been amazed at the progress he has made."

Sales Support Manager Ed McManus, who manages the Million Dollar Club, notes that, "With the help of many Data General people, Al, his wife, and an attendant flew to the Virgin Islands where Al participated in all aspects of the business and social meeting. Friends and co-workers met Al at the conference, at the banquet and at poolside for a cocktail party. Al did not miss a session."

Barbara states that doctors at Craig Hospital know of only a handful who have suffered Al's injuries and have been able to return to work. "The doctors had told us that no one usually goes back into the line of work they were in," says Barbara. "They were thrilled, though, because Al's work allows him to adjust to his handicap."

Throughout his "inconvenience" as Al calls it, his demeanor has remained remarkably positive and his high spirits have inspired all those around him. "I've been in computers 21 years," says Al. "The three years with Data General have been the best in my life. Data General has kept my morale up during my eight months in the hospital. The company wanted me to come back to work so that I could help them win new business. I wanted to get out of the hospital and get back to work. I enjoy being a sales rep. Its nice to go out each day and show that I am a productive part of the company."

As a consultant, Al will train Data General sales representatives on products, contracts, sales territories, and help develop marketing strategies, sales campaigns and other programs to help the Baltimore branch operate effectively with its customers. "My body may be paralyzed, but my brain is not," he states. "As long as I can keep my strength and maneuver my wheelchair, I'll be okay. Most of the work I do is paperwork."

Although Al was on his own fighting for his life at Craig Hospital, the thoughts and prayers of hundreds of Data General employees were with him. "I have a photo at home that shows a wall in my hospital room completely covered with cards from Data General people. I was touched that people took the time to send them. I didn't realize how important something like that can be."

Despite his present condition, Al expects to walk again. Selling computers has taught him that technology is making the impossible possible. "In my condition, there are a lot of things that can get you down," says Al. "That's why you have to have a goal. Mine is to have a long sales career for Data General. I expect CEO software to be a valuable tool in keeping my customers informed, without requiring a lot of travel. I'm still on my way back. I'm not pulling my full weight yet, but I plan to soon. I have a lot of people helping me, especially my wife, family, friends and people at work."

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