GE
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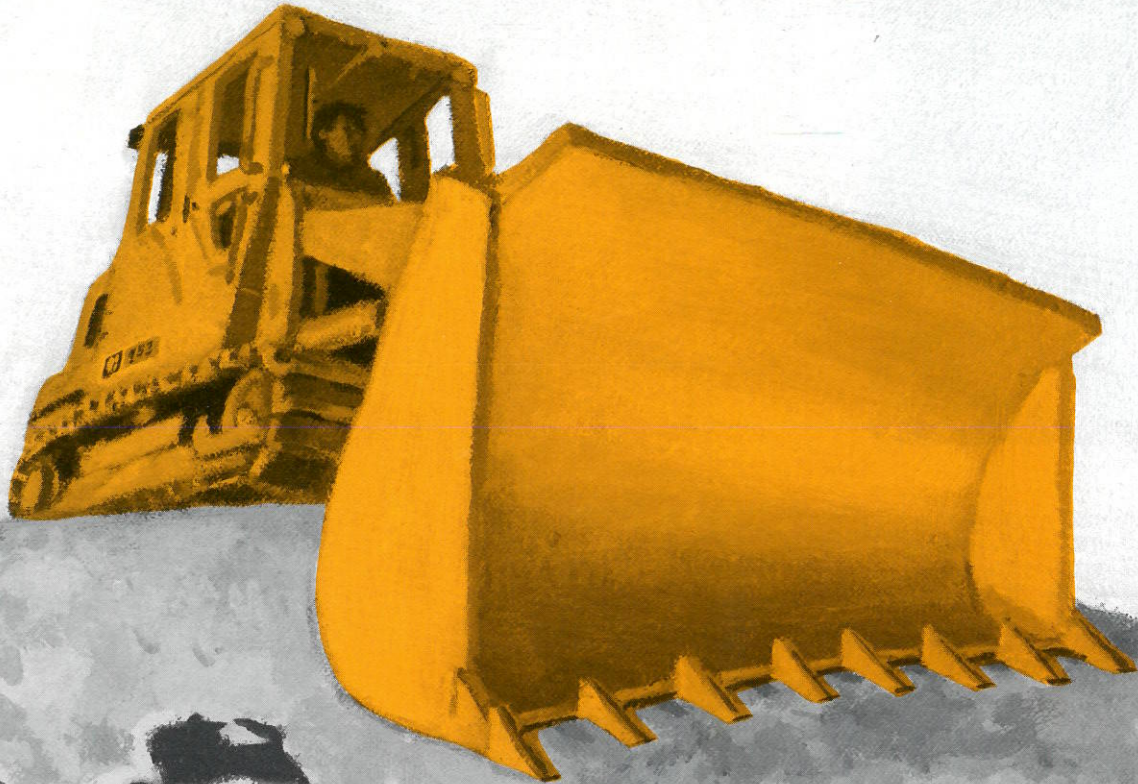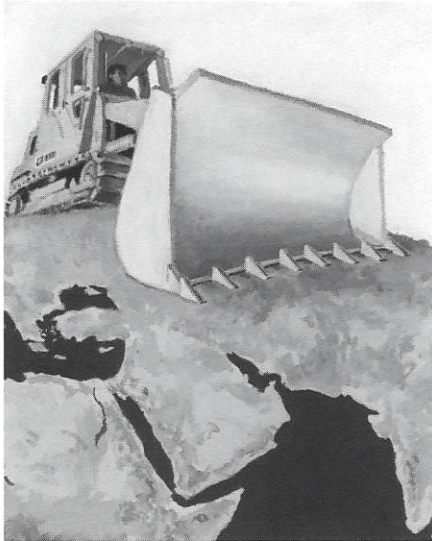
SPECTRUM

HERE COMES
CATERPILLAR

About the cover

Caterpillar Inc., a world leader in the manufacture of heavy equipment, is expanding its EDI system worldwide. One of GE Information Services first EDI clients, Caterpillar is moving from its closed EDI system to EDI*Express™ to bring its worldwide plants and some 2,000 suppliers onto the system. This global implementation will require company-wide support.

GE Information Services

CONTENTS

CATERPILLAR INC.
TAKES EDI WORLDWIDE

*GE's Bruce Morrissette (left) and Cat's Norm Derrickson (right) drive the worldwide implementation of EDI*Express for Caterpillar.*

Worldwide overcapacity, trade barriers, an overvalued U.S. dollar, high interest rates, rising labor costs, and increased foreign competition made the past decade a tough one for U.S. manufacturers. Caterpillar Inc., a world leader in the manufacture of heavy equipment, experienced three years of economic loss—nearly a total of $1 billion from 1982 through 1984.

To help solve its economic woes, Caterpillar determined to fully automate communications between the company's factories and suppliers as the first step in a larger modernization project, which ultimately will include the automated integration of its assembly line and inventory systems. Dubbed the "plant with a future," Caterpillar sees this approach as a cost saving program with significant long-term payoffs.

Rather than developing its own EDI network, Caterpillar elected to turn to a third party vendor, with GE Information Services winning the contract over several other firms. Working in close concert with Caterpillar's project management team, GE Information Services developed a customized EDI system that Caterpillar calls SPEED (Suppliers and Purchasers Electronically Exchanging Data). The system greatly reduced the lead time required for changes to be reported between Caterpillar and its suppliers. It reduced transaction time from the days required via regular mail to just a few minutes. It enabled quicker response from suppliers to revised material requirements. And it dramatically reduced the amount of paperwork required for such transactions.

Since its implementation in 1985, nearly 500 suppliers in

some 750 locations have been brought up on the system. Caterpillar has returned to profitability and attributes this turnaround to such

Bruce Morrissette gets an update on implementation of Caterpillar's EDI*Express System from Rochelle Cohen's EDI Services group. From left to right are Karen Gonzalez, Evelyn Battle, Bruce Morrissette, Peter Kirk, and Rochelle Cohen.

improvements as Just In Time manufacturing techniques, cost reduction, improved quality and a more realistically valued dollar. EDI has been a part of that.

An Early EDI Success

One of the earliest EDI implementations for GE Information Services, SPEED is also one of the most successful. A large measure of this success can be attributed to Caterpillar's commitment to the system and its personal involvement in making it work. Caterpillar works in close partnership with its suppliers and expended a great deal of time, money, and effort to get them to come on to EDI. "Caterpillar has done more than any client I know of in giving tools to their suppliers to make them successful," says Bruce Morrissette, account manager. "They provide

software, negotiate on their behalf, do whatever it takes, short of buying the hardware."

Not only has Caterpillar been a strong proponent of EDI within its own supplier community, it has also been a spokesman for its benefits. All of the initial large users of EDI*EXPRESS™, such as Montgomery Ward, Freight Liner, Paccar, and Navistar were influenced by Caterpillar's success. And Caterpillar has generated considerable good press about the success of the system, which has directed attention to GE Information Services.

Problems In Paradise

While Caterpillar has always spoken of SPEED as a worldwide system, in fact, it is their own internal network that has enabled them to do business worldwide. When Caterpillar decided to implement AIAG standards for EDI, they implemented these standards not only with their suppliers but also with all of their internal operations. They use their

internal network to do EDI between plants and to collect at their headquarters in Peoria all data that has to go out to suppliers. From headquarters they access the GE network and transmit the data to suppliers.

In August of 1985 Caterpillar decided that the time was right to extend the SPEED system to its plants and suppliers worldwide. This presented a unique problem for GE Information Services. The GE International Telecommunications Council felt that the SPEED system didn't have sufficient data processing to overcome restrictions imposed by international teleprocessing regulations regarding message switching. This meant that GE could not offer a transaction price for access by Caterpillar's suppliers and that users would be forced to access SPEED via the PDN or the appropriate local government vehicle for access to the GE network. Therefore, GE Information Services recommended that Caterpillar convert to the internationally approved EDI*EXPRESS system.

However, there were issues. The SPEED system, which predated EDI*EXPRESS, is a very self sufficient system that is also very economical. Caterpillar's suppliers were accustomed to the closed system environment. And Caterpillar felt that moving to the open EDI*EXPRESS system would lose them the competitive advantage they enjoyed with the closed system. In the open EDI environment, the suppliers that Caterpillar had so painstakingly brought on line in their closed system would become accessible to their competitors as well.

GE looked at alternate solutions, such as using the SPEED system in the U.S. and EDI*EXPRESS outside the U.S., but it soon became apparent that the complexity of such an approach would negate its benefits. A company-wide EDI*EXPRESS appeared to be the best solution for Caterpillar, but pricing remained a stumbling block.

During the negotiating period, IBM learned of Caterpillar's interest in a worldwide EDI system and came courting. Soon several other firms entered the competition. But IBM appeared to be the major threat. Since IBM didn't have a standard product, it proposed creating a system for Caterpillar and was ready to price it to win the business. GE Information Services standard pricing policies precluded such an approach.

"There was a lot of smiling and frowning through the whole process," say Barbara Cresswell, manager, Midwest Region, "and a lot of very tough negotiating that went directly to the John Sidgmore level. We needed to convince top management that the value of the account called for creative pricing that would keep us competitive."

Getting The Job Done

In May of 1987, the Global Forum, comprising John Sidgmore, Giuliano Venturi, and Danny Schultz, which meets periodically to review global business issues, weighed Bruce Morrissette's proposal for a special pricing arrangement for Caterpillar and gave its support. A long-term contract with guaranteed revenue made the arrangement palatable for GE; the benefits of worldwide access made it attractive to Caterpillar.

In August of 1987, Caterpillar gave verbal agreement and Bill Wagner and Tom Smit from Norm Derrickson's Supplier Communications and EDI group at Caterpillar and Bruce Morrissette headed to Europe to lay the groundwork with Caterpillar's operations there. They visited all the European facilities and key suppliers to be sure that people at each facility were assigned and dedicated to the project. At each facility, Bruce Morrissette introduced the local GE account representative who would be working with them. He also met with country managers, sales managers, technical managers, and the local account representatives to be sure that everyone understood the project, the revenue each country can expect, their responsibilities, and the importance of success to the entire company.

Support from the company worldwide has been impressive. Raoul Burgraeve, who is stationed in Brussels, supports the Caterpillar plant in Gosselies in the south of Belgium and the plant in Grimbergen in the north. Claude Arlen makes a trip from his office in Lyon to the plant in Grenoble nearly every week. And Myriam Brand at our new joint venture company INS in London supports the plant in Leicester some three hours away. In Japan, Takayuki Umeda at ISI–Dentsu has been supporting Caterpillar's suppliers since the beginning of the SPEED system and continues to offer high quality support for the conversion.

"The magnitude of this implementation is helping us to better define the ways we can work as an international company," says Bruce Morrissette. "So my objective is to do it so well that we can set a new standard for worldwide quality support."

Company-wide Effort Will Spell Success

Caterpillar's goal for EDI*EXPRESS is to bring up 1,000 suppliers worldwide. This means that wherever GE Information Services does business and in some places where we don't, Caterpillar has suppliers to bring on-line.

senior consulting specialist, Chicago, Illinois, Bruce Morrissette, and the Nashville engineering team, working with David Butler of Paul Inserra's Sales Development group, and Rochelle Cohen's EDI Services group came up with and implemented a series of capabilities to make the conversion and

SPEED system to EDI*EXPRESS. An additional 48 suppliers are now trading EDI documents with Caterpillar for the first time, including six outside the U.S. Caterpillar plants in Vernon, France, and Monterrey, Mexico, make local PC connections to EDI*EXPRESS for high priority documents,

*GE Information Services and Caterpillar Inc. are working closely on the implementation of the worldwide EDI*EXPRESS system. Shown here are (left to right) Finley Hubbard, GE, Tom Smit, Caterpillar, Bruce Morrissette, GE, Norm Derrickson, Caterpillar, Barbara Cresswell, GE, and Scott Taylor, Bill Wagner, and Bruce Dimler, all on the Caterpillar team.*

Where the company doesn't have a local presence, the Global Support group has responsibility for support.

The success of the project to date and the forecast for its total success is founded on the detailed planning and the systems put in place to make it easier for everyone who has something to do along the way. Because much of the process has been automated, getting a Caterpillar supplier up on the system requires less time and direct contact than for the typical EDI spoke. Finley Hubbard,

implementation for Caterpillar successful.

The in-depth participation of Caterpillar's own people has been a major factor in assuring success. They handled all mailings to their suppliers and are in daily telephone contact with EDI Services and via the QUIK-COMM™ system with GE people and Caterpillar plant coordinators outside the U.S. to support suppliers in the conversion.

As of May 16, 207 of Caterpillar's U.S. suppliers had been converted from the

and the plant in Piracicaba, Brazil, will soon be coming on line with the aid of Willie Niezen of our Global Support group and our new Brazilian distributor, Proceda. Brazilian suppliers are lining up to test and get into production.

"We hope that we are creating a template for the future growth of the business," says Bruce Morrissette. "It's not bigger than we are; it is something we can do."

GLOBAL

The market in which GE Information Services plays is a dynamic one, driven by increasing globilization and rapid advancements in technology. We are a major player in this dynamic market and intend to remain so. To maintain our competitive position, Denis Gagnon, vice president, Planning and Business Development, and his team continually analyze market trends and review the company's strategy in light of those trends. Denis talked to SPECTRUM about today's marketplace and the company's strategic thrust for continued success in penetrating that market.

How would you characterize the market in which GE Information Services competes and what are the implications for our business?

The directions that GE Information Services took in 1987 strongly position the company in a very dynamic market. The drivers of that market remain the same. Companies and industries around the world are becoming increasingly part of a global village. In this market, success depends more than ever on the degree to which companies can manage operations on a global basis. Global players require strategic information systems that reach beyond the company itself and its far flung subsidiaries to extend to customers, suppliers, banks, dealers, and distributors. These extended enterprise systems represent a unique opportunity for a company like ours and we are well equipped to address it.

At the same time, the regulatory barriers to the implementation of these increasingly communications intensive services are falling down all over the world. This leads to increased competition and also to growth in the market itself.

Companies playing in the global arena require a distributed architecture, a trend that has significant implications for

STRATEGY

FOR 1988 AND BEYOND

Denis Gagnon talks about the company's strategy for maintaining its competitive advantage in a dynamic market.

us. The growth of intercompany services, such as clearing and settlement trading systems, is accelerating and plays to our strength. Front end integration, the integrated workstation, is here and is taking increased control of the desks of business people. This also has significant implications for us and for our strategy.

Finally, the competition. There is more of it in all of our markets, including major traditional players in computer hardware and telecommunications. While this may mean we are on to something big, it also means that we have to make sure we do what it takes to successfully compete.

How is the company positioning itself to successfully compete?

Our strategy for growing the business must account for market drivers, these basic trends in our market. A basic tenet in our strategy is that our future competitive edge and source of added value lies in the applications and services offered to our clients. Our applications and services must provide more functionality and lower cost to our corporate customers than any fully costed alternative available to them. Gone are the days when we could simply rely on processing scale and functionality or the functionality and reach of our

network as a source of unique added value. Our program investments, our marketing investments must be increasingly devoted to the development of applications and systems that can provide corporations with a competitive edge.

Consequently, the framework of our business strategy is based on three main strategic components: an applications and services strategy aimed at development of state-of-the-art competitive services; a distribution strategy aimed at leveraging our technology and applications into a greater penetration of the markets we serve; a network investment strategy to ensure that we

remain fully competitive with rapidly changing technologies available in the market.

What do you see as the key to growth?

The key to growth remains expansion of applications and distribution coverage. Extended enterprise is the heart of business today. Success in today's market requires applications that extend beyond a single company. To address this market need, we will have to build applications with strong SDC content tailored from core applications that provide companies with higher functionality, quality, and a good return for the moneys spent.

How do we do that?

First, we need to build and maintain on a global basis a set of core applications second to none in the market that can do the job better and cheaper than an in-house or competitor solution. This will require buildup of our centers of excellence and accelerating integration into these *core applications* of such things as front end processing and storage, information data bases, real time information, and even artificial intelligence. Second, we need to build and maintain in-depth *global industry* and functional expertise. If we want to offer the best international treasury management system on the market, we had better know treasury management at least as well as, if not better than, any of our clients. And third, we must maintain *ownership* and control

of those core applications so we can bring leverage to bear.

Is this a new business direction?

Interorganizational applications and services in some ways differ significantly from our customized solutions that address the needs of one company. Here the added value lies not so much in the application as in the service provided and in the customer franchise. Owning the middle ground between all the participants in a common service is where the value and the margin lies. Up until now, we have essentially limited ourselves to providing processing, software, and network services to companies that have taken the lead in offering such services. And while we have not done badly in serving those customers, we have only gained value in what we have provided, and that is a lot less than it could be. In our three main focussed markets—financial services, manufacturing and distribution logistics, and international trade—we need to change our posture. In those areas, providing the application is not enough; providing the service alone or in partnership with other companies is our strategic objective.

What kind of partnerships might we form?

To remain competitive, we will have to make some very selective alliances. In the U.S., such alternate channels as Knight Ridder and Baxter Pharmaceutical are good examples. In Europe, a continent in the throes of rapid

regulatory and political change, companies from all directions are positioning to be strong European-wide corporations by 1992. This key date in the common market agenda gives us the opportunity to consolidate our already extensive presence in Europe to gain deeper penetration in the various national markets. This may mean forming alliances with other major players.

In Japan, our distribution strategy is to continue to work closely with our established partners NEC and ISI-Dentsu—NEC for development of new communications intensive services integrated with their hardware offerings and ISI-D for stronger penetration of markets, such as financial services in which Japan has become a leading world player.

What about network investment?

Yes, network investment. We are going to make significant investment in our network to provide lower cost increased band width for greater functionality. This effort has already started in the U.S. with the pilot program in very small aperture technology (VSAT).

Where is all this leading us?

Our goal is to become more global in terms of geographic reach but far more concentrated in our strongest markets—financial services, logistics, and trade. How big the pie is depends on all of us. The market opportunity is there. The strategic framework is in place. The rest depends on our ability to execute.
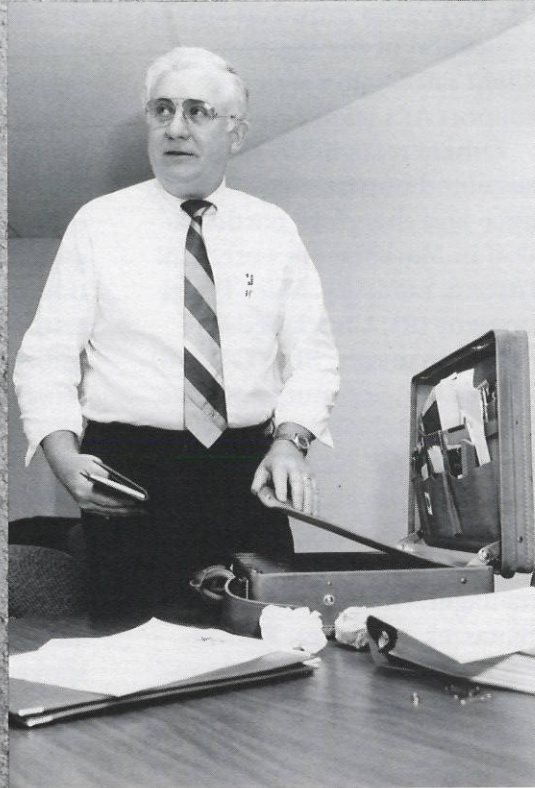
MARKMAKERS XI

HONORING THE COMPANY'S
BEST

For Al Moss, his desk is his briefcase. Al was on the road all but two weeks in 1987, supporting his client, GTE. For his exceptional dedication to service, Al received the "MARKMAKER Super Achiever Ring" at MARKMAKERS XI.

"I t was the best MarkMakers ever," says Paul Inserra, manager, Sales Development. And he ought to know: he's been to nine of them. "The facilities were excellent, the weather ideal, the speakers inspiring and motivational, but perhaps most important of all was the cohesiveness of the group drawn from all over the world."

While many of those attending were being recognized for their outstanding performance in meeting or beating sales quotas, others earned their way to MarkMakers for less quantifiable contributions to the company—SDC people who developed the solutions that enabled the sales team to make the big wins, area managers who provided the leadership, motivation, and support that inspired their teams to make the extra effort, client services people who support our clients and maintain their confidence in our products and services, marketing people who build awareness of our products and services and so lay the foundation for effective selling.

"Anyone in the company can be a MarkMaker," says Paul Inserra, who initiated the program eleven years ago. "The criteria is simply excellence in carrying out one's responsibility to the company."

"MarkMakers recognizes the highest achievement in our company," says John Sidgmore, vice president, U.S. Sales and Services. "The participants have set the standard against which all others are measured."

Stellar Performer Gets The Golden Ring

One MarkMaker, Al Moss, who has attended 10 of the 11 events, was presented the "MarkMaker Super Achiever Ring." Only the second to receive this high honor (Jack Griffin was the first in 1987), Al, regional manager, GTE, who has supported the account since the initial contract in

1972, was recognized for outstanding sustained performance in support of GTE. He and his team have been responsible for the continued growth of revenue from this account, which is the largest in the U.S. That growth is also an indication of the high level of client satisfaction with the support Al's team provides.

Others recognized for sustained outstanding performance and therefore participation in MarkMakers were Paul Inserra, manager, Sales Development (9); Chuck Seibold, region manager, SDC GTE (8), Bill Muller, account executive, GTE (8); Bob Simmons, vice president, GE National Accounts (7); Sonny Tom, SDC consultant S. California Region (7); John Adams, account manager, Atlanta, GA (6); Ron Banaszek, manager, Eastern Area (6); Haskell Mayo, manager, National Comm Area (6); Marty Reese, manager, SDC Technical Center, Dublin, CA (6); Alex To, manager, SDC, Eastern Area (6); Bill Cafiero, senior EDI consultant, Dallas, TX (6).

Sun, Fun, and Something To Think About

The eleventh annual MarkMakers was held at the Pierre Marquis Hotel at the prestigious Princess Hotel complex in Acapulco, Mexico. Oceanfront rooms gave everyone a splendid view of the blue Pacific Ocean lapping at the shore. Super international cuisine, with emphasis on south of the border bill of fare, delighted the palate, and the sports activities offered something for every taste—deep sea fishing, boating, scuba diving, snorkeling, golf, tennis, swimming, and that old standby, sunning.

The speakers were exceptional. Michael Mondavi, president, Mondavi Wines, talked about building an international market in the wine industry, entrepreneurship, and, on the lighter side, gave some practical lessons on how to taste wines. Ed Hubbard, a Vietnam prisoner of war for eight years, gave an inspirational presentation on the will to succeed, setting personal goals, and individual commitment and effort—things that sustained him during those prison years. He talked about taking a negative situation and turning it into a positive one so that every day is better than the one before. Erich Von Daniken, author of *Chariots of the Gods*, spoke about exploring the past and present to open one's mind to future possibilities.

In keeping with the locale, Wednesday's dinner had a Mexican theme with MarkMakers donning native garb. Jim Conners, manager, Detroit Area, and Giuliana Barbi, wife of Mario Colangelo, Rome Branch Manager, walked away with prizes for having the best costumes—and Barbara Cresswell, manager, Midwest Region, for having the worst. The week's festivities closed with a formal banquet in the Salon de Fiesta followed by entertainment by Neil Sedaka and dancing at the Coco Loco (Crazy Coconut) well into the morn.

Motivation: The Bottom Line

Back in their offices, some of this year's MarkMakers reflected upon the event.

"As this was my first MarkMakers, I didn't know what to expect," says Vince Iuzzolino, account executive, New York. "All I ever heard was how great the trip would be. However, it far exceeded my expectations. I enjoyed meeting and socializing with GE Information Services people from the rest of the world. What was most pleasant was my hotel bill for the stay— 46,000 pesos ($19.00 U.S.).
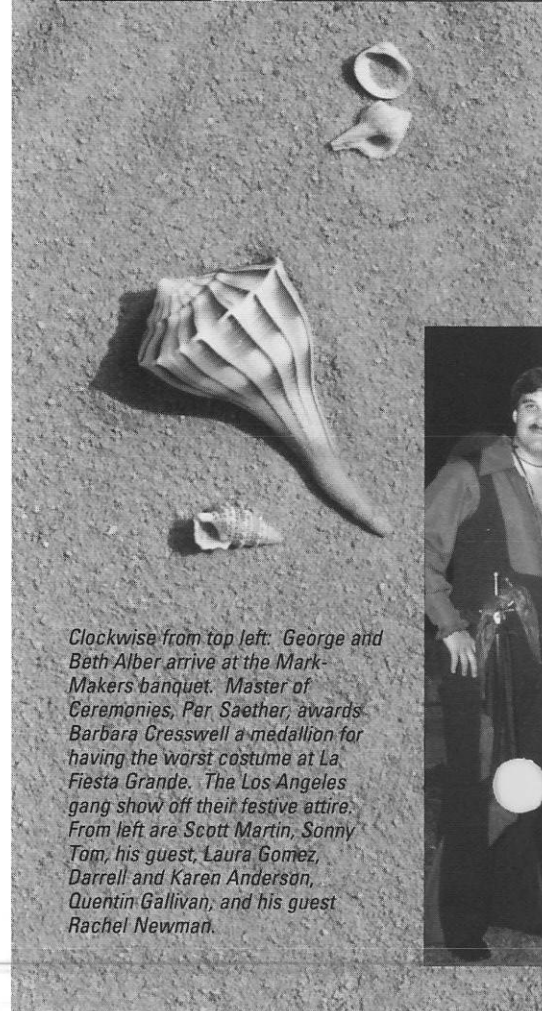
Clockwise from top left: George and Beth Alber arrive at the Mark-Makers banquet. Master of Ceremonies, Per Saether, awards Barbara Cresswell a medallion for having the worst costume at La Fiesta Grande. The Los Angeles gang show off their festive attire. From left are Scott Martin, Sonny Tom, his guest, Laura Gomez, Darrell and Karen Anderson, Quentin Gallivan, and his guest Rachel Newman.

Must get back to work; want to go next year."

"The MarkMakers experience was truly a very special award," says Gretchen Oser, account executive, Minneapolis, MN. "All too infrequently are we able to relax and enjoy the "person" we spend so much time in the "trenches" with, working out the day to day challenges of our business. Our success as a company relies on the effective utilization of so many individuals' skills and talent. MarkMakers is a wonderful mechanism to cement a global team to help ensure our continued success."

"For me the highlight of the event was the climate—in both meanings," says Luc Degehet, International Banking, Brussels. "International cooperation, international teams, international projects, and plans being discussed in a marvelous environment— everything contributed to making MarkMakers XI a very successful and enjoyable event."

"Even though MarkMakers is a GE Information Services tradition, the numerous new faces and familiar ones with new responsibilities underscore how our business is changing and moving in new directions," says Alex To, manager, SDC Eastern Area. "For this

1987 MARKMAKERS

John Adams, Account Mgr, Atlanta, GA
George Alber, Mgr MARK 3000 Sales, Teaneck, NJ
Mark Alexander, Managing Dir Asia Pacific Distributors, Hong Kong
Karen Anderson, Cons SDC So California Region, Los Angeles, CA
Silvio Anichini, Mgr SDC Central Area, Chicago, IL
Ron Banaszek, Eastern Area Mgr, New York, NY
Phil Bayroff, Account Executive, Lyndhurst, NJ
Mike Beasley, NYTR Consultant, New York, NY
Gavin Bell, International Banking Systems, London, UK
Dick Berman, Sr Consultant Corporate Data Network Services, Rockville MD
Andre Boico, Program Mgr, Paris, France
Theo Borsboom, Mgr, Client Services, Amstelveen, Netherlands
Lin Bower, Sr Consultant CDNS, Rockville, MD
Jim Bracken, Inter-Site Link Development, Rockville, MD
Chris Brook, Mgr Network Architecture, Rockville, MD
Ian Bullen, Operations Mgr UK and Ireland, London, UK
Wouter Burger, Sr Sales Consultant, Amstelveen, Netherlands
Joan Burton, Account Mgr, Arlington, VA
Bill Cafiero, Sr EDI Consultant, Dallas, TX
Silvio Cangiano, Mgr International Sales Dev, Paris, France
Charles Cappello, Sr Technical Specialist, Glastonbury, CT
Bob Carpenter, Mgr GE Nuclear Systems Mgmt, San Jose, CA
Mario Colangelo, Rome Branch Mgr, Rome, Italy
Sue Cole, Director, Intercompany and Logistics Businesses, Rockville, MD
Jim Conners, Mid-East Region Mgr, Dearborn, MI
Guglielmo Contrada, Sr Applications Sp Banking, Rome, Italy
Lyndon Cornell, Mgr GE EDI Implementation Support, Schenectady, NY
Barbara Cresswell, Midwest Region Mgr, Chicago, IL
Michel Danon, Mgr Finance Europe, Paris, France
Jacques Debrulle, Mgr Technical Support, Brussels, Belgium
Ed De Jesus, Account Mgr, So New England, Fairfield, CT
Nicolas Desouches, Sales Representative, Paris, France
Mary DeTuerk, Mgr Industry Marketing, Rockville, MD
Luc Degehet, International Banking, Brussels, Belgium
Franco Dell'Oca, SDC Branch Mgr, MARK III & Sp Projects, Milan, Italy
Robin Dent, International Project Coord, IDC, London, UK
Alice Dickerson, EDI Technical Mgr Central Area, Houston, TX
Armin Diener, SDC, Zurich, Switzerland
Pam Druhan, Mgr Information Systems Council, Rockville, MD
Roger Dyer, Mgr European Operations, Amstelveen, Netherlands
Brian Emmott, UK Client Support Mgr, London, UK

baby-boomer approaching mid life, it's rejuvenating to sense that what's ahead will have little resemblance to past experience."

"If the objective of Mark-Makers is to reward and motivate, it certainly achieved it," says Don Jonsson, manager, Western Canada. "I was glad to be working for GE Information Services and certainly full of a sense of accomplishment. I was honoured to be surrounded by such a high calibre of people and considered to be their peer. And on the plane home, I began calculating the extra steps I would need to take this year to be able to qualify for next year's gala event."

1987 MARKMAKERS

Genevieve Fabre-Abbas, Branch Mgr Banking & Services, Paris, France
Juergen Federmann, Sales Rep, Munich, Germany
Tony Fleming, Australian Sales Mgr Banking, Sydney, Australia
Mach Flinn, Project Mgr SDC, New York, NY
Charles Fodor, General Mgr France & Benelux, Paris, France
Stefan Forsberg, Sales Mgr, Stockholm, Sweden
Dave Foster, VP, Intercompany & Logistics Bus, Rockville, MD
Paul Foster, Sr Consultant, Client Services, Rockville, MD
Izy Franco, Mgr NY Comm Region, New York, NY
Walter Franke, District Mgr, Munich, Germany
Dan Fritz, Sales Support Project Mgr, Rockville, MD
Maria Theresa Gandi, Project Leader, Milan, Italy
Quentin Gallivan, Mgr So California Region, Los Angeles, CA
Al Gaston, Sr Consulting Sp GTE, Tampa, FL
Frank Gerhardt, Banking Sales Mgr, Frankfurt, Germany
Pier Luigi Giani, Lombardy and NE Sales Mgr, Italy
Niel Gilmartin, Technical Director, Atlanta, GA
Jack Goldberg, Account Executive, New York, NY
Garret Goo, Sr Consulting Sp, San Francisco, CA
Lucio Governa, Sr Sales Consultant, Rome, Italy
Jack Griffin, General Mgr, UK and Ireland
Bob Grissom, SDC Consulting Specialist, Atlanta, GA
Eugen Haefliger, Sales Mgr, Zurich, Switzerland
Dave Hall, Sr Account Executive, Dearborn, MI
Rolf Hallencreutz, Sr Sales Representative, Stockholm, Sweden
Phil Heavener, Mgr Marketing & Sales Support, Sydney, Australia
Guido Hulsbosch, Technical Support, Brussels, Belgium
Art Hyder, Mgr Corporate Data Network Services, Rockville, MD
Paul Inserra, Mgr Sales Development, Rockville, MD
Vincent Iuzzolino, Account Executive, New York, NY
Don Jonsson, Mgr Western Canada, Toronto, Canada
Sekharam Kasturi, SDC Central Area, Oak Brook, IL
Aman Khan, Mgr, Swiss SDC and CS Operations, Zurich, Switzerland
Suneel Khurmi, Project Leader, Micro Int, IBFS
Steve Knowles, Mgr Sales FP&A, Rockville, MD
Louis Lampe, Country Mgr, Amstelveen, Netherlands
Christina Langen, Account Representative, Huerth, Germany
Jean Daniel Lechat, Sales Department, Paris, France
Arthur P. Lee, Mgr SDC Technical Center East, Morristown, NJ
Tim Lee, Account Executive, Seattle, WA
Florence Louie, SDC Consulting Sp, San Francisco, CA
Frits Luchsinger, Project Manager, Amstelveen, Netherlands
Jim Macioce, Mgr Implementation Services, Rockville, MD

Clockwise from top: Visiting the buffet are (left to right) Chris Pittman, Deborah Gerhard, guest of Dick Berman, and Margaret and Tony Fleming. Anna Hallencreutz (left) and Eva Kempe (center) with their caballeros Rolf Hallencreuz and Stefan Forsberg. Mark and Lauren Alexander get into the spirit of the evening.

Scott Martin, Account Executive, Los Angeles, CA
Haskell Mayo, Mgr National Comm Area, Teaneck, NJ
Mike McDowell, Mgr Sales Planning, Rockville, MD
Dennis McPhail, Project Mgr GTE, Tampa, FL
Bert Meerman, National Sales Mgr, Amstelveen, Netherlands
Carlo Alberto Micai, Sr Sales Consultant, Bologna, Italy
Dan Miller, Comptroller Financial Operations, Rockville, MD
Wayne Morrison, Mgr Hong Kong/Phillippines, Hong Kong
Bruce Morrissette, Account Manager, St. Louis, MO
Al Moss, Mgr GTE Region, Tampa, FL
Suman Mukerji, Mgr Banking & Fncl Services, Toronto, Canada
Bill Muller, GTE Account Executive, Tampa, FL
Matt Mulligan, Director Client Services, Rockville, MD
Russell Murray, Gen Mgr Asia/Pacific Affliliates, Sydney, Australia
Ed Nockunas, Project Mgr Mountain States Region, Denver, CO
Fred Nurski, Sales Mgr, Brussels, Belgium
Mark O'Leary, Mgr Special Agreements, Rockville, MD
Janice Orcutt, Sales Support Mgr, Rockville, MD
Gretchen Oser, Account Executive, Minneapolis, MN
Phil Otero, Counsel ISM and USS&S, Rockville, MD
Marc Parisot, Account Manager, Paris, France
Dee Peace, Central Area Finance Mgr, Chicago, IL
Roberto Piatto, Account Consultant, Turin, Italy
Jean-Louis Pinet, Mgr Belgium, Brussels, Belgium
Christine Pittman, Mgr Federal Systems, Rockville, MD
Maurizio Prati, Bologna Branch Mgr, Bologna, Italy
Mel Presley, Sr Application Specialist, Atlanta, GA
Jean-Louis Previdi, SDC Mgr, France
Bob Prezioso, Mgr, International Development Center, London, UK
Patty Raines, Sr Consulting Specialist, Atlanta, GA
Marty Reese, Mgr SDC Technical Center, Dublin, CA
Malcolm Robarts, Mgr IBFS-US, New York, NY
Chuck Seibold, GTE SDC Region Mgr, Tampa, FL
Emanuela Sferco, OCO Sales Support Specialist, Italy
Dave Shepherd, Director Worldwide Systems Marketing, Rockville, MD
Bob Simmons, VP GE Accounts, Rockville, MD
Carlo Sironi, Mgr Italy, Milan, Italy
Clete Spehr, Mgr SDC Western Area, San Francisco, CA
Colin Spinks, Sr Cons Distributed Systems, Asia/Pacific, Sydney, Australia
Kevin Stoker, Sales Team Leader, London, UK
John Summerville, Mgr IBM Technical Center, Rockville, MD
Ray Tennison, Account Executive, San Francisco, CA
Walter Thess, Mgr Switzerland, Zurich, Switzerland
Alex To, Mgr SDC Eastern Area, Lyndhurst, NJ
Sonny Tom, Consult. SDC S California Region, Los Angeles, CA
Chris Toone, Mgr Distributor Operations Europe, Middle East and
   Latin America, London, UK
Alain Toy Riont, Sales Consultant, Paris, France
Attillio Trombini, SDC Mgr, Milan, Italy
Laurent Verney, System Design Sp CSDC , Amstelveen, Netherlands
Juergen Vidic, Project Mgr, Huerth, Germany
Katie Vogelheim, Western Area Mgr, San Francisco, CA
Peter Volkman, Technical Support GTE Region, Tampa, FL
John Watson, Mgr MARK III Communications, Rockville, MD
Dan Wecker, Sr Account Mgr, Chicago, IL
Colin Willes, Mgr UK Business Consultant, London, UK
Ben Wong, Project Mgr, Hong Kong
Cheryl Wright, SDC Mgr, Sydney, Australia
M Y Yeow, Account Manager, Singapore
Jackie Youngblood, Technical Mgr GTE, Tampa, FL

MNS
Business Takes Off

Key players from AIBD and GE Information Services met in London recently to review progress on GE's MNS contract with AIBD. From left to right are Mike Evans, senior sales consultant, GE; Richard Pope, network manager, AIBD; Roy Lampert, managing director, Member and Market Services, AIBD; Terry Reed, manager, Network Services International, GE; John Taylor, managing director, AIBD; Curt Lienemann, network consultant, GE; and Gary Parsons, program manager, International MNS, GE.

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As trading levels in the international bond market continue to escalate, bond dealers have had growing concerns over the uncertain environment in which deals are settled. Unlike stock brokers, bond dealers have no dealing floor where deals are made face to face. Instead bond dealers make deals—some as many as 1,500 a day—by phone around the world. The buyer and seller then pass the agreed upon terms to their respective back offices, where clerks enter the data and transmit it to Euroclear or CEDEL for settlement. Such a process is prone to error. In fact an estimated 10 percent of all deals made do not settle.

When the data entered by buyer and seller don't match, the terms must be renegotiated and resent for settlement. In the interim, money is tied up and interest is lost. In a large complex deal, considerable sums of money are involved. In one recent mismatched deal, for example, the buyer and seller couldn't agree on whose data was correct and each took a $20,000 loss.

To address this problem, at its annual meeting in Oslo in May 1987, members of the Association of International Bond Dealers (AIBD), a London-based non-profit organization, charged the association with developing a pre-settlement system that would give dealers immediate confirmation of matches.

GE Information Services in London had long been talking to AIBD about a confirmation matching system and, while AIBD liked the concept, it resisted using a third party for processing data. Now with a charge from its members, AIBD appointed a task force to devise a system to meet the members' needs.

In July the task force issued two requests for tender—one for processing hardware, with IBM, DEC, and Tandem the leading candidates, and another for networking, with GE Information Services, SWIFT, IP Sharp, IBM, and IPS vying for the business.

AIBD selected Tandem Computers for its in-house processing and Admiral Computing to write software for the system it calls TRAX. The network services provider would link AIBD's 850 members and 3,800 users worldwide for processing on the TRAX system.

Overplaying The Hand

It was a very worried Mike Hoile, manager, UK Banking, who dropped into Terry Reed's office in London to see how GE Information Services could compete with IBM, our major competitor, when GE's bid was 20 times higher than IBM's.

Terry, who has worldwide responsibility for the fledgling Managed Network Services (MNS) Sales Support Group, recognized that IBM had bid for the network part only, while GE Information Services had included processing as well. This was a classic situation where field sales had done everything in their power to quote for processing business and failed. The client was determined to run its own processing center but didn't want to tackle the worldwide communications problems.

"This was one of the main reasons that the MNS business was set up," says Terry Reed. "If we cannot get the processing business from day one, we still don't lose everything. It keeps a foot in the door for follow-on sales. Interestingly, our price at the end of the day for MNS was still not much different from the original bid, an indication that MNS should not be perceived as a low-margin business. We gave the client what it wanted for a price it was happy with."

Terry had been travelling to Rockville every five weeks to talk with people in his group. He arranged to fly yet again, armed with all the necessary documentation and previous proposals, to assign one of his Sales Support people, Curt Lienemann, to what looked like a huge MNS opportunity.

After reading the documentation, Terry realized that the MNS group did not have a full understanding of the Bond Dealing business and felt it was essential to have UK Account Rep, Mike Evans, fly to Rockville to ensure that the technical solution would meet the business needs of AIBD. Mike, who has a wealth of experience in banking and securities, gave invaluable assistance during a three-day brainstorming session. And because the session took place in Rockville, it was easy to pull in various people from Joe Squarzini's and Bob Hench's groups to assist in determining if the project was feasible.

"The MNS Group has received tremendous support in general, and for AIBD in particular, from Telecommunications Engineering, Worldwide Client Services, and Worldwide Network Operations," says Roy Henderson, director, Network Services. "Because of a severe shortage of resources at the time, Richard Wozencroft, manager, Telecommunications Projects, volunteered to assign one of his people to work on the detailed technical design. Torrin Andrews and Curt Lienemann flew to London to

write the MNS proposal, with Erick Soriano and Diane Timmons giving valuable support from Rockville.

Meeting The Challenges

AIBD posed challenges for the teams on both sides of the Atlantic—launching the fledgling business in the international bond market in a British environment, putting in place the kind of solution AIBD sought, writing the software, finding their way through the mine fields of the PTTs, and devising a cost structure that would be at once competitive and profitable.

"Negotiating from 3,000 miles away put a strain on everyone," Mike Evans recalls. "There was a lot of express mail and QUIK-COMMs going back and forth. But the team pulled together and got the job done."

At one point AIBD became uncertain about proceeding with GE Information Services. The association had appointed a new Managing Director, John Taylor, who came from running large Data Processing and Networking Centers and knew very little about GE's capabilities. Because it was vital to convince him of our credentials to do the job, an Executive Briefing Center visit was arranged in Amstelveen.

"In my view this was the turning point in the negotiations," says Terry Reed. "I gave a full network capabilities and worldwide support presentation, but the real impact came when John Deacon, manager, International Client Services, and Ken George, International Training and Implementation Services, made their superb presentations, giving the client a real comfort level with our worldwide support organisations. This, together with the

Supercenter tour, won the day."

Typical of the team's tenacity, Curt Lienemann and Gary Parsons, International MNS Program Manager, who were to speak at the meeting in Amstelveen, were stranded in the U.S. when the jinxed British Airways 216 flight from Washington failed to take off for the eighth time that year. By sheer negotiation, bullying, and threats, they managed to persuade BA to get them on the Concorde at no extra cost so they could make that pivotal meeting.

In September 1987, Mike Evans learned informally from AIBD that GE was the vendor of choice if we could get our eyes dotted and our tees crossed.

Dotting The Eyes

The eye dotting and tee crossing took a number of months and several more transatlantic trips. Since the team had not yet written an MNS contract, this had to be tackled from scratch—no mean undertaking since the contract had to be issued in Rockville but abide by U.K. law. Teamwork and long hours by Paul Zoukis, Dave Sherman, Martha Mostovych, Curt Lienemann, and Jon Frey from the U.S. and Mike Evans, Chris Starling, and Jack Griffin from the U.K. paid off.

"It was Good Friday, a public holiday in the U.K., when I returned to London with what I hoped was a final contract," Terry Reed recalls. "I delivered it personally to John Taylor's house. On the next Tuesday, April 5th, 1988, AIBD signed the contract with GE Information Services for provision and management of the teleprocessing network.

According to John Taylor, the association selected GE Information Services because of our credentials in the market and our track record in providing network services to Euroclear and CEDEL. AIBD also liked the flexibility GE is able to offer in use of equipment. Unlike IBM, which tends to push clients into the IBM environment, GE was able to offer a shopping list of protocols that would accommodate the needs of users worldwide. Finally our ability to install and support the worldwide system with in-country client services support in 91 percent of their locations turned the business our way.

Providing Worldwide Support

As Managed Network Service provider, GE Information Services assumes full responsibility for all the logistics required to provide worldwide access to TRAX, from negotiating with local PTTs to providing, maintaining, and monitoring leased lines where required to installing host gateways to interface to the Telematics switches.

AIBD wants its first users up on the system by August or September of 1988 and some 200 a month thereafter. Its long-term goal is to have its market makers (40 to 50 major players in the bond market) up by January 1989 and all users up on the system by the end of 1989. When the system is fully implemented the GE network will handle an estimated 80,000 deals a day for AIBD.

"To make this work, we need a company-wide effort, all the way from administration through implementation and on-going client support by

our client services people around the world," says Curt Lienemann. "While base support will come from Network Services in London and Rockville and from Telecommunications Engineering, we are looking for support from all of the countries in which we will be part of AIBD's implementation."

"There is no doubt that this business was won because of GE Information Services' persistence to get the business, the rapport with the client built early on, and our capabilities and support," says Terry Reed, "but above all it was because of the tremendous worldwide teamwork from all parts of our organisation and our ability to convince the client that we do operate as a truly global business."
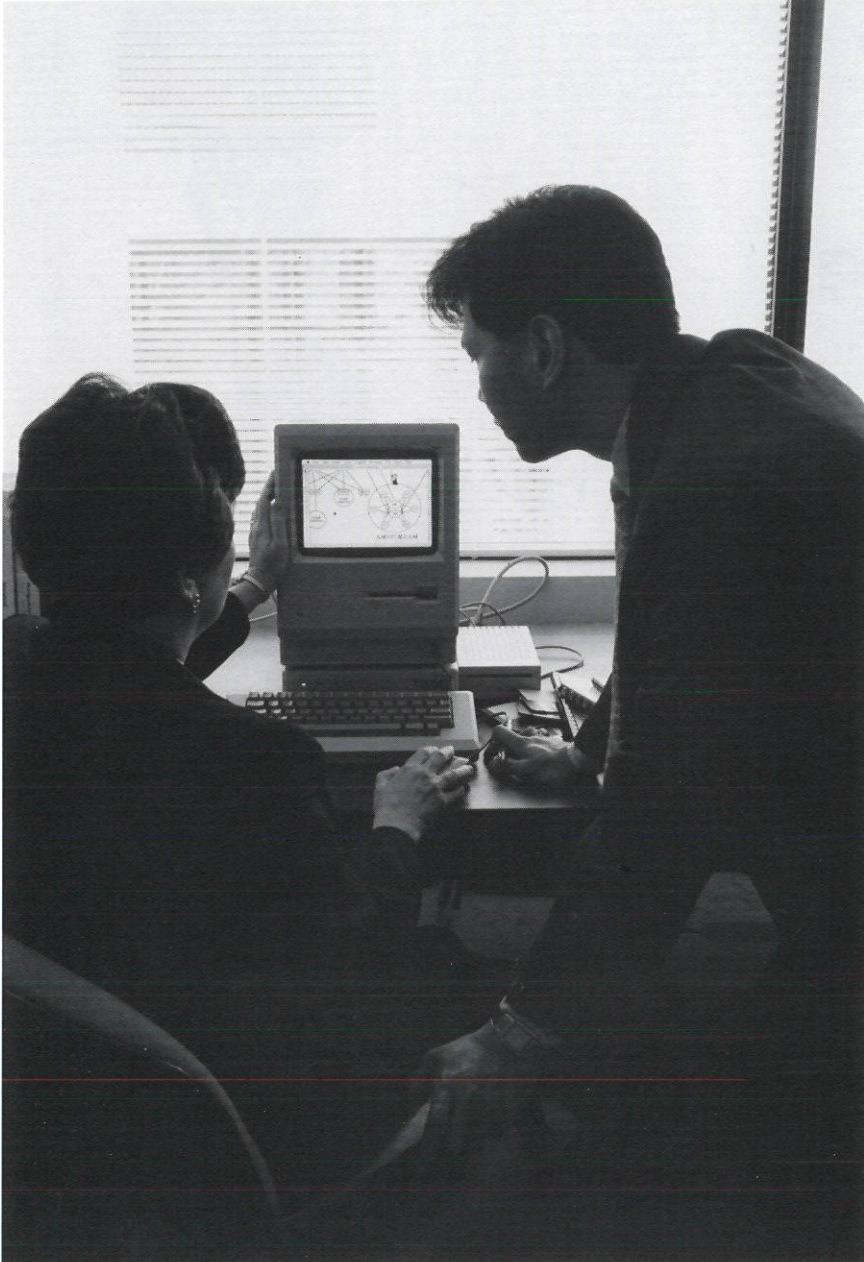
Erick Soriano, proposal development manager, and Diane Timmons, proposal preparer, played an important role in developing the AIBD proposal and coordinating input from the international team. Here they review a graphic for inclusion in the technical solution portion.

DEDICATED TEAM MAKES A DIFFERENCE

Left to right, Don Ivey, Mary Howard, Larry Rollins, Leo Kotschenreuther, and Tom Kenyon gather in Don's office for a conference call with Ohio on a live commercial problem.

Just a few years ago, things did not appear bright for MARK III Engineering. Long the work horse of application development, MARK III was put out to pasture, charged with sustaining present clients but no longer focused on new operating system development.

But there was still plenty of kick in the old horse. A much leaner engineering team, who believed in the business, believed in MARK III, and, most importantly, believed in themselves, pulled together to show that MARK III was good for more than just glue. While meeting its primary charge of maintaining service quality and providing client specific product enhancements—activities that should have consumed the organization—the team quietly undertook doing more.

Can-Do Attitude At Work

With little fanfare, the team began to identify pieces of operating system functionality that would be critical to supporting application development on MARK III and structured these pieces into one- or two-man projects with delivery dates measured in months rather than years. Slowly but surely MARK III operating system development moved forward, laying the groundwork for products such as GEnie, EDI, and QUIK-COMM as well as enabling significant growth in existing

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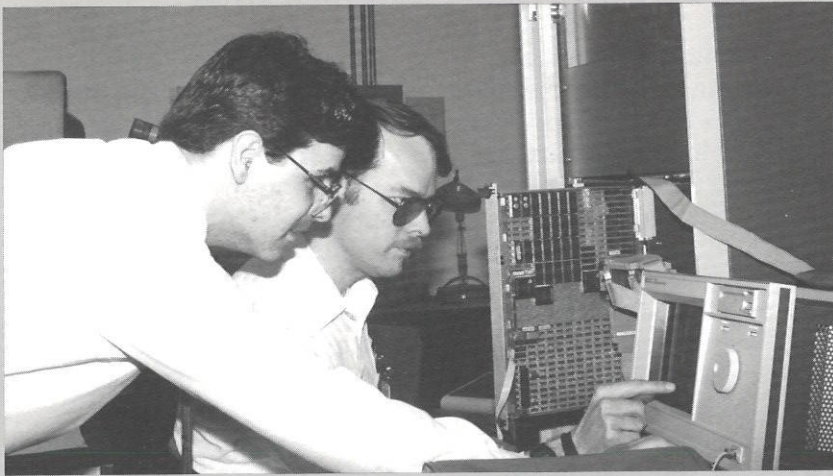
Members of the MARK III Engineering team at work (clockwise from top right). Dave Termohlen (left) and Greg Cook work on the development of the new Special Peripheral Adapter in the MARK III hardware lab. Left to right, John Toussaint, Roger Johnson, and Ellen Robinson check on the development system test configuration. Jack Taylor handles Development Facility operational requirements in the Engineering Development Facility. Frank D'Ambrosio (left) explains File Controller mods to Rich Meadows.
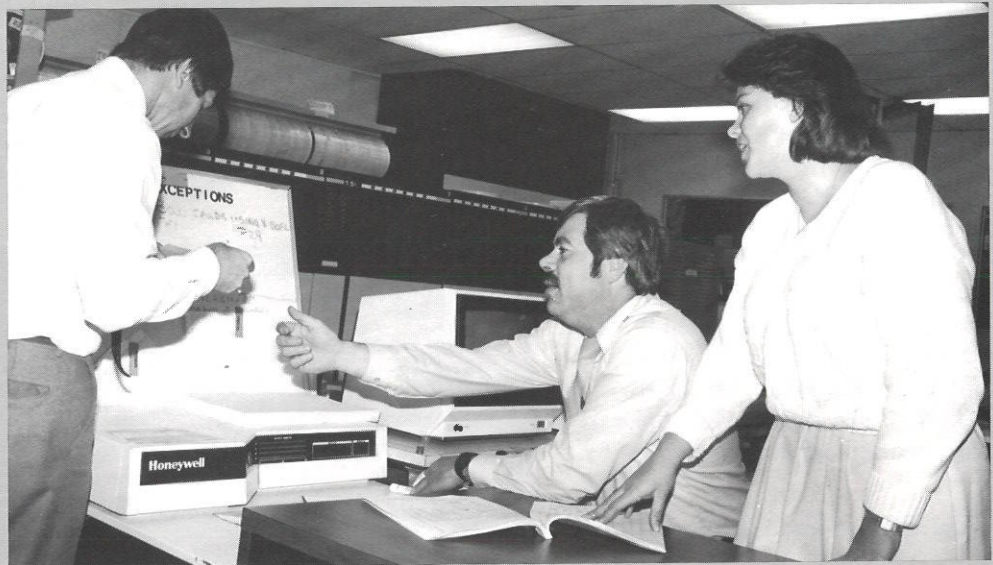
business such as the MARK system, which had run on MARK III since 1972.

A team led by John Watson developed new communications capabilities, such as async and bisync emulators. Phil Provin took on commercialization of the C language. Bill Sullivan and John Farrell led a team tackling projects that allowed slave memory to be shared and expanded to 256K. Dave O'Connor led the drive to solidify DATA*MARK and DataBase Recovery System capabilities, and Dennis Yee's team upgraded on-line file system maintenance tools.

All of this work was aimed at positioning MARK III as a superior platform for future application development that would contribute to the company's growth. By the end of 1986, it was clear that the work had paid off. The team that thought they could make a difference had done it.

Rising To New Challenges

But success brought its own set of problems. In 1987 a growing work load on MARK III put stress on the commercial systems in new ways. New application development exercised previously untapped functionality and required quick turnaround on system enhancement.

At the same time, cost pressure increased the urgency of devising cost-performance programs. In short, the team faced the challenge of maintaining a high level of output on new functionality while preserving the quality of service. Once again, the organization responded with its characteristic blend of imagination and determination, analyzing problems and designing solutions to meet the needs of the business.

Greg Cook developed a highly complex virtual machine capability to increase operating system developer productivity. Tony Dwyer developed new communications capabilities, such as SNA LU6.2 emulation support required to make MARK III a player in the SNA world. Bob Stolzenburg and Neil Hermansdorfer led the drive to improve MARK III's own core technology with projects like the redesign of the system dispatcher and design of capabilities to allow MARK III to take advantage of vendor-provided technology improvements such as the 3MByte Channel.

Programs required to improve the inherent quality of the MARK III system ran the gamut from Russ Haugen eliminating the error prone RAM device to Jerry Brown speeding up the system restart process. At the same time, with expert guidance from Don Ivey, the team attacked defects in commercially deployed products with a vengeance, using everything from quality reviews to SWAT teams to nail high impact problems quickly and to systematically improve overall quality.

The results are impressive. Today MARK III commercial systems are running at

MARK III's Dynamic Duo Recognized

John Watson is a rebel with a cause—MARK III connectivity capabilities that interconnect computer systems and terminals using different protocols. Teamed with another rebel, Norm Harvey, the two kept going on the development of the Information Manager capabilities after the company's strategic redirection in 1985. John led development of MARK III operating system capabilities and Norm developed Fortran subroutine interfaces to those operating system capabilities. These capabilities have enabled our technology to take a quantum leap forward and have opened whole new arenas for the business.

"Many new opportunities, such as those with Campbell Soup and Continental Grain, which incorporate this new technology, would have been impossible to contemplate without these tools," says

Bob Hench, vice president, Information Processing Technology. "GE Information Services is once again out in front with technology and has a real opportunity to be ahead of the game."

The fact that we are in this position is due to the efforts of John Watson and Norm Harvey, who understood what had to be done, believed in the concepts, and put in the extra time and effort to make it happen.

Norm Harvey received his President's Award at the Management Meeting in Boca Raton. Tony Craig offers his warm congratulations.

unprecedented load levels with hardly a hiccup. Quality defects are at an all-time low and the Client Satisfaction index is at a record high. New software continues to flow at a rate of over ten thousand lines per month. MARK III, and the team that put it there, is in the game to stay.

The Challenges Ahead

The challenges that lie ahead for MARK III Engineering may be as formidable as those already overcome. In fact, this team that thrives on challenge is doing everything it can to see that this is so. A major thrust for the future may be customer site installation arrangements. Engineering has taken an active role in supporting sales efforts in this area, including developing an excellent presentation about MARK III technology in both English and French.

On the commercial service front, MARK III Engineering is looking at major architectural changes in the cluster in anticipation of the next generation of hardware. Work is already under way to upgrade the MARK III operating system to meet and surpass present quality levels while handling the enormous user loads these new systems will be able to support. In Sue Bynum's group, a new special peripheral adapter is being developed to provide a state-of-the-art platform for GE Information Services' proprietary interfaces. On the drawing board is performance improvement in both the file system and the network interface to increase the effective bandwidth of these subsystems. New storage technology, including electronic disk and cartridge tape, is being pursued to provide cost-performance benefits to the company and our clients.

New functionality for the client plays a major role in MARK III future plans. Already on the books are projects to allow users to allocate system memory as file space, enabling users to avoid disk I/O bottlenecks. In the languages area, C is being extended to provide full MARK III functionality, including HISAM access. John Jamieson has plans for new compilers in both FORTRAN and C to enable slave applications to exceed 256K. On the data base side, planned enhancements to DATA*MARK and the DataBase Recovery System may eventually provide users of these products with an on-line sync dump capability. And work to expand MARK III connectivity continues, including additional SNA capabilities in the workstations and host emulation areas.

According to Mary Howard, manager, MARK III Engineering, "The future is whatever the team makes of it and this team plans to succeed." Perhaps the essence of the organization is best captured in its version of the GE slogan. In MARK III Engineering the saying goes, "We keep good things alive—and kicking!"

Not satisfied with developing the capabilities, this same team put together demonstration systems, trained SDC people in the U.S., Europe, and Japan, wrote documentation, provided design assistance, and worked—and are still working—with sales, SDC, and clients on new business opportunities.

While many people in MARK III contributed to the commercial products we have today, the creative groundbreaking work of John and Norm and their ownership of the technology earned them the company's highest recognition. Norm Harvey was presented a President's Award for his work on FCMF77. John Watson was presented a Corporate Management Award for his sustained contributions in advancing information technology.
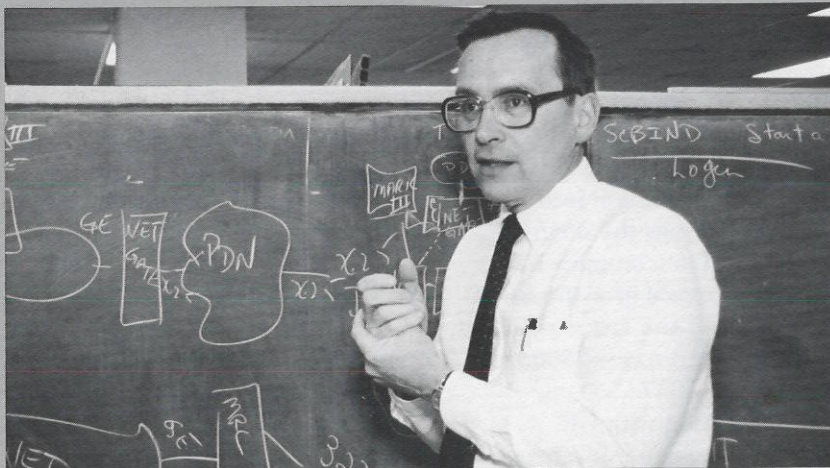
In his office in Rockville, John Watson explains how MARK III supports SNA and X.25 communications paths. These are among the technological advancements for which John received a Corporate Management Award.

ALFA LANCIA
Antonio Pangallo, Italy

GE Information Services Italy has recently implemented an application for Alfa Lancia, a leading Italian car manufacturer company. The company is owned by Fiat Auto, a component of the Fiat Group, one of the biggest automobile manufacturers in the world.

The company was created in 1986 to produce and sell high-class cars for both the domestic and the international market, merging the well-known trademarks Alfa Romeo and Lancia.

The client's management, particularly administration and sales managers, asked for a tool to enable the company to make better timely decisions about marketing the products in the target segments according to revenue and profitability.

The CEMP (Conto Economico Mercato Prodotto) application developed for Alfa Lancia consists of both a reporting system and a capability to analyze profitability by market segment and product. CEMP also compares actual versus forecast at the same level of analysis (market and product).

GE Information Services had developed the CEMP system for Fiat Auto in the past. In fact Fiat Auto has been using it since 1983. High responsiveness and effectiveness of the system led Fiat Auto's management to adopt it also for Alfa Lancia after the merger.

The GE Information Services sales and technical team, based in Turin, made a very remarkable effort to deliver in a tight time frame the customized version required by the client. The extension of CEMP to Alfa Lancia was completed in February 1988.

The system allows Fiat Auto to make production and sales decisions closely unified for all its car production lines, the main objective of the client. It's worth noting that Alfa Romeo used the ADP On-Site system to run a similar application before our CEMP was adopted. CEMP produces information more qualified than the old system did.

The CEMP project involves about forty new users at Alfa Lancia and its affiliates and branches in Europe, the U.S., and Australia. The system is entirely developed on MARK III. Access is made through TN200 terminals and Sperry personal computers.

Achille Lajolo, assisted by Luigi Barp, coordinated the sales effort with the client. On the technical side the following people of our Turin SDC branch formed a very qualified group for the success of the application: Silvano Zannini, Dario Denaldi, Giorgio Di Vincenzo, and Maurizio Micieli.

FREDDIE MAC
Joan Burton, Arlington, VA

Federal Home Loan Mortgage Corporation, Freddie Mac, is number two in the secondary mortgage market in the U.S. Freddie Mac buys mortgages from lenders, packages them into securities, and sells the securities to investors. The company has had a phenomenal growth rate of 20 percent over the last several years and looked to see $300M in net income in 1987.

Before dealing with GE, Freddie Mac was an entirely paper-intensive environment. To maintain their competitive position in the market, Freddie Mac recognized the need to be able to electronically transmit mortgage document information as well as to have a very clear and crisp auditing system to handle those transactions. And most importantly, they needed to have their daily rates instantly available.

Freddie Mac had developed several software packages to transmit data to its largest users and was ready to extend this capability to small and medium sized institutions as well. They developed a software package called MIDANET-PC (Mortgage Information Data Access Network) and were looking for a comprehensive, reliable VAN service to provide transparent data consolidation and transport. The system provided would have to support extensive local access to 95 percent of Freddie Mac's locations as well as support multiple protocols. Security was a major issue because of the nature of the documents themselves.

GE Information Services went after the business in competition with AT&T's NET 1000 and McDonnell Douglas's McAuto, which offered a similar solution to GE's. GE was the vendor of choice because of our track record in the financial services industry, the variety of services we offered in addition to those specifically requested, and the proven reliability of our network services.

After a four-month pilot, the system went into full production in October of 1986 with up to 300 users brought up on MARK 3000 VM each month. Each client has a copy of the PC software developed and continually upgraded by Freddie Mac for local use on an IBM PC as well as a copy of the third party software used for communication with MARK 3000. The third party software resident on MARK 3000 processes all incoming transmissions and

bundles them for transmission to Freddie Mac's host.

In the early days, the dedicated link was opened for transmission every 30 minutes. Today the line is continually open and transmissions occur at least every two minutes between 8:00 a.m and 9:00 p.m. During peak hours, between 11:00 a.m. and 1:00 p.m., when Freddie Mac posts the rates for mortgage purchase and securities, use on MARK 3000 rises dramatically. That avalanche of activity necessitated moving the application from VM to the larger 3081 processor. This occurred in phases between October 1987 and January 1988. Today, during peak hours, the network receives more than 800 calls and often handles as many as 110 concurrent users.

Together, Freddie Mac and GE Information Services continually introduce efficiency measures to improve day-to-day operations—expanding MidaNet to other protocols, adding capability for audit tracking and rebilling, and developing RateNet, which makes interest rates instantly available. These joint efforts, according to Freddie Mac, have put them five years ahead of their competition.

"Joan Burton, Freddie Mac account rep, has done an outstanding job of migrating Freddie Mac over the last two years," says Sue Cole, director, Worldwide Intercompany and Logistics Businesses. "We have had a superb growth with this client in 1987 and expect that to continue in 1988."

Others contributing to this success story are Robert Creasy, manager, Mid-Atlantic Region; Gary Senese, manager, MARK 3000 Engineering; the SDC team of Bob Clarke, Randy Gobleck, and Aravia Holloman; Jim Hines, manager, Network Services Southern Region; Denis White,

senior design and installation engineer; Tony Rydjewski, manager, VM Systems; system specialists Larry Drummond, Jim Littrell, Marty Capps, and Mel Howard; performance analyst Rich Kuehn; project manager Bob Schein; and John Towles and a host of client services people.

Associated Merchandising Corporation (AMC)
Richard Picone, New York

Associated Merchandising Corporation (AMC) is a New York based not-for-profit corporation owned by a group of very large, geographically dispersed retail organizations, including Bloomingdales, Filene, I Magnin, Harrods, and Galeries Lafeyette. During the early part of 1987, Richard Picone, account manager, New York Commercial Region, had been in touch with AMC's M.I.S. personnel trying to sell them the QUIK-COMM™ system as a replacement for their CSC File Transfer Service. In the process, he discovered that AMC was interested in building a worldwide network some time in late 1987 or early 1988. Their plan was to purchase an IBM 3090 mainframe to centralize their purchasing operation, as well as their financial and Telex operations.

With the help of Izy Franco, then area SDC manager and acting sales manager for the region, Richard Picone came up with a strategy to try to bring the business over to GE. They proposed offering more than a network, namely the processing power to run all the software AMC required along with the network

to link all worldwide locations.

The proposal offered a MARK 9000 configuration with the ability to upgrade to provide increased power when overseas offices came on line. This turned the client our way. The 3090 was far more processing power than AMC would need for some time. By selecting the GE solution, AMC could start small and build as the user base grew. Another thing playing to our favor was our ability to meet their requirement for immediate implementation by installing software and beginning testing immediately. Finally, since communications would be via leased line in many overseas locations, the team called upon our overseas affiliates and distributors to work with local PDNs and local AMC people. Our ability to provide worldwide support was key in the eyes of AMC executives.

"In all, getting this account was a true group effort," says Richard Picone, "from sales development in Rockville to overseas SDC and field support to Mach Flinn's SDC team in New York. Without any one of these players, our chances would have been reduced."

FASTFAX

Debbie Parks
Atlanta, Georgia

Q I have heard that we have a news service available on QUIK-COMM named QuikNews. How do you access it?

You can run a program in the QK11 catalog named QC.NEWS This program will ask for your QUIK-COMM address so that it can send the requested news clippings to you. As you will notice this is only a prototype and may never be available for sale to commercial clients. It is made available for the benefit of GE Information Services' employees.

Derek Snell
Kingston, United Kingdom

Q I have a client who wants to connect to Mark III with an IBM System 36. Do we have any on-line information that will help in the connection?

That information used to be in a file on QK11 named IBMS38P. However the IBM System 36 information was extracted and placed in a file named IBMS36P.

John Ledwith
Boston, MA

Q One of my clients wants to purchase PC Mailbox in several countries where we have distributors and wants to know the costs. How can I find those costs?

In the DY28 catalog there is a file named PCMB3*PR that has prices for PC Mailbox for our distributors in the local currency. The file also has pricing information on training and installation. If your client wants to convert the local currency to U.S. dollars, use CRNC*** in the DY28 catalog. The CURR command will show you the different currencies in the Currency Exchange Database.

After picking the right currency code, you can calculate the approximate cost in U.S. dollars.

Sally McMaster
Toronto, Canada

Q I have a client interested in 2780/3780 Emulation on Mark III. How do I go about setting this client up for this product.

An implementation guide on QK11 contains all the information required to establish this service. The filename is D.IMP.

Barbara Feldman
Boston, MA

Q A client wants to know how to invoke XMODEM on Mark III.

The best source of information is in the Mark III Command System Reference Manual (OLOS number 3501.01R, dated December 1987). Look under the SET P command, pages 235-238. The SET P command is used for XMODEM and Microcom Network Protocol (MNP). Also, the MARK*NET Asynchronous Service Terminal Operator's Guide (OLOS number 3918.04D, dated January 1988) has information on XMODEM, pages 66-73.

Marta Gonzalez
Madrid, Spain

Q What is the maximum time limit that a QUIK–COMM item will be retained?

For our activity priced QUIK–COMM, the retention period defaults to 5 days. The QUIK–COMM administrator can set the retention period for between 1 and 5 days by using the RELEASE command.

Bill Gavin,
New York, NY

Q How can I send a copy of the Project ID supplemental invoice to a client?

Information Systems and Billing Operations has written a file titled, "Billing Information Requests and Questions." It describes the procedures for requesting copies of invoices and PID reports and requests for session and task audits, along with the QK11/DY28 files required to read and interpret those audits. The file also tells you where to find answers to questions regarding validation issues and questions on invoice and PID reports. Fast*Fax has placed the file in the Employee Information Bulletin Board in InfoTalk under: Fast*Fax, Billing Information Requests

Beth Tucker
Rockville, MD

Q One of my clients wants a copy of DSXMIT. How do I order it?

As you may know, the software license procedure for DSXMIT was completed in 1987. All clients that were using DSXMIT at that time were given the software, and the $900 license fee was waived. These clients had to sign the DSXMIT Subscription Agreement, OLOS numbers 3910.50 and 3910.51. Plus, they needed to sign the Software License Agreement, OLOS number 800.55. Once that was done the client could order additional copies for $500. There is an annual subscription service fee of $180, due on the anniversary of the license date.

For clients now wanting to become subscibers of DSXMIT, you should have the client sign the above mentioned agreements and then you will have to enter a MAILBOX.

The current MAILBOX order item codes are:

Item Code	Description
OS-3L-S	DSXMIT2/OS V1.3L STND
OS-3L-E	DXMIT2/OS V1.3L EDI
DOS-3L-S	DSXMIT2/DOS VSE V1.3L STND
DOS-3L-E	DSXMIT2/DOS VSE V1.3L EDI

The appropriate tapes and documents will be shipped to the client and billing will be done at the end of the month. The signed agreements need to be sent to:

GE Information Services
401 North Washington Street
Rockville, MD 20850
Attn: A. V. Parker

Fast*Fax Tips

Here is some information passed along to Fast*Fax from Marty Drabek of Brook Park Expediting. If you have an IBM PC or compatible and use PWS or PWC and you want to create a form feed in the text of a file, you can do it by depressing three keys in unison. Depress the Alt key, the numeric pad 1 and 2 (you can have the Num Lock on or off). This will send the ASCII form feed to the screen, not the clear screen that Ctrl L does in PWS and PWC.

Just a reminder to those making requests for deletion or addition to group addresses. You can make those requests to a single QUIK-COMM address, the owner. To find the owner of an address, at the Command? prompt type in GROUP groupname$. This will place you in the group and allow you to list (i.e. *L) the owner.

InfoTalk is getting bigger and better every day. If you haven't used it recently, you ought to take a look at it. You will be impressed!

Having problems with figuring the INTRA and INTER zones for QUIK-COMM? Give Fast*Fax a call. We can rid you of the confusion - FAST!

NEW & REVISED DOCUMENTATION

The following documents were published between February 5 and April 8. This list is accurate as of April 8. Copies of these publications can be secured using the ON-Line Ordering System (OLOS).

Pub No.	Rev Let.	Publication Title	New/ Rev.	Data Pub'd
900.16	–	SDC Success Story #16: Global Limits Developed for Security National Bank	New	752
900.90	–	SDC Success Story #17: Order Processing Communications Link (for Bosie Cascade)	New	8808
900.91	–	SDC Success Story #18: PiMMS - Pfizer International Medical Management System	New	8814
900.92	–	SDC Success Story #19: Helping Banque Nationale de Paris (BNP) Compete	New	8812
900.01	–	QUIK*NET Client Reference	New	8805
902.52	–	Emhart Corporation Closes the Books in a Flash (reprint from LEADER)	New	1/88
902.53	–	Reprint from Computer World: Networking - Network Links Chrysler, Dealers	New New	1/88 1/88
1010.03	D	CIT Request Form - Appendix B	Rev	2/88
1010.13	–	CIT LINKWARESoftware Package	New	3/88
1010.14	–	CIT PC Toolkit Manual	New	2/88
1386.01-6	–	InfoTalk Installation Guide	New	8805
1389.07	B	BUSINESSTALK System Pricing Schedule US and Puerto Rico Effective 12/15/86	Rev	8810
1401.01	J	International Access Directory April-June 1988	Rev	8813
2051.85	–	MARK 3000 Service: OPEN*Net Product Profile	New	8813
2051.86	–	MARK 3000 Service: Session Manager Product Profile	New	8813
2051.87	–	MARK 3000 Service: Network Job (NJE) Entry Product Profile	New	8814
2051.88	–	MARK 3000 Service: CICS and Related Capabilities Product Profile	New	8814
3410.98	F	The GE QUIK*NET System: QUIK-COMM Address Directory, February 1988	Rev	8807
3410.124-3	–	The QUIK-COMM System: QUIK-COMM to ALL-IN-1 Service Installation, Administration & Troubleshooting Guide Supplement	New	8812
3410.124-4	–	The QUIK*COMM System: QUIK*COMM to ALL-IN-1 Service Guide for VMSmail Users	New	8811
3501.46	–	MARK III Connectivity Sales Information Summary	New	8806
3917.01	–	OSI/X.400 The Global Approach (English)	New	8811
3917.02	–	OSI/X.400 Die Globale Strategie (German)	New	8811
3918.04	D	MARK*NET Asynchronous Service Terminal Operator's Guide	Rev	8805
3918.09	L	MARK8NET Service Access Directory March-June 1988	Rev	8809
5070.81-1	–	The EDI*UPDATE Newsletter February 1988, Vol. 1, No 1	New	8807
5075.11-1	–	The BANCOR*EXPRESS System: Data and Document Exchange Administrative Guide	New	2/88
5075.12-1	–	The BANCOR*EXPRESS System: Data and Document Exchange User Guide	New	2/88

INDUSTRY BRIEFS

*T*elematics International, Inc. reached an agreement with British Telecom to supply its family of packet-switching network and access products as British Telecom moves to expand its public and private network offerings. As a leading supplier of communications products and services, British Telecom's strategy is to establish a significant international presence in the private network business.

*R*ecently, many business deals seem to be modeled on, or targeted at, the strategy of Reuters of the U.K.

Among recent developments is a joint marketing agreement between Wang Financial Information Services and Apollo Computer, a manufacturer of powerful technical workstations, under which the Apollo machines will be used as the basis of the Wang subsidiary's high-performance trading system, Shark. Together, Shark and Apollo should make it possible for customers to monitor past and present market performance, review fundamental data, and gain access to financial news services.

Telerate, a leading U.S.-based financial data vendor, has also announced a joint marketing agreement. The deal with Bermuda-based Intex Holdings is designed to develop an automated market system for out-of-hours trading on futures exchanges. Such a system would be a precursor to round-the-clock electronic trading. Intex says it intends to take on Reuters and the Chicago Mercantile Exchange, who signed an agreement last October, "head-to-head" to market automated futures trading systems.

Reuters is unruffled by the new competition, saying it was studying the implications closely and, while it was never complacent about competition, it felt it was comforta-

GTE To Revamp Its Telephone Business

GTE Corporation said it plans a major restructuring of its telephone business to cut employment and centralize operations. According to analysts, the reorganization should remove layers of management, enabling the phone companies to make decisions faster and with greater consistency.

Included in this restructuring will be the formation of a new business group to enter emerging information-service markets. The proposed Information-Services unit could include some current GTE businesses such as GTE Telemessager and Electronic Funds Transfer. GTE also intends to expand its Information-Services business, possibly by acquisition. Because of recent court approval, the regional Bell operating companies also plan to expand greatly into information services.

An implementation team is being set up to develop a consolidation plan. GTE has been gradually consolidating management of its telephone operations, which now are run as seven separate phone companies. GTE said it will consolidate phone operations to form even fewer operating territories, moving the headquarters staffs of the seven companies into a new, central headquarters staff. GTE said it couldn't say how many of the 112,000 employees in the telephone operations would lose their jobs or how much money the consolidation is expected to save the business, which has $12 billion in annual sales.

bly ahead. It was flattered its challengers agreed that the Reuters road was the right one to travel.

*T*he next five years will be a critical time for value-added network suppliers to stake out market share, according to a recent report published by Systems Dynamics Ltd. The early 1990s will see between five and 10 suppliers dominating over 70% of the European market. With the market today largely untapped, highly fragmented, and in a volatile state, Systems Dynamics predicts that market leaders will emerge this year and sees General Electric's GE Information Services and McDonnell Douglas Corp's Tymnet as hot contenders. But with traditionally computing-based major players with a lot of spending power—IBM, DEC— keen to get a slice of the action, nothing is certain.

*M*otorola Inc. has unveiled a computer chip that analysts say could take a big step toward popularizing a hot new technology that promises a generation of faster, more powerful microprocessors. Motorola claims that the 32 bit chip represents the highest performance, most versatile version of the technology known as RISC, reduced instruction set computing. The chip is five times as powerful as other RISC-based chips and is capable of processing up to 17 million instructions per second in certain conditions. Analysts say the chip is likely to be used in areas such as engineering and science, graphic design, artificial intelligence, and telecommunications. Sun Microsystems and other companies have already introduced their versions of RISC chips, but

Motorola's entry into the field is seen as a step toward broadening the technology's appeal.

An unknown purchaser acquired a significant stake in CAP Group PLC, possibly jeopardizing the British software company's proposed merger with a French rival, SEMA-METRA S.A. The combined company, to be called Semacap PLC, would be one of Europe's biggest computer software and services companies. A full bid for CAP by another company could derail the proposed merger with Sema-Metra, which is subject to CAP shareholder approval. Many European concerns view consolidation as necessary if they wish to compete with larger Japanese and U.S. competitors.

The Dun & Bradstreet Corp. acquired Interactive Data Corp., Chase Manhattan Corp.'s computer timesharing subsidiary, for $140 million in cash. Interactive provides historical and analytical information on equity and fixed-income securities to securities firms, financial institutions, and institutional investors in the U.S. and will complement Datastream, a London-based Dun & Bradstreet division that provides European-oriented financial data.

MTech, a computer services subsidiary of troubled bank-holding company MCorp, will be sold to Electronic Data Systems Corporation of Dallas for $281 million in cash and securities, the companies announced.

Bankers in the U.S. are applauding the decision of the Federal Communications Commission (FCC) to abandon a proposal that would have cost the electronic banking industry nearly $250 million a year. In March, after receiving more than 1,000 letters protesting the proposal, the FCC said it will drop the plan.

GE Information Services Is Recognized For Contributions To Montgomery County

In recognition of the significant contribution that businesses make to the economic growth of Montgomery County, the county government designates a week each year as Business Appreciation Week. As part of the week's activities, the county selects businesses for special recognition. This year GE Information Services was selected to receive this special recognition.

Sid Kramer, County Executive, and several members of his staff visited the company's Rockville office on April 13 to meet with company officials and to present President Tony Craig with a Business Appreciation Certificate that expresses the county's thanks to the company for its "ongoing commitment and contribution to the economic vitality, growth, and prosperity of Montgomery County, Maryland."

Tony Craig accepts Business Appreciation Certificate from Montgomery County Executive, Sid Kramer.

MILESTONES

Congratulations to the following GE Information Services employees who celebrated service anniversaries in February, March and April 1988.

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Philip A. Fabrizio
Rockville, MD,
U.S.

Marilyn Friend
Dallas, TX,
U.S.

Alexander V.
Parker
Rockville, MD,
U.S.

30

Verkuel Eubanks
Rockville, MD,
U.S.

25

Yvonne L. Fleming
Brook Park, OH,
U.S.

Richard J. Lewis
Rockville, MD,
U.S.

20

Charles W. Fetz
Rockville, MD,
U.S.

Donald R.
Greenwood
Dallas, TX,
U.S.

John S. Hopson
Rockville, MD,
U.S.

Thomas M. Kenyon
Rockville, MD,
U.S.

Chris Lippold
Hong Kong

Michael J. McGaha
Rockville, MD,
U.S.

Michael J. Moore
Atlanta, GA,
U.S.

Thomas Presgraves
Rockville, MD,
U.S.

15

Silvio J. Anichini
Chicago, IL,
U.S.

Agnes D. Brady
Rockville, MD,
U.S.

Penn B. Cobb
Nashville, MD,
U.S.

Greg A. Cook
Rockville, MD,
U.S.

Carl G. Danielson
Brook Park, OH,
U.S.

Cornal S. Gibson
Brook Park, OH,
U.S.

Donna J. Hicks
Brook Park, OH,
U.S.

Willie Hodge, Jr.
Brook Park, OH,
U.S.

Lawrence W.
Hyre, II
Rockville, MD,
U.S.

Roger E. Kupcik
Brook Park, OH,
U.S.

Emery R. Lendvay
Brook Park, OH,
U.S.

Michael E.
Lockwood
Rockville, MD,
U.S.

Steve H. Mudrick
Rockville, MD,
U.S.

Frederick Palascak
Brook Park, OH,
U.S.

Lance I. Pelter
Rockville, MD,
U.S.

Georganne T. Pfaff
Brook Park, OH,
U.S.

Marty Reese
San Francisco, CA,
U.S.

Glenda V. Roberts
Rockville, MD,
U.S.

George R.
Schubert
Rockville, MD,
U.S.

Elizabeth Stalford
Tampa, FL,
U.S.

10

Barry Aston
London, England,
UK

Helena Renae
Collins
Nashville, TN,
U.S.

Per Bernt Dahle
Oslo, Norway

Rudy W. Forrest
Rockville, MD,
U.S.

Colleen Hindle
London, England,
UK

Barry Jones
London, England,
UK

Hans Kernast
Morristown, NJ,
U.S.

Peter S. Kirk
Rockville, MD,
U.S.

Odessa Pitts-
Talley
Rockville, MD,
U.S.

Loredana
Prassitele
Milan, Italy

Deborah L.
Tolbert
Rockville, MD,
U.S.

Bruce C.
Whitcomb
Rockville, MD,
U.S.

5

James W.
Bracken, Jr
Rockville, MD,
U.S.

John A. Cannon
Rockville, MD,
U.S.

Robert V. Carlson
Chicago, IL,
U.S.

John J. Daub, III
Lynhurst, NJ,
U.S.

Didier Giffard
Paris, France

David C. Hall
Dearborn, MI,
U.S.

Monique La-Tardif
Paris, France

Richard Loesch
Chicago, IL,
U.S.

Catherine
Manickam
Rockville, MD,
U.S.

Cynthia Meyer
Rockville, MD,
U.S.

Michael P.
Salvagno
Brook Park, OH,
U.S.

Craig Shore
Rockville, MD,
U.S.

Claude Vautard
Paris, France

Glenn Veltman
New York, NY, U.S.

GE is dedicated to the highest standards of integrity. Through our policies and actions, we seek performance and a reputation reflecting the very best we can achieve: a Company that both creates economic value and acts by ethical principle. But when the issue is ethics, it is better that profits be lost than corners cut or rules bent."

Statement of Ethics and Standards of Conduct

Commitment To Integrity A GE Way Of Life

At the company-wide Operating Management Meeting, at which GE Information Services was represented by President Tony Craig, Jack Welch, Chairman and CEO, dramatically underscored the company's commitment to integrity in the conduct of business.

Jack Welch's message to managers in essence was

On the subjects of 20.10, 20.4, and 20.5, and all other policies, let's go out of the room with one thought. These policies are to the point. They're real. We'll tolerate no messing around. We want to be the toughest, fastest moving competitor in the world and we don't want to take one single ethical shortcut. There's no winking, there's no reading between the lines, there's no cuteness. Let's make it clear that no single person in this room or outside it will be allowed to bring this enterprise down. This is serious business, serious beyond belief.

Commenting on Jack Welch's remarks, Tony Craig said, "Whatever else we do this year and beyond, let's make sure that this message is understood and integrated into every fibre of our organization. Remember that our commitment to integrity is more than written policies, slide presentations, or brochures—it has to be part of our lives."

Policies 20.4, 20.5, and 20.10 address ethical conduct when doing business with the U.S. government.

Policy 20.4 prohibits improper payments or gratuities in connection with any governmental activity. GE personnel must respect government policies concerning entertainment, gifts, or other business gratuities.

Policy 20.5 addresses compliance with antitrust laws of the U.S. and other countries. It specifically directs that no employee shall enter into any understanding or agreement with a competitor in violation of the Sherman Act and flatly prohibits any collusive arrangements in selling or bidding to

the U.S. government.

Policy 20.10 sets forth the Company's policy with respect to standards of conduct and practices expected in transactions with the U.S. government. The policy states that "no employee shall, in connection with any transaction with the United States Government, engage in any conduct in violation of law or otherwise inconsistent with the standards of honesty and integrity necessary to achieve that objective."

The company's commitment to these policies is clear. At the time of employment, every employee commits to uphold them. These policies are set forth in GE's *Statement of Ethics and Standards of Conduct* and are reiterated in GE Information Services policies 5.10, 5.11, and 5.12.

While it is the responsibility of management to reinforce these policies, it is the responsibility of each employee to understand and uphold them.