OCTOBER 1985

SPECTRUM

FOR THE EMPLOYEES OF GE INFORMATION SERVICES COMPANY

CONTENTS

Cover photo: *Morning Call, the daily forum for quality.*

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INFORMATION SERVICES

General Electric Information Services Company, U.S.A.

cover story

QUALITY: IF IT'S NOT THE BEST, IT'S NOT GOOD ENOUGH

The Morning Call voice check begins promptly at 8:30. Ohio is present and Schenectady, and CACHA is on the line from California. Across the Atlantic comes a voice from Amsterdam, where, according to a digital read-out, the hour is 14:30. Primed to report the past 24 hours' events, the voices crackle around the thirty-odd heads in the Rockville conference room.

Client services presents all the previous day's customer concerns. The Supercenters and network organizations report on their day. CACHA informs everyone of their progress. "Hot spots" (open items) are reviewed.

An unsuspected problem arises, sending voices back and forth in charged pursuit of the cause. Then 45 minutes after it all began, after everything has been addressed, come the sudden words, "That's it for Morning Call."

The crackle disappears, and with coffee cups in hand, so do the people. Clearly, they are on their way to handle the new day's missions.

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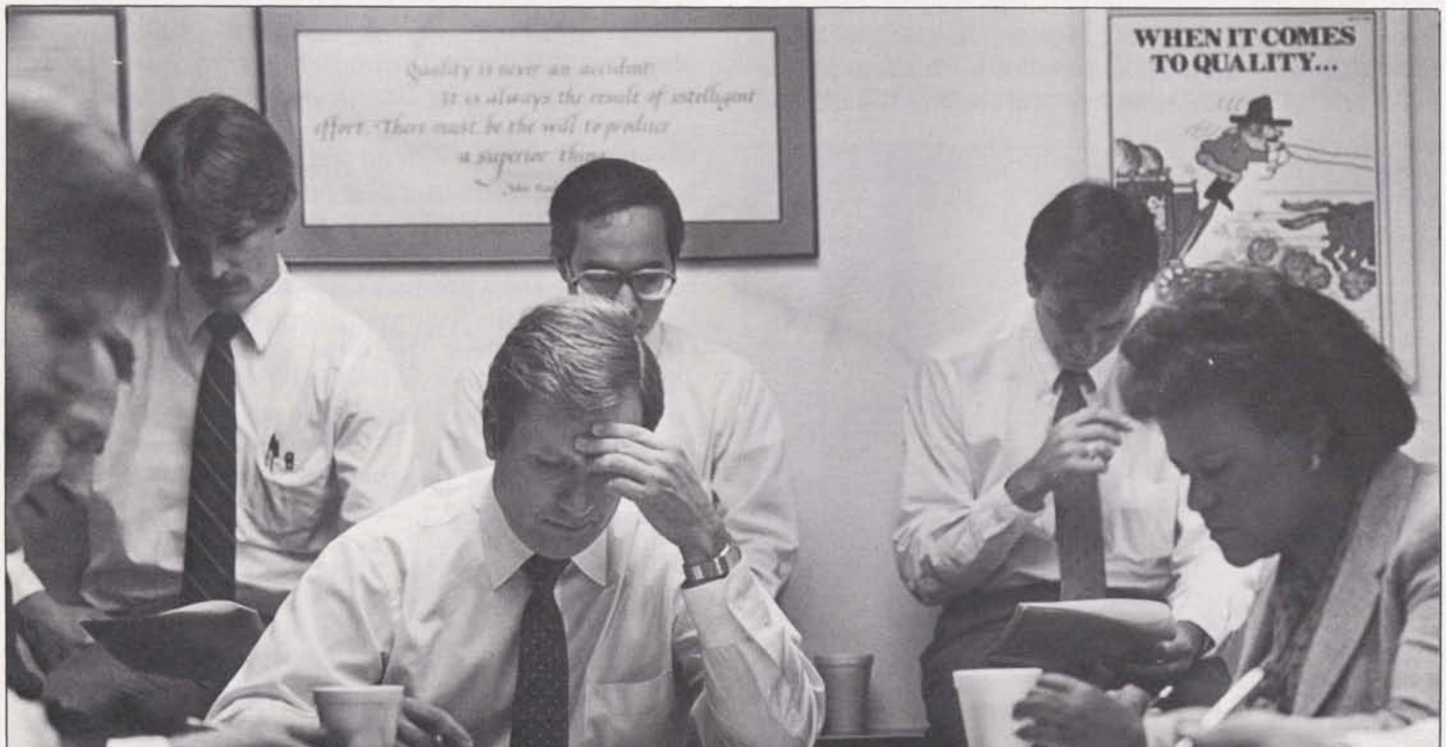
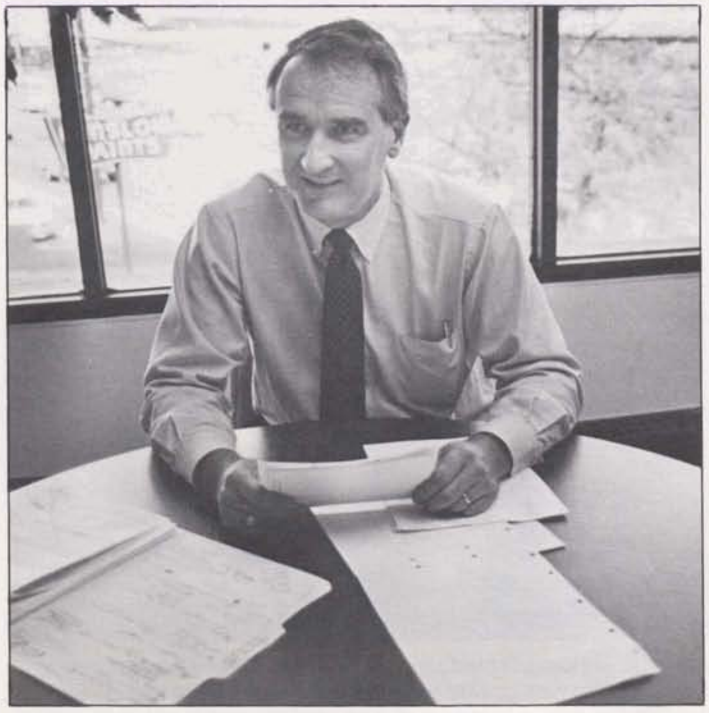


Morning Call's review of domestic and international performance is a serious, action-oriented strategy for maintaining and improving quality. Responsibility for heading this quarter's Call belongs to Mel Szot, planning and quality assurance manager for MARK III. Behind Mel, a John Ruskin quote emphasizes the goals of the daily forum: "Quality is never an accident. It is always the result of intelligent effort. There must be the will to produce a superior thing."

Morning Call is not a novel event at GE Information Services, but it is a revitalized one. For a while the daily routine seemed to be blandly attended and promptly forgotten. Now the one-room forum releases action items like flashes on the six o'clock news. The reason is simple: Quality is the number one priority.

Company President Walt Williams explains, "We seem to have developed the perception that cost control and schedule commitments outweigh delivering and maintaining a high-quality portfolio. While our net income objective *is* critical and our commitments *are* important, we shoot ourselves in the foot if we deliver an unacceptable product. If push comes to shove, we can't let quality be shoved aside. Otherwise a short-term victory becomes a long-term defeat. Our company's longstanding reputation for high-quality products and service cannot be jeopardized. If we are slipping, we must regain; if we are maintaining, we must surpass."

Walt's succinct message is "If we're not the best, we're not good enough." His words appear in large scale outside the cafeteria in the Rockville headquarters building, along with up-to-date availability charts for the network and the MARK III® and MARK 3000™ Services. The display is but a pinpoint of an action-oriented campaign for quality that reaches across all levels of Marketing and U.S. Sales and Technology Operations. Among the many topics being addressed in the campaign are cost, schedules, product ownership, reorganization, tests and measurements, end-to-end responsibility, and above all, the client's perception of quality.



Matt Mulligan

"Good quality has to extend well beyond just hardware; it goes back to the time the product is conceived and onward until it's commercialized, supported, and delivered to the customer."

—Matt Mulligan
Client Services

Spearheading the focus on increased client awareness is client services Manager Matt Mulligan. Matt observes that "every time someone says our quality needs improving, the first thing that comes to mind is our Technology Operations hardware. This is wrong. Good quality has to extend well beyond just hardware; it goes back to the time the product is conceived and onward until it's commercialized, supported, and delivered to the customer. Start to finish, everyone is responsible for a product's success. All of us must see the quality issue from our client's perspective."

Matt considers the New Product Introduction Process (NPIP) (see *SPECTRUM*, April '85) to be a significant step by Marketing and U.S. Sales toward better quality. "The NPIP will facilitate a good portion of our back-to-the-customer focus," he says. "It's going to help us generate a quality product our people can be proud to sell."

In addition to the NPIP, Matt explains, "We're giving our sales representatives vehicles by which they can let us champion their cause and get problems resolved. Those improvements to date have been to make Morning Call more action-oriented, to restructure our weekly staff reports so that Walt and his staff can become more aware of our specific client problems, and to hold regular meetings with the quality assurance manager of each Technology Operations department. These meetings allow us to discuss any problems our clients are having and to present any feedback we're hearing from the field. So far, I've seen a greatly increased awareness of our clients' problems and a genuine desire to get them resolved. This is not a 'just for show' program, but a steadfast commitment to quality."

Matt notes that when the National Service Operation (NSO) was formed to serve a number of clients previously served by the field, some customers thought it meant our interest in them was diminishing. "For the most part," he says, "we now have a more organized response capability. Nonetheless, one of our objectives is to change any perception our clients might have that we don't care about them or about quality.

"The first way we can do this, of course, is to have a quality product. The second is to be there when they want to be heard, and the third is to resolve their problems. If it takes a while to fix a problem, then we have to stay in touch and keep them informed of what we're doing. That's why we have to know what the other departments are doing—so we can let the client know that GE Information Services' team is there for them. The customer with a complaint that is *listened* to is much more likely to continue doing business with us."

"The truth is you'd like to have a perfect program. So you set guidelines that will give you every opportunity to build and evaluate quality from start to finish."

—Cathy Michalak
Applications Engineering

A good example of how important this interdepartmental knowledge is to client services can be found in applications engineering. Cathy Michalak, a member of Steve Mudrick's quality integration and control section explains. "When a customer calls client services with an applications problem, it could be a simple snag that can be resolved immediately, like an incorrect procedure on the client's part.

"When this first line of representatives can't address the problem, they give it to a client services specialist in that application, and usually the specialists can solve it. Sometimes, however, they cannot solve the problem either. They re-enact the customer's situation, check documentation, and maybe discover that it should work but doesn't. At that point, client services puts in a quality defect report—a QDR."

The QDRs, which become action items for the engineering quality assurance groups, are given levels based on the severity of the problem. A level-one QDR means the problem has major impact on the client; there is no workaround, and the client's business is at a standstill until the problem is fixed. "The goal in applications," says Cathy, "is to have zero level-one QDRs, and most weeks we achieve that goal."

Level-two QDRs are still serious, but the client has a workaround that at least prevents complete work stoppage. "Unfortunately, the workaround is usually an inconvenient one," Cathy notes, "and the customer is going to get discouraged very quickly if it has to be used for long."

Finally, with level-three QDRs, there usually is a fairly simple workaround the customer can do. But, Cathy explains, "it is not the way the product was designed to perform, and it still is considered a bug."

Cathy Michalak

Applications engineering has stayed well within its goals for level-two and three QDRs since the department was organized last year.

QDRs are one way all the operations can evaluate their products' performance and their response to problems. "But the truth is," says Cathy, "you'd like to have a perfect program with no problems. So you set guidelines that will give you every opportunity to build and evaluate quality from start to finish."

Pursuing this proactive line of thinking, applications engineering released a preliminary document in August defining the department's quality standards. It's one of several actions the department is taking, including formalizing deployment procedures and implementing regression testing. The document outlines first, the various specifications needed to develop a product and second, the series of tests and reviews that will ensure those specifications have been followed. It serves to support the NPIP, and it provides for more interdepartmental participation in developing and deploying a product. To address this last aspect, the department will be sponsoring a monthly cross-Technology Operations review to ensure end-to-end quality in the products they release.

Included in the outline are the necessary contents for the Requirements Definition Document (RDD) that comes from marketing—what is the product, what attributes must it have, what is the user interface, and so on; the contents of the Functional Specification, which is an agreement between marketing and applications on what will be delivered and when; and details of the Project Management Plan, the Test and Integration Plan, and the Software Management Plan.

Finally, each of these stages is now accompanied by scheduled reviews, with a special Readiness Review before the product is released. The Readiness Review, which literally determines if all the details have been taken care of, is attended by every participating organization—marketing, client services, technology, accounting, documentation, and others.

"There's a big difference between testing a product and testing for quality. Testing a product asks does it function; testing for quality asks does it perform in a commercial environment."

—Chuck Stevens
MARK 3000 Service

Readiness Reviews are becoming standard procedures in the Technology Operations departments, and their value was recently demonstrated in a mid-August MARK 3000 processor upgrade. Chuck Stevens, planning and quality assurance manager for MARK 3000, explains that "some of the system's internal users were seeing slow response, so we needed to increase our processing capacity. We decided to upgrade one of our processors from a model D to a model K. Doing this meant stripping down the entire D system then putting it back together as a K. But because the upgrade kit is built for a particular system, we couldn't do it on an engineering system first: We had to do it directly to the commercial system during one weekend."

After the planning process and before deployment, Chuck's group conducted Readiness Reviews with client services and MARK 3000 engineering, operations, planning, marketing and pricing. By doing this, they were able to address the nearly 100 questions that needed to be answered before implementation. "We then went into the weekend with confidence that we'd succeed, and in fact, that Monday at Morning Call, it was never even mentioned."

The MARK 3000 QA group plans to conduct Readiness Reviews before every major deployment, including the deployment of IBM maintenance tapes. These tapes, approximately ten per year, contain IBM software upgrades that are essential to maintaining a current MARK 3000 system. Whether the tapes will continue being deployed in groups of three, or whether they will be implemented in a higher concentration is being re-examined as part of a recent IBM audit of MARK 3000. The audit, another of the department's proactive steps, is currently being reviewed.

Other actions Chuck is taking to strengthen quality include placing engineering personnel on site in Rockville for major software deployments on commercial systems, and using the internal engineering system for "practice" software deployments. Practice runs reduce the possibility of error when deploying on a commercial system and improve the quality of the deployment process.

Testing is another of Chuck's targeted areas, and he notes that "there's a big difference between testing a product and testing for quality. Testing a product asks does it function; testing for quality asks does it perform in a commercial environment. A piece of software may in fact do what it is supposed to do, but it may not fit into the total MARK 3000 product."

Finally, Chuck is revising the MARK 3000 quality measurement system to provide a more realistic gauge of performance. He explains, "The measurements we've been using aren't very client sensitive. For example, batch turnaround used to be measured by running a canned set of jobs. Now we use actual client data, and we're seeing good results.

"We're also revising our response-time measurements," he continues. "For years, we've measured response based on a TTY–type interface, whereas most of our present users have 3270-type interfaces. The whole idea is to measure response as the client perceives it. Our measurements have to reflect what our customers are actually experiencing."

"Improving quality is done in many ways. One is to have people think about how they can protect the client."

—Mel Szot
MARK III Service

The type of tests and measurements used in MARK 3000 are somewhat different from those used in MARK III and communications, primarily because these operations build their products in house. Planning and quality assurance Manager Mel Szot explains that one of the ways the MARK III operation has traditionally defined quality is to look at discrete measurements of the product. These measurements reflect availability, or how accessible the system is; reliability, or the number of interruptions; and responsiveness, which is the speed of performance.

All of this information and more can easily be found in the new MARK III Client Information Center. Located on the third floor of Rockville headquarters, the Center provides client profiles, success stories, open issues, and system and configuration displays. It's part of the new Quality and Client Awareness Campaign headed by John Jamieson, MARK III testing manager. The campaign also includes section- and department-level follow-ups on significant quality issues. One of four parts in client systems Manager Roger Dyer's new MARK III Support Program (see sidebar, page 7), the campaign intends to publicize how each individual can affect the whole.

"Many people," explains Mel, "have no direct contact with clients and are not aware of the issues we're facing. Improving quality is done in many ways, and one is to have people think about how they can protect the client and make things run better.

"For example," he continues, "a programmer works on a very isolated component and typically builds in routines for handling unexpected conditions. In the past, a programmer may have resolved such a situation by electing to take an entire computer down. That routine would get built in, sit dormant for a while, then suddenly the logic would be activated, and the computer would abort. Today we're focusing on finding better solutions, such as aborting only the offending user. People are more aware of the impact of a processor outage on availability, and as a result, they are contributing directly to service quality."

Mel is improving the abort rate through a project called Fail Soft. He explains, "Fail Soft says let's go back and review what we've done and see how many places we've introduced the opportunity to take drastic action that isn't necessary. It's a software issue that becomes very important when you consider what we're doing in the way of hardware. In that arena, we're moving to the advanced technology of the Honeywell DPS-90. The machine is bigger, better, and faster, and it will serve a larger customer base, which makes eliminating software failures very important."

Another focal point for quality improvement is the 3380 Disk Storage Program. This program will resolve what Mel considers his major quality hot spot. "We bought a hardware product expecting it to perform in an outstanding way, and it hasn't," he says. "Now we're embarking on a program to replace the hardware with 3380-type devices. As soon as we finish the DPS-90 upgrade process, we'll begin replacing all our storage devices."

Most of these programs represent a major investment of funds into MARK III. Mel explains, "MARK III is going to be the backbone of GE Information Services' business for a long time. And in a marketplace as competitive as today's, that means we have to be better than ever. There simply is no room for slipping off our high standards."

"We factor the building of quality into the schedule, expecting to meet the deadline, but if the product doesn't pass its tests, it doesn't go out."

—Bill Brill
Communications

In Communications, too, about 60 or 70 percent of product assurance Manager Bill Brill's QA resources will be applied to "client quality"—to becoming more aware of clients' system and application needs. Bill and other QA managers will be visiting clients through a program being coordinated by Matt Mulligan.

"Our challenge," says Bill, "is to learn how the client perceives quality in the network. To do that, we are committed to spending as much time as we can with clients. One of the ways we can evaluate our clients' perceptions is to measure the network's responsiveness. We think we should be able to do this at the client's site by running a test through the network, with load, and seeing how it comes back. In fact, some of our clients are demanding this."

With a three-year background in marketing, Bill brings an extra emphasis to the idea of competitive quality. "We've always been regarded as the premier quality network, and one reason," he observes, "is that we built in total redundancy. As we've gone into the Value Added Network (VAN), we've found it's more difficult to provide total redundancy, yet clearly, customers expect it."

He explains, "With Remote Computing Services (RCS), clients use either MARK III or MARK 3000 hosts. So it is always their terminals accessing our network and our hosts. In the VAN, we provide only the network, which gets them from *their* terminals to *their* host. The network's service is excellent; but

In regular, informal meetings, quality assurance Managers Bill Brill, Chuck Stevens, Mel Szot, and Steve Mudrick (not shown) examine new possibilities for improving quality engineering and product performance.

when the link from network to host is a single, nonredundant link, and that link goes down, then the customer is down.

"A lot of people," continues Bill, "think that the VAN business generally has lower quality requirements, but that's not the case. And a lot of today's new businesses, such as Point of Sale, have the same characteristics. Building redundancy into each individual client's system can be done technically, but will a client pay for this additional quality? It's a question we think deserves some creative answers."

Another area of focus for Bill is reducing busy signals. He explains that the network is designed to provide clients with no more than five percent busy signals. "Over the years," he says, "we've probably been down in the one-percent range—far superior to expectations. But as we've gone through cost containment and tightening of structure, we've moved toward the five-percent range. That's still better than the competition, but it's not what we would like."

Like his counterparts in the three other Technology Operations' departments, Bill notes that he is not responsible for building quality, only for assuring that it's there. His group, too, conducts Readiness Reviews before a product is released, and he finds this one of the significant outcomes of the QA restructuring. He notes that under the former structure, "when the major emphasis was on productivity, meeting the schedule was the main criterion for evaluating an engineer's performance. We may have met the schedule, but the quality assurance group returned the product two weeks later for more work. And this could go on several times.

"Now," he continues, "a developer is measured both ways—by schedule *and* quality. We factor the building of quality into the schedule, expecting to meet the deadline, but if the product doesn't pass its tests, it doesn't go out. Based on what I see and hear from our engineering and operations people, we're getting better quality products, and we're getting them out faster. I think we're doing the right thing." □

ADOPT-A-CLIENT

Tucked quietly in their offices, where few are likely to notice, are 15 MARK III engineers talking on the telephone. They're making monthly calls to assigned customers, and for most of them, it's a completely new experience.

The engineers are volunteers in an eight-week-old program lightly referred to as Adopt-a-Client. Headed by MARK III communications Manager John Watson, the program is designed to support the National Services Operation organization in assessing and serving the needs of customers who do a monthly business of \$2000 to \$5000.

Almost 20 people responded to John's initial call for volunteers, and they are being trained in groups of five at monthly intervals. After the training, each is given three customers to contact; later, they may be assigned one or two more. The first call is basically to establish contact with the clients, give them someone to talk to, and let them know about GE Information Services' 800 service number and QUIK-COMM™ System capabilities. The engineers follow the call with a letter, then make an additional 20-minute call once each month thereafter.

"We don't ask the volunteers to do a sales job," says John, "just to help the customers if they need help. Of course, if we find out they need a QUIK-COMM or Professional Work Station, we certainly jump at the chance to let them know about ours."

One of the first persons to volunteer, Susan Bynum, project manager for MARK III hardware, explains her experience with Adopt-a-Client. "I was looking for a way to get more customer contact. In the six years I've been here, I've talked to a real external customer only once. I felt it was time."

About her training, Susan was particularly impressed with the series of practice calls performed with client services volunteers who pretended to be customers. She found that "the role playing was excellent and really got me psyched to get started. In actuality, the customers were much easier to talk with than we were trained to expect."

Susan was nervous going into her first call—to U.S. Supervisorships—so she was naturally

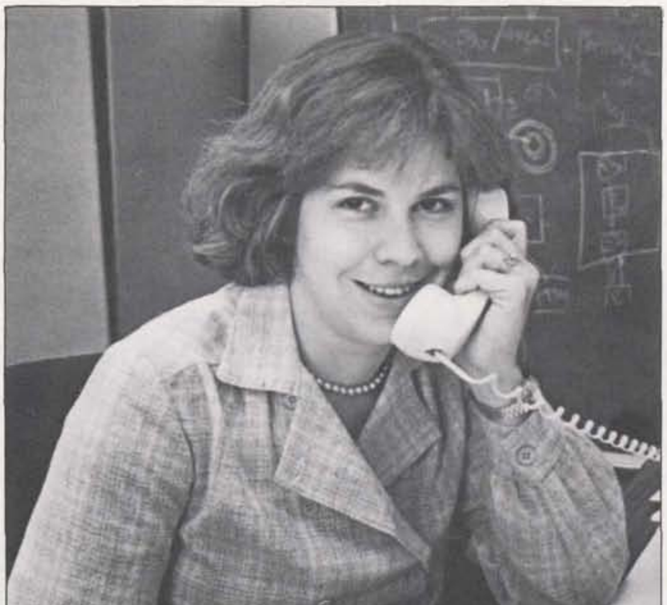
Continued on next page

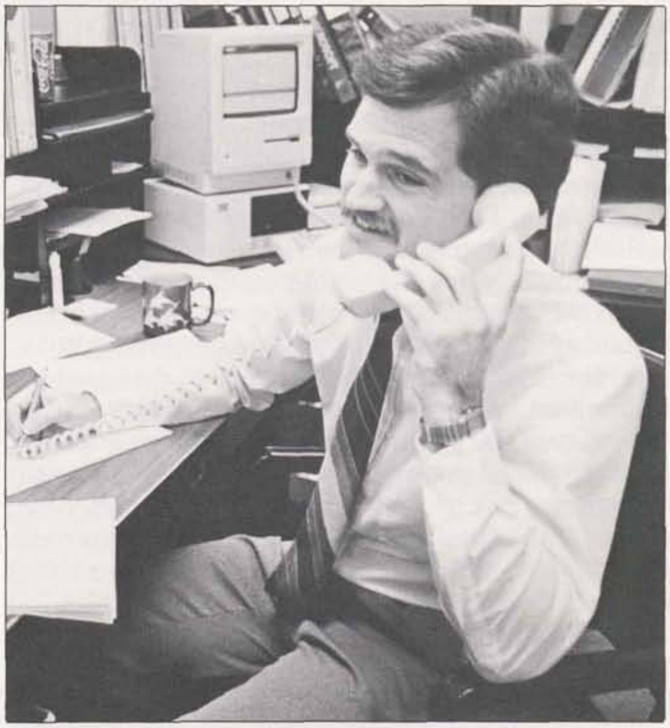
pleased when it ran so smoothly. "They seemed interested in using QUIK-COMM but haven't done so yet. I'm thinking I may send them a message on it this time around.

"I think this would be an interesting change for just about anybody," says Susan. "To be honest, it showed me that customer service work isn't always as glamorous as I thought."

Another of the first volunteers, Tom Eastwood, systems engineer for MARK III client systems, comments that engineers might be surprised by the realities of this type of work. "When engineers write a program, they know from the start that's what they're going to do. They write the program and when it's done, it works. They're pretty much used to a 100 percent success rate. But in sales or client contact, maybe you only get a 40 percent success rate. That can be pretty eye-opening."

Tom found that his first customer, Genicom, was "extremely satisfied with existing service and had no problems with quality." Says Tom, "All developers like to know that what they're working on ends up being used by someone. I think we all have quality in mind when we design, but you can get so far removed from the user that you just crank it out. Seeing the variety of users we have makes you realize the range of functionality that could be required in your product."


Susan Bynum


Tom Eastwood

Adopt-a-Client is one of four programs in the MARK III Support Program headed by Roger Dyer, client systems manager for MARK III. "Any employee can participate in this," says Roger. "It doesn't require any technical expertise, and it only takes about an hour each month. We'd like to develop a pipeline of volunteers, because we really want to get this cranked up." Anyone who is interested in volunteering should call John Watson, DIAL COMM 8*273-4300.

In addition to Adopt-a-Client and the Quality and Client Awareness Campaign (see feature story), the MARK III Support Program includes a segment for Major Account Support (see back page) and a MARK III/GE Information Services Company "blitz" to begin in the next few weeks. All these programs are designed to address concerns about the MARK III product line. □

CATCHING UP ON STAR: MORE IMPORTANT NOW THAN EVER

STAR is an IBM based business information system that will use a centralized data base to support GE Information Services' billing, order entry, and revenue reporting functions worldwide. Its design is based on requirements defined in early 1984 by user committees from all the major functions of the business. Currently under development, STAR will be released in phases; the first, billing for network based services, will consolidate some of the 30 different billing systems now being used. To get an update on the STAR project, SPECTRUM *interviewed John Clouse, manager, GE Information Services Information Systems.*

Q: Exactly where does the STAR project stand at this time?

A: Right now, the initial release is in the code and test phase. We've scheduled integration and acceptance testing for the first quarter of 1986 and selected our Canadian distributorship for the initial implementation on April 1, 1986. We had planned to implement in the United States first, but the size and pricing complexity of its business made the risk unacceptable. Canada was selected because its size reduces these risks. It has a strong information systems group to build the necessary interfaces, and they are enthusiastic about getting STAR started. Implementation will take place in the U.S. on June 1, and in the remaining 15 affiliated distributors by the year's end.

Q: What is the next phase of STAR after Remote Computing Services billing?

A: The order entry module is also scheduled for release in 1986. Additionally, we'll be working on daily revenue and revenue reporting and analysis. These schedules may shift, however, as plans are reviewed and priorities revalidated by the business.

Q: How many people are working on the STAR project?

A: I get asked that frequently. People have the impression that we have an army working on it. I've even heard rumor-mill numbers as high as 70. The fact is we started in February of 1984 with seven people. Between March and July of this year—as the project moved into the phase where we could assign people to parallel tasks—we increased the number to 13.

A related project to move the PAR data base to MARK 3000™ Service started in June of this year with six people, but by the year's end, only a couple of them will still be working on that. PAR is the system that organizes, summarizes, and consolidates data from operating systems accounting. The data is used in quality measurements, load analyses, and capacity planning activities, as well as in billing.

John Clouse

Q: Did you ever consider putting more people on the project and implementing it sooner?

A: Walt and his staff have asked that question in our STAR reviews. We felt that seven people was just about optimum during the specification stage, and that adding more people would just cause them to get in each other's way. We also didn't feel that the cycle would be shortened enough to justify the extra cost.

Q: Is there anything available for people to read that explains STAR's capabilities?

A: Ade Graham, manager, Information Systems Development Center, is preparing an October presentation to familiarize marketing and sales personnel with the considerable capabilities of STAR. We'll make the same presentation again in early November for anyone who wants to attend. That one will be held at the training center.

Q: There appears to be an expectation that STAR will be "all things to all people." Is this a realistic objective?

A: No, obviously not. No system design can anticipate and include all potential requirements, especially when you consider the demonstrated fertile imaginations of our marketing and sales organizations. However, the design objectives of STAR do include removing those constraints in today's systems that limit flexibility and add to the time required for implementing new products and billing arrangements. For example, we currently don't have a satisfactory way of doing transaction pricing. Creating one invoice for a customer that does business in more than one country is a manual process, as are many other billing functions. And new products that require a new billing element take at least 13 weeks of programming effort. A significant new feature of STAR, the Billing Product Code, will allow most new products to be introduced without system modification. However, STAR won't solve all problems. New products or billing arrangements that require changes to the engineering accounting systems (VLC) and the PAR system might take as long as they do today.

Another way of assessing STAR's impact is to look at our current project backlog for the billing systems. Right now, this backlog amounts to 25 product-related projects. Combined, these projects will require 120 applied weeks to implement, with about half of the time spent on PAR changes and half spent on billing system changes. With STAR, none of the billing system changes are necessary, although the PAR changes are still required. So in this case, STAR can cut the work in half, which obviously allows us to implement the changes quicker.

Q: You mentioned earlier that the PAR data base is being moved to MARK 3000. What effect will this have on the business?

A: Well, to start off, the PAR data has to be on MARK 3000 to run the billing on MARK 3000. The PAR data base has all the detailed usage information for each client session. In addition to billing, many people in the business use it for load and problem analyses. The new data base will reduce the effort to use PAR data, but it will require that people rewrite their programs to run on MARK 3000. The plan is to maintain the old PAR data base for 18 to 24 months to allow time for conversion. However, we will freeze the old system so that it slowly becomes obsolete as enhancements are added to the new PAR.

Q: It appears that the STAR being delivered differs significantly from the original definition. Why is that?

A: GE Information Services' view of its markets and future directions has changed greatly since the original STAR requirements were established. Where once we saw one business encompassing RCS, hardware, software, and personnel services, we now are running separate businesses in each area. This has reduced the interest in and the need for servicing these businesses with one billing system, causing that part of the project to be canceled. Revenue reporting needs have been similarly affected and are being re-examined.

Q: In that the business has significantly changed in the last 18 months, is STAR still vital to GE Information Services' success?

A: It's actually more important now than when we conceptualized the system. The move to an applications-oriented, communications-intensive business has increased the number of products and client billing arrangements. The day of a few products and standard contracts is gone. The billing system must be flexible or it will become a bottleneck and limit our ability to move into new markets. STAR can handle the network based services of the future, including application/transaction pricing, which is a key capability to support our business strategy. It also can handle worldwide billing. This supports the multinational marketing and sales efforts discussed by Jim McNerney and Tony Craig in the September issue of *SPECTRUM*. It would cost us more at this point to add these features to the current systems than it will to finish STAR.

Also, GE Information Services Company must invest in productivity tools to help create a cost structure that allows profitable growth. There are large resource expenditures today in information systems, client accounting, application engineering, and the field, as well as in comparable functions at each of our affiliated distributors, which are focused on individual solutions to specific billing problems. Taken individually, these activities appear small, but collectively they represent significant costs. STAR is designed to greatly reduce this kind of effort. Waiting until the business turnaround occurs to undertake the development effort would clearly be too late.

I'm just glad that the business had the foresight to get started when we did. □

PHILLIPPE AWARD RECIPIENT: IT'S 3 A.M., AND GUESS WHERE DANNY RANDALL IS

This year's GE Information Services Company recipient of the Phillippe Award is an ordinary kind of guy. Married for 16 years, he's proud of his son, his home is almost paid for, and he really isn't looking to climb up any ladders—unless he can climb them to the top of a burning building. And that makes Danny Randall someone special, something of a local hero.

Danny is a Materials and Facilities rearrangement maintenance technician, conservative with his words, easy with his smile. During his days at GE Information Services' Rockville headquarters he coordinates relocations and troubleshoots maintenance problems. But all the rest of his life he's a volunteer firefighter; in fact, he'll tell you it *is* his life.

"I grew up in a low-income neighborhood," explains Danny, "and I watched all my friends end up in juvenile courts and jail. Somehow I managed to get around the fire department when I was 16 and it kept me out of trouble."

That beginning, as a member of the Junior Fire and Rescue Squad, led to full firefighter status for Danny in 1963. Since then he has moved to the Kensington Fire House near his Maryland home, where he is one of the most active of the county's 1500 volunteers. He far exceeds the minimum time requirement of five 5-hour standbys per month, often devoting as much as 70 hours instead. Depending on the number of volunteers available, he occasionally sleeps at the firehouse. But even during off-duty hours, he's never far from one of his five home-alert radios that monitor all calls to the station. Danny is one of the few volunteers with this in-home alert capability, and he's responded to as many as six or seven calls in one night. They've interrupted his dinner and sleep, and as if that's not enough, he carries a beeper nearly everywhere he goes. He's darted out in the middle of softball games, bowling frames; "I've even left church several times," he admits, "and that's number one on my list."

In spite of the many interruptions to their home life, Danny gets a lot of support from his wife Pam, who often monitors the radios when he can't. "You get used to it," she says, "and it gets in my blood, too. You wonder how bad it is; will he be the determining factor in whether someone lives or dies. And you always worry. I worry about him just driving the curvey back streets from here to the firehouse. Sometimes they respond to domestic calls, like the

Danny Randall

police do, and you never know when someone will have a gun or other weapon."

Obviously the dangers haven't inhibited Danny, and he calmly assures that his own life has been in serious jeopardy only once. "I was ventilating the roof of a 60-foot building," he explains, "when the fire got trapped between me and the ladder. I had nowhere to go but down, so I prepared to jump."

About that time a second ladder truck came around the corner and saved Danny. "But what I didn't know," he continues, "was that a parapeted fire wall was between me and the fire. In other words, if the wind had suddenly blown the fire, and I'd panicked and jumped, I'd have been history for no reason."

What drives Danny Randall to take such calculated risks with his life? "The excitement," he says, "and the challenge. It's you and the fire, and there can only be one victor. It's also a great feeling to pull somebody out of a fire, to save a life, or bring back someone who's already technically dead."

Danny doesn't have miraculous healing powers. But while most firefighters are trained in basic first aid, nine years ago he went one step further and became a certified Emergency Medical Technician (EMT). For this he completed a 90-hour course, and he still attends unrequired 30-hour classes regularly. Thus, in addition to calls of fire or domestic trouble, Danny responds to calls of heart attacks, labored breathing, knifings, shootings, and suicides. One suicide attempt made a particularly indelible impression.

"A young man on heavy drugs took a razor blade to himself then decided he didn't want to die," tells Danny. "He was trying to apply his own tourniquet when somebody found him and called the station. He'd cut both wrists and slashed his chest and stomach all up. I've never seen anybody lose that much blood and still live." Danny saved the man's life by applying tourniquets; he doesn't know what became of him. "You can't get emotionally tied up with the people you help," he says. "I've seen some guys do it, and it's no good. It tears you apart too much."

Danny Randall: "The greatest thing is to save a life . . ."

Danny, however, is not the type who extricates himself from people. His neighbors often turn to him with cuts, bruises, and broken limbs, and the elderly ones come by regularly to have their blood pressure checked. When necessary, he goes to them.

ABOUT THE PHILLIPPE AWARD

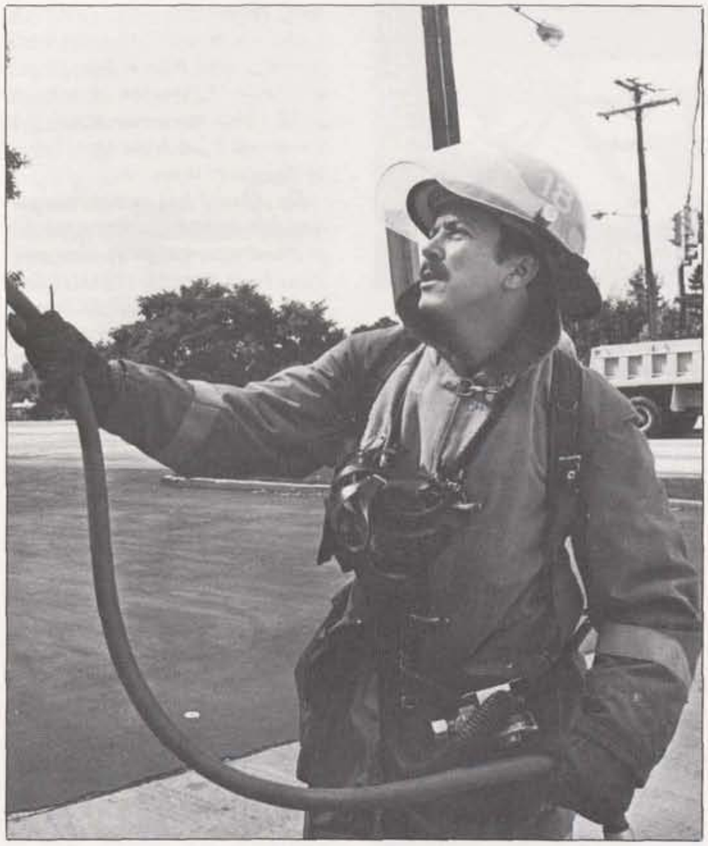
Danny Randall is one of 28 General Electric employees honored through the 1985 Phillippe Award Program for their exemplary dedication to community service.

He was selected from a slate of seven GE Information Services Company nominees by a selection committee comprising Mary DeTuerk of Marketing and U.S. Sales Operations, Brent S. Lyles of ICSO, Dennis Mancinelli of GECON, and Julius Pirrone of Technology Operations (last year's GE Information Services Phillippe Award recipient).

Phillippe Award honorees receive $1000 grants for charitable organizations of their choice. They also receive Phillippe Award certificates and medallions.

Three of the 28 recipients will receive special Corporate Awards for their leadership and commitment to a wide variety of volunteer services.

Since 1970 the Gerald L. Phillippe Awards for Community Service have been presented in memory of the late Mr. Phillippe, former Chairman of the Board of General Electric. Mr. Phillippe was a national leader in the field of public service. □



. . . the second greatest thing is just helping people."

"The greatest thing is to save a life, and I've done that," says Danny. "The second greatest thing is just helping people."

A certified state instructor, Danny's well known around the firehouse for helping the younger firefighters with their training. He also conducts classes on fire and medical safety for church and school groups, and he uses his "spare" time at GE Information Services to similarly educate his coworkers.

Danny also found another way to bring his avocation to GE Information Services. "It began one day about seven years ago," he explains, "when a young man, 33 years old, had a heart attack in his office and died. A visiting paramedic from a sister company tried CPR, but it was too late. We had no medical gear to speak of, and I realized then that something needed to be done. We couldn't have people sitting in their offices and dying."

With that Danny started a one-man campaign to see that his building was properly equipped to handle emergencies. He set up an emergency hotline number, announced it and his EMT status in a SuperInfo, then made sure each first-aid box was stocked with essential items like oxygen tanks and blood pressure kits. Now in an emergency, employees can call the hotline (4733), the operator can contact Danny on his beeper, and the equipment he needs is at hand.

But all of Danny's tales are not triumphs. Death seemed to mimic him one night at a social function when a stranger three-feet away suddenly convulsed and died. There had been no call, no time to prepare, and life-saving efforts failed. "It scared me to be right there and see somebody die in almost an instant," he says. And Pam recalls, "I've watched him come home from a rescue where people have died, and there's this look on his face like he's lost a friend. I want to do something, but there's nothing you can do—just let him work it out on his own."

Once in a while, says Danny, "it all gets to be a hassle. The beeper gets on your nerves, and you've got to get away. That's when I go alone in the woods to hunt, and I don't come out until the end of a week. But when I get back, I'm ready to go again."

Until now, most of Danny's recognition for service has consisted of thank-you notes, whiskey, and a few atta-boys. He's been offered promotion by GE Information Services and the fire department, but he gratefully declines, thinking any more responsibility with one would endanger the other. Besides, he says, "I'm happy. All I want 25 years from now is to live in a remote little town where I can go out and hunt everyday. It'll have a tiny volunteer fire department right up the street, and if I can't fight fires physically, I'll do it administratively."

Not surprisingly, Danny wants to contribute the $1000 grant to the Kensington Volunteer Firemen's Fund. And should he be honored with one of the three Corporate awards in December, his reaction will probably be as subdued as it has been to this one: "I'm very flattered . . . very proud . . . surprised," he says softly.

But that's not to be confused with humility, because humble doesn't quite fit Danny Randall. He's a strong man of character who knows who he is and what he wants; why should he be shy about it? Yet pompous isn't accurate either. He's too aware of his mortality and the preciousness of life to be smug. Danny's just somewhere in the middle. Ordinary perhaps, but definitely remarkable. □

ADMINISTRATION

FAST-FAX

8*274-6517 QK: FAST

SOL KOPPEL
NEW YORK

Is there an index to articles that have appeared in past issues of* Leader *magazine?
Yes. It's OLOS 301.33

CINDY DOUGLAS
OMAHA

Is there a standard nondisclosure letter we can give to a client?
No. There is no standard—it must be worked out for each situation. You should begin by calling Diane Ostrow on 8*279-5643.

ALICE CONNORS
NEW YORK

How can I find out which companies are already on our mailing list for OLOS items?
When you're in the PH56 U#, /LISAD$ will provide the data you need.

SAMIS SYSTEM

Fast Fax *receives many calls from offices asking about the SAMIS system that provides client revenue data. These calls are sent to the marketing and sales systems unit. Susan Sharp put together this list of the most often asked questions and their answers.*

Q: ***There are so many options—what is the best source of client revenue information?***

A: The SAMIS system, available on the AR22 catalog, has a new set of reports in the CRPT*** report group. They offer the most flexibility yet for client revenue reporting and include the following:

- The PROFIT report shows account profitability for clients or catalogs of our network based services.
- The COMPARE report compares revenue periods for clients or catalogs.
- The HISTORY report shows revenue trends by month for clients, catalogs, or account representatives.
- The DETAIL report gives revenues, suppressed revenue, and cost details for select clients, catalogs, and account representatives by cost center, client, catalog, user number range, month, representative, and invoice number.
- The REVCON report shows revenue contribution of clients, catalogs, or account representatives to cost center revenue.

Q: ***How do I get more information on these new reports?***

A: These reports are available through the SAMIS system to anyone on the AR22 catalog. Full documentation is available on-line in SAMIS through the DOC*** report group by requesting information on the CRPT*** reports. Anyone needing an AR22 user number can contact Barbara Campbell, QK: CAMPBELL, for a validation. (List SAMIS* on QK11 for details of information required by Barbara for validation).

Q: ***When will I need to use the PROWIS revenue reports?***

A: To avoid the confusion of multiple revenue sources, PROWIS client revenue reporting will be shut down. The PROWIS system, however, will continue to be the sole source of application revenue.

Q: ***Will any other systems or reports be changed?***

A: The CRPT*** MARK III GCOS reports have been eliminated in favor of the new, more flexible MARK III FG reports. The Stu Morehouse reports, formerly distributed by Revenue Accounting, will no longer be available, but its revenue details can be obtained through the new CRPT ***DETAIL report.

Q: ***How quickly is the revenue information available and how do I know when I can get it?***

A: Naturally, the details of client billing and booking can't be ready until the invoices are completed and the results are booked. Depending on the smoothness of that cycle, this typically takes between six and nine days. The CRPT*** reports can be set up in the SAMIS AID system to ensure automatic execution of a predefined report set just as soon as the updates are complete.

Q: ***How much revenue history is available in the new reports?***

A: Currently, the revenue reports will allow you to see account histories back to 1982. The revenue history is recasted based on the July 1 reorganization.

Q: ***Can I get complete client or catalog revenue information, or just the portion I get revenue credit for?***

A: The new DETAIL report will allow you full access to specific client or catalog details, including revenue booked to cost centers outside your own.

Q: ***Who can help me with questions on the new reports or with problems running them?***

A: For assistance with the new reports, or any other SAMIS report, contact Barbara Campbell, QK: CAMPBELL.

BRUCE MORRISSETTE
ST. LOUIS

Is there a way for an administrative person in the USA to determine how much was billed on user numbers used overseas?
Yes. Admin users in the catalog have access to the PAR files and can get usage data for any U# in the catalog. Data is recorded in CRUs, TCHs, and KCs, not dollars.

NADINE ROSENBAUM
NEW YORK

What's the procedure for ordering forms from the mailroom in Rockville?
Send a QUIK-COMM System message to OSS-SKI. Be sure to include the form number, form name, quantity desired, ship-to address, your name, and phone number.

PHYLLIS VERMA
ARLINGTON

Do clients with MARK 3000 and MARK*NET receive two different invoices?
Yes, but if they use MARK III Service and MARK*NET, they only get one invoice.

FAST-FAX

8*274-6517 QK: FAST

DATA BASES

Do your clients want to monitor activity in their industry or the activity of their customers? QMOD on MARK III Service has the INDUSTRY data base with all the industrial production data series reported by the Federal Reserve each month. For many purposes, total industrial production is a better indicator of economic activity than is the Gross National Product. Some businesses use this indicator to project orders or sales in coming months. Want more data? List a DY28 file name QPROFILE. This has information about the INDUSTRY data base, which is part of the total list of data bases available through the QMOD system. Need more information beyond that? Send a QK to QMOD.

GEORGIA CARSON
HOUSTON

If the Currency Exchange Data Base is available at library level by calling CRNC, why can't any user have access to it?***

It's a data base, and you might think that it is in a special Q catalog. But you're right, it's at 3-star level, which means it's on all systems. The program has a table that contains the user numbers or catalogs of those clients who have filled out the disclaimer form (OLOS 5103.26) and sent it to Al Parker in Rockville. Al does the special mailbox that validates numbers for access to CRNC***.

HOWARD FORER
NEW JERSEY

Is there an on-line file that tells which countries have their currency listed in the Currency Exchange Data Base?

Yes, it's on DY28 in a file named CURREX.

DAVID MILLS
ST. LOUIS

Is there a brochure on the NSS author Arachnae, with the FG data base handler?

No. A QK11 file named ARACINFO may help, and there is also the qualifying questionnaire on DY28 called ARAKQUAL. The key contact at Arachnae is Bruce Wilson, in Toronto, on (416) 477-7150. The GE Information Services Company contact in Toronto is Sally McMaster, QK: TOROM.

DISTRIBUTORS

JEAN DAILY–FRUTH
ROCKVILLE

Do we have a list of the client services people in the Pacific, Saudi Arabia, and Mexico?

Here's a list provided by John Roeder.

Japan:	K. Sunaga QK: JNCS
Singapore:	Virginia Mok QK: SING
Hong Kong:	Szeqai Leung QK: SWLHK
Sydney:	Michelle Poulter QK: CSDS
Melbourne:	Grant Scanlon QK: CSDM
Mexico:	Manlio Miranda QK: MXMM
Saudi Arabia:	Zack Farabi QK: ZACK

DAVE SAKOWSKY
DETROIT

How do we get the local access number for Venezuela?

It's listed in the program on DY28 called /INTAXESS; however, a few other things should be remembered about Venezuela. Clients cannot use the QUIK-COMM System on the GE Information Services network; they have to use the PDN from there for messaging. There is local access, but no local support. A special supplement is required to validate a U# for Venezuela. It's in OLOS 800.49. The USA U# can be used there once this form has been submitted; the billing will be at approximately 160 percent of the USA list.

REINIER BLOEMER
AMSTERDAM

I don't find India in the file named NNACCESS. Is it impossible to reach MARK III from there?

Not impossible, but it's only available through the Telex route. Your user there can use his Netherlands U#, and from a Telex machine, he can dial into Amsterdam Telex port and reach MARK III Service. We hear that the government in India is considering putting in a public data network, but it's not anything that will happen in the immediate future.

TONY DENUNZIO
NEW YORK

I have heard that we now have a representative in Taiwan. Who is it? Where is he located? What's his QK address, and what are the prices for service there?

Andrew Tsang is working out of the Hong Kong office. He doesn't have a permanent office in Taiwan yet, but he visits there two weeks out of each month. His QK address is QTWN. Prices are the same as those for service in Hong Kong. List DY28 file named HKPRICE for those. Incidentally, Taiwan is more than eight hours from GMT.

ACTION IN NEW ZEALAND

A new QUIK-COMM System address has been set up for inquiries about business in New Zealand: it's NZSALES. The current 300 BPS Packet Switching service will soon go to 1200. You can send messages to Alan Rousselot at NZSALES if you need more information, or if you have a client/prospect who wants access in New Zealand.

FRODE EIDEM
NORWAY

We need to allocate U#s to some new countries. Do we send Portugal numbers to Spain?

Not necessarily. Portugal is served by a Public Data Network, and users there can use the Norwegian U# to access. They receive their MARK III Service bill at home in Norway, just as though they had not left.

DICK BANCROFT
PHILADELPHIA

Having a list of countries that have PDNs, like that in NNACCESS, is okay, but where do we go for such details as contact name, address, phone number, Telex number, rates, and so on?

Order the International Reference Guide from OLOS (3918.14A). While waiting for it to arrive, you might want to list a DY28 file named NEWINTL; it also has the data. And be sure to list the DY28 file named IRCINFO. It gives the data on how to reach MARK III via the PDN in those countries where direct access to MARK III is not available.

MARK III® SERVICE

SALLY McMASTER
TORONTO

Has something changed on the rate structure for the DSMT and DEMT commands? I used to recommend DEMT as a money saver, but it doesn't seem to be. What's happened?

The Data Entry Mode Technique (DEMT) was put into place to reduce the connect-time charges when entering data in the system from a terminal. The hourly TCH time was reduced to $3.00 for 300 baud and $4.00 for 1200 baud. I/O characters are charged at .10 per KC.

The DSMT command does cause a change in rates charged, as it merely prepares the system to receive input from something other than a keyboard. If your clients are on an FG option where they are not being charged for KCs, they're better off using DSMT than DEMT. If they use DEMT, they'll receive KC charges they didn't get before, and if they're entering the data from a PC diskette on a downline load, the connect time won't make that much difference.

DOCUMENTATION UPDATE

*When XFER was documented, some requirements for its use were not known. The supplement to the Command System manual will reflect a couple of changes. First, the receiving U# must have ATTACH as a validation, along with TP. Second, when using XFER*** in the slash mode, the user must enter the receiving password after the U#, followed by a comma and a semicolon after the password. These are not optional: XFER*** won't work without them. Thanks to Kathy Stevenson for data on this problem uncovered by Valana Shields.*

FAST-FAX

8*274-6517 QK: FAST

NSS AUTHORS

KEN SLASOR
DUBLIN, CALIFORNIA

Can you print a list of the "focused" authors and the cost centers that control them?

Here's the list as we received it from Art Brusila in NSS Administration.

Adams & Rountree	DQ30	807
Advantage Business Systems	DQ62 /89	795
Chicago Board of Trade	EQ54	701
Coca-Cola	CQ26	703
Council of Petrol Accountants	EQ80	821
Dwight's Energy	AQ38 /BQ68	821
Delta X	BQ18	807
International Data Communications	EQ31	760*
Mardata	BQ19	781
Metier Management Systems	EQ43	807
Pennwell Publishing	EQ67	821
R J Edwards	EQ72	821
SAS Institute	CQ68	703
Wells Fargo Leasing	CQ59	830

*These vary on a number-by-number basis, i.e., not all are assigned to 760.

QUIK-COMM™ SYSTEM

JONI REEVES
DALLAS

Is there a sample of a QUIK-COMM System month-to-date report?

List a QK11 file named MTDREPT. It gives the summarized and detailed month-to-date report as generated by the command MTD within QUIKM***. Thanks to Rob Armstrong for making this file available.

SZEWAI LEUNG
HONG KONG

Please announce to your readers that QUIK-COMM System users in Hong Kong will have to switch over to the Public Data Network instead of using local access. The exact date is not decided yet, but will happen soon. The PDN charges are HK$1.00/minute connection and HK$1.00/640 characters for KC charges. The minimum charge per session is HK$2.00. The contact for the PDN is Albert W. Y. Yung, Cable and Wireless HK Ltd., New Mercury House, P.O. Box 597, 22 Fenwock St., Wanchai, Hong Kong. His phone number is 5-2831-628; Telex (780)83000.

NICK JONES
TORONTO

Are we charged for a carbon copy on a QUIK-COMM message?

No, not for sending it. You can either make yourself one of the carbon copy addressees, or you can include your address as one of the TO: addresses. When the system accumulates the billing data—charging for the number of messages sent—it always subtracts one from the total if your address is one of the TO: or CC addresses.

VERNON SMITH
DETROIT

What is the USA country code when someone wants to send a Telex from a non-USA location into the states?

Each country has one country code, and for the USA it's 327. Regardless of what country the user is dialing from, this code must be used to reach the USA. For example, if a user is dialing into the Telex ports to reach the system, Los Angeles is (327)664306, and Rockville is (327)898360.

MARK 3000™ SERVICE

JOHN THOMPSON
NEW JERSEY

We have a client who says he's interested in using the STAIRS information search and retrieval program on MARK 3000 Service. Is there an on-line file with any information?

Yes. A DY28 file named STAIR*. It's only one page long, but it gives the general function of the application and provides a phone number and QK address for more information.

—*Jim Doyle*

Jim Pickerell

Rockville employees Karen Winston and Floyd DeAndrade appeared on this year's broadcast of the Jerry Lewis Telethon to present the Muscular Dystrophy Association with $10,000. The donation represents the efforts of 300 employees nationwide who participated, with the company's sponsorship, in the Association's "Love Run."

Karen, a beginning runner, and Floyd, who completed the Hawaiian Iron Man Triathlon symbolized the wide range of athletic experience held by the participants. Early this summer, the runners solicited pledges from friends and fellow employees to pay a certain amount for each mile they ran during August. All participants will receive Certificates of Achievement from the MDA, and based on the total pledges redeemed, some may be eligible to win a gold, silver, or bronze medal.

"It feels good to know that all the employees have pulled together for a worthy cause," says Theresa Yee, organizer of the company's Love Run. "And as the health care manager," she adds, "it makes me feel good to know they also got the benefit of exercise."

GE Information Services is the first employer to go nationwide with its Love Run program. The company was invited to appear on television because of its large number of participants and because of last year's $6,160 donation. That amount was raised by less than 200 runners, so this year's goal was increased significantly to $10,000. Whether the goal will be reached remains to be seen, as backers are still turning in their pledges. If your's is one of the outstanding pledges be sure to contact that tired but satisfied runner who's waiting to hear from you.

SIMMONS CITES COMPANY'S SUCCESSES AT GE CONFERENCE

Bob Simmons, Vice President and General Manager, GE National Accounts, was one of four speakers invited to address General Electric's Industrial Market Board at a recent customer service conference. Along with representatives from Corporate Engineering, MABG, and GESCO, Simmons spoke about identifying the causes of and finding solutions to customer service problems.

In his talk entitled "Information Systems: Competitive Advantage or Tower of Babel," Simmons told some 20 GE representatives from the company's Industrial and Power Systems sectors about using information systems and electronic linkages to gain a competitive advantage.

Simmons cited GE Information Services' successes with commercial customers and drew parallels to current GE customer service problems. He reminded his audience that "companies that do not respond will be forced to accept changes that others initiate and will find themselves at a competitive disadvantage." Too often, he said, companies have no master plan for information technology, whose explosive development drove most companies to incremental implementation of systems. This resulted in many independent, uncoordinated, and incompatible "islands of information."

Companies that successfully integrate information systems find doing so adds value to the product, frequently cuts administrative costs, and most importantly, gives that company a competitive edge, Simmons said. He cited several examples, including the following:

- For Levi Strauss, extending its existing systems meant benefits such as instant order confirmation for customers, fewer errors, increased sales-force productivity, improved inventory control, and a drastic reduction in paperwork.
- For Apple Computer, replacing manual systems with electronic dealer support systems in 3500 locations meant that 80 percent of dealer questions could be answered by the company's "Mac" terminals for better service faster. This helped the company avoid $13 million in support costs in five years.

The diversity of examples, Simmons noted, demonstrates that the technology is available and workable, even in a company as broad in scope and geography as General Electric. "The benefits are real," Simmons concluded. "Costs can be taken out, value can be added, agility and a competitive advantage can be gained."

NEW AND REVISED DOCUMENTATION

EDI SOFTWARE PACKAGES, PUBLICATIONS IN PRODUCTION

Electronic Data Interchange (EDI) Services enable documents to be transmitted and received electronically. It is an application well-suited for companies that must contend with the barriers of time, distance, or differing document formats to complete business transactions.

The document distribution method is designed to eliminate many costs associated with manually handling large quantities of paperwork. It reduces the chance of data entry errors, since rekeying of information is not needed, and it reduces the amount of elapsed time involved in transacting business.

One EDI service, the EDI*EXPRESS™ System, provides electronic acceptance and delivery of business documents in a variety of formats, protocols, and access methods. Other EDI*EXPRESS features are listed below.

- Mailboxing. As documents are received and processed, they are placed in electronic "mailboxes" for intended recipients to retrieve later. Mailboxing can also perform security functions, like verifying that the sender and intended recipient are system users, and that they have a valid business relationship.
- Compliance Checking. This function helps determine that the information in the document is formatted correctly.
- Translation. If the sender and recipient document formats differ, EDI*EXPRESS can translate the sender's format into the recipient's format.
- Special Editing. Two types of editing can be performed if the user desires. One will check the contents of specific entries against tables supplied and maintained by the receiver. The other will check the range of values against minimum and maximum values supplied by the receiver. Errors found during Special Editing are reported to the receiver.

At press time, the following EDI publications were being prepared for October availability.

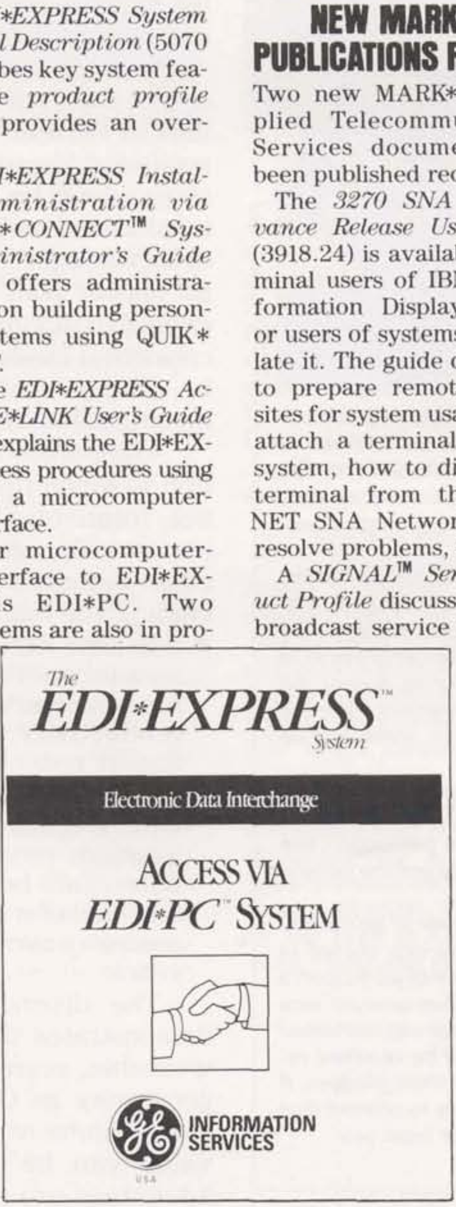
The *EDI*EXPRESS System Functional Description* (5070 .05) describes key system features. The *product profile* (5070.06) provides an overview.

The *EDI*EXPRESS Installation/Administration via the QUIK*CONNECT™ System Administrator's Guide* (5070.08) offers administrative help on building personalized systems using QUIK*CONNECT.

Also, the *EDI*EXPRESS Access via GE*LINK User's Guide* (5070.07) explains the EDI*EXPRESS access procedures using GE*LINK, a microcomputer-based interface.

Another microcomputer-based interface to EDI*EXPRESS is EDI*PC. Two EDI*PC items are also in production: a *software package*, (5070.10), with software on diskette and user's guide; and a *product profile* (5070.15), which describes the system and how it works.

And finally, an *EDI overview brochure* (5070.07) contains inserts explaining how EDI can be used in office products, automotive, international trade, and health care applications.



NEW MARK•NET PUBLICATIONS RELEASED

Two new MARK*NET™ Applied Telecommunications Services documents have been published recently.

The *3270 SNA VAN Advance Release User's Guide* (3918.24) is available for terminal users of IBM 3270 Information Display Systems, or users of systems that emulate it. The guide details how to prepare remote terminal sites for system usage, how to attach a terminal to a host system, how to disconnect a terminal from the MARK*NET SNA Network, how to resolve problems, and more.

A *SIGNAL™ Service Product Profile* discusses the data broadcast service offered by GE Information Services and Bonneville Telecommunications Corporation. SIGNAL is designed to disseminate information simultaneously to numerous widely dispersed recipients by using Bonneville's satellite/FM broadcasting facilities. After messages are received, recipients access the MARK*NET VAN Service to communicate with the sender. Review publication 3918.23 for more information on the SIGNAL Service.

SURENET RETURNS SERVICE SOFTWARE PACKAGE IN THE WORKS

The SureNet™ Returns Service was developed to provide depository financial institutions (DFIs) the ability to enter and send return entry and notification of change transactions to the Federal Reserve's automated clearinghouse (ACH) processing service in an automated rather than paper form. The service eliminates the normal paper entry and handling procedures and associated costs.

The *software package* (5070 .02), which consists of software on a diskette and a user's guide, is in production. It is scheduled to be available in October.

MARK 3000 SERVICE PRODUCT PROFILE UPDATED

The revised *product profile* (2051.55A) contains information on VM (Virtual Machine), a new operating system developed by IBM Corporation and available on MARK 3000™ Service. It also contains information on new application software and a brief description of new access methods, including 3270 SNA and SDLC.

—Dex Nilsson

HOW WE'RE DOING

AUGUST SALES 4 PERCENT UNDER ESTIMATE

GE Information Services' August sales totaled $52.2 million, 12 percent below 1984 and 4 percent under estimate.

- Network Based Services revenue was 11 percent below last year and 1 percent below estimate.
- Marketing and U.S. Sales revenue dropped 18 percent from last year and was 3 percent lower than estimated. The decline from 1984 was caused primarily by lower RCS sales, which were down 17 percent. Foreground was off 19 percent due to price erosion and continued deterioration in NSO accounts. Background was also down 19 percent due to in-house migration.
- International sales were 10 percent higher than 1984 with higher Foreground and SDC revenue primarily in Italy and the U.K.
- GE Consulting Services revenue was on estimate, increasing 4 percent over 1984 because of improved volume.
- Software International sales were 2 percent under 1984 and fell 35 percent short of estimate, the result of industry softness lowering domestic and international volume.
- Integrated Communication Services revenue decreased 12 percent from 1984 and 11 percent below estimate primarily because of the PBX distribution phase-down and widespread shortfalls in service volume. □

STAR OFFERS AWARDS TO CHILDREN OF GE

As the 100 winners of the 1985 General Electric Foundation STAR Program hit the books at colleges and universities across the country, the search has begun for the "STARS" of 1986.

The STAR Program for Student and Teacher Achievement and Recognition awards high-achieving sons and daughters of GE employees and retirees. It also recognizes teachers from the high schools the winners attend. Up to 100 winners will receive awards of $1000 each, and an additional $500 will be contributed to each of their high schools.

Applicants must be seniors in public, private, or parochial high schools during the current academic year and plan to enroll in a full-time undergraduate course of study at an accredited two- or four-year college, university, post-secondary vocational, or technical school. The STAR awards are to be used toward expenses during the recipient's freshman year.

Dependent children of full-time employees, or children of those who retired directly from GE or its majority-owned domestic affiliates, are eligible to compete in the STAR Program. Also eligible are dependent children of full-time employees absent with protected service, as well as children of employees who died while in active service with GE, or after retiring directly from the company.

The deadline for submitting applications is January 15, 1986. Results will be announced on or about April 15. Application forms and complete details on the STAR Program may be obtained from your employee relations manager. □

*This ad will appear in seven major PC magazines in November to publicize the General Electric Network for Information Exchange. GEnie™, for short, is GE Information Services' new product aimed at a mass market, but employees can also participate—and at no cost. Availability for employees excludes the hours between 8 a.m. and 6 p.m., Monday through Friday; the employee user number can be obtained by calling DIAL COMM 8*273-6510 or QUIK-COMM: JEDSON. Be sure* ***not*** *to use the user number indicated in the ad, as you'll be charged for the connection if you do.*

OCTOBER 'OPEN-ENROLLMENT MONTH' FOR IMPROVED LIFE INSURANCE COVERAGE

Perhaps you ignored the Savings & Security Program's life-insurance coverage when you were first eligible because you didn't want to commit one percent of pay to insurance, even though the benefits were excellent. Then, when you later wanted the coverage, you couldn't provide proof of good health and the insurance company turned you down. If that's the case, October can be an important month for you.

Because of improvements that go into effect for S&SP life insurance on October 1, 1985, the month of October has been designated as an "Open-Enrollment Month." That means you can sign up for S&SP insurance in October without having to provide evidence of good health.

Some major improvements in S&SP life insurance make the coverage worthy of serious consideration. For example, the S&SP life insurance coverage provides long-term monthly benefits to beneficiaries of employees, depending on the employee's age at death. One new improvement increases the number of years that benefits are paid to survivors of employees in most age groups.

In another improvement, those who don't want to commit one percent of pay to S&SP insurance coverage can invest in a "half-size" coverage. By choosing this half-percent-of-pay-contribution option, employees will be able to purchase one-half of the level of protection that is available from a one percent contribution.

"There's another important value to be gained by using S&SP life insurance coverage," says Dick LeFebvre, manager of practices and benefits. "GE makes a 50 percent matching payment for any eligible investment in S&SP, including insurance coverage. That means your out-of-pocket contributions for coverage are really only half of what they seem. If you choose the one percent option, GE makes a matching 50 percent payment and places it in one of the other S&SP investments as you choose—the HP Fund, GE stock, U.S. Savings Bonds, or the S&S Mutual Fund.

"For example, if your age is 25 and your pay is $20,000 a year, your one-percent contribution would be just $3.83 per week or $200 per year. However, with GE's 50 percent matching payment, your effective out-of-pocket cost would be only about $1.92 per week ($100 per year). The net cost of the half-percent option is also 50 percent less than it appears, because of the GE matching payment."

One other change gives beneficiaries the first-time flexibility to elect a lump-sum payment of benefits instead of monthly installments. This option is not available, however, when an employee has limited the beneficiary to a particular payment method. Before this change, the employee could choose the lump-sum payment method, but not the beneficiary.

The insurance company—Aetna—also has revised the interest factors used for calculating lump-sum values, resulting in lower values than under the previous interest factor used.

Forms for enrolling for S&SP life-insurance coverage or changing to the half-percent-of-pay-contribution option are available from Dick at QK: CORP or DIAL COMM 8*279-5409. □

AUGUST S&SP PRICES

Here is the report on the prices for GE Stock, Mutual Fund, and Holding Period Interest Fund used under the Savings and Security Program to credit participants' accounts.

The Long Term Interest Fund price for the last day of the month is also shown, as well as year-to-date annual income rates for both the HP and LT Funds.

			Holding Period Fund					Long Term Fund	
				YTD Annual Income Rate (a)					
Month	Stock Price	Mutual Fund Price	Price	1982	1983	1984	1985	Price	YTD Annual Reinvestment Income Rate
January	$60.364	$33.181	$10.00	16.5%	13.6%	13.2%	12.6%	$11.03	10.9%
February	$63.447	$34.967	$10.00	16.7%	13.7%	13.2%	12.7%	$10.80	11.2%
March	$61.881	$34.449	$10.00	16.7%	13.7%	13.2%	12.6%	$10.51	11.2%
April	$59.696	$34.637	$10.00	16.7%	13.7%	13.2%	12.7%	$10.64	11.0%
May	$59.818	$35.514	$10.00	16.7%	13.7%	13.2%	12.7%	$11.03	11.1%
June	$60.906	$36.097	$10.00	16.7%	13.7%	13.2%	12.7%	$11.22	11.1%
July	$62.392	$36.926	$10.00	16.6%	13.7%	13.2%	12.8%	$11.10	11.1%
August	$61.591	$36.318	$10.00	16.6%	13.7%	13.2%	12.8%	$11.16	11.2%

(a) The "announced" HP Fund Rate was 16.25% for 1982, 13.25% for 1983, 12.75% for 1984, and 12.50% for 1985.

DEADLINE NEARS FOR ACTION ON S&SP HOLDING PERIOD NOTICES

If you have not yet decided on whether to change instructions for the distribution of your Savings & Security Program securities next January, there's not much time left to do so. The deadline for returning your Holding Period Distribution Notice on 1982 Savings is the end of October.

The distribution notice went to all S&SP participants early in August. It reported on savings in the 1982 Holding Period under S&SP scheduled for distribution in January 1986.

"The notice tells what securities are available for distribution in early 1986, after the holding period on 1982 savings ends," says Dick LeFebvre, manager of practices and benefits. "If you're a participant, the totals can give you a lot of satisfaction."

Dick says that "the notice also provides a form to use if you want your 1986 securities distribution changed from the 1985 distribution. There are four alternatives. You will want to study the entire form carefully to be sure you choose the alternative that's best for you."

One part of the form reports on a participant's unrecovered investment under S&SP. "In general, that's the amount you've already paid tax on and that can be withdrawn tax-free," Dick explains. "The form shows the estimated taxable income that will result from different distribution choices for your next payment as a result of unrecovered investment. That information can help almost anyone make the wisest distribution choice."

The Holding Period Notice also shows how your securities will be registered, the address where they are sent, and your Federal Income Tax withholding election.

Any changes a participant may want to make should be made on the appropriate part of the form and delivered to the participant's Personnel Accounting Office before November 1, 1985.

"Everyone who has received a Holding Period Distribution Notice should study it carefully before completing it or deciding to let last year's instructions continue," Dick concludes. "An hour's study may save you tax dollars and make sure your money is invested as you want it." □

MILESTONES

Congratulations to the following employees who celebrated service anniversaries in September.

35 years

Rockville
Warner Sinback
James Tidd
James O'Brien
Schenectady
Julius Pirrone

30 years

Rockville
Ray McNees

25 years

Rockville
David Vernot

20 years

Detroit
Warren West
Nashville
Charles Fowler
Rockville
Orman Barkdoll

15 years

Paramus
Dorothy Schan
Rockville
John Jamieson
Joseph Berdini, Jr.
Saul Summerall
Schenectady
Michael Cannizzaro

10 years

Atlanta
Alice Parsons
Long Beach
James Warden
Morristown
Jeanne Piccolo
Rockville
Harrison John
Kathleen Stevenson
Harold Scheinberg
Daniel Ryan
James Boomer
Saddle Brook
Edward Mazur
Schenectady
Georgia Maiorelle
Michaela Howley

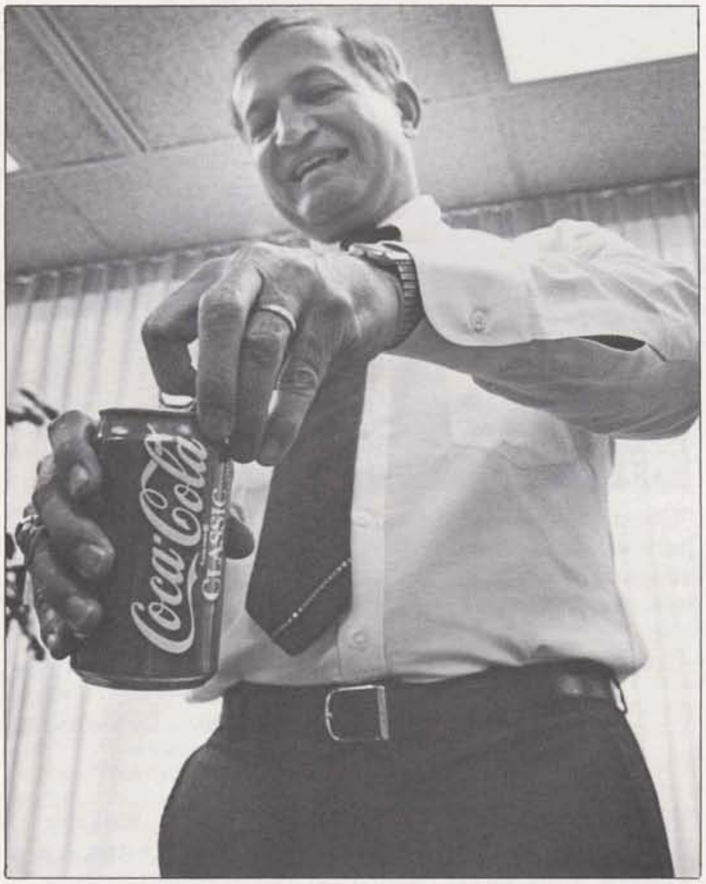
"Completing 35 years with General Electric is not only a personal achievement, but one that requires the full support of an individual's family. I thank GE for the many opportunities and challenges it has provided, and I am indebted to a wonderful family who has gracefully accepted them with me."

—Jim Tidd, logistics manager
Materials and Facilities Operation

Twenty years of excellence doesn't just happen. It's created by people like Jim Tidd, thousands of people who have dedicated their talents, time, and occasionally their families to the success of something they believe in.

The next issue of *SPECTRUM* will celebrate the twentieth anniversary of GE Information Services Company and the employees who have made it successful. We hope you will enjoy this special commemorative publication. Look for it in November.

CLASSIC COMPUTING



Propitious timing, good conversation, and a customer becomes a friend. As part of the Major Account segment of the MARK III Support Program, Bob Hench (above) and Roger Dyer, along with John Adams from the Atlanta sales office, recently visited the Controller and his staff at the Coca-Cola Company in Atlanta. The Coke contingent arrived a bit late for the dinner meeting but not surprisingly, since the soft-drink company had just announced its decision to bring back "old" Coke.

"It was apparently a very tightly held decision," says Roger. "Until that afternoon, very few people in the entire company knew about it." The ensuing conversation became a lively focus on Coca-Cola's business, peppered with talk about GE Information Services Company. It resulted in several new business opportunities.

A couple of weeks later, however, two special delivery packages arrived—one for Bob, one for Roger—along with a note that read, "With the compliments of the Controller of Coca-Cola, since you took so much interest in our business." Inside were six-packs of the very first Coca-Cola Classic® produced. "They felt that we cared about their business," says Roger, "and that can cement a lot of good things."