ISBD Launches CRISP III/70 Service

Last Monday Information Services began a limited pilot sales campaign on the division's newest commercial offerings, CRISP III/70 Service. "CRISP" (Conversational Remote job entry IBM Services Products) is a service utilizing the IBM 370/158 processing system with an up-to-date OS/VS2 (Release 1.6) operating system which will enable thousands of current users with in-house IBM systems to acquire additional computer capabilities through the international MARK III network.

The new service has been in development for several months and has been field tested with the cooperation of a number of prospective customers. The field testing is now complete with such a measure of success that nine of those customers have already subscribed to the new service on a paying basis. Among the division's first CRISP III/70 customers are such notables as Continental Oil Company, Texaco and Proctor and Gamble.

Chicago was the location of the new service's first field training course this week. Four AR's and two TR's from each of the Chicago and Houston Branches, where the service will be initially introduced, were on hand for intensive training by Jim Babcock, Manager, IBM Services Marketing Program; Harry Hearn, Manager, IBM Sales Development; and Barry Siegall, Manager, IBM Marketing Plans. Next week the four TR's are to be in Rockville for seven additional days of CRISP III/70 technical indoctrination.

The pilot effort, targeted to specific MARK III users and major current IBM in-house users in the Chicago and Houston areas, will run through the end of February. During this period, all sales efforts and prospect responses will be carefully monitored to explore the most promising marketing methods and techniques. The service will be introduced nationally and internationally later this year.

Paul Wexler, Manager, Marketing Operation, who has overall responsibility for the project, said: "This is the first time in computer history that thousands of IBM users will be able to obtain almost unlimited additional data processing through ninety percent of the world's business telephones using their existing programs and terminals. The marketing potential for CRISP III/70 Service is really significant."

Jim Babcock believes that because of the great preponderance of in-house IBM systems in the business world, revenue possibilities are really exciting. "With 70 percent of the major American concerns already using IBM hardware and software," he said, "CRISP III/70 Service opens up a vast new market for the Information Services Division."

The hardware, a large-capacity IBM 370/158, is already installed and commercially operating in the Maryland Center. The system features the OS/VS2 operating system which provides Virtual Storage, a configuration capable of programmable address space of up to 16 million bytes. Additional capacity will be added as required, to support the expected revenue growth.

While the pilot CRISP III/70 sales campaign is pursued in Chicago and Houston, an intensive schedule of AR and TR training programs will be organized to orient the division's field personnel in preparation for the national and international introduction of the new service. UPDATE will keep readers posted on CRISP III/70 progress as the program develops.
**Information Services Business Division**

**Vice President and General Manager**

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<tr>
<th>Role</th>
<th>Name</th>
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<tr>
<td>Vice President and General Manager</td>
<td>George J. Feeney</td>
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For General Electric Employees Only
Scenes from the Annual Headquarters Meeting Held December 20
Interchange Corner
As the use of HSS interprocessing grows, so do the questions about the basics of interprocessing — IBM 360/370s using HSS to communicate with Mark III Service. To answer these questions, Product Support offers an "Interprocessing Primer" which puts interprocessing into perspective and covers some of the basic details necessary for running simple sessions.

Written for easy reading and quick reference, the document touches on oft-heard IBMese, describes the DSXMIT package and the sequence of events in a session, and gives some job examples. The Primer is not a customer document. It is a reference guide for use in selling to HSS interprocessing customers or prospects.

The Primer will be mailed to field personnel the week of January 13. If you do not receive a copy, it may be ordered through Don Farrell at 8*273-4749.

Study Made of GE Benefits
"A study of just about all of our GE benefit plans and practices is now being made so that we can be sure that they are in line with any regulations and rulings which might be issued under 'fiduciary responsibility' sections of the recently enacted Employee Retirement Income Security Act of 1974."

Edward H. Beekman, GE's manager of Employee Benefits and Compensation, told about the effort going into the study. "Currently, Corporate Employee Benefits specialists and lawyers are checking every possibility of the need for any amendment to any plan," he said. "The Act applies to many more benefit plans than the pension plan, even though it's called the Employee Retirement Income Security Act. For example, insurance plans and vacation plans may be involved. Because GE has so many benefits it's going to take time to check all implications of the Act and application of possible regulations.

"In order to do this checking in a thorough fashion and in keeping with recently issued government procedures, GE has filed an application for postponement of certain fiduciary responsibility provisions of the Act," Mr. Beekman said. He added that it appeared that many companies with broad arrays of benefits like GE's are having to do the same, as provided for under the Act.

Mr. Beekman emphasized that the purpose of the postponement is merely to provide time for a careful review of status of GE benefit plans with respect to the fiduciary responsibility sections of the Act and will not affect the administration of the plans. Therefore, it will in no way adversely affect the interest of any plan participant or beneficiary.

A notice of the application for postponement, including a list of the various GE benefit plans being studied during the postponement and other information, is posted on plant bulletin boards.

See Spot Run: OPT BIG
Instead of waiting for off-peak hours to Run Very Big, the new system command OPT BIG allows the choice of whether to run large programs during prime time, or during the more economical off-peak hours. Available during prime time, OPT BIG is for users needing up to 32K of core. Response depends on system load, and also on program size. Thus, when the system is heavily loaded response time is longer for all users, but smaller programs will not feel this effect as much as longer programs (over 11K). Even when the system is lightly loaded response will not be as rapid for programs over 11K.

The cost of using OPT BIG reflects the demand on system resources. Thus, off-peak usage is more economical than prime time usage. Interactive programs should be kept as small as possible, for efficiency. This may mean writing front-end programs in many cases. Large programs should take advantage of IND deferred and overnight capabilities whenever possible. BIG placed in the IND option line allows larger programs to take advantage of IND flexibility.

After the OPT BIG command, up to 32K remains available until the end of the session, or until turned off by OPT NOBIG.

Discount for Disney Parks
A discount ticket which permits savings on admission and ride tickets at Disney-land and Disneyworld, is available to General Electric employees. Called the Magic Kingdom Club membership, one card is good for the entire family of a GE employee.

Send your request for a membership card to:
Mr. Sam Stubbs, Resident Manager
General Electric Carousel Progress
Walt Disneyworld
Lake Buena Vista, Florida 32803

Include your home address in the request. The membership card is valid until Dec. 31, 1975.
New and Revised Documentation

Library Software Index (5001.02C), Revision describes 781 programs, routines, language functions; lists classes of support; references documents; and provides a complete index.

Guide to Application Programs for the Utility Industry (5001.03) covers both ISBD and NSS software of special interest to this market.

NSS Author Handbook (6116.01A), a 12-page glossy booklet, describes NSS and provides guidelines for authors.

Generalized Payroll System (5101.01B) documents GEPAYS, a work day payroll package. Complete user's guide revision.

Dynamic System Simulation (5204.05A) documents DYSIM, a digital analog simulator. Complete user's guide revision.

FBI reference manual (2000.01B) and user's guide (2000.23) were reprinted to incorporate about 35 pages of minor corrections and information on SUPERPRIORITY, previously documented in supplement 2000.01B-1.

CRISP III/70 Service user's guide (2050.01A), published in advance release version, documents access to IBM system.

GCOS COBOL Syntax Checker (2100.06) is documented. Preliminary copies are available from Jim Doyle.

All those author systems and database glossaries in the back of the MAP user's guide (5900.01B) have been attractively repackaged as separate booklets to facilitate users needing one manual but many copies describing a database: Econoscope Beta System (5900.11A), HWMAPS (5900.29), MAPCAST (5900.27), NBER (5900.28), SIC (5900.30), FTC and SEC (5900.31), U.S. Regional (5900.32), U.S. Engineers & Consultants (5900.33) and NEMA (5900.34).

Telephone Changes

Pittsburgh
The Pittsburgh office announces a change in their DIALCOMM number. The new number is 8*345-4186.

Milwaukee
Telephone listings in the December division directory for the Milwaukee branch are in error. The number should be 8*326-5292 for all employees in that branch.

Please correct your telephone book pages III-2 and III-3 for these offices.

December Service Awards

15 Years
Lee Anderson . . . . Rockville
David G. Besco . . . Rockville
Bonnie Galbraith . . . Rockville

10 Years
Philip Berns . . . . Rockville
P. L. Maracci . . . . Erie
John Wilson . . . . Pittsburgh

5 Years
Frank Beal . . . . Rockville
Timothy Madison . . . Rockville
Michael Terry . . . . Watertown
David Votta . . . . Rockville

For General Electric Employees Only
Division Meets EEO Objectives

As an equal opportunity employer, the Information Services Business Division reaffirms the Company policy each year to comply with all federal, state and local regulations which apply to employees and employment-related practices.

In 1974 the division continued its long-standing commitment to equal employment opportunity and affirmative action at all organizational levels. This is a commitment to provide uniform practices, assuring equal treatment in hiring, training, compensation, promotion, transfer and all other personnel practices.

The division punctuated its commitment in 1974 by meeting the goals and providing upward mobility for women and minority workers as well.

The division will again establish goals in 1975, in accordance with General Electric policy, to bring the level of minorities and women in all facets of employment up to the level in which they are represented in the national work force.

Wish Book for Utility Customers

For Account Reps and Technical Reps who need to know some of the key applications available for the Utility industry, Electric Utility Industry Sales offers a “Guide to Application Programs for the Utility Industry.” This applications overview is designed for internal and external use; an accompanying Referral List for GE employees only, provides the user with quick reference to individuals responsible for applications in the Guide.

The “Guide to Application Programs” should be given directly to the customers. Then when the customer needs help on a specific problem, he looks in this “wish book” for the possibilities of using Mark III Services. He may need help in a lighting analysis study — by looking in the Guide he learns about four offerings, and that “ILLUMS calculates point-by-point the foot-candle levels resulting from a given configuration of luminaires” — exactly what he needs. He calls his local account rep to tell him which program he is interested in, and the AR learns from his Referral List where the program is available for the customer.

Order document 5001.03 for your utility customers. The Referral List is available only through Utility Industry Sales — keep it handy for calls from your customers or prospects!
# Information Services Systems

## Department

**General Manager**: Ray Marshall

**Network Operations**
- Network Transmissions
- Network Distribution
- Domestic Planning
- International Planning
- European Operation

**Supercenter Operations**
- Foreground Operations
- Background Operations
- Maryland Center
- Ohio Center

**Security Operation**

**Network Planning**
- Foreground Deployment
- Background Deployment
- Procurement
- Facilities Projects

**Quality Assurance**
- Foreground Quality
- Background Quality
- Communications Quality
- Projects & Measurements
- Medinet Quality
- Maintenance Programs

**National Service Operation**
- Customer Assistance & Expediting
- Validations & Billing
- Product Support

**Advanced Facilities Projects**

**Remote Operations**
- Medinet Operations
- Philadelphia Operation
- Erie Operation
- RFM Technical Support
- GCOS Remote Facilities Management

**Network Operations**
- Gerry Gay
  - Gene Shanklin
  - Jim Rowley
  - John Wallis
  - Bob Knight
  - John Prior

- Al Jones
  - Dave Simshauser
  - Phil Fabrizio
  - Tom Taylor
  - Wayne Rice

- Pete Browne
  - Dick Lewis
  - Bill Brill
  - Howard Robinson
  - Alan Paul

- Zigi Quastler
  - Dave Clark
  - Verk Eubanks
  - Ralph Taylor
  - Bill Bacon
  - Ed McPherson
  - Ken Strandberg

- Mel Szot
  - Bob Couts
  - Joe Adams
  - Bill Hewlett

- Warner Sinback

- Jerry Butler
  - Al Orlup
  - Lou Ciccone
  - Ray Bullock
  - Chuck Crotty
  - Ade Graham

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For General Electric Employees Only

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UPDATE is published bi-weekly by the Information Services Division for the benefit and information of employees. Articles and photographs may be submitted to UPDATE, Information Services, 401 N. Washington Street, Rockville, Maryland 20850.

David M. Cooper, Manager, Marketing Communications

Esther Fanfani, editorial specialist

Monica Jordan, editorial specialist

EVERYONE CAN WIN IMPACT 75
Meet A Co-Worker

Mike Johnson, senior systems specialist in data management systems, arrived at headquarters in early December from the Pacific Zone, where he was Medinet account manager in Seattle. A native of Denver, Mike was with Colorado Blue Cross for four years in research and development of hospital systems.

Mike is pleased to be with General Electric and the headquarters Technology Department. His wife and three children will join him in Maryland next month.

Suffering from an Information Gap?

Do you have one of those helpful orange-and-white Sales Manuals, but find you’re not getting up-to-date inserts? Don’t just sit there feeling bad. Do something about it.

Here’s what — fill in the following coupon and send to Norm Otis in Rockville. The original mailing list is being rebuilt; and if your name and correct location are not on the current list, you’re missing important information. If you’re already receiving revisions, you’re OK; if not, send the coupon today.

I have a Sales Manual — send me future updates:

☐ I want to receive a complete Sales Manual. Please also add my name to the mailing list for future update.

Name_____________________________
Title____________________________
Address___________________________
City______________________________

GE People Urged to Buy Bonds

GE’s Board Chairman, Reginald H. Jones, has again been named to the U.S. Industrial Payroll Savings Committee. The appointment was made by U.S. Secretary of the Treasury William E. Simon. Mr. Jones will serve as Chairman for the Electrical Equipment Industry during the Committee’s 1975 campaign, as he did for the 1974 campaign.

The committee encourages the sale of Series E Savings Bonds through company payroll savings plans by encouraging employers to lead all-out efforts to increase enrollment in their plants or offices.

GE’s Board Chairman has a strong belief in the value of savings bonds as “rainy day” protection for American families. “A program like savings bonds, which encourages fiscal stability and protects the family against financial problems, is worthy of the support of every American,” he says.

At General Electric employees can purchase bonds under two plans in addition to the payroll savings plan — plans that offer extra rewards in the form of company payments to participants. The two plans are the Savings and Security Program and the Savings and Stock Bonus Plan. With the three plans, General Electric employees are among the leading bond buyers in industry. By the time 1974 ends, they will have purchased bonds with an estimated maturity value of about $139 million during the year.
People on the Move

Jon Melnyk, from senior specialist in service plans to product programs manager for competitive and sales campaigns, in Rockville.

Gerald Paulsen, from project manager in applications planning to product programs manager in the product programs section, in Rockville.

Margaret Fisher, from sales and use tax report clerk to specialist in accounts payable, in Rockville.

Evelyn Battle, from key punch verifier to accounts payable clerk, in Rockville.

John R. Thompson, from specialist in equipment-leased-to-others in accounting, to specialist in plant and equipment, in Rockville.

Audrey Wilsey, from East Central Zone secretary in Bethesda to specialist in contract administration, in Rockville.

Savings and Security Prices

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W³H = Fast Info

For answers to Who, What, Where and How in Information Services, try the blue pages, a classified index, in your division telephone directory.

Better still, try the new enlarged index to be distributed February 1. It will be even more valuable as an answer to who does what. This new directory will be incorporated in the March division telephone book.

Early in February every employee will receive the pocket size index. Watch for your copy, and use it!
Breese Named Division Counsel

Vice President and Division General Manager George Feeney has announced the appointment of Claude R. Breese as Division Counsel. Gene Baker, Division Counsel since 1969, has accepted a position as Division Counsel of the Switchgear Division.

"Cap" Breese brings exceptional credentials to Information Services. He has been with General Electric since 1960, most recently as Counsel to the Industrial Sales Division in Schenectady. During his years with GE he has held similar positions with several Divisions and Departments, including the Information Systems Equipment Division from 1968-1970.

Mr. Breese's appointment with Information Services is effective February 3.

New Branch, Zone Managers Named

Jim Castle's early 1975 announcement of Sales Department organization included several promotions in the field sales force:

Bruce Frisch as Northeast Zone manager, and branch managers Charles Benton in Philadelphia, Bill Doubek in Minneapolis, Bill Hohenstein in Boston, and Mike Schermer in Chicago.

Bruce Frisch, Northeast zone manager, was employed by International Harvester and Feed Control Corporation in sales before coming to Information Services in 1969 as a marketing representative in Des Plaines, Ill. He has remained in the Chicago area as account rep and account manager, until being named Chicago branch manager in 1973. Jim Castle, Sales Department General Manager, says Bruce has "demonstrated as a branch manager that he has a well planned approach to sales, which produces results and promises even greater success in his new position."

Charles Benton came to Information Services after twelve years' experience with computers in Burroughs, National Broadcasting, Control Data Institute, (Continued on page 2.)
and several data processing service bureaus, including his own business in Columbus. Charles came to Information Services in 1972 as an account rep in Columbus, and transferred to his native California in 1973 where he was a business development rep in Los Angeles before his promotion to manager of the Philadelphia branch.

Bill Doubek joined Information Services in Milwaukee as an account rep in 1972, after three years as a programmer and sales engineer for firms in Milwaukee. Bill is now manager of the Minneapolis branch.

Bill Hohenstein, now manager of the Boston branch, has held positions in the Boston branch since 1969 as sales rep, marketing rep, and senior account rep, before being named account manager there in 1972.

Mike Schermer, Chicago branch manager, has been with GE since 1964. He held positions as technical marketing trainee, programmer/analyst and applications engineer in the Process Computer Department until 1967. Mike then joined this division as a sales rep in Phoenix and was later named manager of the New Mexico branch. Most recently he was manager of the Dallas branch, the outstanding branch for the fourth quarter of 1974, before being named manager of the Chicago branch on February 1.

**BG’s ASTRA for Resource Allocation**

ASTRA, a multi-project resource allocation program now available on Background, should be of vital interest to companies where resource allocation tradeoffs against varying project priorities, schedules and costs are important. It is designed to simultaneously handle the integrated time, resource and dollar scheduling requirements of up to 50 large projects.

ASTRA uses the network planning technique as a base (PERT or CPM). ASTRA provides an improvement over existing Foreground programs (e.g., CPM, REAL, BIGREAL, GEREAL) in the size of networks handled, report flexibility and operating costs. ASTRA also provides stand alone PERT/CPM processing, comparable to the existing Background PERT TIME program.

Candidates for ASTRA’s management science techniques are unlimited in these days of tight budgets: construction, research, new product development, maintenance, education. One of our large ASTRA users indicates a typical run costs anywhere from $50 to $500 — a very economical application, according to the customer, for the processing that is being done.

ASTRA documentation consists of the Resource Allocation Program User’s Guide (publication 5602.40) and Sample Resource Allocation Problem user’s guide (5602.41), reprinted from Honeywell’s manuals DB55 and DB34. These user’s guides may be obtained by calling Don Farrell in Documentation, 8*273-4749.

Ron Lehrer, headquarters contact for ASTRA (8*273-4227) can compare its value with alternative program management techniques in our market basket. Some sample problems have been loaded in the "*** library, and Ron can assist in developing a demonstration strategy.
The most recent technical training class in the use of CRISP III/70 Service included technical reps from pilot sales areas Chicago and Houston, Don Gable (Chicago), Ray Grybowski (Schenectady), Diane Johnson (Dallas), and Glenda Roberts (Houston), and headquarters representatives who will support the new service.

The training course used video-assisted instruction, with lectures and discussion by headquarters staff knowledgeable in this new offering.

Glenda Roberts described the class as "one of the best-structured courses I have attended — the change of pace from television to live speakers, technical discussion to lecture, kept us on our toes and made it a good course."

Dick Herrin of Medinet felt "the technical background evident in the class members made the questions and discussions particularly valuable to all of us."

Dave Votta, project manager for IBM training, plans more technical classes and sales classes during 1975, as CRISP III/70 service is introduced throughout the country.

Others who attended the classes in Chicago and Rockville were Myrl Peterson, Jere Moorman, from Houston; Pete Curtin of Dallas; Karla Yale, Steve Cook, Lee Shaffer, Alex Schwartz, and Lowell Maitland of Chicago; Bruce Barnard and Jennie Munder of the Central Zone; Al Weiss of St. Louis; Jochen Woite of Honeywell, Germany; and from headquarters: Bill Backer of Product Programs; Manny Roberts and Mike Youree of Product Support; Walt Cotton, George Cooper, and Janice Dove of Customer Assistance; Ralph Specht of Technology; Dick Herrin of Medinet Strategic Planning; and Dave Besco of Systems.

Concentrating on a lecture by Harry Haarn in Chicago on the CRISP III/70 service are, left to right: Al Weiss, Steve Cook, Alex Schwartz, Myrl Peterson and Jennie Munder.

The following week, in Rockville, another class asked questions (left to right): Dave Besco, Glenda Roberts, Ralph Specht, Ray Grybowski, Diane Johnson, Dick Herrin, Walt Cotton, and Mike Youree.
Bus Adapter to Replace FG/BG Bridge

You have probably heard that the bus adapter is replacing the DSU-270 bridge as the link between Foreground and Background. There are several good reasons for making this upgrade. Just as we upgraded from 600s to 6000s, we now go from the bridge to the bus adapter.

With bridge technology, a single bridge served one FG system and one BG system. With the bus adapter, a single bus adapter can serve multiple FG systems and multiple BG systems. In the near future bus adapter software will be modified so that the user can specify which BG system his job should go to (Honeywell or IBM). Files were actually resident on the bridge while waiting for the appropriate system to pull them. The bus adapter serves only as a switch, allowing direct transfer with no intermediate stops. The bus adapter also offers what we believe is the state of the art technology for inter-systems data transfer and is expected to be more reliable and more flexible than the DSU-270. Deployment of the bus adapter is expected to be completed during February.

Discontinued Documents

The following documents have recently been discontinued:

- **5403.03** Solution of Differential Equations (SOLVDS***)
- **5404.02** Matrix Subroutine Operations (MATRXS*** and its subroutines)
- **5501.04** Least Cost Feed Analysis (FEEDMIX***)
- **5501.05** Constrained Optimization (CONOPS)

All were "limited support" documents supporting Class C applications. The applications have 2-17 users/month, not warranting further reprinting and warehousing of the documentation. References to the programs and documents will be deleted in the next revision of the Software Library Index and Publications Price List. However, the programs and subroutines involved will remain on line to serve current users.

Frequently, a question arises as to why programs and routines are on line without documentation. Discontinuation of these documents and their accompanying promotion, while leaving the software on line for current users, illustrates how this situation sometimes arises.

Discontinued publications are so noted in the Market File Index, publication 1.09, issued approximately quarterly. Significant cases will be announced in UPDATE.

January Service Awards

**20 YEARS**
Lois J. Valentine . . . Rockville

**15 YEARS**
Evelyn H. Geiger . . . Rockville

**10 YEARS**
Allen U. Nuss . . . . Cleveland
Shirley A. Gilleland . . San Francisco

**5 YEARS**
Joseph I. Ripkin . . . Hollywood
Sambamurty Arisetty . New York
Charles A. Bledsoe . . . Rockville
Georgia R. Hodges . . . Rockville
Anna N. Goldman . . . Rockville

COM Can Ease Paper Shortage

COM, Computer Output Microfilm, is one more way to build background revenue – a background tape is converted to microfiche or microfilm by a Kodak KOM-80 unit in the Ohio Supercenter. Both Medinet and the Philadelphia remote operation are substantial customers. Among the advantages offered by COM is the reduction in paper required.

To put COM into a commercial field test, Product Programs would like to learn of commercial users — preferably existing background users and existing COM users, but any interested customer will be considered. Turnaround should not be critical (output is mailed from the Supercenter), and minimum output should be approximately 1000 pages, since there is a $20 minimum charge for COM use.

For more information, call Fred Wood, 8*273-4624.
Interchange Corner

Product support receives calls from time to time about our computer generating "wrong answers." Generally, the "fault" lies in the precision with which a binary machine represents numbers. Consider the following FIV program:

```
A = 0.1
B = 1.1
C = 1.2
IF (A+B.EQ.C) Print, "EQUAL"
IF (A+B.NE.C) Print, "NOT EQUAL"
STOP
END
```

This prints "NOT EQUAL." BAS and FOR versions also fail, in each case for three reasons:

First, the problem of expressing a number "exactly" in 36-bit words. In a computer word the left-most 8 bits represent the exponent, the right-most 28 bits represent the mantissa. Unless a number can be expressed exactly as the sum of powers of two (e.g., 2, 4, 8, 16, 1/2, 1/4, 1/16), it will not be precisely represented. Try to express one-third exactly, with 8 digits!

Second, before adding or subtracting two numbers of different magnitudes, the processor shifts the mantissa of the smaller number, so the exponents are equal. In other words, when a very large number is added to a very small number, the end of the small number ends up in the bit bucket.

Lastly, when FIV says ".EQ." it means just that, to the very last bit. The value of a number as reflected when printed is irrelevant. FIV I/O routines round to so many places when printing, and do not reflect the actual internal value. So it is quite possible for two numbers to print identically to eight places, yet be different in the last bit, and hence "not equal."

For customers who do not appreciate this accuracy headache, there are some ways to work around it. If one is not worried about comparing binary numbers, possibly double precision is the answer, pushing the inaccuracy out to roughly the 16th place. It might also be wise to point out that most accounting library packages use integer arithmetic throughout — GFAST$ is an example. For the problem of binary comparison, one could say that two numbers are "equal" if their difference is less than a certain tolerance — smaller than the least "significant" digit, but larger than the roundoff noise.

Division Nominee for GE Award:  
Art Baker

Art Baker, account manager in Syracuse, is the division nominee for the Philippe Award for distinguished public service. For the past twelve years Art has held a number of leadership roles in community agencies in Syracuse, and for seven years he has been a member of the Board of Administrators for the GE Employees Federated Community Service Fund.

Recognition of his contribution to this Board's operation was evidenced by his appointment in May as the Board Chairman. The Fund which he heads solicits and distributes approximately $350-450,000 each year to an increasing number of community social and health service organization.

This year Art has contributed to the work of a separate collection, investment and ultimate distribution of a half million dollars of employee funds for a major hospital expansion program in Syracuse, a critically important local project.
Banking Industry — Full Speed Ahead

Jim Brady, manager of banking industry sales, quotes figures from Quantum Science that boggle the mind. "Spending over $2 billion a year in data processing puts the banking industry second only to the U.S. government in its use. Banking is the third largest industry user of remote computer service in the United States. The top three banks in the country have combined assets greater than the combined assets of the top eight Fortune 500 companies. The banking industry is forecast to grow at 30% a year and by 1976 should be the largest user of outside data services."

Jim has nearly four years of General Electric, Information Services, and banking industry sales behind him, and is proceeding with enthusiasm to increase business with our present banking customers, and to reach the primary market of the top 100-150 banks of the 13,000 in the U.S. The banking industry maintains the highest percentage of in-house IBM equipment in the country — putting CRISP III/70 service into the picture.

"We will stress the international network which is pertinent to the top 50 banks," says Jim of his sales plans, "and we will push our new and projected offerings to present customers."

A statement of claim form (FN-688-XS) must be completed each time an employee submits a claim for covered medical expenses for himself or a qualified dependent. These forms are available from the medical insurance office, Gwen DeLacy, in Rockville.

Here are a few general tips that should help you in filing your medical insurance claim correctly and completely:

— Pharmacist’s bills for drugs and medicine requiring a physician’s prescription must include the prescription number, the date dispensed, full name of the patient, full name of the employee, and the amount charged.

— Physician’s bills may be attached to the statement of claim instead of having the physician or surgeon complete the appropriate portion of the form if the following information is included on the bill: name of the patient and employee, dates of treatment, diagnosis, amount of the charge, and the name and address of the physician.

1974 Medical Claims Must Be Filed

Have you claimed your 1974 medical costs yet?

Bills for 1974 medical expenses covered by the General Electric Insurance Plan must be submitted by the March 31, 1975 deadline.

Update is published bi-weekly by the Information Services Division for the benefit and information of employees. Articles and photographs may be submitted to Update, Information Services, 401 N. Washington Street, Rockville, Maryland 20850.

David M. Cooper, Manager, Marketing Communications
Esther Fanfani, editorial specialist

For General Electric Employees Only
Trophy to Tulsa

Ken MacDonald, manager of electric utility industry sales, awarded the fourth quarter electric utility trophy to the Tulsa branch for outstanding performance, as shown in the graph. Jim Kessler, manager of the Tulsa branch, credits their success to the combined efforts of all members of the branch, but gives particular credit to Ken Babb for his work with Public Service of Oklahoma.

Electric utilities, one of the targeted markets of the branch in 1974, conducted a series of management seminars in April for customers and prospects. A special presentation was made to Public Service of Oklahoma by the Electric Utilities Systems Engineering Department in Schenectady, and the same customer attended our Strategic Planning Seminar in Williamsburg in September.

Congratulations to Jim Kessler and the total Tulsa team!

Spotlight on Quality Assurance

Service quality doesn't just happen. It has to be planned — the actions necessary to produce service quality must be determined in advance. The Quality Assurance section of the Systems Department does just that.

This concept must span the entire organization, because most components have responsibilities which influence quality. Quality must be considered in product and process design because it is impossible to deliver a level of quality beyond that inherent in the design. Quality must be controlled in the daily operation of the nearly 100 geographically distributed interconnected computers which comprise the network. Equipment must be maintained, change must be controlled, and the system must provide continuous feedback so that we react quickly to quality-inhibiting situations when they arise.

Quality Assurance is the division focal point for the combined quality efforts. In addition to providing the leadership role in the development of the division's quality system, it has a specific and operationally functional role to play in assuring the delivery of high quality service.

QA must assure service which meets the reasonable expectations of customers. It must assure the non-disruptive introduction of new hardware and software technology. It must consider quality attributes in the design.

(Continued on page 2)
It must identify and resolve current and potential service quality problems. It must assure proper functioning and maintenance of hardware and software.

QA's objectives are to achieve excellence in those attributes which the user characterizes as service quality:

**Availability:**
- Scheduled start-up and shut-down service during scheduled hours
- Network accessibility

**Reliability:**
- Service interruptions
- File disturbances or reversions
- Function of user features (software)

**Efficiency:**
- System response
- Media and utility turnaround
- Background turnaround

**Adequacy**
- Support
- Training
- Documentation
- Response to complaints
- Introduction of changes and new features

A major portion of the QA effort is devoted to intensive testing of system and communication offerings scheduled for deployment to Mark III Service users. These integrated tests are designed to confirm tests conducted by other division components. Any defects are corrected prior to commercial deployment if possible. If discovered after the fact, they are corrected as rapidly as possible. These predeployment tests are supplemented by confidence tests made daily on the commercial software, using a wide variety of application programs (some customer-supplied). Should results vary from the expected QA, specialists initiate immediate corrective action.

Zigi Quastler, manager of the Quality Assurance section, maintains the necessary interface with other division components, and provides the leadership and direction to six sub-sections. These sub-sections are managed by Bill Bacon, quality programs and measurements; Dave Clark, foreground quality; Verk Eubanks, background quality; Ed McPherson, Medinet quality; Ken Strandberg, maintenance programs; and Ralph Taylor, communications quality. These subsections constantly seek optimum levels of service performance for Mark III Service.

**CRISP III/70 Service: Serves a Need**

It looks like ISBD's new CRISP III/70 Service will enjoy an overwhelming reception in the data processing market. All indications are that it will be an effective addition to our service line; and the ways people are finding to use the service are as varied as grains of sand on a beach.

Here, for example, is how some of our first users are utilizing CRISP III/70 Service:

A manufacturer of auto parts is using the service for compiling and debugging new applications — as well as maintaining existing programs — for a management information system. And they expect to get faster results than they do from their own in-house system.

One of the major tobacco companies is using the service for compiling and analyzing the results of lengthy market surveys; and a wiring manufacturer uses it for job shop scheduling — it helps them put shop resources into production of the types and quantities of wiring necessary to satisfy customer demands.

One of the world's biggest oil companies has a model on CRISP III/70 Service which helps design new refineries; and another major oil company uses it primarily for engineering applications, such as reservoir material balance and computing stresses for laying underwater pipelines.

In the field of soaps, detergents and household cleaners, one of the best-known names in the business is using CRISP III/70 Service for chemical analysis, and plans to use it on an international basis so their facilities around the world can benefit. CRISP III/70's first NSS program will be from an engineering firm, which plans to sell access to a large structural model.

Finally, a leading electric utility industry consulting company uses CRISP III/70 Service for a generalized corporate model which can be tailored for the use of various public or municipal utilities. They are also developing a 6,000 bus loadflow on the system to help their utility customers analyze their transmission networks.

In addition, new marketing programs have just begun in Chicago and Houston and the division is already learning a great deal from these first efforts: that the potential market for CRISP III/70 Service is very large and viable; that customers are likely to make substantial, rather than very limited, use of the service; and that the variety of ways in which customers will be using CRISP III/70 Service is virtually boundless.
**MBA Achieved by Top Salesman**

Don White, account rep in Dallas, completed a masters in business administration at the end of 1974, culminating three and a half years of evening classes. In addition to this achievement, he is one of the 13 top performing ARs for the fourth quarter.

Don has taken at least one course, and frequently two, toward his MBA each semester since July, 1972. He found the required courses in accounting and finance to be particularly useful in selling Mark III service to his financial customers. He began work toward his MBA before coming to General Electric, but the major part of the degree was paid for by GE’s Tuition Refund Plan.

Don took his final exams early in December, while he was achieving top performer status. He promises to use his newly acquired free time “to get my revenue a little higher over quota.”

**Blue Cross Provides Hospital Benefits**

Type A-1 hospital benefits under the GE insurance plan will soon be paid through Blue Cross as a result of a change in insurance carriers. The change will take place on all hospital admissions of GE employees and covered dependents which occur on or after May 1. The change to Blue Cross will expedite hospital admissions and should eliminate the need to complete GE claim forms for hospital expenses.

This change will have no effect on eligibility for benefits, or on the benefits provided by the plan. It’s merely an administrative change.

**Hawaii — the 48th State**

You may think Hawaii is the 50th state in the union — but in late January it became the 48th state to offer local access to Mark III Service.

Local access in Hawaii will appeal to networking customers, especially in the areas of accounting, banking, and the military. The Hawaii Addendum to our Agreement for Computer Services must be signed in duplicate by customers desiring access from Hawaii. Forward a copy of the original to Sales Administration, Attention: Contracts, putting the U# to be used from Hawaii in the upper right hand corner of the Addendum.

Responsibility for Hawaii was assigned to the San Francisco branch when local access became available. Ina Crouse in San Francisco, will provide support for the Hawaii customers.
DMS: Impact 75 Star Still Growing

Data Management System, a highlight of the Impact '75 campaign, is expected to continue as a star performer. With that goal in mind, enhancements continue to be made. New features are described in DMSINFO*** in detail, but here is a brief description of the most recent additions.

Released to all systems are WRITE TO, MAXHITS, AND DMDATE. The WRITE TO capability allows the user to generate output to a binary file rather than the normal ASCII file. MAXHITS limits the number of PRINT lines and WRITE records that will be generated from an inquiry. DMDATE returns today's date as an integer and prints it in the form of YY/MM/DD.

Currently on System I is an improved version of DMDB***. Efficiency for large Data Base Description Files has been significantly improved and DMDB*** will now complete the scan of the input file if errors are found. Multiple item keys and working items are now allowed. A working item is not physically present in the data base but can be described in the DBDF.

Within the DMS inquiry module (DMS***), several enhancements are offered. Call to external subroutine MAXHITS limits the number of PR lines and WRITE records that can be generated from an inquiry. DMS will generate an option load so subroutines can be user's own, or in FIVL.

New print and sort subtotalling controls give expanded capability. HEAD, PICTURE, ZERO and NOSBT may be specified within the print statement and override what the DBDF contains.

New subtotal control allows the user to specify which fields will be subtotalled and which fields will have multiple sort keys suppressed. This answers many of the questions raised during the introduction period.

New output controls allow more complete report formatting. PAUSE statement allows insertion of special forms. PAGINATE puts page numbers on each page. FORMFEED causes new pages to be slewed to top rather than spaced. PREHEAD and POSTHEAD allow additional heading lines before and after the normal column headings. SKIP leaves a specified number of blank lines within the report.

These capabilities are now on System I, scheduled for commercial release in mid March. A supplement to the DMS user's guide will be provided at that time.

WANTED: Field Testers for New Products

Do you have a customer who might be interested in field testing any of the new products listed below? Ray McNees in Sales Service is familiar with the field tests and will help you and your customer obtain the additional information needed to participate.

GCOS COBOL Syntax Checker
SORT***
ASTRA
QForm
PARSE
OPTION BIG (ISR 322) 32K core
Teletype Dataspeed Model 40, 1200 baud CRT
Datapoint 3300, 1200 baud CRT terminal

The GCOS COBOL Syntax Checker is a Background-supportive application, a Foreground program for checking COBOL source code for syntactical deviations from GCOS COBOL. It writes diagnostic messages to a file or prints at the terminal. It facilitates the debugging process for the Background COBOL user.

SORT*** is a new Foreground file which has seen significant usage. An advance release manual (3501.10) is now in the warehouse. While still in a field test mode, the program can sort BASIC and FIV ASCII, binary sequential, and random files. The package also merges files.

COM and ASTRA were described in the February 3 issue of UPDATE.

QForm is a report program generator. An FIV program is generated, based on an input file supplied by the user. The FIV program then accesses the data base and produces the planned report. Source copy of the FIV program is generated so fine tuning can be done. Field test is underway.

PARSE routines are being implemented in FIV. These routines give FIV programs the capability of being data-item dependent rather than data-record driven. Of special benefit in input editors, the routines allow for easy error control and prompting for additional input. Field test is underway. Users should be knowledgeable FIV programmers.

OPTION BIG was described in the January 6 issue of UPDATE.

Teletype Dataspeed Model 40, used with 1200 baud service, requires a 202C or 202S data set or equivalent, and consists of a keyboard, printer, and cathode ray tube display. The Datapoint 3300 terminal requires a 202S data set or equivalent, has keyboard and CRT display, Neither terminal is currently qualified for cassette units.

Got any customers who might be interested in field testing any of these? Call Ray McNees, 8*273-4639.
Interchange Corner

The National Service Operation receives many calls from the field and from customers who do not fully understand the scope of services provided.

A new page issued in January for the Sales Manual deserves repeating here, for a better understanding of the capabilities of the National Service Operation and the targeted response times for several categories of questions.

Users of Mark III Service in the continental United States may call one toll-free number, day or night, for “hot-line” assistance:

800-638-2960
Maryland Users Call
800-492-0943

Users’ questions can generally be answered within the following time periods:

- **Immediate answers on:**
  - system status
  - communication problems
  - alternate access numbers

- **Answers within 4 hours (including nights and weekends) on:**
  - system commands
  - FIV-Foreground FORTRAN IV languages
  - edit commands — Foreground
  - library status

- **Answers within 4 hours (8 a.m. to 8 p.m., Monday-Friday) on:**
  - remote media service
  - FLEXIMIS, FAL, STAT-SYSTEM, TOURS, NCPPL, ADAPT, GETURN, and DMS library packages
  - BASIC language
  - foreground/background interface
  - interprocessing IBM 370
  - high speed service

- **Answers within 24 hours (8 a.m. to 8 p.m., Monday-Friday) on:**
  - GCOS background operating system
  - IBM (background)
  - HISAM (Hierarchical Indexed Sequential Access Method)
  - administrative user
  - FORTY — Background FORTRAN IV language
  - Sort/Merge
  - COBOL language
  - terminals
  - other application programs

Questions the service desk representative cannot answer are routed to other qualified people and the information is given to the user as quickly as possible.

The local GE sales office answers questions on:

- billing and adjustments
- validations
- user number and password changes
- moving files
- new product features
- instruction and classes
- customer complaints.

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David M. Cooper, Manager,
Marketing Communications
Esther Fanfani, editorial specialist
As part of the division's search for new market areas, Colin Church, manager of international market planning, recently visited several Middle Eastern countries. During his trip he spoke with government officials and made arrangements for telecommunications tests to be conducted jointly by these governments and the division. These tests will evaluate the technical viability of Mark III Service access over the local switched telephone networks. The commercial desirability of offering Mark III Service in several Middle Eastern countries is under investigation simultaneously.

In Egypt, Colin presented a paper at the Symposium on Office Management and Electronic Data Processing. Commenting on this meeting, Colin said, "I almost didn't make it to the Symposium, since I was in the airport in Teheran when the roof collapsed, killing many people." He did get there, though, forty-four hours after he started for Cairo.

As a result of his presentation, the representatives of the nations present, the United Nations, and OECD (Organization for Economic Cooperation and Development) resolved to explore the feasibility of international data networks as a tool for developing nations.

Programs for Linear Network Analysis

New, improved versions of programs for analysis of linear circuits will become fully commercial March 1. The new programs are ACNETS and DCNETS, which have been in field test under the names ACNET and DCNET. The new ACNETS and DCNETS replace old 1970 programs with the same names. Users inputting data to the old programs will find their needs served by the new programs and will be alerted to the new software by a message. The new user's guide documenting the programs is Linear Network Analysis, publication 5204.44A (order by OLOS). It replaces both the advance release version that supported the field test and the old Linear Network Analysis, publication 5204.11, which documented the old programs.
ISBD Introduces New Sort/Merge Applications Today

One of the reasons General Electric is the world leader in information services is probably that our top-flight staff in Technology seems to be able to come out with the best, the most often.

They've done it again with their new SORT***/MERGE*** application package, which becomes officially available to commercial users today, April 14. It's a product which provides extensive file sorting and merging capabilities for almost any file type; and it can be called from any Foreground language that has a call command.

Fred Wood, marketing specialist, who has been working on the marketing planning side of the new release, said it's just fantastic. "Our field people have expressed nothing short of undiluted enthusiasm for the new application," he said, "The consensus is that not only does it greatly expand our own sort/merge capabilities, but our sales and tech reps pretty well agree that it is probably the best application of its type to be released by any body, anywhere!"

Fred said that both our people in the field and our customers can't wait to get their hands on this package. Though field testing has just been completed and the product is officially being released today, he said, it already ranks among the top 10 application revenue-producers in our library.

The new application offers customers many advantages, including the ability to enjoy sort/merge capabilities for only about a quarter of the previous cost. Another is the great flexibility it provides customers in terms of sequential arrangement. A simple command causes Mark III Service to generate reports alphabetically, numerically, ascending or descending. A file that is stored numerically, for example, can easily be obtained in alphabetic order.

Another tremendous advantage the package provides is the simplicity of its use. One commercial user utilizes SORT***/MERGE*** as a stand-alone application (though it can also be called from another program). A terminal and a user's guide are all that are necessary for our customers to make use of the program for any sorting purposes whatever.

This program can be called from within any of the customer's applicable programs any time it's needed. If sort/merge capabilities are required for any particular program on a regular or continuing basis, a call command can be built into the program which will automatically call forth SORT***/MERGE*** to do the job.

Not only can SORT***/MERGE*** handle ASCII and sequential binary files with ease, but for the first time, random binary files can also be sorted automatically.

Previously, programmers had to write their own code in many instances. For them, this package can cut hours off the programming task.

Here are a few of the major features of the new offering:

- Sorts logical records consisting of one or more physical records, and containing any type of data in any format.
- Records can be fixed or variable length.
- Sorts on single or multiple sort keys, and in ascending or descending order for each key.
- Exactly duplicates input file format in the output file.
- Imposes no arbitrary limit on file size; files to be sorted can be as large as the system maximum size. In addition, up to 11 such files, after sorting, can be merged into one or more output files.

- Includes a simple method of handling with tied records—records containing duplicate sort keys. Such records can be kept in original order or kept in reverse order, or all records containing duplicate sort keys can be deleted, except for the first or last occurrence.

Ed Vandeven, an early user from sales administration, feels one of the most valuable capabilities of the new package is its ability to handle unusual file structures without difficulty.

Continued on page 3

Karleen Draper Honored

Karleen Draper, field organization and manpower secretary in Personnel Relations, was honored last week by the division for having earned 55 credits in ISBD's Employee Development Studies Program. Amazingly, Karleen has earned 40 of those credits in the last year alone. Norm Barth, Manager of the Information Services Relations Operation; and Frank Gibbins, Field Organization and Manpower Manager, presented Karleen with an attractive 50-credit certificate in honor of her achievement.

Norm Barth (left), Karleen Draper and Frank Gibbins.
People on the Move

John Boyd, from facilities service to computer operator trainee, Systems, Rockville.

Roger Kupcik, from computer operator to senior computer operator, Systems, Brook Park.

Richard Marsh, from production control specialist, Medinet Remote Processing Operation to customer assistance specialist, National Service Operation, Rockville.

Richard Minkowetz, from expediting specialist, Ohio Center to customer assistance specialist, National Service Operation, Rockville.

Dean Paschal, from senior account rep to account manager, Encino.

Bill Purnell, from mail service and supply clerk to shipping and receiving clerk, Systems, Rockville.

Janice Weinberg, from account manager, Baltimore branch, to senior program integration specialist, Strategic Planning Operation, Rockville.

New And Revised Documentation

Here are some major documents, new or revised during 1975, that have not been previously announced in Update articles. See your Market File Index for key to three-digit designators; dates are those printed on these latest versions of the documents (usually back cover, lower left).

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<td>3104.01C-3</td>
<td>3RM FIV Parsing Routines</td>
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In addition, all student guides, some out of stock for past weeks, have been reprinted and restocked. All old MARK II terminal operations cards have been finally revised to MARK III.

Ask your Market File librarian to list ONEWSfw in the PH56 catalog for weekly information on new, revised, restocked, and discontinued documentation.
Phoenix Gets New Branch Manager

Melanie Bouer has been appointed Branch Manager of the Phoenix branch, effective April 14.

Melanie joined ISBD in 1969 as an account representative with the Encino branch, and was promoted to account manager in late 1972. Since July 1974 she has been zone support manager for the Pacific zone.

A native of California, Melanie attended Glendale College and earned a B.S. degree at San Diego State. She has completed all her work for an MBA in business management at Pepperdine University, except for the thesis.

He Gave Two Gallons... But It Was Worth It!

Calvin Cillay, project manager in Technology, has been cited by the American Red Cross for donating a total of two gallons of blood. Cal says he didn’t give it all at once; more likely over a three or four year period, he admits.

Calvin believes strongly in participating in ISBD’s bloodbank program, and with good cause. Since he and his wife have incompatible Rh factors in their blood, it was necessary for one of their children, who was born in 1970 as a “blue baby,” to have a complete blood transfusion. It took six pints of ISBD-donated blood and saved the infant’s life. Today the five-year-old is as happy, healthy and rambunctious as any other child.

Update hopes ISBD employees in Rockville and everywhere will give generously of this life-saving commodity.

Kenck To Manage International Sales Support

London’s Antony R. Kench arrived in Rockville April 1 to become ISBD’s Manager of International Sales Support. A native of the “Swinging City,” Tony joined GE’s former computer division there in 1963; and in 1966/67 helped introduce Mark I, the very first timesharing service in Europe.

When GE sold its computer division and overseas operations to Honeywell in 1970, Tony went with Honeywell. In his new capacity, he worked closely with ISBD and was instrumental in implementing Mark II, the world’s first commercial transatlantic teleprocessing service. He later also helped introduce Mark III to the European scene. So Tony is no stranger to ISBD or its services.

Tony’s most recent position was Associate Director of Honeywell Information Systems’ Network Information Services Mission in London. Now comfortably settled in his new Rockville office, Tony will be responsible for ISBD headquarters support to all international distributors. He will also direct sales and marketing support for international operations in the western hemisphere, as well as create ISBD management reports of measurement and revenue analysis for all the division’s international sales activity.

April Service Awards

20 Years
Glen W. Uthe Brook Park
15 Years
Gladys R. Johnson Brook Park
Melvin F. Szot Rockville
10 Years
Ronald E. Nutter Denver
5 Years
Mary L. Aceto Watertown

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Crisp III/70 Service Now Offers
Both Low and High-Speed Network Access

Last week marked a major milestone in Crisp III/70 Service's march toward a complete portfolio of remote computer services. With the introduction of ISBD's Network Interface Processor, version 2, ISBD provides users with the capability to dial up the network with virtually any high-speed terminal in the IBM 2780 class. Access is also available from any network-compatible low-speed terminal such as the TermiNets 300 and 1200.

The entire software package which makes this possible is now installed on the PDP-11 computer in the Maryland Center. The PDP-11 is the main interface between the GE network and our IBM 370/158 computer.

Concurrently, this latest release also includes the very important new feature of file sharing. This capability allows multiple access to common data files within a catalog. This greatly simplifies file maintenance, allows many users and terminals to access the same data, and provides extensive benefits of ISBD security methodology.

This capability is not new to ISBD and Mark III customers, but apparently it is in the IBM world. "To my knowledge," stated Jim Babcock, Crisp III/70 Services Program Manager, "no in-house IBM system has this capability. If they want to provide access to multiple users, they have to simply leave access open to anyone, at the expense of total security abandonment, or else duplicate those files for simultaneous access."

With Crisp III/70 Service, users have the best of both worlds: controlled multiple file access, and the undiluted benefits of ISBD security know-how.

ISBD Featured in 1974 Annual Report

General Electric's full-color, 44-page annual report was distributed last week to the company's more than half-a-million shareholders. One of the divisions selected for highlighting in this year's report is our own ISBD.

On page 17, a half-page is devoted to ISBD's unique services and geographical scope, illustrated by a full-color photo of one of our customers' London office on-line.

And that's not all. Throughout the month of March ISBD was graphically visible on the walls of millions of offices and homes around the world; the division was the feature of the month for GE's widely sought-after 1975 calendar.

Now it's CRU - Not NBU

Both the term "Computer Resource Unit" (CRU) and "National Billing Unit" (NBU) refer to the unit of pricing for system-related resources. The CRU applies to Foreground and the NBU has applied to both Mark III Background and Crisp III/70. However, to make the use of terminology within our services more consistent and remove the word "National" from our international service, the term "Computer Resource Unit" (CRU) will replace the term "National Billing Unit" as follows:

- Effective April 1, 1975, Crisp III/70 switched from the NBU to the CRU;
- Effective June 1, 1975, Mark III Background will switch from the NBU to CRU.

Although the term NBU is being replaced by the term CRU, the price per unit and the pricing algorithm for Crisp III/70 and Mark III background will not change. The Crisp III/70 price has been changed as noted below. Therefore the CRU will have both a different price and a different algorithm for each service to which it applies.

Crisp III/70 Price Modifications

Paul Wexler, Manager of the Marketing Operation, said recent price modifications would most probably result in a slight reduction in costs to Crisp III/70 users. The current CRU price for Crisp III/70 Service is $300 during prime time; $235 during non-prime time.

Daily access by users to Crisp III/70 Service has been increased by four hours. The system may generally be accessed from 9 a.m. until 11 p.m., EDT.
Interchange Corner

Users occasionally have need to request restoration of files from some earlier date. The process of satisfying such requests can be quite complex and frustrating if incorrect or incomplete information is provided in the initial request. The mailbox request must include:

- User number, including system designators (1) on recovery date and (2) current;
- Filename(s), correctly spelled;
- Recovery date.

Be sure to relate file names to their owner user numbers—permitted user numbers cannot recover non-owned files. Incorrect recovery dates are the most common cause of slow completions. If the user has any uncertainty of the last modification date, please specify recovery from “Base dump tapes for weekend of (date),” when the desired version was known to be present. Dump tapes from other nights of the week are cumulative dumps of all files modified since the last base dump, that is, Tuesday tapes include all modifications of Monday and Tuesday. Requests to recover from a Friday tape are therefore recommended if a base tape is inappropriate and the week of modification is known but the exact day is not.

Try to avoid requesting recovery from dump tapes of the first night of the calendar month or the base dumps of the next-to-last weekend of the month—these tapes are offsite and require at least one weekday to recover from storage. Month-end tapes are retained 12 months; other days are only retained 27 days.

Files that are of dissimilar type, that is, core image versus ASC, should be purged or renamed at the time recovery is requested. Our file recovery program does not overlay one file type with another. The operator must halt, secure confirmation and sort over—a time-consuming process for all concerned.

1200-Baud Access

The current ISBD International Access Directory lists a free user number which our customers may use to obtain the very latest available 1200-baud access numbers.

Due to internal budget banners and possible “lock-outs,” ISBD has moved the program onto all its system libraries. Field reps should advise all their 1200-baud customers that the new method of obtaining the latest access numbers is to access Mark III with their own user numbers, then run “BAUD1200***.”

A Solvable Problem

Some 4800-baud users have found they must operate their equipment with their datasets set for 150 millisecond turnaround. AT&T advises us that this problem can be easily corrected through a balancing of any affected user’s dataset with those in Brook Park.

Field reps are asked to provide information on 150MS users so AT&T can coordinate the required corrective action. Please advise customer assistance in Rockville (8*273-4675) with the firm name, contact name and phone number of any 4800-baud, 150MS customers.

COMTEST*** Checks Their Terminals

ISBD’s Systems Department has installed a new program on all systems which enables all 1200-baud (and under) users to check the functioning condition of their terminals and to isolate noisy communication lines.

The program is called COMTEST*** and may be accessed by entering any user’s user number and requesting the program by name.

Sort/Merg Continued

Early SORT***/MERGE*** customers are equally enthusiastic. Reports are that they are all experiencing good results, with minimal trouble. One large tire manufacturer which is using the package tied in with ISBD’s DMS application to produce overtime reports, said, “It’s a delightful routine which truly fills a critical need for us. We plan to use it often.”

A great deal of effort has gone into the creation of this new package. It started out as a part of the DMS project, but as its potentials became more and more evident, it was broken out as a separate project. Hal Moore, Data Management Systems Manager, and his staff, are responsible for the successful results.

For additional information on SORT***/MERGE*** or to get the answers to your questions, call Product Support for technical inquiries; and John Ferrell, Program Integration & Control (8*273-4497) for questions on the marketing side.

An advance release of the user’s guide, titled: “File Sort & Merge,” is available through OLOS. Publication number is 3501.10.
"A Unique Work/Learning Experience," Says ISBD Intern

Last July John Ferrell called ISBD in Rockville to get some information on an on-going class project he was working on in American University's career workshop for graduating seniors. He'd just earned his degree in marketing and computer systems and the university was helping him and his fellow graduates learn the fine techniques of job-hunting for optimum results.

The man he talked to was Don Clark, then manager of equal opportunities and minority relations. Don thought John's questions were intelligent, thoughtful and well-organized. So he turned the conversation back to John himself, and what he planned to do with his life. He learned that what John really wanted to do was continue his education and work toward an MS degree in information systems management.

"Why don't you come out to Rockville and apply for our division's intern program?" Don asked. "If you're one of 14 graduate students selected for our on-going program, ISBD will pay all your tuition expenses plus a proportionate salary for a minimum of 20 hours, work each week."

John couldn't believe that anyone under the top five percent of a graduating class would stand a chance of falling into such a utopian situation, and said so. "It's attitude and willingness that's more important to us than mere grades," Don assured him. "Though your grades do have to be reasonably good, of course."

Before the month was up John had been accepted into the program and assigned the title, "marketing intern." As such, he is participating in one of four special intern programs ISBD has created primarily with the cooperation of Howard and American Universities for employable minority and women undergraduate and graduate students. The other three internships are the Technology Achievement Program, the Systems Technology Achievement Program, and the Technical Intern Program. The latter of these is designed to serve primarily the field sales organization.

John has been an intern in the Marketing Achievement Program about eight months now, and even with working a full 40-hour week, he still has sufficient time to pursue his graduate studies at American University. At the moment he is delegated as the marketing contract man for the division's new SORT***/MERGE*** application package. He was largely responsible for putting together the information necessary to write the lead story for this issue of Update.

John thinks the ISBD on-going intern program is "absolutely terrific." He says it is "unique in that you can relate your school experience directly to the working environment. You get much more out of your classwork because you know exactly how the things you're learning are put to work in a real on-the-job situation."

John is personally acquainted with most of the other 13 on-going ISBD interns, and he's convinced they all agree with his enthusiastic attitude toward the program. John hasn't been satisfied with merely doing a good job at ISBD and turning out the best work he can at American University; during his eight months here he has also earned ISBD certificates for completing the telephone information processing course, the data management system seminar and the Xerox professional selling skills course.

When June arrives, ISBD will be playing host to another 26 interns who will be participating in the division's summer intern program...this one designed primarily for undergraduates who are studying some form of computer sciences. Don Clark said the division frequently selects individuals from the 26 summer interns and invites them to become a part of the year-round intern program while they continue their education toward a higher degree. Others, he said, could be offered full-time employment as soon as they graduate from college, based on superior educational achievement, the quality of their summer work, and their interest in a career with ISBD. "Of course full-time employment is also the goal we have in mind for our on-going interns," he said, "as soon as they complete their graduate studies." Don pointed out that there is no contractual agreement to this end; the intern has the option to elect not to join ISBD full-time, and ISBD is not obligated to offer a permanent position.
Telephone Industry Sales Zoom Upward

Last year ISBD's telephone industry revenue topped 1973 by a full 30 percent; and if Tom Vinci knows what he's talking about, we're almost sure to see a repeat in 1975.

Tom is our telephone industry sales manager, and if anyone knows, he does. In fact, our first-quarter business for 1975 ran just about 42 percent better than the first three months of 1974; and Tom's prediction is that the next three quarters will be just as good.

Already ISBD's largest single industry market, we've not yet begun to realize the real revenue potential that waits for us in this industry, Tom says. "We are responding to telephone company needs faster and more completely than anyone else in our business."

Tom believes we have the best people of any remote data processor serving telephone companies. "We have about 23 full-time telephone industry specialists in this division," he said, "plus another 34 or so who devote a substantial amount of their time and energy to the industry. They're dedicated, and they really work hard at helping telephone companies solve their problems."

Tom believes another reason ISBD is enjoying such success in this area is its spiderweb network, "which gives virtually every telephone office and switching station in the U.S. immediate access to central programs and data bases." And the telephone companies themselves are making some highly innovative use of our system too, he added.

For example, one company uses Mark III for a mechanized time-reporting application. The system collects time worked information, analyzes it and produces reports to all levels of management on time utilization by their work forces.

Another ingenious application will soon be minimizing millions of wire connections in telephone switching offices from coast to coast.

The system is expected to be deployed and into operation in more than 100 central offices within the next two years.

There are many other exciting new applications resident on the Mark III system which help speed telephone company business, improve service to customers and reduce operating expenses. As an example, a large national telephone company uses Mark III Service for an order-entry system throughout its multi-state system.

Tom Vinci feels ISBD will be providing more and more valuable services to the telephone industry in months and years to come. "I think our business situation is very healthy," he declares, "because all our major telephone accounts are participating in our current high rate of growth. Continued attention to their needs and requirements will result in an even faster growth rate in the future."

Southwestern Zone Does it Again. . . Takes Second Outstanding Award

Marv Lewis, Southwestern Zone Manager, has two golden plaques adorning the walls of his Houston office. They are in honor of and appreciation for the excellent job all the zone's men and women did for the division in 1973, then again in 1974.

The zone's 1973 performance topped the previous year by 35 percent; then went on in 1974 to grow an amazing 39 percent more. Marv attributes this rather phenomenal success to his dedicated people who sell and service the total Information Services product line worldwide within the Southwestern customer base.

Marv says the Southwestern Zone is on target or above in all categories so far in 1975. He predicts his zone will again walk off with the Outstanding Zone Award when this year's final results are tallied. "I still have plenty of room on my trophy wall," declared Marv. "We intend to fill it up!"

For General Electric Employees Only
MAP Services Offering New Business Forecasting Course

ISBD's MAP Services conducted its first Business Forecasting Workshop at GE's Management Development Institute in Crotonville, N.Y., in 1973 for GE people only.

It was decided last year to open enrollment to ISBD customers, as well as our own people. John Burke, MAP Educational Services Manager, said there have now been six of the week-long workshops, and the more than 150 who have completed the course have included quite a number of customers.

"Just about every customer who's taken the workshop has told us it is helping them do their jobs better," he said.

The workshop is taught by university and industry authorities, and it covers all major areas of forecasting. "It sends students home ready to produce forecasts," John added, "and helps produce new ISBD revenue." John said that as a result of the workshop, a number of new clients have been signed by ISBD, and revenues have increased for existing customers.

The next Business Forecasting Workshop begins June 15. Now is the time customers should begin making their plans to attend. Tuition is $500 per person, plus travel, room and board expenses. For additional information, call MAP Services (8*228-0230).

People On the Move

Roger Black, from Senior Tech Rep, Washington; to Project Manager, Southwestern Zone TSO, Houston.

T. J. Castello, from Operations Specialist; to Shift Manager, Folcroft.

Richard Gray, from Manager, Revenue Accounting; to Manager, Disbursements Accounting, Rockville.

Peter Janca, from Manager, Revenue Opportunity Services; to Manager, Sales Services, Rockville.

Robert Kellar, from Manager, Disbursements Accounting; to Manager, Revenue Accounting, Rockville.

James Rossini, from Project Manager, Rockville; to Manager, Northeastern Zone TSO, Boston.

Dean Steiner, from Senior Account Rep, Rockville; to Account Manager, Atlanta.

Edward Taylor, from Account Rep; to Senior Account Rep, Cleveland.

M. R. Weinstein, from Tech Rep; to Senior Tech Rep, East Orange.

Crisp III/70 Service Offers Four New Applications

Four application systems are now available to customers via the CRISP III/70 Service.

Two of these Application Systems—the General Purpose Simulation Systems (GPSS-V-OS) and the Mathematical Programming System Extended (MPSX) reside in the ISBD application library and are available to all users according to the Crisp III/70 price schedule.

A third system, Automatically Programmed Tool (APT/360), is intended for use by machine tool manufacturers who wish to become NSS authors for their proprietary numeric control processors. The first NSS author to make use of the APT/360 package is Cincinnati Milacron. The fourth application—also an NSS author-developed system is NASA Structural Analysis System (NASTRAN) which is being offered by Structural Dynamics Research Corporation (SDRC).

Information about both of the NSS packages can be obtained from Art Davies, Senior Account Representative, at the Cincinnati Branch (8*333-3660).
New and Revised Documentation

Here are major documentation changes of the past two weeks:

Supplements to: FIV System Routines (3104.01C-4), adds CALL CMD extension. DMS (5610.01A-2), documents 1975 new features. Command System (3501.01J-1), contains 1200 baud terminal enhancements and related information; Command System is being reprinted now with the supplement bound inside (pp. iii-iv), and supplements need to be given only to people who already have Rev. J manuals. PAL (3810.01A-4), details PAL Program and Editor changes.

New: Utility Rates & Rate Structure Analysis user's guide (5204.42). IBM Mag Card Selectric (1108.02) and Datapoint 3300 (1205.01) terminal operations cards.

Revised: CRISP III/70 user's guide (2050.01B), a major 100-page revision incorporating CRISP commands and TSO, JCL, and HASP info. Market File Index (1.09A); your copy was mailed to you April 18.

Updated information: FAL2INFO documents 1975 FAL features.

MAP user's guide has been revised. Text (5900.01C), binders (5900.35), and tabs (5900.50) are orderable separately. Note again that ordering 5900.01 gets MAP system text only. Rev. C MAP text has been mailed to 502 MAP users who returned cards from past edition.

Discontinued: MARK III key chains, pens, templates, mosaic tie-tacs, mosaic plaques.

Training Activities Reorganized

Due to the tremendous growth in our training activities and demands, the division's Training activities have been reorganized into two sections, effective April 14. Charles W. Proctor, formerly National Training Operation Manager, will head up one of the sections, called Sales Training; and William R. Hewlett, formerly Manager of Product Support, will manage the other section, called Product Training.

In a nutshell, Charlie's responsibilities will cover all sales-oriented training; and Bill's will cover product training for both customers and ISBD personnel. Documentation, formerly a function of Marketing Communications, will now be in Product Training.

A subsequent issue of Update will delineate in greater detail the training areas covered by each of these sections.

Now's the Time to Buy General Electric!

Last Monday GE launched a major nationwide sale on a number of major appliances, and from now through the end of May may be the best time of the year for employees to purchase GE air conditioners, stoves, TV sets, washer/dryers, dishwashers or trash compactors.

Rebate-eligible appliances should be purchased from a regular GE dealer... preferably after comparing prices. Then submit the original receipt, along with a completed rebate form, to the Payroll Department in Rockville.

For General Electric Employees Only
Information Services Honors its Top Sixty Field Performers

Occupying a large wall area just outside Dr. Feeney’s office is a handsome new display which honors the Sales Department’s top 60 field performers.

This display consists of a series of 11 by 14-inch photographs of the top 20 account and tech reps across the nation.

The next 40 performers are honored by having their names attractively inscribed on a plaque which is part of the display.

Jim Castle, General Manager of the Sales Department, said the leading account representatives are chosen by virtue of their quota performance, while tech reps are selected by the managers of the division’s top performing branches.

The display will be updated four times a year—at the end of each quarter. The current display reflects our top 60 performers for the fourth quarter of 1974.

The first account reps and tech reps to be honored by the new display are:

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<th>The Next Forty</th>
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<td>Roger Black</td>
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<td>Pat Emmons</td>
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For General Electric Employees Only
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<td>Barbara Harbison</td>
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<tr>
<td>Ram Sidhaye</td>
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<td>Federal Branch, East Central Zone</td>
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<td>Ron Simon</td>
<td>Account Manager</td>
<td>Los Angeles Branch, Pacific Zone</td>
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<td>Laura Wechter</td>
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<td>Hank Williams</td>
<td>Senior Account Representative</td>
<td>Hartford Branch, Northeastern Zone</td>
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Employee Development Studies Program
Expands to Meet Growing ISBD Demands

When ISBD launched its then new Employee Development Studies Program (EDSP) in September 1973, there was no way to anticipate just how anxious our employees were to continue learning. Gene Taft, Manager of Personnel Practices and Development, labeled the program a success when there were 205 enrollments in the program’s 10 courses which were conducted the first academic year.

But the 1974-75 academic year has seen a threefold increase in size... 35 courses and 576 enrollments. The curriculum has been broadened to cover a much wider area of educational pursuits. There are computer language courses such as BASIC, FORTRAN, and COBOL; data processing courses such as an introductory course, foreground/background interface and others; a series covering effective communication, a human dynamics series, a math series, a secretarial series, plus more courses covering other subject matter.

And that’s not all. Gene says the division will survey all headquarters employees next month to see what they would like to have included in the 1975-76 academic year. Next year’s curriculum will be based on the result of this survey.

How does the program work? Various courses offer from two to 15 class credits, depending upon the amount of material and complexity of each one. The number of credits offered by a course also reflects the number of weeks the course will last. Credits may be earned by successfully completing a course, or by having completed at least a comparable course elsewhere in General Electric or in a college or university within the past five years.

Employees are also frequently granted course credit for having taught the material either to other employees or to customers. To date, most credit earned by field employees has been acquired in this manner. Although formal classes are ordinarily set up only at headquarters in Rockville, Gene says there is no reason they cannot be organized in a field location if a sufficient number of local employees show an interest in any particular course, and if qualified instructors can be located.

Courses are taught by ISBD experts in the subject matter, by visiting professors from nearby colleges, or by specialists from educational consulting firms. As courses are satisfactorily completed, this is noted in their personnel files, and their managers are notified of their achievement. The division also gives special recognition every time an employee completes 50 or more EDSP credits. This consists of a large framed Level Award Certificate signed by the Division General Manager, appropriate division staff member and Gene Taft as Program Coordinator.

To date, 11 current employees, including five in Rockville and six in the field, have earned Level Awards. "A couple of the headquarters students are very close to a second Level Award for their next 50 credits, too," Gene says.

For answers to your particular questions on the Employee Development Studies Program, contact Gene Taft (8-273-4701).

Blue Cross Coverage Begins Thursday

Blue Cross takes over the administration of Part A1 (hospitalization) of General Electric’s group medical policy next Thursday, and Relations has asked Update to remind ISBD employees that there will not be any changes whatever in the comprehensive coverage we have learned to appreciate.

Coverage not included under A1 will remain under the administration of Metropolitan Life (such as doctor bills and prescriptions). Only hospitalizations commencing on May 1 or after will be covered by Blue Cross. To check on any claim due to such hospitalizations, employees are requested to call their local Blue Cross office. For all other inquiries, call Gwen DeLacy, Insurance Benefits Administrator (8-273-4220).

S&SP Prices — March

<table>
<thead>
<tr>
<th>Month</th>
<th>Stock Price</th>
<th>Fund Price</th>
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<tbody>
<tr>
<td>March</td>
<td>$46.369</td>
<td>$24.499</td>
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<td>February</td>
<td>41.757</td>
<td>22.706</td>
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<td>January</td>
<td>39.500</td>
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<td>December</td>
<td>33.274</td>
<td>19.335</td>
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<tr>
<td>November</td>
<td>36.881</td>
<td>20.889</td>
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<tr>
<td>October</td>
<td>36.940</td>
<td>19.810</td>
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<tr>
<td>September</td>
<td>34.350</td>
<td>19.760</td>
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<td>August</td>
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<tr>
<td>July</td>
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<td>June</td>
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<td>49.597</td>
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<tr>
<td>April</td>
<td>53.875</td>
<td>27.834</td>
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</tbody>
</table>

For General Electric Employees Only
In a business application it is often necessary to have exact accuracy to two decimal places (for dollars and cents values). COBOL is designed to handle such values; FORTRAN is not. If the FORTRAN language is chosen for the application, all numeric values must be handled as integers (multiplied by 100), and the following COBOL subroutine may be used to print these values with two decimal places (divided by .01).

Data is transmitted from FORTRAN to COBOL through labeled common. Communication through labeled common between COBOL and FORTRAN is not unique once you discover what the system name is for this labeled common region. In COBOL labeled common is defined in SPECIAL NAMES; for example BLOCK 25 is CDATA. Neither 25 or CDATA is the labeled common name. The system adds to 25 the prefix C which is the name for this labeled common region - C25. This enables communication to FORTRAN because in FORTRAN the labeled common name could not be all numeric.

The integer value passed in labeled region C25 is defined on line 500 as computational-3 (comp-3) which is single precision fixed point binary integer format.

FORTY prints the received item with a format statement A1 2 (line 270). Should you have any questions, contact Mike Yourtee or Paul Lebowitz at 8*273-4571.

**Chicago Wins**

Mike Schermer’s Chicago Branch has won the division's Best Branch Award for the first quarter of 1975. With revenue running 68.4 percent higher than the same quarter of 1973, and with current percentage of quota standing at 122, one might say it's a well-earned award.

Branch Manager Mike Schermer attributes this success entirely to the hard, diligent work of the men and women in the branch, “You can’t imagine how much effort they put into it,” he said, “or how much really professional attention they give to their customers and prospects.”
Industry News

Excerpts from the Trade Press

NCSS

“A new interactive data base system, called LISAR (Logical Information Storage and Retrieval System) is available. Cost is based on the functions performed rather than machine resources. For example, a ten cent charge to search more than 10,000 records…”
EDP Daily, 3/30/75, Page 327

CSC

“Infonet…is offering an on-line service allowing users to translate financial tables into graphic format with English commands. Encore, part of Infonet’s Financial Planning Simulator (FPS),…uses either a Tektronix video display or Zeta plotting terminal…”
EDP Daily, 3/4/75, Page 255

“With help from Infonet,…(CSC) nine month earnings were double those of the year ago period. Earnings totaled $2.4 million or 17 cents a share compared to $1.1 million or 8 cents a share in the same period last year. Infonet revenues…were up 60% to $26.8 million compared with $16.8 million…”
Computerworld, 3/26/75, Page 54

Tymshare

“Earnings,…totaled $3.3 million or 89 cents a share compared with $2.7 million or 71 cents a share last year. Revenues jumped 32% to nearly $46.6 million…”
Computerworld, 4/2/75, Page 38

McAuto

“Confirm, the Conversational File Information Retrieval and Management system, is available. The system is designed for non-programmers with small data files. It handles any kind of data arranged in tabular form…”
EDP Daily, 3/19/75, Page 321

Rapidata

“Rapidata Inc. has announced the availability of Background-10. The service is designed for applications not requiring immediate turnaround. It uses available excess capacity on Rapidata’s interconnected DEC KI-1070 systems…”
EDP Daily, 3/20/75, Page 326

“Robert J. O’Brien elected President and Chief Operating Officer of Rapidata Inc. replacing Stewart B. Gold who resigned…”
EDP Daily, 3/14/75, Page 305

Comshare

“Comshare Inc is offering a system of nutrition analysis and feed formulation programs on its Commander II system. The programs, developed by Comshare’s Maddy Associates subsidiary, are designed to enable animal and feed stuff producers to formulate least-cost feeds, optimize animal production, control feed inventories and project company profits…”
EDP Daily, 3/27/75, Page 358

USC

“United Computing Systems,…has added the Least Effort Scheduling System (Less/Time) to its software library. It calculates project schedules by the Critical Path Method…”
EDP Weekly, 3/24/75, Page 4

$20 Suggestion Award

Rockville employees have probably noticed the attractive padded benches on either side of the second-floor bridge between the Maryland Center and the parking garage. That was the idea of Karen Rulapaugh, Communications System Secretary, Technology. It paid off in a $20 suggestion award.
ISBD Now Offers Library of Fifteen Fully Supported Background Application Packages

Recent weeks have seen a great deal of activity in the area of background application packages in Rockville. Redundant, obsolete or unsupported applications have been eliminated; incomplete or out-of-date documentation has been discontinued; the library has been generally cleaned up; and total support has been made available for the division’s 15 highest-level background packages.

Support comes from three sources: ISBD, Honeywell and NSS authors—each providing complete, comprehensive support for its respective applications. Honeywell, in fact, has assigned a highly capable full-time applications specialist to the ISBD headquarters in Rockville to provide the best possible support to Honeywell packages.

According to Dave Cearnal, Product Program Manager, field reps should be able to market these 15 useful packages with every confidence that they will be solidly backed by the best support ISBD is capable of providing. “And we firmly believe that in this area, ISBD has the best know-how in the industry,” he added.

The 15 packages consist of three ISBD applications, three Honeywell applications and nine NSS applications. The ISBD-supported offerings are EAS (Employee Accounting System... FW23), BFAST and CIRCUS II. Honeywell-supported applications are IMS (Inventory Management System... FW25), ASTRA and LP6000/MPS. Applications supported by NSS authors are SITE, GESIMTEL, SIMSCRIPT II.5, ANSYS, DAGS, INTEL, MPM, IMPERT and EUEO.

Documentation for background applications no longer supported—GEDAN, GEPEX, PERT/COST, PERT/TIME, SIMSCRIPT and STRESS—has been discontinued and back orders cancelled.

Details about background manuals are in Guide to Background Documentation (2000.04C). Latest printing has “2000.04C (2M) 7508 on the back cover, and the guide is being revised to reflect this change.

For answers to your questions on any of ISBD’s 15 background application packages, call Dave Cearnal at 8*273-4133.

He’s a Chip Off the Old Block!

Samuel Wenck III, eighth-grade son of ISBD’s Sam Wenck Jr., Facilities Specialist, Systems, has won first place in the physical sciences division of the 1975 Baltimore Science Fair. His topic: “How accurate is Computerized Weather Forecasting?”

So impressive was Sam’s entry that he was invited by Baltimore’s station WJZ-TV to handle the weather announcements on two news shows. He also appeared on WMAR-TV as a guest of the Sylvia Scott show. Among the many citations he received was a certificate of honor from the U.S. Air Force.

For his exhibit, Sam, 14, assembled his own logic computer, then created a weather forecasting program without the aid of any instructions whatever. His dad says he’s intensely interested in meteorology and astronomy, and that his best subjects are math and science. He became interested in computers by playing with some of the Mark III demonstrations when his dad brought terminals home from the office.

Due to his win, Sam would be eligible to move on to the National Science Fair competition, except for one thing: he’s not yet old enough.

Note to TSO and Technology recruiters: keep an eye on young Sam Wenck III... one of these days he will be old enough!

For General Electric Employees Only
New Foreground Drivers Make Background Applications Easier to Use, More Marketable

One of ISBD's marketing strategies is to develop high-level foreground drivers for its key high-leverage background application packages.

A foreground driver, incidentally, is a very complex application itself, the result of ISBD technological expertise, which translates relatively simple English-language commands and other input into much more complicated background languages, and communicates this input directly into our background processing systems. The drivers also enable users to enjoy the advantages of interactive input for remote batch jobs.

Dave Cearnal, Product Program Manager, says foreground drivers are just about the best thing to come down the pike since FIV. "First of all," he said, "they enable the relative novice user to benefit from the full use of our tremendous background capabilities... it insulates him from the complexities of background job control languages."

Dave also pointed out that these drivers should also be a boon to ISBD's marketing efforts. "Not only does this capability set new ease-of-use levels in the industry for batch jobs," he said, "but it combines the very best of our two data processing worlds: interactive step-by-step input prompting in simple English terms combined with the very attractive economies users can realize through the utilization of our background services."

Currently, five ISBD background applications are equipped with foreground drivers—two in place and commercially available; and three ready for field tests. Field reps are invited to submit customers' names who would like to participate in the field testing program. For details, call Ray McNees at 8·273-4639.

The application packages which, along with their foreground drivers are already commercially available, are SITE, an NSS-authored product which gives users access to 1970 census data, including annually updated estimates to provide the latest trends in population growth; and GESIMTEL, a powerful large-capacity simulation language which allows people with problems to study such of their own operations as factory and facilities planning, machine utilization, waiting line analysis, traffic control, warehousing and inventory, paperwork flow and manpower planning.

AstrA, a Honeywell product, has been available commercially since last September, but without a foreground driver. It is now available for field testing as a foreground/background product. ASTRA is a complete multi-project resource allocator and scheduler designed for new product introductions, construction scheduling, R & D planning, engineering design and development, and manufacturing product mix trade-offs.

LP6000/MPS, another Honeywell package, has also been commercially available since last September, and now also has a foreground driver ready for field tests. "MPS" means Mathematical Programming System. This package is designed to help users determine the optimum use of various resources such as capital, raw material, plant design and many other valuable users.

Since all of these foreground drivers, except EAS, are ready for field tests right now, Dave Cearnal encourages reps to submit customer names for participation as soon as possible. For more information, call Dave at 8·273-4133.

Currency Exchange Data Base
User's Guide Now Available

ISBD's exciting new Foreground application, Currency Exchange Data Base, which provides multinational companies with vital foreign exchange information on a daily basis, now has an advance release of its user's guide. Copies may be ordered on OLOS; the publication number is 5103.20.

Update is published bi-weekly by the Information Services Division for the benefit and information of employees. Articles and photographs may be submitted to Update, Information Services, 401 N. Washington Street, Rockville, Maryland 20850; or call 8·273-4387
S&SP Insurance Refund of 70% Coming to Eligible Participants

HERE's a "rebate to beat all rebates."

It's a refund for all eligible participants in the Savings and Security Program Insurance Option and comes as a result of favorable experience of this life insurance coverage in 1974.

The refund amounts to 70% of 1974 payroll deductions for Savings and Security life insurance coverage. It will be made in the next few weeks to all who were actively participating in S&SP as of February, 1975.

The amount being refunded totals more than $3.2 million. Many refunds will amount to more than $100. The amount of refund depends on an individual's contribution to S&SP Insurance during 1974.

A Real Bargain

The refund of 70% of contributions means that eligible participants will have received their 1974 coverage for a bargain rate. In addition, GE has made a matching payment of 50% of the original cost of the insurance to each participant's S&SP account.

The refund, plus the GE matching payment, makes GE's S&SP life insurance coverage in 1974 a bargain that's hard to beat.

How many GE people will receive the 70% refund?

Checks will go to more than 24,000 participants in the life insurance option in 1974 who had unbroken service and were still participating in S&SP on Feb. 1 of this year.

Even without the refund or Company matching payment, the insurance option under S&SP offers important coverage at exceedingly low cost.

To obtain coverage, an S&SP participant earmarks one percent of his pay for the cost of coverage and receives a matching Company payment equal to half of his deductions. This goes into one of the other S&SP investment options.

How good is S&SP life insurance coverage?

If you are under 30, for example, your beneficiary would receive 60% of your annual pay for 40 years in the event of your death. For an individual with annual earnings of $10,000 per year, that would be $240,000 if spread over the full 40 years.

Coverage goes downward as age climbs, but at any age S&SP Insurance is an excellent buy. Details on how you can obtain S&SP Insurance coverage are available by calling Art Cleary, Personnel Accounting Manager (8*273-4417)

Sherman Is New Division Counsel

ISBD welcomes David Sherman who has accepted a position on the Staff as Division Counsel. He replaces Claud R. Breese who is now Counsel for the Installation and Services Engineering Business Operation.

Dave comes to us from International Administrative Operations where he was Counsel for the International Licensing Department. He's a 1955 graduate of the College of the City of New York; and earned his doctor of jurisprudence degree at Columbia University School of Law in 1958.

The new Division Counsel has been with General Electric since 1966. His GE experience includes assignments with GE Credit Corporation, the Information Systems Equipment Division and Nuclear Energy Products Division.

The Shermans...Dave and Harriet and their two children, 16 and 14...have been living in Wilton, Connecticut. They will now make their home in Rockville beginning in late June when the kids have finished the school year.

Dave expresses unabashed enthusiasm about joining ISBD. He believes our division has one of the most promising futures in the company. "ISBD is the leader in an exciting, dynamic, constantly changing industry," he said. "It's legally challenging, and I'm looking forward to being a part of its continuing growth."

David Sherman
<table>
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<tr>
<th>ISBD Congratulates its First Quarter Top Performers</th>
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<tr>
<td><strong>The Top Twenty</strong></td>
</tr>
<tr>
<td>Silvio Anichini**</td>
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<td>Rudolph Baldor</td>
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<td>Michael Chan**</td>
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<td>Ken Conroy*</td>
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<td>John Adams</td>
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<tr>
<td>Ken Babb**</td>
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For General Electric Employees Only
FRDP Completes Second Successful Training Program

In 1973 ISBD launched an intensive training program to prepare new account and tech reps to go out and face the business world as field representatives of the division.

Development Program was very comprehensive; and covered computer training, sales techniques and effective presentation, major ISBD products, plus a host of other information intended to help the trainees in their new jobs.

After about six months' field experience, the trainees returned to Rockville for three weeks' additional training, taking them even deeper into ISBD products and services. A final nine-day session completed the program, which spanned a total of about nine months.

There have been two complete FRDP programs, graduating a total of 30 field reps. The second of these ended last week.

Ike Smith, Training Coordinator, feels the FRDP program has been very successful. "Those who completed FRDP-I are already beginning to prove themselves in the field," he said. "For example, Brenda Tripp, a field rep with the Federal Branch, placed among the top 20 performers, division-wide, for the fourth quarter of 1974, and ranked among the next 40 for the quarter just ended." He added that a number of FRDP-II trainees also hold promise of some really outstanding performance.

FRDP feels the participants in the FRDP training programs put their full efforts into the task with enthusiasm. "And they've taken that enthusiasm with them to their home branches, too!" he added.
People On the Move

Wally Beck, from NDP Specialist; to Data Communication Specialist, Rockville.

Diane Hare, Technical Representative; to Account Representative, Chicago.

Margaret Holt, from Manager of Special Systems Development; to Manager of Product Support, Rockville.

Carolyn Littles, from Investment Accounting Specialist; to Manager of Financial Analysis, Rockville.

Cecil Overton, from Network Distribution Specialist; to Data Communication Specialist, Brook Park.

Andrew Pecus, from Taxes and Insurance Specialist; to Investment Accounting Specialist, Rockville.

Art Sims, from Manager, Terminals Project; to Manager, Management Services Industry Sales, Rockville.

Mark III Package Aids GE Receivables

Since last September, the Mark III system has hosted a comprehensive application package, developed by Division Finance, which gives GE corporate headquarters a running picture of the accounts receivable situation in every one of its components.

Called "Trend Measurement of Receivables," the data base includes detailed information on each component's receivables compared with sales from January 1971 to the present. Quarterly reports are distributed to finance managers of all GE groups, divisions and departments which reflect ongoing and seasonal collection trends. Summaries are also sent to each member of the GE Board of Directors.

Al Ertel, Senior Systems Analyst, said the package held a great deal of potential for use by individual components, too. "It's so flexible," he said, "that a component can use this capability in any of a great number of ways."

For example, one division is already using the package to obtain monthly payment trend data on various customer categories. Another major division uses it to measure receivables to performance of major product lines. Al thinks many other GE components could benefit from use of the package, and it's available to them at a very modest charge from ISBD.

For additional information, call Al at 8-273-4779.

Going to School This Summer?
Think of Tuition Refunds Now!

ISBD cooperates with employees who desire to better their formal education by providing complete refunds of tuition and compulsory fees for satisfactory completion of accredited courses related to our business through two programs: the Individual Development Program for level "D" through "4" employees; and the Tuition Refund Program for level "5" and above employees.

Relations reminds us that all reimbursements must be applied for and approved prior to the beginning of classes for which they are intended. ISBD is compelled to adhere to company policy in this matter. This means that employees planning to attend accredited courses this summer should obtain an application form (Form ER-11) from Relations and submit it as early as possible. Instructions are located on the reverse side of the application.

Additional information on the Individual Development Program may be found in Benefit Booklet ERB-161, or by calling Dorothy Hevey (8-273-4757). Information on the Tuition Refund Program is located in Policy/Instruction 7-11; or call Gene Taft (8-273-4701).
Interchange Corner

When using DSXMIT-OS through the Crisp III/70 system from a low-speed terminal and/or a qualified high-speed terminal, one should use the /* setup card with "DSXMIT" in columns 19-23.

It should be noted that the /* setup card with DSXMIT is to prevent jobs in the hold queue from being released when another job is using DSXMIT.

If two jobs are trying to execute DSXMIT, one will of necessity be cancelled and the other will go into execution. Hence the primary purpose of the /* setup card when using DSXMIT is to prevent cancellation of jobs when two or more users are trying to access the real time program.

It should also be noted that a user can use as many /* setup cards in his job stream as needed. The only limitation involved is the number of job steps and devices that HASP will allow. However, when using DSXMIT, nothing else should be in the /** setup card (columns 19-23) other than "DSXMIT." Other /* setup cards may precede or follow this card. For additional information on this subject, contact Mannie Roberts at 8-273-4571.

High Speed Service

The National Service Operation has received many phone calls recently about some of the basic procedures for High Speed Service (HSS). The short overview below may help clear some misunderstandings.

There are basically three different functions of High Speed Service: printing files, loading data and independent runs.

The most efficient way to print files is to queue them via low-speed service. The command to accomplish this is: "PRINT FILEA; URTLID; NONE."

To check what is in your output queue, issue the command, "ONLIST" on low speed. The job stream to print all the queued files for LTID URTLID is:

```
ABC12345,password
*LTID URTLID
*MODE Output(*ALL)
*EOS
```

To print only the one file, the MODE card should read:

```
"*MODE OUTPUT(FILEA,"
```

To load data into FILEB and FILEC, use the job stream below. At present, data cannot be loaded via the RPS III.

```
ABC12345,password
*LTID URTLID
*MODE INPUT
*DATA FILEB
*EOF
*DATA FILEC
*EOF
*EOS
```

One may use HSS to do practically anything available on low speed. The commands which are put in the HSS session cause an independent run to be set up. As with any independent run, an output file is necessary. You may name it or the system will.

```
ABC12345,password
*LTID URTLID
*MODE INPUT(INFILE), OUTPUTT(TTYOUT),LIS),WAIT RUN PROGA CRE FILED,, PRINT CFIX; URTLID,COPY(2)
*EOS
```

The above job stream causes the following: the three commands...run, create and print...are put in a CMF independent run which will execute the commands in the order given. INFILE contains data needed during the independent run. The output file for the session is TTYOUT. "WAIT" means you are waiting for any output caused by your commands. Two copies of the file CFIX will be printed. Finally, "LIST" causes the output file TTYOUT to be listed before the session is terminated.

Validations for HSS are done by the administrative user for a catalog by using VAL. For example:

```
VAL ....NEW LT HSS ....NEW LT SPEED ....END
```

For catalogs without an administrative user, Validations and Billing will perform necessary changes requested through a mailbox. Validating multiple LTID's for a catalog is recommended since only one user at a time is able to use HSS with a given LTID. Also, there is an ALLCAT validation which makes it possible to print all output queued for a given LTID for the catalog in a single session. Validations & Billing must do the ALLCAT validations.

New and Revised Documentation

New: Currency Exchange Database advance release user's guide (5103.20). A new RPS 111 user's guide (was 3910.018-4, is now 3911.02). The DIADEM System user's guide (5900.45), a MAP system by Economic Models, Ltd. Corrects:

- Utility Rates & Rate Structure Analysis user's guide is 5204.46; not 5204.42 as listed in the last issue of Update.

See the article, "ISBD Now Offers Library of 15 Fully Supported Background Application Package Products," elsewhere in this issue for significant changes in background applications and related documentation.
For Utility Companies

The cost of petroleum products in the United States has increased exponentially in the past two years. Utility companies who must pay these bloated prices for the fuel they use, as well as other skyrocketing expenses required to produce electricity, have been passing the increased costs on to consumers in the form of higher and higher rates.

Because of the extreme difficulty in justifying rate increase requests to regulatory agencies, more and more utility companies are finding themselves in a serious financial loss situation. They are seeking rate relief with increasing frequency.

Now they can do something about it. ISBD's three-star application library hosts a new package which helps utility companies, both electric and gas, to examine new proposed rates for each of many consumer classes to cover their production costs and generates figures necessary to help assure themselves of an equitable profit. The program also provides information for a portion of the justification for favorable decisions by regulatory agencies.

Called NEWRATES***, this foreground package is interactive, providing rate analysts with almost instant answers, as opposed to the batch processing capabilities of most in-house systems or manual rate-finding techniques.

NEWRATES*** is a product of the Rates and Research department of Central Illinois Light Company.

More information on this timely package is available through OLOS. Publication number of "NEWRATES," a three-star application, is 5204.45; and of "Utility Rates & Rate Structure Analysis," a user's guide, is 5204.46.

For answers to questions on the package, call Ralph Bice at 8-273-4722.

Tax Act Can Boost Take-Home Pay

Many employees found more money in their pay checks last Friday as a result of changes made by the Tax Reduction Act of 1975.

New Federal Income Tax withholding tables have been issued by the Internal Revenue Service and these will be used for wages paid on and after May 1, 1975 and before Jan. 1, 1976.

Since income tax reductions in the new law are effective only for 1975, all employees—particularly those claiming additional allowances for estimated itemized deductions—should review their withholding position and, if necessary, file new Forms W-4 showing the correct number of withholding allowances they are entitled to claim.

Revised W-4 forms and explanatory material are available in your Payroll Office.

May Service Awards

Fifteen Years
  Joanne M. Thyken        Rockville
  Dorothy H. Hevey        Rockville
  Jim Medley              Rockville
  Kenneth A. Braemer      Los Angeles

Ten Years
  Randey L. Hardick      Detroit
  Randy Piper             Rockville
  Eugenia E. Kraus        Bethesda
New, Lower Mark III Prices Become Effective Next Week

Many ISBD customers will begin seeing reduced costs on their Information Services bills for Mark III Service usage after June 1. At the same time, a number of other changes are being made to simplify our billing procedures and improve the value of our services to our customers.

Among the modifications being made are:
- Central processor upgrade,
- Streamlining of the pricing structure,
- Reduced cost for large core programs,
- Standardization of billing terms, and
- Expansion of the Project Accounting Reporting System (PAR).

All foreground catalogs will now be priced at 10 cents for New CRU's and HISAM Storage Units (HSU); 20 cents for Data Storage Units (DSU); and 75 cents for Program Storage Units (PSU).

Users with programs exceeding 16K will realize substantial processing cost reductions, because we have lowered our core premium charges for all programs exceeding 16K in size. That saving could amount to as much as 50 percent for programs requiring 32K. In addition, users will now be able to run their large core programs during prime-time hours, as well as non-prime hours.

As reported in the April 14 issue of Update, the term "National Billing Unit" has been eliminated because of the international nature of our business. The new term, "Computer Resource Unit" (CRU), became effective April 1 for Crisp III/70 Service; and goes into effect June 1 for Mark III background.

Elsewhere in this issue, readers will find an article on enhancements to the Customer PAR system, also scheduled to become effective June 1.

For answers to questions on ISBD’s new MARK III pricing structure, call Lee Beyer, Manager of Market Analysis and Pricing (81273-4681).

Correction

It has been called to our attention that an error was printed in the Interchange Corner of the last Update. In the fifth line of column two, the command, "ONLIST" should have read "OLIST."

The article also pointed out that "At present, data cannot be loaded via the RPS III." This is no longer true; now that RPS III has its own card reader input/output device, HSS data can be loaded via RPS III.
New PAR Enhancements Give Customers Better Control Of Their Mark III Usage

Next Sunday ISBD will go on-line with a redesigned, greatly improved Customer PAR (Project Activity Reporting) system. Capacity has been increased considerably, allowing for the output of much more information than has been previously available to customers.

The Customer PAR system is a system of data bases and routines resident in our application library which allows users to monitor the daily use of Mark III Service for each of their user numbers. Not only does it provide exactly how much usage each individual user or project ID. has used up through the previous day, but it also breaks out the actual dollar and cents cost in each case. With this information the customer has the ability to limit, or even block, usage by any individual or department in the user company with access to Mark III Service.

Larry Capriotti, Manager, Billing Systems, said the redesigned system is just one more event in our continuing improvement of services to our customers. "With the new PAR system," he said, "many customers who really make full use of the service will be able to virtually create their own ISBD bill, covering all usage up through the previous day."

Although all customers should be encouraged to convert to the new system as soon as possible after June 1, Larry said, the old routines will continue operative for another six months or so. This will apply to all customer PAR users except for those with core image programs using PAR system routines, which must be reloaded immediately in order for the customer to continue enjoying the benefits of this service.

To utilize the expanded PAR service, customers must use a new access procedure, and a part of the program must be recoded. This will result in a number of additions to the program definition, as well as a rearrangement of the output information.

Because the new PAR system has the same basic structure as the corresponding part of the ISBD billing system, it is expected to function with a higher reliability level than in the past.

"Another advantage," he said, "is that we now have greatly expanded the capacity of the Customer PAR system, and this gives us room to add several more enhancements in the months to come."

Among the special enhancements already added is the ability of those customers with special contracts to track their performance according to the provisions of their contracts. For example, telephone and CPA companies can now separate prime time usage from non-prime time usage for their bonus pools. Furthermore, accounting firms will be able to track premium CRU's generated by each of their offices or individual users.

The new PAR also includes an expanded data base to include billing data for Crisp III/70 Service, HISAM Storage Units (HSU) and Telephone Information Processing (TIP). A supplement to the Administrative User’s Manual, which explains the redesigned PAR system in greater detail, is now available. Publication number is 3502.01A-8, and copies may be ordered by way of the On-Line Ordering System (OLOS).

Update will keep you posted on additional Customer PAR enhancements as they are made available. In the meantime, any questions should be directed to Larry Capriotti at 8*273-4530.

People On the Move

James Beesley, promoted to Computer Operator, Brook Park.

Carmen Edgehouse, from Senior Computer Operator; to Operations Specialist, Brook Park.

Pete Manzo, from Senior Systems Specialist; to Manager, Language Systems, Rockville.

Andrew Sabol, promoted to Computer Operator, Brook Park.

Harold Stover, from Data Communications Department, Waynesboro, Virginia; to Manager, Terminals Project, Rockville.

Paula Zak, Account Manager, East Orange; to Telephone Industry Applications Manager, Rockville.

Andrew Sabol, Paula Zak

For General Electric Employees Only
Answering Your Questions About Blue Cross... 

A NUMBER of questions concerning the change to Blue Cross have been posed to GE employee benefits specialists. Here are answers to those most frequently asked:

Q—How does the change in carriers for hospital (Type A-1) coverage help me? A—The GE Plan can now operate under the Blue Cross national system when hospitalization is involved. This system, which is used by a number of major corporations, specializes in handling hospital claims and is recognized by hospitals throughout the country.

Q—What about out-patient expenses? Are they paid through the Blue Cross system? A—If emergency out-patient care is received in a hospital because of an accident, and not later than the day following the injury, or if an operation is performed in a hospital outpatient facility, such expenses are Type A-1 and will be paid through the Blue Cross system. Physicians’ services and all other covered outpatient charges will be paid as Type A-2 or Type B expenses under our previous procedures.

Q—What about the restrictions I hear apply to some Blue Cross plans? A—There is absolutely no change in your coverage.

Q—What about coverage of my dependent children away at college? A—Metropolitan is still the carrier for the other medical benefits of the GE Insurance Plan. Claims for these medical expenses (Type A-2 and Type B) should be submitted exactly as in the past by completing a blue claim form and attaching appropriate bills to the claim form.

Q—How do I use the GE/Blue Cross ID card? A—As indicated on the reverse of the card, it should be presented to the hospital whenever you or one of your covered dependents is admitted. The hospital and Blue Cross will then take care of the handling of the payment for covered Type A-1 expenses.

Q—What about conversion of the GE Plan hospital coverage to a private plan in case I leave the Company? A—Now that Blue Cross is the carrier for this part of the GE plan, you will be able to convert your coverage, or a dependent’s coverage, to a Blue Cross/Blue Shield Plan in case you become eligible for conversion. Considering the wide recognition of Blue Cross/Blue Shield plans, this conversion privilege should be of value to employees and dependents whose GE coverage is terminated.

Q—I have had a private hospitalization policy with Blue Cross for many years. Will Blue Cross pay the hospital costs under both plans—the GE group plan as well as my own? A—You should consult your local Blue Cross representative on this matter.

S&SP Prices—April

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<tr>
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<tr>
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</tr>
</tbody>
</table>

If you have specific questions about your Blue Cross or Metropolitan Life medical coverage, call Gwen DeLacy, Insurance Benefits Administrator (8*273-4220).
User Systems Section Reorganized To Respond Better To Customer Needs

Don Montgomery, Manager, User Systems, has reorganized his five subsections and assigned responsibilities with the objective of providing still better services to our field personnel and their customers. Here's a brief rundown of the new arrangements:

Business Systems
Dick Bretagne, Manager
Develops and supports applications which address the business processing requirements of ISBD customers. The HCA system, FAL II, FLEXIMIS, GFAST and the soon-to-be-released PAY II employee accounting system are the responsibilities of Business Systems. Future efforts will be directed toward providing complete corporate business systems.

Background Systems
Bob Penny, Manager
Provides support and coordination for current background applications and streamlines interfaces to those applications. It's also Background Systems' job to help improve user techniques for foreground/background communication, including job submission, status checking and output queueing. Additional emphasis will be given to identifying and acquiring major new applications which offer our background users additional capabilities.

Manufacturing Systems
Joe Schmid, Manager
Efforts are directed toward the general areas of order entry, inventory management, production operations and control, manufacturing operations and control, and numerical control systems. Develops complementary applications for such products as Honeywell's IMS system.

Language Systems
Pete Manzo, Manager
Develops and supports foreground language processors including FIV, BASIC and ALGOL. Also supports an assortment of existing foreground features such as EDIT, TEDIT and TIP. In the future, considerable effort will be directed toward incorporating the advanced capabilities of the H-6000 hardware into our major foreground language, FIV.

Data Management Systems
Hal Moore, Manager
Responsible for providing tools and products in the general area of data and file management. The major current products are SORT***/MERGE*** and HUTIL***.

In the future, Data Management Systems will continue to enhance and extend DMS and HISAM; and has begun definition of a report program generator which will simplify the construction of carefully formatted reports drawn from a variety of foreground file types.

Work is presently in process on a sales order processing/inventory control system, an on-line error correction capability in ADAPT and an improved work management scheduler.

Update is published bi-weekly by the Information Services Division for the benefit and information of employees. Articles and photographs may be submitted to Update, Information Services, 401 N. Washington Street, Rockville, Maryland 20850; or call 8 * 273-4387.

For General Electric Employees Only
Don Montgomery
Dick Bretagne
Bob Penny
Joe Schmid
Pete Manzo
Hal Moore
Goodby Mark I. . .
Hello Progress!

Mark I, the world's first commercial network time-sharing service, will be phased out June 30 . . . never to be revived again.

This may bring a few nostalgic lumps to the throats of some of the ISBD old-timers who were involved in introducing this revolutionary service using General Electric's famous 235 computers. But they'll all undoubtedly agree that space-age technology has led to much bigger and better things . . . Mark III . . . in the 10 years since the concept of Mark I was born.

Jim Castle, General Manager of the Sales Department, said Mark I is no longer a viable product in terms of today's needs; and it is also no longer profitable to the division. He cited three important reasons ISBD Mark I customers should transfer their files to Mark III as soon as possible: First, valuable new cost efficiencies may be realized by Mark I customers who switch to Mark III Service because of its massive remote batch processing capabilities. Secondly, Mark III Service has the capability to handle much larger files and programs than were ever available on Mark I. Finally, there are more than 400 on-line application programs now available, and with Mark III Service they are as near as the customers' remote terminals.

ISBD has asked that all Mark I customers inform the division of specific files to be transferred to Mark III no later than May 30. This gives field reps only a few days to get that information in to headquarters. The final day that transfer requests will be honored is June 25; and the Mark I system will be permanently shut down on June 30. Any files remaining resident in that system after that date will be lost forever.

For answers to questions on the demise of Mark I, contact Ray McNees, Sales Support Specialist, at 8*273-4639.

GE Earns Savings Bonds Award

General Electric has received a special Minute Man Flag Award from the Savings Bonds Division of the U.S. Treasury Department for its continued support of U.S. Savings Bonds. The flag, the official symbol of the U.S. Savings Bonds Division, was presented to Reginald H. Jones, GE's chairman of the board.

General Electric employees can purchase Bonds under two plans in addition to the Payroll Savings Plan—plans that offer extra rewards in the form of Company payments to participants. The two plans are the Savings and Security Program and the Savings and Stock Bonus Plan. With the three plans, General Electric employees are among the leading Bond buyers in industry. During 1974 they purchased Bonds with an estimated maturity value of about $139 million.

Accepting the Minute Man Flag, Jones said "We are honored to receive this special award as a tribute to the men and women in our Company who have been investing regularly in U.S. Savings Bonds. We are proud of our payroll savings plans that benefit us as individual citizens just as much as they help the nation."

Jones is currently serving as chairman of the Savings Bond campaign of the Electrical Equipment Industry for the U.S. Industrial Payroll Savings Committee which is made up of the chief executive officers of 61 corporations.
The following is a discussion of how users can execute H* programs built using the SAVE and SAVOLD options on the $OPTION control card. These options allow a user to build an H* library—multiple programs built onto one H* and executed independent of the others. The study also makes reference to the standard technique used normally in H* execution.

**RELOADING H* FILES**

**METHOD I:** Either linked or non-linked jobs

The user created library routine .HSTAR can be used to load either linked or non-linked jobs

Creating your dynamic library for .HSTAR (see first example)

1. Run program as in example 1 to create an H* Library DISK called LDHSTAR; the disc will be used to load all further H* files.

The Permfile LDHSTAR contains a Reload Program which loads and enables execution of both non-linked & linked H* files (with or without GELOAD created file control blocks, i.e., FORTRAN Files).

The routine must be accessed by the following set of control cards for each activity in which it is to be utilized:

```
1 8 16
$ PROGRAM .HSTAR
$ PRMFL **,R,R, Your user ID/LDHSTAR
$ Limits a, b, c, d, e
$ DATA IH
```

**INPUT CARD**

```
1 8 7 8
*NNNNNN*
```

```
$ TAPE H*, etc.
$ FILE H*, etc.
$ User ID your options
$ PRMFL H*, your options
```

Other file cards associated with job

Where Column 1 on the input card to file IH must have an * if there are file control blocks on the H* file that were constructed by the loader. Otherwise, column 1 must be blank. If the job is a linked job, columns 2 through 7 (inclusive) must be blank (see example 2 which makes use of dummy link). For non-linked jobs columns 2 through 7 contain the name of the load as specified in the save option on the "$ Option" card of the job that created the H* file (see example 3 which shows two non-linked programs placed on a H* and their executions independent of each other).

For example, if a non-link load was created on an H* file by using the card

' $ OPTION FORTRAN, save/LODNAM'

Columns 1-7 of the input card to file IH would contain "LODNAM", to request loading of a non-linked H* file with loader created file control blocks.

As another example, a Cobol link job would contain blanks in columns 1-7 of the input card, since file control blocks in Cobol are created by the compiler and not the loader.

A third example would be of a linked FORTRAN job, in which card column 1 would contain *, and columns 2-7 would be blank, to indicate that a linked job with loader created file control blocks is to be loaded.

**METHOD II:** Linked jobs only (and those making use of $LINK with some dummy name—see example 2)

The following setup may be used to load and begin execution of a Linked H* file from disc or tape without requiring GELOAD.

```
1 8 16
$ PROGRAM RLHS
```

or

```
$ PROGRAM RLHS, ON1
```

$ Limits a, b, c, d, e

$ File cards similar to Method I

Where ON1 will be used when there are no loader created file control blocks on the H* file (e.g., Cobol jobs) and the absence of ON1 implies that the H* file has file control blocks created by GELOAD.

**CAUTION:**

1. All of these methods work only on H* files created by GELOAD. They will not work on H* files created by the System Editor.

2. The same limits must be used with the reload job as when the H* file was created, and load placement must also conform to the original (i.e., LOWLOAD or HIGHLOAD). Furthermore, use of one of the set-up routines must have been made
Interchange Continued

when the original H* file was generated.

NOTE: A maximum of 5 options (following .HSTAR or RLHS) will be recognized on the "$ PROGRAM" card. This permits use of the sense switches in the same manner as on the "$ Execute" card.

Example 1

```
500  :STA:MAINLK
510  :LDQ:="3OH*,DL
520  :MME:GERSTR
530MAINLK:BCI:1\\\\\\\n540  :ZERO:0,0
550  :ZERO:0,0
560FP:BCI:1,0000IH
570DCW1:IO1A:0,1
580DCW2:IO1CD:0,16
```

Example 2

```
FORNON  14:36EDT  04/29/75
100  BRU  *
110  BEN
120  # STRIP ; 8,16
125  $:OPTION:FORTRAN,SAVE/MICKEY,NOGO
130  $:FORTONDECK,NOFORM,NOGO
```

Example 3

```
MME:GERSTR
FORNON  14:36EDT  04/29/75
100  BRU  *
110  BEN
120  # STRIP ; 8,16
125  $:OPTION:FORTRAN,SAVE/MICKEY,NOGO
130  $:FORTONDECK,NOFORM,NOGO
```

For additional information, contact Mike Youree at 8*273-4571.