update

INFORMATION SERVICES BUSINESS DIVISION

ROCKVILLE, MARYLAND

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Oct. 12, 1976

ISBD's New Cash Management Package, CASH, Is Easy to Implement/Use, Economical, Flexible

CASH***, GE's application programs for creating user-responsive cash management systems, has completed field test and was released for commercial use on October 1. This new software is so easy to use that once the customer has decided what he wants, a technical representative can readily implement a cash consolidation system for a customer. Alternatively, a customer can implement his own customized system in a day or less with the aid of a step-by-step user's guide. No programming expertise is necessary.

Using CASH makes it extremely economical to implement and run a cash management system. Costs are significantly less than with prior customized systems.

Based on the field test, it's expected that an average TIP input session should cost less than 20¢, a figure far lower than we've been able to achieve in the past. And by using Metro Access and selecting options which emphasize efficiency, a session could cost even less!

Bill Backer, Senior Specialist in Product Programs, said CASH's unprecedented simplicity of implementation and operation, and its extremely low cost, should enable many new companies to consolidate cash daily from all of their remote bank accounts. In the past, they may have either had to rely on the mails or on costly long-distance phone calls. "A potential customer for CASH," Bill said, "could be any company which is a wholesaler, retailer or service organization with 10

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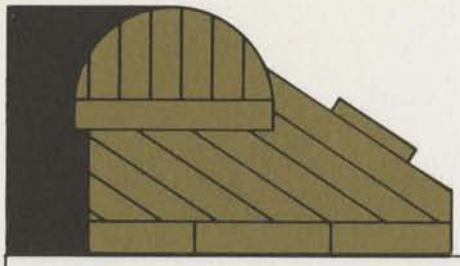
Two Chicago ISBDers Win Management Awards

Anne Van Wagoner, Senior Technical Representative in the Chicago Technical Branch, displays the Management Award recently presented to her by Bob Manning, Central Zone Manager, for some outstanding work she did for ISBD customer Arthur Anderson. As though that weren't enough in itself, the long-stemmed red roses behind her were a gift from two customers at Hotpoint for special help she gave them "far beyond the call of duty." Both honors came Anne's way within a day of each other.

Darlene Santarelli, Branch Administrator, Chicago Commercial Branch, receives a Management Award from her Branch Manager, Mike Schermer, as Central Zone Manager Bob Manning beams his approval. Darlene was instrumental in helping her team win two Outstanding Branch awards, the VIP '75 campaign and the WW '76 campaign. She also helped solve a customer's problem (on her own time) that enabled her branch to realize 100 percent of quota for the quarter. In presenting the award, Mike said: "Many customers have commended her for the outstanding job she has continually done."

GENERAL ELECTRIC



CASH *** *Continued from page 1*

or more operating locations dispersed in different metropolitan areas, which needs daily reporting of deposits of at least $1,000 in each location." Bill believes CASH will be a very easy package to sell to companies which qualify, and that it should be an excellent door-opener to additional ISBD business in the financial management area.

Here are some of the features which make CASH a superior new product:

- Program generators are used to create a cash management system with numerous default features and override capability;
- It handles input from telephones or terminals, or both;
- An easy-to-use means of specifying the collection session language;
- Uses latest efficiency features such as PFN, HISAM, etc.;
- Has built-in TIP capability;
- Reporting and maintenance routines are included;
- Provides total DMS capability, including source and compiled DBDF's.

The benefits to a customer in using CASH to generate his cash management system are many. Here are a few:

- System quickly and easily developed by customers or GE technical representatives;
- Cost-effective operation and maintenance;
- TIP training or programming knowledge not required;
- Ad hoc reports quickly and easily prepared;
- System easy to understand and use;
- More efficient operations and less overhead than a packaged approach;
- Maximum flexibility for end users;
- System can keep pace with dynamic business conditions.

Among the things which make CASH fast and easy to use is a new technique which enables a user to develop his own TIP messages during a single session at the terminal. Using a CASH function called SPEAK***, the implementor can create and refine TIP messages by typing the message into a terminal and listening to it at the same time on a telephone. This way, phonetic sounds can be adjusted on the spot until the desired voice quality is obtained. This feature alone cuts implementation time and cost by about two-thirds.

Another important feature is that CASH files are stored in HISAM, our most economical format. "And the fact that CASH is fully compatible with DMS," said Bill Backer, "enables users to access the database and make inquiries, as well as obtain just about any type of ad hoc reports they could want."

After Chuck Newton, then a product planner, researched customer needs and interest in the cash management area, a development team in Technology Business Systems made up of Lou Schreiber, Russ Barkdoll and Ron Bidwell, went to work. Three months later, ISBD's newest business management product was ready in the form of CASH***, the Cash Management System.

CASH is supported by an easy-to-understand user's guide (5100.14) just revised following field test and written for non-programmers. Copies are available via OLOS. An application systems profile (revised edition of 5100.12) is also complete and has been distributed to branch offices. A TIP sales brochure (3915.03) can also be very helpful in selling CASH, as can a demonstration program and instruction card (3915.01). Leader will feature a cash management article in the winter issue, and a news article is being released to the financial and trade press. And, to summarize pertinent selling information, a sales guide is being sent to all field managers and account representatives.

If you have any questions on CASH, address them to the National Service Desk (for technical information) at 8*273-4675; or Bill Backer (for marketing information) at 8*273-4698.

September Service Awards

Twenty-Five Years

Kenneth H. Rockwell	Schenectady
William H. Johnson	Rockville

Twenty Years

Harold D. Stover	Rockville

Ten Years

Brendan A. McShane	Rockville
Jeannette M. Martin	Watertown
Michael J. Emmi	Philadelphia
Lawrence C. Kristainsen	Rockville
Audrey B. Kannapell	St. Louis
Calvin J. Cillay	Rockville

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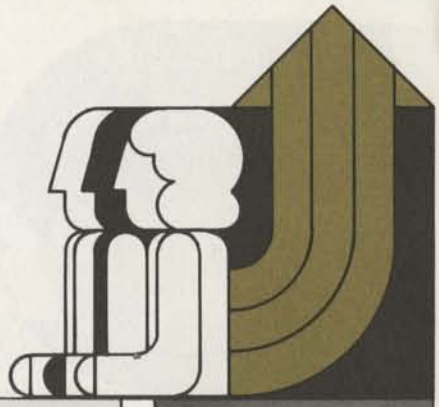


People . . .

Steve Bain, from Technical Representative; to Senior Technical Representative, Atlanta.

John Beal, from Tape Librarian; to Senior Tape Librarian, Rockville.

George Cooper, from Customer Assistance Specialist; to Specialist, International Technical Support, Rockville.

Frank Cornell, from Systems Specialist, Brook Park; to Senior Systems Specialist, Rockville.

Ted Day, from Specialist, Validations, Brook Park; to Shift Manager, Customer Assistance, Rockville.

Robert A. Diskowski, from Senior Applications Specialist; to Project Manager, Oak Brook.

Steve Bain

John Beal

George Cooper

Frank Cornell

Ted Day

Bob Diskowski

. . . On the Move

Joan Fitzpatrick, from Secretary; to Statistical Clerk, Rockville.

Patricia Jackson, from Summer Intern; to STAP, Rockville.

Eugenia Reilly, from Secretary; to Administration Clerk, Rockville.

Mark Shurr, from Application Specialist; to Senior Application Specialist, New York.

Fred A. Wood, from Senior Specialist, Product Programs; to Manager, Product Training Programs, Rockville.

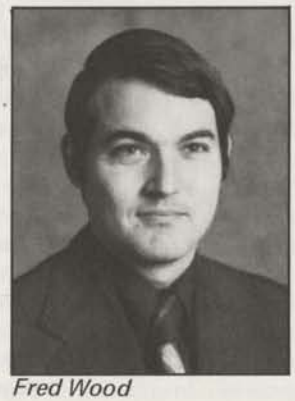
Paula Zak, from Manager, Industry Accounts Support; to Manager, Field Training Operations.

Joan Fitzpatrick

Pat Jackson

Genie Reilly

Mark Shurr


Fred Wood

Paula Zak

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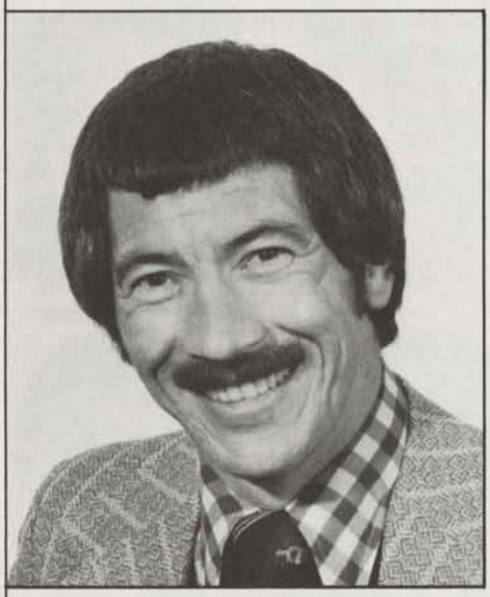
For General Electric Employees Only

Treat the Cause — Not the Effect!



By Terry Faff, Account Representative, Los Angeles-South Branch

A few months ago while visiting a customer, I learned that a DMS system which his company had designed and brought up on its own to handle inventory control and status reporting, was not functioning as well or as economically as they had anticipated. The customer said he felt the system was too costly for the kinds of reports he was getting, and asked if I could arrange to have someone come out and assist them in modifying this system to make it run more efficiently and reduce the monthly operating cost.

Responding to this inquiry, I contacted our CAO group and asked them to join me in a meeting with this customer. During the course of this meeting, it became evident to me that there was much more to this problem than was originally expressed.

Further investigation and questioning revealed that the inadequacies were not with the basic system, but rather due to a lack of communication between the designer and the end user in determining needs and requirements.

At this point, I realized that there were two alternatives open to us: to respond directly to the request of the customer by doing just what he asked, attempting to enhance the existing system and decrease monthly operating cost (this would be approximately a $3K CAO opportunity, resulting in about $3K/month operating revenue); or initiate a full study to determine the *cause* of the dissatisfaction.

In reviewing these preliminary findings with the customer, I was able to convince him that the best alternative was the second one. And he signed a CAO contract to begin the study.

As we suspected, the investigation revealed many shortcomings in the current system, such as the lack of controls, meaningless reports and inaccurate information requirements.

A presentation of our findings was made to the customer, during which we explained the shortcomings of the existing system. At the conclusion of the presentation, an additional CAO contract was signed to begin a redesign of the system.

As we proceeded with the redesign effort, we became aware of other aspects of the customer's operation that could be easily designed into the system to allow for future expansion. These additions were discussed with the user and added to the redesign specifications.

My point in sharing this particular situation with you is that had we responded only to the initial request of the customer, we may have improved the operation of the system . . . perhaps even lessened the costs of it. But the end user's requirements would still not have been satisfied. Ultimately, the system would have deteriorated, bringing an end to monthly revenue for ISBD and leaving the user with a bad taste for our products and services.

By looking beyond the effects of the problem, and trying to determine the *cause* of it, we uncovered the real needs of the user and were able to address them directly. This created a more meaningful and useful system, satisfying current needs and allowing for future requirements.

Incidentally, this system was originally just for inventory control. It has since expanded into a complete order entry and production scheduling system; and it's still growing. CAO contracts have already reached $20K, and there'll be more; and monthly revenue is running at $5K. Not only has treating the cause been beneficial to the user, but it's also been great for long-term, dependable revenue to the account representative.

So next time you are discussing a problem with a customer or prospect, just take a moment to ask yourself: "Are we discussing the effect of an underlying cause or the actual *cause* of the problem?" Remember, the answer could be worth a lot to you!

S&SP Prices — August

Month	Stock Price	Fund Unit Price
August	$54.790	$27.759
July	56.899	27.978
June	54.722	27.317
May	51.469	27.547
April	53.190	28.088
March	52.098	27.962
February	53.329	28.042
January	52.220	26.986
December	46.347	25.407
November	48.336	25.991
October	47.332	25.257
September	44.173	24.010

ISBD Sales Training Really Works; Here's a Senior Account Representative's Own Story

Lew Thompson

Virtually every ISBD employee has had an opportunity to benefit from some part of the Division's extensive and comprehensive training offerings. One of the most popular courses, which has been attended by literally hundreds of ISBD field personnel, is the Lee DuBois Course in Selling Techniques.

Last month, Ike Smith from the Training Operation conducted the three-day Lee DuBois course for the 14th time, and the day after the course ended, Lew Thompson, a senior account representative in Syracuse, decided to put what he'd learned to the test. The results were so outstanding, he rushed a letter to Ike to share his experience. Update would like to share it with our readers.

For the benefit of readers who have not taken the Lee DuBois course, chapter seven (mentioned in the following letter) deals with the "trial close." It may also help to point out that Lee DuBois advocates what he calls "The Law of Psychological Reciprocity." This means that people do unto you as you first do unto them. In Lew's case, the first thing he did was to give his prospect credit for being intelligent.

Here's the letter:

"Ike—it works!

"The next time you get to chapter seven, please remember this real-life example:

"Situation: company with an IBM 370/135 running three shifts per day, six days a week, has an order service challenge.

"Known: no room to automate the job on the existing 370. The director of planning has decided to put the remote order service system on a new PDP mini.

"Goal: to obtain permission to quote on the MARK III® Order Service System as an alternative to the PDP mini.

Appointment

"Results: phone call at 9:30 a.m. Thursday, after finishing the Lee DuBois course on Wednesday, to obtain an appointment to pursue the goal. Appointment set for 2:50 p.m. with the director of planning, whom I had never met.

Conversation

"We talked about *his* duties and *he* showed me many examples of how *he* had used a Census Bureau database on *his* 370 to predict various things about *his* business. Ike, I found several openings here to offer really *sincere* compliments!

Curiosity, Interest

"The discussion *then* came around, without obvious control, to order service. My 'fat little claim' centered around the value of MARK III Order Service to other companies, and the potential value to *his* company.

"His answer was: 'We think the PDP mini is the best way to go for our company.' That's when I *knew* we were going for a little ride on the TNT Railroad (he didn't know, of course)!

TNT Railroad

"I had *thankfully* received my first 'no.' Never thought I'd be thankful for a 'no,' but I really wanted to practice on this account. So instead of drawing my sword and fighting the PDP mini as I might have done prior to your course, we moved right out of the graveyard and back onto the tracks (he didn't even notice the train turning around).

"We discussed several more 'Units of Conviction' about our order service and the value of his looking into it. His benefits were always the major topic of conversation, *not* our order service.

Tonnage

"After a few 'the more information you have the better your ultimate decision will be,' and 'the ability to show your boss how thoroughly you've investigated this important matter for your company,' it was time for a trial close.

Close

"Well, it's time for the close (or *is* it?).

I took out my thermometer—he didn't know it—to take a reading. Prior to the Lee DuBois course I would have been headlong into a PSS-type situation that would have used one of these trial closes: 'to restate the problem;' 'since you now

Continued on page 6

Workshop for New Field Managers in Rockville

The ISBD International Training Center was the location last month of a special high-powered workshop for the Division's new field managers, covering everything from time management and work planning to coaching and motivating employees.

The workshop was conducted by Dean Daniels who, as most of you know, is a management consultant from GE Corporate Consulting Services who has been working with our field sales organization for the past two and a half years and understands our division pretty well now.

The new field managers, including several from our Canadian distributor, CGE, took part in case studies and real life situations where they could apply the course theory. Because of its relevance and timeliness, the intensive three-day course was received by the managers with a great deal of enthusiasm. They all left with the general feeling that they had a much better grasp of their responsibilities as managers.

New ISBD field managers pose for a parting photo before returning to their branches. Front row, from left: Rod Belle, District Manager, VS Sales, Chicago; Steve Saltar, District Manager, CGE, Vancouver; Dean Daniels, who conducted the workshop. Second row: Ray Gryzbowski, Branch Manager, Chicago; Ed Wetzel, Project Manager—Sales Training; Sung Park, Branch Manager, Pittsburgh; Ann Fillipone, Branch Manager, New York; David Burnett, Branch Manager, CGE, Toronto; Paul Goldstein, Manager, Federal Sales, Washington, D.C.; John Ignozza, Technical Branch Manager, East Orange. Back row: David Killins, District Manager, CGE, Montreal; Vic Henschel, Branch Manager, New York; Stan Smith, Branch Manager, Cincinnati; Matt Herman, Technical Branch Manager, New York; Andre Thompson, Branch Manager, St. Louis; Harrison Jordon, Manager, Federal Technical Branch, Washington; Brian Morrison, District Manager, CGE, Calgary; Clete Spehr, ISBD Support to CGE, Toronto.

ISBD Sales Training

Continued from page 5

see how. . .,' and so forth. Ike, I really think none of these would have worked, as he would have staunchly defended his PDP mini against any one of them.

"But guess what: (you're *right!)* I took his temperature with a fantastic: 'In your opinion, do you feel that having someone from our Order Service group look over your challenge would be of benefit to you?'

"His answer, believe it or not, was: 'you're the expert; what do *you* feel?' I closed the sale by saying: 'I feel *we* should have the GE Zone Representative visit you at your earliest convenience. Is the early part of next week best for you, or would you prefer the latter part?' He replied: 'It doesn't matter; call me when they can schedule the meeting.'

"Ike, it *really* happened that way, and I really feel that the 'confrontation close' (forcing a decision) would not have worked on this very logicial–thinking director of planning. Yes, we still have to take on that PDP mini someday, but when we do, we'll have the best tonnage we can load on the train!

"Without the course you taught, we probably would have drawn the sword and taken on the PDP mini that Thursday afternoon. . .and lost!

"Thanks!"

ISBD Dependents Learn About MARK III Service

Thirty-six dependents of ISBD Rockville employees have completed the Division's first "Introduction to Computers" course offered especially for the purpose of acquainting spouses and children with MARK III Service.

Attending two evening courses, the 36 who completed the course were enthusiastic over what they had learned, and many requested additional training. The introductory course, incidentally, will be offered again for dependents beginning this month.

Interchange Corner

ISBD Network Communications Part II—Terminal Compatability and Log-On

In order for a terminal to successfully long-on to, communicate with and disconnect from the MARK III System, it should "look" like one of the "standard" terminals, such as the "standard" terminals listed here:

"Standard" Low-Speed Terminals

Type	Speed	Representative Terminal
0	110 baud	Teletype, model 33
1	150 baud	Teletype, model 37
2	300 baud	TermiNet® 300
3	110 baud	Friden 7102
4	134.5 baud	BM 2741
5	Any	Gulton
6	Any	Hazeltine 2000
7	1200 baud	TermiNet® 1200
8	Voice	Touch-Tone* input (TIP)

*Registered Trademark of the Bell System

"Standard" High-Speed Terminals

Speed	Representative Terminal
2000-4800 baud	RPS III
2000-4800 baud	IBM 2780
2000-4800 baud	IBM 3780*
2000-4800 baud	G-115
2000-4800 baud	High-speed print station

*Asterisk in column 80 of user number card is required.

A baud is equivalent to a bit per second. 300 baud is the same as 30 characters per second. All speeds are given in baud rates.

When a low-speed (1200 BPS and below) user logs on to the MARK III System, he may optionally type one or more "H" characters (lower case "h" plus the carriage return for TYPE 4 terminals). If he does not exercise the option (within seven seconds), the network assumes that his speed is 110 baud. If he does exercise the option, the appropriate speed (110, 134.5, 150, 300, or 1200 baud) is set by the communications system.

Once speed has been determined, the input stream is sent into Foreground along with the user number. A special TYPE message is sent for TIP users as well. Otherwise, speed implies TYPE. For example:

Speed	Implied TYPE
110 baud	0
134.5 baud	4
150 baud	1
300 baud	2
1200 baud	7

If the user does not wish the default type, he may issue a "TYPE" system command sometime after log-on and operate in one of the following modes:

TYPE 3 — Friden terminals—special CR-LF transliteration.

TYPE 5 — These terminals are sent a high number of delay characters (rubouts) by the communications system. Univac DCT 500's are one example.

TYPE 6 — These terminals are sent no delay characters by the communications system; they are usually CRT terminals.

TYPE 3 and TYPE 4 terminals require the (RC/LSC/MRC) to perform character transliteration. In all other cases, ASCII output received from the CC is sent to the user as received (except for parity). Additional rubouts *may* be sent before or after certain characters, depending upon user type and whether or not the user has done a "SET D" command. Delay characters are necessary on some terminals to allow time for mechanical motions to be completed. An insufficient number of delay characters is seen by the user as lost characters in the output report or lost line feeds.

Delay characters are sent before the output characters only at 1200 BPS and then only in two cases: (1) enough delays are sent before a line feed to ensure that every line has 36 or more characters (successive line feeds receive 24 delay characters between them); and (2) 36 delay characters are sent before the form feed.

Values set by the SET D command override this table. This command is only valid at 1200 baud.

Number of Delay Characters Sent After Specific Characters:

TYPE	0	1	2	3	4	5	6	7	8
CR	2	0	0	2var	4var	8	0	0	0
LF	1	2	8	2	2	8	0	3	0
HT	0	8	0	6	6	6	0	0	0
VT	0	2	0	0	0	0	0	0	0
BS	2	0	6	2	0	2	0	0	0
FF	0	0	0	0	0	0	0	217	0

VAR — Variable delay $\left[\frac{IX/16 + IY + 2}{2}\right] * 2$

X = Current line length; Y = Number of characters in delay table

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New and Revised Documentation

Just published, in advance release versions to support field testing, are three FORTRAN 77 documents: the *FORTRAN 77* reference manual (3106.01), *Comparisons – FORTRAN 77 and FIV/PFN* (3106.02), and *Loading and Overlaying for the FORTRAN 77 User* (3106.03). A system routines manual and a techniques user's guide are planned for early next year. Currently, F77 system routines are documented in the comparisons booklet.

The *MARK IV System* is a general purpose software system developed by Informatics, Inc., and available on MARK III VS Background Service. The five-volume Informatics documentation has been republished in two loose-leaf binders with GE covers. The *Reference Manual and Special Features* volume (5611.01) describes capabilities and features, record structure, file creation and maintenance, record selection and processing, and report specification. The *User's Guide, Operations Guide, and Pracniques Handbook* (5611.02) describe a problem-oriented training example, detailed information on operations, diagnostic messages, deck setups, and practical techniques.

Employee Accounting System User Documentation (5101.23), another VS Background system with Foreground driver, is a large binder containing a product information manual (yet to be published), the *PAYPAC**** user's guide (in loose-leaf form), a *PAYII* user's guide, *EAS options* documentation, and the *Labor Cost* user's guide. The *PAYPACS**** user's guide is still available separately as publication 5101.21A.

Orders for MARK IV and EAS documentation must be approved by VS Background Operation personnel before they will be processed, because of the cost of the documents.

The *Course Quarterly* (400.01E), announcing courses and schedules for 600 classes to be held October through December, was mailed last week to 34,000 customers and prospects. Bulk shipments have been made to zones and branches.

New course materials: *Advanced FAL II* instructor's guide (5103.32), viewgraphs (5103.33), and student's guide (5103.34). *Advanced Statsystem* instructor's guide (5707.09), viewgraphs (5707.10), and student's guide (5707.11).

A revised *Instructor's Guide to Course Materials* (4001.10B), which lists available teaching materials (required and optional) for all GE ISBD courses, was printed October 1 and is orderable via OLOS. Another important internal document, the *Market File Index* (1.09E), revised through September, is being mailed this week to all field Sales personnel and Market File Librarians.

Also newly available: A revised *International Access Directory* for October 1 (1401.01Q). *Cash Management* System (CASH***) (5100.14A) user's guide in its final version. And *Cross-File,* documented in an internal Division advance release user's guide (0000.12). All three are available through OLOS.

Robin's Hat's In the Ring!

Robin Ficker, Independent candidate for Congress from Montgomery County, Maryland, is one of our own ISBD attorneys at Division Headquarters in Rockville. He campaigned recently in the Maryland Center cafeteria. Robin expects to complete personal visits to 50,000 county homes discussing Congressional issues; and he's placed three questions on the November ballot targetting tax issues.

Robin Ficker

Interchange Corner

Continued from page 7

Some TermiNet 300 users attempt to increase throughput and decrease terminal connect hours (TCH) by issuing CALL CMD ('TYP 0'). This is contrary to manufacturers' recommendations and may lead to missing characters and/or overprinting.

There is no CALL CMD ('SPE X'). If a user issues a valid SPE X command, his speed is set according to X and his TYPE assumes the default (implied) values in the preceding table.

None of the types has been tailored for the TermiNet 30. This terminal is recognized as TYPE 2, and works correctly with one exception: if a user program will be outputting a carriage return with no line feed (FIV + format), a TYP 5 command should be issued first.

If you are asked whether or not an "unqualified" terminal works with MARK III Service, the answer is that if it "looks" *exactly* like one of the "standard" terminals, it will probably work; although special features such as tabling and plotting may not work. In determining how the format "looks" to our system, you should test the terminal, accessing the system for several sessions, giving particular emphasis to special features and error recovery. For additional information, call Product Support at 8*273-4571.

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