DIGITAL DIALOGUE

Digital Research aims CP/M Card™ at Apple®
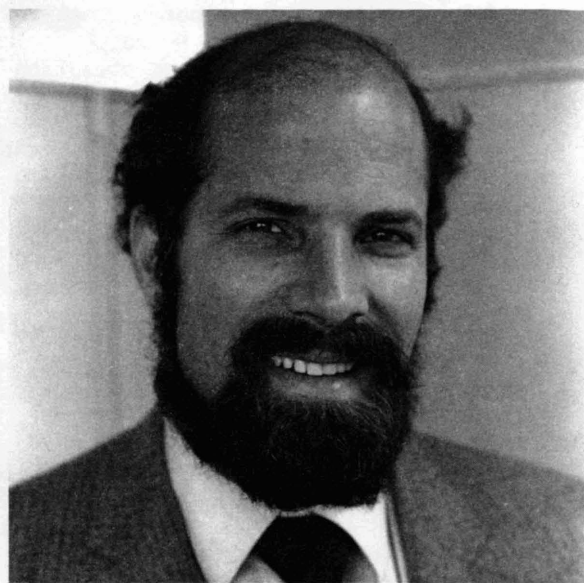
Tom Rolander talks about "growing CP/M" to do more for more microcomputers.

Tom Rolander, until recently director of the Operating Systems SBC, calls it "growing CP/M®." He simply means that Digital Research will continue to develop and market operating system products that will do more for more microcomputers.

A new direction for Digital Research, but one that is right in line with the strategy of growing CP/M, is the development of the first CP/M Card, aimed at the Apple II ™. world. Tom LaFleur, engineering manager in R&D, said, "The CP/M Card for the Apple II is just the first in a whole family of similar products. CP/M Cards will allow CP/M to run on microcomputers that are not now using our operating system software."

The CP/M Card was designed by DRI and Advanced Logic Systems, based in Sunnyvale. DRI and ALS are working closely to manufacture and market the product. The CP/M Card is essentially a board with a Z80B microprocessor, 64K of on board memory and a time of day clock. Placing the card into the Apple II gives Apple users access to CP/M Plus ™. and an additional 64K/128K of memory and allows those users to run CP/M-based 8-bit applications. The CP/M Card significantly enhances performance as well. Tom LaFleur says it will provide "at least a 300 percent improvement in processing speed."

DRI will supply the CP/M Plus operating system, the CBASIC® language, the GSX-80 ™. graphics extensions and program development utilities including an assembler and debugger, as well as full documentation, including a CP/M Card User's Guide, CP/M Plus User's Guide, CBASIC Language Reference Manual and GSX-80 Graphics Extensions Programmer's Guide.

"We expect to follow this with other cards that will allow the IBM PC to run existing 8-bit CP/M based applications, and then we'll go on with other CP/M Cards for other non-CP/M compatible microprocessors," Tom LaFleur explained.

In talking about growing CP/M, Tom Rolander said, "Everything we do is guided by that overall strategy. Basically, we are stressing concurrency, portability and networking because those are the areas in which our products have to succeed. They are the areas of most interest and importance to microcomputer users."

Concurrency

Concurrency is a better word than multi-tasking," Tom went on. "It is friendlier. It means that now you can do more things with your microcomputer at the same time. While working with a general ledger program on your screen you can print a document created with a word processing program. And at the same time your microcomputer can receive electronic mail. You can go from screen to screen with a single keystroke."

CP/M Card, CP/M Plus, Zilog agreement, networking -- it is all happening in Operating Systems SBC

DRI is working to create the expectation of concurrency among microcomputer users, establishing it as something essential and necessary. Concurrent CP/M-86™. was developed to meet that expectation.

Portability

"Portability is CP/M's main selling point," Tom added. "Right now, anyone can take an application program in object code form that executes under CP/M and use it unmodified on more than 700 different hardware configurations of microcomputers.

CP/M '83 offers exhibits, seminars, panels, workshops -- and even buses

CP/M '83, the largest first-year computer show ever to be held, will run from Jan. 21-23 at Moscone Center, San Francisco. More than 25,000 visitors from around the world are expected to attend the exposition/conference dedicated to CP/M-related products, services and support. And among those 25,000 visitors will be some 94 Digital Research employees, thanks to a set of chartered buses.

The buses will take DRI employees to San Francisco Saturday, Jan. 22 and Sunday, Jan. 23, leaving at 8 a.m. each day from 160 Central Ave., Pacific Grove. Buses will leave Moscone Center at 8 p.m. on same day for the return trip to Pacific Grove. All bus riders must return the same day.

Forty-seven seats are available on each bus and space will be reserved on a first-come, first-go basis. Family and friends will be included if space permits. Barbara Norman will post a sign-up sheet in the employee lounge at 160 Central Ave. on Jan. 3. For more information, you may call her at ext. 6054.

What's it all about?

"If you want to get the most out of your CP/M-based computer, you can't afford to miss this show," said Gerald A. Milden, president of Northeast Expositions, producer of the show, which is being sponsored by Digital Research. "There will be more than 500 exhibits--possibly as many as 700--and more than 100 seminars, workshops, panel discussions and other technical meetings."

The exposition portion of the show will be the largest assemblage ever of CP/M-based software, hardware, accessories and services. Exhibitors have signed up to display and sell application packages, development aids, peripherals, publications and many other products. Everything on display at the show will be for sale at special prices.

Stop, look — and learn

You can stroll through the exhibition hall for a look at all the products on display--but you also will have a great opportunity to learn more about CP/M and microcomputing in general. The conference portion of the show, featuring workshops, panel discussions, seminars and a unique set of Software Spotlights--where ISVs will

Manufacturing group 'brings it all together'

At Digital Research--where what we produce is essentially a recorded set of electronic blips, supported by a set of instructions on how to make those blips work for you and all of it, from the writing of software to the writing of documentation, is largely an intellectual process--it sometimes is easy to forget that a tangible product has to be produced and shipped to customers.

But that is the job of Digital Research's Manufacturing group, headed by Director of Manufacturing Greg Walberg. "We are the group that orders and receives all the materials needed to actually make our products, duplicates all the copies of software and documentation that goes to customers, and then ships the finished products out to thousands of DRI customers," Greg said.

Those functions are handled by separate departments within the Manufacturing group. According to Andrea Smith, administrative assistant to the director of Manufacturing, the organizational plan is

Shipping and receiving department includes (left to right) front row, Lance Houseman, Tony Brand, Bill Ashley, Dan Seifert; back row, Shirley James, Brian Curtice, Lori Clark, Margie Arms, Mike Paglia, Shelley Knight and Dallas Gilpin.

straightforward. "The raw materials are purchased and brought into the company by the materials department which is under

Frank Herold. The diskettes which carry our software are duplicated by the software

DRI opens sales office in England; Germany and France will be next

Digital Research has taken a big step into the European microcomputer software market with the opening of a sales office in England and the announcement of offices soon to follow in Germany and France.

DRI's European plans and new Director of European Operations Paul Bailey were introduced by President Gary Kildall during a series of press conferences and briefings for European journalists in late October.

"The demand for our products in Europe has exploded," Kildall told the computer industry and general press in London, "and our customers are asking for service and support from us. Although Vector will continue to represent us, we now have the means to serve our many customers better and more directly."

Bailey named director

Paul Bailey, the new director of European operations, has nearly 10 years of marketing experience in Europe, as European marketing manager for Tektronix Europe, based in Holland.

Paul's initial responsibilities include the start-up of three sales and support offices. "Our first office is in Newbury, England," he said, "and serves the U.K., Ireland and Scandinavia. The second will open in Germany to serve Central Europe, and the third will be in France, to serve Southern Europe."

Each office will be staffed by nationals from that European region, Paul added. "We'll have 20 people on board and trained by April 1983, with more than half of the people in each office assigned to customer support."

The translation of DRI documentation into local European languages is already underway. Software and documentation production in Europe also will start this year.

Business to double

Paul Bailey predicts that DRI business in Europe will double in each of the next two years, as the 8- and 16-bit line of operating systems and languages gets filled out and as graphic products begin to take off. "Graphics software is one of the fastest growing segments of the microcomputer software market in Europe,
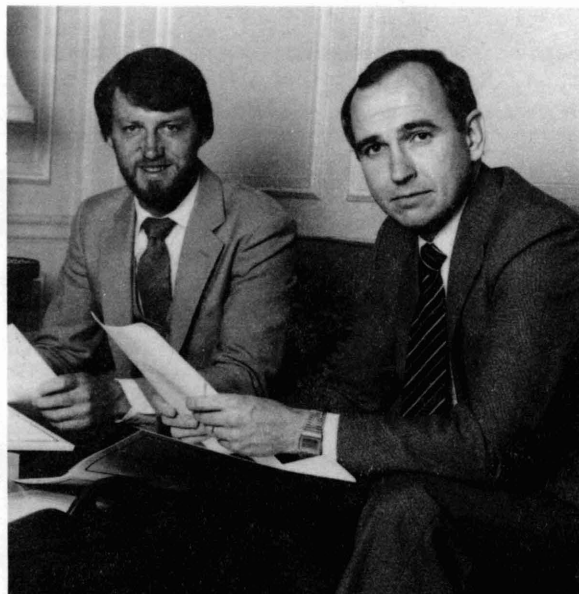
President Gary Kildall (left) and Director of European Operations Paul Bailey announced company's European plans during press conferences in London this fall.

just as it is in the U.S.," Paul said. "As you know, our graphic products will become the standard in the industry, in the same way that our operating systems have done."

Two major contracts announced

During the week of announcements in London, it also was revealed that DRI has signed two major new contracts with leading European computer firms. CII-Honeywell Bull, France's largest computer manufacturer, has licensed CP/M-86 to run on its new Micral 9050 series of microcomputers, and also is evaluating Concurrent CP/M-86 and MP/M products.

ICL, the largest British computer maker, has made CP/M and MP/M II[T.M.] available on its personal computer. CP/M is available as well for ICL's DRS20 computer as an optional user environment to the company's proprietary operating system. And ICL also has CP/M-86 and MP/M-86[T.M.] under review for the 16-bit versions of the DRS and personal computer machines, according to a company spokesperson.

Dealer support program takes shape

Improved product packaging, point-of-purchase display cases, redesigned product literature, product demonstrations, co-op advertising, a dealer sales lead referral program, and comprehensive dealer support and training are all part of the new thrust in retail sales at Digital Research.

"Dealers and distributors are crucial to the successful sale of our products," said Rick Magnuson, DRI's retail marketing manager. "Working together with Jim Tillinghast, North American distribution manager, we're putting together a full complement of dealer support services that

Retail Marketing Manager Rick Magnuson and Advertising Manager Sue Cooper helped design new point-of-purchase display case.

will enhance our position in the retail market," Rick added.

The new retail program is designed to strengthen retail sales of operating systems, programming tools, languages and graphic products.

In line with the CP/M Library[T.M.] concept, DRI products will have redesigned packaging to make them consistent in appearance and attractive to customers. A handsome display case will be placed in retail outlets, to hold packaged products, product literature and demonstration hardware.

The new packages will have a merchandising wrapper with easy-to-understand product descriptions and directions for use.

The retail marketing program is involved in the development of product literature that will be distributed to dealers' stores. The new literature will be highly descriptive, easy to understand and attractive.

Product demonstrations will be available in the stores through an interactive simulation of CP/M-based products.

Rick is working on a sales lead referral program for DRI's supporting dealers. "We get thousands of phone calls and letters from customers all over the world," Rick explained. "We'll forward these leads to local dealers and allow them to contact the interested customers. We also will refer prospective customers to their local dealers, urging them to visit the nearest store. In this way, the program will direct customers to CP/M Library dealers."

Finally, a handbook is being developed to describe all of the merchandising programs and to suggest effective techniques for marketing CP/M Library products. This and other forms of dealer training will be coordinated with Bob Miles, DRI's new educational services manager.

🎁 🎁 *Happy Holidays* 🎁 🎁

Customer Support produces 'Procedures Manual'

Under the direction of Juli Sweet, Customer Support manager, all the personnel of the Customer Support group worked hard to put together a "Procedures Manual" that covers every aspect of every job in the group.

Eighty pages long, with another 25 pages of appendices, the new "Procedures Manual," or Customer Support Center handbook, will be available soon in loose-leaf form for every staff member of the group. Included are departmental responsibilities and organizational outlines for legal services, customer services, sales support and order processing, as well as job descriptions for all present and needed positions.

The manual gives detailed guidelines on how to do all the tasks that are part of daily life in Customer Support, and gives examples of many situations that can come up when dealing with customers and potential customers. Also included are examples of all the forms used in the group, from sales reports, to Canadian export forms, to UPS forms; from product descriptions and parts number lists to correspondence guidelines and proper trademark usage. All are included in the impressive document.

The task force exercise which produced the handbook was organized by Juli, who also had some broader goals in mind. "Participation in an effort like this can help employees understand the group's purpose, help each employee as an individual find more personal job satisfaction, and give all employees a chance to invest something of themselves in redesigning their jobs and their work environment," she said.

The task force approach helped give definition to the group and to each department, helped delineate departmental identity through policies and procedures, and provided better job descriptions and a better understanding of job expansion (moving up the career ladder), Juli added.

Everyone who works for Customer Support was involved in the process with managers and staff given equal voice. Over the four long weeks which went into the process there were some inevitable disagreements, but since everyone was involved, a spirit of cooperation helped resolve problems and kept the group focused on solutions for the welfare of all, Juli says.

"The task force experience has spilled over into other areas of problem-solving," Juli said. "We feel we're really working together now."

Four groups settle in at 399 Lighthouse

Digital Research has another Lighthouse Avenue location. The Customer Support group, headed by Juli Sweet, has moved to the former Social Security office building at 399 Lighthouse, Monterey.

According to Juli, the move means an efficient environment for Customer Support. We can coordinate vists from clients and have our own on-site demonstration center. This will assist us in the explanation of the DRI product line. Finally, we now have space for our outside sales force when they're in town, thereby providing desks and all the tools necessary to professionally service our client base. The move has created more departmental unity, strength and professionalism.

The Customer Support group, which includes Legal Services, Sales Support, Customer Services and Order Processing, was aided in making a smooth weekend transition to new quarters by the yeoman work of Jerry English and his hardworking crew. They spent the entire weekend, including nights, tearing down the old cubicles, reassembling them in the new building, putting up entire new walls from framing to sheetrocking to a fresh coat of paint, redoing ceiling panels, and generally cleaning up so that working conditions would be right.

If you make a visit to the new Customer Support offices soon, they will be glad to show you around. They may even offer you a sauna or a shower--remnants from the days when a health club occupied the building.

Technical Support sets records

During the month of October, DRI's Technical Support personnel handled a record 1001 incoming phone requests for technical support. Another record was set that month when the Technical Support Analysts were able to answer 96 percent of the questions at the time of call.

This is the third successive month that Technical Support was able to keep the unresolved-at-time-of-call figure below 10 percent. This reflects the efforts of all support personnel to increase their skill levels, work more efficiently and discover new solutions to existing technical problems, says Support Center Manager Marion Brown.

The breakdown of calls into languages and operating systems shows an almost even distribution of calls.

Total Calls		Unresolved(#)	Unresolved(%)
OS	550	20	4
Languages	451	26	6
Total	1,001	46	4.5

The figures for registered user, unregistered user and OEM/ distributor calls reveal an amazing 40 percent of calls placed by unregistered users of DRI products.

Total Calls	1001
Registered	406
Unregistered	409
OEM/Distributor	186

DRI publications serve varied audiences

Digital Research publishes a number of newsletters on products, developments and industry news to all segments of the microcomputer world. These publications include the **Digital Research News**, the **ISV Forum**, **OEM News Update** and **Digital Dialogue**. They are produced as part of the public relations effort in the Marketing Communications Department.

Digital Research News is the most general of the DRI publications, reaching a broad audience that includes end users, Independent Software Vendors, Original Equipment Manufacturers, distributors, dealers, the technical press and other retailers.

Articles in **Digital Research News** cover latest product releases, changes in company organization and personnel, retail and distributor plans, and other news relevant to the microcomputer industry in general and Digital Research in particular. An important feature of **Digital Research News** is a technical support column which provides answers to technical questions submitted by users.

Technical support information also is provided in the **ISV Forum**, another quarterly publication from Digital Research. **ISV Forum** focuses on news of products and support programs that will benefit the writers of applications software packages. Legal advice, news of special events and user stories also can be found in this newsletter.

The newest of the Digital Research publications is the **OEM News Update** which was first issued Oct. 15, 1982. This monthly newsletter goes to key persons in approximately 800 Original Equipment Manufacturing firms.

The **News Update** provides a capsule summary of news important to OEMs: developments from the Strategic Business Centers, brief descriptions of other new products, special events planned for OEMs, technical support provided specifically for OEMs, and easy-to-use directories to field operations and other DRI departments.

Another newsletter is being planned for dealers and distributors who work with Digital Research. This projected publication will include news of special programs for dealers and distributors as well as reports of new and revised DRI products.

Digital Dialogue is a monthly newsletter published by and for employees of Digital Research Inc. Launched in August 1982, **Digital Dialogue**, through quarterly and briefer monthly editions, keeps the growing family of DRI employees informed of the company's many new products, introduces persons new to the company, explains policies and carries other news about DRI staff people in the many offices in the United States and abroad.

Copies of newsletters are distributed to Digital Research employees and are available from Nan Bamberger in MarCom.
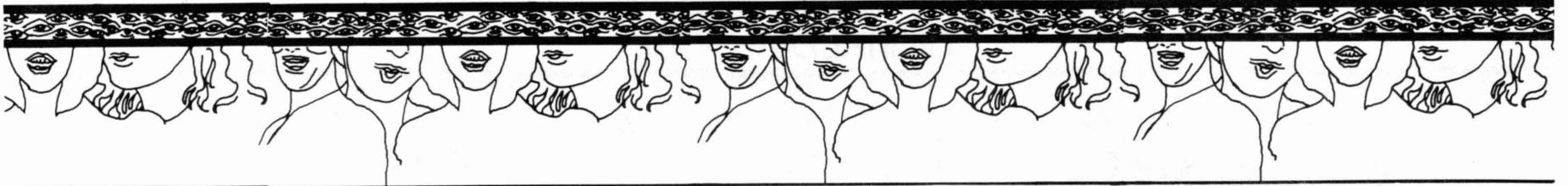
People in the news

On the upswing . . .

Another DRI miracle! There has been a baby boom here lately --both **Frank Holsworth** and **Rob Burton** are pregnant; and recently **Clint Woeltjen** and **Phil Balma** both had baby boys!

A little less miraculous, but still exciting: **Nancy Zentner** is expecting her second.

Speaking of babies, Digital's first baby will be celebrating her first birthday Jan. 27. Her name is Amber Anderson and she now has two teeth and blond hair and is just as cute as her mother--**Andrea Davis**.

Software Engineer Richard Bielsker and Carolyn Bielsker were at DRI's Halloween Party which was complete with costume and pumpkin contests.

In addition . . .

For a real show, don't miss DRI's own women's bowling team Mondays, 6:30 p.m., at Lincoln Lanes in Monterey. According to observers, they are not only good (second in league at last check), but VERY entertaining.

Did you know that . . .

Some lucky DRI employees are working flexible schedules (other than programmers!)? Well, customer service reps now have a 7 a.m. to 3:30 p.m. shift to accommodate our East Coast friends.

Devon Nichols soon will be changeing her name (or at least her marital

status) in approximately "86 days, 22 hours and . . . oh, 18 minutes or so." Of course, this quote is approximately 46 days, 15 hours and 36 minutes old.

We've also been informed that if anyone is in need of a VERY creative birthday card, they should contact **Devon** who is now our Birthday Card Creative Person. Maureen's 10-page birthday card is evidence.)

Jean Pippin has moved from customer service to sales support. Jean is now our communications coordinator. Linda Perez has made a move recently from customer service rep to technical service rep. Congratulations to both of you!

Vicki Heisinger and **Nellis Gilchrist** danced and sang their way to acclaim earlier this fall in the "B-Sharp Follies" (presented in Carmel by Monterey County Symphony). Everyone who saw it gave them and the show rave reviews. Unfortunately, the photographic evidence did not develop.

Personnel Manager Joanne Nelson says . .

I would like to extend my sincerest thanks to those employees who helped make the annual Christmas Party a success: **Sylvia Gardner**, **Lucy Brusa**, **Pauline Collard**, **Marie Hesling**, **Greg Walberg**, **Kay Kwon**, **Tony Brand** and **Kristen Woolston**.

And that's not all . . .

Production recently increased their security by installing a combination lock. It works so well that just the other day not only did they manage to lock all intruders out, they also succeeded in locking the entire department in. Thank you, Ma Bell, for making it possible for them to contact the DRI Rescue Squad, a/k/a Facilities!
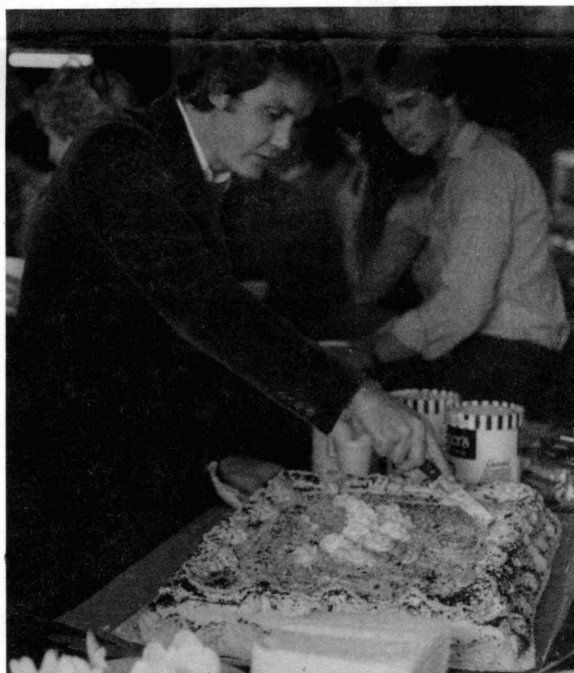
Chief Operating Officer John Rowley cuts cake for group, including magician, who helped him celebrate his birthday.

Among exotic guests at Halloween festivities were Administrative Assistant Susie Miller and Clark Miller.

Rumor has it that one of the last of a dying breed--namely, the single man at DRI (and on the Peninsula, for that matter)-- recently has decided to give up the single life and is engaged. We are not at liberty to mention names, but . . . **Hal** is still single!!!

A few moves are taking place, among which are: **Barbara Norman** will be moving over to sales support and **Mark Staggs** has become manager of Facilities. The biggest move (in distance) is in store for **Maureen Minnes** and **Dan Erickson**. Both are moving to England, Feb. 1 to work with **Paul Bailey** in our European office.

The marketing people have all been centralized below MarCom. This all took place while they were at COMDEX. SURPRISE!

More next issue. Meanwhile, send your news and rumors to **Cathy (Languages) Murphy**. Maybe the suggestion box planned for the lounge will be done soon.

NEW FACES

Mark Hirt, Part-time Proofreader, Oct. 27.
Lynda Haigh, Customer Service Rep. I Nov.1.
Roy Kammerer, Part-time Proofreader, Nov 5.
Deanna Ramos, Secretary I, Manuf., Nov. 5.
Gary Gysin, Customer Service Rep.I, Nov.17.
Judy Mervis, Marcom Manager, Nov. 22.
Zenon Olearczuk, Retail Merchandising Manager, Nov. 22.
Patricia Spencer, Temporary Data Entry, Nov. 22.
Tim Peart, Quality Control Manager, Nov.29.
Marilyn Olson, Temporary Secretary, MarCom, Nov. 29.

BIRTHDAYS

December

1 - Joanne Tenenbaum, Mike Lehman, Marie Hesling, Devon Nicols
2 - Karen Yule
7 - Marcia Condit, Rich Rosenbaum, Cynthia Barnes
10 - Michael Paglia
16 - Vickie Heisinger
17 - Lucy Brusa
18 - Nellis Gilchrist, Clint Woeltjen, Marcel Mendoza
19 - Larry Scroggins
20 - Rita Kan, Barbara Morrison, Danette Votruba
25 - Carol Weaver
26 - Gloria Leyva, Kristen Woolsten
27 - Carol Landaker
30 - Jim Zekas

January
(through Jan. 15)

1 - Frances Borda
4 - Catherine Murphy
6 - Nancy Zentner
9 - Jim Tillinghast, David Smoot
12 - Andrea Davis
14 - Sherri Chartier

Personnel announces promotions, changes and transfers

Name	Date of Change	New Title
Susan Becker	Nov. 22	Secretary (Sales Support)
Sherri Chartier	Sept. 26	Accounting Clerk II
Steve D'Annolfo	Oct. 24	Technical Writer I
Dan Davis	Oct. 24	Project Leader
Larry Drenske	Nov. 15	Customer Service Manager
David Eversz	Oct. 24	Technical Service Rep II
Mike Franusich	Nov. 29	Documentation Development Manager
Vicki Heisinger	Nov. 29	OEM/Distributor Coordinator
Robbie Howard	Oct. 24	Software Duplication Manager
Paul Lancaster	Oct. 24	Project Manager
Gloria Leyva	Sept. 26	Senior Collections Rep
Judy Millette	Dec. 1	Document Control Clerk
Jeff Newman	Oct. 24	Software Engineer II
Debbie Nordgren	Sept. 26	Mail Department Supervisor
Alix Oliver	Sept. 26	Layout Artist II
Linda Perez	Sept. 26	Technical Service Rep I
Scott Plunkett	Oct. 24	Software Engineer II
Mike Robison	Oct. 24	Senior Technical Writer
Debbie Rodrigues	Sept. 26	Data Entry Supervisor
Rick Rosenbaum	Oct. 24	Project Manager
Susan Schwantes	Sept. 26	Lead Mail Clerk
Larry Scroggins	Oct. 24	Techical Writer II
Mark Staggs	Nov. 1	Facilities Manager
Kitty Teeters	Sept. 26	Accounting Clerk II
Kathy Welch	Nov. 29	Customer Service Rep. I

Sports notes . . . . . .

DRI's own bowling team, the "Flawless Five," can be seen in action Mondays, 6:30 p.m., at Lincoln Lanes in Montery. The team is in second place in the league and, according to reports, puts on a great show as well. Patty Oto leads the league in the high game series. Left to right: Sherri Chartier, Gloria Leyva, Kitty Teeters, Charlene Wren and Patty Oto. Karen Loberg is the faithful sub.

The coed softball season ended with daylight savings time, but the fun on the field and at the after game pizza bashes is stirring thoughts of next season. Below, left to right: Dan Erickson takes a swing, Greg Walberg sends one over and Mike Bailey stops for a breather.

'Don't touch the Xerox,' says Kristen

That's the message from Kristen Woolston, Digital Research Xerox operator, who is otherwise a very nice person. Kristen is talking about the big Xerox 8200, which can copy, collate, staple, run up to 999 copies on one setting, and make two-sided and reduction copies as well.

The smaller Xerox 3450 is still available for small numbers of copies and can be used by employees who need fast copies of correspondence, magazine articles or confidential material.

To order copies from the Copy Center, located at 160 Central, Kristen has developed a Request Form on which you can indicate due dates, number of copies, paper size and color, collation, stapling and other information. These Request Froms can be sent to Kristen at Box 2 by interoffice mail or can be hand delivered.

Kristen generally takes jobs on a first-come first-serve basis, but will do priority jobs ahead of others, if something just has to get to Federal Express, on a plane by noon or into an important meeting by 3 p.m., for instance.

Some of the copy center statistics are staggering. Kristen is now running the Xerox 8200 at almost full capacity, making some 14,000 copies a day, or 280,000 copies a month. According to Xerox, the machine's limit, running eight hours a day without stopping for paper loading or maintenance (impossible to do) is 20,000 copies a day.

It is no wonder Kristen is on her feet all day. "Sometimes I really don't get a break," she said. So give Kristen a break, if you can, and fill out your Request Forms legibly, don't demand top priority service unless absolutely necessary, and let her know you appreciate the tough job she is doing.

Kristen Woolston is now running the Xerox 8200 at almost full capacity.

But who are they?

Digital Dialogue logo includes real live employees

Do the faces in the Digital Dialogue drawing look familiar? They should. Most of them are Digital Research employees. But which ones?

After the employee newsletter was named last summer, thanks to Lenette Gaskill who won the Name the Newsletter Contest, MarCom Graphic Artist Angela Lee went to work on artwork appropriate to accompany the name. Working from dozens of snapshots taken at DRI events over the past few years, she assembled a collection of interesting faces. Her goal was to convey the ideas of friendliness and verbal communication. We think she succeeded magnificently. The result is a logo that is uniquely Digital Research.

During the last several months since the logo first appeared, there has been considerable speculation on who is who. Well, it is time to end that speculation; we are ready to reveal true identification.

But first, let us hear who you think these distinguished looking people are.

In other words, this is a contest. The logo drawing is reproduced below with numbers on each head. On a separate piece of paper, match a name with every number. Send your entry to Digital Dialogue Editor, Marcom, # 10. Deadline for entries is Jan. 1. The entrant with the largest number of correct identifications will be awarded a bottle of wine.

Digital Research welcomes more new managers

Digital Research has gained a number of key managers in recent months as the company continues to strengthen its administrative, production and marketing functions. These include:

Jackie Pakarinen
Director of Engineering, Operating Systems

"I see my job as working to put some guidelines into place, so we'll have some consensus in the operating systems group as to how we're going to be doing business internally. At the same time I want to make sure that the atmosphere here is as positive and supportive as it can be," said Jackie Pakarinen Digital Research director of engineering, Operating Systems.

Jackie, who studied at Drake University and the University of Minnesota, has worked previously for computer companies such as Control Data Corporation where she was involved in real time operating system development, minicomputer design and networking projects. At Digital Equipment Corporation she was development manager for the PDP-15 and RSTS/E projects. She has also worked for Prime and Xerox.

"I love the atmosphere here now," she said. "Take the phone list, for instance, organized alphabetically by first names. That's great; we shouldn't lose that feeling. But we do need guidelines and those guidelines must be clear because we're all working at a company that's growing rapidly."

Jackie's project development and management experience will be put to good use at Digital Research.

Frank Herold
Materials Manager

Named materials manager for the Manufacturing group is Frank Herold. Frank comes to Digital Research from Memorex, where he was materials manager for the computer tape division. Previously, he was with Mattel Electronics for whom he was based in Hong Kong for two and a half years and in charge of all overseas manufacturing. He also has worked in the past for Intel, Northern Telecom, Amcomp and Lockheed.

"We need two things, as I see it," Frank commented. I'm committed to develop a standardized part number scheme to support our future operations, especially a computerized manufacturing system. This system will need to have enough intel-

ligence so that personnel from any SBC can use a part number that identifies a very specific product or component. This is an absolute necessity to have a firm grasp on our operating costs and, not the least, to eliminate confusion due to subjective use of product descriptions.

Closely paralleling the part numbering scheme is the need for a computerized data base to drive Manufacturing, Operations, Finance, Engineering and the Support activities. This data base should be accessible to any DRI employee to add, review and update data. These are tools that give management real time data allowing more options and helping to manage growth in a more pragmatic way."

If you want to hear about life in Hong Kong and want some insights on what is happening in the PRC, Thailand, Korea, Japan, Malaysia, the Philippines and other points east, spend a few minutes with Frank, who has traveled to and is knowledgeable about these countries. For the moment, Frank and his wife are more prosaically situated in Gilroy.

Frank Herold is responsible for keeping a steady flow of materials into the production process, both materials used to manufacture DRI products, and the supplies needed to keep the Manufacturing group working efficiently.
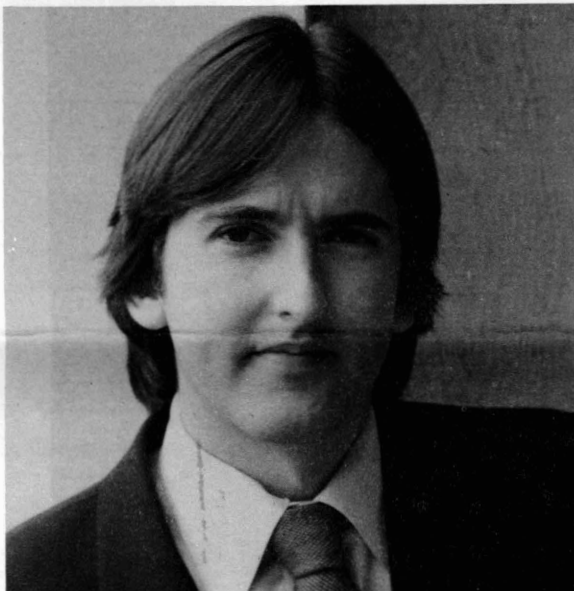

Tom Byers
BASIC Products Manager

Tom Byers, BASIC products manager in the Languages SBC, has responsibility for positioning DRI's existing CBASIC products in the marketplace and for developing new BASIC-family products to meet emerging market needs.

"Positioning existing products is something of a maintenance function," Tom explained, "since our products are already out there and we know, in general, who needs them and how to get the products to users. But development of new products and the improvement of existing ones is where this job gets exciting. It involves a tremendous amount of coordination and decision making on pricing, merchandising and the technical aspects as well—working with engineering, with documentation and with quality assurance."

(Dr.) Tom came to DRI in early September with a background in both academia and the business world. With a BS in industrial engineering, and an MBA and Ph.D. in Management Sciences from UC Berkeley, he also has worked as a management consultant for two years with Arthur Andersen and Co., the large public accounting firm. At Andersen, Tom and Stan McKee were fellow employees. During his university days Tom worked as a microcomputer consultant for many Fortune 1000 companies, trying, he says, "to get EDP managers to understand the microcomputer revolution." In addition, he was a faculty member at Berkeley, teaching MBAs and undergraduates about computers and computing.

"I decided I wanted a line management job, however," Tom said, "to see what working under fire was like, and to learn from the bottom up. I'm doing that at Digital Research. That's for sure."

He continued, "I'm really happy to be here—and not just because this is the Golfing Capital of the World " Tom has had a chance to try a few of the local courses .
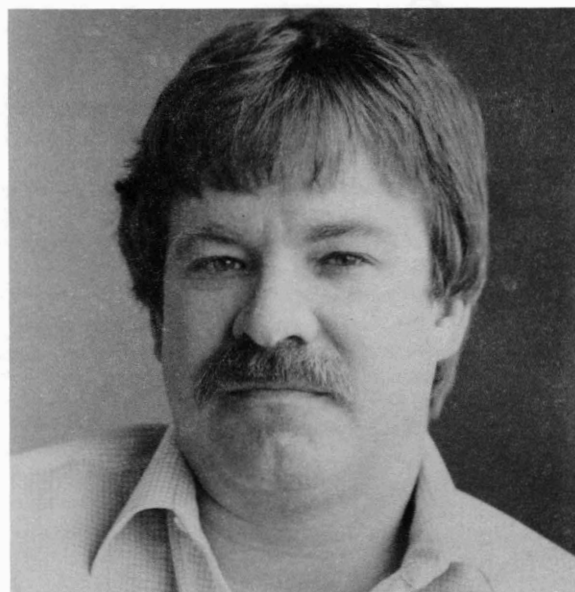
Allen Beebe
Director of Engineering, Languages

Allen Beebe, newly appointed director of engineering in the Languages SBC, comes to DRI after four years with Intel, based in Austin, Texas.

"My role here is to organize the talent we have in software engineering to make sure we're all working on schedules that allow us to get products to market when we've promised them, and yet not stifle creativity of our staff. And we've got some very creative people here. In fact, this group is second to none I've ever worked with. I am very impressed."

Presently Allen is overseeing the software engineering teams that are filling out DRI's product line of languages for the 8-bit world, adding new language products for the 16-bit world, and taking on language projects that will result in some new directions for the company.

"For instance, we want very much to get into language products for users new to microcomputing and we have a few other things up our sleeve as well. We'll be breaking some new ground for Digital Research and for the microcomputer industry."

Allen has moved his family to the Monterey Bay area from the rolling hills and lakes of the Austin area, where they also enjoyed the ambiance and resources of a major university. But it is clear that Allen's excitement with working on DRI languages projects is keeping him happy these days.

Marion Brown
Support Center Manager

Marion Brown is Digital Research's new Support Center manager, supervising the eight technical support analysts who provide help to customers with technical questions about Digital Research products.

Marion's hard-working staff fields customer inquiries that pour into Pacific Grove from all over the country—and even outside it—by phone call, Telex and letter.

With a strong background as an application programmer, systems programmer and software support manager for companies such as Boeing, Sperry Univac and Spectra Medical Systems, Marion understands the need for customer support. "Customer support has very strong impact on a company. How

managers

well a product is supported is very important, and often makes the difference in whether a company is perceived positively or not by customers and prospective customers."

Much of her time is now spent planning for a billable support system, on staff development and training, and sometimes answering tough questions from customers. "Our ultimate objective is to support our OEMs and distributors fully, and then let them support end users themselves. That makes more sense in the long run."

When she can find the time, Marion is a runner, a scuba diver and also a HAM radio operator. "But it's my 20-month old daughter who takes up most of my off-hours time right now," she said.
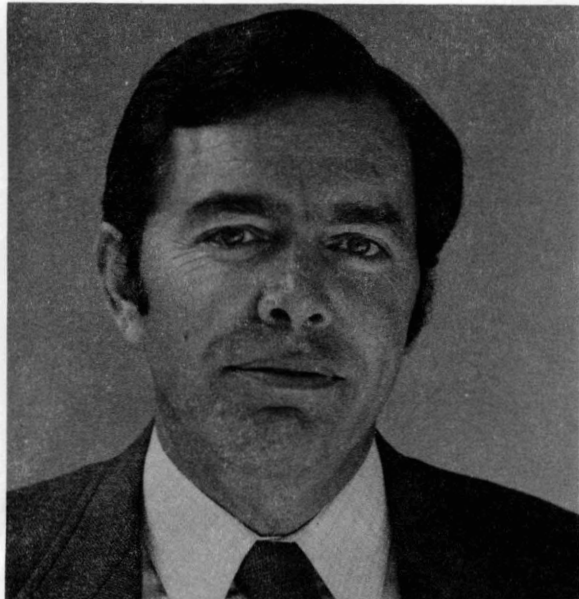
Bob Miles
Educational Services Manager

Bob Miles is DRI's new educational services manager, responsible for Digital Research's strong move into organized training for end users, retail dealers, OEMs, distributors and ISVs.

"I'm determined to help Digital Research become pre-eminent in the microcomputer industry in terms of education and training," Bob said. "We'll be using both classroom settings and self-paced computer-assisted instruction (CAI) techniques to achieve that leadership."

Bob comes to Digital Research from similar education posts at Basic Four Corporation, Philco-Ford and Lawrence Radiation Lab, with a nine-year stint in sales and management development with IBM. He has a B.A. in business administration and industrial relations from San Jose State.

Bob also is responsible for management of the on-going program of DRI Seminars.

"It makes sense to use more CAI techniques in training the people we have to reach, because it means you don't have to tie up a lot of high-level technical people. And it also makes sense to bring our training to where it's needed. We plan to set up training centers around the country, with the first to open in the San Francisco Bay area early in 1983."

Bob is looking for people with experience in education and in microcomputing to round out his educational services staff.

Look for more introductions next issue.

Operating Systems SBC

Portability is the hallmark of CP/M."

In line with the strategy of "growing CP/M," Tom says that his group will continue to expand portability across different microprocessors and into different kinds of functions. Already CP/M products are available for the 8080/8085, Z80 and the 8086/8088 microprocessor worlds, and are used for single user/single task and multiuser and multitask functions. Announcements, for instance, have been made of CP/M products for the Motorola 68000 and, more recently, for the Zilog Z8000 16-bit chip.

Zilog Agreement

Digital Research and Zilog have reached agreements which calls for the modification of CP/M to run on the Z8000. Chief Operating Officer John Rowley points out that this agreement is the latest step in DRI's strategy of forming alliances with the leading semiconductor manufacturers.

Digital Research will develop, market and support the Z8000 version of CP/M under terms of the agreement with Zilog. Dave Guzeman, Zilog's vice president of marketing and strategic planning, commented, "The addition of CP/M to the Z8000's array of software support will be a tremendous boon to the companies that are using, or considering using, the Z8000. The agreement will make available to users the large amount of CP/M-based, high level languages and application software that is already available for our widely-accepted Z80 8-bit microprocessor."

Networking

"There is a fundamental need in the microcomputer environment for communication between workstations and for the sharing of resources. We have developed an architecture that can connect single user workstations in a network," Tom explained.

CP/NET® manages communications between a requestor (slave) running CP/M and a server (master) running MP/M. CP/NOS T.M. (as part of CP/NET), with a CPU and terminal, can execute CP/M without a local disk drive, as CP/NOS can be placed in Read Only Memory. The low cost of a ROMable operating system for multiuser environments makes CP/NOS useful in the classroom educational environment, industrial process control, word processing systems, electronic mail systems and other applications.

CP/M Plus

Growing CP/M also includes upgrading present products to give them better and faster performance features. CP/M Plus, the latest version of our 8-bit operating system, is an example. Gary Kildall points out that the 8-bit microcomputer is still selling strong, and will continue to sell through the 1980s. "The introduction of this latest version of CP/M demonstrates our commitment to providing system software that can exploit the growing power of 8-bit microcomputers."

CP/M Plus will enhance the performance of 8-bit machines with one or more banks of 64K RAM and features a simplified user interface. For instance, now the user has a HELP facility that is used to explain and give examples of operating system commands and how to use them.

CP/M Plus Project Leader Kathy Strutynski discusses marketing tactics with Hal Elgie.

CP/M Plus is compatible with all other DRI 8-bit operating systems. Some of its new features include the ability to add date and time stamps to files, error trapping and recovery, and an automatic disk login feature that eliminates the need to reset the disk every time the media is changed. A new USER facility lets operators store commonly used programs under USER 0 while allowing access to those programs from any user number. Other features also make CP/M Plus an example of "growing CP/M."

CP/M Plus is designed to take advantage of the increasing capacities of disk storage devices," Gary said. "It will become the standard high performance 8-bit operating system."

16-bit world expanding

Although CP/M Plus will give 8-bit microcomputers more power and speed, the 16-bit world continues to grow. Some 100 OEMs have signed contracts for the use of the CP/M-86 16-bit operating system, says Kevin Wandryk, product marketing manager for 8086 operating systems.

Maureen Minnes, OEM sales staff member, says that the list of 16-bit OEMs is growing every week. Negotiations are underway with some 25 additional companies who want CP/M-86, MP/M-86 or Concurrent CP/M-86. "This market is growing rapidly," Maureen added.

Brand Name Recognition

"I'd like to get back to talking about CP/M as a generic brand name," Tom Rolander commented. "Everyone knows what CP/M is; it already has brand name recognition. I'd really like CP/M to mean more than just products. I would like to see it mean things like quality, flexibility and compatibility. We are already the leaders in microcomputer software products for some very good reasons. And those reasons are summed up by just saying 'CP/M'."

CP/M '83

talk about their wares—will cover technical and marketing subjects in great detail.

Industry workshops will be presented each day of the show from 9 to 11 a.m. On Friday, "Venture Capital and the Software Business," will feature experts from the venture capital and business world. Saturday's "Software Packaging and Distribution" workshop will star experts from various software companies; and Sunday's "Distribution" workshop will hear discussions from retailers, distributors and others with marketing know-how.

Panel discussion of important issues

On two of the three days at CP/M '83, Friday and Saturday, from 2 to 4 p.m., major technical issues in microcomputer software will be discussed by a stellar group of experts. Friday's panel on "The Future of Microcomputer Software," features
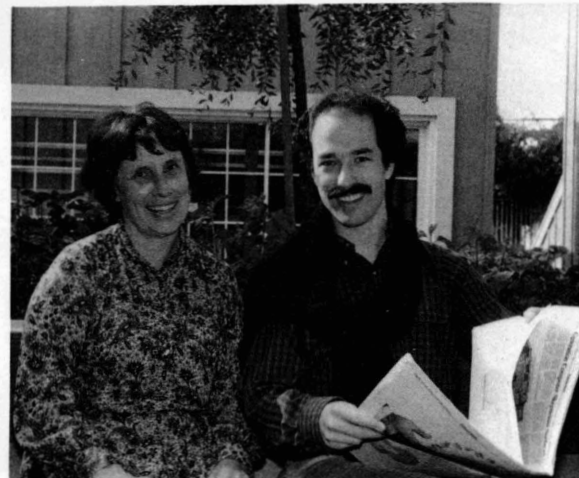
names like Kildall, Osborne, Bricklin, Kay and Eubanks.

Saturday's panel will consider "Trends in Operating Systems," with insiders from software manufacturing as well as industry watchers and researchers with their fingers on the pulse of the software world.

Seminars on the hour

CP/M '83 seminars will be offered every hour on the hour all three days, from 12 noon to 5 p.m., except on Friday and Saturday between 2 and 4 p.m. when the panel discussions are scheduled.

Want a sampling of seminar topics and leaders? How about "Getting the Most out of Spreadsheet Programs," with Stuart Forsyth, State Bar of California; "Applications for Telecommunications," Greg Ferguson, Microcom; "Introduction to CP/M," with Gary Kildall; "An Overview of Word Processors" Jerry Pournelle; "Networks," Charlie Bass, Ungermann-Bass; and a host of

user group meetings, including those for Apple, Osborne and IBM PC fans.

And there is more, with seminars planned on word processing, data bases, graphics, LOGO and others.

Software Spotlights shine

Finally, many of the exhibitors will have a chance to explain and demonstrate their products in a special series of Software Spotlights, to run simultaneously each hour between 11 a.m. and 5 p.m. throughout the show; and most of them will be repeated at least twice.

Remember, to see what Digital Research has wrought in the world of the microcomputer, sign up now for the buses on Saturday and Sunday. If you prefer to go to the show on your own, you can register now by getting in touch with Northeast Expositions, 833 Boylston Street, Chestnut Hill, MA 02167; phone (617) 739-2000 or (800) 343-2222.
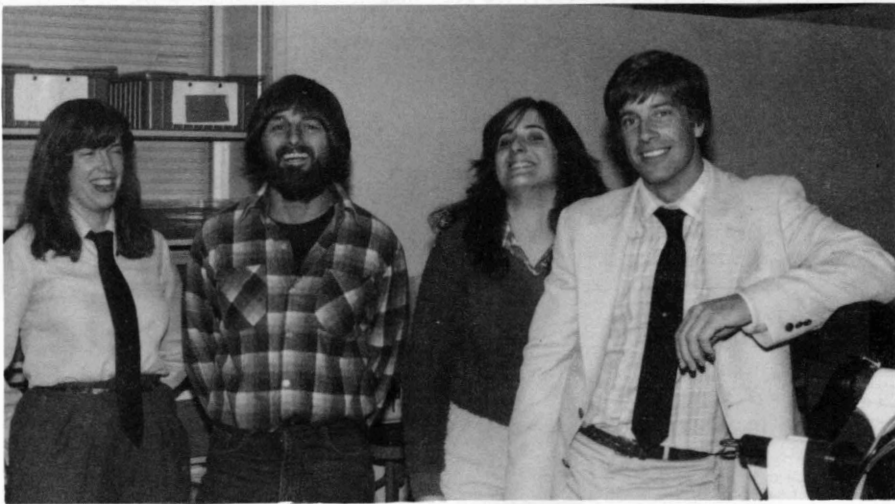
Robbie Howard, right, is in charge of software duplication in the Carriage House at 801 Lighthouse. Assisting him are (left to right) Kathy Muller, Howard Grebe, Roxane Landaker and (absent when photo was taken) Patrick Sterling.
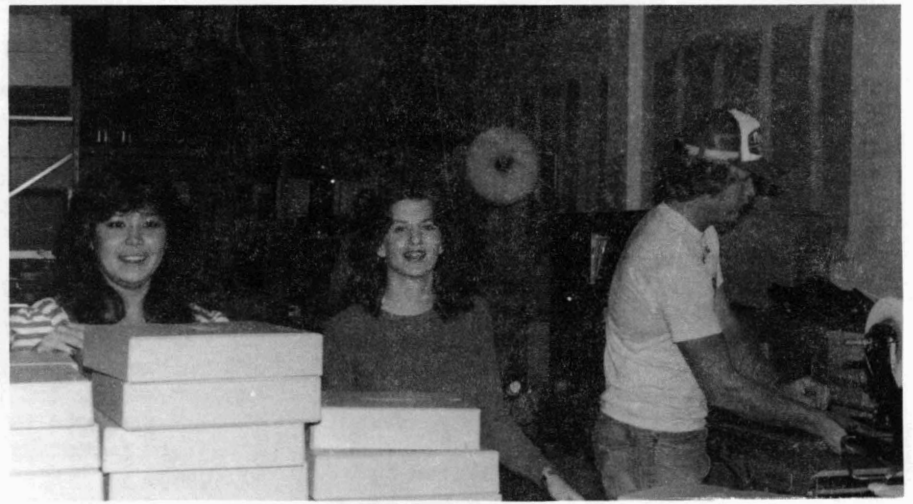
Shipping and receiving staff, which includes (left to right) Margie Arms, Shelley Knight and Dan Seifert), in in middle of manufacturing process. They handle raw materials as well as finished products.
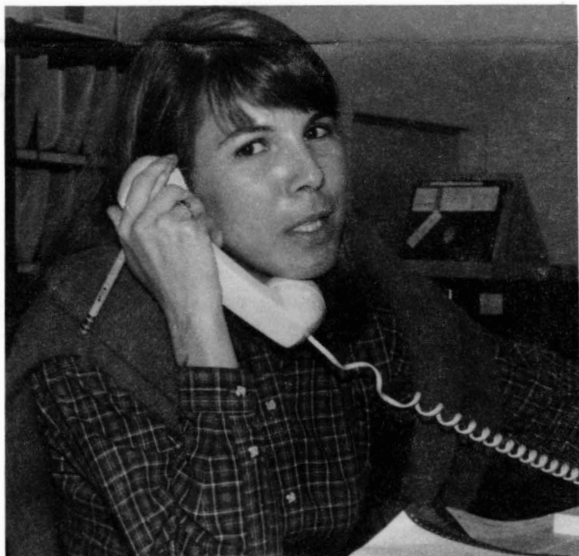
Manufacturing

duplication department, headed by Robbie Howard. And then the finished products are shipped out by the shipping and receiving department, now under the acting direction of Lance Houseman. Acutally, it is a little more complicated than that, but that is the overall picture."

In the beginning . . .

The process begins with the ordering of all the raw materials and supplies that are needed to produce Digital Research's software packages. And that starts with the materials department and Frank Herold. "There are three kinds of materials we use--materials that become part of resale items, consumable materials that are used up and disappear in the shippable products, and a third type which includes office supplies, furniture, electronic equipment, etc."

The actual purchase of materials used in the manufacturing process--as well as the supplies needed to keep each SBC and

As administrative assistant, Andrea Smith keeps in touch with all sections of the Manufacturing Group.

the whole company functioning--is the responsibility of Purchasing Supervisor Nancy Stewart. Nancy keeps tabs on what is needed, negotiates materials purchases and makes sure the supplies are delivered when they are needed. Nancy is assisted by Meedie Kornfield and Carol Weaver. Deanna Ramos, Manufacturing secretary, works with Andrea and assists Nancy and the other groups in Manufacturing.

Planning makes it easier

Product planning and inventory control is another part of Frank's materials group. This new function, which only recently has been formalized within the Manufacturing group, is under the direction of Liz Porter.

"Now I'm responsible for scheduling and production control," she said. "Acting as contact point between Manufacturing and marketing, I work with the product managers in the SBCs, find out what they need, what they are doing, when new products will be introduced, when revisions and changes will be made. I also work closely with Ellen Haley's documentation production staff. This is a coordination job."

Duplicating diskettes

Robbie Howard, software duplication manager, is in charge of a group based in the Carriage House at 801 Lighthouse. They duplicate Digital Research's operating systems, languages, tools and graphics software on diskettes, for further packaging and shipment to thousands of customers.

"We duplicate the products, but we also do much more," Robbie explained. "We design some of the equipment we need to do a better duplication job. We maintain the equipment. We produce reports on how much we are making, on failure rates, and on other publication-related issues. We respond to technical issues or problems that come from the technical support group. We are in charge of the security of all of the production masters from which we make copies. We also maintain archives for all DRI products."
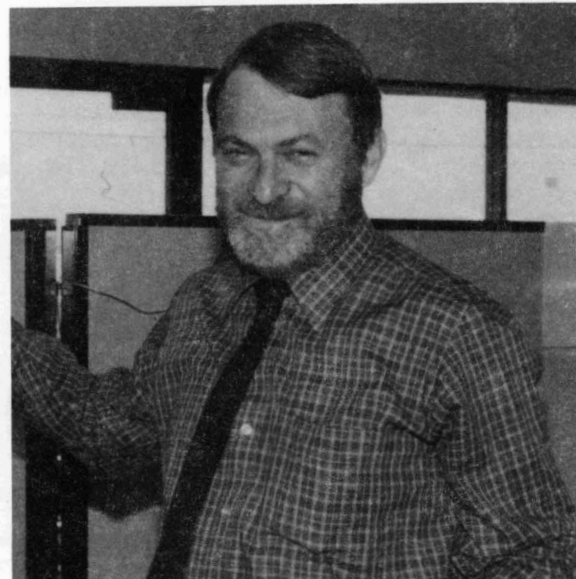
The "Carriage House group" includes Manufacturing Engineer Patrick Sterling who is responsible for the design of new equipment and the maintenance of all equipment. Also in this group are Production Operators Roxanne Landaker, Kathy Muller and Howard Grebe.

The three production operators have a variety of responsiblities. "They duplicate all the software, contribute to the reports we produce for management purposes, and also have specific project assignments as well," Robbie explained.

Duplication, labeling, equipment design and maintenance, planning ahead for even larger production runs--it is all part of the responsibility of the duplication group.

Shipping and receiving

Mark Staggs explained the shipping and

Greg Walberg, director of Manufacturing, oversees the varied functions of the group operating in several locations.

receiving functions which he supervised before he became Facilities manager. Mark has turned over the shipping and receiving department reins to Acting Supervisor Lance Houseman.

The raw materials ordered by Frank Herold are received at the Ocean View Boulevard building. "We maintain a raw goods inventory here," Mark said, "as well as a stock of finished products from which we fill orders. We are right in the middle of the whole process."

If you put shipping and receiving at the center, then you will see raw materials coming in from the left; orders coming in from order processing on the right; finished products from Robbie Howard and the printers coming at them from behind; and packaged shipments going out the front door--via Federal Express, United Parcel and other shippers--to customers all over the world.

Eleven people work in shipping and receiving--at assembly stations, shipping tables, shrinkwrap machines, in inventory control positions, as clerks and packers and order-fillers. "We maintain a basic run rate of about 75 to 100 orders a day," Mark explained, "with capacity to do more. These are very good people here; they work hard and they're very involved. They want to do a good job and they do a great one."

Product planning and inventory is the responsibility of Liz Porter.

The manufacturing process begins with materials and that is job of Frank Herold.

Purchasing Supervisor Nancy Stewart keeps track of what is needed—and then gets it.