

ONLINE

DIGITAL EQUIPMENT CORPORATION

October, 1967

digital
PDP-8/I



DEC ANNOUNCES PDP-8/I

All-Time Winner, Move Over The New PDP-8/I Is Here

At our annual stockholders meeting Ken Olsen announced the introduction of the PDP-8/I. This brand new computer has all of the features of the PDP-8 plus a new ease of interfacing, expanded software and new options. The PDP-8/I is made with the most advanced TTL monolithic integrated circuits. They help make the machine compact, reliable and noise immune. Its speed is the same as the PDP-8. With a 1.5 microsecond cycle time it performs 333,333 additions per second!

The PDP-8/I is ready for general purpose computation and control operations on the day it is delivered. The processor is pre-wired so that it will accommodate a high-speed paper tape reader and punch, a 100 card-per-minute reader, an incremental plotter, and a scope display without further interface. Expansion of the PDP-8/I core memory is accomplished inexpensively by the addition of one to seven memory modules of 4096 words each. Because of the pre-wiring, the first additional block (4K) of memory can be added into the basic system configuration without further interfacing.

Peripherals that go with the PDP-8 and PDP-8/S go with the PDP-8/I. Hundreds of logic-compatible modules make the interfacing easy. Peripherals are field-installed by our Applications Engineering and Field Service Group which is second to none.

The PDP-8/I will feature extremely comprehensive support and training programs. Because our small computers are often the first computer the customers have owned, Digital

has developed the kind of complete programming and maintenance training these people need. These courses, included in the basic price, are considered the finest in the industry.

Because the PDP-8/I makes high speed computing available to many inexperienced users, the new software system has been designed to make it easier to learn how to program. At the same time, the more experienced programmers will find that the software incorporates many advanced features previously unavailable with machines in the PDP-8/I class. The same proven software that runs the PDP-8 will also run on the PDP-8/I. Auto-indexing. MACRO. FC:RTRAN. On-line editing and debugging. These programs have been developed and proven in such demanding on-line applications as nuclear reactor control, medical data acquisition, and direct digital control of manufacturing processes. But that isn't all. Other new software is available which takes full advantage of 32K or more of DECdisc or DECTape memory.

A variety of products have been developed and are currently being designed by other manufacturers to include the PDP-8/I as part of the system. By using DEC computers these manufacturers (OEM's) are able to offer more versatile and power instruments, machines and systems.

Thus far the PDP-8 has been the acknowledged price/performance leader in the field, but its successor, PDP-8/I, (Continued on Page 6)



The first assembly area of the new PDP-8/I. Even as we go to press this facility is expanding.

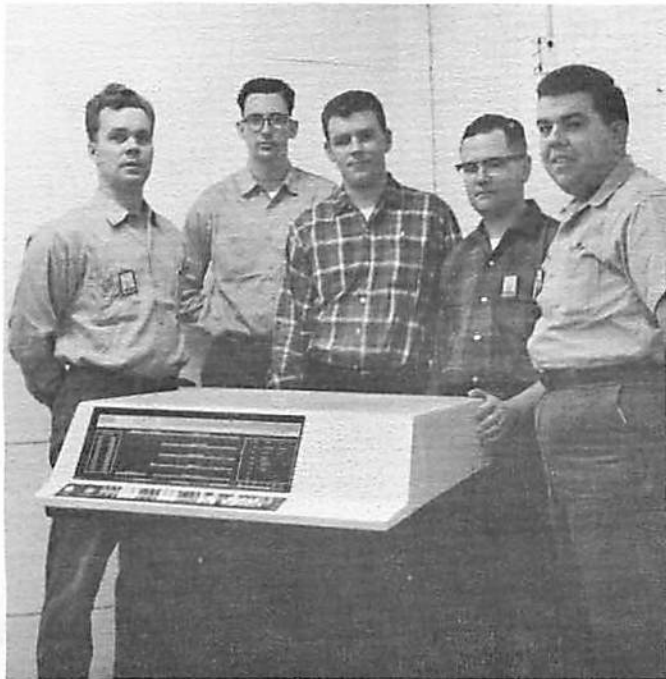
Fabrication Shop We Salute You!

Under the leadership of John Trebendis everyone in Fabrication has given the solid old ground floor a new look. Traditionally this is one of the most difficult areas in any busy plant to keep clean.

In the past few weeks John and his forty-two tried to finish their regular work by three o'clock. Then all who possibly could be spared began painting walls, floors, and just about everything dingy in sight. Finding time for such a project was not easy because, in addition to the production of the usual computer chassis and cabinet end panels, the PDP-8/I prototype was being made. Fortunately many of the men are competent in more than one skill. Not only does this give our Fabrication Shop the resilience to meet the unusual demands of our DEC pioneering, but also permits the assignment of work in such a way as to reserve time for a project like "The Paint In."

One of the real challenges of this project was the tool crib. Here are stored hundreds of tools and parts used each day by the men. The welders, machinists, mechanical assemblers, carpenters, and painters require quick access to these numerous items. Now most everything has been arranged neatly in boxes behind the scenes. On the wall are samples for the easy identification of the tools needed.

So 82 gallons of paint later there exists an attractive, efficient Fabrication Shop. The credit for this goes to each man led by Doug Hines (Metal Fabrication Welding, Spray Painting), John Caulfield (Machine Shop), George Silva (Carpentry), and Bob Burg (Mechanical Assembly).



Among the Fabrication Department's men who participated in the PDP-8/I prototype are those pictured here: (left to right) Veijo Epailys, Larry Brogan, John Caulfield, Doug Hines, and Henry Peront.

Edward Schwartz Named DEC Counsel

Edward Schwartz has been named our Corporate Counsel. Included in this position are the evaluation of terms and conditions of customer purchase orders, proposals, and the negotiation and preparation of leases for office space.

Before joining Digital, Ed was an Associate in the Boston legal firm, Cohn, Riemer and Pollack. In 1961 he completed a legal internship in the office of the Attorney General of Massachusetts. Ed received an A.B. in political science from Oberlin College before beginning his work toward the LL.B. from the Boston College Law School. He has been the associate editor of The Boston College Industrial and Commercial Law Review and The Annual Survey of Massachusetts Law. Our Counsel is a member of the Boston Bar Association, the Massachusetts Bar Association and the Connecticut Bar Association.

Ed lives in Needham with his wife, Alice, and their children, Eric (4) and Jeffrey (2).

Bill Sewalk Heads Central Region

Bill Sewalk has joined the company as our Regional Manager for the Central Region. He comes to us from General Electric where he was Manager of Advanced Systems Sales and Applications in the Industrial Control Division.

Bill holds a B.S. degree in Chemical Engineering from Carnegie Institute of Technology with further formal training in marketing, business and product planning, statistics, industrial electronics, and computer programming. He has published several articles in Chemical Engineering and A.E.C. Journal.

Bill will live in the Chicago area with his wife, Anne, and four children, Bob (12), Tom (10), Mary Anne (8) and Suzanne (6).

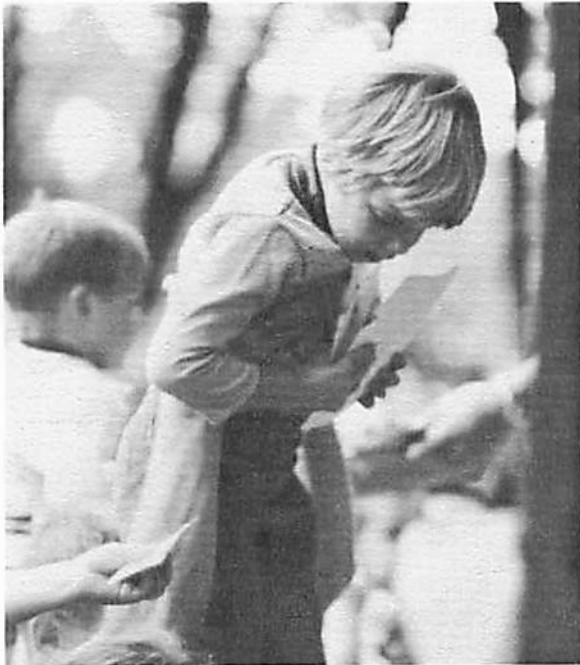
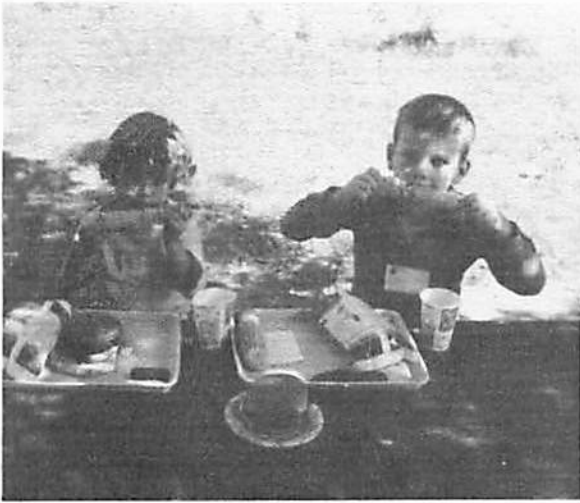
PDP-8/I

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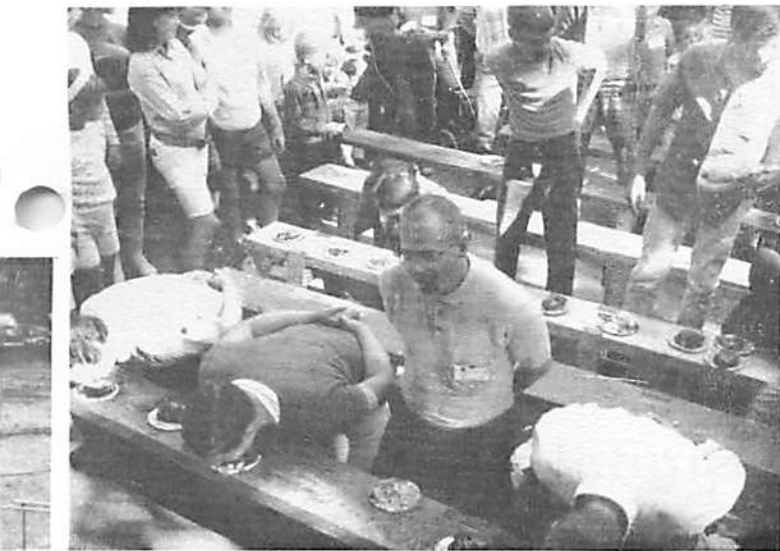
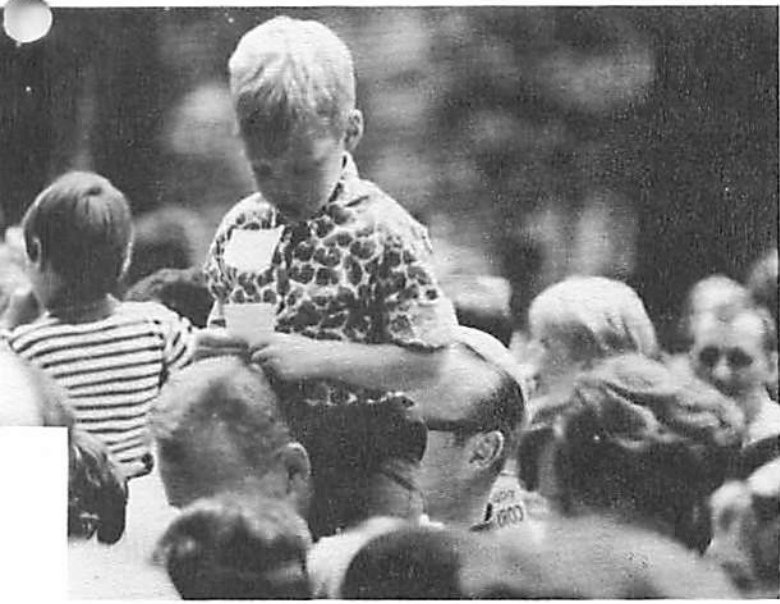
enjoys an even greater margin. It is interesting to compare the Whirlwind computer developed during the early 1950's with the PDP-8/I. The Whirlwind cost over \$3,000,000 and required about 4,000 square feet to house (that is the equivalent, in size, of both the Purchasing and Personnel departments). A Whirlwind required 60 tons of air conditioning; PDP-8/I needs none. A Whirlwind computation took 18-20 microseconds; PDP-8/I takes 1.5.

Increased markets for our new computer are predicted because we offer attractive quantity discounts, dependable delivery, and availability as soon as this Spring...so... PDP-8, move over, PDP-8/I is expected to be our all time winner.

Digital's Annual Fall Outing



Features Fun In The Sun



Personnel Department Occupies New Offices

The expansion of our Personnel Department directly reflects its increased responsibility in filling our Company's growing personnel needs. The Department now occupies 3,400 square feet of space, including new offices, conference, testing, and storage rooms, located on the 4th floor of Building 5. The new area was constructed with sound proofed walls for interviewing purposes. Currently, the Department's functions include personnel relations and employment responsibilities for Plant Personnel and Professional Personnel. Manager of the Department is Bob Lassen.

Manager of Plant Personnel is Paul Chambers, who supervises recruitment, selection and hiring, wage and benefit administration, progress evaluation and placement of hourly paid employees. The Plant Personnel function includes three major categories. Technician personnel and employment activities are handled by Joe Gaffney, while Ed Jafferian is responsible for Field Service needs. All other in-plant personnel work is managed by John Murphy, with Bob Grzyb and Wallace Skilling conducting most of the in-plant employment interviews. They are ably supported by Sandy Beatty, Pam Ruggiero and Genevieve Lawrence. In addition, Joe, Ed and John are responsible for such related personnel areas as the Cafeteria, Company social events, Fire Evacuation Plan, Plant Safety and Nursing, Retirement Plan administration and Personnel surveys.

Office Supervisor for clerical work is Bob Lassen's secretary, Jo Reilly. Records and schedules were maintained for the 6,000 employment interviews conducted during Fiscal 1967 at Maynard. Interviews outside of the plant, held at various schools, colleges, and other sites around the country, totaled an additional 1,800. Personnel's clerical staff handles hundreds of new records, badges, notices and other related personnel administration. Assisting Jo Reilly in this area are Gerry Burnham and Peggy Sawyer.

Lee Callahan is in charge of the Company's Group Insurance program, including the administration of employee claims, as well as the Payroll Savings Plan.

Our Manager of Professional Personnel is Graydon Thayer, who, in addition to managing Professional Personnel activities, is also conducting the company's first comprehensive supervisory development program. The first supervisory training course was programmed and taught by Mr. Thomas Allen of MIT's Sloan School of Industrial Management and was completed recently by 15 Digital managers and supervisors. In order to improve its effectiveness, participating individuals will critically evaluate each course at its conclusion.

Assisting Graydon is Dick Reilly, who is planning our college relations programs. This involves close contact with college placement directors and advising them of Digital's latest activities, as well as recruiting new people from 34

major colleges and universities throughout the country. Ernie Butler and Phyllis Lieberman provide the necessary secretarial support for our professional personnel activity.

Directing our first aid and nursing activities is Dot Hudson, assisted by Ronnieann Ferrara.

Although recruiting continues all year long, spring is usually the heaviest recruiting period. During the past year, 75 different technical schools and colleges were visited, resulting in a new recruitment record for technicians. (100 technicians were recruited.) Recruiting efforts take place in Boston, New York, Chicago, Detroit, and other large cities, as well as locations bordering military posts. Newspaper and magazine advertising is an important vehicle for attracting new employees. However, DEC employee referrals account for over 50% of our hourly hires and is one of our most valuable sources of good people.



Paul Chambers (L), Bob Lassen (C), and Graydon Thayer.

Digital Annual Outing Sunny Success

On Saturday, September 16, Camp Ararat in Maynard was the scene of the big Digital Annual Outing. Among the events for DEC picnickers were softball, football, badminton, horseshoes, pie eating, sack races, and a tug-of-war. The biggest attraction for children this year was the rides. There was a fire truck, a hayride, two swing-around rides and electric bumper cars. For parents there was the late afternoon band concert by the Maynard Community Band followed by square dancing called by DEC's Ed Mayall.

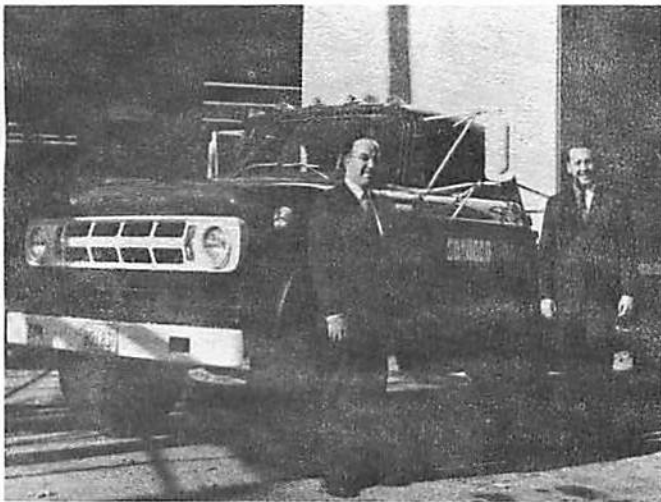
But why are we telling you all this? We think you were all there... about a thousand kids and fifteen hundred adults, anyway. What a collective corporate appetite we have! In total 1,800 pounds of hamburgers, hot dogs, and roast beef were consumed not to mention the fifty watermelons. The big question is the cubic feet of cotton candy eaten. Measuring cotton candy is pretty sticky business. We didn't try.

Personnel organized this wonderful day for us. Thank you, Personnel, from everybody.

Traffic Department Buys New Truck

Digital has just purchased a 1968 1-1/2 ton Dodge Van from John F. Coughlin, Jr. of The Great Road Garage in Maynard. The truck will primarily be used to haul unassembled production materials up to Carleton Place, and on the return run bring back assembled components such as PDP-8 "wings" and completed modules. In addition to handling production materials our truck will also carry all the interoffice mail to and from Canada. The 1,100 mile round trip requires only 2-1/2 days to be completed, including loading, unloading, customs clearance, etc.

The van will also be used locally for shipments to the airport and for computer deliveries to nearby customers. Operation of the 1-1/2 ton van and our smaller econoline panel truck will be directed by Frank Kalwell, Manager of Traffic.



John F. Coughlin, Jr., (L) of the Great Road Garage turns over Dodge truck to Henry Crouse (R), DEC Manager of Purchasing.

OCTOBER ANNIVERSARIES

One Year

George Arnold
Marion Billing
Lonnie Blair
Irene Blomiley
Eugene Bolden
Robert Bureau
Joseph Burke
Douglas Carpenter
Virginia Carroll
Mary Casello
James Chamberlain
Jane Clawson
Richard Cook
Mary Dearden
Claudine Delacourtie
LeRoy Eisner
Sylvia Erkkinen
Margaret Fahy
Richard Falt
Paul Fryatt
Gertrude Fulton
Judson Gilbert
Pascal Green
John Hall
Marjorie Haller
Allen Hanson
Kenneth Harrold
Robert Heald
Flora Hietanen
Edward Hilton
Joseph Hohos
Daniel Kaney
Peter Kaufmann
Loring Kew

Judy LaChance
Arthur Legasse
Penelope Land
Armand Landry
Frederick Lobdell
Forrest Lowell
Ernestine Lyons
Raymond Maloney
Kenneth Margeson
Mavis Wendy Mather
Richard Nelson
Elizabeth Nevala
John Pappas
Frank Pascucci
Patricia Pentz
Judith Percy
Donald Pickering
Joseph Pothier
Sylvia Ruble
David Schwarzwald
Thomas Sheehan
Josephine Spinazzola
Judith Stone
George Suller
Patrick Sullivan
Donald Summers
Gerald Tolman
Clarence Tremblay
Gary Trombley
William Walsh
Harry Winslow
Daniel Wisler
Robert Zlotnick

Two Years

Howard Brocius
Margaret Connolly
Robert Corbeil
Anthony Chulada
Evelyn Dow
Mary Goddard
Peter Gollnow
Edward Goodbar
Barbara Iannarelli
Melvin Mager
John Orifice
Henry Peront
Marie Poirier
Jerry Sarasin
Doreen Taylor
Jesselyn Tobin
John Tobin
Richard Wilkinson
Anna Zaker

Five Years

Richard Reilly
Mae Wuorio

Three Years

Stanley Baker
Virginia Barilone
Charlotte Cardullo
Mary Clark
Jimmy Davis
Philip Despo
Frank Hibberd
Marjorie Kazeniac
Dorolyn Lucas
Ingrid Moore
Claude Payette
Philip Smith
Lillian Werner
Ronald Wolf

Six Years

Rena Cavanaugh
Donald Crowther
Anna D'Errico
Millard Bud Dill, Jr.
Edward Duggan
Arthur Parks
Ethel Sousa

Four Years

Bertha Bettinger
Paul Chambers
Hilja Cutter
Robert Hesseltine
Stephanie Lambert
M. Therese Morin
Larry Portner
Thomas Quinn
Louis Raymond
Hazel Schnair
Celia Smart
Stephen Spaulding
Shirley Wood

Seven Years

John Anderson
James Hogan
Ken Pierce

Ten Years

Paul Green
Alma Pontz



NEW FACES AT DIGITAL

Marion Muzzioli	Boxboro	Accounting	Susan Tucker	Maynard	Comp. Prod.
Judith Reader	Stow	Strate Prosc.	Karen Mills	Hudson	Mod. "A"
Wayne Galvin	Seattle, Wash.	Seattle Office	Paula Mann	Hudson	Mod. "A"
Charles McComas	Acton	Programming	Meredith Lambert	Bedford	Mod. "A"
Barrie Knight	England	U. K. Office	Sue Kelleher	Maynard	Mod. "A"
Mark Barook	Ont., Canada	Canada	Alyce Furtado	Hudson	Mod. Test
John Kirk	England	U. K. Office	Therese Baird	Forge Village	Mod. "A"
Frederick Heathman	Ott., Canada	Canada	Charles Price	Alabama	Cambridge Office
Kenneth Newbold	England	U. K. Office	James Young	Burlington	PDP-10 Eng.
Gordon Clarke	England	U. K. Office	Rita Lancaster	Andover	PDP-8 Mrktg.
Ronald Smith	England	U. K. Office	Robert Antonuccio	Stoneham	Comp. Test Eng.
Geoffrey Hiscox	England	U. K. Office	Raymond Howe	Watertown	Accounting
David Akitt	Ont., Canada	Canada	J. Beverly Young	Cambridge	Med. Comp. Eng.
Martin Cashin	Littleton	Module Service	Paul Puschak	New York	Rochester Office
David Saari	Boylston	Strate Prosc.	Loehr Clark	California	Mid-West Region
Stan Harackiewicz	Millbury	Mod. Test	Diane Griffin	Littleton	Mod "A"
Richard Cygan	Hudson	Mod. Test	Jean Jolivet	France	Paris Office
Barbara White	New Mexico	Denver Office	John Kerr	England	U.K. Office
Sandra Leggee	Chelmsford Sm.	Comp. Spec. Sys.	Larry Olsen	Wisconsin	Chicago Off.
Maria Wuorio	Maynard	Mod. "A"	Richard Evans	Bedford	Model Shop
Harriette Hudson	Littleton	Mod. "A"	James Flemming	Auburn	Drafting
Gail Healy	Littleton	Mod. "A"	Dennis Mattson	Gardner	Drafting
Robert McHugh	Stow	Mrktg. Services	Carol Dunney	England	U.K. Office
Charles Blasi	Arlington	Sm. Comp. Prod. Eng.	Karol Goff	California	L.A. Office
William Mc Carthy	Lowell	Drafting	Eileen Timmons	Canada	Canada Office
Richard Boisvert	Dracut	Drafting	Marie Kluge	New Jersey	Phila. Office
Martha Richards	Wayland	Linc 8 Mfg.	Linda Mendes	Westford	Program Lib.
Joanne Jones	Ayer	Prog. Library	Donald Prange	Waltham	Comp. Prod.
Linda LeMieux	Bolton	Comp. Prog.	Gerard Bakker	Holland	German Office
Arlene LaLonde	Maynard	T. P. Writing	Maxwell Burnet	Australia	Australia Office
Lillian Johnston	Tewksbury	EDP	Bradley Dewey	Lincoln	Sm. Comp. Mktg.
Memrie Guidry	Ft. Devens	EDP	Pierre Jaillet	Cambridge	Sales
Jean Peterschmitt	France	France	Walter Vignault	Framingham	N. E. Sales
Robert Trottier	Ontario	Canada	Bruce Fawcett	Centerville	Mod "A"
John Dymont	Ontario	Canada	John Holland	Canada	Sm. Comp.
Peter Burton	England	U.K. Office	George Rice	Wayland	Sm. Comp. Mktg.
Peter Picthall	England	U.K. Office	Nikolous Pichler	W. Germany	German Office
Raymond Brown	England	U.K. Office	John Gannon	Shrewsbury	Mech. Eng.
Christopher White	England	U.K. Office	Thomas Elliott	So. Chelmsford	Comp. Prog.
Gary Efron	New Jersey	Philadelphia	Alan Frantz	Cochituate	Comp. Prog.
Danial Ridenour	New Jersey	New York Office	Roger Dow	Framingham	Sm. Comp. Eng.
Louis Tamarra	California	L.A. Office	Arthur Johnson	Connecticut	PDP-10 Eng.
Robert Higgenbotham	Huntsville	Huntsville Office	Donald Long	Ohio	Field Service
Menno Koning	Dover	PDP-10 Eng.	Richard Reilly	Peabody	Personnel
Richard Reilly	Peabody	Personnel	Charles Price	Alabama	Cambridge Office
Albert Couillard	Ontario	Canada	James Young	Burlington	PDP-10 Eng.
Peter Januskiewicz	Lowell	DTS	Rita Lancaster	Andover	PDP-8 Mktg.
Louis Cintron	New York	Comp. Prod.	Robert Antonuccio	Stoneham	Comp. Test Eng.
Rennie Ellice	Leaminstor	Model Shop	Paul Puschak	New York	Rochester Office
Ronald Roetzer	Maynard	Comp. Test Eng.	Judith Walsh	Billerica	Accounting
Alfred Carey	Maynard	Lrg. Comp. Mfg.	Celeste Lattanzi	Billerica	Accounting
Judith Cook	Ayer	Mrktg. Services	Ruth Baldwin	Maynard	Tech. Writing