

ONLINE

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DIGITAL EQUIPMENT CORPORATION • MAYNARD, MASSACHUSETTS

Extensive Changes In Maynard Buildings

Digital's program to improve work areas in the Maynard buildings is in full swing. Entire departments have moved, are moving, or will move into refurbished quarters.

Objectives of the remodeling program are to locate all members of specific departments in the same area, to place related projects close together, and to provide more space for departments which have grown.

The program will continue throughout the year. Present plans call for departments to be located as follows:

BUILDING THREE

1st Floor

Metal Shops.

5th Floor

Art Department, Photography, Mechanical Engineering, Program Library, Printing, Plant Engineer.

BUILDING FOUR

3rd Floor

PDP-8/S Production, Numerical Control, Small Computer Stock Room, Software Stock Room.

4th Floor

Drafting.

BUILDING FIVE

1st Floor

PDP-8 and 8I Manufacturing, LINC-8 Manufacturing, Production Engineering and Administration, Peripherals, Teletype Assembly, DISC group, Display Manufacturing, Manufacturing Engineering, Production Engineering.

2nd Floor

Accounting, Systems and Procedures, Corporation Council, Office Services, Advertising, Special Systems, Technical Writing, Northeast Regional Sales and Service, Maynard District Sales and Service, PDP-8 Product Line.

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Devault Named Module Product Line Manager

Allan Devault, formerly Module Marketing Manager, has been promoted to Module Product Line Manager. The position, which reports directly to Vice President Stan Olsen, carries broad design, engineering, and marketing responsibilities for a multimillion dollar product line.

Modules, Digital's original product line, still account for a growing and very significant portion of our company's income. In fact Digital enjoys the distinction of being the world's largest manufacturing supplier of modules. Our FLIP CHIP, K-Series and M-Series modules are used throughout the world.

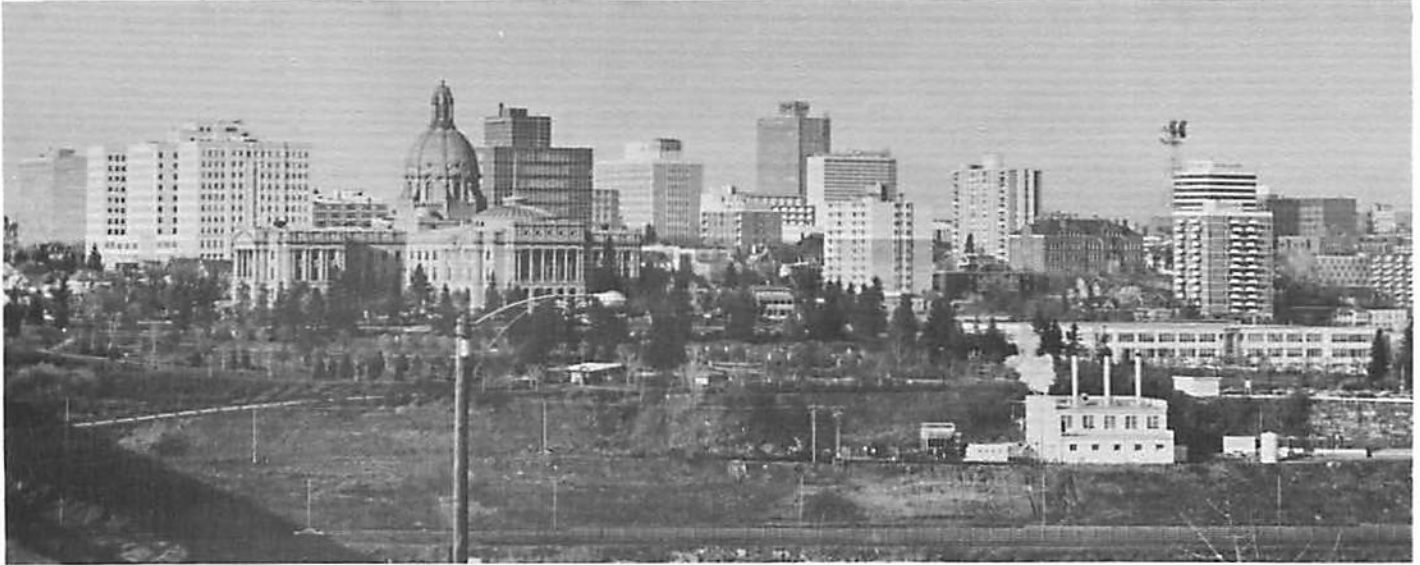
The Product Line, which Al now heads, delivers approximately 20,000 modules per month to customers outside of DEC. Al joined DEC in December, 1966, after serving as a staff engineer and project engineer with other New Eng-

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Among the head table group at the final dinner of Digital's European Sales Meeting in Naarden, Holland, were (left to right) European Regional Manager, John Leng; Manager for France, Jean-Claude Peterschmitt; Vice President, Nick Mazzaresse; President of the Compagnie Francaise de Telegraphie Sans Fil, Maurice Ponte; and Digital Director, Arnaud de Vitry.

New DEC Office Serves Huge, Booming Territory



Edmonton, Alberta, the site of Digital's northernmost office on the American Continent, is an important industrial and cultural center. (National Film Board - Photo by Duncan Bancroft)

Brrh! - it's cold in Edmonton! But the city is an important booming and bustling metropolis. It is also the site of one of Digital's newest and northernmost offices on the American continent.

The Staff

In charge of the office is Reg Rea, a graduate of Queen's University in Kingston, Ontario. Field service technicians are Dave Akitt and Dave Wiens. Their territory stretches some 1,500 miles from Lake Superior to the Pacific ocean.

The City

Edmonton, a city of 500,000, is situated in the heart of oil rich Alberta Province. It is a major petroleum center and also serves as a supply depot and commercial center for Arctic operations. The lowest recorded temperature is -57° , but winter temperatures of -40° are common. Summer temperatures reach into the nineties and the long daylight hours make for excellent crops. Edmonton boasts one of the largest and most modern airports in North America, an excellent planetarium, a theater for the performing arts, and a university which claims to have the most extensive computer facilities in Canada.

Edmonton's stature as a major Canadian city is a recent phenomenon. During World War II it figured prominently as a supply depot for the building of the Alaska highway. In 1947, a major oil find at Leduc, a few miles south of the city, signaled the beginning of the oil boom which is now an essential part of Alberta's economy.

The DEC Market in Edmonton

Like the city itself, DEC's market in and around Edmonton is unique. The major customer is Interprovincial Pipelines, Ltd. which uses 25 PDP-8/S computers to control a pipe-

line starting at Edmonton and running through four Canadian provinces and three American states to reach its destination at Sarnia, Ontario, some 2000 miles away. Another customer is the Research Council of Alberta which is studying the transmission of solids through a pipeline. It is hoped that this research will lead to the commercial exploitation of pipeline fluids to pump small packages across the country at economical rates.

The University of Manitoba in Winnipeg uses a PDP-9 at its cyclotron facility, and the Saskatchewan Power Corporation uses PDP-8's for unscrambling telemetry data.

Additional Improvements Made in Sick Pay Plan

Another important step -- a change in sick pay procedures for hourly employees -- has been taken toward providing DEC employees with a full range of progressive fringe benefits.

The change liberalizes the method by which sick pay days are accrued: in any calendar month in which an employee uses any or all of his accrued sick paid days, he is now entitled to immediately begin to accrue additional sick paid days (including one for the full month in which the illness occurred) up to the maximum of 12 days. Under the former system, if an employee had used 12 days accrued sick pay in a calendar month, he then had to wait 12 months before he received additional days of sick pay.

Compared to other plans, Digital's is one of the most liberal offered. Combined with the company-paid accident and sickness income protection coverage, it significantly reduces the hourly employee's loss of income resulting from absence because of illness.

Purchasing: Skilled, Complex, Vital Process

When you are responsible for annual purchases totalling in the eight figures, you have to be sure that you are getting the most and the best for your dollar. A few cents trimmed from an item can result in many thousands of dollars saved.

You can do this by demanding quality and following through to make sure you get it, negotiating aggressively with your suppliers, using resourcefulness and creativity, establishing standards, and thoroughly inspecting everything you buy to weed out flawed or defective materials.

These are precisely the methods used by Digital's Purchasing Department: a team of engineers, buyers, receivers, testers, and administrative personnel. Theirs is a monumental job -- more complex and more skilled than one might assume. Together they must select, negotiate for the purchase of, acquire, and inspect millions of dollars of purchases per year.

They must insure that the best prices are being paid, that high standards are met, that the Company does not accept defective or substandard materials, and that deliveries are made on time. To do the job, Digital's Purchasing Department, headed by Henry Crouse, has the tools it needs: sophisticated test equipment, a competent staff which combines a wide range of skills, and a 10,000-catalog library.

Vital to the Department's success are the buyers, individuals who must have an unusual blend of abilities. They must be creative -- idea men, technically competent and knowledgeable, astute and aggressive negotiators, and able administrators.

Typically, the buyer's job starts with the design engineer and includes working with the specifications writer, preparing the request for bids, negotiating and awarding the contract, scheduling deliveries, insuring that purchases are received, that specifications are met, and that exacting tests are conducted.

Digital's team of buyers includes: Paul McGaunn, semi-conductors; Richard King, mechanical components; Bill Burns, peripheral equipment; Tom Kennedy, passive electronic components; Pete Waldron, maintenance, repair, and operating supplies; Lee Goodbar, located in the Fabrication Shop, and Lon Beaupre, expendable supplies.

Equally important are the component engineers, whose technical know-how must bear heavily throughout the purchasing process in assessing the technical competence of a supplier and the suitability of his product for DEC use. They are: Bob Hughes, semiconductors; Harry Brockington, passive components; and Dick Heaton, peripherals.

The inspection section, headed by Ed Hogan, uses a sophisticated array of equipment to test materials in the most thorough and vigorous ways possible. The equipment includes an integrated circuit tester (a PDP-7 with multiple automatic test stations), a diode tester which tests every single incoming diode, a camera-equipped microscope, and an optical comparator. Defective items, valued in the many

thousands of dollars, are returned to vendors as a result of rigorous testing.

Purchasing also has the services of a full-time specifications writer: Bob Heald; and an integrated circuit programming engineer: Blaine Belecki. Phil Feehan supervises the receiving area.

Henry Crouse points out, "Each and every one involved are extremely aware of their contribution to the profit structure of the Company. The decisions they make are vital to the Company's earnings."

Silk Screen Transformed By Cleanup Campaign



There's a new look in the Silk Screen Department as a result of a cleanup campaign conducted by the members of the department.

Cleanup fever, which started in the Fabrication Shop, has spread to the Silk Screen area and has resulted in an amazing transformation. What was once an unattractive work area, because of the blue ink and chemicals used in the silkscreening process, has vanished beneath coats of fresh paint, rearranged equipment, and new shelves.

Credit for this transformation goes to the Silk Screen Department members themselves. Led by group leader Tony Bader, they personally conducted the sprucing up project. The floor-to-ceiling painting, cleaning, and rearranging was accomplished over a period of about six weeks. Further credit is due to the men because they did the job without disrupting the normal work schedule. In fact, output actually increased during the clean-up period.

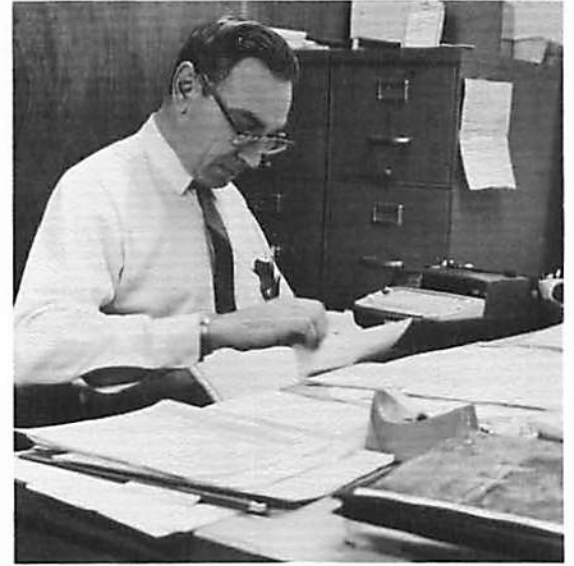
STEPS IN MAKING A PURCHASE

The pictures show the various steps required in making a typical purchase (integrated circuits). Step 1: Purchasing Department engineer Bob Hughes reviews integrated circuit plans with engineer Dick Sogge (L.). Step 2: Specifications writer Bob Heald, prepares the specifications for the integrated circuit. Step 3: Purchasing Department secretary Ann Windheim types the request for bids which will be sent to various suppliers. Step 4: After selection of the supplier, Buyer Paul McGaunn negotiates the terms of the contract. Step 5: John McCadden, Production Control, issues a requisition for the purchase. Step 6: Paul McGaunn schedules the delivery. Step 7: Receiving Supervisor, Phil Feehan, processes the incoming shipment of integrated circuits. Step 8: In the final step of the purchasing process, Engineer, Blaine Belecki, tests the integrated circuits. Defective items will be returned to the vendor.

1. Planning



2. Spec. Writing



3. Preparing Requisition



4. Negotiating



6. Scheduling



7. Receiving



5. Preparing Purchase Order



8. Testing



DEC Computer Aids Trinity Football Team

Possibly some of the credit for Trinity College's (Hartford, Conn.) recent 6-1-1 football record should go to a DEC PDP-8 computer.

The PDP-8 was programmed by graduate student Tom Ripley to look for tendencies in offensive tactics of Trinity's opponents. The computer prints out a play-by-play report of the game with 19 separate pieces of information on each play in the game. It then runs through nine master programs to identify tendencies for Trinity to look for in future games.

Trinity Coach Terry Herr indicated that he was generally looking for the favorite plays of strong teams. Weaker teams, he said, tend to change tactics more often. "That doesn't mean we're only prepared for those strong plays," he cautioned. "It just means we have an idea of what kind of defensive adjustments to make in certain cases."

The computerized football scouting report programs interpret 75 offensive plays (one full game). Each play consists of 19 data components and is sorted into seven predetermined groupings. In order to accomplish this task using Digital's PDP-8 and the Fortran II language, the nineteen data input components are numerically represented. After the seventy-five plays are sorted, the output is translated into a designated football code. The result is a clear, concise picture of the opponent's offensive strengths, weaknesses, and tendencies.

Ripley spent hundreds of hours during the summer to write up the programs. But his time was well spent: it not only contributed to a successful football season, but it also cut the time required for making scouting reports in half.



A Trinity tackler, aided by computer - provided information on opponent's plays, brings down an opposing ball carrier.

Cary Armstrong Is Appointed Washington Mgr.



Cary Armstrong's appointment as District Manager in Washington, D.C., has been announced by Mid-Atlantic Regional Manager Dave Denniston.

Cary brings extensive experience to his new position, having served as an instructor, regional manager, and research scientist with several internationally-known firms. He also has considerable experience in marketing computers to scientific users.

Cary is a graduate of the University of Virginia. He was born in Richmond, Virginia, and currently resides in Annandale, Virginia. He served in the U.S. Navy for six years as an electronics technician. Cary lists his interests as golf and music, categorizing himself as a "duffer" in the former and a "listener" in the latter.

(continued from page 1)

Devault

land electronic firms. He was born in Clinton, Massachusetts, and is an electrical engineering graduate of Worcester Polytechnic Institute. He is married to the former Valerie Buttura of Barre, Vermont. They have one son, Kevin (8), and reside in Framingham.

Al is very optimistic about continued growth for Digital in the module area. He predicts continued growth in sales of the FLIP CHIP modules, and tremendous potential in the K and M series areas. "We are very serious about staying the world's largest manufacturing supplier of modules," he states, "and this requires a concerted effort on the part of Sales, Engineering, and Production Personnel."

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Buildings

BUILDING FIVE

3rd Floor

Computer Administration; Module Product Line; Marketing & Engineering; PDP-9 Product Line, Marketing & Engineering; Marketing Services; Central Order Desk; Model Shop; Library; Sales Administration; Shipping Crating; National Field Service; Northeast Regional Field Service; Direct Mail; Trade Shows.

4th Floor

Purchasing, Personnel, Module Production and Test, Cafeteria, Receiving, Sub-Assembly.

5th Floor

PDP-10 Product Line, Marketing, Engineering and Production, LINC-8 Marketing and Engineering, PDP-9 Manufacturing, Touch-Up and Crating, Small Computer Production Control.

BUILDING SIX

6-D-1

Metal Shops.

6-D B-3

Power Supply Manufacturing.

BUILDING SEVEN

1st Floor

Thru-hole plating Process, Metal Shops, Wire Wrap, Module Development.

BUILDING ELEVEN

Training Department, Silk Screening.

BUILDING TWELVE

1st Floor

Executive Offices, Computer Center

2nd Floor

Programming.

3rd Floor

Programming, Photo Lab.

ANNIVERSARIES

Two Years

Klaus Arlt	Sylvia Head
Isabel Alpine	William Heavey
Robert Barnes	David Herbert
Edward Blair	Peter Hoth
Earl Bouse	Albert Johns
Robert Bruno	Charles Kotsaftis
Bernice Coggins	Axel Kroseberg
Michael Eaton	Richard LeBlanc
Ann Ferraro	Ralph Morse
Ann Flagler	Charles Sapienza
Robert Fronk	Roger Schattilly
Rosalind Goodman	Emily Smith
Fred Gwin	Carol Wojznsis

Six Years

Lucille Chisholm
Galen Davis
Francis Fortin
Richard King
Stella Kodzis
Joseph Kosiewski
Raymond Lovely
Richard Mangsen
John Trubiano

Three Years

Allen Kluchman Marjorie Mahoney
Leo Landry James Murphy, Jr.

Seven Years

Katherine Pareago
John Simeone
Kenneth Fitzgerald
Fred Gould
Josephine Milewski

Four Years

Leo Bulduc
Robin Frith
Mary Thomas

Eight Years

William Davidson

Five Years

Anita Carton	Ingeborg Tolentino
Lois Evans	Veronica Trebendis
Jack Hagerty	

Nine Years

Richard Best
John Culkins

London's Strand Hotel Uses PDP-8s For Billing

Guests departing from one of Europe's largest hotels, the 800-bedroom Strand Palace in London, will soon have their bills prepared by Debbie, a newcomer to the staff who will be able to produce complete detailed accounts in less than 15 seconds.

Debbie (Duplex Electronic Billing Bookkeeping and Information Equipment) is actually a dual system of DEC PDP-8 computers. The advantage of this system is that if one computer fails, the other takes over to insure an ever-ready service. The PDP-8s will handle up to 300 bills a day.

This is the second DEC installation at the Strand. Last year a PDP-8/S was installed to assist with the planning of advance bookings.



NEW FACES AT DIGITAL

Carrie Allan		Mod. Prod. "A"	Margaret Ciorciari	Marlboro	Accounting
Josephine Stephens	Stow	Purchasing	Judy Beland	Maynard	N. England Sales
Jacqueline Cunningham	Maynard	Mod. Prod. "A"	Thomas Forrest	Marlboro	Receiving
Hilda Torppa	Maynard	Mod. Prod. "A"	Arthur Lamy	Berlin	Maintenance
Pauline Karkota	Forge Village	Mod. Prod. "A"	Joseph Diskin	Concord	Mod. "A"
Mary Jeanson	S. Acton	Mod. Prod. "A"	Gary Flanders	Northboro	Drafting
Pamela Ferguson	Maynard	Accounting	Steven Cutshall	Maynard	Comp. Prod.
Kathryn McCullem	Washington	Washington	Ronald Carlson	Berlin	Lg. Comp. Manuf.
George Robinson, Jr.	Lowell	Drafting	Eugene Dionne	Nashua	Lg. Comp. Engr.
Joseph Tomy!	Maynard	Machine Shop	Cary Armstrong	Virginia	Wash. D. C. Sales
Mendall Colburn	Fitchburg	Comp. Prod.	John Webster	California	Palo Alto
Raymond Garry	Clinton	Comp. Prod.	James Craig	Needham	Field Service
William Webster	Pittsfield	Training	Joseph Carruolo	New Jersey	Philadelphia Sales
Kenneth Powell	New Jersey	Training	Ann Duval	Fitchburg	E. D. P.
James Sproles	Huntsville	Huntsville Off.	Kathleen Milton	Maynard	Personnel
Gene Sengstock	Ashland	Training	Nancy Busch	Houston	Houston Sales
Gustavus Chikwendu	Amherst	Comp. Prog.	Mary Czohara	Maynard	Sm. Comp. Mktg.
Eric Hokans	Northboro	Sm. Comp. Mktg.	John McNiff	Acton	Mod.
Roger Cady	Acton	Sm. Comp. Prod. Engr.	Thomas Jessing	Hudson	Comp. Prod.
Phillip Wood	Wrentham	Mod. Prod. "A"	Calvin Buckley	W. Concord	Lg. Comp. Manuf.
Earl Dimmick	California	Palo Alto Sales	Domenic Fasoli	Medford	Drafting
Polly Combs	Huntsville	Huntsville Sales	Walter Ruback	Maynard	Receiving
Arlene Dobosh	Ft. Devens	Data Proc.	Mary Kalinowski	Maynard	Comp. Prod.
Pauline King	Maynard	Module Test	Ebba Kivinen	Maynard	Mod. "A"
Richard Gale	Maynard	Lg. Comp. Manuf.	John Dantini	Fitchburg	Accounting
Owen Ose	Maynard	Training	Roger Morel	Lynn	Comp. Prod.
Thomas Longsjö	Fitchburg	Lg. Comp. Engr.	Sharon Lane	Acton	Model Shop
Lawrence Hess	Westwood	Sm. Comp. Mktg.	Paula Huebner	Framingham	Office Serv.
Warren Garlick	Maynard	Comp. Test. Engr.	Elizabeth Weyn	Acton	Comp. Prod.
Karen Hopkins	Sudbury	Mod. Prod. "A"	Thomas Hastings	Cambridge	Lg. Comp. Prog.
Marcella Holmes	Maynard	Mod. Prod. "A"	Estelle Madden	Maynard	Computer Prod.
Winifred Clark	Maynard	Mod. Prod. "A"	Myrtle Kelley	Maynard	Computer Prod.
Ulysse Cormier	Marlboro	Mod. Prod. "A"	Mary Calabria	Maynard	Computer Prod.
Donald Peterson	W. Acton	Purchasing	Lillian Crue	Stow	Computer Prod.
Yrjö Kuosmanen	S. Acton	Maintenance	Kathleen Galvin	Maynard	Computer Prod.
Louis Hohos	Berlin	Comp. Prod.	Diane Schnair	Maynard	Computer Prod.
Richard Langer	Maynard	Field Service	Betty Ann Sanford	Hudson	Computer Prod.
David Neff	Maynard	Field Service	Judith Wood	Harvard	Computer Prod.
Paul Sirk	Mattapan	Model Shop	Frances Cocco	Maynard	Computer Prod.
Larry McGowan	Natick	Comp. Prog.	Mary Fowler	Maynard	Computer Prod.
Ronald Howington	Sudbury	Field Service	Grace Colombo	Maynard	Computer Prod.
Frank Edelmann		Nat'l Sales	Helen O'Hara	Maynard	Model Shop
Alexander Campbell	Boxboro	Nat'l Sales	Alice Yorston	Hudson	Mod. Prod. "A"
Kenneth Willis		Albuquerque	Margaret Leone	Sudbury	Mod. Prod. "A"
Peter Flowers	Boston	Drafting	Raija Helander	Maynard	Mod. Prod. "A"
Leon Ferber	Norwich	Dig. Test Sys. Engr.	Mary Downey	Hudson	Mod. Prod. "A"
Sandra Bollinger	Maynard	Mod. "A"	Frances Sindoris	Lexington	Mod. Prod. "A"
Michele Rheame	Acton	Mod. "A"	Mary Wellner	Maynard	Mod. Prod. "A"
Carmen Hernandez	Ft. Devens	Mod. "A"	Lillian Moody	Maynard	Mod. Prod. "A"
Benjamin Pakus	Maynard	Model Shop	Anne Driscoll	Maynard	Mod. Prod. "A"