# digital MAYNARD

# DIGITAL THIS WEEK



Volume 12, Number 14 August 5, 1985

# Digital donates \$4.94-million to state Microelectronics Center

Governor Michael Dukakis recently accepted a \$4.94-million donation of computer equipment from Digital on behalf of the Microelectronics Center of the Massachusetts Technology Park Corporation (MTPC). The Center, established as a public-private partnership in 1982, will offer advanced training and research in the design and manufacture of semiconductor chips, core element in all of today's electronic systems.

Speaking at Digital's semiconductor facility in Hudson, Ken Olsen, president, praised the Microelectronics Center as a partnership that "makes sense for Digital, for the computer industry, for our universities, and for all of Massachusetts. Our investment in the Microelectronics Center is really an investment in our future success as a company."

Digital's gift, five VAX-11/785 computers and several dozen graphics workstations, is the largest corporate donation made to the Center to date, meeting 25 percent of the Center's \$20-million matching grant requirement, imposed by the State Legislature when the Center was created in 1982. The Center is a project of the MTPC and is intended to provide the support necessary to train workers needed by Massachusetts' electronics industry.

"We rely on a highly educated and skilled work force to take developments in chip de-



(I-r) Congressman Chester Atkins, Ken Olsen, president, and Governor Michael Dukakis exchange a few words following a press conference at the HLO facility where Digital was recognized for donating \$4.94-million of equipment towards the Microelectronics Center, a project of the Massachusetts Technology Park Corporation.

sign such as our MicroVAX II system from an idea to a product," said Ken.

Jeff Kalb, vice president, Low-End Systems and Technologies, and acting chairman of the Board of the MTPC, the parent body of the Microelectronics Center said,

"We intend to see many more state-of-theart semiconductor products coming from Massachusetts and the training that the Center will make possible is key to that." Massachusetts Congressman Chester At-

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# Digital is first to file 32-bit chip under Semiconductor Protection Act



(I-r) Bill Mulcahy, Burlington plant manager, and Jeff Kalb, vice president, Low End Systems and Technologies, listen to Senator Patrick Leahy of Vermont comment on the Semiconductor Chip Act of 1984, under which Digital registered its new 32-bit chip at a registration ceremony held recently in Washington, D.C.

Digital recently became the first company to file for "mask work" protection for a newly developed and marketed integrated circuit — its MicroVAX II chip and its MicroVAX II floating point unit chip — in a filing with the U.S. Copyright Office under the Semiconductor Chip Protection Act of 1984.

Other chips registered thus far have been commercially available since before the law went into effect last November and as a result are only partially protected under the act. Digital's chip set was introduced in May when the company announced its MicroVAX II and VAXstation II systems.

Digital's MicroVAX II semiconductor chip is the first 32-bit microprocessor-on-a-chip to be registered under the act. As such it includes all the features of a 32-bit central processing unit, such as memory management, on one chip.

At ceremonies in Washington, Digital offi-

cials honored Senator Patrick J. Leahy (D-Vt.) in whose state the first MicroVAX II systems are being manufactured and Rep. Robert W. Kastenmeier (D-Wis.).

"Digital is grateful to Senator Leahy and Representative Kastenmeier who were instrumental in the passage of the Semiconductor Chip Protection Act of 1984," said Jeff Kalb, vice-president, Low End Systems and Technologies, as he presented the law-makers with semiconductor wafers and chip sets commemorating the registration.

Other lawmakers recognized for their leadership in passage of the Semiconductor Chip Protection Act were: Sen. Dennis De-Concini (D-Ariz.); Sen. Charles Mathias (R-Md.), Senator Strom Thurmond (R-S.C); Rep. Don Edwards (D-Calif.); Rep. Norman Mineta (D-Calif.) and Rep. Barney Frank (D-Mass.). In addition, the staffs of the Judiciary

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# Digital honored for employment of disabled



Digital was recently awarded a citation by the Electronics Industry Foundation (EIF) for its efforts to employ disabled workers through Massachusetts Project With Industry, Inc., (MPWI) a local partner of the national EIF Project With Industry program. (I-r) Digital's Phil Sardella, manager, U.S. Employment, was named as the Digital executive responsible for promoting these efforts and was given the award in Washington, D.C. by Carol Dunlap, PWI National Project director for EIF.

# Employees may participate in WGBH pledge night

Seventy-five employees may participate in a pledge night on August 23 at WGBH Channel 2 in Boston by answering telephones. That night Digital will be presented with an award for being the largest corporate contributor. Pledge night participants will be given dinner and a tour of the WGBH facility. Entertainment will be provided. Anyone interested in attending should contact Corporate Employee Services and Recreation at DTN 251-1313 for an invitation.

## **DIGITAL THIS WEEK**



## Editor: Jane Littlejohn

Send stories, photos, ideas or suggestions to DTW, CFO2-3/K23 or call the editor at DTN 251-1307. Ads must be submitted in writing to Marketplace, CFO2-3/K23. Please direct all Marketplace inquiries to DTN 251-1308.

Digital This Week is published every other week by the Corporate Employee Communication department of Digital Equipment Corportion for the Employees in the Greater Maynard area.

# CAEM announces four marketing agreements for earth resource engineering

CAEM (Computer Aided Engineering and Manufacturing) recently signed agreements with four major oil exploration and production software firms to cooperatively market their software on Digital's VAX computers. All four companies, Scientific Software-Intercomp, Inc. (SSI), Dynamic Graphics, Inc. (DGI), Zycor, Inc., and Energy Systems Technology, Inc. (ES) provide state-of-theart application software for hydrocarbon exploration and production.

#### DGI and Zycor

Zycor and DGI are recognized as two of the world's leading vendors of contouring and subsurface modeling software. Contouring and subsurface modeling of spatial data is central to all aspects of petroleum exploration and production. Spatial data is the basic information related to all petroleum prospects. When it is converted to a contour map, crossection or subsurface model, it becomes a much needed tool for spatial interpretation.

DGI's and Zycor's product sets have been designed to take advantage of the latest technology in interactive computing and graphics. They are well-developed computer programs that:

- contour and model spatial data
- display base map data
- edit contours
- display and manipulate well log data
- display seismic lines
- set up data prior to input to a reservoir simulation application

Both companies are rapidly moving to satisfy new industry requirements by developing software modules for reservoir simulation set up, manipulating navigation data, and are working to improve subsurface modeling display techniques such as multiple surface representation.

Zycor is also developing a module for seismic line display and fence diagrams creation. And DGI is developing a well log display module.

#### ES

ES is recognized as a premier vendor of interactive and batch mode well log analysis software and several major corporations are standardizing on their ESLog<sup>®</sup> software.

ES's ESLog well log analysis software is used to define the geological characteristics of oil and gas reservoirs and the quantity and type of hydrocarbons present in those reservoirs. Unlike many software programs in this market — which were originally written for batch mode and later converted to interactive mode — ESLog was developed specifically for interactive operation and is especially suited to the workstation environment.

ES is rapidly moving to satisfy new industry requirements by providing synthetic seismograms and integration between its ESLog software and contouring and subsurface modeling software from other vendors.

#### SSI

SSI is recognized as the primary developer of reservoir engineering, production engineering, pipeline facilities engineering, and well log analysis software for the oil and gas industry. SSI's products are primarily used to determine the most feasible and economic methods of recovering and gathering petroleum products.

They are complex computer programs that:

- Describe the geological characteristics of petroleum reservoirs and determine the volume of hydrocarbons present.
- Analyze well logs for quantities of oil and gas present and the geometric and physical properties of an oil reservoir.
- Simulate primary, secondary, and tertiary recovery techniques.
- Predict effectiveness of hydraulic fracturing and other well completion techniques, plus analyze complex well tests.
- Simulate flow through complex surface facilities and pipeline networks.

All four companies' products are used in most of the important hydrocarbon and natural resource exploration and production regions in the world. Their customer lists include a significant proportion of the large international and domestic oil companies as well as several major mining companies and government agencies.

Digital's VAX computers have historically been selected for earth resource applications as an economic alternative to mainframe computers, and there is a considerable installed base of VAX computers in this market. Industry trends present even greater opportunities for Digital's VAX computers running Zycor, DGI, ES, and SSI software in this market.

# Funding available for advanced development projects

The Corporate Research and Advanced Development Committee (RAD) has funds available to support innovative advanced development projects in any area of technology of interest to Digital. Areas of technology the committee has supported in the past include: software, hardware, computer systems, and manufacturing.

To coincide with the current RAD funding

cycle, proposals should reach the committee by Thursday, September 19. However, in special cases the committee will consider proposals at any time.

Employees with ideas should contact their managers or Anna Gorski, RAD administrator, at DTN 289-1825 or on the ENET at KELVIN::GORSKI.■

# Expanded travel program designed to reduce company expenses

For employees who must travel to conduct business, Digital is expanding the travel program that currently serves the Maynard and Nagog area. The program, designed to provide cost effective and quality services, will expand to Marlboro, Northboro and Hudson in early August with plans to be available in southern New Hampshire by Q2. It will reduce Digital's operational travel expense and enhance the company's ability to negotiate and implement discounts with airlines, hotels and other travel vendors.

Among other things, the travel program involves the consolidation of travel agency agreements with Crimson Travel Service. Branch offices staffed by agency employees will be opened convenient to facility groups that have a large volume of travel activity. Digital staff will monitor agency performance, ensure adherence to company policy and interface with the agent and Digital cus-

tomer. The centralization focuses on managing travel to achieve reductions in costs, consolidated buying power, control and quality assurance. According to a new policy supporting Digital's commitment to manage travel, "where provided for, employees must use the travel service under contract to their site for airlines, hotels/motels, automobile rental and any other details associated with business travel." This policy will be incorporated into Personnel's Policy and Procedures manual early this fall.

In addition to the consolidation of travel service vendors, another travel policy change (May 1985) has been included in the Business Expense section (5.11) of the Personnel manual. This policy states that employees are now allowed to accumulate points from frequent flier programs as long as in doing so no additional, unnecessary expenses are incurred.

The intent of both policies is to control costs, ensure that the appropriate services are received for money spent on travel and achieve full utilization of the company's travel programs.

Among the services provided for business and personal travel are advance seat assignments, boarding passes on major carriers, special low fare programs, 24-hour toll free emergency phone service, frequent ticket delivery and negotiated fares for groups, conventions and seminars. They are available through the Maynard, and Acton/Nagog offices and will be available in Marlboro beginning August 12. Merrimack/-Nashua office(s) will open in late September.

For more information on the expanded travel program or new policies, contact Beebe Meyer, Corporate Travel manager, at DTN 223-4975.

# Beebe Meyer named Corporate Travel manager



Beebe Meyer

Beebe Meyer has been named Corporate Travel manager, reporting to Doug Hammond, Corporate Administrative manager.

In her new position she will have overall responsibility for

travel at Digital within the United States. She will coordinate how the company manages travel and deal with all aspects concerning travel including airlines, travel agencies, hotels, and car rentals.

A Digital employee since 1980, Beebe joined the company as Corporate Travel consultant and became manager of the Operational Travel groups in Maynard in 1982

Before joining Digital, she worked as a Tariff specialist for Pan American World Airways and Travel manager for Arthur D. Little, Inc.

# Digital sells VAX computer systems to London Stock Exchange, broker

Digital Equipment Co. Limited has announced the concurrent sale of \$1.5-million of computer equipment to two of Great Britain's stock exchange establishments.

The London Stock Exchange purchased two VAX 8600 computer systems to be used as the basis of the Stock Exchange Automatic Quotation system (SEAQ), the Exchange's new Electronic Marketplace.

Concurrently, a leading stock broker, Scrimgeour Kemp-Gee, acquired a VAX 8600 system to complement the VAX-11/780 cluster configuration that the firm already employs. This larger VAXcluster will be linked to a world-wide network utilized by Citicorp to provide financial services to the bank's branches in New York, London, Bahrain, Brussels, Hong Kong and Tokyo.

The Stock Exchange's system will provide price and trading information via terminals at brokers' offices and on the floor of the Exchange, displaying competing prices of stocks and details of previous trades.

According to Mike Newman, head of Information and Trading Systems at the Exchange, and the Stock Exchange Project manager for SEAQ, "We have been very satisfied with the performance and reliability of the VAX-11/780. With the introduction of the VAX 8600, with its significant increase in processor power, which will be required for SEAQ, we felt that to continue with the VAX architecture — with the advantage of compatibility — was the correct decision."

At Scrimgeour Kemp-Gee, the VAXcluster configuration will be used to provide the company's personnel and their top 250 clients with a variety of real-time, fundamental, and historic information.

According to Michael Oliver, a broker at Scrimgeour Kemp-Gee, "We had chosen Digital's VAX in the first place because the compatibility of the product range would allow us to expand as we needed to, and allow us to integrate more powerful systems as they became available — without the need to change any of the software. We now have achieved this with the availability of the VAX 8600, and clustering the computers together provides us with a viable alternative to the mainframe approach."

# Betsy Fitter elected trustee to National Urban League

Betsy Fitter, Regional Personnel manager, Digital Field Headquarters, has been elected trustee to the Board of Directors for the National Urban League and has been appointed chairman of the Personnel committee.



Betsy Fitter

During her one-year term, her responsibilities will be to support and work with local and National Urban League affiliates to help successfully manage the organization. In addition, she will work with the National Urban League to integrate government, labor organizations and corporations in addressing the continuing challenge of Equal

Employment Opportunities (EEO) and to support EEO efforts nationwide. Betsy has had continuing service with the National Urban League Board of Directors for the last 10 years.

She has served the Urban League since 1968 where she was an officer of the Rochester Urban League. After joining Digital in 1981, Betsy served the eastern Massachusetts chapter of the Urban League as vice chairman of the Board of Directors, chairman of the Personnel committee and a member of the Program Development committee.

At Digital, she is a member of the Urban League Task Force which coordinated the company's participation in the National Urban League Convention this past July in Washington, D.C.

# Digital matches donations given toward LIVEAID benefit

Employees making contributions of \$10 or more to the LIVEAID benefit to assist the African relief effort may have their donations matched by Digital through the Matching Gift program. When sending donations to LIVEAID, P.O. Box 7800, San Francisco, California 94120, employees should include a Matching Gifts form so Digital will be advised of the amount of funds to match. Matching Gift forms are available through local Personnel offices.



Find out how to cut down on commuter costs by contacting the Commuter Tran portation Department, DTN 223-7029.

Call the following DTN numbers to join these routes.

#### VANPOOLS ACTON (ACO)/MAYNARD From Derry, NH (Rt 93), Rt 495, Andover, Tewksbury (TWO), Lowell, Tom Coughlan DCV #109, 223-2776

From Haverhill, Lawrence, Pat LoConte DCV #129, 223-3067

ACTON (AKO)/MAYNARD From Amherst, NH, Doug Ryder DCV #06, 288-7606

ACTON (AKO)/MAYNARD/STOW From Milford, Holliston, Hopedale area, Bob Figuerido DCV #102, 223-3678

ANDOVER/TEWKSBURY From Maynard, Acton, Littleton, Dave Harding DCV #116, 289-1101

#### MARLBORO

From Westminster, Ashburnham, Ashby, Pepperell, Townsend, Lunenburg, Fitchburg, Leominster, Bill Kilgore DCV #4, 231-7184

From Arlington (St. Camillus Church), to MRO/UPO/HYO, Paul DeFazio DCV #105, 259-3921

From Newton, Watertown, Waltham, Brookline, Danny Mayer DCV #119, 231-6045

From Nashua, NH, Westford, MA, Jim Mahan DCV #148, 231-4446

#### MAYNARD

From Plymouth, Marshfield, Rockland, Braintree, Jack Carter DCV #1, 223-3679 MAYNARD/CONCORD

From Marlboro, Hudson, Bob Johnson DCV #127, 251-1945

#### MAYNARD/STOW

From Chelmsford, Lowell, Rich Berger DCV #132, 223-4281

From Arlington (St. Camillus Church), Alma Antoniotti DCV #115, 223-6667 From Worcester, Shrewsbury, Auburn, Holden, Jack Downing DCV #128, 223-

From Brockton, Quincy, Stoughton, Canton, Dedham, Needham via Route 128, Mary Ellen Dervan DCV #131, 223-3755
From Sterling area, Clinton, Kathie Nickerson DCV #149, 223-2025

From Burlington Route 128 area, Jim Byrne DCV #108, 223-4168

SALEM, NH (NIO)

From Fitchburg, Leominster, Littleton (LTN), Steve LeBlanc DCV #106, 261-2348

# Microelectronics Center . . .

Continued from page 1

kins who, as a state senator, sponsored the legislation creating the MTPC, said "Public-private partnerships such as this are crucial to Massachusetts and U.S. electronics industry's competitive position. The success of the Microelectronics Center's hinges on cooperation amongst all participants and Digital's support has been crucial."

The equipment from Digital's donation will be located at the University of Massachusetts at Amherst, Northeastern University, Tufts University and the University of Lowell.

Students at participating universities will be able to take their ideas for semiconductor chips from design to fabrication, testing and diagnostics, as well as receive training in the basics of semiconductor processing.

The Center will eventually be made up of four separate components: a Very Large Scale Integration (VLSI) design network, Semiconductor Instructional Processing

Laboratories, a Complementary Metal Oxide Semiconductor (CMOS) Integrated Circuit Foundry, and potentially an Advanced Semiconductor Laboratory. Participating engineering colleges will house Computer-Aided Design (CAD) facilities and processing laboratories, and the chip foundry will all be located at the Microelectronics Center's main campus in Westboro.

In addition to representatives from nine Massachusetts-based engineering colleges, the MTPC board is made up of 11 corporate members and three representatives from the state.

Final plans for the Center were submitted to the Legislature and Governor for approval earlier this month. Joseph Stach, MTPC's executive director said, "We have met our initial contributions goal and hope Digital's example will inspire other corporate contributors."

# Semiconductor Protection Act . . .

Continued from page 1

Committees were also presented with chip sets and wafers.

"We developed our VAX-on-a-chip in 20 months when the industry was telling us it couldn't be done in less than three or four years. Our investment, and much of what we learned along the way, are all a part of this registration today. By registering our Micro-VAX II chip set we are not only protecting our own substantial investment in its development, we are protecting our customers' investment in Digital's VAX technology as well," Jeff added.

The MicroVAX chip set achieves several technological firsts within the computer and semiconductor industries. It is the first VAX-on-a-chip — Digital's industry standard VAX computer architecture, reduced to a single chip.

The Semiconductor Chip Protection Act of 1984 protects "mask works" — the pattern of metallic, insulating, and semiconductor materials which makes up the layers of a semiconductor chip — from unauthorized copying for 10 years, according to Ron Reiling, Patent counsel for Digital. "The Act is enforced through the Federal courts which

may prevent the accused infringer from reproducing chips. A certain portion of the infringer's profits may also be awarded as damages," he said.

The Act, administered by the U.S. Copyright Office, is effective as of November of last year and has enabled U.S. chipmakers to register their chips since January. Registration of "old" chips which were introduced to the market after July 1, 1983, but prior to last November, affords only partial protection. Chips manufactured before the law went into effect may continue to be imported or distributed by other firms for an additional two years if the importer offers a reasonable royalty.

The act also provides protection for mask works developed by the citizens of other countries and sold in the U.S. If the U.S. Patent Office determines that the other country provides similar protection for semiconductor mask works developed by U.S. citizens and sold in those countries, foreign mask works may be protected in the U.S. Japan and the United Kingdom currently have such arrangements with the U.S.

## Digital, Fisher Junior College retrain employees for secretarial work

Digital and Fisher Junior College are currently retraining 20 employees, who formerly worked in manufacturing as assemblers and data entry operators, to become secretaries.

A task team, coordinated by Shirley Schorr, Senior Employment specialist, members of the Greater Maynard area clerical employment department and Frank Lanza, Manufacturing Training manager, worked out the curriculum for the retraining program. After the curriculum was developed, proposals from two local colleges were reviewed and Fisher Junior College was se-

lected to conduct the retraining.

The program was then discussed with a group of employees from manufacturing. Individuals interested in transitioning into this new career opportunity were interviewed and 20 people were selected for the retraining. A commitment was made by managers to hire the trainees, and the first six-week retraining program was conducted in April and a second program began on July 15.

Other retraining programs are planned throughout FY86. For more information, contact Shirley Schorr at DTN 223-7443.



Day on Wednesday, August 7.

Guest Day will feature a typical meeting, including impromptu talks, prepared speeches and evaluations. Guests are not required to participate in the meeting, but they may share the free lunch provided. The meeting will be held from 11:30 a.m. to 1 p.m. in the Sheridan Conference Room opposite the Mill cafeteria in MLO5-4. Anyone interested in attending should contact Barbara Donohue by August 6 at DTN 288-7638, mailstop AKO3-2, and ENET node POWPAC.

# Bicyclists raise \$1,500 to benefit multiple sclerosis society

Digital bicyclists Matthew Lourie and Neil O'Sullivan from HLO, Lorene Waugh from CFO and Bill Zarachuk from SHR all recently bicycled 150 miles to raise funds for the benefit of the National Multiple Sclerosis (MS) Society. Digital matched their donation through the Matching Gift program and a total of \$1,500 was given.

Approximately 350 bicyclists began the 150-mile tour which went from Northern Essex Community College in Haverhill, Mass., to the University of New Hampshire. The bike tour generated nearly \$100,000 in pledges. For more information about the National MS Society and future bike tours, contact Lorene Waugh at DTN 251-1071.■

# 1985 Manufacturing Software Symposium set for December

Plans are being made the works for the Manufacturing Software Symposium, a three-day conference to be held locally on December 3-5. The program is a continuation of the theme established in 1984 of "Integrated Manufacturing Process Through Software Systems."

Areas of concentrations will be: Computer Aided Engineering and Manufacturing, Factory Control Systems, Manufacturing Information Systems, and the introduction and educational process of establishing these systems in manufacturing.

This internal symposium, hosted by Paul Hale, manager of Software Engineering for Computer Systems Manufacturing Engineering in Acton, will provide visibility to the increasing role of software systems in realizing manufacturing goals. Planned are formal presentations, technical/user discussions. and software demonstrations. It will include software systems in use today and packages planned for tomorrow.

For more information on submitting an abstract or providing a demonstration, contact the program coordinator, Jeannie Flynn on ENET node HAZEL::FLYNN.■

#### On the move

On August 12, the Software Distribution Center (SDC) will be located at 1 Digital Drive, Westminster (WMO), Mass. 01473.

To submit Cost Center Orders for software and software documentation, complete an Internal Software Order Form (ISOF) (EN-01740-07) and forward to SDC Order Processing at WMO/E15. To send ISOFs via the facsimile machine, call the following numbers: To FAX - DTN 241-3660 or To CONFIRM - DTN 241-3626.

To contact a Customer Service representative about problems or inquiries before shipment, from Massachusetts, call DTN 241-3592, 3645, from the Northeast District, call DTN 241-3416, from Western/Central/Southern and Mid-Atlantic states, call DTN 241-3444, from GIA/Europe, call DTN 241-3365. For problems or inquiries after shipment, from any region, call DTN 241-3361. Calling from outside the company, the telephone number is 671-874-plus the extension.

# THE MARKETPLACE



#### APPLIANCES

DRYER,GE Elec,perm prs+del,RANGE,GE Elec,slf cln oven,both 2yrs.old,almond,B/O,Evelyn,269-2106

DISHWASHER, Sears portable, delux mod, conv kit for full install, lyr old, options, \$375, Chris, 231-6769

REFRIGERATOR, Whirlpool, green, good conditon, \$95, Kathy, 231-4105

#### CARS

'77 OLDS CUTLASS salon,350V8,velour int,high buckets,many opts,exc cond,\$2475,Marcia,874-2855

'82 VW RABBIT LS,4dr,gray,diesel,44mpg,AC,AM/FM,55Kmi,exc cond,\$3950,Fred,231-6134

'73 PORSCHE 21tr,wide rims,air dam,stnless rocker panel+heat exch,exc cond,\$6500,Con,223-2884

'69 CAMARO 307, V8, blue, exc mech cond, \$800, Bob, 225-5839

'78 MERCEDES 450 SEL, like new, 35Kmi, lt silver blue w/dk blue int, must sell, \$21K, Bob, 276-8619

'72 BUICK sta wgn,61Kmi,PS,PB,AC,rfrck,new batt+ exh sys,runs great,\$995,Art,221-5607

'82 OLDS TORONADO,loaded,white w/red int,AM/FM, extras,38Km,mint cond,511,300,B/O,Larry,223-5746

'83 PONTIAC Bonneville,\$8500,B/O;'81 CJ7 JEEP, \$5500,B/O;'80 FORD VAN,\$1700,B/O,Helena,274-6442

'84 BMW 318,1ux,Baltic blue,18Kmi,PW,AM/FMcass, sunrf,AC,CC,S15,400,Robert,246-2204

'80 CHEV Citation htchbk, AT-PS, AC, FWD, 4D, vy gd cond, \$1600, Sandra, 223-4444

'83 PONTIAC 6000 STE,19Kmi,blue/black,loaded,sun-roof,exc cond.59200,Peter,276-8194

'57 T-BIRD,auto,PS,PB,PW,hdtp,softop,search radio,orig tonneau,exc cond,\$18,000,Tom,272-7147

'79 BUICK Electra/Park Ave,4dr,6cyl/350 eng,77Kmi loaded,AC,PW,CC,rw/dfg,\$4100,Bob,231-6869

'73 WW SUPER BEETLE, sunrf, recent eng, mflr, heater, brakes, shocks, nds battery, \$900, Nannette, 223-8536

'81 WW RABBIT Diesel LS,2dr,Top of Line Rabbit w/ sunrf,AM/FMcass,120Kmi,\$3600,B/O,Leslie,225-4749

'77 AMC JEEP CJ5,80Kmi,Black,new clutch,engine good,trans needs work,runs,\$400,B/0,Greg 262-8277

'84 TOYOTA Celica GT,cpe,auto,AC,fuel inj,AM/FM cass w/equal+expand,alloy whls,Connie,283-7429

'83 FORD ESCORT L,4dr,htchbk,under 20Kmi,4cyl, std,exc cond,must sell,\$6,000,B/O,Jan,234-4893

'69 AUSTIN HEALY SPRITE, Mark IV, conv.good cond, runs great, working on body, \$950, B/O, Pat, 249-4133

'81 DODGE OMNI Htchbk,exc cond,no rust,AM/FM stereo,AC,PS,PB,31Kmi,\$3,000,Larry,237-3274

'76 TOYOTA Celica GT,91Kmi,5 spd,AM/FM cass,runs well,some rust,5800,Laura,251-1730

'80 CHEWY Citation,4dr,htchbk,4cyl,auto,50Kmi, great cond,economical,\$2900,John,277-7310

'81 HONDA Civic,4dr sd,5spd,silver,93Kmi,runs great,\$2000,Jane 249-4737

'79 VOLVO 245,4spd+OD,PS,PB,AM/FM stereo,new paint,exc cond,66Kmi,S5900,B/O,Jim,251-1277

'82 JEEP Scrambler, sport package, 34Kmi, excellent condition, blue, \$6900, Mike, 223-1221

'84 FORD Capri,htchbk,auto,AM/FM,dk blue,F/R def, good condition,\$7400,B/O,Debbie,289-1019

'79 SUBARU 4x4 wagon,gold metallic,very little rust,runs well,good cond,\$1800,Maria,289-1018

'82 NISSAN Sentra,PS,PB,5spd,AM/FM,sunrf,new tires,36Kmi,exc cond,\$4200,B/O,Sharon,234-4315

'75 CHEVY Impala 350,V-8,for parts,accident, best offer,Baldwin,223-3037

'80 MAZDA 626,2dr,5spd,AC,AM/FM stereo,excellent condition, \$4000,Kevin,288-6727

'77 TOYOTA Corolla,5spd,AM/FM,white,65Kmi,\$750 or best offer,Josie,225-4762

GMC JIMMY, loaded, AC, 5spd, AM/FM stereo, tow pack, Lisa, 237-2343

'75 TOYOTA Corolla Sedan,4dr,standard,AM/FM,79K mi,needs some work,\$1100,B/0,Mary,223-6331

'73 MGB/GT htchbk,exc int,ext nds work,good mech, new motor at 53Kmi,\$1500,B/O,Theresa,292-2250

'82 TOYOTA CELICA GT, sport coupe, 5spd, AM/FM, 37K mi, rstprf, exc cond, \$7500, Cheryl, 223-7577

'83 PONTIAC 2000,4dr,5spd,std,AM/FM,23Kmi,exc cond,\$5900,Ed,226-7220

#### **FURNITURE**

CHEST OF DRAWERS, antique, early pine, 4 drwrs, carvd wooden keyholes, 33"x38"x17", \$250, Betsy, 231-7817

DINING ROOM SET, Basset 6 chrs, table, china cab, side brd, like new, \$2500, Lou, 257-1223

WARDROBE (Armoire), Contemp. "Brazilia" brand, white, 70x40x24, \$150, B/O, Orson 276-9629

WATERBED, king size, mattress, heater+frame, plain headboard, no drwrs, exc.comd, \$115, Becki, 273-3569

#### MISCELLANEOUS

Droguett's"KITTENSWORLD"Plates(1979), hand engrvd, Royl Crnwll prcln,set-6,ltd.ed,\$300,Pat,272-7172

TURNTABLE, dual1246 blt dr, w/Pickering SXV-3000 cart, exc cond, \$100, Donnie, 289-1991

35MM SLIDE PROJECTOR, Argus remote control, extra slide trays, \$100, Marvin, 223-9071

PDT 11/150,all manuals+software incl,used very little,\$375,Paul,262-8263

JOTUL#602 airtight wood stove,\$300, MERIVENT CHIMNEY,12',dbl insul,\$300, Judith,223-1278

TIRE RIMS, 2 14"rims for GM cars, \$15, Alan, 288-7559

NATIONAL GEOGRAPHICS, 1920's-1950's, many complete, make an offer, David, 278-4405

55 PATIO BLOCKS,16x16",concrete decorator,never used,orig.\$1.59ea,sell for \$1 ea,Linda,237-2310

FOAM MATTRESS, very firm, 86-1/2"x58-1/2"x8-1/2" \$200 new, sell for \$75, Donna, 278-4017

CABIN,wood yurt(circular), never used, single small rm, transport negotiable, \$800, B/O, Colette, 278-4165

REMOTE CONTROL GAS CAR, radio+all starting equip, great cond, \$265, Mark, 282-2001

ROBIN VT180,2dr,LA50 printr,CPM,Basic,Multiplan, Select,Turbo,Pascal,\$1200,Dave,289-1294

PIANO, Wurlitzer, ex.cond, bench, \$700, Alice, 231-4909

BASS GUITAR, Fender Musicmaster, hard shell case, \$175, Dan, 223-9884

### MOTORCYCLES

'79 YAMAHA 11000cc, excellent condition, 8K orig mi, S1500, B/O, Joe, 223-9821

'81 HONDA 900 Custom,low mi,new batt,clr fairing, luggage racks,adj back rest,\$1800,Dick,237-3440

'81HONDA CB650,black,mint cond,low mi,\$1000, Woody,288-6137 '82 SUZUKI GS1100L,adj backrst,case guards,nava helmet,kryp lock,1400mi,\$2600,Rachelle,229-6550

'80 HONDA CX500 Custom, shaft dr, wtr cool w/fairng road bars, bag, air shocks, \$995, Steve, 282-2458

'79 HARLEY-DAVIDSON XLS Sportster,met blue,all stock,\$3000,B/O,John,225-4924

'81 YAMAHA 650 Maxim,low ride,mint cond,shaft dr, 13Kmi,\$1700,Nancy 223-2221.

### PETS

CAT, young female BHW, med size, healthy, neutered, declawed, nds+deserves gd home, Tiph, 231-6360

AKC LABRADOR RETRIEVER PUPS, championship pedigree ex.conform./temperment,\$300-340,Paul,1-865-6277

### **REAL ESTATE**

TIME SHARE CONDO, Falmouth, 2br, fully equip, pool, tennis, 3rd wk Aug, 1st wk Feb, 59500, Pat, 225-4577

CONDO, HYANNIS, time share, 2nd wk Aug, pool, sauna, eat-in kitch, slps 4,85800, Russ, 225-5871

HOUSE, Acton, 2yr.young saltbox, contemp, 3br, 1-1/2b, frplc, sunken FR, dead end st, \$191K, Lisa, 249-4310

#### RECREATIONAL VEHICLES

'82 U.S. YACHT SLOOP,27'fiberglass,slps6,fully equip,many extras,like new,932.9K,Ray,236-2347

BOAT, 14 Stur-Dee Amesbury Dory Style, fbrgls, 9.8HP Merc.motor, trailer, ex.cond, \$2995, Frank, 232-2542

'82 PROWLER, 20'Twin TRAILER, slps6, stove, refrig, shower, not used last 3yrs, \$2500, Barbara, 292-2561

'77 COACHMAN CAMPER, 25', slps9, stove/oven, ref, htr, shower/tub, awning, gas tanks, \$6000, Diane, 285-6006

#### RENTALS

HOUSE, So. Yarmouth, ava. Aug, slps6, 2bdrm, encl.porch, patio, close bches, no pets, \$450/wk, Roger, 274-6630

CONDO, Hilton Head, SC, 2bdrm, 2b, ocean beach, tennis, 3 pools, indoor sprts complx, \$480/wk, Joe, 289-1985

HOUSE, 3bdrm contemp on Saco R. near White Mt activities, ava wk/wkend, Dino, 231-4477

CONDO, Rye, NH, quiet, ocean front, slps 4, pool, no pets, ava till 9/30, Bob, 223-9377

SUMMER RENTAL,nr York Beach,ME,slps6-8,wtr view, fireplc,nice for family,\$450/wk,Gary,274-6972

SUMMER RENTAL, 1/2 duplex, W. Yarmouth, Cape Cod, 2 bdrm, deck, cable TV, \$375/wk, Bev, 289-1414

CONDO, Quechee, Vt, slps6, golf, tennis, pool, biking, canoeing, fishing, ava.wk/wkend/mo, Kaye, 278-4257
CONDO, Linderhof, N. Conway, 2bdrm+loft, tennis, golf,

pool,\$475,Dick,234-5147 CAPE,New Seabury,new 6rm cottage,priv beach,slps

6,8800/wk8/3-24,off seas rates,Mike,223-9834

COTAGE, Newfound Lake, 3bdrm, fplc, Aug-\$350/wk, wntr, wkend rates avail, Bill, 288-6722

APT, Lowell, ref, stove, carpet, off st park, storage, 1 min to Low.connect., \$550/mo, Chris, 289-1680

APT, Marlboro at 495+rte20, Nice 1br, ava.immed, \$450/mo inc.heat+water, Deborah, 288-6075

## SPORTING GOODS

10 SPEED BIKE,men's,red,brand new,used 2x,must sell quickly,asking \$125,Becki,273-3569

FRONT WHEEL+tire for 10 speed bike, alloy rims, 100 psi tire, new cond, \$28, Sonia, 234-4284

# educational opportunités

# WPI offers M.S. graduate courses

Worcester Polytechnic Institute will offer graduate courses in Computer Science and Electrical Engineering at the Acton/Boxboro High School beginning Wednesday, September 4. Courses scheduled for Fall '85 are Computer Systems Performance (Wed. 5:30), Formal Lang. & Syntactic Analysis (Mon. 5:30), and Computer Architecture (Tues. 5:30).

On-site registration will be held on August 22 in the Parker Street Cafeteria from 10 a.m. to noon and in the Mill Cafeteria from 1:30 - 3 p.m. Prof. Robert J. Hall, director of Continuing Education, as well as other rep-

resentatives from the degree departments will be available for consultation. Registration may also be done through the mail.

Additional registration will be held on the Worcester campus August 27 (for formally admitted students only) and August 28 & 29 (for non-admitted students) in Olin Hall, Room 107 from 6 - 8 p.m. Tuition may be paid by Master Charge/Visa. (\$247 per credit hour; audit rate is one-half.)

For catalogs and further information, call the Office of Continuing Education at WPI (793-5301). ■

## Human Resource Management/DIS Training announcements

New course offerings for August and September

 Data Description and Naming Workshop - August 27

This one day workshop introduces the Digital Standard Procedure for Data Description and Naming. It provides participants with concrete skill-based training to develop data element descriptions and derive data names from those descriptions.

Anyone who has responsibility for developing/evaluating data descriptions will find this course beneficial.

 Data Resource Management (DRM) Methodology "Conceptual Phase" -Modeling September 9-13

Intended for DRM specialists, business systems analysts, and business data analysts, this course covers the conceptual phase of the DRM Methodology focusing on

# DME presents English as a second language

This program is designed for anyone at Digital whose native language is not English. Participants will determine their abilities and needs through self-assessment techniques. Participants will improve their written and spoken communication in the workplace through individual and small group work.

Participants will demonstrate an increased command of spoken English and improve grammar skills through weekly practice sessions.

The course will be offered on 11 consecutive Mondays beginning with orientation on Monday, September 9, the first class on Monday, September 23 and continue on each Monday thereafter for 10 weeks.

To register call the DME registrar at DTN: 249-1881/1882. ■

business requirements. Various documents provided by the business community are explored and their connection to data and process/event analysis is formalized.

Data and process analysis and their integration are treated rigorously. Students gain confidence that the business requirements are documented in a manner which will deliver a coherent definition of the business for logical and physical development phases.

### FY'86 DIS Training Schedule Distribution

DIS Training and Education will publish the Training Schedule on a bi-monthly basis (6 editions), in response to your feedback to the User Survey. Look for this publication in July, September, November, January, March and May.

For registration call the DIS Registrar, Justin Sullivan at DTN 249-4670. For further training information, call DTN 249-1461.

# Lecture on use of sprites in different environments

Sprites are programmable, interactive graphics characters that can be given different characteristics such as size, shape, color, and speed. These capabilities can make it possible for a relatively inexperienced programmer to create dynamic and interactive simulations, games, animation, and iconographic interfaces to menu-driven programs.

A ler ture on the use of sprites in creating educational and iconographic environments will be presented by Marlene Kliman, MIT Educational Computing Group and Terrapin Inc. of Cambridge, Mass., on Thursday, August 8 at 1:30 p.m. in the Burlington Room, 30 North Ave, Burlington, Mass., (FPO).

In this talk, the fundamental sprite-controlling commands of the high-level language Sprite Logo will be introduced. Several programs of varying complexity will be demonstrated and explained. Application areas of programs demonstrated include interactive simulations, educational games, and iconographic interfaces.

# Boston area offering from Seminar Programs

Note: All seminars are for customers and employees unless otherwise specified)

### **Design of Applications Under RSX**

September 3-6, 1985 Course code: EY-ACO25-SO Registration: DTN 249-4380

# Boston University off-campus offerings

Boston University Metropolitan College continued to offer undergraduate and graduate evening courses at the Digital Training facility in Bedford as well as Acton/Boxborough Regional High School. The courses scheduled for the fall semester 1985/86 at the Bedford-DEC Training Facility, 12 Crosby Drive, Bedford, Mass. includes:

MONDAY **MET CS 101** Computers and Their Applications **MET CS 221** Programming in C **TUESDAY MET CS 218** Pascal for Programmers **MET CS 779** Advanced Database Management WEDNESDAY **MET CS 225** Assembler Programming Language **MET CS 671** Introduction to Operating Systems **THURSDAY MET CS 682** Information Systems Analysis and Design **MET CS 761 Expert Systems MET OM 501** Quantitative Methods in Management

For a copy of the Off-Campus Class Schedule or an Off-Campus Registration Schedule, please call 617/353-3000, or write Boston University Metropolitan College, 755 Commonwealth Avenue, Boston, MA 02215. ■

# Digital files suit against Emulex Corporation and an Emulex employee for trade secret misappropriation

Digital has filed suit in U.S. District Court for the District of New Hampshire, against Emulex Corporation of Costa Mesa, California, alleging misappropriation of Digital's trade secrets regarding its mass storage architecture and busses. The trade secret action was made part of Digital's pending patent infringement suit against Emulex. In addition, Digital has secured an injunction from the U.S. District Court of New Hampshire against Emulex using Charles Hess, a former Digital employee who has been Engineering director at Emulex since July 15, in any matter related to the lawsuit. In a related step. Digital has filed a trade secret suit against Hess in U.S. District Court for the District of Colorado, alleging misappropriation of trade secrets.

The new trade secret suits against Emulex and Charles Hess charge that Hess, while employed as a senior engineer at Digital's Colorado Springs, Colorado, mass storage engineering facility, appropriated Digital's critical trade secret information for Emulex's and his benefit. The suits specifically allege misappropriation of trade secrets, conversion, unfair competition, breach by Hess of his employment agreement, and Emulex's inducing Hess to breach that agreement. The suits request temporary and permanent injunctions against Emulex's or Hess's use or disclosure or any of Digital's trade secrets. The suit seeks actual and punitive damages.

The injunction against Hess is based on the fact that while privately discussing employment with Emulex, Hess participated in a confidential meeting with Digital's attorneys regarding the planned litigation against Emulex. He then related information he learned at this meeting to Emulex.

These actions taken by Digital demonstrate the company's long-standing policy and commitment to protect vigorously its innovations resulting from investments in research and development. Digital will continue to pursue aggressively intellectual property violations on a worldwide basis, as it has in suits involving Digital's VAX-11/780 memory boards, VT-220 terminals, MASS-BUS products, RL disks, and SBI interconnects. ■

# In its second year, MRO3's Rainbow camp helps with community projects



(background) John Wetherell and (foreground) Adrian Kwan practice some of the applications they have recently learned while participating in the Rainbow Computer Camp. John is the nephew of Dottie Jensen, Administrative secretary, and Jim Jensen, Electrical engineer for the High Performance Systems/Technology Research and Engineering group in Mariboro. Adrian is the son of Harvey Kwan, Principle engineer for the Shrewsbury Heads Manufacturing Technology group.

Nine students attending the Rainbow Computer Camp this summer had returned from the summer 1984 camp. These "seniors" were given advanced instruction and they put their computer skills to work on projects for four community organizations.



Teacher Sara Bacon instructs children related to Digital employees how to use Rainbow personal computers as part of Rainbow Computer Camp currently being held at MRO3.



Adrienne Lewis runs a program on her Rainbow. She is the niece of Jeannette Lightfoot, Senior Programmer analyst for M.I.S. Manufacturing in Marlboro. Approximately 90 children related to Digital employees participated in Sessions I and II to learn about computers through the summer camp program designed and coordinated by the French River Education Center, a school-based, non-profit organization, and Digital Community Relations in Marlboro. The comprehensive two-week program is intended to provide a challenging computer experience with emphasis on using the computer as a tool to solve problems.

A phone line was installed in the class-room, and the students were in daily contact with the local organizations. For the Greater Marlboro United Way, the students developed a new emergency service telephone directory and handled all logistical arrangements for a special board meeting. The other projects included completing a six-page Budget Expense Report for Greater Marlboro Programs, Inc.; and creating a multi-page program for a community musical production to be presented by the Marlboro Office of Cultural Affairs, and a mailing list for the Marlboro Public Library.

# Boston Ballet dedicates performance to Digital

The Boston Ballet will give a free performance dedicated to Digital on August 22 at 8 p.m. at the Hatch Memorial Shell on the Charles River Esplanade.

The dedicated performance is to acknowledge Digital for its continuing sponsorship of the Boston Ballet over the past several years through cash and equipment grants provided through Corporate Community Relations. Digital has sponsored both the Ballet on the Esplanade and the Ballet's school programs.

# Schedule for photo badges

Photography sessions for employee photo identification badges are scheduled as follows:

LMO2 and LMO4 August 5
BPO1, 2, 3 and MOO UPO and HUO August 7
MRO3 August 12
MRO2 August 13
MRO1 August 14

Details on times and locations will be posted in all facilities. Notices will also be sent through interoffice mail to all employees in the facilities listed above and will include make-up dates and times.