ON LINE
DIGITAL EQUIPMENT CORPORATION
APRIL
1969

A Royal Look

His Royal Highness, Prince Philip, Duke of Edinburgh, studies a PDP-8/S at a recent oceanographic exhibition in England. This computer is used in Digital's satellite navigation system.

Lowers Software Costs

INDAC-8 System Saves $

The INDAC-8, another stride toward lowering our customers' overall costs, has been introduced by Digital.

INDAC-8 (Industrial Data Acquisition and Control) is a hardware/software package built around the PDP-8/I or PDP-8/L. As its name suggests, the latest DEC computer system is intended primarily for monitoring, testing, and controlling industrial real-time processes, although research laboratories present a potential market too.

With its simplified software, this system costs less than other computer systems able to perform the same tasks. Previously, a manufacturer could buy a PDP-8 family computer (or a comparable computer) to do what the INDAC-8 can do. But, real-time industrial programs are so sophisticated that they require highly-skilled, highly-paid programmers to devise them. Therefore, the customer would spend on expensive software the money he had saved on the inexpensive hardware. The INDAC-8's simple software substantially reduces programming time and costs.

"The INDAC-8 has made the small computer's software costs for real-time industrial applications compatible with its hardware costs," said Ron Noonan, INDAC-8's Project Manager.

The INDAC-8 reduces not only costly program writing, but user software documentation and maintenance, also. Since it uses a compiler-level language (English and arithmetic symbols) instead of an assembly-level language (computer-language symbols) the program is its own documentation. The software's simplicity eliminates the need for a senior programmer to maintain it; the people actually using the system can maintain it.

Possible applications number in the hundreds, but one typical manufacturing control use would be testing automobile transmissions. The INDAC-8 could subject transmissions to certain stresses and insure that the subassemblies were functioning properly.

Perto-chemical plants represent one of the largest potential process control markets. The INDAC-8 system could monitor hundreds of variables (temperature, pressure, vibration) during the refining of crude oil.

Manufacturing control and process control applications will constitute the bulk of INDAC-8's markets, but research/aero-space could be important too. Here, the computer could monitor and control experiments.

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U.K. Exhibits Attract V.I.P.'s

Hob-nobbing with distinguished members of the British Government is getting to be a regular habit for members of Digital's European Advertising and Sales Promotion Department.

According to Steve Bowers, European Promotions Manager, "It has become such standard practice that, for example, we no longer consider one of our British Trade Shows a success unless at least one member of the government elite has chosen to visit our booth."

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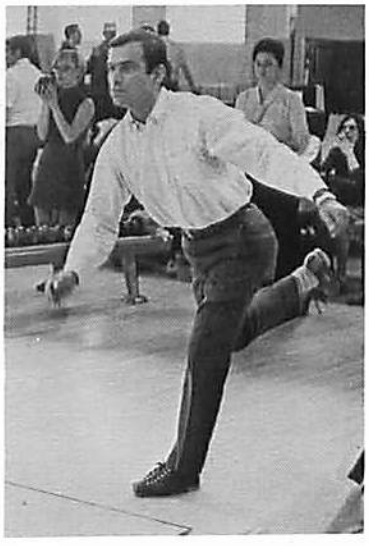
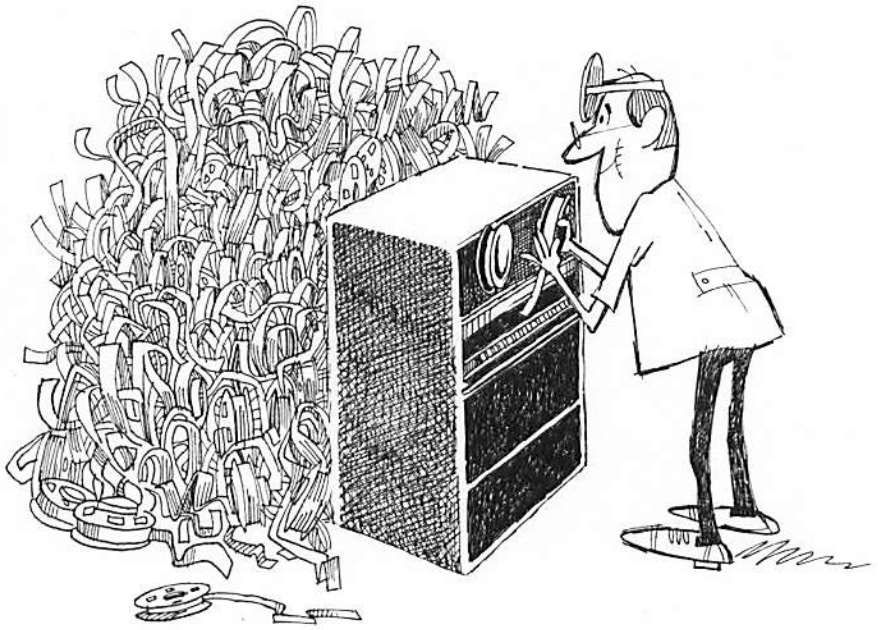
DEC Bowlers Roll On



Top to Bottom: Lou Klotz, PDP-8 Engineering; John Keddy, Field Service; Jerry Lendmen, Cocoa Beach office field serviceman.



With PDP-8/I

Doctor Trims Paperwork

Dr. Joseph Edelman, a Baton Rouge neurosurgeon, is developing a system based around the PDP-8/I that will all but eliminate the need to type individual patient records from scratch.

Edelman has found that in the normal operation of his practice certain paragraphs describing particular conditions, symptoms, causes, diagnoses, and prognoses, are used repeatedly in case write-ups, patient work-ups, and referral and consultive letters.

Like other busy and successful physicians, he finds that record-keeping consumes enormous amounts of time that might be better used in patient treatment, surgery, and consultation.

Some time ago, he decided to do something about the paper pile-up. Using an automatic typewriter, he tried putting key phrases on paper that, when fed into the machine in a proper sequence, produced letters and reports at a considerable time saving.

The system worked reasonably well. An article about the process appeared in a national medical publication, and to Dr. Edelman's surprise, he received hundreds of inquiries from other physicians wishing to know if the system were generally available.

After a time, Edelman began to see the need for a more efficient method. He began sounding out Ron Rathjen of Digital's Houston office about the possible use of a DEC computer in his system. The system was developed with the technical assistance of Nick Wells, Project Administrator for Computer Special Systems. The PDP-8/I will initially be connected to three automatic typewriters.

When the software, a program consisting of hundreds of commonly-used paragraphs, is ready, Dr. Edelman's stenographers will be able to punch up a series of pre-coded paragraphs that will then be automatically typed by the typewriter.

Edelman expects the new automatic typewriters to type about 50 percent faster than his previous equipment. In addition, they will be quieter.

"Believe me," he smiled, "it will pay."

Woodwork? You Name It, They'll Do It

George Silva (foreground), Ray Therrien

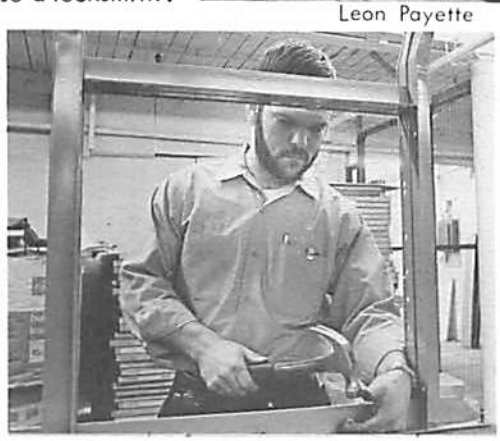
Al Dubois (foreground), Carl Loomer

John Teske (left), Rich Anderson

Variety is a way of life with Digital's 12 carpenters. They build, repair, or refurbish just about everything made of wood from floors to picture frames, from tables to work benches, from computer table-tops to trade show booths. Nine of the men, under Building Maintenance and Services, construct and repair office partitions, windows, and much more. The three others, under the Fabrication Shop, concentrate on trade show displays and the formica-topped tables used with many DEC computers. All are pictured here except Forrest Lowell Building Maintenance who besides being a carpenter, is also a locksmith.

Leon Payette

Roger Elliott (left), Stan Baker



Bernie Nealon

DEC Highlights

Tom Elliott, Programming, spends Saturdays operating his Gospel Shop, a religious book and supplies store.

Elliott Runs Gospel Shop

"It's much more than just a hobby with me," said Programming's Tom Elliott as he discussed his Christian book and supplies store, "but you can't really call it a 'vocation' because it isn't my full-time job. Probably the most accurate term would be 'avocation'."

Tom, a PDP-10 software writer, and his wife own and operate the Gospel

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APPLIED LOGIC INSTALLS FOURTH PDP-10

Applied Logic Corporation has installed its fourth Digital Equipment Corporation PDP-10 computer in its AL/COM computer center which serves time-sharing customers coast-to-coast.

Each of the PDP-10 systems is capable of handling 40-50 users simultaneously through a nationwide network of multiplexors consisting of DEC communications systems, and special interfacing designed by ALC.

TRAVELING COMPUTER TESTS SUGAR

The Australian Sugar Research Institute has developed an automated mobile laboratory to log data from its scattered sugar mills. Built around a PDP-8/S, the mobile lab can process 1,400 readings per hour from a dozen instruments that measure lift, speed, and flow in a milling train. The readings, lasting several hours, are reduced by the PDP-8/S and converted into punched paper tape for further processing on a large computer in Brisbane.

NEW FIELD OFFICE

Digital's ever-expanding sales and service office network has spread to Knoxville, Tennessee. The new office is near the Atomic Energy Commission's Oak Ridge facility, a major DEC customer. Jim Curry has moved from our Cocoa Beach, Florida office to be Knoxville Branch Manager.

DIGITAL GROWS IN EUROPE

London, Milan, and Geneva will join the list of European cities housing Digital office. The three new office openings are scheduled for this year.

THEY'RE NOT 'BUFFALOED' IN BUFFALO

Computer Systems Division of Graphic Controls Corp., Buffalo, New York, knows what to do when it wants to increase its commercial timesharing facility--order a PDP-10. The augmentation of the PDP-10 has enabled the company to extend its services outside their present geographic confines.

Ron Eisenhauer Named Salesman Of Year

Ron Eisenhauer, District Sales Manager for the Northeast District Office is the first Digital salesman to receive the Sales & Marketing Executives of Greater Boston's annual recognition of excellence, the Salesman of the Year Award.

"A gentleman of ethical standards, a courteous ambassador of his company, and a truly professional salesman" is the association's description of the man who receives this award.

Ron came to Digital from Raytheon four years ago and was appointed to his present position slightly over two years ago. He, eight salesmen, and 20 field servicemen cover Vermont, New Hampshire, Rhode Island, Maine, and Massachusetts except for Cambridge office's area.

Ron Eisenhauer (center) receives Salesman of the Year award from vice-President of Sales, Ted Johnson (right). Northeast District Sales Manager Roger Handy looks on.

April Milestones

10 Years

Robert B. Graham
Roger Melanson

9 Years

Eva Robblee

8 Years

Arthur Brazee
Charles Newell
Robert Savell
Joseph Scalia

7 Years

Viola Clement
Rita Daigneau
Harold Godfrey
Dominic Inferrera
Carol Pitz
Helga Starr
Peter Waldron

6 Years

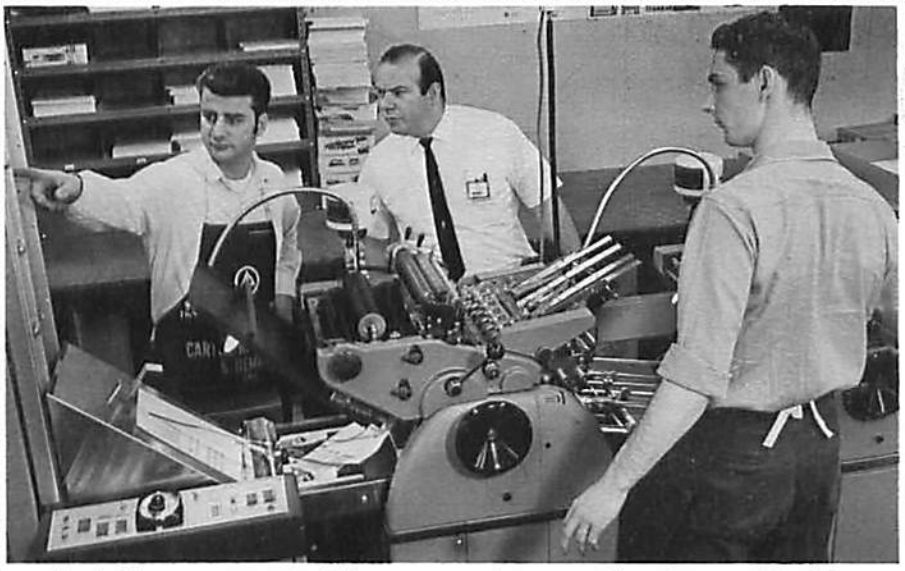
I. Ferne Halley
William Long
Paul McGaunn
Joseph Monahan, Jr.
John Rodenhiser
Anne Wojcik

5 Years

Robert Brooks
Helga Herla
David Packer
Ilse Peters
Rose Pittsley

4 Years

Richard Abel
Andrew Allison
Mary Bakun
Joseph Ballou
John Caulfield
John French
Raymond Jones
Gertrude Rasmussen
Michael Parry
Viola Priest
Godfrey Shingles
Bradstreet Vachon



Fred Gipps operates the fully automatic Addressograph press, as Print Shop Supervisor Ray LaPan (middle) observes. Also pictured is John Orifice.

Printer's Output: 100 Tons

Over 100 tons of printed materials - technical manuals, Program Library material, forms, Sales Newsletters, DECUS literature, engineering prints, promotional brochures, and ON LINE - roll off our Print Shop presses each year.

"We produce over 18-1/2 million images per year," said Supervisor Ray Lapan "but still have to send some work out. We hope to expand so we can handle more printing in-house."

The Print Shop group consists of 12 people and $73,000 worth of equipment, including four standard off-set presses and one full-automatic Addressograph Multigraph press.

"The Print Shop is an outstanding department," said Office Services Manager Nick LaRusso. "The people rank among the hardest workers here."

"We're striving to staff, equip, and organize the Print Shop to give one-hour service on simple jobs," Nick added. "We're not there yet, but we're working toward it."

Sorting papers hot off the presses are (l. to r.) Natalie Ohlin, Fran Piecewicz, and Rose Novelli.

Gospel Shop

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Shop in Chelmsford, Mass. Although the shop offers a wide range of items, from pews to missals and rosaries to church spires, its main emphasis is on conveying the Christian message through Bibles, religious tracts and booklets, and other types of literature. The shop also rents audio-visual equipment, books, and records.

Tom stocks over 500 books covering many subjects and directed toward diverse audiences. His inventory includes juvenile fare, adult nonfiction and novels. The only similarity among these books is that each has a religious theme or message.

The Elliotts established their store 2-1/2 years ago when they moved from Malden to Chelmsford. Tom felt that his contact with a Christian bookstore in Boston when he had been working in the city had been a major factor in leading him to a vital experience with Christ. He wanted to help lead others to a similar experience.

"There was no religious bookstore in town, and I felt that establishing one would be my way of serving God and my neighbors. I consider it my 'calling' in life," Tom said.

Nor is this the only ministry in which he is involved. Tom teaches Sunday school for the Lowell Assembly of God (Pentecostal), and also serves as a youth advisor there. In this latter function, he helps organize retreats and social events, like parties and hayrides, for the teenagers.

The Elliotts use the gross profit from their store's sales and rentals for local evangelism. Operating expenses, such as rent, utilities, postage, and advertising, come from Tom's regular income.

INDAC - 8

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"The INDAC-8 will not do anything new," Ron concluded. "But, it will do many things with much simpler software, and, therefore, many more people will be able to afford it. This is one of the most advanced software developments ever in the small computer field."

Promotions & Appointments

Bruce McFadden

Don Berman

Leo Shpiz has become Digital's first Regional Software Support Manager for the Northeast Region. He will be responsible for developing the region's software support staff to provide post-sale customer assistance. Leo joined the Northeast Region last year as a PDP-10 software support specialist. He is a graduate of Rensselaer Polytechnic Institute (MS) and Brooklyn College (BS).

Bruce McFadden has joined the Personnel Department where his responsibility covers total salaries, and personnel administration including recruiting, counselling, and manpower planning for the product lines. Prior to joining Digital, he served as Personnel Manager of Applied Dynamics, Ann Arbor, Michigan, and as Assistant to the Director of Special-

Leo Shpiz

Fred Wilhelm

ized Training and Employment Services for the State of Michigan. Bruce earned a Bachelor's Degree from West Virginia Wesleyan and an MBA from the University of Michigan.

Don Berman has been appointed Manager of the Computer Order Processing Department. In addition to continuing to manage order processing, Don will also set up a customer service group to handle order status inquiries. Don joined Digital last year from the U.S. Department of Labor, Washington, D.C., where he was involved in office operations and contract negotiations.

Fred Wilhelm has joined Digital as PDP-10 Engineering Manager. Holder of several central processor design patents, he helped develop the EAI-8400 scientific computer at Electronics Associates, Inc., and, more recently, managed large computer development at Honeywell, Inc.

Bill Kiesewetter has been appointed District Manager of the Washington, D.C. office, replacing Cary Armstrong who has joined Data Sciences, Inc., one of our latest PDP-10 customers. Bill was the first sales representative in the Philadelphia area when Digital opened an office there in 1966. He was later appointed Philadelphia District Manager. He is a graduate of Northeastern University, and, prior to joining Digital, had been a sales manager with the Nuclear-Chicago Corporation.

DEC U.K. Exhibts Attract V.P.'s

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The standard was set last August when Lord Louis Mountbatten visited Digital's booth at the I.F.I.P.S. Conference in Edinburgh, Scotland. "We considered this a major coup at the time," said Steve.

The procession of dignitaries has continued, however. At a recent Oceanology Show, in which Digital was exhibiting its PDP-8/I-based satellite navigation system, similar to the one on board the new Queen Elizabeth II passenger liner, Mr. Anthony Wedgewood-Benn, Minister of State for Technology, visited the Digital booth. He called it one of the most interesting at the show.