SESSION X DIGITAL EQUIPMENT COMPUTER USERS GROUP

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DEC users' group report

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The Digital Equipment Corporation (DEC) Users' Group met at the Seventh National Conference on the Use of On-Line Computers in Psychology, with about 35 people in attendance. The meeting started with the presentation of four papers on the use of DEC hardware with user-developed software to conduct psychology research.

COMMUNICATIONS

Rosters were distributed with names, addresses, and machine types listed for active psychology DEC users. (Anyone wanting a copy of the roster can write to Doris Aaronson, Department of Psychology, New York University, Washington Square, New York, New York 10003.) At last year's meeting, we decided to organize a group of "Computer Friends." The group consists of individuals who are experienced computer users with well developed DEC computer laboratories. They are willing to provide advice to new computer users or to people with specific hardware or software problems. A roster of Computer Friends was distributed along with a chart of their computer hardware, so that people with similar hardware can select the most appropriate Friend when they need help. The roster and chart appear at the end of this report. It is interesting to note from the chart that a large percentage of the users now have non-DEC hardware interfaced to their DEC machines, particularly, extra memory and visual display terminals. People willing to be listed as Computer Friends on future rosters should send their name, address, phone number, and a list of their DEC and non-DEC computer hardware to Doris Aaronson. We are particularly interested in increasing the number of Friends with PDP-11 series machines and with microprocessor CPUs and peripherals.

Steve Mullen, the DEC representative for life science applications, was present at our meeting. In the past he has been helpful to psychology users of DEC equipment. He is generally up to date on DEC products

and services. He is willing to obtain information when it is not at his fingertips and to return phone calls. Interested persons can write to him at 200 Forrest St., Marlboro, Massachusetts (mail stop M-51) or reach him by phone at (617) 481-9511. Mr. Mullen informed us that the psychology users have finally had an impact on the DEC national office. Because Neurosciences and the Psychonomic Society meet simultaneously at different ends of the world, DEC has doubled their life sciences staff so that one person can attend each conference.

USER PROBLEMS

There were three classes of problems experienced by many DEC users this past year. (1) Users of 12-bit machines, the PDP-8 and PDP-12 series, are experiencing increasingly poorer service each year. They have difficulty obtaining replacement parts, software, and documentation. Local offices often do not have personnel trained to handle these machines and will do relatively little to obtain the necessary personnel or information from regional or national offices. The national DEC office now has a "classics" department to handle the thousands of computer "antiques" (age 5 years or more) in the 12-bit series that are currently alive, and usually well, in research laboratories and business establishments. The classics department is sometimes useful, but many local DEC offices are not aware of its existence or do not make use of its services.

(2) In general, DEC field service has decreased in quality. DEC engineers are not sufficiently trained before they start servicing machines. They obtain "on-the-job training" in our laboratories, at our expense in time and money. During the year and at the meeting, there were reports of DEC engineers arriving to service components that they had never before seen or repaired, reports of DEC engineers damaging computer components by improper wiring or installation, and reports of DEC engineers watching while psychology

laboratory engineers performed the maintenance work. On top of the poor service, DEC field service has a difficult time obtaining replacement parts for the machines they service. Many of us have been told by local field service personnel that there has been a national reorganization so that DEC field service is treated as a separate subcompany. They must wait the same number of weeks or months for delivery of repair parts as customers placing new orders do. The DEC representative at our meeting reported that this system has recently been changed. We certainly hope so.

(3) During the year we received reports of slow delivery from DEC of both hardware and software. One laboratory cancelled an order of software that had not arrived 4 months after the date promised by DEC. Some users have obtained improved delivery speed by phoning or writing the DEC company president or vice president, thus going above the local and regional offices.

NEW PRODUCTS

Steve Mullen briefly described the DEC products that have recently appeared on the market or that will appear in the next few months. (1) In the "maxicomputers" (PDP-11/70+ series), a new 32-bit machine (upward of

\$150,000) has two powerful instruction sets, including three-address capability. (2) In the "midicomputers" (PDP-11/60 series), there is an FFT machine with super A/D and D/A power useful for work in graphics, speech synthesis, and physiological recording. This will have a lab peripheral accelerator (LPA) that moves data from the CPU to a microprocessor to increase the data transmission rate, providing a good real-time machine. (3) For the "minicomputers" (PDP-11/34), there is Version 3 of RT-11. The operating system will permit more extensive and flexible user interaction. The extended monitor will handle additional memory exceeding 28K (usable for data storage but not program execution). The software will include a multiterminal handler in foreground/background mode and an expanded FORTRAN system. (4) For the "microcomputers" (PDP-11/03), there is a floppy disk, an LSI 11/2 processor on a double module, and 32K of memory on a double module (permitting substantial size reduction in the equipment). (5) For the 12-bit machines, there is a new "super" video terminal, VT-78, with an LSI microprocessor. A new memory system will permit the PDP-8 to be expanded to have 128K of core, and Focal-Lab has been expanded to be more powerful and useful for laboratory work. Steve Mullen maintains that the 12-bit series computers will not fade away.

Computer Friends

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Note—The people on this list volunteered to be helpful if anyone wants advice, information, and so on, about setting up or expanding a PDP psychology computer lab. Feel free to write or call them. They are listed by machine number.