

# Fast access to archives now available at Downsview

The Downsview Computer Centre officially opened its new AS/6 computer facility on Tuesday September 23, 1980. The Magnetic Tape System 7420 will enable researchers to access any part of the AES meteorological archives within 10 minutes. This is a far cry from earlier days when the archives occupied the better part of a large building in Toronto, and when accessing information was a long, tedious and laborious task.

Through an intricate telecommunications system, users will be able to access the archives from anywhere in the world, provided they have a telephone. Larger weather centres, already equipped with a terminal, can obtain information within minutes; additional terminals are available and relatively inexpensive.

Outside agencies and the private sector will also be able to obtain archived information for research and statistical work. They will continue to do so through the Canadian Climate Centre Information Office. Use is expected to be high, at 90 per cent or better.

In addition to the magnetic tape system, a Fixed Disk Subsystem 7350 is provided for rapid access and temporary storage of information for use by research scientists. The language of the system is basic FORTRAN, a universal language with which most scientists are comfortable.

Though data are recorded in the metric system, earlier data in Fahrenheit, feet and inches are also stored in the computer for those who want them.

The opening ceremony agenda of events included several half-hour guided tours of the computer centre. Before leaving everyone was given a souvenir of the occasion, a computer graphic of Snoopy and a 1980 calendar.

AES staff and special guests gathered in the Downsview auditorium at 3:15 p.m. for the official opening ceremony, at which Bruce Byce, chief of the Computer Centre was MC. Jim Bruce, Assistant Deputy Minister recounted the events leading to the acquisition of the system. "It took a long time," he said. "AES Management Committee approved the concept in July 1976, prepared a series of submissions to Treasury Board and, two years later obtained Treasury Board approval".

The Intel computer product group was selected, and National Advanced Systems (NAS) was charged with the installation of the system. Strong support was given to NAS by AES computer staff and in particular by an AES evaluation team, headed by Mr. Byce.

Mr. Bruce, armed with a pair of scissors, cut the traditional ribbon. The curtains opened, and a live transmission of the very first operations of the AS/6 computer facility appeared on a television screen. The audience was then able to see the 'launching' of the system, while the computer staff and everyone else held their breath. The system proceeded without any hitches, and was termed an unqualified success.

Don Robertson, NAS Marketing Branch manager, told the audience of the significant breakthrough in negotiations and the laborious steps that led to the signing of the contract. "We got out with our shirts on,

but only just," he said. "Your managers drive a hard bargain!"

To illustrate how fast the archives can be accessed, he compared the system to the common hand calculator, which executes about 33 instructions per second. "The system we installed can execute 3.3 million instructions per second, or 100 000 times that speed. It did not cost 100 000 times more than the calculator, although we would have liked it to."

Morley Thomas, director general of the Canadian Climate Centre, and former director general of the Central Services Directorate at the time of the negotiations and installation of the system, provided much needed support and encouragement to Mr. Byce in acquiring the AS/6 computer facility. "We made a good team," he said. He recalled the lengthy and cumbersome methods of accessing the archives during and after World War II. Information then had to be individually typed, as there was no Xerox machine in those days. "All I want now is to be able to sit at home, punch a few buttons and see the figures appear on my TV screen. Just get me the information and I'll make sure I'll use it," he said.



Admiring the newly-opened AS/6 computer facility at AES Downsview are (left to right): Clarence C. Boughner, retired head of Central Services; ADM Jim Bruce; and Bruce Byce, Chief of the Computer Centre. Mr. Boughner headed the Service's climatology division for more than 20 years.