

Atmospheric Research Centre Opened at Egbert, Ontario

More than 500 people attended opening day ceremonies October 28 at the brand new Centre for Atmospheric Research Experiments (C.A.R.E.), inaugurated by the Hon. Doug Lewis, then minister of State, Treasury Board and Minister of State, Deputy House Leader.

The new research centre located at Egbert, Ontario, about 85 km northwest of Toronto, will help AES scientists measure atmospheric change and track transboundary pollution.

The official part of the ceremony was held in a large basement room in the solid glass and

concrete three-storey building, located in the heart of rural southern Ontario. As a red-coated RCMP officer stood at attention, an audience of about 80 sang "O Canada".

This was followed by an introduction of the speakers by master of ceremonies, Dr. Jim Young, director of Air Quality and Inter-Environmental Research Branch. First speaker was ADMA Howard Ferguson.

Mr. Ferguson told his audience that the Egbert location had been chosen as a regionally representative site for measuring the atmosphere of southern Ontario. He added that due to

the changing atmosphere, the Station for Atmospheric Experiments, located at Woodbridge, Ontario between 1963 and 1987, had become less useful for monitoring air quality due to rapid urban growth and was therefore less regionally representative. "By this we mean that most of southern Ontario is made up of open countryside and small towns and since the impact of the changing atmosphere will be, on average, most pronounced in these rural areas, we have chosen to place our 'watchdog research station' at Egbert."

Mr. Lewis told attendees that in addition to monitoring air quality, the Centre will soon be expanded to enable scientists to study the effects of climate change on water and forests. "Here in Egbert, scientists will develop technologies that will keep Canada in the forefront of atmospheric research", he added.

Mr. Lewis went on to say that the C.A.R.E. facility would help to provide the information needed to achieve what the World Commission on Environment and Development (Brundtland Commission) calls "sustainable development"; that is, development that meets the economic needs of the people of the world without bankrupting the environment in the process.

In a short speech, Charlie Pridham, reeve of Essa Township reaffirmed the municipality's commitment not to encourage development that might pollute the rural atmosphere of Egbert.

The ceremony ended with the unveiling of



The new three-storey CARE building at Egbert, Ontario, has facilities for a dozen or more different atmospheric research projects

two plaques, one to commemorate the opening of C.A.R.E., the other to honor the memory of the late Max Woodhead, scientist and builder of the centre's Remote Sensing Laboratory, a "visionary" who foresaw the opportunities offered by C.A.R.E. for the expansion of AES's important work. Mrs. Woodhead was present to receive a copy of the plaque.

The rest of the day was taken up with tours of the facility, of interest to everyone, from visiting scientists and government officials to a busload of gifted public school children.

Some of the main areas on display included the Canadian Climate Centre Laboratory, where scientists Barry Goodison and John Metcalfe demonstrated experiments to study the interaction of the atmosphere with crops and forests as well as the installation of the World Meteorological Organization precipitation reference station.

Phil Raczynski and Terry Allsopp explained the operation of the Ontario Region Climate Station — measurement of air temperature, precipitation, rate of rainfall, evaporation, wind, hours of sunshine, radiation and depth of snow on the ground.

Larry Wiggins and Bill Clink demonstrated some instruments developed by the Applied Engineering Section of the AES Data Acquisition Systems Branch, especially those used to remotely measure atmospheric parameters such as temperature and winds.

Al Wiebe guided visitors around the Air Chemistry Laboratory, showing them how the lab supported the analysis of photochemical oxidants, nitrogen and sulphur compounds, aerosols and hydrocarbons, all measured at the site.

Jim Arnold, Joe Kovalick and Wes Kobelka demonstrated the Air Quality Monitoring Laboratory where new instrumentation to



Dr. Wayne Evans (right) demonstrates the Brewer Spectrometer to the principal speakers at the CARE opening last November. The Hon. Doug Lewis and ADMA Howard Ferguson.

support the Canada-wide acid rain network is developed. The vertical profile experiment to study change of temperature, humidity, winds and ozone in the lower levels of the atmosphere was shown, as were the Clean Air Sampling Facility instruments where air pollution is monitored for intercomparison of different atmospheric chemicals.

Ray Hoff and Frank Froude conducted tours of the Electro-Optics Research Laboratory where lasers are used to study atmospheric aerosols, SO₂ and ozone. They also demonstrated vertical profiling equipment used to measure temperature, winds and ozone in the atmosphere by monitoring a free floating

balloon with sensors attached.

Lastly, Wayne Evans, Jim Kerr and Dave Barton showed visitors around the Solar Radiation Observatory where solar radiation properties of the atmosphere and stratospheric ozone are measured.

The day-long open house was also notable for the number of local residents who dropped by including farmers who looked in after their day's work was done. The visitors even included someone who claimed to have been born in the farmhouse that occupied the site of the current C.A.R.E. facility. The farmhouse was dismantled prior to building the new Centre.