

Weather service hits 100

By JOHN SKINNER

There's a new federal Government building going up that had an original construction budget of \$8,150,000—but now the forecast is that it's going to be completed for \$314,000 under budget.

A federal Government building under budget? Whose forecast is that?

The Atmospheric Environment Service. Used to be called the Canadian Meteorological Service. You know—the weather office.

The Canadian Meteorological Service is celebrating its 100th anniversary this year with a new national headquarters building in Metro, a new name, a \$38-million budget and a full-time staff of 2,300.

When it started in 1871 it was given \$5,000 by the federal Government and got its first weather observations from 37 lighthouse keepers who became voluntary meteorologists.

It all started with a letter from a University of Toronto meteorology professor, G. T. Kingston, to federal Marine and Fisheries Minister Peter Mitchell on Oct. 13, 1870. In it, Professor Kingston laid down plans for a system of weather observation points in Canada's five provinces.

"They (the lighthouses) present facilities of a personal kind," he wrote, "as the keepers, besides being steady men, are necessarily compelled to be at their posts."

When the service was absorbed into the new federal Department of the Environment at the beginning of this year, it became known as the Atmospheric Environment Service.

It has 53 forecast offices, 298 land stations, the services of 172 weather ships, 2,059 climatological recording stations and 55,000 miles of teletype and wirephoto circuits.

And it has a new home, the Central



—Globe and Mail, Franz Maier

The federal meteorological service celebrates its 100th anniversary with a change of name and a new Metro building.

Administration and Research Centre, almost completed on Dufferin Street in Downsview. Of all its records, the service probably cherishes its budget coup the most.

"It was mostly a matter of close attention and careful work," says Stanley Heinonen of Boigen and Heinonen, the architectural firm that designed the building. "We used cost consultants at various stages of construction so we always knew whether or not we were on budget."

Construction started in June, 1969, and the first furniture is being moved in—a month and a half ahead of schedule. Inauguration day is Oct. 29.

The original budget of \$8,150,000 was tendered at \$7,836,000, which works out to \$23.10 a square foot. Similar buildings usually cost \$30 a square foot, the architects said.

The building features an auditorium with a simultaneous translation service in four languages, and a wind tunnel to permit study of the effects on land and buildings of winds up to 70 miles an hour.

The centre will have a staff of 540 engaged in research, administration, climatology, instrumentation, training and field services. Another 100 to 120 will take courses there at various times.

Staff will come from the service's 12 Metro offices, but forecast offices, in-

cluding the one at Toronto International Airport, will remain where they are.

The service's new name was made necessary by an expanding meteorological horizon that now includes air pollution research. A task force is studying the feasibility of a national pollution monitoring network that could be adapted to the existing weather network.

Research will be undertaken at the centre on radiation and ozones, air-water interaction, cloud physics, forecasting and air turbulence.

The centre had humble ancestors. The service's 1871 budget of \$5,000 wouldn't even pay for the new building's fibreglas observatory.

"I consider," Professor Kingston wrote in a letter to Ottawa a hundred

years ago, "that \$200 for each province, including Manitoba, or \$1,000 in all would not be too much (as grants for instruments). The managers of railways have shown their appreciation of the work by allowing their station-masters to act as observers when invited by me to do so, and also by giving free passes to enable me . . . to visit the meteorological stations."

In the United States, studies have estimated that accurate advance warning of a single hurricane can decrease economic loss by an amount equal to the annual operating cost of the National Weather Service.

As a general rule, every dollar spent on weather services can result in \$25 in savings to users of the information, the Atmospheric Environment Service says.

Par for the course

Local meteorological employees held their annual golf day on June 8 at Woodbridge Golf and Country Club.

It rained.

"Yes, some of us got wet," an organizer chuckled. "We have to take our lumps like everyone else."

It wasn't that they didn't know it would happen. But they had to reserve

the course far in advance of their ability to forecast the weather.

"But the game goes on rain or shine. As weather men we could tell only a few days in advance.

"You get a bit apprehensive when you look into the crystal ball and . . ."

Crystal ball?

"Oh, no, no. Don't say I said that. We don't really use one."