## Canada-France-Hawaii telescope the world's newest

The world's newest optical observatory, the Canada-France-Hawaii telescope, was officially opened recently, concluding nearly five years of planning and construction.

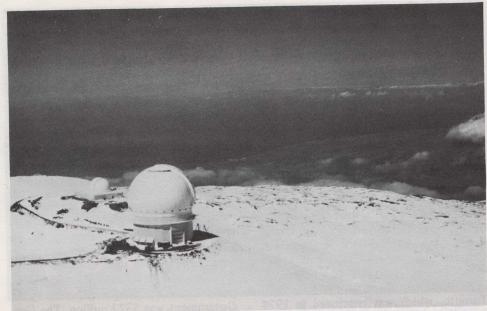
Located at the 4,200 metre-high summit of Mauna Kea, an extinct volcano on the island of Hawaii, the facility was built as a joint project involving the National Research Council of Canada (NRC), the Centre national de la recherche scientifique of France and the University of Hawaii. Among the largest observing instruments in the world, the new telescope will enable Canadian and French astronomers to look farther into space and to collect data unavailable from older and smaller telescopes in their own countries.

Mauna Kea is considered to be one of the best places on earth for carrying out astronomical observations. The air above the peak, the highest point of land in the Pacific Ocean, is much drier than at sea level, a condition particularly well-suited to detection of infrared emissions from space. The atmosphere around the site is also very still and transparent, affording clear, unblurred images of stars and most nights at the summit are cloud-free and suitable for observation. Cloud layers normally form at lower levels on the mountain, blocking out interfering lights from Hilo, the major city on the island. Mauna Kea's location in the tropics also provides an excellent vantage point from which to view almost the entire sky.

## The mirror

The new telescope's main mirror, which is used to collect and focus starlight, is nearly twice the diameter (3.66 metres) of any other now available in Canada or France. (At present, the largest telescopes in Canada are the NRC's Dominion Astrophysical Observatory near Victoria, British Columbia, and the David Dunlap Observatory near Toronto.) The mirror can enable the new telescope to make out both eyes of a person standing 20 kilometres away or pick up the glow of a light bulb on the darkened side of the moon. The mirror was installed on Mauna Kea in July of this year, to complete construction of the main telescope structure.

The other components of the telescope had been built and tested in various



The Canada-France-Hawaii telescope, surrounded by clouds at the summit of Mauna Kea. A smaller U.S. infrared telescope stands next to the dome of the new observatory.

locations in Canada and France, then shipped to Hawaii for assembly. The work on all phases of the project was coordinated by the Canada-France-Hawaii Telescope Corporation, an agency set up by the three partners. The construction costs of \$30 million (U.S.) were shared equally by Canada and France, while the University of Hawaii provided the moun-

taintop site and other support facilities.

Canada and France will each be entitled to 42.5 per cent of the available observing time while the University of Hawaii will receive 15 per cent. A staff of 30 will work both on Mauna Kea and at the Canada-France-Hawaii Telescope Corporation headquarters in the village of Waimea at the foot of the mountain.

## Residents assess holidays in Canada

Canadians from coast-to-coast ranked British Columbia as their number one choice for a travel destination in a recent tourism survey prepared for the Canadian Government Office of Tourism.

The survey was aimed at determining the attitudes of Canadians towards Canada as a vacation destination, especially in relation to the United States.

The 500 respondents, in each of six metropolitan centres located near the U.S./Canada border (Vancouver, Calgary, Winnipeg, Toronto, Montreal and Halifax), were asked to compare Canada with the United States by rating 20 vacation activities and 23 vacation attributes on a scale of one to ten. Respondents were all 18 years of age or over, had been on a trip of at least 160 km (100 miles), and had stayed away from home for at least one night in the past two years.

British Columbia was rated as the number one travel destination by each group with the exception of Montreal (French-speaking), which chose Quebec. The U.S. was the second choice as a destination in Vancouver, Winnipeg and Montreal (English-speaking); third in Calgary and Montreal (French-speaking); and fourth in Halifax.

When asked to compare accommodations in the two countries, the respondents indicated that the United States offered a wider variety of hotels and motels, and felt they received better value for their money south of the border.

According to the survey, Canadian cities have the image of being safe to walk in, and for this reason were rated above American cities as tourist destinations. Canada also scored higher than the U.S. for good restaurants, being a place to explore the countryside and talk to the local people. The ease of getting travel information before leaving on a trip also made Canada more appealing to many travellers. On the other hand, the U.S. rated higher than Canada as a place to shop and to visit beaches and art galleries, as well as offering a more exciting nightlife.