

LANDING AIDS USE PHOTO-ELECTRIC CELLS

An improved method of measuring ceiling (height of cloud base) and visibility where they count most — in the approach to and along the runway — is now in use at most of Canada's major airports, according to the Department of Transport. Over the past few years, the jet-age tools to do this job have been installed at the airports at Gander, Halifax, Montreal, Ottawa, Toronto and Vancouver, and at North Bay (Ontario), Goose Bay (Labrador), and Frobisher Bay (Northwest Territories). Another set, at Winnipeg International Airport, became operational this autumn.

The instruments, called ceilometers and transmissometers, are necessary because of the huge size of modern airports. At Vancouver, for instance, the touchdown point on the main instrument runway is two miles away from the weather-observing office. When ceiling and visibility are nearing the point at which it is no longer safe for an aircraft to land, small variations become very important.

FUNCTION OF INSTRUMENTS

The ceilometer measures the height of the cloud base at a critical point on the final approach path. Similarly, the transmissometer measures the visibility in the aircraft-touchdown zone. On both instruments a photo-electric cell is used.

In the case of the ceilometer, a beam of light interrupted 120 times a second is reflected from the cloud base to a detector. Recognizing the light beam only, the detector is sensitive enough to record its reflection even in broad daylight.

The transmissometer measures visibility by computing the percentage of light that is lost when a beam of known intensity travels along the runway. This measurement can be converted into an accurate estimate of visual range along the runway.

The instruments' findings are recorded electronically in the weather office.

Eventually the information will be relayed direct to air-traffic controllers so that they can give instant ceiling and visibility data to pilots on approach.

FAMILIES IN CANADA

The number of families in Canada, excluding the Yukon and Northwest Territories, on June 1, 1962, was estimated at 4,239,000, an increase of 99,000 or 2.4 per cent since the 1961 census. The average number of persons in a family in Canada on June 1, 1962, was 3.9, unchanged from the 1961 census, and a slight increase from the 1956 census. The average family size was greatest in Quebec and the Atlantic Provinces, at 4.3 persons a family, followed by the Prairie Provinces at 3.8, Ontario at 3.7 and British Columbia at 3.6 persons a family.

CHILDREN

The average number of children in a Canadian family in June 1962 was 1.9, the same as shown in the 1961 census. The 1962 estimates show marked differences between regions in the number of children

in a family. Families with no children, for example, were only 25.2 per cent of all families in Quebec and 26.1 per cent in the Atlantic Provinces, but constituted 32.4 per cent of the total in British Columbia, 29.7 per cent in Ontario and 29.5 per cent in the Prairie Provinces. On the other hand, 14.8 per cent of all families in the Atlantic Provinces and 14.5 per cent in Quebec reported five or more children, the Prairie Provinces and Ontario 6.6 per cent and 5.9 per cent respectively, with British Columbia reporting only 5.0 per cent.

NEW STRATFORD DIRECTOR

Jean Gascon, co-founder and artistic director of Montreal's Le Théâtre du Nouveau Monde and executive director of the National Theatre School, has been appointed associate director of the Stratford Ontario Shakespearean Festival.

As his first project in his new post, Mr. Gascon, who directed "The Comedy of Errors" during the past season, will stage "Le Bourgeois Gentilhomme", which the Festival will present next April at Chichester, England, with "Timon of Athens" and "Love's Labour's Lost", during the celebration of the 400th anniversary of Shakespeare's birth. "Le Bourgeois Gentilhomme" will also be one of the four productions to be seen at Stratford next summer during the twelfth season, from June 15 to October 3.

Mr. Gascon has had a long association with the Stratford Festival. In 1956 he played Constable in "Henry V" at the Festival Theatre and, with fellow members of Le Théâtre du Nouveau Monde, presented and appeared in three farces by Molière at the Avon Theatre. Two years later he returned to the Avon, again with Le Théâtre du Nouveau Monde, to direct and play in "Le Malade Imaginaire". In 1959 he co-directed (with George McCowan) "Othello" on the Festival Theatre stage.

Mr. Gascon will continue to live and work in Montreal but will spend part of the year in Stratford.

FOREST FIRES

Forest areas burned in Canada by the end of August point to one of the lightest forest-fire seasons on record.

According to estimates released by the Department of Forestry, 6,220 forest fires, with a total area of 296,000 acres, were reported to the end of August. This includes 97 fires that burned 22,000 acres in the Yukon and Northwest Territories.

At the end of August last year, 5,711 fires had swept through some 482,000 acres of forest. The figures for the Yukon and Northwest Territories were 148 fires with an estimated area of 33,000 acres.

Statistics for August this year are as follows: 1,138 fires covering 27,000 acres, of which eight fires with an overall area of 1,000 acres occurred in the Yukon and Northwest Territories.

The lightest forest-fire season on record was in 1954, when the area burned was 266,000 acres.