

New Research Site

The University of Toronto's Institute of Aerophysics, headed by Dr. Gordon N. Patterson, is expanding into 16,000 square feet of new building near the Connaught Laboratories in north Toronto.

The building, at present estimated to cost \$550,000, will be located on a 20-acre site allowing for further expansion of test facilities. Initially it will house a new low-density wind tunnel and hypersonic shock tubes.

With work to begin this spring, the Institute hopes to move the subsonic wind tunnel from its present campus site before the autumn semester. Cost of the missile research centre is divided between the University, the Defence Research Board, and the A.V. Roe Group of companies primarily Orenda and Avro which donated \$50,000. Said Dr. Patterson about this: "It was a key donation for we couldn't have done it without the help of industry. The DRB is not empowered to provide for such things as office space and lecture rooms. They are only allowed to build research facilities."

The building project will be put out for tender at the end of this month.

Speed Record

USAF Major Adrian Drew, flying a McDonnell F-101A Voodoo has officially recaptured the world absolute speed record for the U.S. with a 1,207.6

mph average speed over an official course at Edwards AFB. Until this time, the record has rested in Great Britain where it was won in March 1956 by Peter Twiss in the Fairey Delta FD.2 at 1,132 mph.

In the same month, USAF Voodoo aircraft set two transcontinental records between Los Angeles and New York. The first of these was between those two cities from west to east in 3 hours 5 minutes 39 seconds. The other record was for the round trip from Los Angeles to New York and back to Los Angeles, which was flown in 6 hours 42 minutes and 6 seconds.

DRB in '57

The Defence Research Board's program during 1957 shifted in emphasis from research leading to direct development to fundamental investigations, the Board's year-end report says. The newly-aligned studies were directed to support U.K. and U.S. ballistic missile defence activities, and expanded weapons' and defence systems evaluations.

Working closely with scientists from the other two countries, DRB staff members accelerated scientific effort related to the development of a defence against ICBM's. The program involves the study of a scale model ICBM passing through a simulated atmosphere, research in upper atmospheric physics, infrared detection and guidance, and the development of new propellants for

large rockets.

To assist in obtaining vital scientific information about the upper atmosphere, the Board and the USAF are beginning construction of a large radar installation near Prince Albert, Sask. Aimed at studying the aurora borealis and its likely effect upon ICBM detection, the joint project will begin this summer.

Scientific advances related to military operations that have developed so rapidly during the past few years have dictated that Canada choose new defensive weapons in the near future, the Board says. For this reason, DRB operational research specialists increased their efforts in the field of systems evaluations during the past 12 month period.

Golden Anniversary

A national council representing Canadian government departments, military services, the aviation industry and associations connected with the industry has been formed to develop and co-ordinate activities across the nation during 1959 in commemoration of the 50th anniversary of powered flight in Canada.

The first flight in Canada (it was also the first flight in the British Commonwealth by a British subject) was made by the Hon. J. A. D. McCurdy off the ice at Baddeck, Nova Scotia, on Feb. 23, 1909.

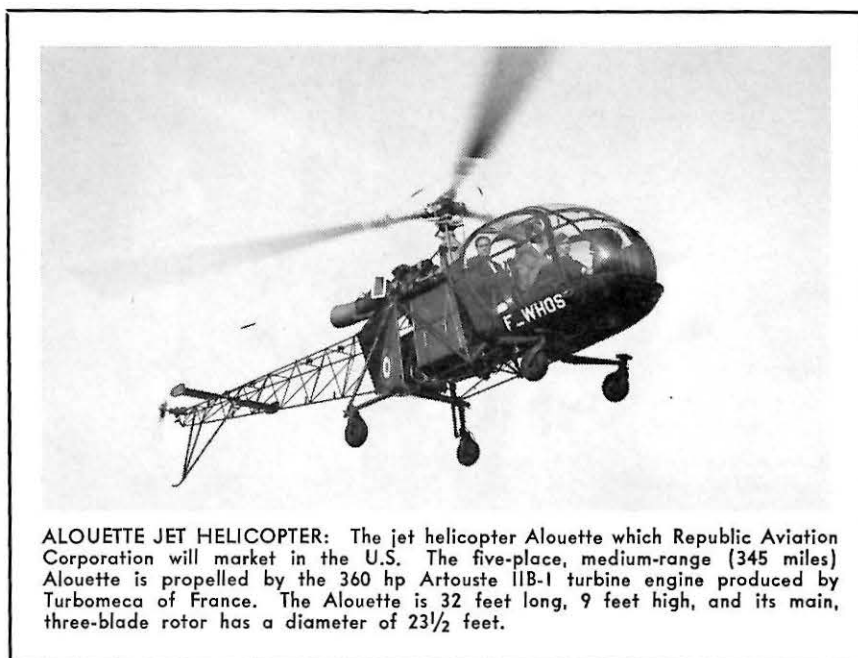
The National Co-ordinating Council is made up of representatives of the manufacturers and transport companies of the aviation industry (AITA) from coast to coast, the Aviation Writers Association, the Air Cadet League of Canada, Canadian Army, DoT, RCAF, Royal Canadian Air Force Association, RCFCA, RCN, and the NRC.

Committees will be established in the major centres of Canada and these committees will develop programs and celebrations for local areas, in liaison with the National Council.

NRC Science Library

Canada's National Research Council has a library of Russian scientific literature comparable to any collection outside the Iron Curtain, the government agency claims.

The library of the National Research Council is the major science library in Canada. Its chief aim is to supply the Canadian scientific community with information, published in any language, that may contribute to the ad-



ALOUETTE JET HELICOPTER: The jet helicopter Alouette which Republic Aviation Corporation will market in the U.S. The five-place, medium-range (345 miles) Alouette is propelled by the 360 hp Artouste IIB-1 turbine engine produced by Turbomeca of France. The Alouette is 32 feet long, 9 feet high, and its main, three-blade rotor has a diameter of 23½ feet.