

**DECK LANDING TRAILS** for the Beaver were recently carried out on HMS Centaur by the British Army Air Corps, which acquired 36 DHC-2's last year. Purpose of trials, carried out without usual deck landing aids, was to test feasibility of transporting Beavers to beach-head areas by carrier.

### CAE Project Signboard

Canadian Aviation Electronics recently delivered an advanced display system to the Canadian Army Signal Station at Carp, Ontario. The system, known as 'Project Signboard', will plot air, ground and nuclear detonation activity on a theatre-type screen. Its purpose is to keep the Army's civil defence team immediately up-to-date on exercises or in a real emergency.

The CAE system uses a computer which processes messages carried to it automatically from radar installations, reconnaissance aircraft, nuclear detonation and fallout-reporting stations. It will also be tied into the data transmitter at NORAD headquarters.

The display is carried to the screen in six colors by a maximum of ten projectors on command from the computer which selects color and projector automatically. The writing mechanisms in the projectors are also controlled by the computer.

## CF-104 Sub-Contract

The AN/APX-46(V) IFF airborne transponder is being supplied for the CF-104 Starfighter by the Hazeltine Corp., Little Neck, N.Y., which designed and developed this configuration of the transponder for use in the F-104 program for the NATO countries of Europe as well as Canada.

The transponder being fitted into the Starfighters at Canadair is a transistorized version which provides greatly increased reliability and is capable of operating at high altitudes under extreme temperature conditions. Modular construction permits the equipment to be adapted to differing configurations depending on the space available in various types of aircraft.

### Lack of Research

The shortage of a few specialized scientists may ultimately restrict the growth of general employment in Canada, according to C. B. C. Scott, president of the Technical Service Council. The Council is a non-profit industry-sponsored placement service which has been recruiting such men for new research groups in Canada.

Canadian companies spend much less on research than those in the U.S. This is partly due to the fact that many Canadian firms are subsidiaries of foreign companies. Mr. Scott estimates that only 3000 scientists are doing research in Canada, and that three-quarters of these are with governments or universities. Because of the small number of researchers, there are few scientists qualified to set up and run new research laboratories in specialized fields.

Many engineers and scientists with advanced degrees emigrate to the U.S. Some go to work with internationally famous researchers, but others go due to the limited choice of employment in Canada. There are many fields of scientific activity in which only one or two companies in all of Canada are engaged.

Surprisingly, the Council receives many letters of enquiry from Canadian professional men in the U.S. who wish to return to Canada. Some Canadians in the U.S. would undoubtedly be qualified for professional openings now going begging. Young chemists, chemical engineers and experienced electronic engineers and computer specialists are in such short supply that some Canadian companies are recruiting in Great Britain.

#### Fleet Year-End

The fiscal year ended Sept. 30, 1961, was profitable for Fleet Manufacturing Ltd. and its new subsidiary Dumont Aluminum Ltd. The consolidated net profit of the two companies was \$151,270.

The parent company's net operating profit was \$63,582 compared with \$2300 in the previous fiscal year. The additional \$87,688 was contributed by Dumont Aluminum in the six and one-half months which followed its acquisition by Fleet in March 1961.

Fleet's sales during the year totalled \$2,284,336.

About 65% of the operations at Fort Erie were concerned with defence contracts and the remaining 35% with the production of components for civilian aircraft and microwave equipment. During the year, Fleet obtained its first contract awarded under the Canadian - U.S. defence production sharing program. This was a pilot order for antenna reflectors from Gilfillan Bros., Los Angeles.

About 44% of Fleet's sales during the last fiscal year consisted of products for the aircraft industry. The company was awarded new contracts by Canadair and de Havilland Canada for the production of systems training panels for the CF-104 and components for the DHC-4 Caribou. Approximately \$15,000 worth of components is supplied for each Caribou, including fins and rudders, cargo doors and loading ramps.

# Sell F-104 Cockpits

Canadair has sold 29 CF-104 cockpits with seats to Canadian Aviation Electronics Ltd. for the F-104 simulators being produced by CAE for the RCAF and the air forces of Belgium, Germany, The Netherlands and Italy.

# Avro Pay Raise

A new wage agreement has been negotiated between A. V. Roe (Canada) Ltd. and some 2500 members of the International Assoc. of Machinists providing for a six cent an hour increase from Aug. 1, 1961, and seven cents on Aug. 1, 1962. The agreement expires in December 1963. The workers are employees of the