# THE INDUSTRY

#### The Mark Five

The intention of the RCAF to reequip its nine regular all-weather home defence squardrons with a new version of the CF-100, the Mk. 5, was confirmed at January's end by AFHQ. To carry through such a re-equipment program will require approximately 300 aircraft worth some \$150,000,000. Though Avro Aircraft Ltd. and Orenda Engines Ltd. will be the direct beneficiaries of this program, their host of suppliers and subcontractors will also receive a muchneeded boost.

No details of the Mk. 5 have yet been released, but it is understood to be a further development of the Mk. 4C, the existence of which was "leaked" at the 1955 SBAC Display. The latter has increased wing area and more power, a combination which effectively raises the operational ceiling of the type to something over 50,000 ft., or approximately 5,000 ft. over that of current operational versions of the Mk. 4.

#### NATO Orders for Canada

West Germany is reported to be negotiating through the Department of External Affairs to purchase military equipment worth \$600,000,000 for her newly-established armed services. According to the most recent of the constantly recurring reports on this subject, most of the \$600,000,000 will be spent on Canadian-built Sabres and CF-100's.

While a breakdown of the numbers of each type under discussion has not been announced, one total mentioned was 1,236 airplanes.

## Industry's Prospects

President J. G. Notman of Canadair Ltd., testifying last month before the Royal Commission on Canada's Economic Prospects, made these points:

• During and since the war a careful check has compared the productivity of Canadian plants with those of the U.S. and U.K. We are able to say that Canadian workmen can compete on an hours-per-pound basis with anyone in the world producing an equivalent article. In quality and schedule performance, the Canadian industry ranks among the best in the world. Given a continued opportunity, there is no reas-

on to believe this cannot be maintained.

- Much has been written of the flight of our engineers and scientists to the U.S. for more gainful employment; the aircraft industry is becoming increasingly dependent on such personnel, and unless we can offer them opportunities in some long-range development, they will not be available to us for our current activity or in a crisis.
- A planned replacement policy for the RCAF, using latest available equipment, might well result in Canada becoming a regular supplier of older aircraft to other countries.

## U.S. Spending Here

The U.S. armed forces will spend more than \$200,000,000 in Canada this year, according to Washington sources.

Most will be for the Distant Early Warning radar line; the balance will be for aircraft, electronic spares and light arms.

U.S. purchases in 1951 amounted to \$38,000,000. In 1952 they reached \$149,000,000. In 1953 and 1954 they totalled \$192,000,000 in each year. The 1955 figure was about the same as the 1956 estimate.

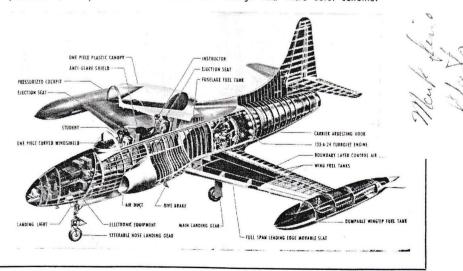
## **Export Orders**

In 1955, some 60 per cent of all civil Beavers built by de Havilland of Canada were exported, a company report reveals. Recipients were: Colombia (5), U.S. (2) and one each to Egypt, Japan, Australia, Finland, Arabia, the Falkland Islands and Mexico.

Since 1950, Colombia has purchased 30 Beavers and one Otter, making it de Havilland's best Latin American customer. Operators are: Colombia Air Force (11 Beavers), Aereo Taxi Avian-

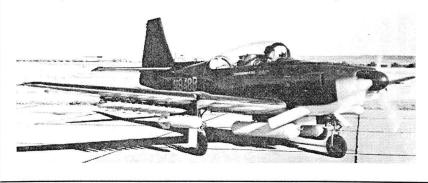


IN THE FLESH & UNDER THE SKIN: Photo and cutaway drawing show the USN's new Lockheed T2V-I SeaStar, a development of the T-33. Designed especially for carrier training, the SeaStar is fitted with boundary layer control, which er '' it to land at airspeeds as low as 97 mph. Another feature is the elevated rea for the instructor, six inches higher than the front seat. The jet trainers, n production, are painted in the USN's new orange and white color scheme.





TEMCO TRAINER: This new dual-purpose military trainer for primary flight and armament instruction has been developed by Temco Aircraft Corp., Dallas, Texas, as a private venture for sale to foreign governments. Designated the Model 58, the trainer is powered by a Lycoming GSO-480-AIA rated at 340 hp @ 3,400 rpm @ SL. Max. TAS is 185 kts. @ 10,000 ft.; cruising speed @ 75% power is 174 kts. @ 10,000 ft. Max. rate of climb at sea level is 1,820 fpm.



ca (7 Beavers), Aereo Taxi Santander (5 Beavers, 1 Otter), Government of Colombia (6 Beavers), Seraco (1 Beaver).

#### Shift to Downsview

Flight test operations of Orenda Engines Ltd. have been transferred from Malton to Downsview airports. Involved in the move were about 40 people, two CF-100 and two Sabre VI aircraft. Following a fire in March, 1955, which levelled the company's Malton flight test hanger, temporary space was rented. In the new location, 12,000 sq. ft. of hangar space, offices, stores area and other facilities are occupied in an existing hangar.

# Sycamore to Float

Bristol's demonstrator Sycamore is being utilized at Winnipeg for the development of flotation and skid gear which, company officials say, are necessary for Canadian market competition.

Previously, the machine made a six-week tour which covered Victoria, Vancouver, Edmonton, Toronto, Oshawa, Trenton, Kingston, Ottawa and Montreal. It was demonstrated in its five versions: passenger, freight,

ambulance, search and rescue and underslung load.

Among its demonstration duties was to heft two water pumps, each weighing 550 lbs.; carrying drill pipes and barrels of fuel oil, and towing a specially designed electro magnetometer over mountainous country.

## More Sabre Spares

The Greek Government has announced that Canada has offered a one-year extension of its spares support program for F-86 Sabre aircraft supplied Greece under the Canadian mutual aid program. An Athens report says Canada will undertake to supply ground-handling equipment, tools and a full range of aircraft maintenance and overhaul parts until March 31, 1958.

Since July, 1954, Canada has supplied a large number of Sabres and a small number of T-33 Silver Star jet trainers to both Greece and Turkey.

# Harvards to Egypt

Three Harvard training aircraft have been shipped to Egypt, the Canadian Government admitted last month during a spirited House of Commons debate. They were not, as earlier claimed, surplus to RCAF require-

ments; they were fabricated by Canadian Car and Foundry Co. Ltd. at Fort William from spare parts and sold in a purely commercial transaction.

Originally, Egypt purchased 15 aircraft and an export permit was fully issued. However, after criticism in Parliament and by many newspapers, the government decided to delay shipment of the remaining 12.

#### Here's Howe

Defence Production Minister Howe, questioned in Parliament last month about reported layoffs at the Winnipeg plant of Bristol Aircraft, replied: "It would be much more to the point to talk about unemployment as the result of complaints about Harvard aircraft. I know of no unemployment resulting directly from any government action at Winnipeg."

## \$600,000 Contract

Canadian Westinghouse reports the receipt of a \$600,000 order from the Transport Department to build 36 VOR transmitters for installation at Western Canada airports. Deliveries will begin next summer and continue for 12 months.

The VOR equipment (VHF Omnidirectional Radio Range) will replace the four-course LF/MF radio ranges still widely used in Canada.

#### Atlas Titanium

Atlas Steels Ltd. of Welland, Ont., and Mallory-Sharon Titanium Corp. of Niles, Ohio, have formed Atlas Titanium Ltd. to supply titanium in bar, wire, sheet and forged forms for Canadian and world markets. Atlas Steels maintains controlling interest in the new company.

Mallory-Sharon will undertake melting operations. All other phases of production will be carried out by Atlas Steels on existing equipment which, the manufacturer says, needs only minor additions for full titanium processing.

### Hot Box

An air circulating furnace with a temperature range from 200 to 1,450 degrees F. and capable of handling 4,000 lbs. of material has been installed at the Malton plant of Avro Aircraft Ltd. It will be used mainly for the treatment of aluminum alloys, but its high temperature range makes it possible to heat-treat titanium. Operation is automatic and push button-controlled.

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