# THE INDUSTRY

#### Canadair Contracts

First official figures on costs of the Canadair CL-28, CL-44 (CC-106) and Eland Convair 440 (CL-66) were given by Defence Production Minister Raymond O'Hurley in the House of Commons on July 28. Mr. O'Hurley gave an account of all unclassified contracts awarded to Canadair between August 10, 1953, and June 30, 1958. In this period, Canadair was awarded 182 contracts worth \$10,000 or more with a total value of \$340,-060,869.48 and 466 contracts under \$10,000 with a total value of \$611,-368.51.

Among the details of contracts are: Engineering and development of CP-107 (CL-28), \$20,969,100; tooling for CL-28, \$25.265,000; production of CL-28, \$113,500,000.

Engineering and development for production of CL-44, \$8,500,000; tooling for CL-44, \$10,100,000; production of CL-44, \$24,000,000. Production of CL-66, \$10,000,000. The company at present has orders for 33 CL-28's, eight CL-44's and 13 CL-66's.

Other noteworthy contracts awarded to Canadair included: \$8,000,000 for pre-production planning and engineering for the Sparrow II air-to-air guided missile; \$2,250,000 for Sparrow tooling; \$52,781 for tooling for Sparrow simulated aerodynamic vehicles; \$460,044 for Sparrow simulated aerodynamic vehicles; and \$800,000 for production of Sparrow II Mod. "D" missile.

\$30,000 (Feb. 14, 1957) for a vertical take-off and landing design study; \$10,000 (Feb. 5, 1958) for engineering assistance for ballistic missile defence studies; and \$50,000—(May 29, 1958) for engineering and analytical assistance for guided missile research and systems study programs.

# Lear Autopilot for Caribou

The U.S. Army Signal Corps has awarded Lear Inc., production contracts to supply modified Lear F-5 automatic flight control systems for the de Havilland DHC-4 Caribou and the Beechcraft L-23 Twin-Bonanza. Contracts totalled \$716,000 with follow-on orders expected.

The Lear automatic flight control system won the Army award on the

basis of its proven performance, reliability, weight and availability. It is one of the adaptations of the basic Lear F-5 automatic flight control concept designed to meet automatic control requirements for military jet aircraft. Production is scheduled to begin in March, 1959.

#### RCA Victor at Malton

Negotiations are being concluded by the RCA Victor Co. Ltd., for the construction of a 50,000 sq. ft. area building and hangar on Derry Road, Malton, Ont., just west of the A.V. Roe Company property.

RCA Victor recently announced the organization of a new Defence Electronic Systems Division for the research, development and production of important electronic systems such as the integrated electronic system to be used in the CF-105 Arrow. Formal announcement regarding this new RCA Victor activity will be made at a later date.

## Company Expansion

Carriere & MacFeeters Ltd., one of the industry's fastest growing companies, has recently opened a second plant on Northline Road, Toronto. The new facility will add 10,000 square feet of working area, and will be devoted to the manufacture of hermetically-sealed sub-miniature relays and high-temperature solenoids.

Meanwhile, the head office is still located at the company's number one plant at 936 Warden Avenue. Major activity here is the repair and overhaul of RCAF and RCN equipment, as well as commercial airline contracts, and work done on business and

private operated aircraft. The company represents Bendix-Scintilla; B.T.H.; Delco-Remy; and Westinghouse. They are Canadian distributors for U.S. Gauge Aircraft Instruments, and Kenyon Instrument Co. Ltd.

### RR Canada Contract

A contract has been placed with Rolls-Royce of Canada Ltd., for the overhaul of the Westinghouse J. 34 - WE. 36 turbine engines which will shortly be installed as auxiliary power units in the RCAF's Neptune maritime reconnaissance aircraft.

Rolls-Royce will utilize existing facilities already engaged in overhauling J. 34 engines for the RCN's Banshee aircraft.

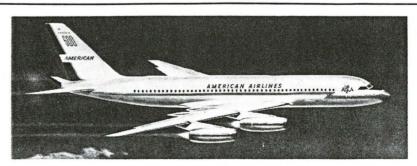
## Fairey Diversification

Fairey Aviation (Canada) Ltd., of Dartmouth, N.S., are presently conducting a research program into the problem of servicing hearing aids. The company hopes to produce a cheap but easily serviced resistor hearing aid.

Says general manager Charles E. Hilbert: "If our development is successful, the user will be able to have his hearing aid repaired in any electronic shop."

While the main part of Fairey's operation still consists of the repair, overhaul and modification of RCN Banshees and RCAF Neptune aircraft, some diversification has been in progress. Fairey (Canada) has been producing hydraulic booster equipment for Banshee jets for over a year.

Unlike most manufacturing plants in Canada, Fairey continues an apprentice plan. Each year the company enrolls a class of 10 apprentices in a five-year training program. In addition to the plant work, the boys are given one day a week in the vocational



CONVAIR 600: American Airlines has purchased 25 Convair 600's and taken an option on a further 25. Powered by four GE CJ-805-21 jet engines, a development of the J-79, the Convair 600 has a top speed of 635 mph, trans-continental range. The luxurious interior will seat 90 to 120 passengers according to interior configuration. First flight is scheduled for August 1960.

AIRCRAFT

school in Halifax studying mathematics and drafting.

### Argus Production

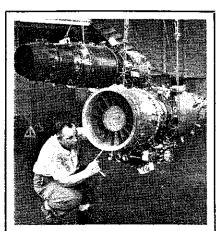
The first 12 Argus aircraft produced by Canadair Ltd., for the RCAF, had flown over a total of 1,700 hours by mid-August. At that time, five of the 74-ton aircraft were in squadron service with Maritime Air Command, flying out of RCAF Station Greenwood, N.S. Seven more, turned over to the RCAF by Canadair, were still engaged in experimental and development work in various parts of Canada.

Number 14 aircraft off the assembly line became the first to be designated Mark II, and fitted with the latest-designed detection and tactical equipment. The principal external sign of the advanced version is a drastic reduction in the size of the radome, which on the first thirteen aircraft is a large conspicuous bulb under the forward fuselage.

#### Government Talks CF-105

The House of Commons estimates committee has suggested that Canada never again embark alone on a weapons program of the magnitude of the CF-105 development. In a report to Parliament August 6, the committee said the CF-105 program will cost \$175,000.000 in the 1958-59 fiscal year and added:

"While the committee concurs in the necessity of this expenditure, having regard to the terms of reference, it does not feel authorized to comment at this time on future action with



PRATT & WHITNEY JT-12: A small, high-performance jet turbine has been announced by Pratt & Whitney. Designed for economical production, the JT-12 has an initial rating of 2,900 pounds dry static thrust for take-off; weighs 430 lbs. Ratio is 6.75 lb. thrust per lb. weight.



GROUND CONTROLLED LANDING: The Boeing 707 jetliner is seen here about to touch down under control of the Bell Aircraft automatic all-weather landing system in right foreground. Aircraft was picked up by the radar system four miles from end of runway and then controlled by the radar unit through automatic pilot all the way to touchdown.

respect to further development of this portion of defence program.

"Having made that point, however, and in view of the heavy financial burden, the committee does express its concern in the government entering into any subsequent weapon program of this magnitude without first negotiating for some cost-sharing agreement with either NATO member countries or the United States under the NORAD agreement."

The committee report brought comment two days later in the Commons from Opposition Leader Pearson, who believes that weapons development should be carried out collectively within NATO. However, Canada would have very great difficulty in getting the United States or any NATO country to participate in the cost of an aircraft and missile program in this country in light of their own defence costs.

The estimates committee recommended RCAF adoption of a primary jet trainer to replace the Chipmunk and Harvard. It said on this point: "Such a program would make the step up to service flying more gradual with an appreciable saving through the elimination of high replacement and maintenance cost of present equipment. It is to be noted that this recommendation follows the pattern adopted by air forces in other countries."

## BEA Orders DH 121 Airliners

The British government recently announced that it has approved BEA's order of 24 D.H. 121 jetliners from the Aircraft Manufacturing Co. Ltd., the company formed early in 1958 with de Havilland, Hunting and Fairey participating. The contract will amount

to some \$72.5 million, and calls for the delivery of the aircraft between 1964 and 1966.

The D.H. 121 will be powered by three Rolls-Royce RB. 141 engines mounted at the rear of the fuselage. A short-and-medium haul airliner, the D.H. 121 will have a maximum cruising speed of more than 600 mph. It is required to carry up to 100 passengers on stage lengths of about 1,000 miles and to operate from airport runways only 6,000 feet long.

## Rotodyne Agreement

The Fairey Aviation Co., announce that they have agreed with the Kaman Aircraft Corp., of Bloomfield, Conn., the terms of a licence for the manufacture and sale of the Fairey Rotodyne vertical take-off airliner in the United States.

#### Avon Life Extended

The Air Registration Board of Great Britain has authorized a life of I,000 hours between overhauls for the Rolls-Royce Avon RA. 29 which is used in both the Comet 4 and the Sud Aviation Caravelle. This will be confirmed in the case of BOAC by an examination of two engines at 800 hours and two at 900 hours flying time.

Initially, a target of 500-hour overhaul life was set when BOAC began an intensive engine proving exercise in September, 1957. Two Comet 2E aircraft, powered by two RA. 29's and two earlier Avons, made daily scheduled flights from London to Beirut and back at an aircraft utilization of 11 hours per day, accumulating 7,000 hours of flying time on the RA. 29 engines. Only one RA. 29 had to be removed prematurely, due to the