

CANBERRA: The English Electric Canberra is shown above as it performed at Baltimore, Maryland, for top personnel of the Glenn L. Martin Company, which is to build an unspecified number of the Canberras for the USAF. The Canberra has been given the U.S. designation B-57A and will be utilized as an attack bomber or as a night intruder. The Canberra was originally designed as a high-speed, high altitude bomber, but degree of manoeuvrability indicated it would have many other uses.

teristics. It may be equipped for either water-alcohol injection or after-burning. GE claims a low rate of fuel consumption.

The engine has the annular type of combustion system. Some accessories, housed in the nose of the current production engines, have been placed underneath to provide a greater air inlet area to the compressor. A "hot nose" is achieved by bleeding hot air from the compressor to hollow nose parts, and retractable air inlet screens are used to prevent ice collection on the critical inlet parts. The basic engine is 36.75 inches in length and 146 inches long.

Repair and Overhaul

Present value of RCAF overhaul and repair contracts with civilian firms is approximately \$35,000,000, Minister of Defence Production C. D. Howe told The Commons recently. He said that some of these contracts cover programs extending over two years.

Contracts Awarded

Contractors awarded business in excess of \$10,000 by the Department of Defence Production during the period May 15-31 and June 1-15 include the following. It is pointed out that the list does not include orders deleted for security reasons, orders placed by the Department outside Canada or with

other government agencies, and increases in orders placed earlier.

(Names appearing in bold face type are current AIRCRAFT advertisers)

Abercorn Aero Limited, Montreal, \$50,000 for aircraft parts.

Aircraft Industries of Canada, Ltd., St. Johns, P.Q., \$300,000 for aircraft reconditioning.

Aviation Electric Ltd., Montreal, \$45,798 for communications equipment, aircraft parts, and test apparatus.

The Babb Company (Canada) Limited, Dorval, P.Q., \$664,125 for aircraft.

British Aeroplane Engines Limited, Vancouver, B.C., \$1,135,000 for aero engine repairs.

Canadair Limited, Montreal, \$210,-

000 for aircraft reconditioning.

Canadian Aviation Electronics Limited, Montreal, \$25,000 for telecommunication installations.

Canadian Pratt & Whitney Aircraft Co. Ltd., Longueuil, P.Q., \$64,211 for aero engine repairs and parts.

Clatworthy Lumber Co. Ltd., London, Ontario, \$64,793 for lumber and hangar roof replacements.

The de Havilland Aircraft Company of Canada Limited, Toronto, \$779,927 for aircraft reconditioning and parts.

The Fairey Aviation Company of Canada Limited, Eastern Passage, N.S., \$240,392 for aircraft spares and tools.

Irvin Air Chute Limited, Fort Erie, Ontario, \$900,329 for parachutes and parts.

J. W. Lawrence Canada Limited, Montreal, \$12,000 for aircraft parts.

MacDonald Bros. Aircraft Limited, Winnipeg, \$230,000 for aircraft modification kits and electronic equipment.

W. A. Moffatt Company, Toronto, \$138,600 for hangar repairs.

Monahan Supply Corp. Ltd., Toronto, \$38,655 for tools and ground handling equipment.

Radio Engineering Products Limited, Montreal, \$46,504 for communication equipment.

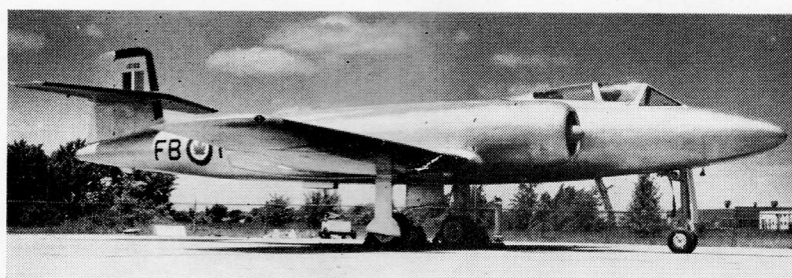
A. V. Roe Canada Limited, Toronto, \$14,735 for aircraft parts. *

Rolls-Royce Montreal Limited, Montreal, \$295,506 for aero engine parts.

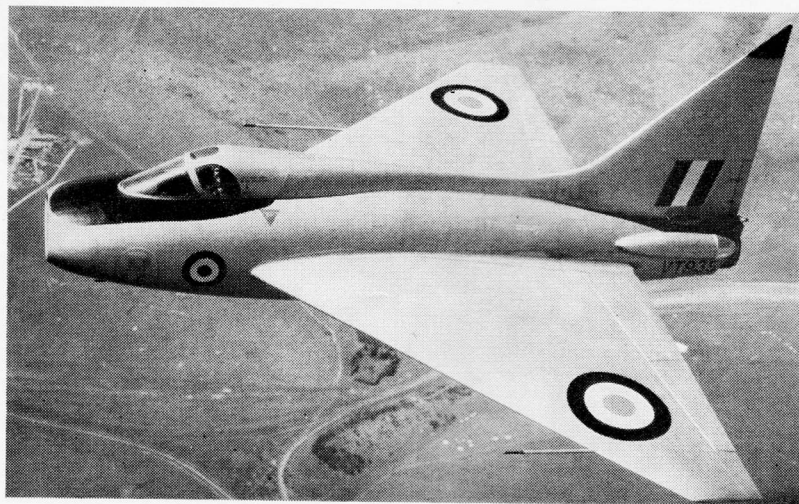
Rotax Canada Limited, Dorval, P.Q., \$18,625 for aircraft parts.

Standard Aero Engine Limited, Winnipeg, \$33,000 for aero engine repairs.

Visco Petroleum Products Limited, Toronto, \$13,347 for aircraft oxygen apparatus.



FIRST ORENDA CF-100: The first Orenda powered CF-100 made its initial flight on June 20, with Avro Canada Chief Test Pilot Don Rogers as pilot. With the exception of a slight increase in length of the engine nacelles, this first production CF-100 is almost identical to first two prototypes. The only obvious difference is the silver paint job. Avro Canada says first ten aircraft are to have dual controls,



RESEARCH TRIANGLE: First air-to-air photograph of the Boulton Paul P. 111 Delta type tailless aircraft is shown here. Designed and built for the British Ministry of Supply, the P. 111 is to be used for high speed aerodynamic research work. Powered by a Rolls-Royce Nene, it is now undergoing flight tests.

Abercorn Aero Limited, Montreal \$25,739 for aircraft parts.

Aviation Electric Limited, Montreal, \$831,082 for aircraft parts and overhaul.

A. F. Byers Construction Co. Ltd., Montreal, \$69,500 for hangar repairs.

Canadian Car & Foundry Co. Ltd., Montreal, \$19,506 for aircraft parts and repair.

Canadian Pratt & Whitney Aircraft Co. Ltd., Longueuil, P.Q., \$3,250,000 for aircraft engine repairs.

The de Havilland Aircraft of Canada Limited, Toronto, \$304,351 for aircraft parts and repair.

MacDonald Bros. Aircraft Ltd., Winnipeg, \$53,975 for aircraft parts.

Northwest Industries Limited, Edmonton, \$140,000 for aircraft reconditioning.

A. V. Roe Canada Limited, Toronto, \$272,435 for aircraft parts.

Rolls-Royce Montreal Limited, Montreal, \$13,379 for aircraft engine spares.

Ross Smith Co. Ltd., Montreal, \$559,760 for targets and aircraft covers.

Anti-Icing for Jets

An electrically heated blade has been developed at Avro Canada for dealing with the problem of ice formation on the compressor blades of aircraft gas turbines. The Avro Canada blade is designed to overcome the formation of ice on the initial stages of the compressor by providing internal heating of the blade surface.

The heating element of the blade is first wound with an electrical resistance ribbon and then insulated with

helical windings of glass thread. The whole assembly is impregnated with ceramic material to form a core around which the blade form is cast. This method of blade construction provides a light, compact form of blade anti-icing without reducing the blade's strength or interfering with the profile of its external contours.

Briefly

•First flight was recently made of the **Fairey Firefly Mark 7**, an anti-submarine (3 seater) aircraft, powered by a Rolls-Royce Griffon with four-blade propeller.

•Republic Aviation Corporation is now producing the **F-84G Thunderjet**, the first operational jet fighter to be produced in numbers fully equipped for mid-air refueling by tanker planes.

•British jet engine makers got \$2,170,000 in royalties and license fees from U.S. manufacturers who built British-designed jets during 1950.

•A contract to investigate application of a gas turbine to a helicopter has been awarded to Kaman Aircraft Corporation by the USN. The gas turbine to be used by Kaman is the Boeing 502-2.

•Primary lead, refined secondary lead, slab zinc, and cadmium are now under direct allocation by the Non-ferrous Metals Division of the Department of Defence Production.

•A USAF Douglas C-124 Globemaster recently airlifted 70,000 pounds of simulated cargo a distance of 1,000

miles, unloaded and returned to its point of departure without refueling. The C-124, designed for a gross take-off weight of 175,000 pounds, carried a gross weight of 210,000 pounds, a new mark for a production transport.

•The world's largest blimp, made by Goodyear, recently made its first flight. The blimp is 324 feet long, has a capacity of 875,000 cubic feet, and an air speed of 75 knots per hour.

•A new illustrated brochure entitled "**This is Bendix**" describes the research, engineering, and production facilities at Bendix Radio. Requests for the brochure should be addressed to the Public Relations Department, Bendix Radio Division, Bendix Aviation Corporation.

•The **Fairey 17** has been named the "**Gannet**". This aircraft is now in quantity production for the Royal Navy.

•A design for a **turboprop medium transport** airplane submitted by the Lockheed Aircraft Corporation has been selected for further development by the USAF. Four Allison T-38 engines will be used in the first model, according to present plans.

ALLISON RADAR

NAVIGATIONAL AID
For MULTI-ENGINE

TRANSPORT AIRCRAFT
& HELICOPTERS

MILITARY—CIVIL

SMALL—COMPACT
LIGHTWEIGHT
EFFICIENT

LATEST MODELS:

E-2, ES-2, ESB-2
E-3, ES-3, ESB-3

- Sees Thunderstorm Cores, Snow, Hail, Rain in advance.
- Promotes smoother flying for passenger safety and comfort.
- Warns of approaching aircraft in line of flight.
- Sees obstructions in true outline and/or direction.

**ALLISON
RADAR CORPORATION**

11 W. 42 St. N.Y. 18 PEnn 6-5811-12