

## CF-105 Electronics

A contract has been let to the Radio Corporation of America to design and develop a complete electronic system for the Avro CF-105 for fire control, navigation and communication. The contract, reportedly valued at \$9,000,000, also covers an integrated automatic flight control system.

The contract was let by the U.S. Air Force acting on behalf of Canada's Department of Defence Production, normal procedure in such cases. The system is being designed to meet an RCAF specification.

The aeronautical division of Minneapolis-Honeywell Regulator Co. is to work with RCA on an associate basis and, it is understood, will be responsible for the automatic flight control system. According to reports, some Canadian firms will also share substantially in the research and development work on a sub-contract basis.

It has been emphasized that the contract covers design and development, and production of a few prototype systems only. If and when the developed systems go into production, it will be in Canada.

## DHC-4 Backing

Development of the DHC-4 by The de Havilland Aircraft of Canada Ltd. is now being backed by the Canadian Government. The aircraft—in its present configuration, twin-engined—is being developed around a Canadian Army requirement for a transport capable of carrying 20 soldiers and operating out of unprepared fields.

Backing of the DHC-4's development is related to the tentative acceptance by the Government of Army plans to make its forces air transportable. It is understood that the dropping of soldiers by parachute is no longer considered to be tactically sound on a large scale. It is now thought more effective to fly troops and equipment directly into the battle areas.

## A. V. Roe Stock

The offering of 500,000 shares of common stock in A. V. Roe Canada Ltd. to the Canadian public was announced September 27 by Sir Roy Dobson, chairman of the board of the Canadian member company of the Hawker Siddeley Group. The announcement was made during a visit

of some 140 investment dealers to the plants of Avro Aircraft Ltd. and Orenda Engines Ltd.—main subsidiaries of A. V. Roe Canada.

The Hawker Siddeley Group will retain the controlling interest in the Canadian organization.

The issue is being handled by Wood, Gundy & Co. Ltd., which has announced that the initial price of the stock would be \$16.00 per share. Application has been made for listing on the Toronto and Montreal stock exchanges.

In announcing the offering, Sir Roy pointed out that since the formation of A.V. Roe Canada Ltd. in 1945 as a wholly-owned subsidiary of the Hawker Siddeley Group, the parent British organization had pumped \$16,000,000 into its Canadian offspring. Not a dollar had gone back to the U.K.; all the profits had been ploughed back into the Canadian business.

Said Sir Roy: "There is a very definite awareness that it has become a matter of concern to the Canadian people that so much of their industrial activity is in the hands of non-residents. There is no doubt that you welcome the assistance being given in developing your vast potential re-

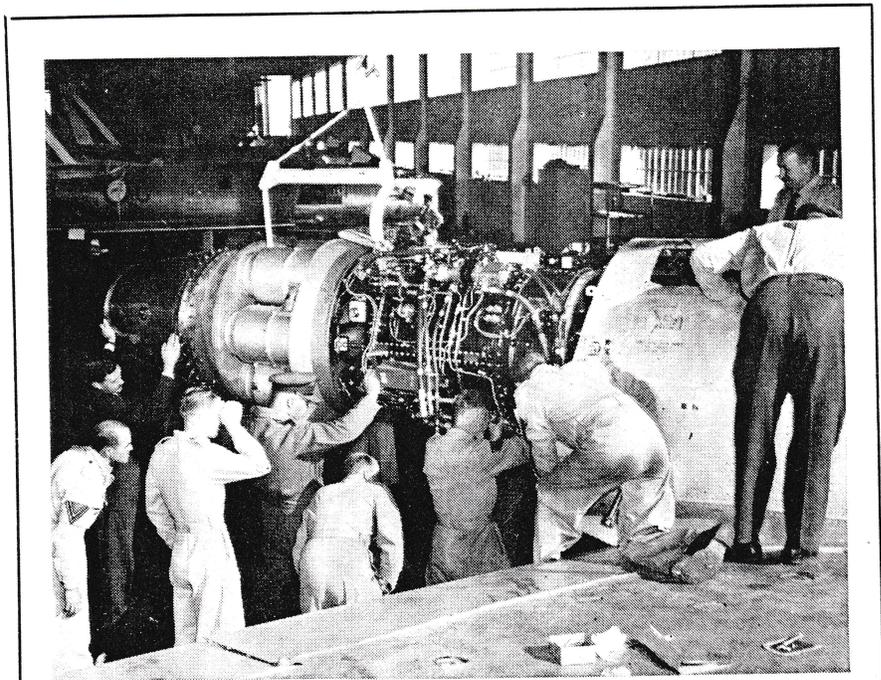
sources, but there is no doubt either that there is a growing feeling that you should be allowed to share in the ownership, as well as the operation of these activities."

A booklet on A. V. Roe Canada issued by Wood, Gundy at the time of Sir Roy's announcement says that combined sales of the enterprise for the 1955 fiscal year, including sales of Canadian Car & Foundry for the 12 months ended Sept. 30, 1955, amounted to \$224,135,483. In the fiscal year ended July 31, 1956, sales of \$202,767,101 were recorded, including sales of CanCar for a fiscal period of ten months only.

Combined earnings before taxes and other charges are given as follows, with net earnings (after charges and taxes) appearing in parentheses: 1952, \$8,801,372 (\$3,097,275); 1953, \$13,301,803 (\$5,291,387); 1954, \$21,446,569 (\$8,294,184); 1955, \$24,400,477 (\$9,719,538); 1956, \$20,810,161 (\$8,954,458).

Assets of the A. V. Roe Canada organization are valued at \$101,331,009, with buildings, machinery and equipment making up \$86,948,267 of this total.

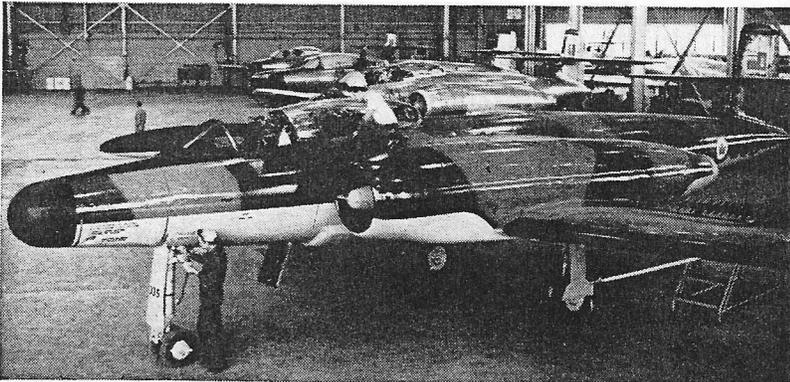
Member companies of the A.V. Roe Canada group include: Avro Aircraft Ltd., Orenda Engines Ltd., Canadian Car & Foundry Co. Ltd. (acquired



**ORENDA IN SOUTH AFRICA:** The first of South Africa's Canadair Sabre 6's to be assembled is shown having its Orenda 14 powerplant installed at the SAAF's 1 Air Depot, near Pretoria. Photo, taken several months ago, shows, extreme left, Orenda service rep Ron Willis. Fourth from left is Lt. H. W. Palmer, one of a number of SAAF personnel who attended Orenda service school at Malton earlier this year.



**CF-100'S FOR VENEZUELA?** Shown inspecting Avro Aircraft's facilities recently is the commander-in-chief of the Venezuelan Air Force, Col. Jose Saul Guerrero, (2nd from R). With the C-in-C are, L to R, A/M W. A. Curtis, A. V. Roe Canada vice chmn.; Avro VP Engineering J. C. Floyd; Col. Brienco, Venezuelan air attache, Washington; Maj. Aravjo, aide-de-camp to the C-in-C; the C-in-C; Avro VP Mfg. H. R. Smith. Photo below shows one of first CF-100's to be painted in NATO camouflage. First such CF-100's are now being delivered to units destined for overseas service.



1955), Canadian Steel Foundries (1956) Ltd. (formed recently from the old CanCar Steel Foundry Div.), and Canadian Steel Improvement Ltd.

### Now It Can be Told

In 1952, a major U.S. airline—one of the foremost airlines in the world—was so interested in the Avro Canada Jetliner that it wanted to buy 30 and was willing to underwrite all the costs of putting the transport into production.

This interesting background history on the C-102 was revealed by Fred T. Smye, president & general manager of Avro Aircraft Ltd., while outlining the development and growth of his company to a group of investment dealers who toured the aircraft manufacturing organization's plant at September's end.

At the time of the outbreak of the Korean War, Mr. Smye said, the company had been negotiating with a U.S. airline for the sale of ten Jetliners.

In both 1950 and 1952, negotiations had to be halted because of the necessity of giving top priority to getting the CF-100 into volume production, he indicated.

Reviewing TCA's role in the development of the Jetliner, Mr. Smye stated flatly that the aircraft was designed to a TCA specification . . . "and it met that specification." In the meantime, a change in the TCA executive resulted in a change in policy and the airline then decided that it didn't want to buy a new type and assume the responsibility for "de-bugging" it. Instead, it wanted to use types that had already been proven in service with other airlines.

### Slim Pickings

Canadian Manufacturers of aircraft parts and components are at present producing at not more than 38% of their capacity on a single shift basis, according to a report presented at a recent meeting of the AITA's associate

manufacturer committee.

Committee Chairman A. Bandi of Aviation Electric Ltd. pointed out that according to the report, the output of the companies concerned was slightly under \$10,000,000 per annum, and all that would be necessary to keep these companies active and on a sustaining break-even basis, and ready for any defence emergency, would be an additional \$10,000,000 business.

The AITA committee members voiced the opinion that there should be no difficulty in the Department of Defence Production and the aircraft constructors diverting to the smaller Canadian manufacturers orders sufficient to make up this business, from the contracts now being placed by these two groups outside the country.

In some instances, the cost of producing an item in this country might exceed the price being paid for a similar item from a foreign source, it was conceded, but when the cost of follow-up and expediting of such items from sources as far away as California were taken into consideration, the placing of orders with a Canadian supplier could prove more economical in the final analysis.

### More German Sabres ?

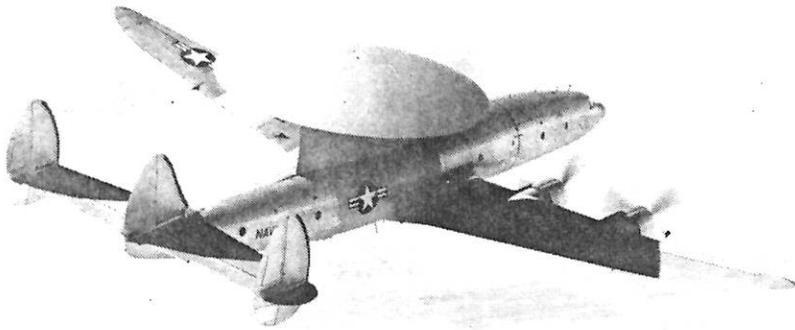
Unconfirmed reports state that preliminary talks in connection with the possible sale of 300 Canadian Sabres to West Germany have been held between Canadair and German officials but as yet no orders have been placed.

If the deal is consummated the sale would be worth approximately \$200,000,000 including spares and would be the largest sale of new military fighting aircraft ever made to a foreign country by a Canadian firm. The previous high sale was 34 Sabres to South Africa.

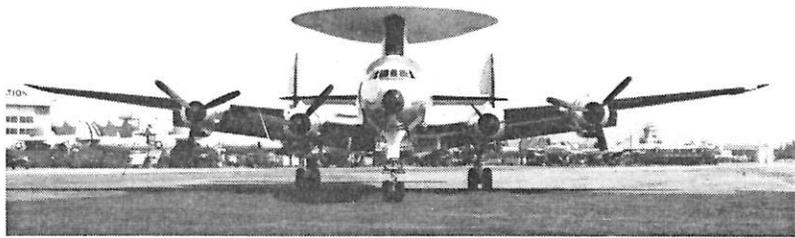
There have been reports that Germany will buy large quantities of arms from a number of countries. However, Canadian authorities said they have no knowledge of any German orders being placed in Canada.

### Ground Support

Consolidated Diesel Electric Corp. of Canada Ltd., has established general offices, manufacturing and assembly facilities at 66 Racine Road, Rexdale, Toronto. Incorporated in 1955, the company will engage in the manufacture of multi-purpose ground support equipment for conventional, jet and rocket aircraft; test equipment for industry; and power equipment for



**FLAT HAT:** Latest version of the USN's Lockheed WV-2 radar picket is fitted with this unusual dorsal-mounted radome. It will be recalled that while current versions of the WV-2 also have a dorsal fin type radome, their main scanning gear is housed in a large ventral radome, the appearance of which has resulted in this version of these aircraft being nicknamed the "Pregnant Goose".



industry and defence purposes.

Norman I. Schafler, president, said that Con Diesel of Canada is a wholly owned subsidiary of Consolidated Diesel Electric Corp., Stamford, Conn. Jens F. Louv, formerly with the parent company's aircraft division, has been appointed sales manager for the Canadian operation. The U.S. company has maintained an office in Ottawa since 1954.

### Airtron Canada Opens

The formation of Airtron Canada Ltd., a wholly owned subsidiary of Airtron Inc., Linden, N.J. was announced in September. W. J. Muller is in charge of production at the Airtron Canada plant at Renfrew, Ont., while the sales operation is handled by E. D. Smith from Airtron Canada's main office at 300 Campbell St., Toronto.

### Canadair in Ottawa

To facilitate closer liaison with AFHQ, Canadair Ltd., Montreal, has opened an office in Ottawa. Heading the new operation will be C. F. Fincham, special assistant to Peter H. Redpath, vice president sales. Prior to his retirement from the RCAF, Mr. Fincham was in charge of RCAF aircraft programming.

The Canadair office will be in the newly-built Commonwealth Building on Metcalfe Street.

### More Otters to PAL

Philippine Airlines is ready to double its feeder line service to out-of-the-way communities after the completion of some fifteen months operation with three de Havilland Otters. The airline has taken delivery of three additional Otters and these will enable it to extend its unique service to some 35 communities through the Philippine jungles.

### New CDC Computer

An analogue computer, designated the REAC 400, designed to make it "particularly suited to the study and development of industrial content problems and mechanical design" has been installed by Computing Devices of Canada Ltd. in its data processing centre of Bells Corners, near Ottawa.

The machine, manufactured by the Reeves Instrument Corp., is said to be the most up-to-date of a long series of analogue computers made by this firm. Custom-built to CDC specifications, it will be available to customers on a time rental basis. A team of experienced mathematicians and engineers, under B. Farrell Chown, P. Eng., head of the CDC analogue computer

department, will operate the machine.

CDC states that a customer may rent machine time only, operating it himself. This is sometimes desirable when the problems and their solution are of a confidential nature. If necessary, CDC is prepared to train a customer's engineers in the use of the machine.

### New Avro Skin Mill

A 200 ton skin milling machine, part of a battery of new machines lined up for the production of the CF-105, has been installed by Avro Aircraft Ltd. Said to be the only one of its type in Canada, the mill was built by Kearney & Trecker of Milwaukee to Avro specifications, and is one of the most versatile in the field. It is capable of carrying out any skin milling operation on aircraft designs of the foreseeable future, Avro says.

Due to the company's pioneering in this field Avro purchased the new machine for \$325,000. In building the first model, Kearney & Trecker invested over \$1,000,000 for design and construction, most of which the company is looking forward to recovering on further sales of the new mill. Today's price for the same model is \$600,000.

### Contracts Awarded

Contractors awarded business in excess of \$10,000 by the Department of Defence Production during the period July 16-August 15, 1956, include the following. The list does not include orders placed by the Department outside Canada, or with other agencies, and increases in orders placed earlier — nor do orders classified as secret appear here.

(Name appearing in bold face are current Aircraft advertisers.)

**Aircraft Industries of Canada Ltd.**, St. Johns, P.Q., \$50,413, for aircraft modification kits.

**Aircraft Welding & Sheet Metals Co. Ltd.**, Ville St. Michel, P.Q., \$42,647, for engine containers.

**Austin Airways Ltd.**, Toronto, \$100,760, for charter of aircraft.

**Aviation Electric Ltd.**, Montreal, \$11,227, for airframe spares.

**Bancroft Industries Ltd.**, Montreal, \$50,000, for aircraft spares and accessories during year ending March 31/57.

**Bristol Aero Engines Ltd.**, Montreal, \$10,000, for investigation of aero engines and engine components during year ending March 31/57.

**Bristol Aircraft (Western) Ltd.**, Winnipeg, \$175,000, for airframe spares.

**Canadair Ltd.**, Montreal, \$54,492, for aircraft electrical equipment.

**Canadian Aero Service Ltd.**, Ottawa, \$13,000, for mapping service.

**Canadian Comstock Co. Ltd.**, St. Catharines, Ont., \$54,658, for spares for energizers.

**Canadian Pratt & Whitney Aircraft Co. Ltd.**, Longueuil, P.Q., \$90,000, for repair and overhaul of aero engines and engine components during year ending March 31/57.

**Trans-Air Limited**, St. James, Manitoba, \$309,575, for charter of aircraft.