



**BEAVERS TO VENEZUELA.** Delivery of two Beaver aircraft to RANSA (Rutas Aéreas Nacionales S.A.) of Venezuela by de Havilland Aircraft of Canada, Ltd. Above, Ross Whyte, DH sales representative (right) wishes Capt. Carlos Gonzales Ricones well on his ferry trip to Venezuela.

## Orenda's Plan

To meet the unprecedented demand for more engineers, Orenda Engines Ltd. has proposed a study plan for plant technical personnel to reach professional engineering status at no personal cost and without leaving the job.

The plan, which has the support of the Association of Professional Engineers of Ontario, will enable men now employed to become professional engineers by 1960 through a course of study during work hours. Candidates for the course will be required to have their senior matriculation (which is the entrance requirement for most university engineering courses) or training considered equivalent to senior matriculation. They will pay a fee of 50c per lecture which will be held in trust and refunded in full if the candidate passes all his examinations or returned in part if the candidate is only partially successful.

## Briefs

**Avro Aircraft** has installed a giant 15,000-ton hydraulic rubber pad forming press built to Avro specifications by Siempelkamp Co. It is being used for production of CF-105 parts.

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**Canadian Aviation Electronics** has opened a \$150,000 Vancouver branch building.

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**Gulf Oil Corp.** reports a major find of columbium ore 17 miles northeast of Chappleau, Ont. This was found as a result of a 1954 survey using an airborne magnetometer developed by Gulf.

## Transport Boom

Number of passengers carried by Canadian airlines in revenue services in 1955 rose to 2,711,352 from 2,316,655—an increase of 394,697 or 17% over last year, according to official air transport figures for 1955.

Air carriers completed the year with an operating income of \$6,162,483, an increase of \$4,285,563 over the \$1,876,920 reported in 1954. This was the fifth successive surplus in as many years and only slightly less than the all-time high of \$6,990,586 in 1951.

Passenger fare revenues continued to show a large increase, soaring to a new high of \$77,622,017 as compared with \$66,748,505 in 1954, an increase of 16.3%

Freight earnings rose to \$7,975,443 from \$5,979,693; mail revenues to \$10,885,726 from \$10,873,163 and excess baggage receipts were \$867,042 as compared with \$726,037 a year ago.

Bulk transportation services nearly trebled rising to \$41,540,747 from \$15,149,492 a year ago (mostly as a result of DEW line airlift activity).

Revenue from other flying services dropped slightly from \$5,984,893 to \$5,970,950 and non-flying services rose to \$4,048,097 from \$3,402,506 bringing total operating revenues for 1955 up to \$148,910,022 as against \$108,864,289.

Total operating expenses rose to \$142,747,539 from \$106,987,369 in 1954 — an increase of 33%.

Aircraft operation and maintenance rose to \$87,640,058 from \$59,984,323; ground operations and maintenance rose to \$32,380,389 from \$27,840,216. Traffic expenses were \$13,860,317 compared with \$11,806,206; general administration costs rose to \$8,239,625 from \$6,824,333 and general taxes to \$627,150 from \$532,291.

The amount of revenue freight carried totaled 222,224,900 lb., almost double the freight reported in 1954. Freight carried in unit toll transportation rose from 40,033,708 lb. in 1954 to 49,496,667 lb.

## "Stretchout?"

While the Canadian Government's aircraft procurement policy is "to keep the aircraft industry intact as a going concern," Defense Production Minister C. D. Howe recently stated in Parliament that Canada's output of military aircraft may be reduced further.

"During the last year we have had to resort to stretch-outs of production at reduced rates of output, where service requirements permitted, in order to keep production lines open and to stabilize future work loads," he said.

"As a result, some layoffs have been unavoidable and there may be future contractions to come.

"Subject to these limitations, the air-

craft program will be conducted in such a way as to stabilize work loads and employment to greatest extent possible."

Mr. Howe went on to outline the results of government assistance and encouragement to private industry in the past few years in creating research and production facilities and engineering experience that did not exist in Canada before.

The industry is now in ninth place among all industries in terms of value of output and third in terms of employment.

In the future, Mr. Howe said, the main military planes to be produced are the CF-105 supersonic fighter, the CL-28 maritime reconnaissance plane—a modification of the Bristol Britannia — and the CS2F-1 Sentinel for the Royal Canadian Navy.

The CF-105 and its Orenda Iroquois jet engine were of all Canadian design. Piston engines for the CS2F-1 are being made in Canada under U. S. license. For economy reasons the (Wright turbo) engines for the CL-28 would be purchased from the United States.

## Raytheon Plans

A major portion of the development and production of the traffic surveillance radar system to be installed at major Canadian airports by the Department of Transport (Canadian Aviation, May), will be carried out in Canada under subcontract to Raytheon Canada Ltd. of Kitchener, Ont. The Canadian company is jointly owned by Dominion Electrohome Industries Ltd. of Kitchener and Raytheon Manufacturing Co. of Waltham, Mass., the firm which received the \$5,000,000 DOT order. Carl A. Pollock, president of Dominion Electrohome, is also president of Raytheon Canada Ltd.

## U. K. Exports

Aviation exports from Britain reached a record high for the month of March, 77% above the total recorded for any single month in the past. The dollar value was about \$41,000,000, about the same as for the first three months of 1955 and about \$17,000,000 above the total for February.

## PWA Helicopters

Pacific Western Airlines does not hold a Class I helicopter license to operate a helicopter passenger service between Nanaimo, Victoria and Vancouver. Okanagan is the only company licensed to operate helicopters from the Vancouver airport. (An article on the formation of PWA's helicopter division stated that PWA held the Class I license referred to above.)