

Orenda Re-Heat

Power boost of about 15 per cent (from current 7,200-lbs.-thrust) is the target of an experimental tailpipe thrust augmentor being fitted to an Orenda turbojet, industry reports claim. Orenda Engines Ltd. of Malton neither confirms nor denies.

The device, which causes afterburning within the tailpipe, is to be used, it is said, in conjunction with an iris-type exhaust nozzle developed for Orenda by the Marquhardt Aircraft Co. of Van Nuys, Calif. The nozzle regulates exhaust apertures for maximum fuel economy during cruise and has good development possibilities for reverse-thrust application.

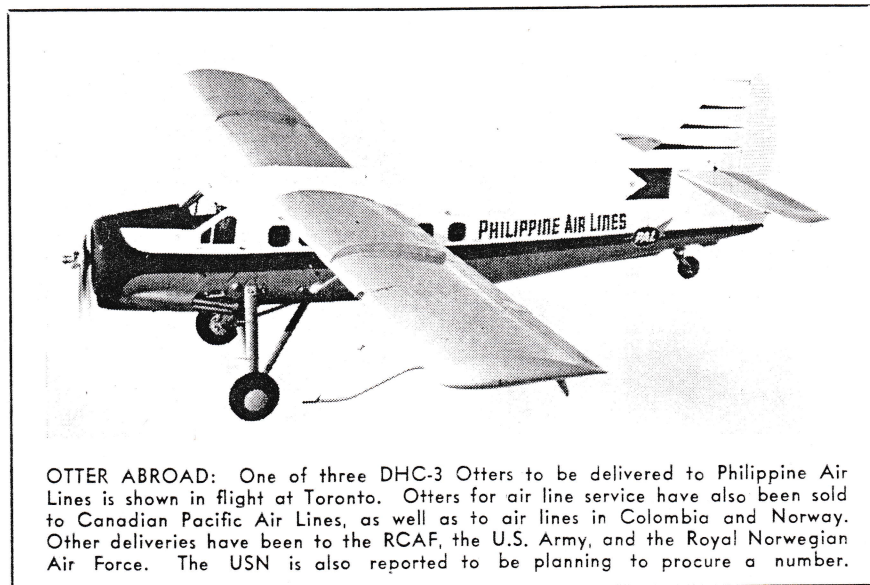
Some months ago, the RCAF began negotiating with the Bristol Aero-

engine by Marquhardt Aircraft Ltd. of Van Nuys, Calif.

Early running of the first prototype has uncovered several component defects, some of them traceable to the engine's relatively heavy reliance on relatively new titanium alloys. The test program has been stopped several times for strip-down inspections and component rebuilds.

Sperry Buys Plant

The Defense Production Department has announced the sale to the Sperry Gyroscope Co. of Canada Ltd. of the land and buildings of the government-owned defence plant on Cote de Liesse Rd., Montreal, built for Sperry in 1952 under a capital assistance plan.



OTTER ABROAD: One of three DHC-3 Otters to be delivered to Philippine Air Lines is shown in flight at Toronto. Otters for air line service have also been sold to Canadian Pacific Air Lines, as well as to air lines in Colombia and Norway. Other deliveries have been to the RCAF, the U.S. Army, and the Royal Norwegian Air Force. The USN is also reported to be planning to procure a number.

plane Co. for the adaptation of a Bristol-developed simplified re-heat system for the Orenda. The system would, presumably, be produced by Bristol of Canada.

PS-113 on Trial

Orenda Engines' new PS-113 Super Orenda, the powerplant tailored for Avro's forthcoming CF-105 all-weather delta, has been test-run at three-quarters its initial design thrust, about 13,000 pounds.

After shakedown, the PS-113 is expected to deliver 18,000-lbs.-thrust; with afterburner, up to 25,000-lbs.-thrust. A special lightweight afterburner is being developed for the

The sale involves 13 acres and buildings with 90,000 square feet of floor space. Title to machinery and equipment (valued at more than \$1,000,000) remains vested in the Crown and the company has agreed to give priority to defence contracts for 10 years.

ATC Britannia

The RCAF's over-taxed Air Transport Command is counting the months until a transport version of the North Americanized Bristol Britannia is available from Canadair Ltd.

ATC's North Stars and Fairchild C-119's are working overtime to carry the increasing load imposed by Air

Division requirements in Europe and growing domestic requirements, especially in the northland.

Oddly, ATC evidences little interest in a piston-powered Britannia, such as is being developed for Maritime Air Command. It wants turboprops, and has sent observers abroad to study the new Bristol BE-25 engine.

Canadair, too, is obviously anxious about the prospects of a civil Britannia. The annual report of General Dynamics Corp., its parent company, contains this comment:

"As a turbo-prop military or commercial transport, the CL-28 could readily make scheduled non-stop flights between Europe and the east coasts of Canada and the United States."

DDP Aviation Orders

Orders for aircraft with a total value of \$1,902,830,000 were placed during the over-3½ year period from April 1, 1951, to December 31, 1954, by the Department of Defence Production, on behalf of the Department of National Defence. During the same time, actual expenditures in the aircraft field totalled \$1,490,435,000. These figures were recently published by the DDP in a report on its activities up to the end of 1954.

Of the total, orders with a value of \$1,527,868,000 were placed in Canada, while the actual expenditure was \$1,139,508,000. Of the remaining orders, \$342,578,000 went to the U.S., and the expenditure in this case by the end of 1954 was \$326,854,000; the balance of \$32,384,000 was placed in the U.K., with actual expenditure during the period being \$24,072,000.

During this same time, the value of U.S. defence orders to Canada's Aircraft Industry totalled \$159,850,000, with \$122,372,000 being expended.

In the aircraft field, the DDP also approved capital assistance projects over this period with a net value of \$105,354,000. So far, \$102,267,000 of this total has been spent.

In the electronics & communication equipment field, the orders placed had a total net value of \$375,470,000, with \$295,802,000 actually being expended. In this classification, orders worth \$272,847,000 were placed in Canada (\$235,418,000 expenditure); \$91,785,000 in the U.S. (\$54,787,000 expenditure); \$10,839,000 in the U.K. (\$5,-