

"G" Suit Order for Irvin

An over-\$300,000 order for pneumatic anti-G suits for the RCAF has been awarded to Irvin Air Chute Limited, Fort Erie, Ontario, by the Department of Defence Production. The order, which involves some 4,000 suits, marks the establishing of a new Canadian source of supply for the G suits, since previously the RCAF had received all its equipment of this type through the USAF from an American manufacturer.

The RCAF has been investigating the possibility of having the suits made in Canada for some time now, and Irvin has been working on the project for about a year. During this time, Irvin has successfully fabricated several of the suits at its Fort Erie plant. These suits have met all RCAF tests, thus demonstrating to the Air Force's satisfaction that the Canadian Irvin organization was qualified to manufacture this vital safety equipment in quantity.

The suit is a standard USAF design, made of a basic interwoven cotton/nylon fabric. There are a number of rubber bladders in the suit which inflate and deflate automatically, applying pressure as and where necessary to counteract the effects of "G". Air for the suit's operation and the associated

regulatory equipment is fitted to the aircraft.

Irvin General Manager Clifford Bonn reports that the new order will mean an expansion in plant facilities and an increase in personnel. Employment, now at 75, may go as high as 150 when peak production is reached on the suits. A 2,000 sq. ft. addition will be built onto the present 10,000 sq. ft. plant. Parachute manufacturing operations for the Canadian military and civil aviation markets will, of course, continue as before.

Titanium Jet Blades

Precision forged jet engine blades have been made from titanium alloy at Canadian Steel Improvement Limited, Toronto, a development of unusual significance for jet engine designers.

Titanium, which has heat resistant, high strength, and low weight qualities that make it ideal for use on turbojet engines, has not been used extensively in this application before now because it is difficult to refine and to forge. However, recent developments in the refining of the metal by electrolytic process has made the first problem less formidable. And now apparently, Canadian Steel Improvement has solved some of the problems of forging the metal.

So precise is the forging said to be that only the leading edge and the root of the blade needs machining. The only other operation required is polishing.

Undoubtedly, the forged titanium blades are slated for use in the big new turbojet engine (which will have a large titanium content) now under development at Avro Canada as a private venture. Canadian Steel Improvement is a subsidiary of High Duty Alloys (Canada) Limited, and, like Avro Canada, a member of the Hawker Siddeley Group.

USN Orders T-34

The United States Navy has chosen the Beech T-34 as its new primary trainer and initial orders will be for several hundred aircraft, according to a Navy announcement. The T-34 is already in production for the USAF at the Wichita, Kansas, plant of Beech Aircraft Corporation, and at the Fort William, Ontario, plant of Canadian Car & Foundry Co. Limited's Aircraft Division. The latter firm is also



TRANS-ATLANTIC OTTER: Pilot Jack Ford (R) of Fleetway Inc., and his navigator, Walter Henderson (L), are shown just before take-off on their recent trans-Atlantic Otter ferry flight (see story, this page), Toronto-Norway. Extra tankage installed for flight increased Otter's range to 2,000 miles.

producing a token number of the aircraft (about 25) for the RCAF.

In the USN, the T-34 will replace the SNJ (Harvard) and will be used for the first seventy hours of flying, including primary night training and aerobatics. The Navy's present basic trainer, the big North American T-28B, will be used as the second step in student training.

Otter to Norway

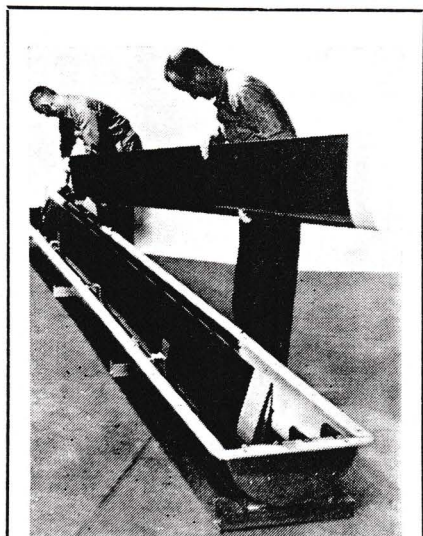
What is believed to be the first delivery flight over the North Atlantic of a single-engine commercial aircraft, recently took place when a de Havilland Otter was flown from Toronto to Oslo, Norway.

The Otter, which is destined for service with a Norwegian operator, Widerøe's Flyveselskap Og Polarfly, was ferried over the 3,450-mile route by Fleetway Inc., Burbank, California, an organization specializing in such delivery flights.

The aircraft's itinerary called for refuelling stops at Goose Bay, Bluie West One, Keflavik, and Stavanger, Norway. Longest leg was the 960 miles from Toronto to Goose Bay. The Otter's normal fuel capacity of 179 Imperial gallons was supplemented by a 182-gallon auxiliary tank installed in the passenger cabin, increasing range to 2,000 miles.

Pilot was Jack Ford, who is also president of Fleetway, while the navigator was Walter Henderson.

This Otter replaced another machine



TITANIUM ROTORS: Latest titanium use is a skin covering for helicopter rotor blades. Made by Prewitt Aircraft of Clinton Heights, Pa., set of six blades requires 52 lbs. of rolled titanium, a weight saving of 68 lbs. over alloy steel covering now commonly used. Blades above are being shipped to USN for testing.