



**HIGH PRESSURE TYPE:** Flight Lieutenant Douglas Biden, DFC, test pilot with the RCAF's Central Experimental & Proving Establishment, Rockcliffe, models the latest thing in pressure suits. The suit is designed to protect pilots at heights over 40,000 feet and against high speed acceleration forces. Made of nylon fabric, it provides ventilation and warmth. Helmet is a self-contained unit supplied with oxygen, defrosting, and a radio-microphone. Pressure is applied to wearer through lacings, which are pulled tight when air tubes (back) are expanded.

is already in Europe.

At the time of his appointment, W/C Malloy was commanding officer of RCAF Station Uplands, a post that has now been taken over by Wing Commander D. R. Miller, AFC, CD, former staff officer for personnel administration at Air Defence Command HQ.

## Closing the Gap

Construction work is now about 90% complete on the radar stations which will comprise the so-called "radar screen" across the north, it was indicated recently to the Commons Defence Committee by R. G. Johnson, president of Defence Construction Limited.

What Mr. Johnson actually said was: "We have negotiated and supervised a number of projects being constructed for the account of the U.S. government. These contracts . . . are now approximately 90% complete."

Since the establishment of the radar screen is the principal project in which the U.S. is participating in Canada, Mr. Johnson's remark would seem to intimate that the necessary stations, at least, were nearly all built. This does not mean, of course, that the screen is 90% operational, because even assuming the extensive and complex electronic equipment necessary were immediately available, its installation and getting into operation would take some time.

Practically no details have ever been

released about the screen and the location and scope if its component stations are closely guarded secrets.

## MacBrien to NATO

Air Commodore W. R. MacBrien, OBE, CD, formerly chief staff officer at the RCAF's Air Defence Command HQ, was transferred last month to fill a similar position at the headquarters of 4th Allied Tactical Air Force at Landsberg, Germany.

The 4th Allied Tactical Air Force is one of the formations coming under Allied Air Force Central Europe, under General Lauris Norstad, and includes the RCAF's Air Division, as well as similar American and French air divisions.

## In the Spotlight

The costs and length of time involved in building three RCAF establishments in Western Canada were scrutinized recently by the Commons Defence Committee. Though committee members eyed at least one of the projects suspiciously, there is apparently no further action planned.

Subject of the most interest was RCAF Station Penhold, Alberta, for which construction contracts were first let in the spring of 1951. The complete construction program at Penhold, which will cost over \$6,300,000, will not be finished for several months yet. The station has long been slated as the

# LOCKHEED'S

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FASTER, CHEAPER**

On the opposite page you see illustrated the rear loading area of a big Super Constellation 1049-D, designed to carry more freight farther, faster and cheaper than ever before in history—closely approaching the sought-after 5¢ per ton-mile operating cost.

This all-cargo version of the Super Constellation culminates 7 years of special cargo research by Lockheed and is so different from the passenger versions that the fuselage requires separate production jigs.

The 1049-D utilizes the most economical form of power available to aircraft, the turbo-compound engine. Four of these Wright engines, each rated 3250 horsepower for take-off, give the Super Constellation a 332-mph cruising speed at 20,000 feet. It will fly the 3,459 miles from New York to London non-stop in 13½ hours with a payload of 14 tons, crew of 5 and full over-water equipment—will fly 24,500 lbs. non-stop to Berlin.

## DESIGNED TO CUT COSTS

The Super Constellation was designed for "loadability," so as to assure maximum efficiency and cut costs in man-hours.

Total usable payload volume is 5568 cu. ft., equivalent to a storeroom 46.4 ft. by 15 ft. and 8 ft. high. Total floor area for cargo is 1032 sq. ft.

The integrated all-magnesium floor is the finest being installed in any air transport today, according to both commercial and military operators who have inspected it. Concentrated loads from skids and legs may exert up to 400 lbs. per square inch. Floor loads of 1000 lbs. per lineal foot or 300 lbs. per square foot may be applied in the main cabin.

## SPECIAL TIE-DOWNS AND BUILT-IN CONVEYOR

Floor tie-down fittings in a grid pattern of approximately 20" x 20" provide for loads of 4,000 lbs. in any direction. Wall tie-downs will take up to 4,500 lbs. each.

At a push of a button the built-in conveyor will pull (or push) loads over 12,000 lbs. on rollers or dollies or will skid a load of 8,000 lbs., reducing man power to a minimum.

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