

THE B-47 FLYING TEST-BED IN THE LANDING CIRCUIT OVER MALTON AIRPORT

FLIGHT TESTING THE NEW IROQUOIS AT MALTON

This 92-ton Boeing B-47 Stratojet is the largest and most unusual aircraft ever to operate from Toronto's Malton Airport. In the unique pylon at the rear of the fuselage flies Orenda Engines' new supersonic jet engine—the IROQUOIS—which delivers power almost equal to that of the aircraft's six jets combined.

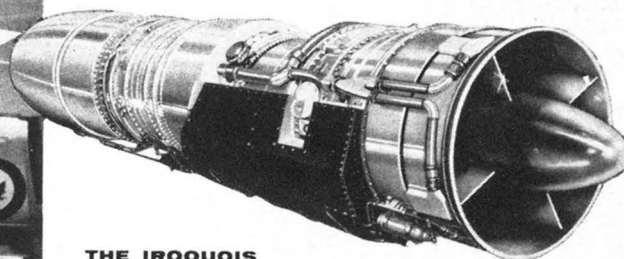
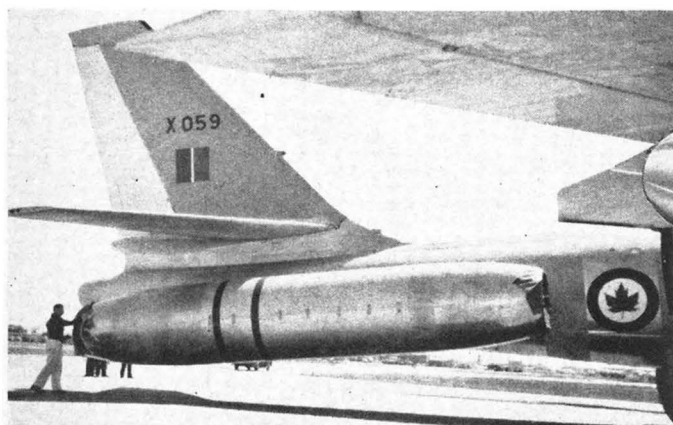
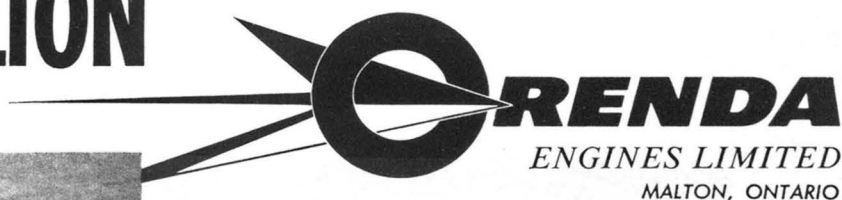
This B-47, on loan from the United States Air Force, has been converted into a flying laboratory to test the IROQUOIS in the thin-cold air of the sub-stratosphere. It has an elaborate instrumentation system for recording aloft or transmitting to ground stations, data on the engine's performance.

The IROQUOIS, which will power the Avro Arrow supersonic interceptor being developed by Avro Aircraft Limited, has completed two years of

ground running tests but certain data can be obtained only by actual high altitude operation.

The IROQUOIS is of very advanced design and its air testing program marks another milestone in the progress of Orenda Engines Limited, the member of the A. V. Roe Canada Group which pioneered jet engine design in Canada. Thousands of Orenda Engines are in service in CF-100 or F-86 aircraft of the RCAF in Canada and Europe. The air forces of West Germany, South Africa and the Republic of Colombia have also selected Orenda-power for their fighters.

Orenda Engines Limited serves Canada's air defence as other members of the A. V. Roe Canada Group are serving heavy industry, transportation, advanced metallurgy and the electro-mechanical instrument field.



THE IROQUOIS

Orenda engineers studied eleven United States and British aircraft before selecting the Boeing B-47 Stratojet. Seven possible locations were considered before the IROQUOIS was mounted in the pylon shown at left attached to the starboard rear side of the fuselage. This installation required a minimum of change in the basic aircraft, and avoids possible structure damage from the high jet-velocity of the IROQUOIS, and is easily accessible for service. Flying characteristics of the B-47 are almost unchanged by this unusual mounting.



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