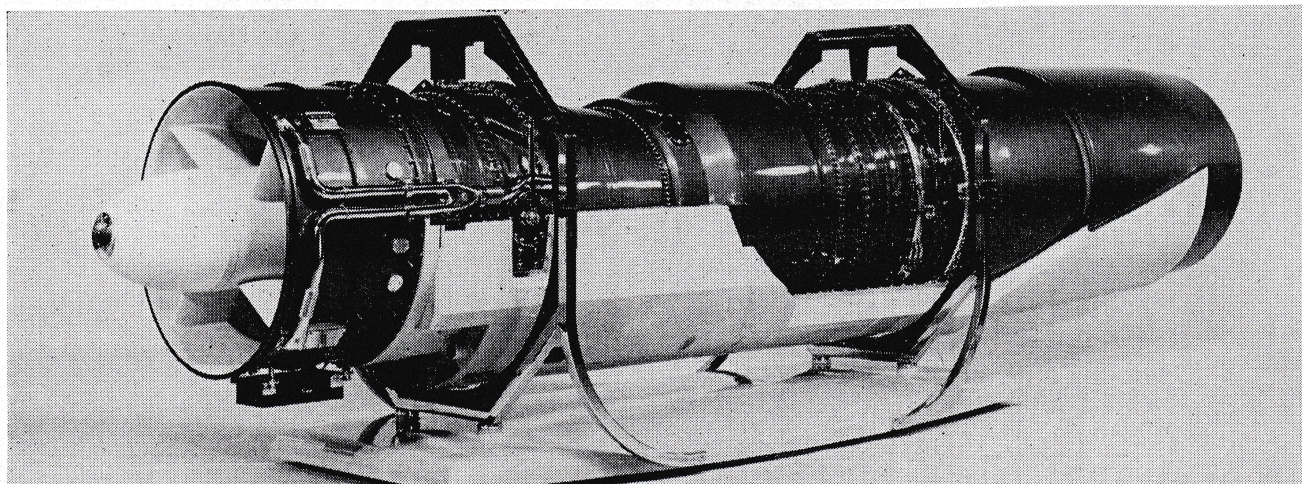


# aviation news digest



**WORLD BEATER.** The 22 ft. long, 20,000 plus pounds' thrust Iroquois.

## Wraps Off Orenda's Iroquois

The heavy wraps came off Orenda Engines Ltd.'s Iroquois late last month. But a veil of secrecy still shrouds definite information on most vital specifications of the Canadian-developed supersonic turbojet engine.

What was revealed is impressive!

Canada's new Minister of National Defense, the Hon. George R. Pearkes, VC, did the official cloak lifting in the first public display of a full size model of the Iroquois in ceremonies at Orenda's Malton plant. Speakers on the occasion included Walter R. McLachlan, Orenda president and general manager, and Air Marshal C. R. Slemon, chief of the Air Staff of the Royal Canadian Air Force, as well as the Minister of National Defense.

Information about the Iroquois confirmed and revealed included:

- Its size is approximately twice that of the Orenda 14, a working display model of which was also shown along with Orenda's original Chinook engine;
- At its present stage of development, the Iroquois' thrust is triple that of the Orenda 14, or in excess of 20,000 pounds;

- The power potential of the basic Iroquois design is such that later versions will provide more thrust than any other engine in the same stage of development;

- The power to weight ratio of the Iroquois, achieved largely through the pioneering use of titanium by Orenda engineers, is better than five to one compared with the three to one ratio of the Orenda 14;

- Weight of the Iroquois is less per pound of thrust than any other large supersonic engine known to be running to date;

- Structural design of the Iroquois is such that the new engine with afterburner is made up of fewer parts than the Orenda 14 series without afterburners;

- The Iroquois has passed exhaustive ground running tests qualifying it for high altitude flying tests in the modified B-47 which has been loaned to Canada by the United States Air Force.

Air Marshal Slemon vividly outlined expectations for the Iroquois in a comparison between performances of Avro Aircraft's CF-100s, now in service with the RCAF, and the Avro CF-105 Arrow, the delta-wing supersonic interceptor which will succeed them.

The 17-ton CF-100, the Air Marshal said, is carried to altitudes up to eight or nine miles in something like seven or eight minutes by its Orenda 14 power plants.

The Iroquois-powered Arrow, by comparison, will weigh twice as much and will reach altitudes four or five miles higher in about half the time. Once there it will fly at better than twice the speed of which the CF-100 is capable.

Using minimum quoted figures in all instances, Air Marshal Slemon's specifications project into a rate of climb in excess of 15,000 feet a minute for the CF-105 Arrow.

Defense Minister Pearkes in his address confirmed reports of negotiations between Orenda and an American manufacturer for license to produce the Iroquois in the United States. The Minister did not specify the company, but it is assumed he referred to the Aeronautical Division of the Curtiss-Wright Corp., which is said to be discussing details of a licensing arrangement with Orenda.

Mr. McLachlan in his opening remarks reviewed the history of jet engine development at Orenda, paying tribute to all those who had contributed to advances over the years and emphasizing the extreme co-operation which Orenda had been accorded throughout the Canadian industry. Of the more than 2,100 firms supplying Orenda with materials, components and services, he said, the vast majority were Canadian, although the

company had received much appreciated assistance from U. S. and United Kingdom firms.

The Iroquois model does not show the working parts of the engine. The detail of both the intake and exhaust areas are blanked out. The model was displayed at the Air Power Panorama in Washington late in July and is also to be shown at the SBAC static display in Farnborough early in September.

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### Kenting Re-Supply

Kenting Helicopters Ltd., Toronto, one of the firms in the Hunting Associates Group, has received a contract for re-supply of Eastern DEW Line sites. Firm has acquired three S-55 helicopters from Petroleum Helicopters Inc., for the job. These were flown north by Globemaster.

**CAR ENGINE** made by the Porsche Co. of Germany, powers this version of the U. S. Navy's XRON-1 rotorcycle, made by Gyrodyne Co. of America.

