THE INDUSTRY

CF-100 Mk. 6 Scrubbed

Production plans for the Mk. 6 version of the CF-100 have been cancelled by the Government. Indications are that the cancellation may be traced to the unavailability of the weapon which was to be the Mk. 6's *raison d'être* — the Sparrow 2 air-to-air guided missile — plus the new Conservative Government's desire to economize.

To help ease the effects of the cancellation of the Mk. 6 contract, a further order for additional Mk. 5's is being placed with Avro Aircraft.

The decision to manufacture the Sparrow 2 in Canada as a weapon for the CF-100 and possibly the CF-105 Arrow, was made early in 1956. However because of licensing delays and a hold-up in the final selection of a guidance system for the Sparrow, the missile still has not reached the production stage. It is considered extremely unlikely that operational Sparrows will be available in less than 18 months from now.

The CF-100/6 has essentially the same airframe as the CF-100/5, but is fitted out as a guided missile carrier. A further important point of difference is in the powerplants, which in the case of the Mk. 6 are fitted with short afterburners, and are known as Orenda 11R's (Orenda 11's are also used in the Mk. 5, but, not having reheat, the designation does not have the suffix "R").

The 11R, with afterburner in operation, is rated at 9,000 lb. th. for take-off, compared to 7,500 lb. for the Orenda 11.

"Wright" Iroquois

An agreement has been signed between Orenda Engines Ltd. and Curtiss-Wright Corp. covering rights for the manufacture, sale and further development of Orenda's new Iroquois supersonic turbojet in the United States.

Announcement of the deal was made jointly Sept. 30 by Crawford Gordon, Jr., president of A. V. Roe Canada Ltd. and chairman of the board of Orenda Engines, and Roy T. Hurley, chairman and president of Curtiss-Wright. The agreement which runs for seven years, also provides for the exchange of technical information between the two companies.

Orenda President W. R. McLachlan said that the agreement, reached after many months of discussion, is the first of its kind ever concluded by a Canadian aero engine or aircraft company. Initially, it covers the present Iroquois — widely regarded as an outstanding engine because of its mechanical simplicity, low weight and high thrust.

In addition, it is anticipated that the two companies will collaborate in the development of further variants of the Iroquois, "suitable for the very high speed, high altitude interceptors and bombers now on the drawing board, and for commercial applications."

BOEING STRATOLINER NEARS COMPLETION: Engines in place and tail surfaces installed, the first of 151 Stratoliners now on order by 13 airlines nears completion in the Boeing plant at Renton, Wash. The first two Stratoliners will be rolled out of the factory late this year, and will be delivered to PAA late in 1958.

DH Props for CL-44

De Havilland Propellers Ltd. has been awarded a multi-million dollar contract to supply propeller equipment for the Canadair CL-44, as ordered for transport service with the RCAF.

The de Havilland constant-speed, feathering and reversing propeller for the RCAF's CL-44's is 16 feet in diameter and has four solid aluminum-alloy blades. These blades are of wide chord to absorb the high power developed by the Orion engines. The propeller operates on the hydromatic principle, using hydraulic pressure to actuate the pitch-change mechanism.

New safety features comprise an automatic drag-limiting control and mechanical pitch-lock. The drag-limiting system limits the propeller pitch in event of an engine failure. It operates on receipt of a mechanical signal from the engine reduction gear, and by automatically coarsening the pitch of the propeller, prevents the torque in the engine shaft from falling below a pre-set value. Thus propeller drag is maintained at an acceptable level.

The mechanical pitch-lock operates automatically in response to either loss of propeller control oil pressure, or to propeller overspeed. By mechanically checking uncontrolled movement of the blades towards fine pitch, the lock prevents serious overspeeding or high windmilling drag that would otherwise occur.

Automatic synchrophasing, which will ensure that corresponding blades of all four propellers on the CL-44 are kept in a pre-set angular relationship to one another, will maintain noise and vibration within the cabin of the aircraft at the lowest possible level.

Collins for TCA

TCA has placed a new and additional order totalling over $500,000 for 33 Collins automatic pilot systems for installation on new Viscounts.

Eighteen other Collins AP-101 Automatic Pilot Systems were recently installed on Viscounts by TCA. Delivery of the additional 33 will begin in December and will be completed by March, 1958. The AP-101 includes the

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