# THE INDUSTRY

#### CF-100 Trainer Contract

MacDonald Bros. Aircraft Ltd. of Winnipeg has started work on a CF-100 modification program designed to convert some 50 Mk. 3 aircraft into dual control pilot training machines.

The program, which involves extensive modifications to the rear cockpit and removal of the armament, is being carried out under subcontract from Avro Aircraft Limited. The machines to be converted are already in service with the RCAF, mainly at No. 3 All Weather OTU at North Bay, Ont. They will be removed from service a few at a time, so as not to interfere with operational training, and ferried to Winnipeg by the RCAF. They will then be put through the conversion program, which will include bringing them up to the latest mod standard.

Technical liaison will be provided by a small group of Avro Aircraft personnel. R. T. Gibson, who has been a stress engineer at Malton for the past several years, was recently posted to Winnipeg to handle preliminary details in connection with the subcontract. He will be joined by other Avro personnel as the program gets under way.

#### S2F Subcontract to Jarry

A \$326,000 subcontract has been awared to Jarry Hydraulics to manufacture the main undercarriage for the CS2F anti-submarine aircraft now entering production at The de Havilland Aircraft of Canada Ltd., for the RCN.

The contract was awarded by de Havilland to the Montreal manufacturer, which is a division of Jarry Automobile Limited, and initially covers production of 42 units.

Additional news from Jarry is that another important subcontract has recently been received from Avro Aircraft Ltd. covering the design, development, and manufacture of the nose landing gear for the new CF-105, now in the prototype stage.

Besides the nose landing gear for this new fighter, Jarry has already designed and produced elevator control actuators. These actuators are described as being extremely large and having a specification requirement that presented Jarry with a real challenge in design. "Nevertheless," reports John Truran, the company's executive sales engineer, "we designed and produced the first unit in a total of ten weeks and we believe this is an achievement which could not be bettered outside Canada."

#### F-104 for the RCAF?

U.S. and foreign reports say that the RCAF is giving serious consideration to the adoption of the Lockheed F-104 day superiority fighter as as replacement for the Sabre 5's and 6's now equipping its dayfighter squadrons. Should the RCAF select the F-104 for this purpose, it would be produced in Canada under license by Canadair.

The F-104, still under development and not yet in service with the USAF, is powered by the Wright J-65 (Armstrong Siddeley Sapphire) of some 7,800 lbs. st. th. Though little information about the F-104 is available at this time, it is understood to be in the same general performance class as the North American F-100. Both are capable of supersonic speeds in level flight.

In this new Lockheed aircraft, the designers have reverted to the straight wing plan, abandoning the swept wing concept which has been so popular with designers of sub and trans-sonic aircraft during the past few years.

Until a few months ago, the RCAF

was reportedly favoring the F-100 as an F-86 successor, but supposedly decided that the new aircraft did not have sufficient performance edge over existing machines to justify the expense of production. In spite of the new reports concerning the F-104 as a F-86 replacement it would appear that the same objections could be applied to it as to the F-100. The F-104 may, however, have more growth potential than the Super Sabre, since its straight wing is more suited for speeds in excess of Mach 1.0 than the Super Sabre's swept wing.

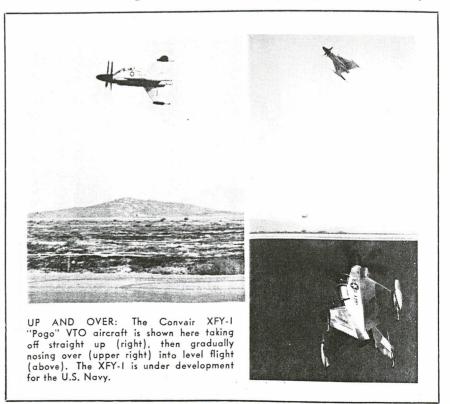
### **S2F** Propellers

Canadian Pratt & Whitney Aircraft Co. Ltd. will produce major components for the Hamilton Standard propellers which are used on the Grumman S2F, a Canadian version of which is now entering production at The de Havilland Aircraft of Canada for the RCN.

## Collins Expands

The establishment of an engineering research, development and manufacturing operation in the Toronto area by Collins Radio Company of Canada Ltd., has been announced by W. S. Kendall, the firm's resident manager. The new facility is located in leased premises at 11 Bermondsey Rd., Toronto.

Collins of Canada was organized about a year ago to sell Collins' pro-



AIRCRAFT

RL 900-G