# THE INDUSTRY

### Arrow Progress

First flight of the Avro CF-105 Arrow will probably take place either late in January or early in February, it was indicated Jan. 4th by J. L. Plant, Avro's newly appointed executive vice president & general manager.

Mr. Plant said that the aircraft's low speed taxi trials (up to 100 knots) had been carried out between Christmas and the New Year, and that a complete inspection which was now in progress would occupy the next two to three weeks. Following this inspection the Arrow would be brought out of the hangar for its high speed taxi trials (up to 160 knots, just below flying speed). When these had been satisfactorily carried out, then the first flight would take place.

The first flight will be made at a weight of about 35,000 lbs.

Meanwhile, a second Arrow fig. 1 has been completed. This one, however, will never fly; it is to be used for full-scale structural testing.

Other recent news about the Arrow includes a report that Avro has sent out orders to subcontractors to proceed with the production of enough components to build 40 complete aircraft (including the initial batch of Arrow 1's and production Arrow 2's). Company officials have declined to comment on this report.

J. C. Floyd, Avro's vice president, engineering, addressing the third annual dinner of Avro's Ten-Year Club during December, stated that recent missile and satellite developments did not make the Arrow obsolete, as many people claimed.

Said Mr. Floyd: "... During the next four or five years, the biggest threat against this Continent ... will be the manned bomber ... The most potent weapon against this at the present time is the Arrow. It will be the most effective on this Continent, and this is recognized by the U.S. Even when the ICBM comes along, I still think that the Arrow will be one of the most potent weapons against it.

"If you think about it for a minute, the normal launching platforms for anti-missile missiles are stationary. The Russians can find out where they are and destroy them. On the other hand, an airborne missile mothership,

if you like (which could be the Arrow), can be rapidly moved from one place to another carrying an anti-ICBM missile on it.

"We have done a quick specific calculation on an ICBM coming in at say Mach 10 at 200 miles above the earth's surface. An anti-ICBM missile of [only about] one-third the thrust is needed if it is fired from an aircraft moving at Mach 1.5 at 60,000 feet, than would be needed to carry the same size warhead to this given point in approximately the same time if it was launched from the ground. There is, then, a distinct advantage in launching an anti-ICBM missile from a CF-105."

## **CAE Transport Trainers**

Canadian Aviation Electronics Ltd. has been awarded a \$2 million development and production contract for twelve transport aircraft type procedure trainers for the RCAF. The trainers are designed to familiarize pilots with general characteristics of transport aircraft, and to enable them to practice procedure-flying common to the transport role.

A CAE spokesman stressed the fact that the new procedure trainers are not simulators. On December 20, CAE delivered the first of the DC-6B simulators to Canadian Pacific Airlines.

# Licensing Agreement

Signing of contracts implementing the licensing of a Japanese firm to manufacture certain airborne computing units was announced recently by Servomechanisms (Canada) Ltd., Toronto, foreign sales arm of Servomechanisms Inc., producers of electronic and electromechanical guidance and control devices for aircraft and guided missiles.

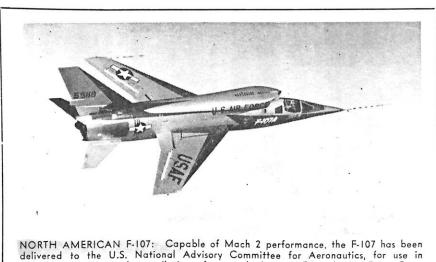
The initial contracts, which are in excess of \$75,000, with the Mitsubishi Electric Company of Tokyo, call for the provision of sample units and kits of parts to facilitate the beginning of production, and technical services to assist the Japanese company.

Since the parent corporation is completely geared to the requirements of the U.S. Department of Defense and its major contractors, Servo mechanisms' Canadian organization has been made the sole channel for all foreign activities since the beginning of the year. Organized to offer prompt and effective services to overseas buyers, as well as to the Canadian market, the Toronto concern expects a substantial increase in foreign sales in 1958.

### Avro in Belgium

Avro Aircraft Limited has set up a separate company called Avro Aircraft Services Limited in Brussels to assist the Belgian Air Force in maintaining its new CF-100's at peak efficiency. The new company will provide a direct link between the Belgian Air Force and the Avro plant and will act as a clearing house for the two-way flow of technical information.

Head of the new subsidiary is Jim Kenny, formerly experimental manager at the Malton plant. His new



NORTH AMERICAN F-107: Capable of Mach 2 performance, the F-107 has been delivered to the U.S. National Advisory Committee for Aeronautics, for use in supersonic testing and compilation of research data at Edwards Air Force Base, Caliî. The overhead duct is designed to give maximum efficiency to the J-75 jet engine which is rated in the 20,000 pounds thrust bracket.