THE INDUSTRY

German Sabre 6's

Canadair Ltd. has announced a $75 million order for 225 Sabre 6 fighters to be supplied to the Republic of West Germany. This is the largest dollar-value export order ever placed with a Canadian aircraft manufacturer. With the order came the announcement by the Department of External Affairs in Ottawa that Canada will train 360 West German pilots to take over the Sabre 6's and the 75 Sabre 5's that this country offered West Germany last summer. The delivery of the Sabre 5's has been held up due to West Germany's lack of jet pilots.

This foreign order follows Canadair's delivery last summer of 34 Sabre 6's to the Union of South Africa, and six to Colombia. In addition to these orders, Canadair continued to supply the RCAF with Sabre 6's for its No. 1 Air Division in Europe.

The West German order confirms the growing reputation of the Sabre 6 as a first-line fighter aircraft. Its fine performance is due in large part to its Canadian-built Orenda 14 engine which delivers 7,300 pounds of thrust.

R. A. Neale, Canadair vice president of manufacturing, explained that steps taken in preparation for an increased production rate will enable the company to build the additional airplanes while fulfilling previous orders for Sabres, CL-28's and T-33's, as well as work on guided missiles and on atomic energy reactors. The production of the Sabres can be executed on schedule without affecting any other export business or continued delivery to the RCAF.

The West German Republic has requested that the new fighters be made available to it progressively to tie in with the German pilot training program, beginning this year.

105 Ground Support

Consolidated Diesel Electric Corp. of Canada Ltd., has received an $86,000 contract from Avro Aircraft Ltd., for lightweight, highly mobile ground support equipment to service the new Avro CF-105 jet fighter. The units are self-propelled and contain a gas turbine compressor rated at 117 lbs. per min. at 50 psi. pressure and 370°F. on a standard day.

Components of the self-propelled pneumatic powerplant include bleed air ducting for connecting the compressor to the aircraft, quick disconnect couplings, fuel tanks, fuel system, exhaust gas ducts, control panels, starting systems, and other necessary parts to make the vehicle self-sufficient.

Con Diesel of Canada is a subsidiary of Consolidated Diesel Electric Corporation, Stamford, Conn., manufacturer of ground support equipment, power and test equipment.

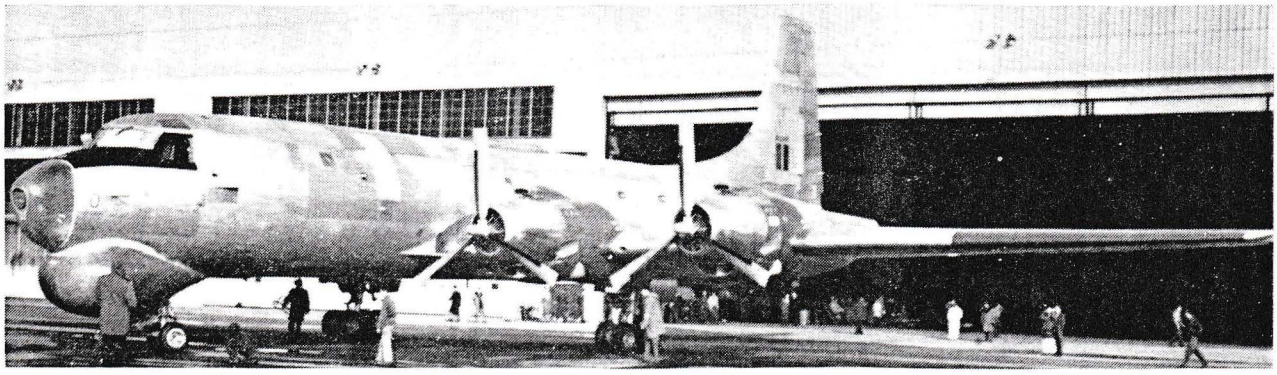
F-106A Test Flown

The Convair F-106A, an advanced USAF all-weather interceptor, has been test-flown for the first time at Edwards Air Force Base. R. L. Johnson, Convair's chief engineering test pilot at Edwards lifted the new delta-wing interceptor off the Air Force Flight Test Center runway on December 27. To enable it to hunt down attacking bombers in any kind of weather, day or night, the F-106A is equipped with what is described as the most advanced electronic fire control system and armament yet developed for an interceptor. The initial $83,000,000 contract for F-106A interceptors was announced by Convair last summer.

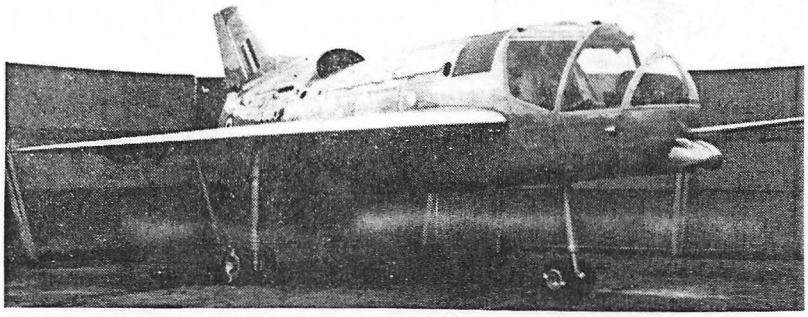
CGE's New Lab

A new major engineering laboratory devoted to applied research and advance engineering is being set up by Canadian General Electric Company at its Peterborough plant. Announcement of the new 22,000 square foot laboratory was made recently in Toronto by company President James H. Goss. Mr. Goss said the new engineering laboratory, together with control laboratories that contribute to its work in Peterborough, represents an investment of about $1,000,000.

Mr. Goss indicated that, while the laboratory would assist all technical



CL-28 ROLLS: Like a giant moth slowly emerging from its cocoon, the first CL-28 submarine hunter-killer for the RCAF rolls from the final assembly line at Canadair Ltd. in Montreal. While no special ceremony was planned, hundreds of employees joined management personnel, engineers, office workers and air force officers to see the "Roll-out". Note the special slot cut in the hangar to allow the immense tail to emerge. The RCAF's Air Transport Command is to receive another version of the Britannia, similar to the CL-28. This version is to be known as the CL-44 and will replace the North Star, venerable workhorse of the RCAF during the past decade. The CL-44 transport version will be equipped with turboprop engines.



VERTICAL TAKE-OFF JET: The Short SC-1, a jet powered research aircraft designed for vertical take-off and landing, and able to change from hovering to forward flight, made its first taxying trials at Belfast recently. The SC-1, which is powered by five Rolls-Royce RB-108 engines, is Britain's first aircraft project in the field of VTOL. (vertical take-off and landing). The aircraft has been designed and built for the Ministry of Supply's research program.

groups within the company, its main function would be concerned with the technical activities of the company's capital goods business. He defined the laboratory's function as "applied research, engineering development, consulting and control."

The laboratory staff numbers 52, including electrical and mechanical engineers, chemists, metallurgists, physicists, mathematicians and laboratory apprentices. Included in the equipment ordered for the laboratory is an IBM-650 computer, first of its kind to be put in use by any industry in Canada outside the defence field.

No Sabres Thanks

It has been reported that Argentina's naval air force expects to acquire 36 Panther jets from the U.S. in the near future. At the same time it has also been reported that plans of the Argentine air force to buy 36 new Sabre 6's from Canadair in Montreal have been cancelled because of the cost. Argentine sources say that the South American republic's navy will be able to buy all the Panthers reconditioned for almost the same price as one new Sabre 6.

Vertical Jets

A British jet aircraft which will take-off and land vertically received its first taxying trials at Belfast, Northern Ireland last month. Designed and built by Short Brothers & Harland Ltd., of Belfast, as part of a Ministry of Supply research program, the airplane is known as the Short SC-1. Not only is it designed for vertical take-off and landing, but it is able to change from hovering to forward flight.

The SC-1 is powered by five Rolls Royce RB-108 turbojets — a new type of gas turbine of which no details have yet been announced. It is Britain's first aircraft project in the field of vertical take-off and landing. The essential difference between this and Rolls-Royce's "Flying Bedstead" lies in new airplane's ability to make transition from hovering to normal flight.

Rear Admiral Mathew Slattery, chairman of Shorts, said: "The taxying trials successfully completed were the first step in an extensive program of development leading to attainment of vertical take-off and landing, a new technique which is expected to have important applications in both military and civil aviation." The research program will include many hours of hovering with machine tethered in a test gantry now being built at Belfast.

New Bendix Outlet

Airborne electronic communications and navigation equipment made by Bendix Aviation Corp., formerly sold in Canada by Aviation Electric Ltd., will now be handled exclusively by Computing Devices of Canada Ltd. This agreement is part of the comprehensive arrangements concluded during the summer between Bendix and CDC, whereby Bendix acquired a minority interest in CDC, and CDC received exclusive rights to Canadian sale of a wide range of Bendix products.

The communications equipment includes a variety of transmitter-receivers covering HF, VHF, and UHF bands. All meet ARINC specifications, and have received widespread acceptance by military and civil users in Canada. Specific types are: the AN/ARC-45, an eight channel lightweight UHF transmitter-receiver for small military aircraft and helicopters; the AN/ARC-44 FM transmitter-receiver communication system with 280 channels in the HF band; the TA-20A VHF transmitter, with 360 channels; the corresponding receiver RA-18C; the MI-36A audio amplifier; the MI-51A cockpit loudspeaker system; the CNA-2C audio control panel; and the SCL-3 selective calling system.

Bendix equipment has filled a major part of the RCAF requirements of recent years for ILS facilities. The MN-85 (Localizer, VOR), MN-100 (Glide Slope), and MN-53 (Marker Beacon) receivers are used by commercial operators, and under the designation AN/ARN-14 and AN/ARN-18, have been adopted for military use. In addition to airborne equipment, the agreement covers the well known Bendix mobile, railroad and portable transmitters and receivers.

Servicing of equipment covered in the agreement will be handled by CDC.

Jetliner Scrapped

North America's first jet-propelled transport aircraft — Avro's C-102 Jetliner — has been consigned to the scrap heap. Its designer and manufacturer, Avro Aircraft Ltd., early this month confirmed that the task of dismantling was well advanced. The four-engined, 26-ton, 50-passenger airliner first took to the air August 10, 1949.

The project was heavily subsidized by the Federal Government, whose investment ran to $6,568,363. Avro contributed another $2,317,772, but only one Jetliner was ever built. Further development was halted on government instructions early in the Korean war to make additional facilities available for production of CF-100's.

P & W J-52

Pratt & Whitney Aircraft, East Hartford, Conn., recently revealed that tooling for production of its new medium-sized J-32 turbojet is being planned. First installation of the new engine is scheduled for a current production model of the USN's Douglas A4D Skyhawk carrier-based attack bomber.