

New Sabre Mod.

North American Aviation is currently working on a new Sabre wing modification aimed at further improving performance at altitude at the same time as it improves handling characteristics at low speeds, such as in approach and landing. It is expected that the modified wing will be fitted to RCAF Sabre 6's if tests show a significant improvement in performance.

The modification is a comparatively simple one comprising the re-introduction of leading edge slats and the addition of extended wing tips. The design of the leading edge slats is being reworked so that they will always open and close simultaneously. Apparently it was not uncommon with earlier slat-fitted models of the F-86 for one slat to open while the other remained closed.

German CF-100s?

Reports persist in Britain that the Canadian Government intends to donate several dozen fighters to the new West German air force. There has been no confirmation from Ottawa.

One report says three squadrons, comprising 36 aircraft, have been pledged. Two squadrons would be of

CF-100's and one of Sabres.

On a recent visit to Canada, Dr. Ludwig Erhard, West Germany's Minister for Economic Affairs, inspected production facilities of Canadair Ltd.

Labor Pains

A walkout July 11 of 1,700 production workers, members of the CIO United Auto Workers, and the subsequent laying off of 1,300 office and technical employees, brought activity to a standstill at the plant of The de Havilland Aircraft of Canada Ltd. at Downsview, outside Toronto.

Suspended by the strike were:

- Production for the U.S. military, the RCAF and civil operators of Otter utility aircraft;
- Production for the U.S. military and civil operators of Beaver utility aircraft;
- Production for the RCAF of 60 Chipmunk primary trainers;
- Manufacture of spares and provision of factory overhaul for these three types;
- Preparation for production of CS2F Sentinel anti-submarine aircraft for the Royal Canadian Navy;
- Repair and overhaul for the RCAF of General Electric J-47 jet engines

used in early models of the Sabre interceptor, and of deHavilland Goblin engines used in the second-line Vampire fighter; also Orendas;

- Repair and overhaul for the RCAF of Vampires and North Star transports;
- Research and development (the nature of which is classified) for the Defense Production Department on guided missiles;
- Development and prototype construction of a twin-engine, high-wing, Otter-size utility transport.

The 1,700 production workers, during 10 months of negotiations, demanded that their wages, ranging from \$1.44 to \$1.98 an hour, be increased by an average of 10 cents. They rejected a company compromise which would have resulted in an average increase of 2.6 cents an hour.

On July 24, members of the AFL Machinists' Union ratified a new master agreement providing an hourly wage increase averaging nearly 10 cents for some 10,000 workers of the Avro Canada Ltd. companies.

The Department of Labor, incidentally, releases figures which indicate that workers in all categories of the aircraft and parts industry received higher pay during the year ending October, 1954, than ever before. The overall increase over 1953 was in the neighborhood of 12 per cent.

Missile Order

The Canadian Government has placed a pre-production order with an undisclosed manufacturer for an unstated number of unidentified air-to air guided missiles, Defence Minister Campney told the Commons recently.

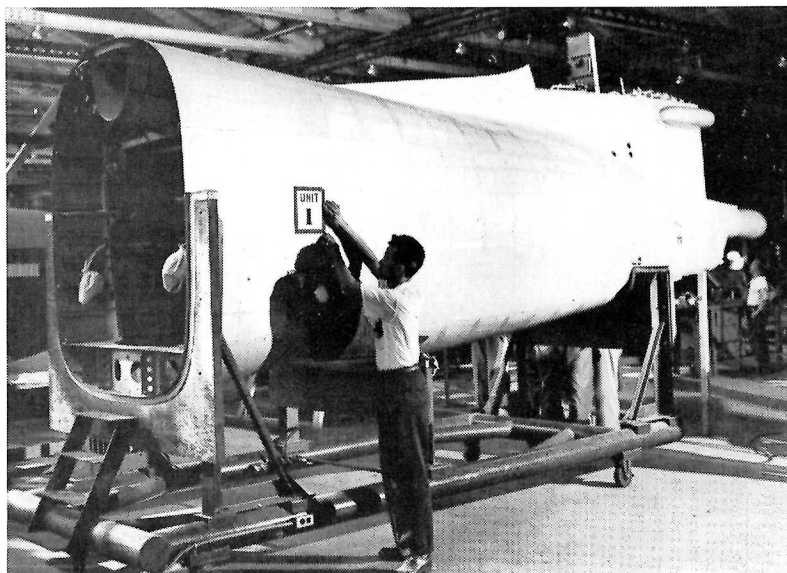
(The contractor is believed to be Canadair Ltd. and the weapon the Velvet Glove, developed by the Canadian Armament Research and Development Establishment at Valcartier, Que.)

Mr. Campney said also that a pre-production order is soon to be placed with Avro Canada Ltd. for the CF-105 supersonic interceptor.

In this connection, Mr. Campney observed:

"Once you are committed to one particular phase, it is difficult to detach yourself if you find that you have made a mistake.

"I think it is better to be careful and



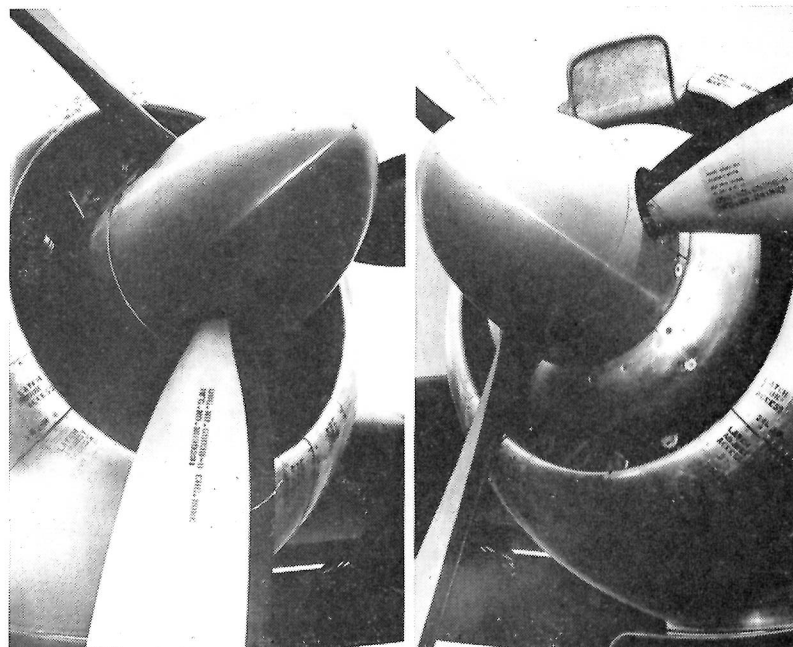
CANADAIR DELIVERS FIRST CS2F REAR SECTION: Shown ready to be delivered to the prime contractor is the first CS2F-1 Sentinel rear fuselage section to be completed by Canadair, which is building these components under subcontract from The de Havilland Aircraft of Canada. DHC is building the Sentinel for the RCN. Not started until December, 1954, section number one was completed by early July, thus maintaining Canadair's tradition of on, or ahead of schedule deliveries.

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try to get the answer as far as you can before launching upon production, because these are extremely costly projects to develop."

Marconi Mission

A stubby, 140-foot freighter, carrying 24 engineers and technicians of the Canadian Marconi Co.'s Special Services Division, is plowing its way to isolated sub-polar stations of the U.S. Air Force in Newfoundland, Labrador and Baffinland.



SCOOPING IT UP: New improvements on Lockheed Super Constellations are redesigned air scoops (top of nacelle in right picture) which are said to add nearly 1,000 ft. of critical altitude at max. cruise power settings, and new propeller afterbodies, called "dishpans", which increase cruise speeds by 2 mph. For comparison, old nacelle is shown at left. New scoop increases air pressure available at the carburetors by eliminating the more complicated air channel used previously. An alternate, sheltered source of air is located under the cowling. Prop afterbodies increase speed by reducing drag without affecting cooling.

The ship is a floating electronics and diesel repair depot; her mission is the annual preventive maintenance call to the North East Air Command's far-flung radar stations. Routine repairs and adjustments are done on the spot. Equipment requiring major overhaul will be replaced and returned to the Marconi repair base at Pepperell, Nfld.

Canadian Marconi's Special Services Division has been responsible for the installation and maintenance of various radar warning systems in Canada.

ARL Expansion

PSC Applied Research Ltd. of Toronto announces extension of its facilities to provide enlarged quarters

for drafting, product engineering, publications, electronics engineering and a new environmental laboratory. Included are:

Vibration equipment, for both horizontal and vertical shake tests; altitude chambers, to determine performance at altitudes up to 100,000 ft. at temperature ranges from -100° F. to 300° F.; humidity chambers, to determine performance in relative humidities from 20 to 98 per cent; shock testing equipment; wind tunnel,

of the industry's floor space. And if efficient management was provided for, he did not think the interests of his department would be prejudiced.

As for the creation of a monopoly, there is not much competition in the industry anyway, except for a race to reduce production costs, the minister said.

Pump Dealers

New York Air Brake Co. has appointed Aviation Electric Ltd. of Montreal and Standard Aero Engine Ltd. of Winnipeg as Canadian representatives for Stratopower pumps manufactured by the company's Watertown division.

Stratopower constant and variable delivery type aircraft hydraulic pumps range from capacities of one quarter of a gallon per minute to 10 gallons per minute at the nominal speed of 1,500 r.p.m. Maximum continuous operating speed for most models is 3,750 r.p.m.

Best Customer

Canada last year became the U.S. aircraft industry's largest foreign customer, according to the Aircraft Industries Association. She took delivery of nine Lockheed Constellations, valued at \$15,400,000, for Trans-Canada Air Lines, and 191 smaller aircraft of various types, valued at \$1,800,000.

For the previous six years, The Netherlands ranked as the U.S. industry's top export buyer.

Total export volume was \$618,900,000 — \$260,000,000 under the record year of 1953, but three times the total volume for all the years prior to the Second World War. Britain's 1954 aircraft exports amounted to \$157,000,000.

The bulk of the 1954 export sales, \$497,000,000 worth, was in military items. The remainder, including 112 commercial transports worth \$96,000,000, was sold to civil interests in 79 countries.

Antarctic Beaver

A Toronto-built de Havilland Beaver, wearing the insignia of the Royal Australian Air Force, is to accompany the 1955 Australian Antarctic Expedition, which departs late this year aboard the vessel Kista Dan. For 12 months the expedition will make its headquarters at Mawson.

for speeds up to 200 mph., with a working cross-section of 12" x 12"; physical testing equipment, for analyzing performance on switches, motors, relays, etc.

Avro Monopoly?

The question was raised recently in the House of Commons by J. M. Macdonnell (PC, Toronto - Greenwood) of whether a near-monopoly was threatened in the aircraft production field by the offer of Avro Canada Ltd. to purchase Canadian Car and Foundry Co. Ltd.

Defense Minister Howe replied that the offer was a surprise to him, but that if a merger was completed it would involve less than 50 per cent

In a ceremony at the Government Aircraft Factory, Fishermen's Bend, near Melbourne, the RAAF Chief of Staff, Air Marshal Sir John McCauley, accepted the Beaver from Australia's External Affairs Minister, R. G. Casey. It was then turned over to the expedition's RAAF Flight.

The Antarctic Beaver, which was assembled by de Havilland-Australia at Bankstown, N.S.W., will be flown by Flight Lieutenant Douglas Leckie, who was awarded the Air Force Cross for his work with the 1954 Antarctic Expedition.

DPA Affiliations

Data Processing Associates Ltd., of Ottawa, announces that it has been selected as Canadian representative of Dynamics Research Associates, Seattle, and Dian Laboratories Inc., New York. The Dynamics firm manufactures several new products which have wide application in the guided missiles, industrial control and automation fields. Dian Laboratories operates a complete analog computing centre.

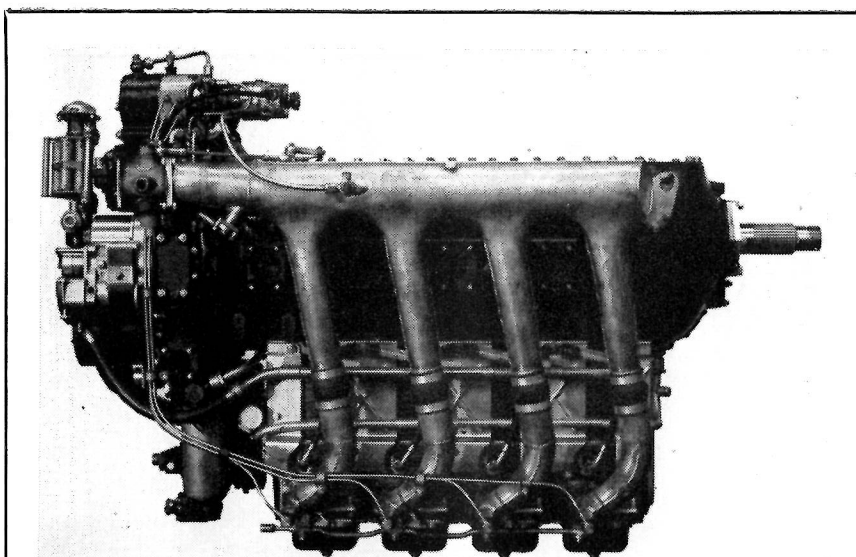
Contract Ends

Some 380 temporary employees of Trans-Canada Air Lines have been laid off at Winnipeg as a result of the termination of a contract under which TCA provided maintenance and overhaul on RCAF aircraft. The work is now being assumed by the RCAF.

The program began in May, 1951, when the RCAF was undergoing rapid expansion and lacked adequate



CHANGEOVER: G/C R. M. Aldwinkle, DFC, (R) for the last year resident engineering officer at Canadair, with rank of wing commander, is shown greeting his successor at the aircraft plant, W/C R. C. Thompson. G/C Aldwinkle has been posted to the AMTS instrument & electrical branch at Air Force Headquarters in Ottawa.



A NEW GIPSY: Latest in the long line of de Havilland Gipsy air-cooled, four-cylinder inline aircraft engines is the Gipsy Major 200, which develops 200 bhp @ 2600 rpm @ SL. It is intended for use in both helicopters and fixed-wing aircraft. Cylinder assemblies are interchangeable with those of Gipsy Queen 70 Mk. 2 and include sodium-cooled exhaust valves. Feature of the Major 200 is the induction system, which employs inlet port fuel injection in place of conventional float-type carburation. This induction system (see photo) is said to be of very high aero-dynamic efficiency and to give near-perfect fuel distribution.

facilities of its own. At its peak it involved 758 TCA personnel, of which about 300 have become permanent employees.

Overhauls were completed on 106 Expeditors, 19 Mitchells and six Dakotas, all of which went through the shops several times. In addition, major inspections were carried out on between 200 and 300 Harvard trainers.

A major cleanup job was involved in sorting from the mass of shop equipment and returning more than 13,000 items owned by the RCAF.

Executive Jet

Plans for a light jet transport with a cruising speed of 560 mph. have been disclosed by Fairchild Aircraft Division, Hagerstown, Md. Designated the M-225, it will carry a crew of two and seven passengers. It will be a low-wing, four-engine design grossing 17,695 lbs., with wingspan of 35 ft. 4 in.; length of 50 ft. 10 in.; height of 13 ft. 3 in.

Industry Addition

According to a New York report, a jointly owned Canadian company to provide armament engineering services to the Canadian Government has been formed by Aircraft Armaments Inc., of Cockeysville, Maryland, and Bawden Industries Limited of Toronto, both subsidiaries of Hayes Manufacturing Company of Grand

Rapids, Mich.

The company, known as AA Engineering Ltd., will offer to the Canadian Government a service modelled after that now performed by Aircraft Armaments for the U.S. military. Offices will be at 74 Sparks St., Ottawa.

Since its inception in 1950, Aircraft Armaments Inc. has been a major source of ordnance and electronics development engineering for the U.S. Army and the USAF. Selected engineers from its staff will initially work with Canadian engineering personnel to get the new Canadian venture started.

Contracts Awarded

Contractors awarded business in excess of \$10,000 by the Department of Defence Production during the period May 16 - June 15, 1955, include the following. The list does not include orders placed by the Department outside Canada or with other agencies, and amendments to orders placed earlier—nor do orders classified as secret appear here: (Names appearing in bold face type are current *Aircraft* advertisers.)

Abercorn Aero Ltd., Montreal, \$32,308 for aircraft spares.

Aviation Electric Ltd., Montreal, \$90,000 for repair, modification and storage of aeronautical electrical equipment and instruments during period April 1, 1955 - March 31, 1956.

Avro Aircraft Limited, Toronto, \$945,000 for aircraft armament equipment.

Godfrey Engineering Co. Ltd., Lachine, P.Q., \$20,987 for aircraft servicing equipment.

Imperial Oil Limited, Ottawa, \$286,240 for