The Industry

FIRST CONTINENTAL COMET 4B for BEA recently flew London-Athens (1500 mi.) in 3½ hrs., compared to normal airline time of about 6¾ hrs. The 4B can carry up to 102 passengers on stages between 400 and 2500 miles.

Smye and Plant Resign

Two more top executives of the A. V. Roe Canada Group have resigned in the aftermath of the Arrow cancellation. At July's end, Sir Roy Dobson, chairman of the board and president of A. V. Roe Canada Ltd. announced the resignations of Fred T. Smye, executive vice president, aeronautical, of the holding company, and of John L. Plant, president & general manager of the subsidiary Avro Aircraft Ltd.

Harvey R. Smith has been named to succeed Mr. Smye, who was A. V. Roe Canada Ltd.'s first employee when the company came to Canada at the end of World War II, but at time of writing no successor had been named to Mr. Plant's post.

Mr. Smith comes from the post of vice president & general manager of Dominion Steel & Coal Corp. Ltd. Prior to joining Dosco, he was vice president, manufacturing, of Avro Aircraft.

End in Sight

Schedules for the completion of two Canadian aircraft production programs were given in Commons recently by Defence Production Minister O'Hurley. The Argus order will be completed late this year, Mr. O'Hurley said, and the CS2F Tracker will go out of production in early 1960.

The Minister also told Commons that the U.S. Air Force contract on which Canadair Ltd. is bidding is still not decided. He blamed the delay in awarding the contract, which is said to have a value of $200 million, on the fact that new tenders had been requested on various items of equipment which were different than had been called for in the original specification.

Said Mr. O'Hurley: "I can say that Canadair is certainly in the running and we are certainly optimistic about it."

Destroying the Evidence

The last completed Avro Arrow was destroyed last month. Before the ceasework order on the Arrow program was given by the Government, six Arrows had been completed. The last of these was the first Mk. 2, powered by Iroquois engines. It never flew. The first five aircraft were Mk. 1's, powered by Pratt & Whitney J-75's.

The Government claims that attempts were made to sell the completed aircraft as research vehicles to agencies in the United Kingdom and the U.S. and, finding no takers, there was no alternative but to take out the salvageable equipment and cut the remains up into scrap. This program was carried out with alacrity hitherto unknown in Government circles.

There is no record that the completed Arrows were ever offered to Canada's own National Aeronautical Establishment, which has been engaged in high speed flight research for the past decade or more. The NAE is, in fact, currently building a supersonic wind tunnel capable of speeds from Mach 0.3 up to Mach 4.5. It has usually in past supported its wind tunnel research with flight research, using advanced equipment supplied by the RCAF and flown by RCAF crews.

PHI for German 104's

Designed by Computing Devices of Canada Ltd., the CDC Position & Homing Indicator has been specified for the Starfighter aircraft which have been ordered by the West German Air Force. The PHI is an advanced automatic dead reckoning navigation system for single seat fighter aircraft. The instruments will be manufactured in Canada and supplied to Lockheed, builders of the first 66 aircraft for West Germany, before they are delivered to Germany.

The PHI was developed by CDC on a contract from the RCAF, and has gone through several stages of improvement since the first prototype was test flown in 1952. Version being supplied to Germany is the Mk. 4.

Locking the Barn

The expenditure of up to $9 million was authorized by Commons early last month to ensure the retaining of the Canadian engineering skills that have been built up during the past few years.

In explanation of the item, Defence Production Minister O'Hurley noted that . . . "as long as Canada was undertaking the independent development and production of major equipment requirements of the armed forces, Canadian industry was able to build up and maintain sizeable engineering teams and to develop an advanced technology in a number of fields. As it becomes increasingly difficult for Canada to develop major weapon systems independently, the support previously given to development engineering by the equipment programs of the Canadian services is lessened.

"We are therefore taking other steps to ensure that existing engineering capacity will be maintained to the greatest extent possible and that our technological progress will not be impeded.

"This is important for many reasons, among them being the serious effect which a decline in Canadian engineering capabilities would have on our production sharing efforts. The weapon systems and equipments which seem

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to offer the greatest promise for future production sharing are all characterized by a very high degree of engineering content.

"Canadian industry will be able to share in such production programs only if its engineering capacity can be maintained and its technical competence advanced through the performance of appropriate development tasks . . ."

• The Score: James Floyd, vice president engineering of Avro Aircraft Ltd. — returned to the U.K.; James Chamberlin, chief of design, Avro Aircraft — gone to the U.S. to join the NASA; Charles Grinyer, vice president engineering of Orenda Engines Ltd. and guiding genius behind the Iroquois —gone to Atomic Energy of Canada Ltd.; the Arrow and Iroquois design teams—desintegrated and 75% of their component members scattered around in various U.S. aircraft manufacturing centres in Georgia, California, Ohio and New York.

Mohawk Orders 440's

Mohawk Airlines Inc., U.S. local service carrier, has ordered four 440 Metropolitan piston engine airliners from the Convair Division of General Dynamics. Up till the time of the placing of this order, Mohawk had been considered a prime prospect for Canadair 540 turboprop airliners. However, the company still remains a prospect for turboprop conversion of the 440's, as one of the reasons stated for selecting the piston engine airliner was the ease with which it could be converted to turboprop power.

Exact reason for the choice of the Convair 440 over the Canadair 540 is not known, but it is thought that the fact that Mohawk was able to obtain almost immediate delivery of the 440's was an influential factor.

Beavers at Work

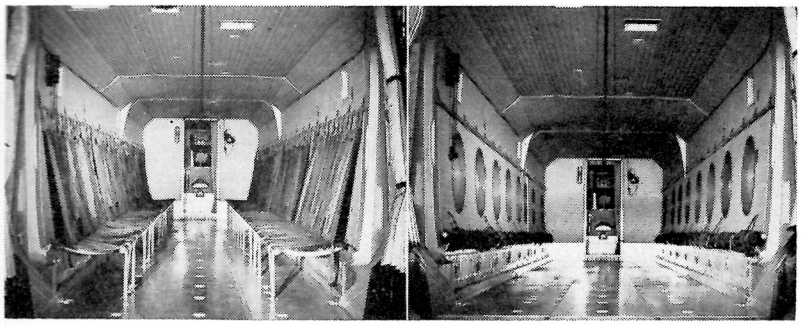
Since May, 1957, two DHC-2 Beaver agricultural aircraft have been operating in India. Under the direction of the Ministry of Food and Agriculture, these aircraft are engaged on insecticide spraying and top-dressing in sugar, wheat, cotton and rice growing areas. Results to date have been excellent. In the treatment of one sugar crop the increased yield per acre value was ten times the operating expense, including the cost of insecticides.

For large scale crop spraying and top-dressing operations in such countries as India, the Beaver offers a number of advantages over the conventional agricultural aircraft. Rough strips, constructed by native laborers who have no conception of landing and take-off requirements for aircraft, pose few problems for the STOL Beaver. It carries a generous payload and performs excellently where low, slow flying is essential.

Slick Buys Super Hercules

An initial order for six giant Lockheed Super Hercules turboprop freighters has been announced by Slick Airways Inc., up to now considered a prospect for Canadair CL-44's. The order amounts to approximately $22 million. The first Super Hercules air freighter will go into service on Slick Airways routes in early 1962.

Said Earl Slick, chairman of the board: "With a direct operating cost of less than four cents per ton mile, this is the breakthrough air vehicle



INSIDE THE CARIBOU: At left is shown the DHC-4's military seating arrangement for 32 troops in wall type seats. Civil version seats 30 in forward facing utility seats, or a high density seating arrangement for 40 passengers. At right: Caribou interior as seen with military wall seats rolled back for cargo accommodation. Tie-down rings, nearly 100 of them, are standard equipment.

for mass volume movement of cargo at rates competitive with surface transportation."

The Super Hercules will be powered by four advanced Allison turboprops of unstated power ratings. However, it is said that the 230,000-lb. gross weight air freighter will be capable of transcontinental non-stop flights carrying 77,000 lbs. of cargo. Gross usable cargo volume of the huge air freighter will be more than 7,500 cubic feet.

Contracts Awarded

Contractors awarded business in excess of $10,000 by the Department of Defence Production during the period May 16 to June 15, 1959, include the following. The list does not include orders placed by the Department outside of Canada, or with other agencies or increases in orders placed earlier — nor do orders classified as secret appear here.

Names appearing in bold face are current AIRCRAFT advertisers.

Abercorn Aero Ltd., Montreal, $10,000 for repair & overhaul of air/sea rescue equipment during year ending March 31/60.

Aircraft Industries of Canada Ltd., St. Johns, Quebec, $1,343,721 for repair & overhaul of airframe and airframe components during year ending March 31/60.

Alpha Aracon Co. Ltd., Downsview, Ont., $18,675 for electronic equipment.

Aviation Electric Ltd., Montreal, $21,851 for aircraft components.

Avro Aircraft Ltd., Toronto, $24,741 for technical publications.

Bayly Engineering Ltd., Ottawa, $133,610 for repair & overhaul of ground and airborne electronic equipment during year ending March 30/60.

Bayly Engineering Ltd., Ottawa, $10,000 for repair & overhaul of aeronautical electronic equipment during year ending March 31/60.

Bristol Aero - Industries Ltd., Winnipeg, $344,000 for repair & overhaul of aero engines, special investigations and technical studies during year ending March 31/60.

Bristol Aero - Industries Ltd., Winnipeg, $1,784,914 for inspection and repair of aircraft during year ending March 31/60.

Canadian Aviation Electronics Ltd., Montreal, $13,274 for technical services during year ending March 31/60.

Canadian Aviation Electronics Ltd., Montreal, $3,839,370 for repair & overhaul of ground and airborne electronic material during year ending March 31/60.

Canadian Marconi Co., Montreal, $11,074 for sonobuoy equipment.

Canadian Pratt & Whitney Aircraft Co. Ltd., Longueuil, Que., $100,000 for repair & overhaul of aero engine spares, special investigations and technical studies during year ending March 31/60.

Carriere and MacFeeters Ltd., Scarborough, Ont., $35,000 for repair & overhaul of ground rectifiers, auxiliary generating sets and associated equipment during year ending March 31/60.

Collins Radio Co. of Canada Ltd., Toronto, $15,000 for repair & overhaul of electronic equipment during year ending March 31/60.

Garrett Mfg. Corp. of Canada Ltd., Rexdale, Ont., $180,000 for repair & overhaul of ground and airborne electronic materiel during year ending March 31/60.

Garrett Mfg. Corp. of Canada Ltd., Rexdale, Ont., $14,528 for electronic equipment.

Genaire Ltd., St. Catharines, Ont., $338,910 for repair & overhaul of airframe components and ancillary equipment during period ending Sept. 30/59.

Imperial Oil Ltd., Ottawa, $18,446 for aviation gasoline during 1959 navigation season.

Walter Kidde & Co. of Canada Ltd., Montreal, $10,000 for repair & overhaul of airborne fire fighting material during year ending March 31/60.

Rolls-Royce of Canada Ltd., Montreal, $350,000 for repair & overhaul of aero engine components, special investigations and technical studies during year ending March 31/60.

Rolls-Royce of Canada Ltd., Montreal, $184,000 for repair & overhaul of aero engines and aero engine components during year ending March 31/60.

Standard Aero Engine Ltd., Winnipeg, $836,000 for repair & overhaul of aero engines, special investigations and technical studies during year ending March 31/60.

Standard Aero Engine Ltd., Winnipeg, $2,260,000 for repair & overhaul of aero engine components and airframe components, special investigations and technical studies during year ending March 31/60.

MARKING A FIRST: Shown at the unveiling in June of the CAI-sponsored memorial to the first flight in Canada are (L) CAI's Dr. G. N. Patterson and (R) Maj.-Gen. E. C. Plow, Lieutenant-Governor of Nova Scotia, who dedicated the new monument. The symbolic memorial is located on the grounds of the Alexander Graham Bell Museum at Baddeck, N.S.

Superior Airways Ltd., Fort William, Ont., $10,000 for repairs, storage and servicing of aircraft during year ending March 31/60.

Terry Machinery Co. Ltd., Montreal, $2,260,000 for repair & overhaul of ground rectifiers, auxiliary generating sets and associated equipment during year ending March 31/60.

Terry Machinery Co. (Alta.) Ltd., Edmonton, Alta., $400,000 for repair & overhaul of ground rectifiers, auxiliary generating sets and associated equipment during year ending March 31/60.

Sorel Industries Ltd., Montreal, $634,600 for variable diffuser and model support for high speed wind tunnel — Uplands, Ont.

Abercorn Aero Ltd., Montreal, $19,094 for spares for aircraft tie down kits.

S. F. Bowser Co. Ltd., Ottawa, Ont., $41,072 for components for refuelling equipment.

Bristol Aero - Industries Ltd., Winnipeg, $422,000 for repair & overhaul of airframe components during year ending March 31/60.

Bristol Aero - Industries Ltd., Winnipeg, $17,000 for repair & overhaul of airframes and airframe components during year ending March 31/60.

Bristol Aero - Industries Ltd., Montreal, $35,000 for technical services during year ending March 31/60.

Canadair Ltd., Montreal, $438,254 for repair & overhaul of airframes and airframe components during year ending March 31/60.

Canadian Aviation Electronics Ltd., Montreal, $10,000 for repair & overhaul of telecommunication materiel during year ending March 31/60.

Canadian Aviation Electronics, Montreal, $1,856,000 for fire control spares.

Canadian Pratt & Whitney Aircraft Co. Ltd., Montreal, $1,520,000 for aero engines.

Canadian Pratt & Whitney Aircraft Co. Ltd., Montreal, $21,013 for helicopter airframe spares.

Canadian Pratt & Whitney Aircraft Co. Ltd., Montreal, $21,976 for aero engine spares and tools.

Canadian Westinghouse Co. Ltd., Ottawa, $25,000 for aero engine spares and tools during two years ending March 31/61.

D. & S. Aviation Co. Ltd., Pont Viau, Que., $10,947 for test equipment.

De Havilland Aircraft of Canada Ltd., Toronto, $101,000 for repair & overhaul of airframes and aiframe components during year ending March 31/60.

Dominion Rubber Co. Ltd., Montreal, $12,280, for airframe spares.

Fairey Aviation Co. of Canada Ltd., Dartmouth, N.S., $400,000 for repair & overhaul of aircraft and aircraft components, special investigations and technical studies during year ending March 31/60.

Fairey Aviation Co. of Canada Ltd., Dartmouth, N.S., $1,180,000 for repair & overhaul of airframe components during year ending March 31/60.

Heroux Machine Parts Ltd., Montreal, $20,793 for repair & overhaul of aircraft hydraulic components during year ending March 31/60.

Honeywell Controls Ltd., Toronto, $13,791 for oscillograph.

Honeywell Controls Ltd., Toronto, $355,260 for repair & overhaul of aircraft instruments and accessories during year ending March 31/60.

Imperial Oil Ltd., Ottawa, $25,930 for aviation gasoline during year ending March 31/60.

Midland Foundry & Machine Co. Ltd., Midland, Ont., $21,334 for hydraulic jack.

Orenda Engines Ltd., Toronto, $190,000 for repair & overhaul of aero engine spares, special investigations and technical studies during year ending March 31/60.

Orenda Engines Ltd., Toronto, $1,309,000 for repair and overhaul of aero engines and engine components during year ending March 31/60.

Orenda Engines Ltd., Toronto, $6,165,000 for overhaul of spares for aero engines and engine components during year ending March 31/60.

Patlon Aircraft of Canada Ltd., Toronto, $11,067 for airframe spares.

R.C.A. Victor Co. Ltd., Montreal, $341,222 for radar display equipment.

Rolls-Royce of Canada Ltd., Montreal, $2,310,149 for repair & overhaul of aero engines and engine components during year ending March 31/60.

Rolls-Royce of Canada Ltd., Montreal, $20,000 for aero engine and power plant spares during year ending May 31/60.

Ross-Smith Co. Ltd., Montreal, $148,994 for targets.

Sperry Gyroscope Co. of Canada Ltd., Montreal, $41,654 for radar test equipment.