



**THE BETTER TO SEE YOU WITH** is the greatly enlarged windshield area of the commercial version of the CL-44 (L), as compared with that of the military variant for the RCAF (R). The new design features fewer sections of greater depth and has extended side panels for better rearward visibility.

### Four Caribou Ordered

Prime Minister Diefenbaker informed the House of Commons last month that the Government is buying four de Havilland Caribou aircraft for the purpose of airlifting supplies to Canadian forces in the Congo.

The de Havilland Aircraft of Canada Ltd. was able to deliver two of the aircraft immediately, with the third scheduled for delivery this month and the fourth in October. The surprise order is the first to be made by the Canadian government for the utility troop carrier designed and built to Canadian Army needs.

### Electronics Boost

The Canadian electronics industry may get a \$20 million shot in the arm this year.

D. B. Mundy, director of DDP's electronics branch, says there is a good chance that West Germany, Belgium and The Netherlands will buy F-104 simulators in Canada. He said arrangements have recently been completed for purchase of \$1.5 million worth of Canadian-made sonobuoys by the U.S. Navy.

This information was given the Commons defence committee July 14. Defence Production Minister O'Hurley gave these figures, among others:

Only \$1,851,108 was actually spent out of the \$5 million appropriation for development assistance in 1959-60. The appropriation is \$5 million again this year.

Production assistance is estimated at \$2,731,500 this year compared with an

estimate of \$2,907,000 last year and an actual expenditure of \$1,729,494. The estimate for establishment of component sources is unchanged at \$950,000 but the actual expenditure last year was only \$281,948. DDP this year will spend as much for its own administration as it will for production assistance, establishment of component sources and development assistance combined.

Major contracting for the CF-104 program will be completed soon. Much subcontracting remains to be done.

DDP spent \$654 million as purchasing agent for DND in 1959-60, 12 per cent lower than in the previous year. Expenditures to foreign contractors represented 9.3 per cent of total payments compared with 6.6 per cent in 1958-59, an increase of \$12 million.

### \$300,000 for Avrocar

A grant of \$300,000 to subsidize continued development of the Avrocar VTOL vehicle, has been made by the Canadian Government to Avro Aircraft Ltd. The grant is said to be intended to help keep alive U.S. military interest, which seems to wax and wane regularly, depending on the results of the most recent tests.

Status of the project is that its future, insofar as the U.S. Army and the USAF are concerned, depends on the final results of wind tunnel tests now being conducted in California at the NASA's Ames Research Centre. The tests, which are taking place in the full scale wind tunnel at Ames, have actually been under way for several months. Results so far have

been sufficiently encouraging to warrant continuation of the program after some modifications are made to the aircraft.

A Washington report says that stability of the unique disc-shaped aircraft has been a major problem at low speed, both in and out of ground effect. To date, a full scale out-of-ground-effect program has not been conducted. The vehicle is intended to combine the ability to fly and hover in ground effect with the ability to fly at high speed at relatively high altitudes.

### CL-44 Salesman

A boost for the CL-44 was given recently by U.S. Assistant Secretary of the Air Force Philip B. Taylor when he advised a group of representatives of the U.S. air transport industry that American carriers could not depend on securing MATS business in 1961 or 1962 if they relied on DC-7 and Super Connie freighter conversions when the more modern CL-44 was "right around the corner."

Other U.S. news involving the CL-44 emanates from New York, where creditors of Seaboard & Western Airlines, which include Canadair Ltd., agreed early last month to participate in a refinancing plan for the carrier that gives them a voice in the management. The number of directors was increased from six to eight, one of the new members being Peter J. Aird, chartered accountant with Canadair.

The refinancing plan includes the issuance of \$3.3 million worth of ten year nonconvertible debentures to major creditors, who will make additional advances to the carrier.

To provide immediate funds to meet Seaboard's critical financing demands, Canadair, Esso, and Curtiss-Wright and a small group of private investors have purchased \$2 million in temporary debentures which are exchangeable for Series A debentures and warrants.

Seaboard & Western has ordered five CL-44's from Canadair.

### Iroquois Revived?

The Iroquois jet engine may yet be used to power a plane, but not a Canadian one.

Defence Production Minister O'Hurley informed the Commons July 28:

"From the early development stages of the Iroquois engine, many groups

engaged in aircraft production have expressed interest in using this power plant in various types of aircraft. My department and Orenda Engines Ltd. have received inquiries from governmental agencies and private interests in North America and Europe.

"Officers of Orenda and of my department are co-operating in discussions with all groups who may be in a position to complete the development and put the Iroquois into production.

"The future use of the engine now is under serious consideration by one aircraft manufacturer in the U.S. Proposals have been submitted to the manufacturer and these are at present undergoing technical and economic evaluation. I regret that I cannot reveal the name of the manufacturer or any of the details at this time because a premature announcement would not be conducive to the successful completion of negotiations.

"Interest in the Iroquois for the purpose of furthering the 'state of the art' has been shown by a company in the United Kingdom. This company has requested the use of one engine and we have agreed, in principle, to make

one or more engines available in the event that the engines are not required for the production program which now is under consideration.

"In the meantime, 13 completed prototypes, components sufficient to complete an additional seven engines and all essential tooling are stored in the crown-owned high altitude test facility at Malton".

### Nav aids from CDC

Computing Devices of Canada Ltd. started deliveries last month on a \$600,000 order from the RCAF for airborne electronics equipment.

The equipment, consisting of the well known Bendix MN-97H Omnimag and the new INA-21A Course Selectro Indicator, is for use with TACAN and previously installed Bendix airborne VOR/ILS.

### Hupp Buys Roy Industries

Hupp Corp. of Cleveland, has acquired for cash all outstanding stock of E. Roy Industries Ltd., Montreal. Total amount and terms of the transaction were not disclosed. The Canadian concern, under present manage-

ment and personnel, will be operated as a subsidiary of Hupp Corp.

E. Roy Industries Ltd. has an annual sales of approximately \$6.5 million. The company, primarily a manufacturer of furnaces, ranges, and refrigerators, has an aircraft division which makes parts and assemblies under sub-contract to Canadair for T-33's, F-86's and CF-104's. Manufacturing facilities totalling 160,000 sq. ft. are located at L'Assumption, Quebec.

### Canadair Diversifies

Canadair Ltd. has formed a new architectural products department for the engineering, testing and manufacturing of metal curtain-wall panel material for large buildings. First order was received recently for the entire exterior metal surface of a 34-storey aluminum and glass covered building now being constructed in downtown Montreal as the headquarters of Canadair Industries Ltd.

Canadair's entry into this new field marks another step toward product diversification. To execute the order for the curtain-wall panelling for this building, (to be called CIL House), the

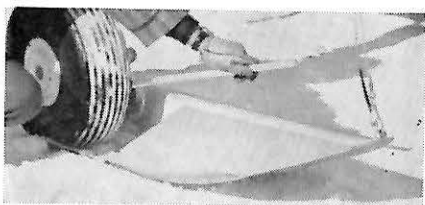
## RUGGED DEPENDABILITY!

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## FEDERAL Airglide SKIS

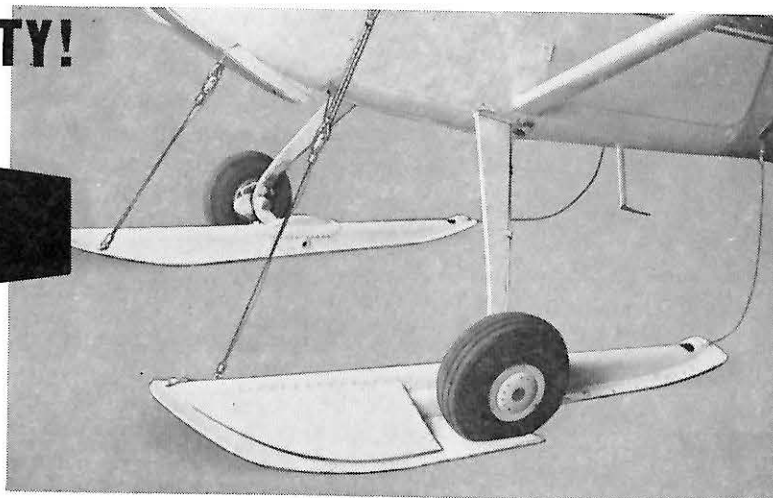
In the rugged "bush country" of the North, operators who make their living by flying, almost universally choose FEDERAL aircraft skis. These better engineered skis carry the heaviest loads safer, faster, and with less strain on the aircraft structure.

The world over, from the North Pole to the Antarctic, from the Swiss Alps to New Zealand, FEDERAL aircraft skis are used and recognized as the standard of quality.



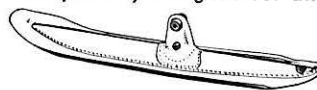
### MANUALLY ACTUATED MODEL

The same air-cushioned Airglide benefits, except skis are manually raised or lowered while on the ground. Economically priced. Also available as a fixed position ski, tire cushioned, with full ski board for use in deep, soft snow areas.



### MULTI-PURPOSE WHEEL SKIS. You glide on air!

- Tire rests on ski board, absorbing shock of landing or take-off runs.
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- Specially designed for all models of popular aircraft.



The time-tested, low cost wheel replacement ski for the operator who does not require use of wheels.

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company has appointed Richard T. Noe, former USAF engineering officer at ARDC headquarters, as manager.

## Helicopters Wanted

Note to Canadian helicopter interests:

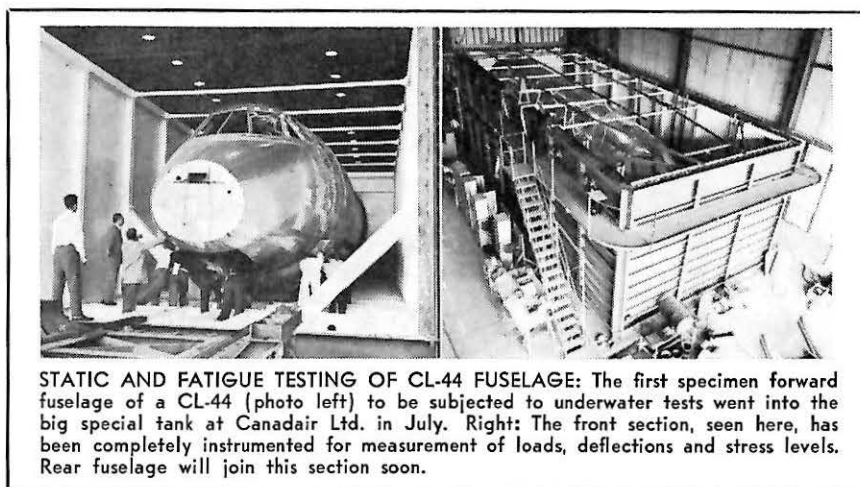
If you can come up with a single type of helicopter to satisfy the needs of the Navy, Army and RCAF, rush your plans to the Department of National Defence.

Defence Minister Pearkes told the Commons Aug. 5:

"We have not yet seen our way clear to providing the helicopters which are necessary [for the Canadian infantry brigade in Europe].

"To be quite frank we have been investigating the very knotty problem as to what type of helicopter should be used.

"We would like to have one type of helicopter which could be used by all the three forces. It does not seem quite practical that we can do that. If we could get the forces to accept one type of helicopter and could have enough orders to justify that helicopter being manufactured in Canada that would be



**STATIC AND FATIGUE TESTING OF CL-44 FUSELAGE:** The first specimen forward fuselage of a CL-44 (photo left) to be subjected to underwater tests went into the big special tank at Canadair Ltd. in July. Right: The front section, seen here, has been completely instrumented for measurement of loads, deflections and stress levels. Rear fuselage will join this section soon.

the ideal situation. Failing that we may have to purchase helicopters from the United States."

## CF-104 Work to Avro

The Dept. of Defence Production has awarded a \$2,495,258 contract for external fuel tanks for the CF-104 Starfighter to Avro Aircraft Ltd. Avro's was the lowest of nine bids submitted.

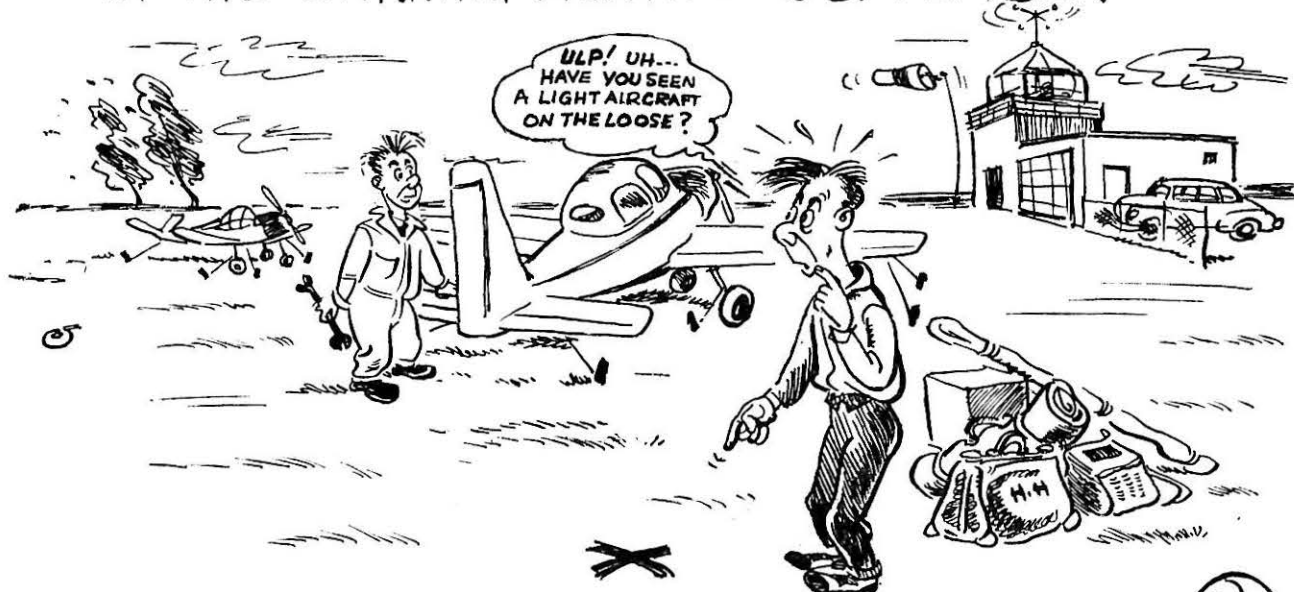
The contract is expected to help Avro maintain its present employment

level and possibly even add a few more workers to the payroll. Plans and specifications for the fuel tanks will be supplied by Lockheed. The order is for 300 sets of tanks together with associated tooling.

## Switch Distributor

The Control Switch Division of Controls Co. of America has appointed Brian Engineering Ltd., as Canadian distributor and sales representative. Brian Engineering, which has offices

**IN THE STIRRING MONTH OF SEPTEMBER---**



**But what will B.A.I.C say..?**  
YOU WON'T BE TIED-UP IF YOUR AIRCRAFT IS TIED-DOWN!



**BRITISH AVIATION INSURANCE COMPANY LIMITED**

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in Montreal and Toronto, will handle the complete line of Control Switch Division products.

Prior to this most recent appointment, Brian Engineering handled only Electrosnap products. The company will now handle sales of both Electrosnap and Hetherington lines, as an OEM sales engineering representative, and also as a stocking distributor.

## Slick CL-44 Order

Contrary to the expressed opinion from American news sources that the loss of an important U.S. government Logair contract by Slick Airways would alter its plans for Canadair CL-44D's, the American freight carrier has stated that the loss of this contract will in no way affect its order.

## New Edo Franchise

Edo (Canada) Ltd., of Cornwall, Ont., has been granted an exclusive manufacturing franchise covering Canada, Great Britain and other Commonwealth areas by Burnell & Co. Inc., a leading U.S. manufacturer of electronic filter networks and delay lines. The agreement covers design information, catalogs and technical assistance.

## More Gnats Ordered

A further 30 Gnat trainer aircraft have been ordered for RAF use by the Ministry of Aviation. An initial order for 14 of these aircraft was placed in 1958 for evaluation purposes. Since then a full program of trials has been carried out with the first two prototypes.

The aircraft is powered by a Bristol Siddeley Orpheus 100 rated at 4230 lb. thrust, which gives both long overhaul life and reduced fuel consumption. The Gnat trainer is one of seven types now flying with Orpheus engines installed.

## Contracts Awarded

Contractors awarded business in excess of \$10,000 by the Department of Defence Production during the period June 1-30, 1960, include the following. The list does not include orders placed by the Department outside Canada, or with other agencies or increases in orders placed earlier—nor do orders classified as secret appear here.

Names appearing in bold face type are current AIRCRAFT advertisers.

**Avro Aircraft Ltd.**, Toronto, \$635,000 for engineering studies development, manufacture of prototype and production of aircraft modification kits during year ending March 31/61.

**Bristol Aero-Industries Ltd.**, Winnipeg, \$694,000 for engineering studies, development, manufacture of prototype and production of aircraft modification kits during year ending March 31/61.

**Bristol Aero-Industries Ltd.**, Winnipeg, \$11,656, for aircraft spares.

**Canadair Ltd.**, Montreal, \$408,000 for engin-

engineering studies, development, manufacture of prototype and production of aircraft modification kits during year ending March 31/61.

**Canadair Ltd.**, Montreal, \$66,500 for technical representatives during year ending March 31/61.

**Canadian Aviation Electronics Ltd.**, Montreal, \$719,060 for rental of mobile calibration laboratories.

**Canadian Aviation Electronics Ltd.**, Montreal, \$60,790 for technical representatives during period ending March 31/61.

**Canadian Car Co. Ltd.**, Fort William, Ont., \$14,000 for engineering studies, development, manufacture of prototype and production of aircraft modification kits during year ending March 31/61.

**Canadian Pratt & Whitney Aircraft Co. Ltd.**, Montreal, \$59,000 for engineering studies, development, manufacture of prototype and production of helicopter modification kits during year ending March 31/61.

**Canadian Pratt & Whitney Aircraft Co. Ltd.**, Montreal, \$20,880 for aero engine spares and tools.

**Canadian Pratt & Whitney Aircraft Co. Ltd.**, Montreal, \$62,748 for aero engine spares.

**Canadian Vertol Aircraft Ltd.**, Arnprior, Ont., \$50,000 for engineering studies, development, manufacture of prototype and production of helicopter modification kits during year ending March 31/61.

**Computing Devices of Canada Ltd.**, Ottawa, \$45,000 for installation repair and check out of airborne instrumentation in aircraft balloons and rockets during year ending March 31/61.

**Computing Devices of Canada Ltd.**, Ottawa, \$10,000 for technical representative during period ending March 31/61.

**De Havilland Aircraft of Canada Ltd.**, Downsview, Ont., \$125,000 for engineering studies, development manufacture of prototype and production of aircraft modification kits during year ending March 31/61.

**De Havilland Aircraft of Canada Ltd.**, Downsview, Ont., \$27,581 for airframe spares during year ending May 31/61.

**Fairey Aviation Co. of Canada Ltd.**, Halifax, N.S., \$391,000 for engineering studies, development, manufacture of prototypes and production of aircraft modification kits during year ending March 31/61.

**Hunting Survey Corp. Ltd.**, Toronto, \$39,125 for radar altimetry.

**Walter Kidde & Co. of Canada Ltd.**, Montreal, \$15,668 for aircraft spares.

**Northern Electric Co. Ltd.**, Ottawa, \$536,000 for maintenance of radar and communications equipment during year ending March 31/61.

**Northwest Industries Ltd.**, Edmonton, Alta.,

\$278,000 for engineering studies, development, manufacture of prototype and production of aircraft modification kits during year ending March 31/61.

**Northwest Industries Ltd.**, Edmonton, \$18,384 for development contract.

**Patlon Aircraft of Canada Ltd.**, Toronto, \$13,818 for aircraft spares.

**Railway & Power Engineering Corp. Ltd.**, Montreal, \$15,293 for aircraft spares.

**Avro Aircraft Ltd.**, Toronto, \$13,911 for controls for high speed wind tunnel at Uplands, Ont.

**Aircraft Industries of Canada Ltd.**, St. Johns, Que., \$40,000 for engineering studies, development, manufacture of prototype and production of modification kits during year ending March 31/61.

**Aviation Electric Ltd.**, Montreal, \$551,248 for aircraft spares.

**Aviquip of Canada Ltd.**, Montreal, \$10,332 for aircraft spares.

**Avro Aircraft Ltd.**, Toronto, \$225,484 for airframe spares.

**Canadair Ltd.**, Montreal, \$1,615,000 for engineering studies, development, manufacture of prototype and production of aircraft modification kits during year ending March 31/61.

**Canadair Ltd.**, Montreal, \$29,994 for design and development of ground support equipment for aircraft program.

**Canadair Ltd.**, Montreal, \$807,000 for aircraft spares during year ending March 31/61.

**Canadair Pratt & Whitney Aircraft Co. Ltd.**, Montreal, \$291,641 for pneumatic starters for aircraft engines.

**Carriere & MacFeeters Ltd.**, Toronto, \$14,676 for modification kits for electric tachometer and hourmeter installation.

**Collins Radio Co. of Canada Ltd.**, Toronto, \$10,000 for refurbishing of electronic equipment during year ending March 31/61.

**Computing Devices of Canada Ltd.**, Ottawa, \$52,511 for visual omni-range instrument system equipment.

**De Havilland Aircraft of Canada Ltd.**, Toronto, \$160,000 for engineering studies, development, manufacture of prototype and production of aircraft modification kits during year ending March 31/61.

**Edo (Canada) Ltd.**, Cornwall, Ont., \$12,714 for electronic equipment.

**Field Aviation Co. Ltd.**, Ottawa, \$12,894 for parachute components.

**Godfrey Engineering Co. Ltd.**, Lachine, Que., \$11,250 for spares for aircraft cabin pressure tester.

**Irvin Air Chute Ltd.**, Fort Erie, Ont., \$15,712 for parachute components.

**Thermo Electric (Canada) Ltd.**, Brampton, Ont., \$16,735 for aircraft instrument spares.



**FOUND FBA-2A BEGINS FLIGHT TESTING:** First flight of the new FBA-2A utility bush-plane was made early in August from Toronto Malton Airport. Test flying is being done by Stan Haswell, ex-Avro test pilot. The aircraft is being developed by Found Bros. Aviation Ltd., Malton. Prototype color scheme is red and white with black wing and empennage tips. Power is by a 250 hp Lycoming.

