

## Daystrom in Canada

Daystrom Limited, 840 Caledonia Road, Toronto 10, Ont., has been established to handle sales, service assembly and manufacture of Daystrom electronic products in Canada. The new company has planned a program of expansion that will lead to the establishment of a manufacturing facility in the Toronto area employing several hundred people and capable of turning out a large volume of electrical and electronic instruments for use by the Canadian industry. General manager of the new Toronto firm is H. W. Cowan.

## A. V. Roe Adds

Formation of the ninth company in the rapidly expanding A. V. Roe Canada Ltd. Group, was announced recently by Crawford Gordon, Jr., president & general manager. The new

company, Canadian Thermo Control Co. Ltd., has been established to sell and service refrigeration equipment for trucks and trailers, railway freight cars and tanks, buses and ships under license agreement with the Thermo King Corp., and Thermo King Railway Corp., of Minneapolis, Minn.

## Forward Scatter

The Canadian Westinghouse Co., Hamilton, has disclosed the development of a versatile new system of long-distance, multi-channel communication that sends signals far beyond the horizon by beaming them off the lower atmosphere. Described as the first Canadian venture into the "scatter propagation" field of communication, the new system can be used for long-hop television, voice, teletype, facsimile or data transmission.

The result of a year-long concentrated engineering program, the sys-

tem is the first to be completely developed, designed and built in Canada. Due to its long range and transportability, the new system is ideal for use in rugged and normally inaccessible regions. Microwave radio now employed is limited to line-of-sight transmission and costly relay stations must be used to cover appreciable distances.

The forward scatter technique has seen limited use but high costs and cumbersome equipment sharply restricts its practical application in isolated northern regions. Typical antennas for the new Westinghouse system are 18 feet in diameter and may be as small as 12 feet. A complete transmitter-receiver unit is small and light enough to be helicopter lifted.

## ASL Bought Out

Aeromagnetic Surveys Limited, of Toronto, has become a wholly-owned subsidiary of Hunting Associates, holding company of the Hunting companies in Canada. J. R. Hughes, former president of the company, has become chairman of the board; and Douglas N. Kendall, former vice president, has become president. Douglas MacKay, general manager of the company, has also joined the board. Other directors are: P. F. Osler, of Montreal; H. S. MacKenzie, Q.C., of Toronto.

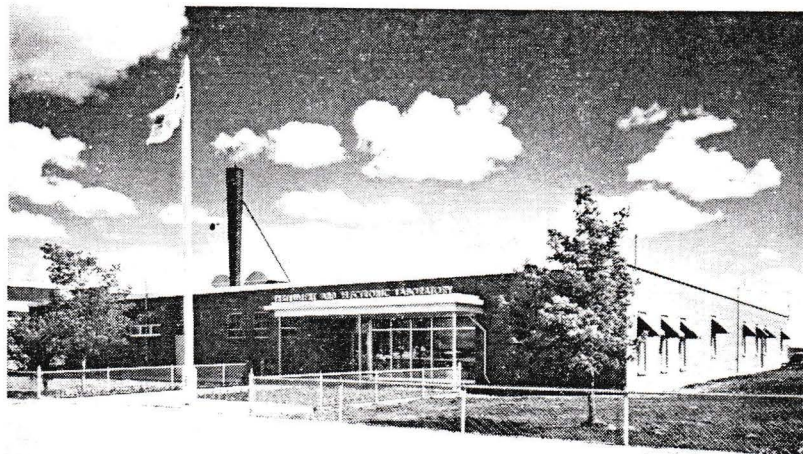
## Automatic Attack

The Avro CF-100 jet all-weather interceptor is being modified for automatic attacking of targets. Multi-million dollar contracts for the necessary automatic controls have been awarded to Honeywell Controls Limited, Toronto, and Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.

"With the addition of Honeywell's fire control coupler system" said a company spokesman, "The CF-100's will be able to guide themselves by radar contact on an intercepting path toward a target, and then start firing at the target, all automatically. The system takes a lot of the guess-work out of intercepting enemy airplanes by deciding best how to attack them."

Included in the CF-100 modification program is a contract from the RCAF for a "command signal limiting" system, and a contract being handled through the USAF for components of the automatic fire control coupler system. The CSL system monitors signals from the fire control system to protect

## A NEW INSTRUMENT LAB



Northwest Industries Ltd., of Edmonton, last April opened a new \$275,000 building to house its Instruments & Electronic laboratory. This modern facility has been specifically designed to cater to the increasing demands made on the company for the repair, overhaul, testing and modification of aircraft instruments, airborne and ground telecommunications and radar equipment.

Constructed of brick and steel, the single-storey structure, with a floor area of 19,500 sq. ft., is temperature and humidity controlled. It has a completely equipped dial studio for the preparation and luminizing of instrument and related components.

A total of over 100 technicians are currently engaged in the new laboratory. This group has been drawn from many parts of Europe and the North American continent

and brings together technicians, technologists and engineers from fifteen different countries.

With the emphasis on quality, no attempt is made here to introduce mass-production methods. Each piece of equipment, in many cases vital to airborne passenger safety, receives individual attention from qualified craftsmen. The instrument repair facilities have been approved since 1952 by the DoT, and surveillance over the military program is exercised by RCAF Quality Control Inspectors.

Backed by the resources of the Engineering Department, extensive research and development in the radar field is being currently undertaken. The present program includes development and installation of weather and search electronic equipment on C-119 series aircraft.



the airplane structurally from making beyond-limits maneuvers. CSL helps zero the aircraft to its target by maneuvers that both the airframe and the pilot can stand.

## Distributor for Dallas

Timmins Aviation Ltd. of Montreal, has been appointed exclusive Canadian distributor for Dallas Air-motive Inc., aircraft engines. The association introduces to Canadian business and commercial operators what Timmins describes as a much needed service, that of a central source for all engine requirements and services. Pratt & Whitney, Lycoming and Continental engines are carried in stock freshly overhauled. These engines are available by outright purchase or exchange, and Timmins offers a flat rate installation.

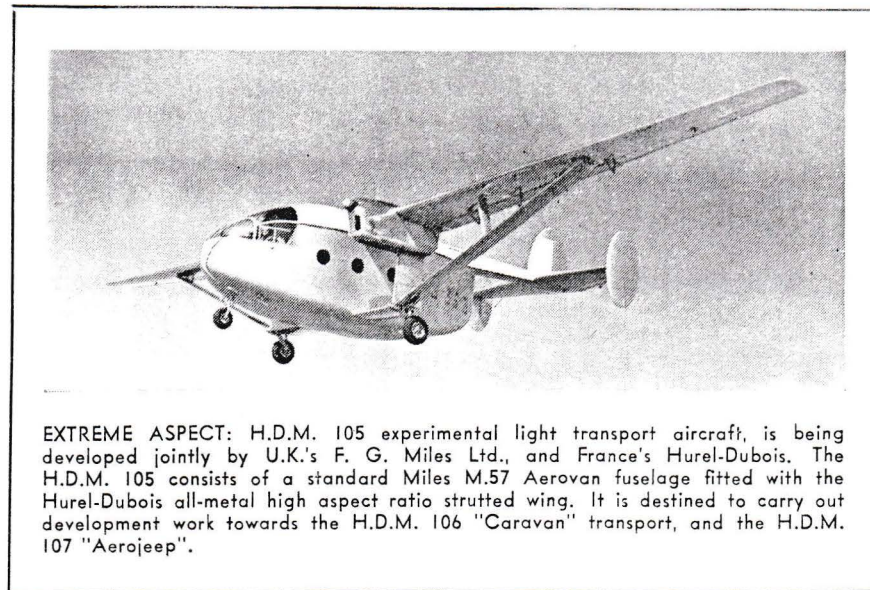
## New CAB Turbine Regs.

The Civil Aeronautics Board recently adopted a Special Civil Air Regulation applicable to turbojet and turboprop transports. This special regulation prescribes a new set of performance requirements to be complied with by all turbine transport aircraft. These performance requirements determine the weights at which the airplane can be operated. The requirements heretofore were developed specifically for airplanes powered by conventional reciprocating engines. The CAB says these were not fully realistic in respect to the peculiar characteristics of turbine-powered aircraft considering the type of engines used, the higher speeds involved and the higher operating altitudes.

The new regulations are being made applicable to the new airplanes which are nearing completion at manufacturing plants throughout the U.S., and in some instances abroad. Included are the Boeing 707, the Douglas DC-8, the Lockheed Electra, the Convair 880, and foreign built airplanes which are to be certificated in the U.S. These include the Dutch Fokker Friendship (and the equivalent U.S. model the Fairchild F-27), the French Caravelle, and the new series of British Viscounts, Britannias, and Comets.

## Contracts Awarded

Contractors awarded business in excess of \$10,000 by the Department of Defence Production, during the period May 16, 1957 to June 15, 1957, include the following. The list does not include orders



**EXTREME ASPECT:** H.D.M. 105 experimental light transport aircraft, is being developed jointly by U.K.'s F. G. Miles Ltd., and France's Hurel-Dubois. The H.D.M. 105 consists of a standard Miles M.57 Aerovan fuselage fitted with the Hurel-Dubois all-metal high aspect ratio strutted wing. It is destined to carry out development work towards the H.D.M. 106 "Caravan" transport, and the H.D.M. 107 "Aerojeep".

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 are current *Aircraft* advertisers.

**Aviation Electric Ltd.**, Montreal, \$547,242, for aircraft spares.

**Avro Aircraft Ltd.**, Toronto, \$44,813, for spares for aircraft ejection seats.

**Avro Aircraft Ltd.**, Toronto, \$70,000, for airframe spares.

**Bancroft Industries Ltd.**, Montreal, \$50,000, for aircraft accessories and spares during two years ending March 31/59.

**Bristol Aero Engines Ltd.**, Montreal, \$32,000, for repair, overhaul inspection and storage of aero engine components during year ending March 31/58.

**Bristol Aero Engines (Western) Ltd.**, Vancouver, \$83,000 for repair, overhaul, inspection and storage of aero engines and aero engine components during year ending March 31/58.

**Canadian Pratt & Whitney Aircraft Co. Ltd.**, Longueuil, Que., \$340,000, for repair, overhaul and special investigations of helicopter airframes and airframe components during year ending March 31/58.

**George W. Crothers Ltd.**, Leaside, Ont., \$36,981, for spares for energizers.

**Crothers Manufacturing Ltd.**, Toronto, \$55,804 for modification of energizers.

**Dowty Equipment of Canada Ltd.**, Ajax, Ont., \$50,000 for aircraft spares during two years ending March 31/59.

**Dowty Equipment of Canada Ltd.**, Ajax, Ont., \$233,991, for aircraft spares.

**Enamel & Heating Products Ltd.**, Amherst, N.S., \$370,000 for repair and overhaul of aircraft spares during year ending March 31/58.

**Fairey Aviation Co. of Canada Ltd.**, Eastern Passage, N.S., \$1,650,000 for repair, overhaul and special investigations of aircraft and aircraft spares during year ending March 31/58.

**Fairey Aviation Co. of Canada Ltd.**, Eastern Passage, N.S., \$595,000, for repair, overhaul and special investigations of aircraft spares during year ending March 31/58.

**Field Aviation Co. Ltd.**, Oshawa, Ont., \$18,403, for sectionalization of aero engines.

**Goodyear Tire & Rubber Co. of Canada Ltd.**, Toronto, \$50,000 for aircraft spares during two years ending March 31/59.

**Liquidometer of Canada Ltd.**, Montreal,

\$15,843, for spare parts for aircraft instruments.

**Liquidometer of Canada Ltd.**, Montreal, \$18,697, for aircraft instruments.

**Mechron Engineering Products Ltd.**, Ottawa, Ont., \$10,740 for aircraft navigational equipment.

**Okanagan Helicopters Ltd.**, Ottawa, Ont., \$30,980, for charter of helicopter.

**Patlon Aircraft of Canada Ltd.**, Toronto, \$18,368, for aircraft spares.

**Phoenix Engineered Products Ltd.**, Toronto, \$100,000 for repair and overhaul of aeronautical instruments and electrical equipment during year ending March 31/58.

**PSC Applied Research Ltd.**, Toronto, \$14,400 for aircraft navigational equipment.

**Roils-Royce of Canada Ltd.**, Montreal, \$100,000 for aero engine spares and special tools during two years ending March 31/59.

**Sperry Gyroscope Co. of Canada Ltd.**, Montreal, \$37,816 for electronic equipment.

**Vertol Aircraft Co. (Canada) Ltd.**, Arnprior, Ont., \$20,000 for helicopter spares, tools and modification sets during year ending March 31/58.

**British American Oil Co. Ltd.**, Toronto, \$50,467, for aviation gasoline during year ending March 31/58.

**Canadian Car Co. Ltd.**, Montreal, \$10,560, for aircraft modification kits.

**Collins Radio Co. of Canada Ltd.**, Toronto, \$24,002 for electronic test equipment.

**Computing Devices of Canada Ltd.**, Ottawa, \$11,193 for aircraft navigational equipment.

**Curtiss-Wright of Canada Ltd.**, Montreal, \$73,455, for aircraft spares.

**Dowty Equipment of Canada Ltd.**, Ajax, Ont., \$10,000 for repair and overhaul of aeronautical hydraulic and pneumatic equipment during year ending March 31/58.

**B. F. Goodrich Canada Ltd.**, Kitchener, Ont., \$10,000 for aircraft spares during two years ending March 31/59.

**Imperial Oil Ltd.**, Ottawa, Ont., \$26,915, for aviation gasoline during 1957 navigation season.

**Imperial Oil Ltd.**, Ottawa, \$27,500 for aviation gasoline during year ending March 31/58.

**Lucas-Rotax Ltd.**, Toronto, \$20,154, for aircraft spares.

**Shell Oil Co. of Canada Ltd.**, Toronto, \$38,250, for aviation gasoline during year ending March 31/58.

**Sperry Gyroscope Co. of Canada Ltd.**, Montreal, \$15,499, for aircraft instruments.