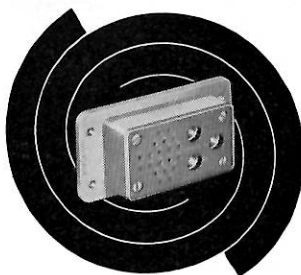
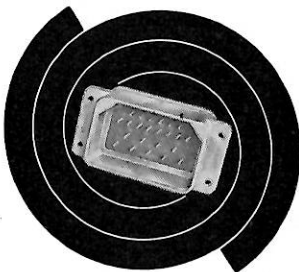


# CANNON PLUGS

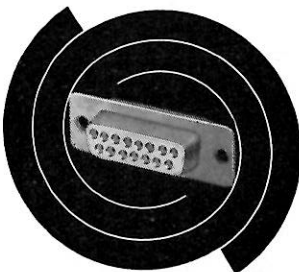
Rack/Panel/Chassis & Miniature



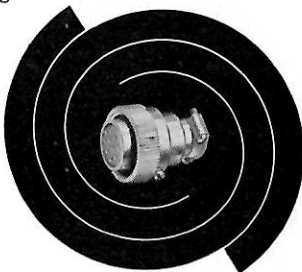
Standard DPD—strong aluminum shell for unit-plug-in applications. Wide range of contact voltage and amperages, including coaxials.



Miniature rack & panel type; shell protected; 13 available insert arrangements; 5-amp, 10-amp and miniature coaxials; split shell.



D Sub-miniature rack/panel type; steel shell protected; all 5-amps. 15 to 50 contacts; flash. 1700v dc; junction shells, locking means; floating mounting holes; also hermetic seals.



K-Miniature; circular, aluminum shell protected; 3, 10, 20, 30, 38 contact arrangements; voltage up to 4000v ac. Also hermetic seals.

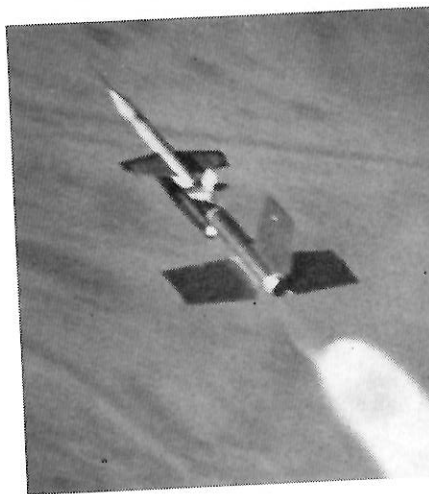
All above, excepting DPA are fully described in HMC Bulletin; DPD in DP9. Copies from Cannon Electric representatives or factory.



**CANNON ELECTRIC**  
**CANADA LIMITED**

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5705



**LOCKHEED RAMJET X-7:** This X-7 ramjet missile, which is recoverable by parachute, has flown ten trips with no sign of wearing out. A rugged workhorse for the USAF's missile development program, the X-7 wrings out powerful new ramjet engines and other components for supersonic defense weapons. Shown in flight on the left, it is seen draped in its own parachute after landing nose down.

tually as a passenger.

If the carrier deck is not in the proper position for a safe landing, the system automatically gives the pilot a "wave-off" and the airplane is flown around the landing pattern for another attempt. The U.S. Navy requires that the automatic system land the aircraft within a distance not to exceed plus or minus 30 feet longitudinally, and a maximum of plus or minus 25 feet laterally from a pre-established landing spot on the deck.

## New Barnes Office

The Wallace Barnes Co. Ltd., Hamilton, Ont., Canadian subsidiary of Associated Spring Corporation, Bristol, Conn., has opened a new sales office in Montreal to give better service to the growing number of industrial plants in the Maritimes and the province of Quebec. The Canadian subsidiary supplies precision mechanical springs to a wide variety of Canadian industries.

## Turbojet Relights

Pyrophoric fuels which spontaneously ignite on contact with air have successfully completed sea level and simulated altitude tests for emergency relighting turbojet engines, according to Curtiss-Wright. Using a test stand type pyrophoric supply system and fuel supplied by C-W's Wright Aeronautical Division, the pyrophoric ignition tests were conducted with a Curtiss-Wright jet engine.

Composed of a mixture of aluminum trimethyl (ATM) and aluminum

triethyl (ATE), the new pyrophoric fuel has been under evaluation and development by Wright Aeronautical for several years. A measurement of the physical properties of the pyrophoric fuel disclosed that the available energy in the ATM-ATE mixture is approximately 19,000 BTU per pound. Exposed to air, the fuel appears to burn like some aviation kerosene, emitting an orange flame and a small volume of smoke.

Relatively impervious to temperature changes, it will function well in the normal temperature ranges of ramjet and turbojet operations. Freezing point of the mixture is 40° F. Reliable spontaneous ignition has been demonstrated at temperatures from 40° F to 400° F. Increased moisture or humidity is an advantage.

The effectiveness of pyrophoric fuel for aircraft engine ignition at very high altitudes, as well as at sea level, holds a distinct advantage over electrical systems for very high altitudes at which jet powered aircraft are required to operate. In addition, it is providing the ignition requirements for anticipated altitude ranges upward to 120,000 feet.

## Any Old Orendas?

With Orenda 14's powering Canadian Sabre 6's, and Orenda 11's pushing Avro CF-100's, what has happened to the older production models of Orenda engines, the 2's, 8's, 9's and 10's?? Orenda's Sales & Service department recently came up with the

AIRCRAFT

following answer:

There are in existence some 62 Orenda 2's, all of which were retired from service with the RCAF some time ago. Sixty of these have been returned from storage to Orenda at Malton for dismantling. The compressor components from these engines will be used as equipment in the company's new altitude test facility.

Of the others, Orenda 8's and 9's are still in service, being used in CF-100 trainers and operational aircraft. Orenda 10's are used in the Sabre 5's which are being flown by the auxiliary squadrons across Canada. These same aircraft are used at the RCAF's Fighter OTU at Chatham, N.B. Other Orenda 10's are used at RCAF training schools and a number are being sent to West Germany on a Mutual Aid program, where they will also be used for training.

## Airport Ups and Downs

July was the busiest month on record for Canadian airports in terms of takeoffs and landings. According to figures released by the DoT, the Department's air traffic controllers handled a total of 315,583 landings and

takeoffs for the period. This represents an increase of 26% over the corresponding period of a year ago.

Montreal's Cartierville airport topped the list with 32,354 arrivals and departures. Next were Vancouver with 30,870; Malton with 28,113; Edmonton with 26,237; Ottawa with 23,766; and Winnipeg with 20,427. Statistics cover the 26 airports where the DoT's air traffic controllers operate.

## Heatex

As of July 1, J. W. Lawrence Radiators Ltd., was renamed Heatex Limited, in order to relate the firm's name more closely with its expanded operations in the design and manufacture of all types of heat exchangers. The company has also moved to new premises at 740 St. Maurice St., Montreal, (head office and plant), and 801 St. Clarens Ave., Toronto, (branch office and warehouse).

## Landing Aid

A new airport approach lighting system, described as the first of its type in Canada, will be installed at the HMCS Shearwater naval air station at Dartmouth, N.S. The Electronic Flash Approach System has been

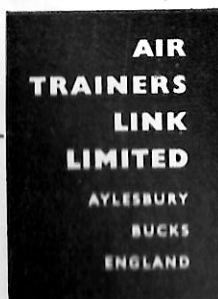
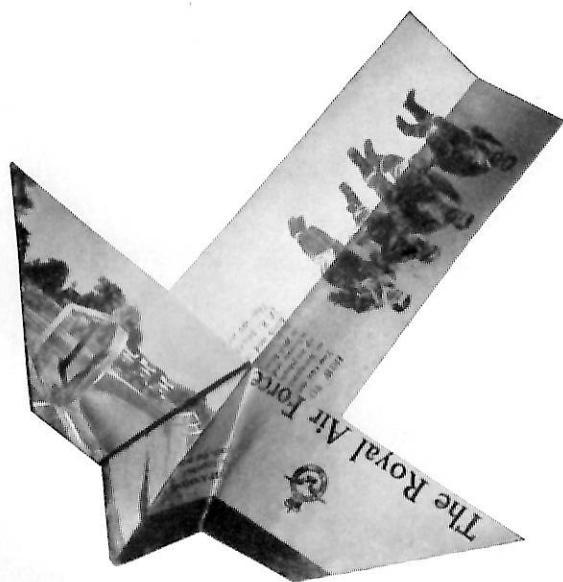
ordered by the DoT from Sylvania Electric (Canada) Ltd.

The system, which is used in the U.S., is said to increase flying safety, allows more all-weather flights, reduces flight delays and cancellations, thus solving many air control problems. The system includes special beacon units which flash intermittently to produce a moving streak of light that guides pilots during landings in periods of limited visibility.

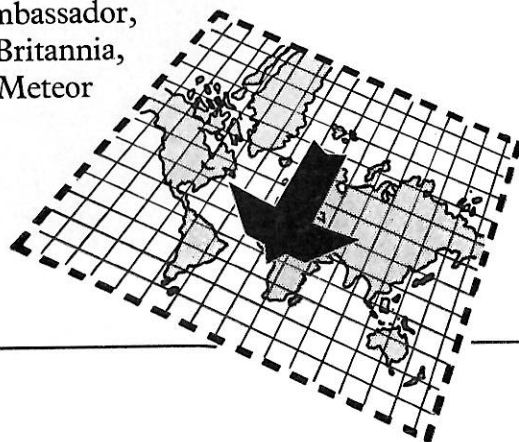
## New Survey Method

New electronic computation methods will enormously speed up the interpretation of aerial photographs for engineering purposes. Photronix Incorporated, (a combination of the words photogrammetry and electronics) was formed by Everett S. Preston in Columbus, Ohio, to specialize in offering these new computation methods. These methods are first being applied to speed badly-needed highway construction throughout North America.

Photronix Inc., has been set up in association with the Hunting group of companies in Canada, to make use of their aerial survey experience and technical background. The founder and operating head of the Hunting Cana-



From Links to Electronic Simulators—equipment manufactured by Air Trainers Link Limited is to be found in most parts of the world. Apart from General Purpose Trainers, Simulators and "Type" Trainers have been ordered for the Viscount, Ambassador, North Star, Britannia, Hunter and Meteor aircraft.



AIR TRAINERS (CANADA) LIMITED, 222 SOMERSET STREET WEST, OTTAWA