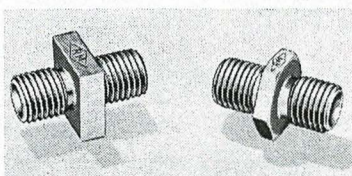


Small, low-cost submersible fuel booster pump (above) has been designed by the Lear-Romac Division of **Lear Inc.**, Elyria, Ohio. Consisting of a centrifugal pump, an electric motor and a radio noise filter, the unit is designed for vertical mounting on the fuel tank wall of target drones and missiles. Pump has a rated flow of 200 pph with a 15 psig discharge pressure (per MIL-F-5572), and 300 pph with a 14 psig discharge pressure (per MIL-F-5624). Operating ambient temperature range —67 to 160 deg F, fuel temperature range —65 to 110 deg.

Sno-gon, a chloride-free de-icing compound for snow and ice control on airport runways is available from **Calgon Co.**, Pittsburgh, Pa. It is non-corrosive to aluminum surfaces and structural components of aircraft.

Self-contained motor winch weighing 35 lb. which will lift 6,000 lb. is introduced by **All American Engineering Co.**, Wilmington, Delaware. Standard 400-cycle ac motor is fitted. Where necessary 28-volt dc, 110-volt ac-dc or hydraulic drives can be used.

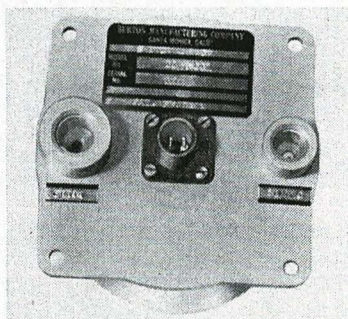


Space and weight conservation is the main aim of the above miniature relief valve designed by the **Republic Mfg. Co.**, for aircraft and missiles. As shown, the "Mini-Relief" valve, on the left, is very little larger than the union of the same tube size. Pressure range is 1,000 to 4,100 lb psi.

New 10-ton press by **Benchmaster Mfg. Co.**, of Gardena, Calif., is equipped with back gearing to prolong inertial force developed by the oversize flywheel over a long ram stroke and to slow the ram speed. This adapts the machine to many operations such as deep drawing, necking, expanding and other jobs where metal flow, rather than shearing, is desirable.

New series of three-position toggle switches, with safety catches to guard against accidental movement, is being marketed by **Micro Switch**, a division of **Honeywell Controls Ltd.**, Toronto, Ont. Versions of the switch have two or four basic switching movements. All have single-pole, double-throw. Compact design makes them ideal for aircraft and electronic applications.

Smallest actuating unit produced in the firm's history has been developed by the **Garrett Corporation's** AiResearch Mfg Division, for the Lockheed Electra. Just three inches long and weighing  $\frac{3}{4}$  lb, it is used to open and close the air duct shutters on the airliner's refrigeration and air conditioning system. It is claimed to have a gear ratio of 30,000 to 1 and provide up to 100 inch-pounds of torque.



A force-balance direct-acting mach switch, claimed to provide a weight saving of as much as two pounds (above) is announced by **Burton Manufacturing Co.**, Santa Monica, Calif. The unit is about 4 in. in diameter and  $1\frac{1}{2}$  in. in depth. Weight is 1 lb. Instrument is claimed to provide an accuracy of plus or minus 2 percent with an altitude range to 70,000 feet. It can be made to open or close at selected mach points up to 2 mach.

Small volume, high pressure, electric motor drive, positive displacement hydraulic pump is announced by Lear-Romac division of **Lear Inc.**, Elyria, Ohio. It is designed for applications requiring low flow and high pressures for actuating mechanical components of hydraulic or pneumatic systems in aircraft or missiles. Unit includes pump, an 18-30-volt dc permanent magnet motor and a radio noise filter.

Power supply unit for ground support of Britannia aircraft is offered by the **Motor Generator Corp.**, of Troy, Ohio. This incorporates two DC generators in tandem with a 26-kw combined rating. Unit is driven by an 8-cyl. Chrysler engine and is available as a mobile unit, or for mounting on a standard truck chassis.



Frank G. Wait, CBE, CD, Air Vice-Marshal (retired) R.C.A.F., has been appointed Assistant to the Vice-President of Enheat Aircraft, the Aircraft Division of Enamel & Heating Products Limited.

His appointment, effective January 1st of this year was announced by N. A. Hesler, President and General Manager of Enheat.

Mr. Wait, a resident of Ottawa, in which area he will represent the Company, joins Enheat after a long and varied career in the Royal Canadian Air Force. Retired in 1956 in the rank of Air Vice-Marshal as Air Member for Personnel, he held many command and executive posts during 32 years of service.

A graduate of Royal Military College at Kingston, Ont., Mr. Wait also holds a Bachelor of Science degree in Civil Engineering from McGill University.

As well as enjoying memberships in several associations, among which is the Association of Professional Engineers of Ontario, he is National President of the Royal Canadian Air Force Association.

## People (Continued)

**R. J. Good** has been appointed manager, defense electronic systems engineering, of RCA Victor Company, Ltd. His experience includes development work on the CF-105. **E. W. J. Morris** was recently appointed manager, contracts administration, defense electronic systems engineering, of the company and **D. R. Sherwin** is the newly appointed manager, operations and engineering, of the group.

**R. N. Fournier** has been made general manager of the wholesale department of Canadian General Electric Co., Toronto. He was formerly manager of the mid-west district, based in Winnipeg.

**William B. Billingsley**, of Oakville, Ont., is named vice-president and resident manager of Pennsalt Chemicals of Canada Ltd., new subsidiary of Pennsalt Chemicals Corp., Philadelphia, Pa. Formerly manager of firm's Eastern Canadian sales since 1954, he will now head operations of the first Canadian plant being built at Oakville.