# aviation intelligence

#### TACAN Installation

Royal Canadian Air Force is understood to be adopting the TACAN (Tactical Air Navigation) system for airborne radio navigation. TACAN is the standard military radio navigation aid employed by the United States Air Force. System was developed by Federal Telecommunication Laboratories of IT&T. RCAF is understood to be negotiating with Department of Transport officials for permission to establish TACAN beacons in the vicinity of existing VOR beacons. This gives rise to speculation that there will be an attempt to incorporate the military system with the civil VOR to set up a VORTAC system similar to that proposed for civil use in the United States. VORTAC represents a combination of the two facilities. However, it is unlikely that there would be any decision on a VORTAC setup until after next February's ICAO meeting at which the entire question of a common civil navaid is to receive an international airing. There has been extensive evaluation of the DECCA and DECTRA systems in Canada over the past 18 months and Canadian officials are said to be considering carefully before deciding on any system. Size of the TACAN ground installation has not been disclosed, but information some months ago when system was being discussed indicated that about 60 sites might be required to provide the coverage contemplated.

## Moon Rocket Tracking

Canadian Astronautical Society enthusiasts spent a busy Thanksgiving week end. The finish of the IRE Show at the CNE grounds found them dismantling their three-quarter-ton antenna and returning it to its North Toronto site in a dump truck and working without a break to get it set up in time to pick up a track on the United States Pioneer moon rocket. The Toronto CAS members believe they are the only ones other than government tracking stations who were able to get a fix on the moon shoot vehicle.

#### Commonwealth Astronauts

Officers of the Canadian Astronautical Society are playing a leading part in efforts to bring astronauts from Commonwealth countries together in an association which would make for exchange of information in the ultimate hope of initiating some project in which scientists in various nations could participate. The idea grew out of contacts made during the Ninth Congress of The International Astronautical Federation held in Amsterdam.

## A. V. Roe Finances

A. V. Roe Canada Ltd. group of companies annually put more than one third of a billion dollars into the Canadian company. Sir Roy Dobson, chairman of the Board of Directors, told shareholders' annual meeting last month that Roe's 41,000 employees received \$183 million in wages and salaries in fiscal 1958. A similar amount went to 6,300 different subcontractors and suppliers. Another \$20 million was accounted for in Federal, Provincial and Municipal

taxes, workmen's compensation, unemployment insurance, etc. Four and one-half million dollars was paid in pensions or contributions to pension funds.

#### Mark 7 Sabre

There are prospects that a portion of the 225 Canadiar Sabre 6s purchased by West Germany will be converted to a Mark 7 version of the aircraft, the prime conversion being installation of an afterburner system on the Orenda 14 power plants. Any conversion program would mean little alteration in airframe. The afterburners would be in the main installed on present engines, some of which might be returned to Orenda's Malton plant for rework.

### Drop Light Turbojet

Support has been withdrawn from the program to develop a long life (aircraft) version of the Fairchild J-83 light turbojet engine. The power plant had been chosen for use in Canadair's CL-41 ab initio trainer and utility light jet. Fairchild is continuing with the expendable version of the J-83 (for use in target drones) and is getting some assistance in some phases of the engineering, production and development program from Orenda Engines Ltd. at Malton. Orenda has also been participating in the same manner in the advanced J-83 project. No new power plant has been selected for the CL-41, which is nearing the proposed rollout date at Canadair's Montreal plant.

## Autopilot For Caribou

The U.S. Army Signal Corps has ordered modified Lear F-5 automatic flight control systems for its de Havilland DHC-4 Caribou. The U.S. Army has five Caribou on order for evaluation purposes. The Lear F-5 has also been specified by the U.S. Army Signal Corps for its Beechcraft L-23 Twin Bonanza aircraft, and together with the Caribou order the total contract award for the autopilots is \$716,000, with follow-on orders expected.

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