



THE SOLID-FUELED BOEING MINUTEMAN, the USAF's newest ICBM, is shown being launched for the first time. Test firing was pronounced successful when all three stages fired and nose cone landed in target area. Minuteman missiles will be located in underground silos and on roaming trains.

Airport Spending '61-62

The Federal Transport Department plans to spend \$60.9 million in the 1961-62 fiscal year on air terminals, runways and the like. This compares with \$52.5 million in 1959-60 and a little less than \$52 million in 1960-61.

Expenditures are estimated at the following amounts for these airports: Fredericton, \$126,000 for extension to parking ramp and new taxiway; Halifax, \$115,000 for completion of terminal building and \$139,000 for weather surveillance radar.

Ottawa, \$325,000 for a new apron, roads and runway reconstruction and resurfacing; North Bay, \$899,000 for a start on a terminal, lighting, VHF and UHF transmitters.

Montreal, \$419,000 for terminal completion and other projects; Murray Bay, \$608,000 for runway, taxiway, apron; Rimouski, \$100,000 for runway extension; Sherbrooke, \$239,000 for runway, taxiways; Three Rivers, \$790,000 for runway, taxiway.

Sault Ste. Marie, \$956,000 for start on terminal, lighting etc.; Toronto Island, \$1.6 million for development; London, \$57,000 for VHF building; Windsor, \$50,000 for lighting.

Flin Flon, \$780,000 for runway

completion, lighting; Lynn Lake, \$465,000 for runway and lighting; North Battleford, \$70,000; Saskatoon, \$820,000 for runway reconstruction, lighting, storage; Winnipeg, \$5 million for terminal, \$690,000 for land, lighting, radio.

Calgary, \$1,035,000 for runway extension, taxiways, parking ramp, lighting, transmitter site; Edmonton, \$3.5 million for terminal, \$200,000 for remote transmitters, etc.

Port Hardy, \$468,000 for terminal, visual omni range, etc.; Prince George, \$237,000 for ILS, etc.; Prince Rupert, \$380,000 for terminal, lighting, ILS; Vancouver, \$1,719,000 for runways, lighting, ILS; Victoria, \$605,000 for terminal, visual omni-range.

1960 Tudhope Awarded

Joseph Green, a 17 year old flight sergeant air cadet from Edmonton, was awarded the Tudhope Trophy as Canada's best teen-age pilot graduating in 1960. The announcement was made by the RCFCA, which administers the Tudhope competition.

Runner-up among the 359 contestants for the award was Frank Ross, Jr., of Trenton, Ontario. The trophy was donated by the late Major J. H. Tudhope of pioneer

aviation fame, in memory of his son.

To be eligible for the Tudhope Trophy competition, the pilot must be under 19 at the time of licensing, and must obtain at least 80% in his written examinations. The flying club doing the training must be a member of the RCFCA.

BEA Hiring Pilots

British European Airways is hoping to hire some 50 Canadian pilots before spring 1961. The need for additional pilots has arisen due to BEA's plans to expand air traffic service by 20% this coming year.

In the forthcoming expansion of BEA, the airline will add 20 Vanguard turboprop airliners and seven Comets to its fleet. The first BEA Vanguards are scheduled to go into service in March.

Surinam Expedition

A Canso belonging to Canadian Aero Service Ltd., Ottawa, plus a staff of eight people, is scheduled to carry out an intensive follow-up of a 66,000 sq. mile aerial reconnaissance completed last year of Surinam. This Dutch colony on the northeastern coast of South America was once known as Dutch Guiana.

The Explorer I Canso to operate in Surinam is thought to be the most completely equipped exploration unit ever put into the air. The big amphibian is carrying the Gulf high-sensitivity airborne magnetometer, Canadian Aero's in-phase/out-of-phase electromagnetic detector, the AF-mag electromagnetic detector, and a scintillation counter. In addition, a Canadian Marconi Doppler radar unit is installed for navigational purposes.

New Avro Venture

Avro Aircraft Ltd. has entered into a manufacturing agreement with the Automatic Canteen Co. of America. Under terms of the agreement, Avro is given an exclusive licence in Canada to manufacture vending machines of Automatic Canteen's subsidiary Rowe Manufacturing Co., Inc. Avro is also licenced to manufacture coin-operated music machines and background music equipment of another Canteen subsidiary, Automatic Music, Inc.

A separate agreement is to be announced soon whereby Avro Aircraft also will manufacture for Canadian distribution the currency detecting equipment made by Automatic Canteen's ABT division. This includes the ABT \$1 and the \$1 and \$5 bill changers, as well as other equipment utilizing currency detecting capabilities.

Harvey R. Smith, executive vice president, aeronautical, A. V. Roe Canada Ltd., stated that although Avro Aircraft is diversifying its

manufacturing interests, the company is still very much in the aircraft building business. At the present time, Avro has two sub-contracts for CF-104 components, and is doing a limited amount of maintenance work on CF-100's.

Forest Fire Expenses

B.C. Lands & Forests Minister Ray Williston said the Federal Government doesn't pay a fair share of forest fire fighting costs and should set up a national forest fire air force.

The minister told the provincial legislature, now in session, that Federal Forests Minister Hugh Flemming has indicated consideration is being given to the use of defence personnel and equipment to fight forest fires.

Mr. Williston said the giant Mars water bombers had proved satisfactory for small fires and on some isolated corners of large fires, but they are not a panacea for all fire-fighting problems. Water bombers should never be used without ground crews to follow up, the minister added, but have proved effective in keeping outbreaks in check until ground crews arrive.

For this purpose it would be desirable to maintain a small unit of flying tankers readily mobile for quick changes in base locations as the fire hazard through the province develops, the minister said.

VOR/DME For Europe

ICAO has prepared a plan for the provision of VOR/DME in the European-Mediterranean area. The plan, which will now be submitted to the Air Navigation Commission and the Council of ICAO for approval, involves over 550 facilities at approximately 380 locations.

The task of assigning frequencies to these facilities was a difficult one in view of the number of installations to be accommodated within the same frequency bands.

This ground work was done by the ICAO Limited Regional Air Navigation Meeting held earlier this year in Paris. The meeting was attended by representatives of 26 nations and four international organizations.

RCMP Called In

Responsibility for policing and security of five major Canadian air terminals has been turned over by the DoT to the RCMP. The terminals are: Toronto, Montreal, Ottawa, Edmonton and Halifax.

Transport Minister Leon Balcer pointed out that the question of airport security has been under study for some time. It was decided that the matter could best be handled by a specialized agency and, since the RCMP is already responsible for

security in the case of other Federal property, it was asked to handle the policing at the airports in question.

The decision to have the RCMP take charge of the policing at Toronto, Ottawa and Montreal airports will affect a total of 32 men, at present employed by the DoT as airport constables or security guards. The RCMP will employ a number of men from the Corps of Commissioners under the new scheme. It is expected that about 49 members of the RCMP and 57 Commissioners will be in service, all told, at the five airports.

Dorval Sees 880

Northeast Airlines' Convair 880 jetliners have made their appearance at Montreal Dorval in recent weeks. The big 880's are being used on Northeast's Montreal and Miami via Boston route, and will soon be seen on an expanded service linking Mont-

real with Philadelphia, New York, Tampa, and Fort Lauderdale as well as Boston and Miami.

Protest Lodged

The Victoria Chamber of Commerce and organized labor in the area have protested to Defence Production Minister Raymond O'Hurley the sending of B.C.-based military planes to Edmonton for a paint job.

Twelve Neptune patrol bombers from Comox RCAF base were sent outside the province for a routine paint job despite the fact that Fairey Aviation Co. of Canada Ltd., located at Patricia Bay, near Victoria, has full facilities and labor to tackle the job, the chamber said.

ORENDA J79

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engine is mainly of sheet metal fabrications.

This necessitated a considerable expansion of our welding facilities. All of the materials had been welded previously at Orenda with the exception of Chromolloy. The increase in the welding facilities not only included the acquisition and qualification of the necessary equipment, but also the hiring and training of operators. Orenda has set up a welding training school which has been very successful. In this school, operators are required to become proficient in the welding of all types of materials and joint configurations.

Canadian Suppliers: In order to meet Canadian content requirements, the maximum amount of raw materials has been procured from Canadian sources. This posed a significant problem, namely, that of qualifying, in the short time available, not only the initial material from these sources, but the larger production quantities following immediately after the prototype samples. This has been overcome by the build-up of laboratory staff and the continued checking of test data to maintain minimum testing consistent with quality.

In the testing area, facilities were available for engine testing but modifications were required to adapt them to the J79. We used test cells which had been modified for the Iroquois operation and changed these to fit the J79 requirements. This involved installation of the particular instrumentation required and some minor modi-

Coming Events

March 12-16—ASME Aviation Conference, Statler Hilton, Los Angeles, Calif.

March 19-25—1961 Joint Meeting, American Soc. of Photogrammetry and American Congress of Survey & Mapping, Shoreham Hotel, Washington, D.C.

April 4-7 — SAE National Aeronautic Meeting, Commodore Hotel, New York, N.Y.

April 5-7—Inst. of Environmental Sciences Annual Technical Meeting & Equipment Exposition, Park Sheraton Hotel, Washington, D.C.

April 10-11—AITA Semi-Annual Meeting, Empress Hotel, Victoria, B.C.

April 13-14—IAS/US Army Aviation Meeting, Sheraton Park Hotel, Washington, D.C.

April 17—IATA 14th Technical Conference begins, Queen Elizabeth Hotel, Montreal.

April 24-27 — Annual Conference, Aerospace Medical Assoc., Palmer House Hotel, Chicago.

May 3-13—B.C. International Trade Fair, Exhibition Park, Vancouver.

May 8-12—National Industrial Production Show of Canada, Industry and Coliseum Bldgs., CNE Park, Toronto.

May 16-17—First Annual Meeting, Canadian Nuclear Assoc., Lord Simcoe Hotel, Toronto.

May 20-22—B.C. Aviation Council, Spring Executive-Director Meeting, hosted by Nelson Pilots Assoc., Nelson, B.C.

June 13-15—37th Meeting, Aviation Distributors & Manufacturers Assoc., Dennis Hotel, Atlantic City, N.J.

June 13-15—IAS/ARS Joint Summer Meeting, Ambassador Hotel, Los Angeles.

June 18—Annual Fly-in Breakfast Flight, Ontario County Flying Club, Oshawa, Ont.

June 28-July 1—Annual Meeting, Institute of Navigation, Williamsburg Inn, Williamsburg, Virginia.

May 25-26 — CAI Annual General Meeting, Royal York Hotel, Toronto.