

## 2.—Value of Expenditures on Canadian Government Defence Contracts Placed, by Program, 1957 and 1958

Program	1957	1958	Program	1957	1958
	\$'000	\$'000		\$'000	\$'000
Aircraft.....	346,436	341,022	Fuels and lubricants.....	47,826	46,512
Ships.....	83,579	49,937	Clothing and equipage.....	10,652	7,088
Tank-automotive.....	13,992	11,883	Construction.....	105,380	48,516
Weapons.....	15,628	18,153	Other.....	116,382	110,289
Ammunition and explosives...	31,085	24,857			
Electronics and communication equipment.....	98,676	99,469	<b>Totals.....</b>	<b>869,636</b>	<b>757,727</b>

**Aircraft.**—In 1958 two Canadian designed and produced aircraft successfully completed their maiden flights—the *CF-105 Arrow* aircraft,\* a supersonic all-weather jet interceptor, and the *DHC-4 Caribou*, a twin-engined troop transport and cargo carrier. Aircraft production declined as programs that had been in progress for several years were completed. The *F-86 Sabre* production line closed down in October following completion of an order for the West German Air Force, and the last *CF-100 Canuck* was completed in December. Production of the *T-33 Silver Star* jet trainers continued at a low rate, the program nearing completion at the end of 1958. *Otter* and *Beaver* general-purpose aircraft continued to be produced at the same rate as in 1957; the majority of these aircraft were purchased by the United States Government. Steady rates of production were also maintained for the maritime reconnaissance *CP-107 Argus* aircraft and the carrier-based anti-submarine *CS2F Tracker*. Manufacturing started on two new aircraft types: the *CC-106*, which is a long-range transport version of the *CP-107 Argus*, and the *CC-109 Cosmopolitan*, which is a medium-range transport. Both aircraft are powered by British turbo-prop engines.

Deliveries of the *Orenda* jet engine, which powers *CF-100* and *Sabre* aircraft, were completed in July. No further *Orenda* engines were purchased by the Department although contracts continued to be placed for spare parts, modification kits, publications and field services. Development, tooling and prototype production of the more advanced *PS-18 Iroquois* jet engine for the *CF-105* aircraft\* proceeded satisfactorily. Production of *R-1820-82* piston engines and Hamilton Standard propellers for the *CS2F Tracker* aircraft continued during the year. The rate of production of these items was reduced as a result of a re-assessment by the Navy of its spare engine requirements and a consequent reduction in the number of engines ordered. The United States Government continued to buy a large quantity of *R-1840* piston engine spares from a Canadian source.

Canadian production of flight instruments, gyro compasses, pressure indicators and transmitters was almost completed in 1958. Production of the navigation and tactical control (ANTAC) system developed satisfactorily after difficulty with some of the components. The position and homing indicator reached the final development stage and was expected to receive flight trials early in 1959. One of the major developments in the instrument field was that of a low-drift gyro, of which the latest design was approved. Additional quantities of *R-Theta* computers were ordered for the Royal Canadian Air Force.

The repair, overhaul and maintenance of aircraft, engines and associated equipment continued on a fairly large scale, although the volume of work declined from the preceding year.

\* Production of the *CF-105 Arrow* aircraft was discontinued as a result of a Government decision announced Feb. 20, 1959.