

involved contracts valued at \$86,243,000, the largest portion of which was for destroyer escorts. Defence construction contracts totalled \$51,571,000 in 1960, 23.2 p.c. lower than in 1959.

The value of expenditures on defence procurement and construction amounted to \$620,592,000 in 1960, 7.8 p.c. less than in 1959. All the major programs except aircraft showed declines. Aircraft spending increased by \$6,044,000. Expenditures for ammunition and explosives dropped by \$16,331,000 and expenditures for electronics and communication equipment declined by \$12,092,000. Expenditure on clothing and equipage was \$16,516,000 lower in 1960 mainly because of the unusually large output in 1959 when the Department of National Defence took over the Defence Production stockpile of cloth.

Of the total net value of contracts issued during 1960, 10.6 p.c. was placed outside Canada compared with 8.0 p.c. in 1959. The increase in contracts placed abroad in 1960 was accounted for mainly by purchases of the *CF-104D* trainer aircraft, the *LN-3* navigation system, and a small number of *C-130B* aircraft with associated spares and equipment. Payments to defence contractors outside Canada in 1960 came to 11.3 p.c. of total spending, a somewhat higher proportion than the 6.7 p.c. paid directly to foreign firms in 1959.

Aircraft.—*CF-104* production became the major program within the Canadian aircraft industry in 1960. Output of the airframes, engines and equipment proceeded on schedule. The similarity between the Canadian version of the *F-104* aircraft and that adopted by several NATO countries has lent itself to close co-operation between the countries concerned.

Deliveries of the *CP-107 Argus* maritime reconnaissance aircraft and the *CS2F Tracker* carrier-borne aircraft were completed in 1960, and deliveries of the *CC-109* medium-range transport were almost completed. The *CC-106* long-range transport production programs continued and the first aircraft was delivered before the end of the year. Production of *Otter* aircraft for the RCAF also continued throughout 1960. Four *Caribou* aircraft were purchased for use and support of United Nations activities. Contracts were placed on behalf of the United States Army for a number of *Caribou*, and a development program on the *Mk-2* version of this aircraft was started in co-operation with the manufacturer. The first of a small quantity of *Albatross* search and rescue aircraft ordered from the United States was delivered. Four *C-130B Hercules* medium-range, heavy-bulk-carrier aircraft and equipment were also purchased in the United States.

Production of *R-1820-82* piston engines and *Hamilton Standard* propellers, both for the *CS2F Tracker*, was completed. Production of the *J-79-7* turbojet engine for the *CF-104* was on schedule and the first engine successfully completed its test run. The Department gave financial support to the *PT-6* gas turbine engine which was being developed by a Canadian company.

In the field of aircraft equipment items, production of the position and homing indicator was entered into for the *CF-104* program and was selected by the Air Forces of the Federal Republic of Germany, the Netherlands, Belgium and Italy for use in their *F-104* aircraft. The *LN-3* inertial navigation system, the *MH-97* automatic flight control system and other items of navigation equipment for the *CF-104* were also put into production. Further quantities of the air navigation and tactical control system (ANTAC) were ordered for the *Neptune* anti-submarine aircraft.

Electronics.—The production of search and height-finding radars and of fiberglass radomes for the Air Forces of both Canada and the United States neared completion in 1960. Production continued on counter countermeasure equipment and on selective identification equipment. The development and production of data-processing equipment was a significant contribution to the air defence radar program. Production began on battlefield surveillance radars.