

and overhaul work proceeded as expected, and phasing out of older types of aircraft and engines offset additional arisings of later models. Facilities now exist in Canada for the repair and overhaul of all aircraft, engines and related equipment currently in use by the Department of National Defence.

The development of the air-to-air guided missile "Velvet Glove" continued during 1955 and further limited production for service trials by the RCAF was undertaken. This was Canada's first missile program and it demanded the co-ordinated efforts of a number of production specialists within the Government and throughout industry. As a result of the Velvet Glove program valuable experience has been gained by the Government, its contractors and by Service evaluation teams. Although the Velvet Glove may be superseded by another air-to-air guided missile the benefits gained from this program will facilitate the development of production in Canada of new types of missiles.

**Electronics.**—The procurement and production of electronic equipment for the Canadian Armed Forces and for Allied countries continued at a high level in 1955. Considerable planning was undertaken of those electronic items involving special military specifications or requiring special production facilities. The development of an ultra high frequency (UHF) airborne radio set proceeded satisfactorily, and orders were placed for an airborne transmitter-receiver and direction finding equipment. Production of the one mile radio set and the radio navigational compass was completed and production of a new five mile radio set started. Fixed airborne and shipboard radars were produced throughout the year and new contracts were placed for airborne equipment and large ground radars as well as for the production of radar counter-mortar equipment. The anti-submarine detection program was further advanced with the placing of orders for sonar and harbour defence equipment. Contracts were also placed for the production and conversion of flight simulators and the production of proximity fuses continued throughout the year.

A large program was undertaken to provide spares and maintenance for the Pinetree radar system. Also, many of the major orders for equipment for the mid-Canada early-warning line were placed during 1955 and active expediting was undertaken. An installation program was drawn up and discussed with major contractors. In accordance with the Canadian-United States agreement covering the Distant Early Warning (DEW) line which is being financed by the United States Government, assistance was given to the management contractor in procuring equipment and services in Canada for this project. Substantial contracts have been awarded to Canadian companies for construction work, steel towers and airlift services.

**Shipbuilding.**—The keels of five of six MCB-class coastal minesweepers were laid in 1955. These ships are an advanced version of the Canadian-designed AMC-class minesweepers which were completed in 1954 and are designed to cope with the latest known developments in mines. The last three of the first program of 16 World War II frigate conversions were completed during the year; these ships are completely new except for propulsion and auxiliary machinery and the bare hull up to deck level. Work continued on the second program of five ships to undergo similar conversion, the demolition work being complete and reconstruction well advanced at the end of 1955.

The lead ship of the first group of seven destroyer escorts, HMCS *St. Laurent*, successfully underwent sea trials and was commissioned on Oct. 29, 1955. The hulls of the other six vessels were launched in preparation for the fitting of propulsion machinery and auxiliaries. Three hulls of the second group of seven destroyer escorts were launched. A total of 35 auxiliary craft and 57 small boats were under construction during the year; eleven of the auxiliary craft were completed and all but ten of the small boats.

Construction progressed rapidly in Northern Ireland on the light fleet carrier HMCS *Bonaventure*, and fitting-out advanced well during the year. Delivery of the Mark 30 and Mark 32 torpedoes was completed in 1955, although some ancillary items had not been completely shipped by the end of the year. Orders were placed for a quantity of Mark 43 torpedoes for delivery to the RCN and the RCAF. The refit and overhaul of ships, performed mainly in East Coast and West Coast shipyards, increased during the year with more naval vessels in operation. The longterm degaussing program to provide all Canadian ships with anti-magnetic equipment was virtually completed.