

industry has increased its military capacity. Facilities have been established to produce items new to Canada's economy, including sub-miniature tubes and components, and crystals.

A large quantity of radar and communications equipment for the northern screen of the air defence of this Continent is being produced in Canada, together with anti-aircraft and other types of radar for use by the Armed Services. One type of early-warning radar used by anti-aircraft artillery, the No. 4 Mk. VI, is being supplied as Mutual Aid to NATO and is being used as well in the air defence of Canada. A certain number have also been delivered to the United States. Radar proximity fuses are now being produced in Canada for the first time.

A new type of pack radio for use by the infantry was developed in Canada and came into production during 1952. It has a range of one mile and is believed to be the best of its type in existence. It will be used extensively by the Canadian Army and by other North Atlantic Treaty countries, to which it is being supplied as Mutual Aid. Other production includes telephone, microwave and radio equipment for the communications network behind the radar screen.

A new development is the design and production in Canada of a flight simulator, which is an electronic device for reproducing the conditions of flight so that pilots may receive training on the ground.

Canadian shipyards are working on orders for escort vessels and minesweepers, as well as a number of harbour craft. In addition to the new ships, the reconversion of a "Mothball Fleet" of 36 minesweepers and frigates is being completed. The escort vessels, designed in Canada except for the propulsion machinery, are the most modern of their kind, equipped with all the latest devices and weapons; the first was launched in November 1951. To reduce their magnetism the minesweepers are being built of aluminum, with the hulls sheathed in wood. Five gate vessels, for duty at harbour entrances, have been completed and delivered to the Royal Canadian Navy and an icebreaker has also been completed for the Department of Transport.

The construction of these vessels calls for work elsewhere than in the shipyards, for instance the manufacture of boilers, turbines, auxiliary engines, deck gear and other components. Most of the contracts for such items have been let in Canada.

An aircraft carrier has been ordered from the United Kingdom to replace the *Magnificent*, which is on loan from the Royal Navy.

Under the weapons program, the major production project has been the 3-inch 50-calibre naval guns and mountings. The first of these equipments was delivered to the United States but the requirements of the Royal Canadian Navy will be met as they arise. Browning 0.5-inch machine guns were produced for use in the Sabre and CF-100 jet fighters, and 3.5-inch rocket launchers for use by the Canadian Army. Arrangements have been made to produce 155-mm. and 105-mm. howitzers, the 105-mm. recoilless rifle, and 81-mm. and 60-mm. mortars. Contracts placed for small arms were limited, partly because these weapons have not yet been standardized.

Ammunition requirements altered with the change-over to United States types of equipment. It was decided to produce in Canada ammunition for the Army's 155-mm., 105-mm. and 90-mm. artillery equipments. Naval requirements to be met from domestic sources include rounds for 3-inch 50-calibre and 40-mm. Bofors