

operation with the Armed Forces has been active since the outbreak of war and the National Research Council has now been officially designated the research station of the Canadian Navy, Army and Air Force.

The Council has constructed prototypes of important tactical weapons that are now in extensive operation and use. Work has been conducted in connection with secret radio gear and with naval protective devices and studies are continually being made on specifications for a wide range of materials. Testing of engines, explosives and a host of items used in warfare has been done on a large scale.

Newer activities of the laboratories arising from the War include: intensive study of radio problems; studies antecedent to the production of optical glass in Canada; development of gear and equipment for naval protective devices; work on ballistics; study of scientific and engineering problems involved in the storage of perishable foodstuffs and their transport to Great Britain; research on blood storage; preservation of food; and the study of nutrition problems. All research on methods of defence against chemical attack, except training phases, is carried on by a chemical warfare establishment committee, of which a member of the Council is chairman and technical officers of the Department of National Defence are members. This committee has organized and directed over seventy research projects within the various university laboratories and in the Chemistry Division at Ottawa.

In medical research, committees of the Council have made substantial progress. Investigations in this field cover many phases of medicine and surgery of primary importance to the Armed Forces, but much of the information obtained will contribute to the welfare of the civilian population also.

Liaison with the United Kingdom and other countries of the British Empire and the United States has been maintained at a high level of efficiency through the interchange of staff and the exchange of information, both as to plans and results.

Other Agencies and Activities.—There are various other special agencies performing important economic functions, either of control or investigation. The Canadian Shipping Board controls the use of both lake and ocean ships of Canadian registry. In allocating ships to particular routes and in seeing that essential cargoes are carried, it co-operates with the United Kingdom Ministry of War Transport and the United States Maritime Commission. The Shipping Priorities Committee determines the degree of urgency or priority of the various shipping requirements, gives direction to the Shipping Board, and forwards necessary requests for the use of United Kingdom and United States ships.

Since the Hyde Park Declaration, joint committees have been set up to co-ordinate the war programs of the United States and Canada on the economic side. The Joint Materials Co-ordinating Committee, linking the War Production Board and the Department of Munitions and Supply, is concerned with joint plans for the production, acquisition and use of scarce basic materials. The Joint Committee on Defence Production surveys the plant capacities in each country for the production of complete war equipment and supplies and recommends such modifications in allotment and specifications as will increase the total effectiveness of the program. The Joint Economic Committees, with which the other joint committees maintain continuous liaison, have an over-riding responsibility to investigate and report on joint war-time economic problems not being currently studied by other agencies. They are further charged with the duty of studying joint economic problems of post-war adjustment.