

Military, psychological, clothing and food research is carried out intramurally at the Defence Research Medical Laboratories near Toronto and extramurally in Canadian universities by means of a grant-in-aid program. An important field of activity is aviation medicine but investigations include naval and army problems as well as studies on blood substitutes, infection and immunity, burns and wounds, the effects of noise on hearing, and other factors likely to affect a military man's efficiency and health.

Most of the basic aeronautical research program is also carried out extramurally in Canadian universities and in Canadian industry. The principal fields covered are aerodynamics, aircraft propulsion, and engineering materials.

Operational research is carried on in the Defence Research Board by a Headquarters group. This group conducts long-range scientific analyses of future defence problems; it is also responsible for computational work on behalf of other operational research sections in cases where the use of digital computational equipment is required. In addition to this group, trained operational research scientists are provided by the Defence Research Board to the operational research teams in the three Armed Services, and also to a fourth outside group known as the Defence Systems Analysis Group which undertakes, for the Chiefs of Staff Committee, analytical studies of those defence problems that lie beyond the executive responsibility of an individual Chief of Staff.

In all, the Board continues to support those fields of research that are of foremost interest to the Canadian Armed Services and the program is under continual review to ensure that cognizance is taken of all changes in emphasis in defence requirements. Close liaison is maintained between the Defence Research Board and the Department of Defence Production to ensure that research and development activities are closely integrated with production.

Section 2.—Services Colleges and Staff Training Colleges

Canadian Services Colleges.—The three Canadian Services Colleges are the Royal Military College of Canada founded at Kingston, Ont., in 1876, Royal Roads which was established in 1941 near Victoria, B.C., as a school for naval officers, and Collège Militaire Royal de Saint-Jean established at St. Johns, Que., primarily to meet the needs of French-speaking cadets. The Royal Military College and Royal Roads were constituted as Canadian Services Colleges in 1948, and Collège Militaire Royal de Saint-Jean was opened in 1952. In 1959 the Legislature of the Province of Ontario granted the Royal Military College a charter empowering it to grant degrees.

The purpose of the instruction and training at the Services Colleges is to impart the knowledge, to teach the skills and to develop the qualities of character and leadership essential to officers of all three Armed Services. The courses of instruction provided a sound and balanced liberal scientific and military education leading to degrees in Arts and Sciences which are granted by the Royal Military College. The organization and training give cadets the opportunity to command and to exercise judgment.

For cadets entering the Royal Military College and Royal Roads the course is of four years duration. As the third and fourth years of the college course are given only at the Royal Military College, cadets entering Royal Roads must proceed to that College for the final two years of the general or engineering courses. For cadets entering Collège Militaire Royal, which gives a preparatory year, the course is of five years duration. Cadets take the preparatory, first and second years at that institution and complete the final two years at the Royal Military College.

The college year is eleven months, divided into three terms: autumn, winter and summer. The months September to May are devoted to academic training supplemented by such military studies as drill and physical training. The summer term, June to mid-August, is spent in practical training at an establishment of the Service in which the cadet is enrolled. Academic requirements for admission to the first year at the Royal Military College and Royal Roads is senior matriculation (or its equivalent) in the following subjects: