



STATEMENTS AND SPEECHES

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DEFENCE RESEARCH IN CANADA

A C.B.C. broadcast by Dr. O. M. Solandt,
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Science emerged from World War II with a new importance and with vastly increased responsibilities. The Axis forces were finally overcome by the courage, skill and endurance of the fighting men of the United Nations, but it is quite clear that this victory was only possible because the scientists and engineers, who supplied the weapons to our forces, proved superior to those of the enemy. The dominant role of science in war was forcefully demonstrated in the Battle of Britain. This epic victory was made possible by the efforts of the small group of scientists who discovered in the early efforts to probe the ionosphere, the principles that led to the development of radar. The later victory against the flying bomb was similarly due to a series of important scientific developments of which the most spectacular was the Radio Proximity Fuze. Finally came the atomic bomb which forced the early surrender of Japan and which, by the very horror of its destructive power, has made all mankind seek again for some means of eliminating war.

Because of this widespread appreciation of the importance of science in war, all nations now regard research as an essential part of their national defence. Canada has given official recognition to this new place of science in war by the formation of a Defence Research organization within the Department of National Defence. As Director General of Defence Research I have been given the same status as the Chiefs of the Armed Forces.

Prior to 1939, the Canadian Armed Forces had no research organization. However, General McNaughton, a former Chief of the General Staff, was then President of the National Research Council and had already begun to direct the efforts of the Council toward war problems. Under the stress of war, research groups and organizations were formed wherever the need arose. The National Research Council, under its wartime President, Dr. C. J. Mackenzie, was active in the formation, guidance and co-ordination of nearly all these research groups, but the actual administration of many of them remained in the hands of other departments. This entire wartime research structure was set up under the Emergency Powers Act and consequently has no permanent basis.

Wartime Groups Taken Over

The first task of the new Defence Research organization has been to take over those parts of the wartime groups that should be continued in peace; to put them on a permanent basis; and to re-mould them to meet the needs of the future. I shall try to give you a broad outline of the place of this new research organization in national defence and of the factors that will determine Canadian Defence Research plans.

Try to picture the supply of new weapons to the Armed Forces as a continuous chain which begins in the laboratory and ends in battle. This chain is a complex one. In its simplest form it begins with research and progresses through design, development, manufacture and inspection, to end with use in training or in battle. It is especially necessary for engineers