

the atomic field for mutual defence purposes. At that time agreement was reached that each government would make available to the other government atomic information deemed necessary to:

- (a) the development of defence plans;
- (b) the training of personnel in the employment of defence against atomic weapons; and
- (c) the evaluation of the capabilities of potential enemies in the employment of atomic weapons.

"The finalizing of this agreement in this very important field was followed by the participation of Canadian military personnel in United States exercises involving thermo-nuclear explosions, so Canadian troops could be trained in the procedures for decontamination of personnel and vehicles and the detection of radiation resulting from these kinds of explosions. In short, there exists today the fullest co-operation in all aspects of military operations in areas where atomic weapons may be used.

"In President Eisenhower's statement of November 7... the President made particular reference to Canada-United States partnership in the construction of our continental defence system. Collaboration in air defence was undertaken soon after the close of the last war, and a joint effort was made to develop a comprehensive air defence system for the common defence of North America. This system, concerning which the House has been fully informed, comprises an aircraft control and warning radar installation in the southern part of Canada, known as the Pinetree system, which was jointly built and is jointly operated by Canada and the United States. This was followed by the joint arrangement for the construction of the Mid-Canada Line and the Distant Early Warning Line, and a common communications system. For administrative convenience these projects were constructed separately by each government, but they are operated along with the Pinetree chain as a complete early warning and interceptor system. In order to work out these intricate air defence problems of an operational and scientific nature, a joint Canadian-United States military study group consisting of service officers and scientists was set up.

"One result of studies conducted by this group was a recommendation, made to the chiefs of staff of both countries in December 1956, for the establishment of a joint headquarters to provide for the operational control of the air defence of Canada and the United States. These recommendations of the joint study group were approved by the chiefs of staff of both countries and the United States Secretary of Defence approved these measures early in April.

"This bilateral arrangement within the Canada-United States Regional Planning Group of NATO is a further step in achieving the agreed NATO objectives for the Canada-United

States regional planning group, which are as follows:

- (a) to provide an effective base for and effective protection of the strategic nuclear counter-offensive capability;
- (b) maintenance of an effective early warning and air defensive system.

"This arrangement within the Canada-United States Regional Planning Group was reported by both countries to the NATO Council before it was made public.

"It is realized that this comprehensive air defence system is a defence against the manned bomber, and it was recognized some time ago that steps should be taken to provide for defence against the further threat of the inter-continental ballistic missile. As early as July 1956, negotiations were commenced for joint collaboration in the study of methods and procedures for dealing with defence against the ICBM. The Defence Research Board, in collaboration with the United States Air Force, has undertaken a substantial research programme which will aid in solving the problems of producing a warning system and defence against the ICBM. Research studies, including field and laboratory studies, of the factors which will make feasible the radar detection of an ICBM warhead and the interception of this warhead by a destructive missile are now being thoroughly and jointly investigated.

"The radar to be installed in Saskatchewan is part of this activity. It is worthy of note that this radar has been loaned by the United States to be operated by the research workers of the Defence Research Board as part of our contribution to the research against this new and serious threat. It is our intention to follow up very closely this joint development and to give this project of creating a defence against the ballistic missile high priority in our defence programme.

"Other joint efforts of considerable significance are the projects for the development of defensive measures against the missile-carrying submarine, including new long-range submarine detection techniques and improved methods of destroying submarines. These measures are being developed by the two navies in an effort to combat the threat of missile attacks against North American ports and installations.

"There is consultation and co-operation on defence on all levels. Officers of all services are integrated into the major schools and training establishments of all services in the United States. The cold weather testing of United States and Canadian weapons, including missiles, is carried out at the Canadian test station at Churchill, Manitoba. While co-operation in these fields is indeed very extensive, there are other areas where more joint work can be done, and we intend to fully explore further co-operation and consultation in these important fields of defence and particularly research and development."