

operator. The timber is sold by auction in the same manner as the regular timber sales. Access roads are built by the government. In 1955 a Royal Commission was set up by the British Columbia Government to study the results obtained by the forest management licence system and to report on the forest resources generally of the Province.

The use of air photographs for forestry purposes is a comparatively new field in which progress has been made both in research and in practice (*see* p. 472). By the use of such photographs the Forestry Branch of the Department of Northern Affairs and National Resources has been continuing work on the aerial forest mapping of federally administered lands and other territories. Forest inventory maps for example were prepared from air photographs for portions of the Yukon and Northwest Territories and data were collected on the ground to support the interpretation of the photographs. The development of instrumental aids in forest photography and in interpretation is being continued.

Timber Control.—The formal control of timber by the Timber Controller, as established during the war years, ceased on Mar. 31, 1950. Since that date the only controls have been those exercised through licences for the export of logs and pulpwood, required under the authority of the Export and Import Permits Act.

Subsection 2.—Forest Fire Protection

The Federal Government is responsible for fire protection in the forests under its administration—chiefly those of Yukon Territory and the Northwest Territories, the National Parks, Indian lands, military reserves and Forest Experiment Stations. Each of the provincial governments, except that of Prince Edward Island, maintains a fire protection organization co-operating with owners and licensees for the protection of timbered areas, the cost being distributed or covered by special taxes on timberlands.

In each province except Prince Edward Island provincial legislation regulates the use of fire for clearing and other legitimate purposes and provides for the closing of forests to travel or work during dangerous periods. The Province of Quebec has organized a number of co-operative protective associations among lessees of timber limits. These associations have their own staffs, which co-operate with those of the Board of Transport Commissioners and the provincial government. The latter contributes towards fire suppression costs and also pays for the protection of vacant Crown lands lying within the area of the associations' activities. In the Province of Newfoundland responsibility for the protection of most licensed timberlands is vested in the lessees. The Newfoundland Forest Protection Association, maintained jointly by the provincial government and industry, carries out certain important fire control functions.

The provincial services of forest fire protection along railway lines are assisted by the Railway Act, administered by the Board of Transport Commissioners which has wide powers relating to fire protection along railway lines under its jurisdiction. Certain officers of the various forest authorities are appointed *ex officio* officers of the Board of Transport Commissioners and co-operate with the fire ranger staffs which, under the Railway Act, the railway companies are required to employ.

In many districts in Canada radio equipped aircraft are used to good effect for the detection and suppression of forest fires. Where lakes are numerous seaplanes or flying boats can be used for fire detection and for transportation of fire fighters and their equipment to fires in remote areas especially. In Ontario water bombing of small fires is regularly practised and in some districts helicopters are being used in fire suppression work. Equipment and supplies are sometimes dropped by parachute to isolated fire crews and in Saskatchewan parachutists are employed to fight fires that are difficult to reach.

Fire detection in more settled areas is carried out from lookout towers fitted with telephone or radio for reporting and fire fighting crews and equipment are maintained at strategic points. These crews, when not engaged on fire suppression duties, are employed on the construction and maintenance of roads, trails, telephone lines, fire guards and other improvements.