A major responsibility of the Forestry Branch is the development of techniques in the prevention, detection and suppression of forest fires. A network of 85 lookout towers equipped with two-way radios is maintained throughout the province and supplemented by six aircraft on regular patrol during the high-hazard periods. In 1959 a helicopter was used for the first time on fire detection and suppression work. A group of smokejumpers, originally organized in 1947, has been trained to parachute on remote fires. This unit is in constant readiness during the fire season and takes immediate suppression action which is maintained until the smoke-jumpers are relieved by overland crews.

Northern Saskatchewan's communication system, with over 800 radio sets in operation in towers, vehicles, aircraft and woods camps, plays a vital role in the detection and suppression of forest fires. These activities have also been assisted in recent years by the construction of over 2,000 miles of forest access roads.

Alberta.—The 158,529 sq. miles of provincial forest in Alberta are administered by the Forests Division of the Department of Lands and Forests at Edmonton. The Division is composed of five forestry branches under a Director of Forestry: Administration, Forest Protection, Forest Management, Forest Surveys, and Radio.

The Administration Branch supervises all branches, maintaining general control over revenue and expenditure, deals with personnel and conducts a Forestry Training School which offers in-service training for forest officers and other employees.

Protection of the forests is in the charge of the Forest Protection Branch and all field personnel. For ease of administration the forested area has been divided into seven Divisions, each responsible for the forest within its boundary. These Divisions are composed of Ranger Districts in which all activities are supervised by the district forest officer responsible to his divisional superintendent. The divisional staffs include: Forest Superintendent, Assistant Forest Superintendent, Divisional Forester, Chief Ranger, Mechanical Foreman, Chief Check Scaler, Assistant Check Scaler, Divisional Clerk, Assistant Clerk, Radio Operator, Stenographer and seasonal help such as standby fire crews, forest lookout men and general labourers and construction crews. These employees are responsible for fire prevention, detection and suppression and the supervision of logging and milling operations, timber cruising, and construction and maintenance of forestry projects.

The functions of the Forest Management Branch include the approval and acceptance of management and annual operating plans prepared for other Crown lands, proper land use, proper disposal of Crown timber and the direction of field officers in the administration of all contracts related thereto. This extends to all phases, including acceptance of applications, cruising of timber, drawing up of contracts, periodic inspections of areas to assure proper logging and utilization practices, scaling of products cut, collection of dues and the reforestation of areas denuded through cutting, fire, etc.

The Forest Surveys Branch maintains the provincial forest inventory and prepares and maintains detailed inventories by management units; prepares long- and shortterm management and protection plans; provides timber application forest type maps; conducts other work pertaining to photogrammetry and forest cover maps; and provides technical drafting and mapping services to other branches of the Alberta Forest Service and the general public.

Development and maintenance of communications is the function of the Radio Branch. Central stations are maintained at Edmonton and Calgary with smaller stations located at divisional headquarters, lookout towers and ranger districts. A number of portable, mobile and airborne stations combine with the fixed stations to form a flexible and comprehensive communications network for both fire detection and suppression operations.

Conservation of 9,000 sq. miles of forest comprising the Rocky Mountains Forest Reserve is administered by a joint provincial-federal agency—the Eastern Rockies Forest Conservation Board with offices at Calgary. The area is composed of three forests which are subdivided into ranger districts. The Superintendent in charge of each forest is