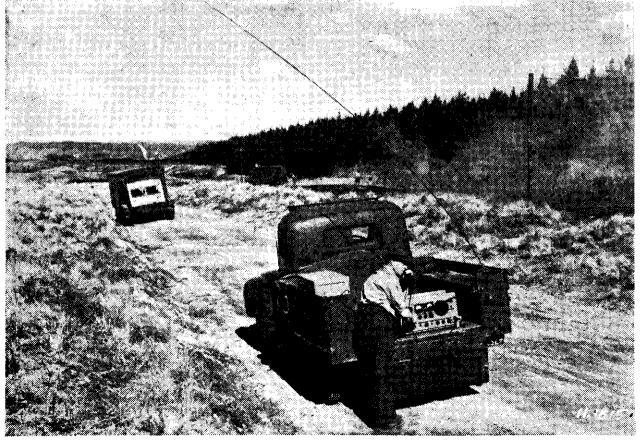
RADIO BATTLES AGAINST BUSH-FIRES





State Forest Service photographs

Top: Plotting a fire at Ngatamawahine, in the Kaingaroa Forest, Rotorua. The transceiver is in the right foreground.

Below: A "success" signal is flashed back to headquarters from a radio truck after one outbreak has been successfully dealt with

AT the moment the wind is nor'-west to west; if the humidity recorded this morning drops, it might be dangerous again."

Having jotted down this information from Rotorua by telephone—and a lot more data like it—an officer of the State Forest Service fire-fighting department in Wellington settled down, between calls, to explain some of the methods used in New Zealand for forest fire prevention and suppression.

"These calls," he said, "are coming through all day, and at night they come to my home. We're pretty busy people these days." But there was time for him to talk a little about the battle-front, with emphasis on the wide use of radio.

When the service starts out to fight a forest fire, it organises itself like a fully-equipped army, issuing its directives from headquarters, and controls every front. There is much more in it than just sending out fire-engines and gangs of beaters. Radio, the Army, Navy and Air Force, and the Weather Office, have all co-operated in fighting recent outbreaks, using all the available modern mechanical aids, and have helped to minimise the spread of destruction.

When a forest fire races forward on a broad front, it can only be contained, at best, by flank attacks and backburning. Hence the imperatives in forest fire control are preparedness and immediate suppression. And that is where the National Broadcasting Service comes in.

Man Makes the Fires

Practically all fires are man-made. We hear on the radio constant references to causes—cigarette butts and matches carelessly thrown away, billy fires left smouldering by so-called bush-lovers, and even by those whose livelihood is bound up with the bush. The NBS mentions, at intervals during bad fire weather, the implications of carelessness in the destruction of valuable bush, the destruction of soil cover, and its effect on erosion, the despoiling of natural beauty, and the unassessable damage to future timber crops.

Broadcasts of weather reports indicate danger periods and an elaboration of these forecasts is made possible by fire-hazard records from widely dispersed stations in forested areas. Such records collected by Forest Service stations provide the accessory data needed to provide fire weather forecasts. So the State Forest Service, the Weather Office, and the NBS work in close co-operation.

Radio is used, too, as a medium through which preventive measures can be taken in emergencies, and it gives special emphasis to the need for extreme care in hazardous regions. Radio protection in the field is provided by a network of short-wave stations in major forested parts, for a telephone line might itself be destroyed by fire.

Mosquito Network

"Transceivers," so named because they send as well as receive, are installed in fire look-out stations as an adjunct to the telephone, and are also contained in mobile fire-weather stations, in trucks and patrol planes.

In suppressing a fire, radio controls the fight over a wide front, using the