for cross-country operation. It was finally decided that, pending Government decision on the major problem and the passing of the necessary legislation, an endeavour should be made to control the situation on a voluntary basis. Experiments showed that the forestry fire-engines could operate across country even in heavy scrub, and Government agreed to supply one of them to be stationed at Taupo. A local fire brigade was formed and a committee representing the forestry interests and the Taupo Road Board was set up to control and finance the seasonal fire-fighting operations in the waste-land area.

12. The climatic conditions during the last fire season were unusual. The late summer was both hot and dry and there were periods of exceptionally low relative humidity beginning in mid-January. The result was that grass and scrub in the waste-land area reached a tinder condition which not only caused fire to strike easily and travel rapidly, but also to persist right into the roots of bracken and grass. The sporadic fires, which are of no great importance in a normal season, did not die out as usual. Towards the end of January it could be said that there was a continuous fire or series of fires in the area between the Tauhara and Tahorakuri plantations and Lake Taupo. This wakened up daily with the heat of the sun and threatened from point to point as the wind increased and veered. Conditions reached the emergency stage in the early days of February and it was necessary to make a call on the Fire Service to counter the threat to the built-up areas at Wairakei, Taupo, and elsewhere.

13. The first call was sent to Rotorua, where one of the E.P.S. water units had been stationed in 1944 for the protection of the scenic and forest areas. This appliance operated in an endeavour to prevent the fire crossing the Waikato River near the Huka Falls, but it became evident that more assistance would be necessary. The fires were by this time on both sides of the Taupo-Rotorua Road, and a call was sent to Wellington on Saturday, 11th February, when heavy winds greatly increased the danger throughout the district. Although no prior arrangements had been made, the response was excellent. The first machine moved off from Wellington within thirty minutes of the call, arriving at Taupo at 2 a.m. the following morning. A second call was sent to Palmerston North, Wanganui, and Auckland, and later for relief purposes to the Waikato brigades. Most of the latter were urgently engaged owing to the wide area covered by the bad fire conditions, and response was only possible from Te Aroha and Rotorua. The "water units" sent on the first call were later reinforced by trailer pumps and cross-country-towing vehicles obtained from surplus Army and Air Force stocks.

14. The Fire Service crews continued in action until 5th March, when heavy rains had relieved the position, the permanent men on duty being relieved from time to time. In all, two water units with heavy pumps and four with medium pumps were used in addition to fifteen standard trailer pumps. The man hours worked were approximately 7,500. One brigadesman was rather badly burned, several of the appliances were more or less seriously damaged, and 5,500 ft. of hose was destroyed. It may fairly be said that the Fire Service was effective in its primary function in such emergencies—that of protecting built-up areas. There is little doubt that but for the operation of heavy equipment much of the property at Taupo and elsewhere would have been lost. The officers in charge of the Fire Service units have reported that their operations and effectiveness were very greatly hampered by the absence of an adequate system of control and communications, particularly in the early stages of the emergency. The brigade units took little or no part in what should have been their secondary job of supporting the forestry teams in their protection of the actual forest. (NOTE.—It is considered that it is only in exceptional cases that direct operation by the Fire Service on a forest fire will be possible. Its duty will usually be to transfer water overland by hose-lines from the static source to some convenient point from which the mobile forestry appliances can operate.)