

This is fully recognized in England and other countries, where very vigorous control is exercised over drivers' hours.

In New Zealand the position as regards control is fraught with much difficulty owing to the very large preponderance of owner-drivers. The position is quite satisfactory as regards passenger-services and large trucking concerns, but these unfortunately are but a very small portion of the total. Although the number of owner-drivers in the truck industry cannot be stated with absolute accuracy, the attached table, No. 19, gives a very fair idea of the situation. This shows that of the total number of truck-owners holding licenses under the Act 67 per cent. hold licenses for one truck only, and 21 per cent. hold licenses for two. From these figures it is safe to assume that of the total number of trucks licensed—viz., 3,355—about 2,000 are operated by owner-drivers.

The Department is fully alive to its responsibilities in this direction, but, owing to the complex nature of the problem, realizes that great care must be taken and thorough investigations made before embarking upon control of this nature.

13. OVERSEA MECHANICAL TRANSPORT COUNCIL.

A report has now been issued by the Oversea Mechanical Transport Directing Committee regarding the tests carried out in Australia with the second experimental motor-transport unit designed for the transport of heavy loads over unmetalled roads.

This tractor-trailer unit carries a pay-load of 15 tons under average conditions, has a maximum speed of 28 miles per hour, and can climb a gradient of 1 in 8 on a dry earth road. The tractor alone, with 3 tons pay-load, can negotiate a 1 in 2½ grade. The tractor, with 130 brake horse-power compression-ignition engine driving on all four axles, draws two 8-wheeled trailers each of 6 tons pay-load capacity. The whole outfit is equipped with low-pressure tires, and the maximum axle weight is less than 3 tons.

The test comprised almost 10,000 miles over surfaces varying from deep sand and plains covered with loose stone to heavy sandy creek crossings, black soil, and deep mud. The fuel-consumption averaged 3.15 miles per gallon (Diesel oil) and the speed 12.87 miles per hour. The operating-cost per net ton-mile, including depreciation, interest, wages, repairs and maintenance, fuel, lubricants, tires, insurances, garage fees, license, and supervision amounted to 3.70d.; whereas the ruling-rate for carriage of goods in the Northern Territory where the tests were carried out ranges from 9d. to 1s. 6d. per ton-mile. It is considered that with back-loading freights and better provisions for loading, a lower unit figure than 3.70d. would be reached.

The Directing Committee of the Oversea Mechanical Transport Council suggests that a pay-load of more than 15 tons should be aimed at in order to attain the greatest economy of transport under the conditions for which this type of unit is designed. With this end in view a design has been prepared for a similar tractor-trailer unit with a maximum pay-load of 30 tons, motive-power being provided by two 130 brake horse-power Diesel engines. It is considered that with an axle load of 4½ tons, and with the low-pressure tires used, and slower and more even running, the unit will cause no more damage to the road surfaces than does the ordinary 3-ton lorry, and at the same time there would be a substantial reduction in the cost per ton-mile attained by the 15-ton unit.

It is unfortunate that further experiments on the lines outlined above are rendered impossible at the present juncture owing to lack of funds.

14. CHANGES IN TRANSPORT LAWS AND REGULATIONS.

A. LEGISLATION.

Two acts under the jurisdiction of the Department were passed in the period under review:—

(a) TRANSPORT LICENSING (COMMERCIAL AIRCRAFT SERVICES) ACT, 1934.

This provides for commercial air services being brought under the licensing system, the Transport Co-ordination Board being the licensing authority.

(b) MOTOR-VEHICLES AMENDMENT ACT, 1934-35.

This amends the Motor-vehicles Act, 1924, and has two main purposes:—

- (1) It amends the definition of "public motor-car" by altering words "plying for hire" to "plying or is available for hire." This alteration was urgently required owing to the increasing number of private-hire vehicles which under the previous wording were exempt from liability for local-body plying-for-hire fees, and not under the same measure of control as ordinary taxis.
- (2) It provides relief and clarifies the legal position in the matter of taxation for a miscellaneous class of vehicles such as well-borers, agricultural apparatus, roadmaking machinery, saw-benches, log-haulers, &c. Prior to this alteration the position of this class of vehicle under the law was legally uncertain, but now they are, in appropriate cases, either totally exempted from taxation or subjected to the mileage-tax and exempted from license fees and 6d. per gallon of the motor-spirits tax.