A balance-sheet will be published in the annual accounts.

It should also be noted that prior to the Government taking over the Niue service in 1925 an amount was expended on the Niue service only, for relief ships and subsidies, of £3,866 for the year.

The initial year is naturally a heavy-expenditure one, and in addition, owing to the Mau activities in Samoa, the ship's revenues were considerably handicapped on account of the fact that the anticipated banana cargoes were not forthcoming, and the ship during part of the year ran on very small cargoes. On one occasion, also, hurricane conditions in the islands resulted in half of a cargo having to be left behind, with the consequent loss of revenue. It is also a consideration that the freights to all New Zealand ports are on a flat rate, which places the vessel at a disadvantage as against private shipping firms, both as regards revenues and the greatly extended run to southern ports so far south as Dunedin.

The invisible profits of the trade that has been made possible by this vessel are also worthy of consideration.

Under the adverse conditions experienced throughout the year, therefore, the service has shown a surprisingly good trading result.

Unfortunately, the vessel's machinery has required several extensive overhauls and alterations, with the consequent irritating delays and damaging effects to the service. Breakdowns in machinery were contributory causes of the loss of fruit shipments on two occasions—one a total and one a partial loss. Everything possible is being done to overcome the difficulties under the direction of a technical advisory committee of departmental Engineers appointed for the purpose. A report of the committee is printed herewith :—

Government Buildings, Wellington, 26th June, 1929.

The Hon. Minister for the Cook Islands, Wellington.

DEAR SIR,—

In accordance with the request contained in your letter of the 13th May, I visited the motor-vessel " Maui Pomare " in company with all members of the advisory committee and made a careful investigation into the troubles recently developing in the vessel's propelling machinery. The committe has been strengthened by the inclusion on this work of Messrs. Breeze and McKinnon, of the Marine Department, who have co-operated very fully in the inquiry and in the determination of remedial measures.

Dealing with the several questions in the numerical order adopted in your letter, I beg to report as follows :—

(1) The trouble developed first of all in the heating of two separate crank-pin bearings. This occurred between Lyttelton and Auckland, and necessitated disconnecting the two pistons concerned. On arrival in Auckland it was learned that a number of holding-down bolts were fractured and a small crack had developed in one of the main-engine cylinders.

The immediate cause of the heating of the crank-pins was the failure of garter-springs associated with the crank-case sealing-rings. The failure of the springs, in turn, is attributed to the shearing and wearing down of the small feathers on the crank-shaft which drive the sealing-rings.

After a detailed study of all the surrounding circumstances, it was decided to replace all existing sealing-rings with new ones of modified design, and this has been done. The new design adopted is still open to objections but is the best that could be adopted in the restricted space available.

The failure of holding-down bolts is attributed to excessive vibration, or nodding, of the engines. Complete sets of new bolts have been fitted, and the foundations of the engines have been stiffened up by reriveting some of the intercostals under each engine and the bolting of heavy angle bars on tank-top in way of holding-down bolts. The supports to the heavy exhaust-manifolds have been modified, the original pipe-stanchions being entirely removed and replaced by heavy adjustable bar stays stepped on to the engine-bed. This latter alteration should make the engines steadier and reduce the risk of cracked silencer or cylinder castings.

With the above attention it was considered the vessel could safely resume her service, and after a few hours' preliminary run she was finally despatched with a full complement of passengers for Norfolk Island on Friday last, the 21st instant. Reports received yesterday (the 24th instant) indicate that the results of the work have been satisfactory.

(2) The advisory committee, as the result of about ten months' association with the vessel, feel that they cannot guarantee that she will run to a rigid schedule at all times without interruption. Since the negotiations for the purchase of the vessel were undertaken there has been considerable development in the design of propelling machinery of the Diesel type and of the size required for the " Maui Pomare." The type of engine installed is now recognized to have certain disabilities, especially in a vessel working in the Antipodes, out of touch with the designers and builders, where the quality and grade of fuel oil is liable to vary, and in a trade involving the working of roadstead harbours. Undoubtedly a steam-vessel would give more regular service, with less time required in port for overhaul ; but, nevertheless, the committee feel that the Government have a vessel capable of giving good and useful service in the carriage of fruit from the islands to New Zealand. There are still some features of the engines that are rather obscure and doubtful. These features cannot be entirely eliminated, and your engineers therefore find themselves unable to give an unqualified guarantee that the vessel will run to a regular schedule. It is essential that the vessel have ample time between each voyage and while in New Zealand ports to carry out current maintenance and periodical overhaul.

(3) At the present time the committee are recommending and taking steps to get quotations for the supply of (*a*) a complete new equipment of mechanical sight-feed lubricators for the main auxiliary engines ; (*b*) a complete new generator unit of 15 kw. capacity. These are major items of