11 A—6

particles. The analysis thus showed a very high percentage of calcium carbonate, or coral, and a relatively small percentage of true soil. It was suggested that crops might be grown if the coral were broken up and mixed with as much vegetable refuse as possible. The use of a supplement of blood-and-bone and muriate of potash was also recommended, but it was considered by the Cawthron Institute that a successful result was not very likely.

The experiment suggested was carried out. Experimental plots were established in Fakaofo, and control or checking plots were also prepared in Samoa in large samples of coral from each of the atolls. Taro, Ta'amu, and kumaras were planted and at first showed rapid progress, but as subsequent showers of rain leached out the chemical additions to the coral, soil growth slowed and, later on, ceased altogether. It does not appear, therefore, that the addition of chemical supplements represents a good approach to the problem of the infertility of Tokelau soil. Heavy mulching and composting seems to be the only solution, but it is difficult to persuade the Tokelau people to do this consistently in order to raise small crops. They recognize the value of the use of vegetable refuse, however, and they are accustomed to lay down coconut husks round the bases of their few banana-plants.

17. Communications and Shipping

For the past ten years the principal communications with the Group have been maintained by means of Government-chartered shipping or aircraft. Mission ships also make occasional calls, and units of the Royal New Zealand Navy have resumed the annual visits which were interrupted by the war. On the above visits the Administrator takes the opportunity of inspecting the Group. Modern wireless transmitting and receiving sets have now been installed on each atoll in charge of operators trained at Apia on their new equipment.

Until the war years made it dangerous to do so, the islanders occasionally made voyages from one atoll to another in their own canoes. From Fakaofo to Nukunono is approximately 40 miles, and the distance between Nukunono and Atafu is 57 miles. With the re-establishment of wireless-stations in the Group such voyages are now permitted, subject to certain conditions such as the reporting to Apia by wireless both of departure and arrival of the canoe.

The Tokelau Islands are removed from normal Pacific shipping routes; this lack of communications is in part made up by visits by flying-boats of the Royal New Zealand Air Force, which carry urgently required supplies or personnel.

Arrangements are being made for the institution of a regular three-monthly air service to the Tokelau Islands by Catalina flying-boats of the Royal New Zealand Air Force.

In view of the difficulty which has been experienced in chartering ships to make trading and official visits to the Group, inquiries are being made by the New Zealand Government with a view to the purchase of a suitable vessel.

18. Finance

No formal Budget is drawn up for the financial administration of the Group. The High Commissioner of Western Samoa, in his capacity of representative of the New Zealand Government, keeps a separate account in the Samoan Treasury of receipts and payments in respect of the Tokelau Islands. All revenue is paid to this account and all expenditure met from it. Where definite proposals are in train for construction or other projects that require a substantial sum of money, the New Zealand Government provides the subsidy