

available on the spot are frequently an important means of locating aircraft in distress, and since flying clubs and other owners are involved in what to them is considerable expense when such searches are undertaken, we recommend consideration of the extension of the organisation to cover search by civil aircraft and reimbursement of costs involved.

Aeronautical radio communications and aids to navigation

108. It is generally admitted that the provision of radio and landline communication and radio aids to navigation has not kept pace with the requirements of the air services and of air traffic control. This is almost universal experience, and the situation requires continuing effort to make up the deficiencies in trained personnel and equipment, as well as co-ordinated policy decisions emanating from the planning which has been advocated. Recognition of certain accepted principles would assist in implementing the programme. Aeronautical radio is a highly specialised form of radio science and practice. It needs to be handled by specialists, and the Civil Aviation Directorate should be fully organised to deal with all the technical problems, from construction to maintenance. We would advise a review of the Joint Report of the Post and Telegraph Department and Air Department on Control and Operation of Aeradio Services, dated 18th October, 1946, to ensure that there is no confusion of responsibility, and that the Civil Aviation Directorate is adequately manned and equipped to fulfill its responsibilities.

109. Of present shortcomings, it has been emphasised to us that point to point communication at present is inadequate for the proper operation of air traffic control. Instrument landing equipment is an urgent necessity at Whenuapai and the alternate international aerodrome—i.e., Ohakea—for the safe operation of the international air services. Similar instrument landing equipment will be required at certain aerodromes for the operation of internal air services.

110. It has been represented to us that the radio aids to navigation in the Tasman Sea are inadequate in the light of modern knowledge. The utility of astronomical navigation by day is limited. Although there is not universal acceptance of I.C.A.O. recommendations on systems of long-range navigational aids, we recommend that continuing attention should be given to the improvement of the long-range navigational aids in this area. The provision of one or more ocean weather ships, which has been considered at several international conferences and considered not justified for meteorological purposes alone, would be one means of providing additional aids to navigation, as well as a search and rescue unit. The provision of such ships is not the responsibility of one country alone, and we merely draw attention to the need for keeping the matter under consideration in relation to the whole problem of air navigation.