

SECTION IV—AIR NAVIGATION SECTION

CRASH/FIRE ORGANIZATION

An important phase in the development of aerodromes and associated services is the provision of an adequate crash/fire organization.

With the approval of the Government, a progressive programme has been adopted whereby modernized equipment will be available at all the main aerodromes throughout New Zealand.

Firemasters have been appointed to the larger aerodromes, and, under the direction of the Principal Fire Officer on the staff of the Civil Aviation Branch, training of crews in fire and crash work and in the manning of fire-tenders is proceeding. The crews are drawn from all branches of ground staff and include employees of operating companies.

AERONAUTICAL MAPPING

With the rapid increase in the intensity of air traffic it was realized that a comprehensive programme of aeronautical mapping was urgently necessary in order to ensure adequate coverage of the Dominion with suitable maps and charts of all types.

The Civil Aviation Branch is responsible for the initiation of the mapping programme, for the aeronautical data included therein, and for the issue of all aeronautical maps and charts for civil use, while the Lands and Survey Department has accepted responsibility for their compilation. The closest liaison exists between the Departments.

The compilation of aeronautical maps and charts has been carried out in general conformity with the Standards and Recommended Practices laid down by the International Civil Aviation Organization, any differences being due to problems peculiar to New Zealand topography.

The production of the following aeronautical charts was initiated:—

- (i) *Approach and Landing Charts.*—These charts display the approved instrument approach procedures to be followed by pilots when approaching an aerodrome in instrument flying conditions, also a detailed drawing giving the layout of the aerodrome, obstructions in the vicinity, position and features of the radio aids serving the aerodrome, and a profile drawing of the terrain along the line of the approach.
- (ii) *Facility Charts.*—These supply pilots with all the details necessary to enable them to conduct their aircraft from point to point along the airways. The details given on these charts are overprinted on an outline chart and show position and direction of airways, directional flight levels, minimum safe altitudes of airways, position and details of all radio aids serving the routes, position and distance between reporting points, radio beacons, and airports.
- (iii) *Aeronautical Charts (Scale 1/500,000).*—This series of charts is required to replace the obsolescent New Zealand Aeronautical Strip Map which was compiled before the war, to which amendments are necessary, as shown by the large-scale topographical surveys which have been carried out since 1940. The series will be needed by all pilots and is being compiled from the latest survey data, showing all topographical, hydrographic, and coastal detail, with a distinctive colour overprint showing the aeronautical radio aids to air navigation.
- (iv) *Aeronautical Plotting Charts.*—A programme was laid down for compilation of a series of 1/3,000,000 scale, plotting charts covering the areas flown by our airlines. These charts are an inexpensive sheet drawn on the Mercator projection and showing basic topographical detail. The plotting series is necessary for air navigators to enable them to plot the movement of the aircraft and observations obtained by radio or astronomy.