

SECTION VII.—AERONAUTICS DIVISION

In April, 1947, the strength of the Division comprised the Chief Aeronautical Engineer, five Aircraft Surveyors, and one Assistant Aeronautical Engineer. During the year, the following appointments were made : one District Surveyor, four Assistant Aircraft Surveyors, one Examination Engineer, and two Engineers' Assistants.

The four Assistant Aircraft Surveyors have been posted to the four main centres, and in order that they may gain the widest possible experience their locations will be changed at nine-monthly intervals.

In order to meet present requirements there still remain vacancies for two Senior Aeronautical Engineers, two Aeronautical Engineers, and two Aircraft Surveyors.

Every effort is being made to fill these positions, and until suitable appointees are found the research and development programme to which the Division is committed cannot be implemented.

The work of various sections of the Division during the year may briefly be summarized as follows :—

(a) *Engineering Section—*

Investigation and approval of 176 Certificates of Airworthiness. Checking and approval of 43 modifications and 12 major repair schemes. Extensive detail work arising out of conversion and rework of Dakota, Lodestar, and Beechcraft aircraft.

Extensive flight tests on Sandringham aircraft in Australia and New Zealand, and reduction and correction of flight and cooling performance consequent upon the incident to ZK-AME on 3rd December, 1947, and in conformity with the recommendations of the Commission of Inquiry.

Investigation of aerodrome takeoff and landing performance for Lockheed 10A and Dominie aircraft using cine camera.

(b) *Examination and Approval Section—*

Preparation of revised Airworthiness Requirements.

Preparation of manual covering Register of Approved Firms and Products and complete reorganization of this aspect of divisional responsibility.

Detailed investigation of A.S.C. rating for Tasman Empire Airways, Ltd., and New Zealand National Airways Corporation.

Detailed statistical investigation into maintenance and flight records relating to trans-Tasman flights covering twelve months.

Correlation of New Zealand draft regulations with ICAO and British Commonwealth regulations in relation to personnel licensing.

(c) *Field Survey Section—*

Chief Surveyor completed a four-months period of secondment to Air Registration Board, London.

Preparation of draft of manual covering the Examination and Licensing of Aircraft Maintenance Engineers.

Preparation and analysis of inspectional statistics relating to the reconditioning of civil aircraft and to civil airworthiness standards, and for the issue, renewal, and validation of Airworthiness Certificates. These are as follows :—

Reconditioned to Certificate of Airworthiness standard	..	58
Surveyed for the renewal of Certificate of Airworthiness	..	115
Surveyed for validation of Certificate of Airworthiness	..	18

(d) *Technical Administration Section—*

Notices to Aircraft Owners and Engineers issued, 78.

Preparation and issue of Consolidated Notices to Aircraft Owners and Engineers.

Organizing arrangements and reporting discussions covering numerous major conferences held in Wellington.