

2. AIR SERVICES.

(a) N.Z. PERMANENT AIR FORCE.

The strength of the New Zealand Permanent Air Force is now eight officers and forty-two other ranks, an addition of two officers and twenty-five other ranks over that of last year. These numbers include fifteen apprentices who are undergoing training at Wigram Aerodrome.

A Royal Air Force Officer, Wing-Commander S. Grant Dalton, D.S.O., A.F.C. (R.), was appointed Director of Air Services on the 1st October for a term of two years. This appointment combines the duties of Officer Commanding New Zealand Permanent Air Force, and the Controller of Civil Aviation.

During the year Squadron-Leader T. M. Wilkes, M.C., left the Dominion to act as liaison officer at the Air Ministry, London.

Squadron-Leader (Temporary) J. L. Findlay, M.C., who is undergoing R.A.F. courses in England, passed out of the Central Flying School at Wittering as an A1 instructor, which is the highest qualification obtainable. This officer will carry out courses in parachute-work, Army co-operation, and photography before his return at the end of the year.

Captain A. de T. Nevill, B.Sc., R.N.Z.A., has been transferred to the N.Z.P.A.F., with the rank of Flight-Lieutenant, and appointed Staff Officer to the Director of Air Services.

In January, Flight-Lieutenant Wallingford proceeded on H.M.S. "Dunedin" to Samoa with a D.H. Moth sea-plane equipped with wireless, and carried out valuable reconnaissance work.

Training and refresher courses for officers of the New Zealand Air Force (Territorial) and Aero Club instructors were carried out at Wigram Aerodrome during the period January to March. The flying time has totalled over 700 hours without injury to personnel or serious damage to aircraft.

During the past year the aerial survey of Christchurch City, including eight surrounding counties, with a total area of 40 square miles, on a scale of 5 chains to 1 in., has been completed to the satisfaction of the Christchurch City Council.

An aerial survey of 300 square miles in the Maniototo District, on a scale of 20 chains to 1 in., for the Public Works, Otago Central irrigation scheme, is well under way.

Other smaller surveys have also been undertaken for various Departments, notably a series of oblique photographs of fault-lines in the West Coast earthquake area, which proved of considerable value to the Geological Department.

The fifteen apprentices who were enlisted as cadets in November have made good progress. At the same time, they will not become skilled aircraftsmen for some years, and an adequate proportion of trained fitters and riggers must be maintained.

During the year Royal Air Force titles have been adopted in the New Zealand Air Force.

(b) N.Z. AIR FORCE (TERRITORIAL).

The strength of this unit is ninety officers and nineteen other ranks.

Nine pilot officers, who completed their *ab initio* training last year, carried out a month's course at Wigram Aerodrome in January, during which they received more advanced instruction in aerial gunnery, bombing, and navigation.

In February and March, forty officers attended a series of refresher courses at Wigram. The instruction included aerial gunnery and the use of the *camera obscura* and the camera gun.

During these courses two additional officers were employed to supplement the permanent staff—Flying Officer McGovern acting as armament officer, and Pilot Officer Buckeridge as assistant pilot instructor.

Permission has been obtained to carry out aerial gunnery over Lake Ellesmere at Christchurch, which is near Wigram Aerodrome, and is admirably suited for this purpose.

In the Northern Command, aeroplanes from Hobsonville co-operated with the Territorial Field and Medium Batteries in camp at Rotorua, and a very successful series of "shoots" was carried out with air observation.

(c) AIRCRAFT AND EQUIPMENT.

At Wigram Aerodrome the Department maintains seventeen machines, which are comprised of the following:—

(i) *Service Machines*.—Three Gloster Grebes and six Bristol Fighters (the latter being obsolescent).

(ii) *Training Machines*.—Four Avro 504K and four D.H. Moths.

Of this latter class it is considered that the Avro machines should be disposed of, and replaced by four D.H. Moth aeroplanes.

The aircraft held at Hobsonville sea-plane base consist of two Fairey IIIF machines and one D.H. Moth, all of which may be used either as sea-planes or land-planes.

With regard to the Fairey machines, trouble has been experienced due to the bursting of the petrol-tanks while in flight. A representative of the Fairey Aviation Co. is now at Hobsonville, and the cause of the trouble will be ascertained.

A small two-engined flying-boat has been ordered for use at Hobsonville. This machine will be most useful in training pilots for future employment in the large flying-boats recommended for coastal-reconnaissance work.