

During the period under review eleven new aerodromes have been licensed; and several more are completed and awaiting growth of grass and consolidation of surface before they are placed in service. Development work is in hand on fifteen new grounds, and extensions are under construction on a further twelve existing aerodromes. Surveys are in hand on thirteen proposed sites, and preliminary investigations have been made in many localities all over the country.

Close co-operation has been maintained between this Department, Air Department, and Royal New Zealand Air Force in the design and construction of Air Force Bases in the three selected centres at Christchurch, Ohakea, and Auckland. A very comprehensive programme of work is running well up to the proposed schedule. In this work the Department's operations have been extended to the design, supervision, and construction of buildings, roading, sewerage, water-supplies, and electrical reticulation and installation, as well as handling and giving expert technical advice on all problems that are related to the sound establishment of aviation.

A marked change in construction methods has been made during the year. Where previously all construction was undertaken by slow and laborious hand methods, now every possible phase of the work is undertaken by modern mechanical means, and much of the work is let to private contractors at competitive prices arranged by invitation of public tenders. This method has resulted in a saving to the country on every work undertaken, and in some cases costs have been reduced to as low as a quarter of the probable cost by hand work.

Radio Aids to Air Navigation.—The Aeradio Committee has been set up during the year. This is composed of officers from Public Works Department, Post and Telegraph Department, Air Department, and Meteorological Department, and is giving consideration to every side of the question of radio aids in air navigation. As the result of the work of this Committee radio transmitting and receiving stations are in hand or completed at six strategic points throughout the system of airways, a further six are proposed and will be in hand at an early date. The development of radio aids to blind flying, approaching, and landing, in overseas countries is being watched carefully with the object of early installation of the most efficient equipment suited to New Zealand conditions.

Removal of Obstructions in Aerodrome Localities.—A definite attitude has been taken in connection with obstructions in the neighbourhood of aerodromes which may be a source of danger to aircraft. Many grounds are obstructed to a greater or lesser extent by power and telephone lines, trees, and wireless masts. Legislation has been framed to deal with these, and the Department now has power to remove all obstructions above a predetermined grade all round aerodromes, and to prevent the building of new structures above this grade. A commencement has been made with this work.

Air Pilot and Notice to Airmen.—This guide-book has proved to be a great value to airmen, and it is kept up to date by monthly inspections of each aerodrome by departmental officers. A service has been arranged so that holders of the *Pilot* receive amendments at regular intervals. Careful watch is kept on all aerodromes, and developments of a nature which may be dangerous to aircraft are made the subject of printed notices which are issued to all airmen by the Air Department.

Strip Maps.—Working in conjunction with the Lands and Survey Department, the Department has proceeded with the compilation of these maps. The first is already available, and the rest are in the hands of the Government Printer. A large amount of work has been put into these maps to ensure accuracy of detail and the production of an article which will be of the greatest possible use to airmen.

Details of aerodrome works in hand are as set out in the following list :—

ROYAL NEW ZEALAND AIR FORCE.

Auckland District: Hobsonville Air Base.—During the year the flying-field has been extended and improved. The extended grading operations, covering an area of 90 acres, are almost complete. 87,500 cubic yards of material have been excavated during the period, bringing the total to date on this work up to 217,000 cubic yards.

Excavation and reclamation for additional seaplane-hangar accommodation have been completed. This work involved 27,000 cubic yards of excavation and the construction of a stone breastwork 10·3 chains long, containing 1,330 cubic yards of spalls.

Surface drainage of the flying-field is in hand; 2 miles 69 chains of field tile and scoria drains have been constructed.

Returfing has been completed over 31 acres, making a total to date of 51 acres.

Water-supply and fire-fighting facilities have been improved by the construction of an elevated 20,000-gallon reinforced-concrete water-tower.

Wellington District.—As a result of further investigations, the proposed site for an Air Force Station at Woodbourne, Blenheim, has been abandoned, and a more suitable site has been acquired at Ohakea, near Palmerston North. Preliminary investigations have been carried out, and it is proposed to commence the detailed engineering survey immediately.

An alternative site at Rongotea was also investigated.

Christchurch District: Wigram.—All uneven and unfinished portions of the field have been completed and grassed. Marking circle and identification name have been placed. Roading is in hand. A 25-yard rifle range and machine-gun butts are completed, and five wireless masts have been erected.

The workshops block has been completed.

Two dormitories and a community block have been erected and are accommodating eighty men. A 5,000-gallon fuel installation has been completed.

Water-supply, sewerage, and electrical reticulation are in hand.

Proposed Royal New Zealand Air Force Base: Auckland District.—Preliminary investigations for the establishment of a Royal New Zealand Air Force Base have been carried out at the following localities: Kumeu, 500 acres; Whenuapai, 450 acres; and Mangere Central, 900 acres (comprising two areas). No site has yet been adopted.