

A gratifying feature of the construction was the weight. If the ships had run over the designed weight their usefulness would have been seriously compromised. Fortunately, all ships, including the first of the series, showed a useful lift in excess of the designed load. In some cases it appeared that the structural weights would run over, but in those cases the buoyancy also ran somewhat in excess of the designed figures, leaving a good margin for the useful load.

The ships in service have more than fulfilled all expectations. Designed to cruise for 16 hours, a record on patrol of 40 hours has been made with one of them at Key West. Aside from the short life of the fabric on some of the first ships, which was replaced, the ships have stood up well, and seven are still in use. One Goodrich ship was in continuous service with its original envelope for fifteen months. Another ship made by Goodyear kept one inflation of gas for nine months, and during this time was in the air 743 hours.

The Navy's first attempt to design, build and operate airships has been fraught with difficulties, but has been on the whole very successful. This is to some extent due to the modest size selected for the first attempt, but mainly to the energy and enthusiasm of the people concerned, both in and out of the service. The B class airships, as these 16 were called, were used at home for training and coast patrol. In France our air forces operated French ships, and in England English ships. But though the B ships had no direct War service, they contributed their mite by training our pilots so that they could go abroad and take over immediately the operation of the foreign types. About 170 pilots were so trained in the United States on B ships before

the Armistice. In addition, B ships were used on coast patrol, and flew over 13,600 hours, or about 400,000 miles.

The B class airships are in no way an improvement over contemporary English airships of the same type, and are in some respects less handy and simple, though of greater carrying capacity and endurance. The only noteworthy features are the conditions of their design, manufacture and initial operation. The ships were put into production from plans without waiting for the perfection of an experimental ship.

From the beginning the manufacture of a rubberised fabric for the envelope was recognised as the principal technical difficulty. The rubber companies had considerable experience in proofing fabric, but had never attempted anything to meet the rigid requirements now in effect. The specifications called for a life of six months in service, with high strength value and a low hydrogen permeability. The French specifications were copied exactly as to fabric. It was soon found that if over-cured the permeability was good but the life short, and *vice versa*. The quality of the fine cotton cloth used made trouble, and there were other difficulties which at the time seemed very serious but are now forgotten.

All contractors succeeded in doing what they had undertaken: to produce fabric in accordance with the specifications. The first few envelopes from one contractor perished quickly, but were promptly replaced with fabric coated with a different compound developed from this experience. Since then progress has been continuous, as more information has been obtained from our own experience and research and from abroad.

(To be continued.)

Personals

Death

To Lieut.-Col. JOHN CYRIL PORTE, late R.A.F., who died on October 22, aviation in general, and the flying-boat in particular, owes a great deal. Born at Brandon, Cork, on February 26, 1884, Lieut.-Col. Porte first turned his attention to aviation when serving in the submarine section of the Royal Navy. He experimented with gliders, and learned to fly in 1910, after building a small machine of the Santos-Dumont Demoiselle type. He actually qualified for a pilot's certificate in France in 1911 on a Deperdussin monoplane. He flew this make of machine in the circuit of Britain of 1911, and in the Military Trials of 1912. In 1914 he went to the United States with a view to making a flight across the Atlantic on a flying-boat, built by the Curtiss Co. under his supervision. On the outbreak of War Lieut. Porte returned home and on rejoining the R.N.A.S. set to work to develop the flying-boat for naval purposes. For some time he was in command at the R.N.A.S. station at Hendon, but then went to Felixstowe, where the "Felixstowe Fury" was developed. On the formation of the R.A.F. he became Lieut.-Col. He was an Associate Fellow of the Royal Aeronautical Society.

To be Married

The engagement is announced between Lieut. J. A. V. BODDY, D.L.I. and R.A.F., son of the Rev. and Mrs. A. A. Boddy, All Saints' Vicarage, Sunderland, and MARJORIE D'ARCY, younger daughter of Mr. and Mrs. A. J. EWEN, of Leicester.

The engagement is announced between Mr. M. W. H. EVANS, late Lieut., R.N.A.S., only son of Mr. W. J. Evans, C.B.E., and Mrs. Evans, of Glencourt, Brondesbury Park, and NANCY, elder daughter of Mr. and Mrs. R. J. LINDSELL, of Fairfield Bury, St. Ives, Huntingdonshire.

Items

SIR RICHARD GLAZEBROOK, late director of the N.P.L. at Bushy House, Bushy Park, is to be presented, in December, by the staff with his portrait in oils, the work of his cousin, Mr. H. Glazebrook.

The will of Lieut. the Hon. EDMUND WILLIAM CLAUDE GERARD DE VERE PERY, Viscount GLENTWORTH, 24, eldest son of the Earl of Limerick, R.A.F., formerly of the Warwickshire Yeomanry, of Dromore Castle, Limerick, Ireland, has been proved at £725.

AERODROMES IN THE UNITED KINGDOM

THE Air Ministry announces that the following lists of aerodromes are issued as an addition or in amendment of the lists already published.

LIST B.—Service Stations also available for Civil Use (Amendments).

The following aerodrome has been transferred to List E, and is now published in that list:—

Aerodrome.	Nearest Railway Station.	Nearest Large Town.
Sherburn-in-Elmet.	Sherburn-in-Elmet.	Selby

LIST C.—Aerodromes temporarily retained for Service purposes (Amendments).

The following aerodromes have been transferred to List E, and are now published in that list:—

Aerodrome.	Nearest Railway Station.	Nearest Large Town.
Lake Down.	Amesbury.	Salisbury.
Newhaven (S).	Bishopstone.	Newhaven.
Sedgeford.	Sedgeford.	Hunstanton.
Yatesbury.	Calne.	Marlborough.

Reference: (S) = Seaplane Station.

LIST D.—Aerodromes licenced as suitable for "Avro (504" K) and similar types of Aircraft" only. Except in very few instances accommodation does not exist. The licences have also in the majority of cases been issued for limited periods only.

Aerodrome.	Location	Nearest Town.
Brighouse.	Stoney Lane.	Halifax.
Leamington.	Polo Ground, Radford Road.	Leamington.

LIST E.—Stations no longer in use by the R.A.F.

These stations have been passed to the Government Property Disposal Board. They will be relinquished as soon as the Government property thereon has been disposed of. In many cases the aerodromes are now under cultivation, but it is probable that the sites still form the best emergency landing grounds in the immediate neighbourhood.

Aerodrome.	Station.	Town.
Lake Down..	.. Amesbury Salisbury.
Newhaven (S) Bishopstone Newhaven.
Scapa Flow (S) Thurso (by boat) Kirkwall.
Sedgeford Sedgeford Hunstanton.
Sherburn-in-Elmet	Sherburn-in-Elmet	Selby.
Yatesbury Calne Marlborough.

Reference: (S) = Seaplane Station.