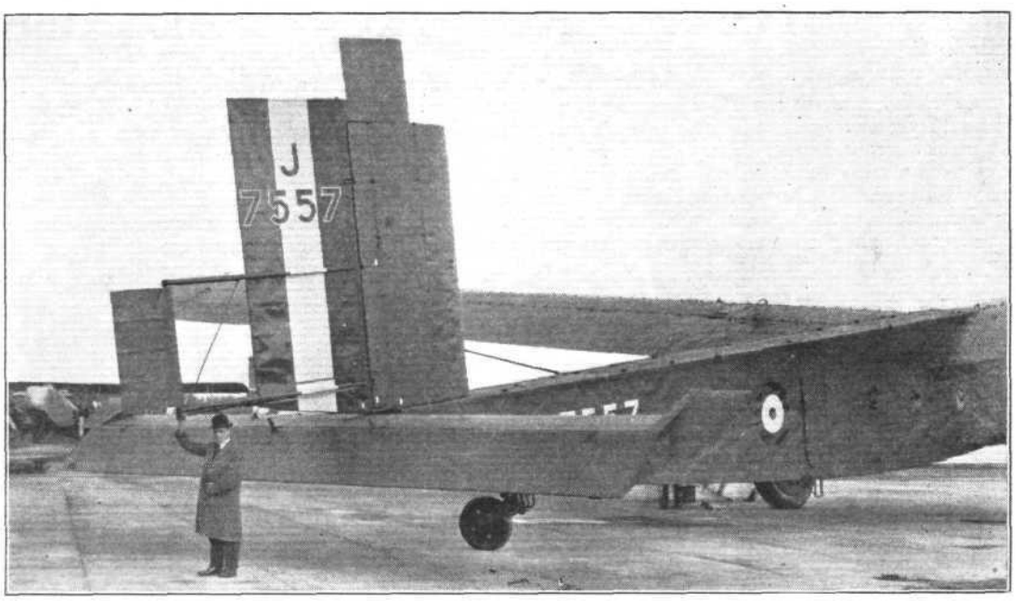

The Beardmore "Inflexible": View of the tail unit. Note the balances and Flettner servo-rudder.

apply. Thus it is claimed that by making refinements in the details of the construction, refinements which become possible in the large machine but were out of the question in the smaller one, sizes far beyond those indicated by the plain $W^{3/2}$ law become practicable. In the Beardmore "Inflexible," a large monoplane of Rohrbach design, constructed at the Dalmuir works of Wm. Beardmore and Co., we have an interesting attempt at "beating the $W^{3/2}$ law."

The Beardmore "Inflexible" is, as the accompanying illustrations show, a monoplane of very large span (about 158 ft.), and equipped with three Rolls-Royce "Condor" engines. The machine is of all-metal construction, including the skin of wings and fuselage, which is of Duralumin. Steel is used for a few highly-stressed fittings, but for the rest the entire machine is built of Duralumin.

The general principles of construction are those adopted by Dr. Rohrbach for a number of years, and include the use of a form of metal "box" to form the wing spars, the sheet-metal covering being laminated and the number of laminations depending upon the stresses at any particular point.

At present no information concerning the performance of the machine is available. The "Inflexible" is known to have been tested in flight at Martlesham, and is reported to have flown very well and to be very controllable. Features of the design visible in the photographs are the large span, the balanced control surfaces, and the Flettner type servo-rudder. The large Dunlop wheels must have presented a pretty problem in design, having to carry a load of something like 7½ tons each.

We had occasion to refer recently to the alleged characteristics of a large machine designed by Herr Dornier, and expressed the view that, with the weight and dimensions given, the machine would be unable to get off. In the case of the Beardmore "Inflexible" it can easily be shown that the induced drag of the wing has been reduced to quite a low figure. The span is approximately 158 ft., and the loaded weight is given as in the neighbourhood of 15 tons. Assuming these figures to be approximately correct, the value of Span ^{2}/W is 0·74, which is very much higher than is usually found in large aeroplanes. In fact, a value of 0·3 is not uncommon. As the power loading is round about 16 lbs./h.p., there is no reason whatever why the "Inflexible" should not have quite a good performance. Its great size has, not unnaturally, given the wags an opportunity to exercise their wit, and the machine has been variously nicknamed the "Incredible," the "Impossible" and the "Brittle." The last name presumably comes from an assumption that anything which is inflexible must be brittle.

It is to be hoped that detail information may soon become available as the machine is a most interesting experiment. Apart from performance figures, it will be particularly interesting to learn what percentage of tare weight to gross weight has been attained. We gather that the useful load is a good deal greater than most people would imagine.

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Aircraft Establishment Retirement

Mr. William Sydney Smith, B.Sc., C.B., O.B.E., the Chief Superintendent of the Royal Aircraft Establishment, Farnborough, which is the main research and experimental establishment of the Air Ministry, formally retired from that post on Sunday, and is succeeded by Mr. A. H. Hall, who before and during the war was largely connected with the supervision of Government ordnance factories.

R.A F. Middle East Dinner

The 7th Annual Middle East Dinner will be held in London on June 7, when it is hoped that a record attendance will be attained. Time and place will be announced at a later date. It is hoped that special efforts will be made by all interested to attend this dinner, and that officers will bring the notification to the attention of all those who have left the Service whose addresses they know. All communications should be addressed to:—Brigadier-General W. B. Caddell, Vickers House, Broadway, Westminster, S.W.1.

An Air Pageant for Bristol

On May 5 the Bristol and Wessex Aeroplane Club is holding an Aerial Pageant at Filton, under the auspices of the Air Ministry and the Royal Aero Club. Apart from Air Races, joy-riding, etc., there will be aerobatics in formation by R.A.F. pilots, selected for their skill and daring, while the Air Ministry will be sending bombing and fighting planes to give demonstrations of the actual conditions of aerial warfare. The Pageant itself will start at 2 p.m., but there will be flying from 11 a.m. onwards, various heats of races and competitions, etc., being run off in the morning. Prices of admission will range from 1*s.* to 15*s.*, while a limited number of private boxes to hold eight persons (price £8 8*s.*) can be booked in advance on application to the Secretary, Bristol and Wessex Aeroplane Club, Filton Aerodrome, Glos.

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A Correction of a Correction

On page 25 of The Aircraft Engineer (technical supplement to Flight) last week, we published a paragraph entitled "An Omission," relating to a radius dimension which had been left out of Fig. 1 of Mr. Pollard's illustrations. Owing to a printer's error, the radius dimension was given as 0·05 in. This should have been 0·5 in. Will readers please make the necessary correction?

The Air Force in Iraq

On March 29 there arrived at Basra a new draft of six Air Force officers and 233 men. They were to relieve those whose overseas service had expired, but at the moment all home leave in Iraq has been cancelled temporarily. This new draft will go up country to desert bases and outposts.

High-speed Flight

A new high-speed flight is to be formed in the R.A.F., and it is reported that Flight-Lieut. Webster, who won the 1927 Schneider Trophy, has been asked whether he wished to join it. It is said that he is keen to do so. Flight-Lieut. Worsley, a member of the last Schneider team with Webster, may also be a member. It seems possible that if a new attempt upon the air speed record is to be made soon the choice of a pilot will inevitably rest between these two officers.