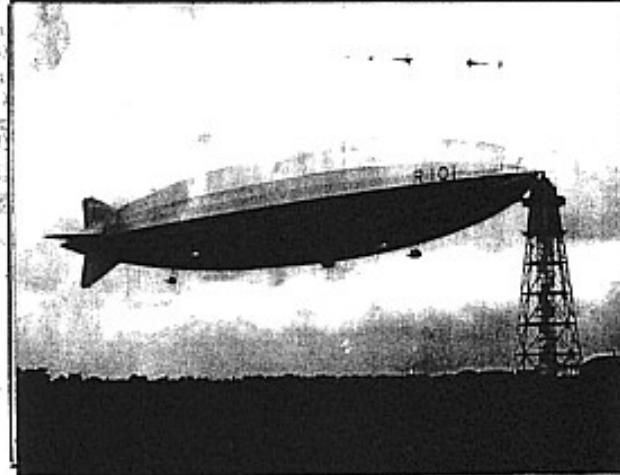




GREAT BRITAIN,

AIR MINISTRY.



CERTIFICATE OF AIRWORTHINESS No. L/A. 6.

(Airships.)

FIRST PART.

FULL NAME, ADDRESS AND NATIONALITY OF OWNER OR OF OWNING COMPANY.

1. Surname of owner (or name of Company): **The Air Council.**

Christian name:

2. Address: **Whitehall, London, S.W.1.**3. Nationality: **British**

NAME OF CONSTRUCTOR.

Air Ministry (Royal Airship Works)

NATIONALITY AND REGISTRATION MARKS.

G-FAAW

DESCRIPTION OF AIRSHIP.

6. Type **R.101.**

Constructor's No.

7. Place of construction and year of completion of airship: **Gardington, 1929.**8. Usual Station: **Royal Airship Works, Gardington, Bedford.**9. Class of Airship **Rigid**

(Non-rigid, semi-rigid or rigid)

Category: **Special**

10. Classification of Airship

Subdivision: **(v) Research or experimental**

11. Maximum Gas Capacity:

5,500,800 cubic feet.

12. Overall length of airship:

777 ft 2½ inches.**777 ft 7 inches**

13. Overall height of airship (with and without landing shock absorber):

131 ft 1 inch

14. Overall width of airship:

131 ft 9 inches.

<p>15. Makes, Types and number of each installed:</p> <p>(a) Make... Tornado Type... Bentley III Number installed... 2 (b) Make... Tornado Type... Bentley III Number installed... 2 (c) Make... Type... Number installed...</p> <p>16. International or special power of the engine or engines :</p> <p>Engines</p> <p>(a) 585 H.P. at... 900 revolutions per minute. (International or special number of revolutions.) (b) 585 H.P. at... 900 revolutions per minute. (International or special number of revolutions.) (c) H.P. at..... revolutions per minute. (International or special number of revolutions.)</p> <p>Hourly consumption at ground level at above-mentioned power (per engine)</p> <p>17. Fuel : (a) 224 lbs. (b) 224 lbs. (c) ... (International or special number of revolutions.)</p> <p>18. Oil : (a) 3.9 lbs. (b) 3.9 lbs. (c) ... (International or special number of revolutions.)</p> <p>Number fitted : (a) Three Types : Two-bladed (wooden) Design No. (a) T.29280/3. (b) Two (c) ... (b) T.29350/1. (c) ... (c) ...</p> <p>19. Airscrews</p> <p>Pitch : (a) 10.4 ft. Diameter : (a) 16' 0" (b) 8.4 ft. (b) 16' 0" (c) ... (c) ...</p> <p>20. Total gross lift..... 169.85 tons. Nature and purity of the gas..... Hydrogen 97%</p> <p>21. Weight of aircraft empty, including complete equipment (with the water in the radiators but without ballast, fuel or oil)..... 113 tons.</p> <p>22. Fuel Tank capacity..... 9408 gallons (25.7 tons fuel oil sp. gr. .85).</p> <p>23. Lubricating oil tank capacity..... 21.5 gallons (.9 tons sp. gr. .935).</p> <p>COMPULSORY CONDITIONS.</p> <p>24. Minimum crew required :</p> <p>1 First Officer 2 Second Officers 2 Helmsmen 10 Engineers.</p> <p>25. Minimum ballast required : Four tons.</p> <p>26. Stowage.</p> <p>The movable loads embarked must be distributed over the entire airship in such a way as not to fatigue the various elements of its structure and not to disturb its balance ; they should be suitably secured on board.</p> <p>27. Nature and specific gross lift of the inflating gas : Hydrogen 71.2 lb. per 1000 cubic feet at 100% purity under standard conditions.</p> <p>28. Minimum gas purity. 80%</p> <p>29. The speed of the engine must not exceed..... 9000 r.p.m. Accept for short periods, it must never exceed _____ r.p.m., and must not be maintained in flight for more than five minutes at a time.</p> <p>30. Smoking in the airship is permitted in the Smoking Room only.</p>

the 2nd October, 1930

The Secretary of State for Air, having regard to the Reports furnished to him, issues the present Certificate of Airworthiness dated..... in respect of the above-mentioned aircraft in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with the Air Navigation Act, 1920, and the Orders in Council in force thereunder.

This Certificate is only valid subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Date.

Signature. *[Signature]* **Deputy Director of Civil Aviation** *[Signature]*

* The total gross lift is the maximum gas capacity of the airship as given in Item 11 multiplied by the lift per unit volume of the gas under standard conditions, namely dry air under a pressure of 760 m.m., mercury at a temperature of 15° Centigrade.

SECOND PART.

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION.

A.—Description and position of instruments and material with which the airship must be equipped for navigation and which must be in perfect working order:

Flying and Navigational Instruments and Equipment to be in accordance with Section VII of the Air Navigation Directions, 1928 (A.N.D.) and equipment for signalling to be in accordance with Section II, Schedule IV of the Air Navigation (Consolidation) Order, 1928.

Position is mainly in the control car.

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Issue Fire Extinguishers:-

- 2½ Type No.2
- 2½ Type No.3
- 2½ Pyrene
- 2½

C.—Equipment essential for rendering first aid in case of accident:

One First Aid Box comprising necessary first aid equipment for a crew of fifty men.

The owner of an aircraft must not cause any aircraft to be started off (1) unless it is fit for flight and (2) unless it is in a condition of safety which is not less than that required by the regulations of the Ministry of Civil Aviation.

Attention is drawn to the requirement of the Air Navigation Directions that the owner of an aircraft, in respect of which a certificate of airworthiness is in force, shall not carry out any modifications which affect the safety of the aircraft without first obtaining the approval of the Secretary of State.