The Future of the Commercial Airship

It is now a matter of common knowledge that the formation of a company is under discussion to exploit the airship for commercial purposes. As at the present moment nothing is settled definitely, it will suffice to mention that several firms who contracted to build rigid airships for the naval authorities are combining with one or two steamship companies to experiment with several trial services during the months of summer. To enable these firms to become possessed of airships it is understood that the Air Ministry are prepared to hand over the following rigid airships in commission or building:

R 32, a wooden ship, constructed on the principles of those manufactured by the Schutte Lanz Company in Germany.

R 33, the sister ship to R 34, which made the successful trans-Atlantic flight last July.

R 80, a ship on the same lines as R 33 and R 34, but of somewhat smaller capacity, and which is nearing completion at Messrs. Vickers' works at Barrow-on-Furness.

R 39, the latest production of English design, some 75,000 cubic feet larger than R 33 and R 34, but which is still a long way from completion.

These ships should afford ample material for very extended experiments, and, in view of the success which has already attended R 34 it is anticipated that before the year is over the airship will be recognised as possessing an immense future for aerial transport. It is not the purpose of this article to attempt to disparage the aeroplane. Both the aeroplane and the airship have each their own particular sphere of usefulness, and it will be the height of folly if the advocates of either attempt to belittle their different merits. It is considered that for commercial purposes the future uses of both types will not conflict.

It appears to be theoretically impossible, unless some totally new design is discovered, to produce an aeroplane on the present methods of construction, which will be capable of undertaking non-stop flights of over 2,000 miles with any commercial load. When this is realised it will be perceived that the crossing of the Atlantic by this form of aircraft is likely to be attended by considerable difficulties.

We know that this crossing can be undertaken by the airship to-morrow, and that the commercial load can be increased by merely extending the size of the airship. With this conceded it appears justifiable to define the fields of activity open to the two types.

The aeroplane undoubtedly possesses the advantage for short journeys, where speed is of paramount importance, and the load to be carried, whether passenger or merchandise, is light.

On the other hand, for long distance voyages, either over the oceans or broken and unpopulated country, where large loads are to be carried, the airship should be found to be more suitable. The advantages possessed over the heavier-than-air machine for flights of this nature are due to the following reasons:

In the case of the airship the percentage of disposable lift increases with the size of the ship and the weight to power ratio decreases.

In the aeroplane the percentage of disposable lift increases but slightly with the size and weight to power ratio increases instead of decreasing.

Comfort for long-distance travel must also be considered. In the airship ample means for taking exercise will be found in the keel of the ship, and the passenger's saloon can be provided away from the noise and vibration of the ship's machinery. It is obvious in the restricted space available on the aeroplane certain discomforts must be experienced.

Finally, safety must be mentioned. The aeroplane is entirely dependent upon its engines for remaining in the air. Should any of the engines break down the machine must make a forced landing, and this at sea will be attended with grave risk. In the case of the