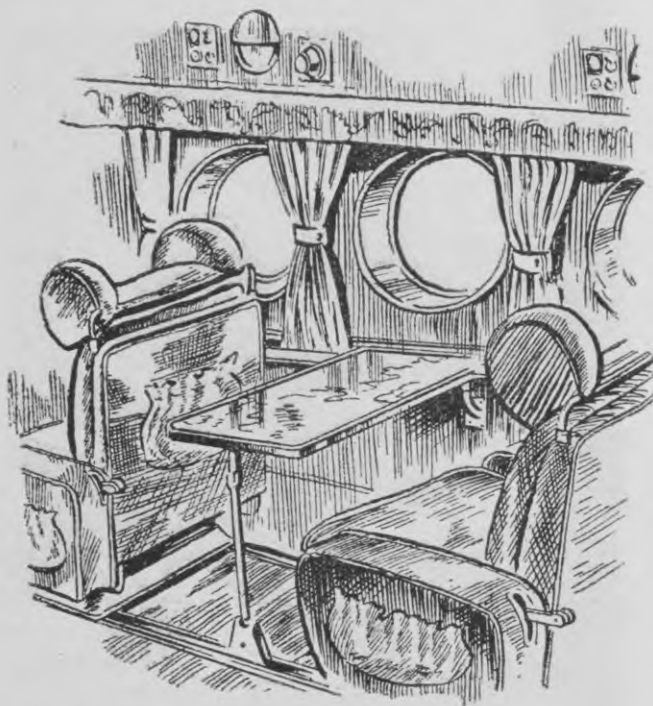


## The Challenge of Air Travel.

*York* is a thirty ton blood-brother to the Lancaster bomber, and is capable of carrying from fifty to fifty-six passengers. It has a range of over 3,000 miles and a cruising speed of 275 mph.



A view of the comfortable interior of the *Avro York*.

A great degree of comfort has been achieved in this liner. The Bristol Company has announced as being on order the *Brabazon I*, a huge liner weighing 100 tons, and capable of flying fifty passengers and two tons of mail across the Atlantic in fifteen hours. Another smaller British plane is the *Tudor*, which has aroused favourable comment in aviation circles in England. The Boeing *Stratoliner*, the Lockheed *Lodestar* and *Constellation*, and the *Liberator Express* are among the leading American passenger planes.

A highly controversial subject is the respective merits of the land-plane and the flying-boat. Before great airports were built to meet the needs of war, the flying-boat had a marked advantage over the land-plane as all that is required for its runway is a length of sheltered water. The provision of suitable landing-gear and

braking apparatus was a problem for the designer of a giant land-plane, whereas the larger the flying-boat the more efficient a craft it became on the water. The water, too, is a never-failing brake. As a result of these advantages the flying-boat was rapidly developed, and today there are many outstanding types in use and in the blue-print stage. Among these are the American *Mars*, the Boeing *Clipper*, the Short Bros'. British flying-boats, and Sikorsky's 100ton ship. Lately, however, with the provision of new landing-fields in various parts of the world to take heavy bombers and transport planes there has been a swing in most quarters towards the land-plane.

How much can a freight plane carry? How will the carriage of cargo by air affect sea transport? Although it is not possible, in view of the recent advances made in aeroplane construction, to predict with accuracy what giant planes will be produced in the next ten years, it is doubtful if the aircraft will seriously challenge the cargo steamer for a long time to come. Certainly the air freighter has been developed considerably in recent years. Such machines as the Bristol freighter, the *Avro York*, and the *Stratoliner* are examples of the latest types of cargo-carrying planes but even they can carry only up to ten and twelve tons, although such flying-boats as the *Mars*, the Boeing *Clipper*, and Short Bros'. *Shetland* can transport considerably more, up to sixty-five tons in the case of the latest version of the *Mars*.

A comparison between a Liberty ship and an average cargo-carrying aircraft gives an idea of the limitations of commercial air freight transport as it exists today. A Liberty ship can be built in twenty days and can carry 10,000 tons of cargo. A crew of about 100 would be required to man it, of whom only about twenty would be highly-skilled. Now take the case of the aircraft. It would require 100