

CORRESPONDENCE

Dear Sir,—In the paper published on “ R.100 ” in the February issue of the Journal by Mr. R. B. Brigham there appear such a number of inaccuracies, both on R.100 and R.101, that it is difficult in a short letter to correct more than a small percentage of the errors. Outstanding examples, however, are quoted below.

On page 184 it is stated that tubular girders in R.100 are made from material varying in gauge from .032in. to .064in. The helical duralumin tubes incorporated in the structure of this ship vary in gauge from .022in. to .056in.; no .064in. tube has yet been constructed by the Airship Guarantee Co., Ltd. On the same page it is stated that the tubes for the longitudinal girders vary in length from 45 to 50ft. The whole of the longitudinal girder tubes in R.100 are 42.37 feet in length except those of Bay O, which are 22.21 feet long.

On page 185 reference is made to a wire mesh “ which encased the ship ” and is “ wrapped round the ship.” No such mesh exists, though it is possible that a reference is here intended to the gasbag mesh wiring.

On page 186 it is stated that “ the elevators and rudders—were operated by four small variable gear boxes. The ratio of the gears varied from 30 to 1 to 300 to 1.” In actual fact, seven gear boxes are used on the two rudders and six on the two elevators. The gear ratio varies from 98 to 1 to 330 to 1.

On page 187 it is stated that the three power cars of R.100 weigh $7\frac{1}{2}$ tons in all. The correct figure is 9.6 tons, the weight of the reverse gear boxes being 750lbs. instead of 300lbs., as stated in the paper. On the same page the description of the R.100 water ballast system is entirely fictitious.

On page 188 it is stated that “ the external fabric covering the ship was of rubberised fabric.” No rubber is incorporated in this pre-doped material. On the same page it is stated that the mooring gear was designed to withstand a gale of 100 miles per hour. This case formed no part of the design conditions for the ship.

It is with considerable regret that I write to point out these errors to the readers of the Journal. Technical literature upon the design of modern rigid airships, however, is so scanty that the publication of this paper may well have misled a number of interested persons both in this country and abroad.

Yours faithfully,

N. S. NORWAY.

The Airship Guarantee Co., Ltd.,
Howden, E. Yorks.

Dear Sir,—With reference to a suggestion in a recent paper that ethylene glycol is a suitable medium for the cooling of aero engines in place of water, may I draw your attention and that of the lecturer to the fact that this substance is highly inflammable and might materially increase the fire risk to the aircraft especially in the case of a crash.

Another suitable liquid is glycol triacetate, which has a boiling point of about 250°, but this substance also suffers from the defect of inflammability.

Yours faithfully,

W. O. MANNING.