

Letters to the Editor

PROPOSALS FOR A NEW AIR NAVIGATION CHART

SIR,

The paper by T. Freer and K. J. Irwin describing their proposals for a new air navigation chart (Vol. IV, No. 1) raises an interesting subject, and perhaps some hopes for getting charts produced to the requirements of the practical navigator. In civil aviation there are two distinct needs, those of the pilot navigator and those of the navigator of long-range aircraft. It should be possible to produce a chart that will combine the qualities of the old plotting chart with those of the topographical map to meet each of these requirements.

An important aspect of a chart, that was not stressed, is its ability to cover a given air route. For example the existing 1:2 M. sheet Basra-Karachi does not include the two alternates for Karachi, i.e. Ahmedabad and Bombay. The chart for the pilot navigator should be, I think, similar to the one proposed, but to a scale of 1 : 1½ M., and all coastlines, towns, rivers, &c., should be shown.

For long-range navigation I fail to see why the Mercator projection should be discarded. It covers satisfactorily all the main air routes, and it is really not too difficult to measure distances at the latitude of working. It is also convenient for use with astronomical navigation. Great circle tracks for the Pacific and Atlantic crossings could be printed faintly on the charts, or, alternatively, separate master copies with the tracks and distances shown could be produced.

Once outside Europe pinpointing is reduced by the lack of towns and the unsuitability of the terrain. The few available features might then be enlarged in small inset diagrams placed where convenient on the chart. Clearly this would be impossible on the European chart for lack of space; but then I visualize the navigator of a long-range aircraft changing over to the pilot-type chart as soon as he has obtained a good fix over Europe, so that he can map read or range fly to, say, London.

From the photograph of the proposed chart reproduced in the *Journal* it looks excellent, especially as compared with the I.C.A.O. chart with the same essential information put on it. The high ground should, I think, be marked as shown in the photograph, rather than in a lighter shade; high ground has taken quite a toll of aircraft. The idea of showing all aerodromes with an indication of their runway length is also good, and indeed it might be carried a step further by giving an idea of the weight restriction, either in lbs. or in aircraft types. A list supplied with the chart might give, for instance, such information as 'Normal: Dakota. Emergency: D.C.4'.

May I here make an appeal for the retention of marine lights as shown on GSGS 4647. I have found them a very useful check at night.

Air India International,
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Yours faithfully,
P. L. NIGHTINGALE.

RADAR USAGE AND SPEED IN FOG

SIR,

Captain Robb's interesting paper on radar usage and speed in fog (Vol. IV, No. 2) shows that he has given much deep thought to the problem. I do feel,