

## CORRESPONDENCE

SIR,

I have read with great interest the article 'Blind Estuary Pilotage' in the January issue of your *Journal* and regret that I was not present at this meeting. The discussion on whether *blind pilotage is possible* today seemed to me to have had a theoretical character. Also the question was not solved but remained in the air. Although I am no longer in a responsible position in the field of navigation, I have a lot to do with radar equipment in Finnish ships and I would like to reply to the basic question of the discussion by answering definitely: *Yes*. There are no estuaries in this country, but navigation of the Finnish archipelago is no easier than that of the estuaries of continental rivers. Our ships have to run between small islands; the routes often pass these islands at a distance of one or two hundred yards and this goes on for many hours at a stretch. Last week I had the interesting experience to go with s.s. *Wellamo* equipped with a Kelvin-Hughes radar, and we met a very dense fog. The visibility of the coastline was about 200 yards, that of lights about 300–400 yards. The ships went at full speed for five hours on radar information only. This means that the ship officers rely entirely on the instrument and must have a perfect local knowledge of the route. Practically four men were engaged in this work. The pilot on the P.P.I., the second pilot, connected with a speaking tube with the first one, beside the helmsman, and the master or the first mate near the engine telegraph. All orders were issued by the first pilot, who passed them to his partner, who from his side gave the order to the helmsman. There was no possibility of losing any time in this responsible work, and it often happened that the ship was running straight for some rock (unseen in fog) and when she approached the danger at a distance of 300 yards, which was fixed by the range ring of the P.P.I., she was turned to a new course. The difficulty of this navigation will be clear to you if you only take a chart of the Finnish coast and study the route between Åbo and Mariehamn on Åland.

The discussion mentioned has some other points of interest, on which I will take the liberty to give my opinion. The suggestion of Lieutenant P. G. Satow (page 59) to put special beacons on shoal water on either side of channels at 500 yards back from the danger can be of great importance even in our waters. There are cases when we have to pass some obstacle at 50 yards and it may happen that the sea clutter in the centre (or some other reason) makes the central point not quite distinct. At the same time, a buoy at 500 yards distance will always be well seen and the distance to it can always be measured with great precision. I do not quite agree with the suggestion of Mr. E. Parker (page 60) concerning special types of leading mark, because this is very complicated and our experience in the Finnish archipelago shows that good natural leading lines or specially built reflectors with a great distance between them are very important in our type of navigation and can be made very accurate. Concerning different remarks of Captain F. R. Goldsmith on page 63, I should confirm that it is very important to have the P.P.I. in a quite closed compartment so that the head pilot should not be disturbed by strong light—natural or of a lamp. Further, it is interesting to note that Finnish pilots on the above-mentioned route work nearly the whole way on the same scale of about  $1\frac{1}{2}$  miles and do not change this even when a bigger scale would perhaps be more suitable in very narrow places. They find that it is important to get used to some scale and to prompt measurement of distances without any special calculations.

Concerning the relations between master and pilot mentioned by Captain H. S. Hewson (page 64), I must say that this question must be reconsidered in a new light. I have always advocated in different articles in the Scandinavian press the idea that the master of the ship should be the sole responsible person and that pilots could only be his advisers. Under the present conditions of radar pilotage the situation changes and there is no possibility of giving advice to the master. The man who works on the P.P.I. must have the right of decision. At the same time the master cannot be put on the P.P.I., because he wants to be free to look after other things beside strict navigation. On the Finnish boats the real responsibility lies upon both pilots, upon whom the master must fully rely. It is necessary to explain that these are not occasional pilots from the pilot station, but two special men who know the whole route from one port to the other, who are living on the ship, paid by the shipowners and belonging practically to the staff of the ship. If the radar could be rebuilt in such a way that the P.P.I. could be placed on an open spot on the bridge between the helmsman and the engine telegraph and need not be in the dark, then the master could do the whole work personally, provided that he knows the route as well as his pilots; this is often not the case.

Referring once more to the remark of Captain Goldsmith (page 68) concerning standardization in calibration ring spacing, we find that this question is exceedingly important and that it can easily be adapted by the different firms building these instruments.

Finally, referring to the remarks of Lieutenant Satow (page 68), I suppose that a shore navigating school with a radar would never give the same results as would a radar-fitted ship which could cruise along the coast making calls at different ports and training pilots under real conditions.

I hope that this information from a corner of the Baltic which is rather little known to most of you will interest you, and remain,

Yours faithfully,

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