

significant relationship with any specific factor. However, the standard error of the individual sightings increased rapidly with deteriorating conditions of sharpness of the horizon. The most experienced observers obtained, in good conditions, a quite remarkable consistency; but all observers recorded anomalous sights as the horizon became indistinct or difficult to observe, often *before* they thought it necessary to record the conditions as poor.

‘Behaviour Patterns in Encounters between Ships’

G. R. Spooner

A FEW hours after reading the above article in the October *Journal* an incident occurred which highlighted the dangers indicated by Captain Kemp. At night, but in clear weather and deep water, and with no navigational hazards, a ship was reported at Green 30, 3 miles, with a C.P.A. of 2 cables to starboard. This was unnecessarily and dangerously close and the officer-of-the-watch (a relatively inexperienced watchkeeper) proposed standing on to 1 mile and then altering 10 degrees to port to open the range.

We were the burdened vessel and I considered this action wrong; too little and too late. An immediate turn to starboard was ordered to leave the other vessel clear to port and to make our intentions clear. Before the officer-of-the-watch could alter, the other vessel was seen to alter to *port*. We therefore held our course and he passed clear up the starboard side. This is one of the situations envisaged in the paper; had we made our turn to starboard in accordance with the Rules, a close-quarters situation would have developed at a very short range—with a greater ambiguity with regard to the subsequent actions in both ships.

The problem appears to be in deciding at what range ships should assume the full responsibilities within Rules 21 and 22. My officer’s assessment was based on radar tracking confirmed by visual bearings. It is not known what sensors were available, or used, in the other vessel; and this will almost invariably be the case. You have no means of knowing how the other vessel has assessed the situation.

Although the Rules are reasonably clear on the action to take they are very vague about when this action should be taken; ‘positive, early action’ will be interpreted differently by every mariner. Small coasters seem to accept miss distances of 2 cables with equanimity and are sufficiently manoeuvrable to take avoiding action at close range, but with larger vessels action must be more positive and taken far sooner, a fact which does not appear to be recognized in many small vessels. A captain of an aircraft carrier has stated that if a vessel approached within 2 miles forward of the beam without making her intentions clear there was very little that the carrier could do to avoid a collision. In the case of VLCCs I imagine that this range could be increased to 3 or even 4 miles.

Nowadays nearly every vessel carries radar (although a distressing number do not operate it in good visibility, relying solely on the judgment of the officer-of-the-watch) and it should therefore be possible to establish an advisory, if not mandatory, range within which ships *must* be bound by the regulations.