Offshore Special Regulation – 4.10.1

Radar Reflectors

A submission from the Deutscher Segler-Verband (GER)

Proposal

A passive radar reflector (that is a Radar Reflector without any power) shall be provided

a) If a radar reflector is octahedral it must have a minimum diagonal measurement of 456mm (18in) or if not octahedral must have a documented RCS (radar cross-section) of not less than 2 sqm. The minimum effective height above water is 4.0m (13ft).

Advice on mounting the Radar Reflector: The minimum effective height above water is 4.0m (13ft) if mounted vertically.

Current Position

As above

Reason

1) Make the mounting position clearly a recommendation or advice. At present people tend to read that the reflectors needs to be carried at all times, because its written that the minimum effective height is 4.0 metres.

2) The modern type Radar reflector is a tube of 50 x 570mm and has a RCS of 2 sqm. To require a RCS of 10 sqm (ten! Square metres) would require a merchant ship type reflector to be carried on board. Modern sailing yachts tend to have a 2 sqm (50 x 570mm, 380g) or a 4 sqm (100 x 590 mm, 880g) type of the “Mobri” tube on board. It’s a struggle to go and buy the old fashioned octahedral type nowadays. On equipment and security checks, sailors are usually not aware that their tube-type reflectors are not o.k. To get a 10 sqm Reflector, sailors would need to buy an “Echomax” type, being 2.5 kg and quite bulky at 245 x 610mm for the 230E. As often found, the tube type reflectors are carried always, while the octahedral type is usually stowed down below.

The requirements on radar reflectors should be changed, at least for Cat 3 & 4 races.