

## Collision

Hundreds of collisions of significant nature occur every year. Most ship collisions occur in restricted visibility. Traffic Separation Scheme and Automatic Radar Plotting Aids (ARPA) have been very effective in reducing this type of collisions.

Danger of collisions generally arises in heavy rainstorms and tropical areas such as the Singapore Strait where not only visibility is poor, but the radar ability to detect even large ships is very much reduced. Echoes of ships, which are not in, but on the other side of the rain area will be diminished by attenuation.

Collisions also occur in clear visibility and are caused by poor crew look out or errors by one or both vessels. The following notes are few recommendations for Masters and officers for prevention of collisions.

- Vessel should maintain a proper lookout by sight and hearing and take all appropriate measures for avoidance of collision.
- Vessel should proceed at safe speed taking into account, visibility, wind, waves, current, traffic, maneuverability, and lighting in dark hours as well as draft in relation to depth.
- Vessel should also take into account radar's limitations, constraints, detections, interferences including number, location and movement(s) of vessel(s) in the vicinity.
- Any course of alteration, or action to avoid a collision shall be large enough to attract the other vessel(s) in the vicinity.
- Crew on watch should be present and vigilant on their posts at night. Collisions are 3 times more likely to occur in darkness than in daylight.
- Crew on watch should maintain good visual lookout at all times. Some small fishing vessels are not sighted until a short range and cannot easily be detected by radar.
- Vessel should not proceed in the wrong direction in Traffic Separation Schemes (TSS).
- Vessel should not cross a traffic lane in TSS since it would increase the chance of collision occurrence at the lane border line.
- Vessel should record in narrow waters & channels evidence of positions taken at frequent intervals on the chart and in the log book. Unfortunately, many officers neglect this task in pilotage waters. It is important for determining liability.
- Master should take into account the direction and strength of the tidal stream and surface current in confined waters. It is also important in the analysis of collisions in confined waters.
- Master should ensure that officers in charge are familiar with the use of ARPA.
- Master should maintain a continuous listening watch on the VHF radio channel appropriate to the VHF sector in which the vessel is located in typhoon areas such as Hong Kong and other similar areas.
- Ship owners are invited to increase the standards of training and certification of crew on board.