

## **Lessons from Recent Spate of Collisions at Sea: *Back to Basics?***

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A lot has been said and written about the series of collisions at sea particularly concerning the USN ships. According to one writer, there were four [major incidents in as many years](#) demanding serious introspection and more importantly, an audit of the procedures and policies adopted at sea for training and watch keeping. The most recent one, which raised many questions was in the Malacca Straits where USS John McCain collided with a merchant vessel the Arnica MC resulting in extensive damage to the warship and the loss of ten sailors. The US Navy was compelled to order an operational [pause](#) for carrying out a review on all the ships of the Seventh Fleet. The top leadership in Washington believed that there were some serious issues with the Seventh Fleet which resulted in the [sacking of the Seventh Fleet Commander](#).

Navies around the world in pursuit of national objectives and international obligations, are charged with posturing, forward presence and flag showing in different parts of the world. This charter is the basis for the existence of the navies, which are created as military maritime instruments of national policy. The challenges of spending many days at sea in unfamiliar waters with hostile weather and visibility conditions, while engaged in out of area operations, are unique to naval forces. It may be worthwhile to list out the challenges that exist today in the maritime domain.

### **Maritime Environment**

The shipping density out there is only increasing by the day. While collisions involving warships and big ships are devastating, collisions with smaller fishing craft are no less distressing as it is invariably the smaller craft that suffer, often with loss of life and property. In busy straits like the Straits of Malacca and Singapore there are Traffic Separation Schemes (TSS) in place and one would have expected that strict compliance

with such schemes would avoid accidents. However, the recent accident in the Malacca Strait clearly illustrates that accidents continue to be caused by human errors and noncompliance with Standard Operating Procedures.

Coming to the specific issue of accidents in the Pacific, whether the recent operational pressure on ships carrying out Freedom of Navigation Operations (FONOPS) in the South China Sea, the heightened tension due to the aggressive stance of North Korea, and changed areas of operation of the Seventh Fleet are causing undue stress on the crew of ships is being debated.

## **Weather and Visibility**

Weather and visibility have always played an important role in accidents and incidents, particularly when due caution is not exercised while navigating through such conditions. Despite the presence of modern tools and aids to navigation, both over reliance and lack of situational awareness have led to close quarter situations that have the potential to result in major collisions. In the case of the collision of the US Navy destroyer, it happened at 5:24 AM, well before day break. According to researchers, the period of darkness, particularly before sunrise, appears to have been a contributing factor for lower levels of alertness by the crew. Even in the case of USS Fitzgerald the accident took place at [02:30 hours when most of the crew excepting the watchkeepers were asleep.](#)

Likewise the collision off Ennore, between the BW Maple and MT Dawn Kancheepuram which resulted in a major oil spill, occurred [at 04:00 am on 28<sup>th</sup> January 2017.](#) The time of occurrence of several major accidents clearly illustrates the critical importance of keeping additional vigil during dawn, dusk and hours of darkness.

## **Bridge Resource Management (BRM)**

A lot of importance is being given to BRM which is akin to Crew Resource Management in the aviation world. However unlike merchantmen, whose primary purpose is the safe and expeditious navigation from point A to point B, warships have the additional responsibility of accomplishing many other missions during any given passage. One of these is to keep the ship's crew trained and prepared at all times for hostile conditions. A common reason given in several collisions is the late response of the Officer of the watch along with the bridge team and a delayed call to the captain of the ship while at a close

quarter situation at sea is still developing. Another common refrain is the multiple demanding tasks undertaken by the crew onboard warships, which drain them both physically and mentally thus leading to lower span of attention on the bridge which in turn leads to incidents and accidents.

## **Technology and Training**

The navies of the world, the merchant fleet and even the fishing fleet are increasingly adopting front end-technology for managing activities in the maritime spectrum. The use of radars, satellites, digital meters, laser range finders, Automatic Identification Systems (AIS) cannot be a substitute for Safe navigation practices or for sound seamanship. Unfortunately, there is a tendency towards overdependence on technology as generally there is a high degree of reliability of technical aids and minimal failures. The fact that the number of accidents have come down since 2007, which year, witnessed [17 incidents](#) as compared to just one in 2016 may have brought about a certain degree of complacency. Technology, however is a double edged weapon which helps, but also distracts from, the primary purpose of safety. The Oversight by the bridge team is of vital importance in order to ensure that the famous 'Eye Ball Mk 2' is constantly in the loop to assess the situation and to take effective control of the situation. This is where there has to be greater stress on training the bridge team of the OOW, lookouts, radar operators and the Machinery Control Room team, together to be able to respond to developing situations. The merchant navy has laid a lot of emphasis on STCW and as a result, the percentage of accidents and incidents in the merchant fleet are fairly under control.

## **Rules of the Road (ROR)**

Finally it bears repeating that the most important instrument is the International regulations for prevention of collision at sea ([COLREGS](#)), promulgated way back in 1972 by the IMO. International Conventions and the Rules of the Road (ROR) or the COLREGS as popularly called have stood the test of time. Though ROR is applicable in the medium of the seas, strangely the reference to 'Roads' in this nomenclature has remained unchanged. No trainee whether on a warship or on a merchant ship, can escape the rigours of learning the ROR. Aids to learning the ROR have gone from visual models with lights and symbols to digital training and have been also included in the ship handling simulators.

In conclusion, it is obvious that navies which could be deployed anywhere in the world, need to prepare for their area specific assignments based inter-alia on based on the expected or prevailing traffic patterns, weather and visibility factors. A multibillion dollar ship that is capable of deploying a wide spectrum of weaponry and capable of defending itself, cannot under any circumstances be seen as compromising its own safety by neglect of essentials of safe passage.

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