In many cases analysed, it is evident that the straightforward navigational techniques of:

- making sure a good lookout is maintained
- complying with a safe speed would have been enough in the majority of cases to have prevented many of the incidents.

FATIGUE

Fatigue is definitely an issue that has an impact on navigational claims. It is difficult to see how many claims are caused solely by fatigue, but the navigational claims identified by the club where fatigue was an issue and those in the public domain make this issue significant.

Bridge procedures should ensure that fatigue is addressed by:

- having a formal fatigue management plan
- having guidelines to address the problem of fatigue on watch.
 For example, calling the master when starting to fall asleep
- · masters referring to fatigue in their standing orders
- always maintaining a bridge lookout AB at all times during the hours of darkness
- training lookouts in their duties.

The now famous pictures of the container ship *Alva Star* running into the cliffs of a Greek island is not an isolated case. Similar incidents happen regularly and are more often than not caused by the watchkeeper falling asleep without having a lookout AB on the bridge. The club is a partner in a consortium of academic institutions and shipping organisations sponsored by the European Commission to carry out a research project named **'Project Horizon'** (www.project-horizon.eu), which is looking into 'watchkeeper fatigue'. The project results will provide useful advice for combatting watchkeeper fatigue.

CASE STUDY

A container ship doing 16 knots was overtaking a handysize bulk carrier doing 13 knots coming out of the Baltic. It was approximately 0500 hours in the morning with good visibility when the overtaking container ship collided into the stern of the bulk carrier. The watchkeeper on the container ship was alone on the bridge and fell asleep, and the bulk carrier did not take action to avoid collision.

There have been a number of documented collisions, including some recorded by the club where the overtaking vessel has just apparently run into the vessel being overtaken. It often appears that the watchkeeper had either just not taken any action for reasons unknown or that the watchkeeper had simply fallen asleep. There can be no other explanation. Fatigue is a major problem in the context of safe navigation. It leads to groundings and collisions, and it should be addressed by owners.

ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM – (ECDIS)

The introduction of ECDIS is going to have a big impact on how ships will be navigated. (Please refer to *Standard Safety ECDIS special edition*, September 2011 link below). If, as it appears, we are seeing navigational incidents increasing where there is moderately sophisticated equipment, it is reasonable to assume that there could be further increases when a sophisticated system such as ECDIS is mandatory on all ships. Presently a low percentage of ship's watchkeeping personnel have been trained in the use of ECDIS. Many authorities have warned of the issues and complexities surrounding the training that is going to be required for watchkeepers on the different types of ECDIS. Companies should heed these warnings and consider the introduction of ECDIS as a significant management of change issue and carry out the risk assessments associated with its introduction and implementation.

There is already evidence that the failure to understand ECDIS systems on board has been the cause of some groundings. www.standard-club.com/docs/StandardSafety ECDIS24August2011.pdf



^ ECDIS – Image courtesy of ECDIS Limited