

SAFETY RECOMMENDATION No: 48/2014

Text of Safety Recommendation:

Ensure that the personnel who are required to board on vessels whilst at anchorage are fit and that during the boarding procedure they would not encounter difficulties due to their physical condition.

No of Safety Investigation Report:

06/2014: Fatal fall into the sea of technician during disembarkation from Oil Tanker ROYAL OAK to launch boat DRAGON TAXIARCHIS
(See the full Report [here.](#))

Safety Recommendation addressed to:

Technician's company

Date of publication:

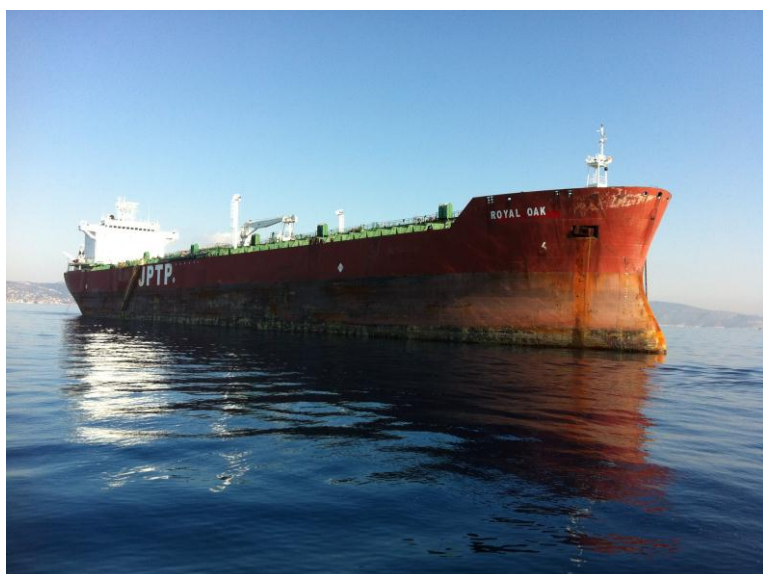
24/01/2017

Comments-Remarks:

Casualty information



Name of vessel: DRAGON TAXIARCHIS
Type of vessel: Passenger launch boat
Year of built: 2010
Flag: Greek



Name of vessel: ROYAL OAK
Type of vessel: Oil Tanker
Year of built: 1999
Flag: Marshal Islands

Course of events

On 10 April 2014 Oil Tanker ROYAL OAK was at Piraeus anchorage where her ownership was altered and she was delivered to new managers. On the same day the vessel got registered in Marshall Islands Registry and a Provisional Certificate of Registry was issued. On 11 April 2014 ROYAL OAK was still remaining at Piraeus anchorage in order to complete the required inspections by her Flag State and her Class for the issuance of the new Statutory and Class Certificates.

On 1400 a shore technician with his assistant boarded the ROYAL OAK in order to set up and inspect the GMDSS equipment. After the technicians concluded their work, at approximately 1650 the launch boat DRAGON TAXIARCHIS approached the vessel, for the embarkation of the two technicians and of one crew member in order to transfer them ashore.

During the embarkation procedure from the vessel's Starboard accommodation ladder located almost amidships, onto the launch's foredeck, one of the two technicians fell overboard. After his fall into the sea the technician, retained for a short time his consciousness and was swimming to remain on the sea surface. At the same time, ROYAL OAK crew and the launch's Skipper along with ROYAL OAK C/O and the technician's assistant who were already on the launch threw liferings with rope to assist the technician to stay on the sea surface and to retrieve him; however, after a short time, the technician lost consciousness. The C/O of ROYAL OAK, dived into the sea from the launch, and caught the technician and held him on the surface. At the same time, ROYAL OAK crew lowered the accommodation ladder to sea level and the technician was placed on the ladder's lower platform. Immediately, C/O started CPR but without any results.

With the assistance of the vessel's crew, the technician was transferred on the launch, which sailed directly for Keratsini port. Throughout the course of the journey towards Keratsini port, ROYAL OAK C/O and the technician's assistant continued the CPR.

At the same time, the incident was reported to Keratsini Port Authority, the vessel's managers and agent requesting an ambulance to transfer the technician to the hospital.

When the launch arrived at Keratsini port the technician was placed in the ambulance, but the ambulance crew declared his death. According to the official postmortem report, his death was caused by myocardial infarction in extension of past coronary heart disease.



The fore embarkation deck of launch boat DRAGON TAXIARCHIS



The Starboard accommodation ladder of M/T ROYAL OAK.

Cause of the accident

During the embarkation procedure the launch boat was pitching due to the prevailing weather conditions causing a wave height of approximately 0,5m. Consequently the embarkation to the launch boat required proper estimation and synchronization of movements both from the launch's skipper and the technician. The skipper of the boat was required to perform the proper maneuvers so as to bring and keep the launch boat at a close distance to the ladder's lower platform, without letting it drift underneath it, in order to avoid a possible impact due to the pitching. At the same time the technician would have to estimate the launch's movement due to pitching so as to jump on the boat's deck at the right moment when it would be at a close distance to the ladder's platform in respect to the horizontal as well as to the vertical axis.

According to data obtained during the interview process, when the launch boat was close to the ladder and after the technician handed over a sonar device to the C/O positioned at the bow of the launch, he attempted to embark, however his movement was slow and not at the right time since it was performed when the boat was moving downwards and away from the ladder's platform.

However the technician attempted The casualty was caused by the ignition of propane gas that had leaked from the storage bottle and accumulated at the lower levels of the Boatswain's Store. The ignition source could not be identified; however spark from unprotected lighting equipment found at the area or spark caused by static electricity or friction/impact of metal tools or other metallic equipment were highlighted as possible sources.

Main conclusions / identified factors

- The sea area where ROYAL OAK was anchored was out of the permitted voyage areas of DRAGON TAXIARCHIS, as provided by the valid Certificate of General Inspection
- The technician was overweight and his body feature affected his walk and retarded his movements during embarkation / disembarkation on vessels while at anchorage.
- Upon contact with water, blood pressure is increased to such an extent that it can cause cardiac arrest or stroke in susceptible organisms due to vascular contraction caused by the low temperature, in combination with increased heart rate caused by anxiety or panic situation, and the hydrostatic pressure of water.
- The managing company's guidelines for safe disembarkation / embarkation whilst at anchorage were not fully implemented. However, on the day of the casualty, ROYAL OAK was under necessary surveys for the issuance of Statutory Certificates and did not carry a valid Safety Management Certificate. Consequently there was no obligation to implement the respective SMSM guidelines concerning the safe embarkation / disembarkation at anchorage.
- A second crew member on the launch boat could contribute to avoid unsafe situations during boarding with rippled sea causing rolling and pitching or during emergency response actions.
- The location of the launch boat's liferings provided easy and quick use, however it contributed to a short

delay as it was at a distance from the fore embarkation deck.

- On passenger launch boats the risk of a person falling overboard increases during embarkation / disembarkation, especially when performed at anchorages where the sea area is open and the weather conditions are heavier in respect to weather conditions in ports.
Placing liferings as close as possible to the embarkation / disembarkation points could minimize the time required to throw them and enhance the effectiveness of emergency response to a “man overboard” incident.
- The use of Personal Floating Device or other buoyancy equipment during embarkation / disembarkation procedure on vessels by launch boats is not required by the existing regulatory framework, however, it is considered as an key factor for an effective emergency response of “man overboard” incident which may occur during said procedure.