



SAFETY RECOMMENDATION No: 36/2015

Text of Safety Recommendation:

Modification of the fire sensors' network in order smoke detectors to be installed inside the spaces covered by the suspended ceiling.

No of Safety Investigation Report:

05/2015: Fire onboard HSC Ro-Ro Passenger Ship HIGH SPEED 5, Flag Greece, IMO 9329095 and death of her Chief Electrician on 23rd March 2015 at Keratsini, Greece.

(See the full Report [here.](#))

Safety Recommendation addressed to:

The Owners / Managers of the ship

Date of publication:

11/11/2016

Comments-Remarks:

INFORMATION OF ACCIDENT

Type of vessel: HSC Ro-Ro Passenger Ship

Year of built: 2004

Fire onboard HSC Ro-Ro Passenger Ship HIGH SPEED 5, Flag Greece, IMO 9329095 and death of her Chief Electrician on 23rd March 2015 at Keratsini, Greece.

Course of events

On 23rd March 2015, the HSC Ro-Ro Passenger Ship "HIGH SPEED 5", was moored alongside at DEI dock, Keratsini, Greece for works including her annual maintenance and a conversion performed by external teams at several ship's compartments.

At approximately 13:20 a fire broke out inside the passengers salon spaces named "Business" on Upper Deck. At the time of the accident there were 27 external teams' members and 16 crew members onboard. The external teams evacuated the ship from her stbd aft part through the embarkation ladder whereas her crew remained onboard, to confront the emergency using portable extinguishers. However the fire could not be extinguished and they evacuated the ship shortly after, following her Master's order via the Public Address system.

In the meantime, 13 private tugboats as well as 02 Firefighting boats were deployed from the ship's port side

and Fire Squad teams were deployed at the dock, from the stbd side, whereas the local Coast Guard Authority members blocked the access to the accident area.



Figure 1: The deployment of the firefighting boats was imminent.

After counting the crew at the dock, the ship's Chief Electrician was missing and a search was commenced. His body was found semi-burnt, from the Fire Squad members, after the extinguishment of the fire, inside the passengers' salon, at the fore stbd part of the Upper Deck.

Consequences (to individuals, environment , property)

Death of the ship's Chief Electrician.

HIGHSPEED 5 sustained major damages, since all her accommodation compartments above the Upper Deck were completely destroyed. Her navigation bridge and all equipment were also destroyed.



Figures 2 & 3: General side views of the ship showing her extended damage.

Probable cause

1. The fire may have been caused due to the high temperature of the "Business" salon's top plating where welding works were being performed and the combustion of the adjacent insulation placed below it, which had not been removed, as would be appropriate.
2. The Master and the competent crew of HIGHSPEED 5 had not been informed regarding the execution of hot works above the "Business" salon on the day of the accident.
3. The crew's training regarding the procedure of entering an enclosed space had not been sufficient.
4. The Contractor of the conversion had not activated procedures regarding the application of safety measures according to the Safety Technician's recommendations.
5. The fire detection system was not activated due to the fact that there were no sensors inside the space between the top plating and the ceiling of the passengers' salon, where the fire was initially developed.

Conclusions

1. Actions should be taken by the ship's Managing Company to include in its Safety Management System procedures such as:
 - the use of portable VHF devices by key personnel, when the ship is not in operation,
 - the appointment of substitute crew members for emergency procedures when the ship is not in operation,
 - the appointment of a person designated exclusively for the supervision of the works regarding the safety procedures,
 - the provision of a person's constant presence in the navigation bridge for the supervision of the fire detection and fire extinguishing systems.
2. Actions should be taken by the ship's Managing Company to examine the possibility of installing fire detectors inside the spaces covered by the accommodation spaces' ceilings.
3. Actions should be taken by the competent Hellenic Maritime Administration's Authorities regarding the assessment of:
 - the need of including the spaces covered by ceilings to those provided to be covered by fire detection sensors by the HSC Code,
 - the need of proposing the amendment of the regulations of the HSC Code regarding the fire protecting divisions covering the assembly stations, aiming to protect a part of the assembly stations in the event of a fire,
 - the need of amending the legal framework covering the execution of works onboard ships, aiming to provide the appointment of safety teams with the exclusive duties of supervising the works regarding the safety procedures.
4. Actions should be taken by the Port Authority in view of providing more than one evacuation exits towards the pier for ships conducting conversion works and in view of providing a "Fire Safety Team" with the duty of conducting daily inspections on vessels for the prevention of fire.