

SAFE MANAGEMENT OF THE SHIPS – AVOIDANCE AUTOMATION FAILURE RELATED ACCIDENTS

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Abstract

The ships are the hugest vehicles created by the human being ever. Any failure in the propulsion, communication, command control or cargo handling systems may cause serious even fatal accidents. Nowadays the ship's management systems are approximately fully automated any automation failure may cause unacceptable accidents with damage to human life, environment, ship, port facilities and goods transported.

The automated systems are very capable and facilitates ship management functions and comparably better than human being but do not have common sense. This situation needs uninterrupted control of the automation systems by human element. The automated systems are the production of the high technology and the users should be aware of the working principals and specification of these systems in order to be able to avoid any accidents in case of failure in the systems.

The automation system failures are significantly important for the merchant shipping sailing in the condense traffic conditions as well as for naval ships. Any failure on navigation and/or command control systems may cause total loss of the ship.

This study gives a background to existing studies for the development of the accident avoidance systems and calls other parties for international cooperation to achieve a common solution to overcome such problems. In the light of the existing studies, some findings for hint points for solutions are also discussed.

Key Words: *Safe Management of the Ships, Automation Failures, Ship Automation, Human Element versus Automation*

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