

# Abstract

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## THE IMPACT OF FATIGUE IN MARITIME ACCIDENTS

1. **Introduction:** Maritime transport is a vital part of the world's economy, and the integrity of the maritime transport system is essential for the safety and security of the world. One of the most serious problems affecting the integrity of the maritime transport system is fatigue and exhaustion. Fatigue and exhaustion are common among crew members (officers and sailors) and can lead to errors and accidents. The purpose of this research is to investigate the impact of fatigue and exhaustion on maritime accidents and to identify the factors that contribute to fatigue and exhaustion. The research will focus on the most serious problems affecting the integrity of the maritime transport system generally, a problem of fatigue and exhaustion which affect the crew members (officers and sailors), the fatigue and exhaustion happen in different ways on the ships and one of the factors that affect the efficiency of sailors on the board of all ships, and one of the reasons that lead to trivial and fatal mistakes which cause accidents and injuries on the ships, and the fatigue is a major problem in accidents with a variety of other reasons, which require clear solutions and a comprehensive approach, not on one hand, organization people, but be is integrated in the education and training, and a mechanism to activate and monitor the implementation of legislation on working and rest hours, and serious attention to the guidelines and provide proof and effective measures to reduce fatigue and therefore maritime accidents. Indeed, the facts which will be discussed in the following chapters of this research reveals that fatigue is a common problem among sailors that is contributing factor which is very important in personal injury and marine accidents such as collision and grounding incidents and others, in spite of the international regulations issued by IMO, ILO and other organizations regarding safety at sea the ship owner looking to achieve profit as much as possible by reducing ship running cost of operation of ships, therefore reducing number of crew is one vital issue to reduce, and thus additional burdens on the limited number of crew members and thus fatigue and exhaustion are the following is the result of accidents and injuries. We base this research on the numbers of the various maritime accidents and reach of the real reasons behind these accidents through the investigations into these accidents and the results were reported, and through these results and reports found that the human error was the largest share to be a contributing factor to the

Abstract: This research studies the most serious problems effecting over all the integrity of the maritime transport system generally, a problem of fatigue and exhaustion which affect the crew members (officers and sailors), the fatigue and exhaustion happen in different ways on the ships and one of the factors that affect the efficiency of sailors on the board of all ships, and one of the reasons that lead to trivial and fatal mistakes which cause accidents and injuries on the ships, and the fatigue is a major problem in accidents with a variety of other reasons, which require clear solutions and a comprehensive approach, not on one hand, organization people, but be is integrated in the education and training, and a mechanism to activate and monitor the implementation of legislation on working and rest hours, and serious attention to the guidelines and provide proof and effective measures to reduce fatigue and therefore maritime accidents. Indeed, the facts which will be discussed in the following chapters of this research reveals that fatigue is a common problem among sailors that is contributing factor which is very important in personal injury and marine accidents such as collision and grounding incidents and others, in spite of the international regulations issued by IMO, ILO and other organizations regarding safety at sea the ship owner looking to achieve profit as much as possible by reducing ship running cost of operation of ships, therefore reducing number of crew is one vital issue to reduce, and thus additional burdens on the limited number of crew members and thus fatigue and exhaustion are the following is the result of accidents and injuries. We base this research on the numbers of the various maritime accidents and reach of the real reasons behind these accidents through the investigations into these accidents and the results were reported, and through these results and reports found that the human error was the largest share to be a contributing factor to the

cause of these accidents, which the statistics found that contributes to a rate ranging from 75% to 96% of these accidents, also found through studies conducted in this regard that the most important human factors contribute to accidents is the problem of fatigue and exhaustion, Although it did not receive enough attention from international organizations and legislation powerful and necessary follow-up to reduce it, which in turn affects the safety of maritime transport of all, this can be fatigue and exhaustion due to either a lack of training (incompetence) inadequate crew member on ships . by looking at the number of maritime accidents and disasters that fatigue is a contributing factor, it needs to be mutual interest between international bodies and organizations along with the owners and operators of vessels, as well as all relevant parties to reduce the problem of fatigue and exhaustion, and try to propose solutions have an effective impact on reducing of fatigue and exhaustion, which affects the sailors and this we will discuss during this research.