Autonomous and Remotely-Operated Ship Safety Stats and Facts



FACTS

Sources of injuries caused by autonomous and remotely-operated ships.

1. Malfunction or failure in the equipment or systems of an autonomous or remotely-operated ship, can lead to accidents and injuries.
2. Collision avoidance systems, collisions and groundings can occur, leading to injuries due to errors in sensor data interpretation, unexpected vessel behavior, or misjudgment in navigation decisions.
3. There is a risk of slips, trips, and falls due to uneven surfaces, unexpected movements, inadequate lighting, or human error.
4. Autonomous and remotely-operated ships are involved in cargo handling operations which can result in accidents, falls, or being struck by moving objects.
5. Human error in monitoring, control, or decision-making can result in accidents and injuries.
6. Injuries can occur due to the need for rapid evacuation, exposure to hazardous substances, or difficulties in accessing emergency equipment.
7. If a hacker gains unauthorized control over an autonomous or remotely-operated ship, they may cause intentional damage, jeopardizing the safety of the vessel.
8. Injuries can also occur during onshore operations involving autonomous and remotely-operated ships. Maintenance, repair, or servicing activities can pose risks if proper safety protocols and precautions are not followed.

STATS

- It is a widely adopted view that a significant part of all accidents at sea involve a human erroneous action. Numbers range from approximately 60% to 90%.
- A total of 3306 lives have been lost in the period 2018. The data shows that 83% of the fatalities are associated with ships that were lost due to the accident. The only exceptions are fire/explosion accidents, for which only 42% of the fatalities are associated with ships that were lost due to the accident.

- EMSA recorded 696 fatalities of which 388 are fatalities by shipping accidents and 308 are fatalities by deviation. It can be expected that the fatalities in the IHS database only account for roughly 55% of fatalities since the fatalities by deviation are excluded.
- According to data collected by MaritimeExecutive.com, there were 24 bulk cargo related fatalities in 2018. To put this number in perspective, there were 125 fatalities reported in 2018, meaning that 20 % of fatalities occurred in 2018 alone.