E-LEARNING SAFTEY PLAN FOR OIL TANKER SHIPS AS LEARNING MATERIAL

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ABSTRACT

The high risk of fire on tanker ships due to the flammable nature of their cargo serves as the background of this research. This elevated risk makes the implementation of a safety plan in accordance with international regulations highly important. The objective of this descriptive quantitative study is to describe the structure and main components of the fire-fighting system on tanker ships, assess its compliance with SOLAS, and develop animation-based e-learning media to improve the understanding of students and maritime practitioners. A case study was conducted on a self-designed tanker ship using technical calculations (number of hydrants, smoke detector coverage, foam system capacity). The findings indicate that the simulated design of the fire-fighting system meets international criteria for protecting high-risk areas, evacuation protocols, and the strategic placement of equipment. Compared to traditional approaches, the use of animation-based elearning successfully enhanced conceptual understanding and user awareness of safety. In conclusion, combining interactive learning materials with regulationbased technical planning can be an effective strategy to improve the operational safety of tanker ships and expand access to maritime safety training.

Key Word: Safety Plan, Fire Fighting, Tanker Ships, SOLAS, E-Learning, Plan Ships.