

Safety of Dynamic Positioning Operations on MODUs

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Abstract

Safety of dynamic positioning operation on mobile offshore drilling units is characterized by two key parameters, namely, the resistance to loss of position, and the robustness of recovery. Both parameters should be evaluated in order to identify effective ways to further improve the safety. The failure modes, applicable frequencies, and probabilistic modeling for both loss of position and recovery are discussed in this paper. Influencing factors to the resistance and robustness parameters are identified respectively. The results contribute to the further development of the safety assessment methodology for DP operation on drilling units. Areas that need further development of modeling approach and analyses are pointed out.

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