Design Aspects of Future Oil Tankers

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ABSTRACT

The aim of this paper is to address the main consequences of the U.S. OPA 90 and recent 1992 amendments to the MARPOL 73/78 on design of oil tankers. First, the statistics related to marine pollution by tankers are reviewed to make clear of the current situation of accidents and oil spills. Second, new structural design concepts to prevent oil outflow are discussed, and evaluation methods and comparative studies of structural designs against accidents are reviewed. Finally, general consequences of above-mentioned new regulations on the design of future oil tankers are examined.