

## **A PROPOSED APPROACH TO ENHANCE SAFETY LEVELS OF CRANE HANDLING ONBOARD SUPPLY VESSELS**

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### **ABSTRACT**

It is very common to see an Offshore Supply Vessel (OSV) operating along-side different types of fixed and floating platforms. These OSVs operations include transfer of personnel, equipment and cargo to and from platforms. Cranes are one of the main tools used in handling cargo and equipment between supply vessels and offshore installations. Crane handling operations between supply vessels and platforms are among the operations that need very good communication between various parties including: crane operators, supply vessel crew and platform operators. Catastrophic results; such as, hoisting failure, load failure or the crane itself collapsing could be the outcome of many circumstances going wrong at any moment during crane operations. The number of accidents recently monitored during crane operations has increased vigorously; for example, according to Health and Safety Executives (HSE), 519 lifting incidents took place in the period between 1991 to 1997; while 1439 incidents occurred in the period 1997 to 2009, according to Sparrows (Sparrows Offshore Services Ltd, on behalf of the Health and Safety Executive Offshore Safety Division) database. Therefore, it has become important to analyze more deeply the root causes behind such incidents. This paper illustrates the different operations performed by the various forms of crane handling between offshore supply vessels and installations. However, the paper focuses on the operations carried out onboard supply vessels as well as navigational aspects by applying the frequency analysis findings. The final part of the paper presents some recommendations on how to raise safety standards, prevent the re-occurrence of problems and overcome them.

**KEYWORDS:** Crane, Offshore Supply Vessel (OSV), Safety, Rigger, Human Error, Training