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Abstract:

Title - 'Two into Three does Go' - Lessons Learned During Upgrade Of DP Class 2 Vessels To DP Class 3.

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The last newbuilding cycle was prolific with many of the major construction vessels and MODUs being built to meet IMO DP Class 3 requirements, (at construction stage the cost differential with DP Class 2 is lower).

As such, the market for certain vessel types is saturated with high specification DP class 3 vessels. End user charterers have much greater choice and can afford to specify the highest DP equipment class without significant cost penalty.

DP equipment class has proven to be a relatively poor way to differentiate DP vessels on the basis of their station keeping integrity. This is because the effects of technical failures common to both classes dominates the risk profile. A well-designed DP class 2 vessel can be more robust, resilient and reliable than a DP class 3 vessel. However, this fact is not universally understood outside the DP community and is not widely known by organisations responsible for vessel procurement and logistics.

Unfortunately, those vessel owners who chose to build high specification DP class 2 vessels are now at a disadvantage in terms of their ability to market their vessels and are faced with the prospect of accepting much lower day-rates, scrapping the vessels or upgrading them to DP class 3. None of these solutions is particularly appealing but a cost-effective upgrade does at least offer a path to increased marketability and utilisation.

This paper will discuss experience of:

- The challenges associated with cost-effectively converting large DP class 2 vessels to meet the requirements of DP class 3.
- The process of achieving DP class 3 notation with closed-busties to maximise the return on investment.

Success is all too often defined as achievement of a DP class 3 notation, but this alone does not guarantee a marketable vessel particularly if the upgrade process cripples the vessel's post failure DP capability and thus the environmental envelop in which it can work (Many poor-quality upgrades can have this effect).

The paper will also discuss the influence that various stakeholder groups can exert and the roles and responsibilities that stakeholders have in achieving a successful outcome. These stakeholders include but are not limited to:

- Vessel owner's project team
- Class
- FMEA provider
- Equipment vendors