RADius, a New Contribution to Demanding Close-up DP Operations

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Abstract

Kongsberg Seatex AS has developed a new relative positioning system, RADius, for short-range positioning applications, which currently is in use in the North Sea. The system is designed for “close by” DP operations where the need for robust and reliable performance is critical. Statistics shows an increasing number of contacts or collisions between vessels and installations offshore. As a consequence several operators requires DP class 2 vessels for operations within safety zones of their installations.

Further IMO guidelines require minimum three reference systems for class 2 and 3 DP vessels. RADius is developed to meet these requirements and is a contribution to increase the safety for these kinds of operations. RADius utilizes FM-CW (Frequency Modulated – Continuous Wave) technology to measure range and bearing to one or several transponders located on target vessel or installation. The system is fully solid state without any moving parts and operates in all weather conditions. Relevant operational scenarios for use of the system are also described.

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