

Title: Who Said That DP Does Not Rhyme with Cybersecurity?

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Abstract

The maritime industry is being transformed by the integration of the digital world with machinery, turning traditional assets into interconnected devices generating data. A lot of critical equipment on board vessels are “connected”, including advanced control systems which most likely were not meant to be connected to the internet in the first place. There are a few documented cases (and most likely a lot of undocumented cases) of cyber-attacks over the past five years. So how do you protect these expensive and often strategic assets against malware and cyber threats, while maintaining their integrity and reliability?

Taking the DP system as a case study, this paper first explores different types of cyber threats: from a position reference system being spoofed to a USB memory stick infecting a DP computer, we will review practical cases of cyber threats to the DP system, and review countermeasures and best practices when it comes to cybersecurity.

This paper is intended to be used as an introduction to cybersecurity and DP and aims at increasing awareness among the DP community of the importance of cybersecurity.