Industry and cyber risk management onboard ships

Mr. Aron Sorenson

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Aron Sorensen holds the position as Head of the Maritime Technology and Regulation and is responsible for BIMCO's technical affairs. He manages BIMCO's role in marine, operational and related regulatory matters at a number of international organizations such as IMO, ISO, IACS and IHO. His tasks include negotiating, monitoring and disseminating relevant conventions and assisting in the development of international standards, regional/national requirements, and assessing the impact on BIMCO members.
He led the development of the industry Guidelines on Cyber Security Onboard Ships, where the second edition was published in 2017. A new edition will be published at the end of 2018. He was also project leader in the development of BIMCO/CIRM industry guidelines on software maintenance, which was published in January 2018. Following a career at sea as a deck officer, Aron Sorensen taught apprentice deck officers at the nautical institutes in Denmark. After some years of teaching, he joined the Danish Maritime Authority dealing with navigation safety in Danish waters. In 2008, he joined BIMCO, which is a shipping association providing a wide range of services to its global membership of stakeholders, who have vested interests in the shipping industry, including shipowners, operators, managers, brokers and agents.

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Abstract

BIMCO began to focus on cyber security in 2013. At the International Maritime Organization's Maritime Safety Committee 94 (MSC 94) meeting, a submission from Canada and the United States recommended the development of voluntary guidelines on cyber-security practices "to protect and enhance the resiliency of cyber-systems, supporting the operations of ports, vessels, marine facilities and other elements of the maritime transport system". In response, BIMCO was able to announce that such work, undertaken with its industry partners for the benefit of shipowners and ships' crews, was well under way. Accordingly, at MSC 95, "Industry guidelines on cyber-security on board ships" was submitted as a detailed paper by BIMCO, the International Chamber of Shipping (ICS), INTERTANKO and INTERCARGO. Since then Cruise Lines International Association (CLIA), International Union of Marine Insurance (IUMI) InterManager and World Shipping Council (WSC) have also joined the group to update the industry guidelines and finalize version three before the end of the year.

Based on penetration testing carried out by BIMCO members, it was evident that there are several vulnerabilities on ships, some of which were potentially serious. Recent events such as the attack on Maersk in 2017 showed how damaging cyber threats can be to the shipping industry. The industry guidelines provide a risk-based approach to cyber security on board ships thereby enabling companies to manage the cyber risk. The presentation will also address other ongoing initiatives such as ensuring new ships are built in a cyber resilient way and are equipped with cyber robust systems.