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# Technical Talk

Co-Organised by

The Joint Branch of the RINA and IMarEST (Singapore)

The Society of Naval Architects and Marine Engineers Singapore

Singapore Maritime Academy

## Maritime Cybersecurity



By

**Dr Michael Thurlbeck LLM MSc CMgr FCMI FRINA**  
**Stapleton International Pte – Management Consultants**

**Date :** 20<sup>th</sup> Feb 2020, Thursday.

**Time :** 6:30 pm to 7:00 pm Registration & Refreshment  
The talk begins at 7:00 pm and ends at 8:30 pm

**Venue:** LT18A, Singapore Polytechnic  
500 Dover Rd, 139651

To register your attendance, please click the web-link as follows,



<https://www.eventbrite.sg/e/maritime-cybersecurity-tickets-91094344637>



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## Synopsis

Modern ships and seafarers are prime targets for cyber-attacks. Bridge systems such as GPS, ECDIS, radar and autopilot systems can be compromised by outsiders which poses a significant safety risk. And it is not only vessel navigation that can be undermined, but control systems for ballast water, vessel stability, engines and propulsion can all be targeted by increasingly sophisticated cybercriminals. With the introduction of autonomous vessels in the near future, the risks will certainly increase.

The threat is omnipresent, as the infrastructure that supports shipping, such as ports and shore-based businesses being just as vulnerable as ships. As the frequency and complexity of these attacks are set to rise, organisations will have to build stronger defences, chiefly by training their employees and equipping them with the knowledge to keep the business safe. It is crucial for all employees - no matter how big or small the company - to understand the latest threats, the extent of the damage they could do, and the best way to prevent or deal with a breach of security.

There has been a marked shift in the targets of Cyber Attacks moving from corporate systems to individuals. Studies by IBM identify that 95% of breaches were due to human error. How secure is your information? Do you understand what are the greatest risks? What are the simple measures that could prevent successful attacks on individuals leading to major disruption within your organisations?

This technical talk will outline examples of Cyber Attacks within the Maritime Sector and how they could be avoided in the future. It will address the role of individuals and business to ensure compliance with the seventh edition of the TMSA Vessel inspection Questionnaire (VIQ7) from the Ship Inspection Report Programme (SIRE), and IMO's Maritime Safety Committee Regulation MSC 428 (98) Cyber Risk Management, the ISM Code requirements which will become effective in January 2021.



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## About the Speaker

Dr Michael Thurlbeck, Chief Executive with Stapleton International, has over 50 years' experience within the Maritime and Oil & Gas sectors. Following his groundbreaking work in the development and delivery of major Oil and Gas Alliance contracts, he was the recipient of several awards and has been acknowledged internationally for his contribution to the sector.

Over the past four years, Dr Michael Thurlbeck has led a diverse team comprising representatives of shipowners, academia, maritime institutes, UK government, classification societies and global satellite communications providers, in the development of Maritime Cyber Safety Awareness Courses. He is a founding member and Chair (designate) of the IMarEST Cyber Security Special interest group which meets quarterly to review, disseminate, collate and discuss current threats and incidents in Maritime Cyber Security.

In addition to these developments, whilst authoring papers and speaking at conferences on the issue, he advocates the drive for necessary culture change. Without such actions, safety at sea is continually being compromised.

Dr Michael Thurlbeck is a Chartered Fellow of the Chartered Management Institute and a Fellow of the Royal Institution of Naval Architects. He has a Master of Science in Quality Management and a Doctorate in Business Management with the University of Sunderland, where Dr Michael Thurlbeck is the Visiting Fellow in Enterprise within the Faculty of Business and Law. He also has a Master of Laws from De Montfort University, Leicester.



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## Location Map



**SINGAPORE POLYTECHNIC** | **SP** | 500 Dover Road, Singapore 139651 | [www.sp.edu.sg](http://www.sp.edu.sg) |

***Nearest MRT Station: Dover (Green Line).  
Bus 14, 74, 105, 106, 147, 166, 185.  
Closest Bus Stops in Commonwealth Ave W: Dover Stn.***

***All members are welcome, and admission is free, but early registration is necessary.  
No filming or walk-in guest is allowed for this event.  
Dress code: business casual.  
Photos taken by official photographers may be used by the organizers in their published material.***