



# SEMAPHORE

Newsletter of the Maritime Law

Association of Australia and New Zealand



## Navigare Necesses Est

When food was in short supply in Rome (in 56BC), Pompeius sailed to Africa to bring grain. After the ships were laden, a storm stopped them from leaving the harbour. The sailors were afraid to sail on stormy waters.

Then Pompeius hoisted sails, weighed anchor and shouted: “Navigare necesse est, vivere non est necesse (sailing is necessary; life is not).”

That’s how New Zealand Branch member Tomasz (Tomek) M Glowacki began his presentation to the 46th Annual MLAANZ Conference in Auckland last year. In a highly-thought-provoking address, Mr Glowacki outlined a range of lesser-known facts about trends affecting the world’s oceans. Playing the role of a futurist, he also made a series of predictions.

“Over the decades ahead, oceans are poised to play an even more prominent role in our lives. Oceans are the lifeblood of our planet, yet ... we have only explored less than 5% of them,” he said.

Mr Glowacki anticipated that with approximately 80% of the world’s food production dependent on pollination by honeybees, and the population of bees in rapid decline, there will be a significant increase in demand for food from the sea. Oceans can be viewed as enormous “cultivated areas” ready to be “ploughed” and it is likely some areas will be developed as “arable seas” or “cultivated oceans”. Deep-water farms will replace shallow-water cultivation. There will be a bigger requirement for the exchange of food between countries, causing large increases in demand for overseas transport. Political diplomacy will focus, to a greater extent, on issues such as bottom dredging, drilling and ocean exploration and the “littering” of the seas.

He also predicted that, with limited precious fresh water available, an increasing number of countries will move to build desalination plants which will require massive amounts of energy. There is no more energy stored anywhere than in oceans. Energy from the oceans could come from the horizontal flow of water caused by “tides” or the vertical movement of water from waves. New technologies will allow hydrogen – which has the highest energy density value per mass – to become a major source of energy. For example, the new generation of German submarines will use hydrogen fuel cells for power.

Mr Glowacki’s presentation explored the potential implications for shipping of naval innovations. To defend their territorial waters, the world’s nations are developing new technologies and strategies. Only a small number of countries can afford or have the capability to build big carriers, but small boats (when there are plenty of them) can cause significant damage. One of the things an aircraft carrier fears most is a “swarm attack”. It is possible to envisage a navy deploying thousands of speed boats capable of travelling at 80-85 knots armed with anti-ship missiles.

In defence technology, Mr Glowacki predicted we will see more use of drones and smaller, very fast crafts – their shape will be based on either wave-piercing hulls or SWATH (small water



area twin hull) or hybrids of both. They will be stealthy. The offshore patrol vessels sector is the fastest-growing segment of the naval market. These vessels support defensive strategies for the protection of countries' own maritime limits and boundaries such as 12-nautical-mile, 24-nautical-mile and 200-nautical-mile zones.

"The global shipping system is about to undergo significant transformation, mainly due to the pollution it has created," said Mr Glowacki.

The 16-biggest ships produce more pollution than all of the cars in the world. Wind-supported systems will power future vessels. Unmanned ships could provide a significant leap forward.

He also referenced bleak scenarios such as those portrayed by author Ian Urbina in his bestselling 2019 book "The Outlaw Ocean: Crime and Survival in the Last Untamed Frontier":

"Boating 13 miles from shore, we suddenly find ourselves on the 'high seas' beyond the reach of governments," states the book.

Mr Urbina painted a picture of traffickers and smugglers, pirates and mercenaries, wreck thieves and repo men, vigilante conservationists and elusive poachers, clandestine oil dumpers, shackled slaves and cast-adrift stowaways.

Mr Glowacki argued that, in the context of all of these dynamic changes and possible future states, upholding the principle of freedom of navigation on the world's oceans is vital.

"To survive, modern societies need food, natural resources, energy, transport, living space and freedom of navigation," continued Mr Glowacki.

"Not one of these links can be removed from the chain."

Britain's naval fleet was the main force for maintaining freedom of navigation from the time of Horatio Nelson up to the Second World War. From that time, until now, the American fleet has assumed this responsibility, but the path ahead is unclear.

"Maritime lawyers have a vital role to play in preserving the rule of law on the high seas."

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