The Maritime Observatory

Our vision to protect the world's oceans

The iridescent oil sheen on the water was unmistakable, as oil from the wreck of the World War II tanker SS Coimbra began seeping into the dark Atlantic waters of America's Eastern Coast. Torpedoed in 1942 during the Battle of the Atlantic, the wreck had sunk to the ocean floor carrying approximately 9,000 tonnes of lubricating oil. Some 36 of the 46 crew lost their lives. Nearly 80 years later, this naval wreck, and many others like her, pose a potentially devastating environmental risk. As their metal structures begin to weaken and disintegrate, they stand to release toxic, polluting cargoes of oil and chemicals into the ocean, causing untold damage to the rich diversity of marine life and harming creatures including birds, dolphins, sea turtles alike.

Meanwhile, the growing threat of uncontrolled, unauthorised salvage operations could accelerate or even trigger such incidents, as unscrupulous scrap dealers target wartime wrecks in their relentless pursuit of profit at the expense of precious marine ecosystems. The remains of more than 50 WWII American, British and Dutch warships have been destroyed in South East Asian waters in the last decade. Such activities also result in the loss of culturally important relics, the desecration of naval war graves and damage to local livelihoods.

However, until now, monitoring and safeguarding life in the oceans has been almost impossible. Looters exploit ever more sophisticated means and legal ambiguities to reach previously inaccessible vessels, while protected sites remain largely 'invisible' to the authorities and the public, too costly to monitor and patrol, and beyond the boundaries of daily life. This profound neglect for marine life and its vital link to our own food chain, sits in stark contrast to the controversy surrounding burning forests and toxic pollution on land. It's time to protect our oceans. And this means protecting shipwrecks too.



The Maritime Observatory is revolutionising ocean surveillance and turning the tables on looters, for good. An unprecedented, not-for-profit collaboration between high technology ocean surveillance expert OceanMind, and maritime heritage and advocacy specialist MAST, the Maritime Observatory is making the invisible, visible, and the unknown, known.

"The release of unstable cargo into the ocean is entirely preventable," says Jessica Berry, CEO of MAST. "Our aim at the Observatory is to detect and deter looters from pillaging wrecks, in order to safeguard our marine heritage and stop catastrophic environmental damage."





"We're collaborating to conserve ocean life and our world heritage," says Nick Wise, CEO of OceanMind. "Ultimately, we want to be able to watch every wreck – getting the right information to the right people, at the right time – to help ensure that our oceans are protected."

How does the partnership work?

Leveraging its proven expertise in combining satellite imagery and data analytics to protect the world's oceans, OceanMind identifies irregular patterns in shipping activities, cross referencing with thousands of rules, regulations and records to identify signs of suspicious activity, or even activity such as diving and fishing. Increasingly, the team is using artificial intelligence to automate this complex process and enable the real-time identification of suspected unauthorised salvage at scale – 365 days a year, anywhere in the world. Their findings create alerts for MAST's maritime heritage experts to investigate the issue in more detail, tapping into its specialist knowledge of wreck sites, known salvage players and robust intelligence networks. The teams' combined, unbiased intelligence is then provided to the relevant authorities and law enforcement bodies to inform decision-making and action. For example, using satellite radar, the OceanMind team can detect early signs of leakage – and potential environmental damage – over wrecks, enabling the relevant authorities to develop a containment action plan. Overall, it's the simplest, most cost-effective way for governments to gain a full picture of illegal looting activity at sea.

What's the story so far?

To prove the value of its work, the Maritime Observatory conducted a pilot project monitoring 11 historic shipwreck sites around the world and tracking vessel movements over a three-year period. The team monitored the level of activity at each site, checking for signs of unauthorised salvage operations, and reviewed 24 suspected high risk vessels to identify their potential targets. This was combined with open source intelligence data on a number of known players. The findings were astonishing: vessels going 'dark' by switching off tracking devices, evidence of plundered shipwrecks linked to financial and investment fraud, and even networks of businesses supporting unauthorised salvage operations in throughout South-east Asia.

What's next and how can I help?

The Maritime Observatory is already working with governments in Europe to provide in-depth analysis of satellite imagery over potentially polluting wrecks and of suspected looting activities. But governments don't have the funding and resources needed to protect the marine environment surrounding these historic sites. And we can't do this alone. We need your help to scale up our monitoring. With more funding, we could also offer support to governments worldwide, including in developing countries, helping to overcome the financial and logistical barriers to preserving maritime heritage. "The threat of looting starts with the wreck's discovery. This can mark the beginning of the end. And in our generation, these sites will be gone if we don't act now," concludes Berry. "The Maritime Observatory represents a turning point in the protection of underwater heritage sites and a major step forward for ocean conservation."

To learn more or to enquire how you can help, please contact caroline@thisismast.org

website.

