

## **Marine Al**

Turnchapel Wharf, Barton Road, Devon, PL9 9RQ, U.K.

18 January 2022 PRESS RELEASE

Water Witch, pioneering manufacturer of marine litter collection workboats, announces partnership with Marine AI to develop next generation autonomous vessels.



Water Witch builds innovative, cost effective and efficient vessels to help clean up marine environments. Over 200 of their debris collection and trash retrieval workboats are operating around the world to combat the growing tide of plastics in our seas. Water Witch's next generation marine litter vessels will be controlled by GUARDIAN, Marine Al's autonomous software solution.

The exciting combination of Water Witch's proven Versi-Cat Trash Skimmer design and Marine Al's GUARDIAN, will deliver a truly unique capability. The new vessels will be fully autonomous, smaller and lighter, and will be fitted with thrusters: these modifications will increase versatility, manoeuvrability and portability whilst reducing operating costs. The development represents a major advancement in the cost efficiency of retrieving plastic and the new boats will have sufficient recovery capacity for most applications.

GUARDIAN's advanced data analytics will enable full automation of the process and will allow marine litter and ocean plastic retrieval to be optimised. The detailed data captured and processed by GUARDIAN will give better insights into the location and predicted movements of plastics in the marine environment, the variations and density of these hotspots, and the characteristics of the litter. The AI technology will use this monitoring, modelling and machine learning capability to increase the recovery capacity, endurance and the cost-efficiency of the cleanup process.

marineai.co.uk



The key features of the Water Witch's next generation vessel are:

- Electric propulsion for zero emission and zero pollution operation
- GUARDIAN Vision will provide human-in-the-loop object detection and classification, with the ability to increase AI functionality up to a COLREG-compliant level control system by utilising the Guardian AUTONOMY software suite.
- Built from environmentally friendly, sustainable materials. Marine grade aluminium: 70% recycled content and completely recyclable at the end of its working life.
- High recovery capacity and efficient system for collecting all types of marine litter, algae and vegetation.
- Robust design which can be scaled up
- The technology can be refitted to existing Water Witch Trash Skimmers

Matthew Ratsey, MD of Marine AI, stated, "The increasing presence of marine litter, particularly plastics, in our oceans is one of the biggest challenges of our time. We are delighted to partner with Water Witch to assist them reduce the global marine litter problem."

Jackie Caddick, Director of Liverpool Waterwitch Marine & Engineering Co. Ltd, explained that "Over 90% of marine debris reaches the ocean from rivers. By reducing the flow of plastics and waste in our inland waterways, rivers, and estuaries, we can really make a huge difference. GUARDIAN will significantly enhance Water Witch's capability: the new autonomous vessels will be able to collect, monitor and model marine plastic occurrence, behaviour and flow paths. We are confident that the next generation Trash Skimmers will provide a proven and innovative solution to achieve cleaner waters."

## **Further information:**

Sally Dale, Sales & Marketing, Marine Al Tel: +44 (0) 1752 938 270

## Notes to Editors:

Marine AI is a software engineering firm specialising in edge-based artificial intelligence software. Our aim is to deliver sensor-driven cognitive artificial intelligence to enhance maritime capabilities, on or below, the water.

www.marineai.co.uk

Water Witch are world-leaders in the design of workboats for waterway clean up and maintenance roles and is a 4<sup>th</sup> generation family run business with over 55 years' experience and over 200 craft in marineai.co.uk



## Marine Al

Turnchapel Wharf, Barton Road, Devon, PL9 9RQ, U.K.

service. We are located in the UK and to date, our vessels have removed over 2 million tonnes of marine debris.

www.waterwitch.com

marineai.co.uk