

Navigating Confined Waters with Trelleborg's SafePilot Solutions

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Trelleborg Marine and Infrastructure proudly supplied its navigation and piloting solution, SafePilot Pro, for use in the world-famous 2019 Fastnet Race. SafePilot Pro, combined with Trelleborg's high-accuracy hardware, was used by Associated British Ports (ABP) Southampton to maintain commercial traffic movements by navigating through the trickiest part of the race – the start.

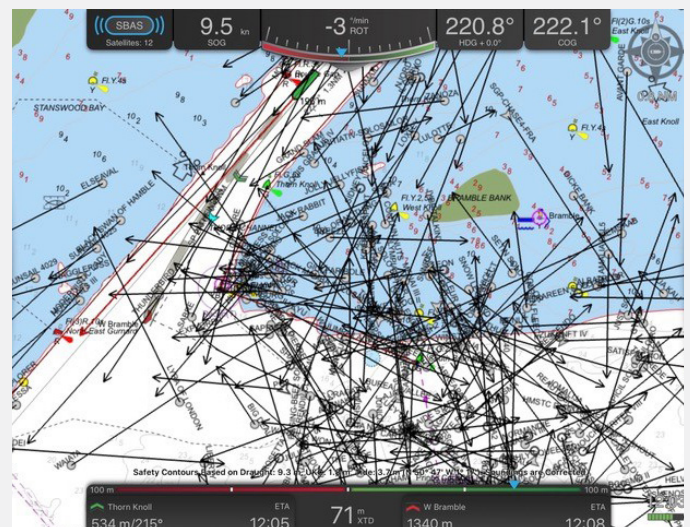
Getting off to a Good Start

The 2019 Fastnet Race was a 608-mile challenge that started from Cowes on the Isle of Wight, UK, and involved sailors crossing the Celtic Sea to round the Fastnet Rock off the southwest coast of Ireland, before returning on a reciprocal route to the finish line at Plymouth, UK. One of the big draws of the ocean race includes the race start, which is always heavily congested with commercial vessels and sailing yachts using the port, and requires racers to navigate in confined waters to avoid impact with other boats. This is where Trelleborg's SafePilot solutions played a pivotal role in keeping the port operating.

Bruce Thomas, Marine Pilot at ABP Southampton, said: "The Fastnet Race involves hundreds of boats in close proximity to each other at the start of the race. This means getting out of the blocks cleanly is very tricky – races can be won and lost at this stage. We needed a high-accuracy positioning system to help our commercial vessels avoid collisions, as well as navigate through the channel off the Isle of Wight.

"SafePilot Pro gave our pilots knowledge of where their vessel was going to be in relation to the hundreds of race boats traveling at high speeds. This is critically important when dealing with vessels in tight channels, as pilots need to be as accurate as possible – a meter here or there could be the difference between a maritime catastrophe or not. The SafePilot system ultimately proved to be an extremely accurate and valuable tool which made sure the iconic race got off to a great start."

SafePilot Pro is used by all ABP Southampton pilots and helped ensure commercial traffic could continue to operate safely, even at the busy start of the race. SafePilot Pro combines professional piloting software with portable pilot units to deliver situational awareness of a vessel to within 1cm of accuracy.



Better Navigational Accuracy in Real-Time

All piloted commercial marine traffic in Southampton waters are equipped with either SafePilot CAT ROT or SafePilot CAT MAX.

Trelleborg's SafePilot CAT MAX is specifically designed for use in demanding applications, including the piloting of ultra-large container vessels and LNG ships in confined waters and offshore operations. Its dual antenna solution, which consists of heading and positioning units that can communicate with each other and the pilot's display via Wi-Fi, boasts an integrated six-axis gyro/motion sensor, offering precise and independent rate of turn, roll and pitch. This, coupled with the capability of charging wirelessly, makes CAT MAX the ideal solution for operations where accurate under-keel clearance is critical.

The solution delivers a speed accuracy down to 1 cm/s and a heading accuracy down to 0.01°, allowing the system to be used in challenging operations. Built-in UHF radio facilitates the exchange of environmental, hawser load, product and ESD data between all parts in the operation, including RTK corrections to the CAT MAX. Combined with SafePilot software, this information can also be exchanged via the cloud.

Improved Situational Awareness

Developed in conjunction with working marine pilots from across the world, SafePilot is known for its intuitive usability, offering optional software modules that can be selected according to operational pilotage requirements. Benefits include improved accuracy, as data is filtered to only display what is relevant during each operational phase, eliminating the risk of information overload, while enhancing safety through an improved situational overview and accurate, real-time data.

SmartPort by Trelleborg

SafePilot Pro is a critical component of SmartPort by Trelleborg, which is Trelleborg's answer to the need for a standardized way to collect and store data. SmartPort connects port operations, allowing operators to analyze performance and use data to improve decision-making across the port environment. The system integrates assets such as fenders, mooring equipment, ship performance monitoring, and navigation systems, and is underpinned by cloud and Internet of Things (IoT) technologies.

To find out more about Trelleborg's range of SafePilot navigation and piloting solutions, please visit: trelleborg.com

SmartPort by Trelleborg

SmartPort by Trelleborg powers the critical interface between ship and port, on land and at sea. Visit our website to access our case studies and whitepaper, plus the entire suite of SmartPort solutions.

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GET IN TOUCH:

Website | trelleborg.com/marineandinfrastructure

Email | marine_infra@trelleborg.com