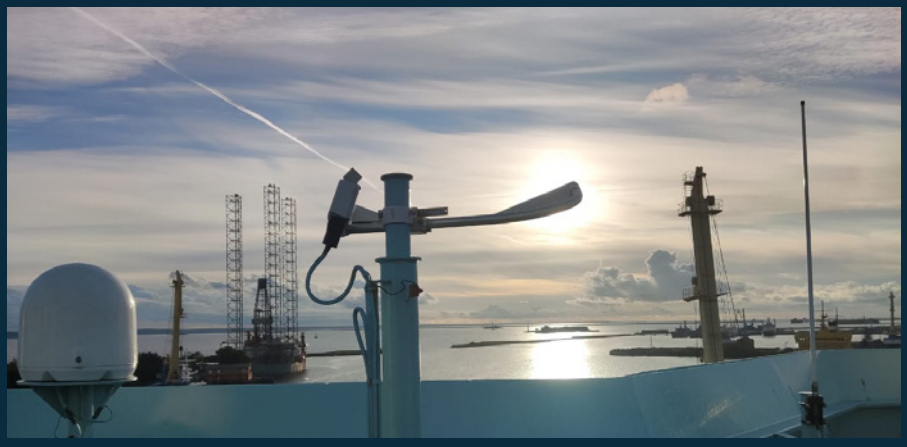
Dependable measurements for harsh environments

VAISALA

Case Study



The client:

Transas, part of Wärtsilä Voyage

Vaisala solution:

Maritime Observation System AWS430

Maritime Observation Console MCC401

THE CHALLENGE:

Seeking robust technology for offshore navigation

Many Wärtsilä Voyage customers operate in the extreme arctic waters. The critical impact of weather and ocean conditions on offshore operations makes reliable environmental monitoring a vital tool for ensuring operational efficiency and crew safety.

To ensure optimal operations for their customers, Transas, part of Wärtsilä Voyage, sought an environmental monitoring system to complement the company's Wärtsilä Vessel Traffic Services. This suite of services helps customers effectively manage vessel traffic in ports, harbors and coastal areas. The solution had to be rugged and dependable to help customers navigate through any kind of weather.

THE APPROACH:

Providing dependable accuracy in all weather conditions

Transas selected the Vaisala Environmental Monitoring System, consisting of the Vaisala Maritime Observation System AWS430 with associated sensors and the Vaisala Maritime Observation Console MCC401. The high-quality AWS430 is purpose-built to provide accurate, dependable maritime weather measurements down to the last detail.

The comprehensive solution combines several Vaisala sensors and measurement technologies. Four WINDCAP® WMT702 Ultrasonic Wind Sensors gather wind measurement data. The Digital Barometer PTB330 measures barometric pressure for tracking the movement of local and

"Having a reliable insight on the prevailing and upcoming weather conditions is a key factor while operating in harsh environments like arctic waters. We want to provide our clients with the most robust and dependable weather solution to tackle these challenges. We have a long cooperation with Vaisala and are especially pleased with the high standards of their technology which integrates well with our vessel traffic service solutions."

Sergey Komarov
Purchase and Logistics Director, Transas Navigator

regional weather fronts, generating historical models of high- and low-pressure systems, and monitoring developing severe weather for an early warning system.

The Ceilometers CL31 and CL51 leverage pulsed diode lidar technology and single lens optics to measure the ceiling and base height of cloud layers. The HUMICAP® Humidity and Temperature Probe HMP155 provides humidity and temperature measurement, and the Present Weather Detector PWD22 enables characterization of reduced visibility, precipitation type identification, precipitation accumulation and intensity measurement, and report formats.

All measurement data is collected and displayed with the Vaisala Maritime Observation Console MCC401, enabling real-time weather data management including reporting tools, warning alarms, and data storage for observations archiving.

THE RESULTS:

Enabling safer and more efficient offshore operations

The Environmental Monitoring System is perfectly suited to the Wärtsilä Vessel Traffic Services for its high accuracy and reliability in extreme ocean environments. Customers use the solution to monitor air and sea conditions in every corner of operations: Coordinating supply vessels, helicopters and other operational support traffic; gathering detailed offshore condition information to inform early warning and safety protocols; providing accurate wind and helideck stability data to ensure safe airborne operations; and monitoring weather conditions to ensure safe offshore maintenance operations. Not only is the solution dependably accurate in all weather conditions, but Transas has the confidence of knowing their complete Wärtsilä Vessel Traffic Services meets the level of excellence that they and their customers demand.

Why Vaisala?

Weather and environmental insights are the greatest catalysts for successful maritime operations— from sensors to systems and digital services, Vaisala provides actionable insights that empower stakeholders to confidently meet challenges and harness new opportunities.

Our globally trusted maritime weather solutions enable remarkable efficiency gains, digital transformation, the protection of people and investments while supporting sustainable and responsible operations.

We are scientists and explorers driven by passion, relentless curiosity, and the desire to create a better world. Backed by 85+ years of unmatched scientific leadership, our solutions increase maritime weather awareness and drive innovation.

Ref. B212413EN-B

vaisala.com/maritime