VAISALA

Enhanced safety and efficiency for offshore operations

Case Study



The client:

PT Timas Samudera Indonesia

Vaisala solution:

Vaisala Helideck Monitoring System (HMS)

THE CHALLENGE:

Ensuring industry-compliant safety for offshore helicopter operations

PT Timas sought a compliant Helideck Monitoring System (HMS) for Timas 1201, aligning with the stringent safety and operational standards set by the UK Civil Aviation Authority (CAA) for offshore helicopter landing areas. With escalating demand for offshore industrial activities, particularly helicopter services, safeguarding takeoffs and landings is increasingly critical.

Helideck weather conditions are subject to abrupt changes, risking personnel safety and causing operational disruptions. PT Timas recognized the pressing need for precise and timely weather data to elevate the safety and efficiency of their helicopter operations.

THE APPROACH:

Comprehensive and future-proof HMS technology

To address the challenge, PT Timas equipped the Timas 1201 with the Vaisala Helideck Monitoring System (HMS). The CAP 437-compliant system provides accurate and real-time weather and environmental data, helideck motion and vessel position.

The Vaisala HMS is a turnkey solution with complete power, sensor integration, data collection and storage. The comprehensive solution includes the Vaisala Automatic Weather station AWS430, Helideck Monitoring software and world-class Vaisala sensors. The system ensures precise wind speed and direction measurements with the maintenance-free Vaisala WINDCAP® Ultrasonic Wind Sensor "We at PT Timas Samudera Indonesia are committed to maintaining the highest standards of safety and efficiency in our offshore operations. The Vaisala Helideck Monitoring System has proven to be an invaluable asset, providing us with real-time and accurate weather data essential for ensuring secure helicopter takeoffs and landings on our Timas 1201 multipurpose construction vessel."

William Wijaya Operation Manager, PT Timas Samudera Indonesia

WMT700. Vaisala BAROCAP® Digital Barometer PTB330 provides barometric pressure with low hysteresis and long-term stability. Air temperature, dew point and relative humidity are provided by Vaisala HUMICAP® Humidity and Temperature Probe HMP155 with superior longterm stability and an optional warmed probe for humid conditions.

The dependable and efficient Vaisala PWD Present Weather Visibility Series Sensor provides horizontal visibility. Vaisala Ceilometer CL31 provides cloud height and coverage with advanced single lens optics for excellent performance. The solution also includes a helideck motion sensor, and is ready for future integration with repeater lights.

All sensor data is collected and presented through the easy-to-use Vaisala Helideck Monitoring Software, which keeps PT Timas informed of current weather conditions with a real-time data display and built-in security. Reporting tools and critical alarms help keep on-deck personnel safe and ensure optimal landings and takeoffs in the face of changing weather conditions.

THE RESULTS:

Enhanced safety and efficiency for operational success

With the Vaisala HMS in place, helideck operators, pilots, and others onboard the Timas 1201 pipeline vessel can make informed decisions with realtime and accurate weather and environmental data. The system provides secure access to helideck status information for efficient communication and coordination.

Scalability features make it possible to easily accommodate future measurements such as wave height, ocean current, lightning data, compatibility with repeater lights and weather forecasting. The solution is designed to meet evolving needs and comply with international regulations.

In embracing Vaisala's Helideck Monitoring System, PT Timas enhances safety, efficiency, and compliance of their offshore helicopter operations, contributing to the success of the Timas 1201 and the broader offshore industry.

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.

