Telematics control of ship fueling in the Far East of Russia

PROBLEM

Sakhalin Shipping Company regularly delivers cargo across the Sea of Okhotsk and the Sea of Japan. The company's fleet comprises fifteen vessels.

SASCO ANIVA is one of the company's container ships. Its tank holds more than 240 tons of mazut. Previously, the fuel level was checked using an old counter and a measuring stick, but this control method could not ensure the desired accuracy. The shipping company needed a solution that could:

- take the most accurate fueling parameters;
- allow for avoiding controversial situations associated with errors in measuring the fuel volume;
- help prevent overpayments for mazut.

SOLUTION

Our partner Spec Centr Orbita from the Russian Federation designed and installed a Wialon-base monitoring system aboard SASCO ANIVA.

- The flow meter Endress Hauser F 300 is responsible for the fuel monitoring in the system. This device measures mazut temperature, density, and weight. The volume is calculated based on the weight data.
- All parameters are shown on the out-of-the-box flow meter display.

THIS IS HOW THE KEY DATA ON THE FUEL STATUS LOOKS ON THE PANEL

COMPANY PROFILE

COUNTRY:
Russia

INDUSTRY:
Water transportation

MONITORING UNIT:
Dry cargo carriers

WEBSITE:
orbitadv.ru

- The Galileosky 7x terminal sends the collected data to Wialon using a GSM connection.
- The OVEN panel at the captain's bridge makes it possible to monitor fuel parameters from there as well.
- Safety regulations precluded welding on board. At the same time, the hardware should have been installed in a strictly limited space observing the fuel line's correct geometry. The Wialon partner welded pipes in a workshop using templates. After several fit checks on the vessel, the hardware took its place.

WELDING PIPES BY TEMPLATES IN THE WORKSHOP

RESULT

The Wialon-based solution developed by the integrator specifically for the SASCO ANIVA container ship helps Sakhalin Shipping Company obtain the most accurate data on the fuel quality and volume remotely.

ACCURACY AND QUALITY

Hardware used in the project gives the opportunity to accurately see the mazut amount, calculate its volume, and determine its quality.

SAVINGS

The solution prevents overpayments for fuel. The system paid off as early as after the fourth fueling.

RELIABILITY

A comprehensive solution helps avoid debates that can be triggered by imperfect fuel volume measuring methods.

USABILITY

Fuel data is displayed in three places: on the flow meter itself, in Wialon, and at the captain's bridge.

IMPLEMENTED PRODUCTS

WIALON HOSTING