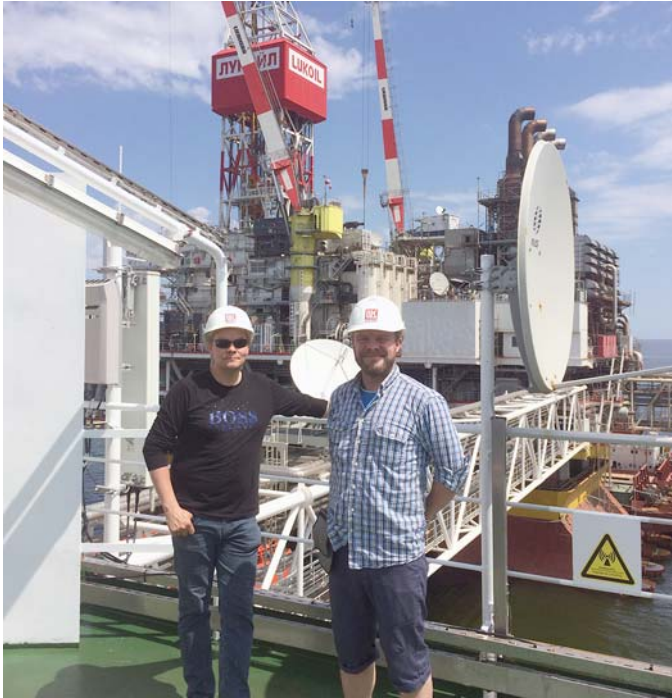


# Oil platform winterisation check



Ilkka Rantanen and Sami Saarinen visited Lukoil's new Filanovsky oil platform in the Caspian Sea in July 2016 and performed an oil platform winterisation check.

This winterisation check included evaluation of ice resistance, evaluation of the ability to function in extreme cold weather as well as an environmental and oil spill check.

Based on the results, we can make recommendations on how to improve certain aspects," Ilkka Rantanen explains.

"All major things are in good order, but winterisation can always be improved in terms of safety. For instance, how to keep walkways and helideck ice free at all times, installation of heating systems for evacuation routes or wind protection for walkways to mention but a few."

The Caspian Sea is a challenging area, especially due to its shallow waters. The area around the Filanovsky platform is about 6.5 m deep, but in other areas the water depth can be as little as 3 m. An additional challenge is that the level varies throughout the year. The air temperature can range from -30 degrees Celsius to +35 degrees Celsius.

"Only about ten per cent of the year is extremely cold, but when this occurs with strong, freezing winds, the ice piles up against the structures," Rantanen adds. "This ice is often a brash type of ice, which is difficult to remove and also does not support walking on. Therefore, it is essential to plan the ability for machines and people to function during this time, how to service the platform and how to evacuate in case of an accident."

The Vladimir Filanovsky oil field is one of the largest oil fields discovered in Russia in the past 25 years. It is located in the northern part of the Caspian Sea. Lukoil's Filanovsky platform is expected to begin production this year.

Aker Arctic has earlier experience from Caspian Sea operations. Among other projects, we designed the five Mangustay shallow draught icebreaking tugs for Caspian Offshore Construction in 2009. These tugs have an exceptional draught of only 2.5 m.



Winter is a challenging time in the Caspian Sea with freezing temperatures and strong winds. In 1998, Aker Arctic designed and Kvaerner Masa- Yards built two icebreaking supply vessels for Wagenborg Kazakhstan B.V.



Aker Arctic designed five shallow draught icebreaking tugs for Caspian Offshore Construction in 2009.