

## News in brief

### Second Novy Port icebreaker danced its way to Gulf of Ob

The icebreaker *Andrey Vilkitsky*, built as part of Gazprom Neft's "Time of the Arctic" programme, was delivered in St. Petersburg in December 2018. The vessel has since then joined her sister vessel, *Aleksandr Sannikov*, at the Arctic Gate oil terminal.

The highly-maneuvrable vessel presented herself to the residents of St. Petersburg who were able to witness a spectacular scene as the icebreaker passed along Neva River. TV reports later showed the arctic ship and called it the dancing vessel; the icebreaker can complete a full turn in open water in about a minute and has been designed for high manoeuvrability in ice conditions.

The icebreaker is named in honour of the famous Russian hydrographer, surveyor and polar explorer *Andrey Vilkitsky*. The vessel, based on the Aker ARC 130 A design, was built at the Vyborg Shipyard and designed to operate in shallow river estuaries in the Arctic. These waters are covered by up to two metres of ice for 200 days of the year and exposed to strong gales off the Gulf of Ob. Icebreaking vessels such as the *Aleksandr Sannikov* and the *Andrey Vilkitsky* are vital in ensuring that tankers can safely pass through the ice to reach the Arctic Gate terminal.

*Andrey Vilkitsky's* unique hull form allows it to cut through and break the ice



Photo: Vyborg Shipyard

efficiently, while its shallow draught and manoeuvrability ensure safe icebreaking operations at the offshore oil terminal. The vessel demonstrates icebreaking capacity comparable to the nuclear icebreakers of far greater power, advantages made possible by the highly-refined hull form and three Azipod propulsion units, two in the stern and one in the bow, capable of being rotated 360 degrees.

The captain of the icebreaker, Yuri Akhromkin, said to PortNews that during the 35 days of testing in the Baltic Sea, the vessel proved to be manoeuvrable and powerful. "In the beginning, I was sceptical about the fact that the icebreaker was called 'dancing', but now I agree with this definition," said the captain.

According to Akhromkin, *Andrey Vilkitsky* is a wonderful vessel that will be

in demand. "The icebreaker is automated and easy to manage, with all systems connected in a single computer network, allowing you to manage all the processes on the ship. Operators receive full information about the vessel itself, and about the environment."

According to Alexander Dyukov, Chairman of the Gazprom Neft Management Board, logistics are playing a vital role, making it possible to continue shipping and transporting oil through the Kara Sea, regardless of weather conditions. "Building these icebreakers was an essential precondition to the further effective development of Novoportovskoye hydrocarbon field," Dyukov stated in Gazprom Neft's press release.

[www.gazprom-neft.com](http://www.gazprom-neft.com), [www.gazprom-neft.ru](http://www.gazprom-neft.ru), [www.portnews.ru](http://www.portnews.ru)

### More autonomous vessel tests

Components for autonomous vessel-testing in the model test laboratory is being continuously improved. Since the launch of the service in June 2018, new tests have been performed.

"The propulsion units have been upgraded and a joint project regarding dynamic positioning in ice is currently on-going," says Development Engineer Jukka-Pekka Sallinen.

"Navis NavDP system and ABB Ability™ Marine Pilot Control systems have been successfully integrated and tested in Aker Arctic's model test



facilities. DIVEC™ has proved to be a powerful tool for interfacing different DP provider's systems with Aker Arctic's model test system."

The DIVEC™ software architecture allows adding third-party software components, according to the purpose of

the testing situation. A demonstration where a model avoids changing obstacles on its way from departure to destination and back can be found on Aker Arctic's Youtube channel.

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### China launched icebreaker Xue Long 2

In September, China launched its first domestically-built polar research icebreaker. Delivery is expected by summer 2019.

*Xue Long 2* was jointly designed by Aker Arctic Technology and China State Shipbuilding Corporation (CSSC) institute. Construction began in 2016 at CSSC's Jiangnan Shipyard in Shanghai.

After commissioning, *Xue Long 2* will expand China's scientific missions in the polar regions with its advanced laboratories and equipment, including two on-board helicopters. It will be able

to travel at 12 knots for 20,000 nautical miles and sustain a 90-person crew and researchers on board for up to 60 days.

Aker Arctic was responsible for the conceptual and basic design as well as model testing. "We are also supporting the owner in areas that are typically

important for an icebreaker's operation and reliability by participating in tests such as inclining tests, open water sea trials and other checks before ship delivery," says Kari Laukia. "Full-scale ice trials are planned for later this year."



### Keel laid of Le Commandant Charcot



The luxury icebreaking cruise vessel for PONANT is moving ahead. The ship's traditional steel cutting ceremony was held in November 2018 and the keel laying took place in Tulcea, Romania in December.



The unique hybrid electric polar exploration vessel propelled by Liquefied Natural Gas (LNG) will offer its guests a fascinating odyssey in the wake of the great polar explorers. The launch is planned for 2020, before its delivery in 2021. Final works and outfitting will take place at VARD Söviknes yard in Norway.

The vessel incorporates the latest technologies in environmental protection and surpasses the ecological standards set out in international regulations. It is named after Jean-Baptiste Charcot, an explorer and "gentleman of the poles".

*Le Commandant Charcot*, with ice class PC2, was designed to combine

forward sailing modes through compact ice and reverse sailing in extreme ice conditions, by using the Double Acting principle (Aker Arctic DAS™). With its innovative design, *Le Commandant Charcot* offers unrivalled ice performances compared with classic icebreakers.

### Rosatom to control the Northern Sea Route

The State Duma in Russia transferred the powers of operator of the Northern Sea Route (NSR) to Rosatom in December 2018. The Ministry of Transport, which previously commanded the Northern Sea Route, retains the functions of state control and regulation of the NSR.

Rosatom will plan the development of infrastructure on the NSR and carry out

appropriate actions. A subordinate enterprise must be defined, who will be authorized to award permits to sail via the NRS. It will also sign concession agreements related to infrastructure of sea ports located at the shore of the NRS water area, and design and construct buildings, including capital projects associated with sea port infrastructure located at the shore of the NRS water space.

The state-owned corporation also acquired rights to develop proposals on forming the state policy for development and sustainable functioning of the NSR.

A key person in the new structure is Vyacheslav Ruksha, the former leader of FSUE Atomflot.

Rosatom, together with the authorized bodies, will make navigation viable and safe in the NSR offshore areas. This will include monitoring hydrometeorological, ice and navigation situation, the coordination of the installation of navigational equipment, making recommendations on the development of routes of navigation and use of icebreakers to assist in the organization of search and rescue operations. [rosatom.ru](http://rosatom.ru), [chelorg.com](http://chelorg.com)