Polar Water Operations Manual in process

One of the demands in the Code for Ships Operating in Polar Waters (Polar Code) is that all vessels are required to have a Polar Water Operations Manual (PWOM) on board the vessel. We are now developing the manual so that we can offer this service to our customers.

The vessel specific Polar Water Operations Manual (PWOM), required from January 1st, 2017, provides the owner, operator, master and crew with information regarding the ship's operational capabilities and limitations in order to support the operations in the Polar waters.

"We are now developing the manual based on the model table of contents," says Maximilian Vocke, project manager at Aker Arctic.

"The manual will vary according to the type of vessel, what ice class the vessel has and where the vessel is operating, as it needs to be adapted to the area of operation."



Part of design package

"Our core know-how is arctic vessels. We know thoroughly how to operate them, we know the ice circumstances in different areas and can predict how it is most useful to operate a vessel in ice, in addition to winterisation needs," Vocke explains.

"Based on our know-how, we can go through a ship and see how it works, and then evaluate the limitations of that vessel. We can also suggest upgrades in order for it to work better."

Aker Arctic is therefore in an excellent position to offer the PWOM service to customers. In new vessel design projects, the manual is already part of our basic design package. For vessels constructed before 1 January 2017, the requirements have to be met by the first intermediate or renewal survey, whichever occurs first, after 1 January 2018. A vessel is required to have a PWOM in order to receive the Polar Ship Certificate.

"We will be able to compile the manual also for existing vessels and help ship owners with approval," Vocke assures. "The basic manual will be ready during this year and then adapted to meet the requirements for each specific vessel."

Model of Polar Water Operation Manual

1. Operational capabilities and limitations

Chapter 1 - Operation in ice Chapter 2 - Operation in low temperatures

Chapter 3 - Communication and navigation capabilities in high latitudes

Chapter 4 - Voyage duration

2. Ship operations

Chapter 1 - Strategic planning Chapter 2 - Arrangements for receiving forecasts on environmental conditions Chapter 3 - Verification of hydrographic, meteorological and navigational information Chapter 4 - Operation of special equipment Chapter 5 - Procedures to maintain equipment functionality

3. Risk management

Chapter 1 - Risk mitigation in limiting environmental condition Chapter 2 - Emergency response

Chapter 3 - Coordination with emergency response services

Chapter 4 - Procedures for maintaining life support and ship integrity in the event of prolonged entrapment by ice

4. Joint operations

Chapter 1 - Escorted operations Chapter 2 - Convoy operations



Meet Maximilian Vocke

Maximilian Vocke has been working in shipbuilding for twenty years, first at the Helsinki Shipyard and then at Aker Arctic. He has mainly been involved in the design work of offshore vessels and icebreakers as project engineer and project manager. One of his designs is the offshore supply vessel and standby icebreaker *FESCO Sakhalin*, nowadays *SCF Sakhalin*.

Apart from work, Maximilian enjoys swimming and downhill skiing with his family.