

Polar Code adopted

During the 94th session of the International Maritime Organization IMO's Maritime Safety Committee held in November 2014, the International Code for Ships Operating in Polar Waters, commonly referred to as the Polar Code, was adopted as well as related amendments to the International Convention for the Safety of Life at Sea (SOLAS).

The planned date of entry into force is the first of January 2017 for new ships. Older ships will have to meet the requirements by the time of their first intermediate or renewal survey after first of January 2018.

The Polar Code will be mandatory under both SOLAS (International Convention for the Safety of Life at Sea) and MARPOL (International Convention for the prevention of Pollution from Ships).

Compulsory operation manual

According to the Polar Code, each vessel operating in the Polar waters has to have a vessel specific Polar Water Operation Manual (PWOM) onboard.

"This is something we at Aker Arctic will be able to help our customers with. A list of proposed contents can be found below. Until now, there has not been a decision on how this manual will be administered," says Arto Uuskallio, Sales and Marketing Manager and following IMO's decisions.

"One part of the Polar Code concerns training. A general guidance is in place already for what kind of training will be required, but development work continues on this matter. Our ice simulator will be an excellent tool to use for training once the criteria are clear. A decision was made that it will be possible to use an Ice Advisor while sailing in Polar areas if the crew does not have the sufficient experience required by the Polar Code. No exceptions from the rule will be allowed, even for single journeys."

Evaluation model for vessels

A correspondence group has been founded to outline an evaluation model for vessels and freezing areas under the working name "Polaris". The idea is to create a mathematical formula for different ice conditions that enables captains to evaluate whether they can enter and operate their vessel in a certain



The Arctic map was updated to include the specific coordinates where the Polar Code applies. The Antarctic map remained untouched and the Polar Code will apply on all areas south of latitude S 60 degrees.

area. Icebreaker assistance also has to be evaluated as part of this system. A working group will very likely be initiated to further develop this matter during the next meeting.

"The Polar Code is the first mandatory legislation for ships addressing potential hazards unique to Arctic and Antarctic environment, such as ice, remoteness and rapidly changing severe weather conditions, and provides goals and functional requirements related to ship design, construction, equipment, operations and training, as well as search and rescue. The newly adopted resolution has received criticism from different parties for being too much of a compromise and therefore not the powerful directive it was envisioned to be. In order to keep the schedule, many challenging issues had to be left out from the first version of the code. But at least now it has been developed to a certain stage and the development work will continue. The code will be updated with so called circulars, which will include updates to the Polar Code," Mr Uuskallio outlines.

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

Ice conditions	Tankers	Passenger ships	Other
Ice free	Not applicable	Not applicable	Not applicable
Open waters	Basic training for master, chief mate and officers in charge of a navigational watch	Basic training for master, chief mate and officers in charge of a navigational watch	
Other waters	Advanced training for master and chief mate. Basic training for officers in charge of a navigational watch.	Advanced training for master and chief mate. Basic training for officers in charge of a navigational watch.	Advanced training for master and chief mate. Basic training for officers in charge of a navigational watch.

A rough draft is in place for the kind of training which will be required, but development work is still continuing concerning this matter. Our ice simulator will be an excellent tool to use for training once the criteria are clear.