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Lifesaving Equipment

IMO Polar Guidelines and Canadian Application



Transport
Canada

Transports
Canada

Canada

Overview

Development of IMO Polar Guidelines

- Moving to mandatory requirements
- Table of Contents

Lifesaving Equipment

- Current – International/National
- Suggestions for changes
- Mandatory or recommended?

Summary



Development of IMO Polar Guidelines

“Polar Code” = IMO Guidelines + IACS Polar Class Rules

Purpose: provide guidance for construction, equipment and operation of vessels navigating in ice

- 2002** IMO issues Joint Circular
Guidelines for Ships Operating in Arctic Ice-covered Waters
- 2006** IACS publish Unified Requirements for Polar Ships
- 2008** IACS Members incorporate UR in Rules
- 2009** IMO updates Guidelines and extends application to Polar waters. Reference to ice-covered removed.
DE sub-committee directed to develop a mandatory Code for vessels operating in polar waters
- Future** Canada adopts IMO/IACS Polar Rules by reference



IMO Polar Guidelines - Contents

Chapter / Topic

1. General
2. Structures
3. Subdivision and stability
4. Accommodation and escape measures
5. Directional control systems
6. Anchoring and towing arrangements
7. Main machinery
8. Auxiliary machinery systems
9. Electrical installations
10. Fire safety
11. Life-saving appliances and survival arrangements
12. Navigational equipment
13. Operational arrangements
14. Crewing
15. Emergency equipment
16. Environmental protection and damage control



IMO Polar Guidelines Lifesaving Equipment

- Personal survival kits (PSKs)
- Group survival kits (GSKs)
 - Personal and group survival kits should be:
 - sufficient for 110% of persons on board
 - inspected annually
- Lifeboats / liferafts
 - Lifeboats should be partially or totally enclosed with propulsion suited for low temperatures (-15° or -30° ?)
 - Liferaft inflation should be suited for low temperatures (CORE?)
 - Ice should be removed regularly and a mallet kept nearby
 - Additional rations should be considered
- Means of protection from wildlife recommended where encounters likely
- Training manuals & Emergency drills



Personal Survival Kits

- Recommended if mean daily temperature below 0°
- PSKs should be stored so that they can be easily retrieved. Dedicated lockers in assembly areas are suggested.
- Additional kits for training purposes recommended.

Clothing

Head protection (VP)
Neck and face protection (VP)
Hand protection – Mitts (VP)
Hand protection – Gloves (VP)
Foot protection – Socks (VP)
Foot protection – Boots
Insulated suit (VP)
Approved immersion suit
Thermal underwear (VP)

Miscellaneous

Handwarmers - 240 hours
Sunglasses
Survival candle
Matches - 2 boxes
Whistle
Drinking mug
Penknife
Handbook (Polar Survival)
Carrying bag



Group Survival Kits

- Recommended if voyage is anticipated to encounter ice conditions which may prevent the lowering and operation of survival craft
- GSKs should be stored so that they can be easily retrieved and deployed, e.g. near survival craft.
- GSK container should be designed to float and be easily moved over ice.

Group equipment

Tents - 1 per 6 persons
Air mattresses - 1 per 2 persons
Sleeping bags (VP) - 1 per 2 persons
Stove - 1 per tent
Stove fuel - 0.5 litres per person
Fuel paste - 2 tubes per stove
Matches - 2 boxes per tent
Pan (with sealing lid) - 1 per stove
Fortified health drinks - 5 packets per person
Flashlights - 1 per tent
Candles and holders - 5 per tent
Snow shovel - 1 per tent
Snow saw and snow knife - 1 per tent
Tarpaulin - 1 per tent
Foot protection – Booties - 1 per person
GSK container - 1

Spare personal equipment - 1 set per GSK

PSK clothing (no immersion suit)
Handwarmer, sunglasses, whistle, drinking mug



Update of Canadian Regulations

- *Canada Shipping Act, 2001* provides regulatory authority for lifesaving equipment
- *Arctic Waters Pollution Prevention Act* deals only with pollution prevention measures, including crew qualifications
- Regulatory reform of Canadian Lifesaving Equipment Regulations is underway



Discussion

What's missing?

What's superfluous?

What should be mandatory?

- Personal survival kits (PSKs)
- Group survival kits (GSKs)
- Lifeboats / liferafts
- Means of protection from wildlife
- Training manuals
- Emergency drills



Summary

IMO Guidelines are being updated – soon to be for polar waters without reference to ice-cover

Provisions to be split into requirements and recommendations

Lifesaving provisions – international/national



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