

USING KNOWLEDGE OF THE PAST EMERGENCY RESPONSE OPERATIONS ON SVALBARD FOR COMPETENCE DEVELOPMENT EFFORTS

Project financed by Research Council of Norway «MAREC- The Inter-organizational coordination of mass rescue operations in complex environments» (SAMRISK-II program)

MAREC analyses of case studies of SAR/SEAO operations:

Cases in Svalbard: Northguider grounding, Norma Mary fire on board, Maxim Gorkij sinking, MI-8 helicopter crash, the TU-154 plane crash, Exercise Isfjord, SAREx Svalbard exercise.

Focus:

- Coordination in challenging operational conditions
- Preparedness institutions framework
- Incident command, managerial roles and structuring mechanisms
- Information sharing between different actors
- Recommendations for training and simulation exercises to be employed in incident commander competence development

Increasing the link between education and science – how to develop science-based higher education

- The online map resource increases student-active learning by visualizations and information representation in case studies, tabletop exercises and simulator training.
- The online map resource can contribute to open science, can be used for data collection and research within emergency management of response operations in complex environments like Svalbard.
- The map is a database of experiences from exercises and incidents in Svalbard, can be used as a tool for research-based education in the Arctic region.
- Scenario-based exercises and group assignments are used in higher education, for instance on the program Master in Preparedness and Emergency Management at Nord University



Northguider, photo: Governor of Svalbard

SARex Svalbard, photo: Natalia Andreassen

Maxim Gorkij sinking, photo: Odd Mydland

An online Geographical Information System (GIS) called MarEmAr: Marine Emergencies in the Arctic

MarEmAr screenshot



Exercise for students at master program in preparedness and emergency management, photo: Hege Eilertsen

References

Andreassen N. & Borch O.J. (eds) (2020) Crisis and Emergency Management in the Arctic Navigating Complex Environments. Routledge.
 Andreassen, N. & Pincus, R. (2022 forth) Disaster Definitions from an Arctic Perspective, in Aronsson-Storrier, M. and Dahlberg, R. (eds.) Defining Disaster: Disciplines and Domains. Edward Elgar Publishing.
 Andreassen, N., Borch, O.J. & Ikonen, E. (2018). Managerial Roles & Structuring Mechanisms within Arctic Maritime Emergency Response. The Arctic Yearbook 2018 (2298-2418), s. 275-292.
 Andreassen, N., Borch, O.J. & Sydnes, A.K. (2020). Information sharing and emergency response coordination. Safety Science, Vol. 130.
 Andreassen, N., Borch, O.J., Kuznetsova, S. & Markov, S. (2018). Emergency management in mass rescue operations: the case of the High Arctic. In Hildebrand, Brigham & Johansson (eds.) Sustainable Shipping in a Changing Arctic. Springer Nature.
 Andreassen, N., Dalakis, D. & Jonassen, B. (2019). Exercise "Isfjord" demonstration – SAR in Arctic waters. The 8th MARPART Conference "Maritime Emergency Response in the Arctic – policies, capacities and competence", Bodo 3-4.09.2019.
 Marchenko, N. (2019). "Marine Emergencies in the Arctic" - GIS Online Resource for Preparedness, Response and Education, ISOPE - International Offshore and Polar Engineering Conference. Proceedings
 Marchenko, N. (2019). GIS technology to show maritime accidents in the Arctic and learn from case study. Arctic Safety Conference 2019
 Marchenko, N. (2020). Maritime activity and risk in the Arctic. In Andreassen N. & Borch O.J. (eds) Crisis and Emergency Management in the Arctic Navigating Complex Environments. Routledge
 Marchenko, N., Andreassen, N., Borch, O.J., Kuznetsova, S., Ingmundarson, V. & Jakobsen, U. (2018). Arctic Shipping and Risks: Emergency Categories and Response Capacities. International Journal on Marine Navigation and Safety of Sea Transportation, 12(1): 107-114.

