The MMA project was designed to train men and women to safely navigate through winter conditions. Because of the hazards of travel through icy waters, students were trained in a simulator that helped to grow their skills to safely navigate through a variety of tough weather conditions and situations. With this training, students were prepared with skills that could be applied in real world scenarios.

This project saw the development of an advanced ice navigation course required by the Polar Code for all masters and chief mates operating in polar waters. Through this project, a class and simulator was created to teach the basic and advanced ice navigation courses satisfy these requirements for U.S. mariners. Upon completion of these courses, American ship’s officers will have met or exceeded all Standards for Training, Certification, and Watchkeeping (STCW) required by international maritime law.

Maine Maritime Academy Continuing Education (MEMACE) pursued development of two hybrid courses in two years. An Ice Navigation (IMO model, STCW and USCG approved course incorporating the international Polar Code) with online knowledge-based modules and hands-on simulation modules specific to the Arctic. A First Responder course with online modules and face-to-face sessions adapted to the Arctic maritime domain selected from MEMACE’s five DHS/FEMA approvals. Both courses incorporated results from COE work in Theme 2 notably Arctic Sea Ice models and Storm Surge Prediction models.