

## **Operational Analysis of Vessel Movements**

As part of the Baffinland's strategy to develop infrastructure to support its mining operations in the long term, plans are being made to construct both a second loading dock capable of handling Cape Size ships, as well as a dedicated resupply dock at its Milne Inlet site. Pursuant to moving forward with construction works, Baffinland retained the services of the Maritime Simulation and Resource Centre (MSRC) as part of its due diligence process to assist with conducting an operational analysis of vessel movements within Milne Inlet.

The four-day study took place at the MSRC's facilities in Quebec City, and consisted of a series of twenty-three manoeuvres run on the DNV approved Class "A" Full Mission Simulator with modern instruments and an uninterrupted field of vision of 330°. Thirteen manoeuvres were conducted with Cape Size Vessels and the remainder with PANAMAX / KAMSARMAX size vessels.

MSRC's own database development tool was used to create a high-fidelity 3D geographical area model to include all aspects of the channel bathymetry and shore-side structures as well as some of the ship models used for the study.

