



Client

Dillon Consulting Ltd, Hatch Engineering

Vessel Type

Neo-Panamax container vessel

Location

Saint John, New Brunswick, Canada

Manoeuvring Feasibility Analysis Saint John Westside Terminal Neo-PANAMAX Container Vessel

Dillon Consulting Ltd. and Hatch Engineering retained the services of the Maritime Simulation and Resource Centre (MSRC) to allow the Port Saint John and Saint John Pilots to conduct real-time navigation simulations. The goal was to determine the feasibility of a Neo-PANAMAX design container vessel (367m X 48.5m X 15.0 m) transiting the entry channel to the Port of Saint John, and turning in the basin at the north end of the harbour in order to berth at an expanded Westside Container Terminal.

Over 30 manoeuvres were conducted with the Neo-PANAMAX design ship, a 7500 TEU container vessel with a 320-metre LOA and a 347-metre LOA cruise vessel. The tugs were also simulated using the Atlantic Oak model rated at 65 tonnes static bollard pull.

- The study was conducted on the Kongsberg-built Class A and DNV approved full mission simulator;
- The 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;
- W.F. Baird & Associates Coastal Engineers Ltd. was retained by Dillon to undertake 3D hydrodynamic modelling (using the FVCOM model) to define the currents to be used in the navigation simulations.

