



Client

Valero (Ultramar Ltd.)

Vessel Type

Product Carrier with Tug

Location

Saint Romuald, Quebec, Canada

Study of Ship Manoeuvres for an Oil-handling Terminal

Ultramar, a subsidiary of Valero Energy Corporation, called on the services of the Maritime Simulation and Resource Centre (MSRC) to establish new berthing procedures at its port facilities.

The MSRC began by developing a complete geographic database for the site. It also converted some current fields predicted by means of digital modelling, depicting the evolution of currents throughout the tidal cycle for spring tide and neap tide conditions. For each georeferenced point, 12 different vector values were assigned to reflect the dynamic current evolution during tidal cycles.

In collaboration with pilots from the Corporation of Lower Saint Lawrence Pilots, using its full mission bridge simulator, the MSRC then conducted a series of simulations designed to determine safe berthing procedures for oil tankers assisted by tugboats.

