

IMPLEMENTATION OF VN-301 RESTRICTION ON NAVSIM PPU

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The transit of wide beam and long vessels in the St. Lawrence River presents a number of navigational challenges for marine pilots, including restrictions on, and a need for greater coordination of, the meet/overtake maneuvers for these larger vessels. The following project was developed in response to a request by the LPA and the CPSLC to design and implement a fully integrated display of Canadian Coast Guard VN-301 Risk Zones and Directives for Wide Beam and Long Vessels into NavSim's Argus piloting software. The aims of the project was to improve the safety and the efficiency of ship's transits on the St- Lawrence River. The technical specifications for the VN-301 Chart and Risk Zones can be accessed in the VN-301 chart (<https://www.marinfo.gc.ca/images/VN301.pdf>) and, in detail, in Section 27A of the NOTICES TO MARINERS 1 to 46 - ANNUAL EDITION 2020 (www.notmar.gc.ca/publications/annual-annuel/annual-notice-to-mariners-eng.pdf).

In addition, the current project also includes integration of the VN-301 Risk Zones and Directives with a new Planned Meeting Place (PMP) feature. The Argus piloting software enables the creation, distribution, and display of the VN-301 Risk Zones on an ENC panel. The Argus PMP feature automatically checks the status of user-selected Meeting Places against the VN-301 directives (Risk Zone matrix), using the combined breadth of the Ownship and AIS Target vessel to determine whether the planned meet/overtake maneuver is prohibited, can proceed under restrictions, or can proceed with no restrictions. The results of these checks are presented to the user in a clear, accessible display, thereby allowing the user to identify and coordinate optimal locations for multiple meet/overtake maneuvers or to identify zones where such planned Meeting Places are prohibited or restricted.

