



NATIONAL CENTRE OF EXPERTISE ON MARITIME PILOTAGE

Bringing together and sharing the expertise
of maritime pilots, to ensure that Canada benefits
from the most professional pilotage service possible

An aerial, high-angle view of the deck of a large oil tanker ship. The deck is painted a bright red and is filled with a complex network of orange and red pipes, valves, and machinery. A central white staircase structure is visible. The ship is moving through a body of water, with a dark, overcast sky above and a distant shoreline in the background. The text is overlaid in white on the central part of the image.

The National Centre of Expertise on Maritime Pilotage is the technical body of the Canadian Marine Pilots, bringing together the extensive technical expertise and professional know-how of Canada's 450 licensed pilots, from Newfoundland to Vancouver Island.

Our work

Pilotage Procedures and Techniques, Technology, Research and Innovation

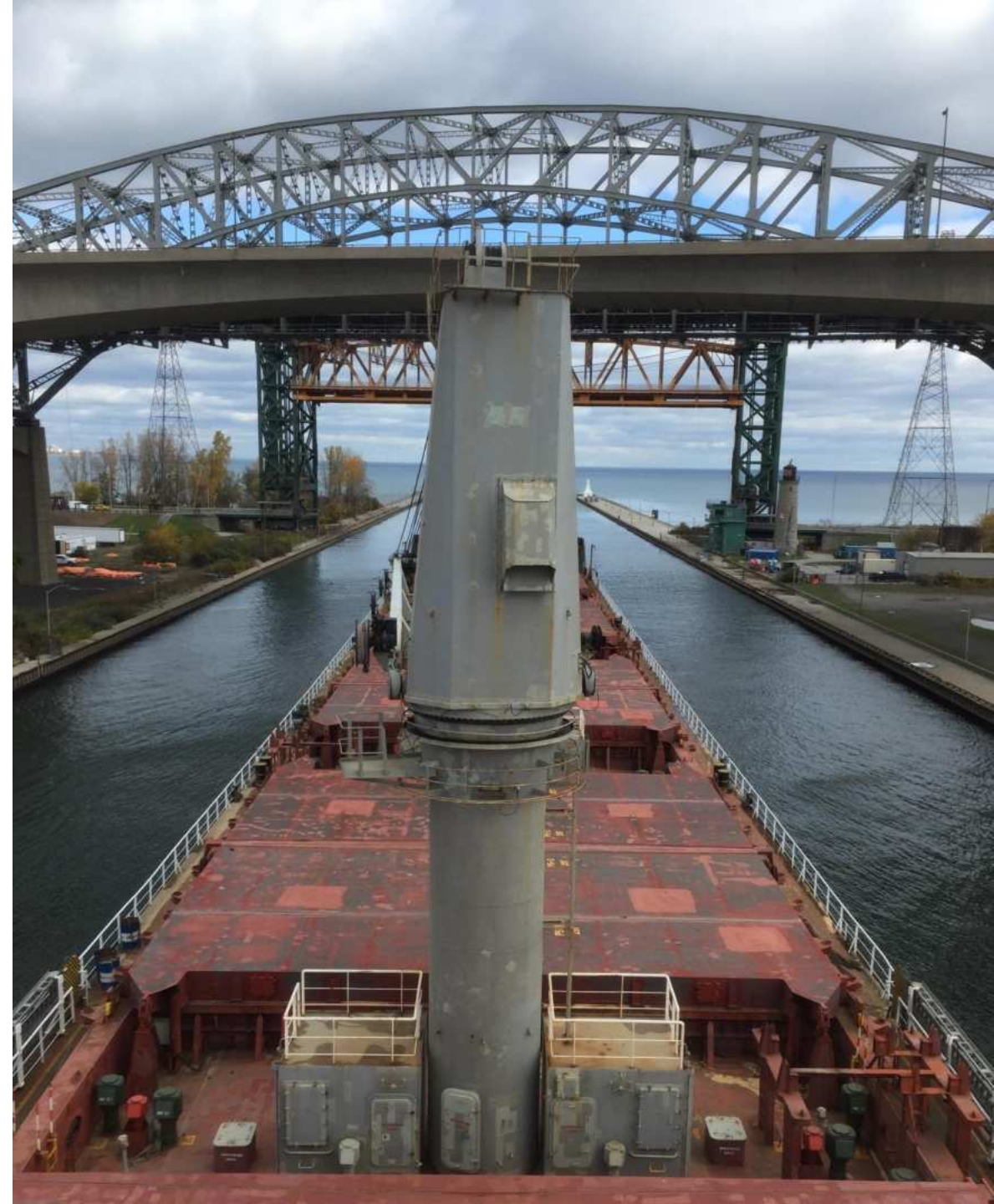
- Responsible for setting guidelines on key technical aspects of the piloting profession
- Improves operational safety and efficiency in Canada's ports and waterways
- Develops best practices on pilotage procedures such as pilot transfers to and from vessels
- Position statements on emerging questions such as the conditions in which Marine Autonomous Surface Ships should operate


Aims to improve operational safety and efficiency in Canada's ports and waterways, and to ensure that Canada's pilots and their local organizations continue to be world-leaders in pilotage innovation

Government and industry

The Centre provides government with advice on key matters related to the technical dimension of piloting, and on matters affecting the exercise of the profession.

The Centre also works with industry to optimize operational parameters, for example in respect of pilotage practices and procedures, and the development and operation of essential marine infrastructure.



An aerial photograph of a port area, showing numerous stacks of colorful shipping containers in shades of blue, red, green, and purple. A large ship is docked at a pier, and several trucks are visible on the roads adjacent to the container stacks. The entire image is overlaid with a semi-transparent blue filter.

The Centre's ability to bring together and reflect the extraordinary diversity of local skills, experience and professional expertise from all of Canada's pilotage districts is its greatest asset.

To achieve this, it relies on its key partners.

Our Partners





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ON MARITIME PILOTAGE**

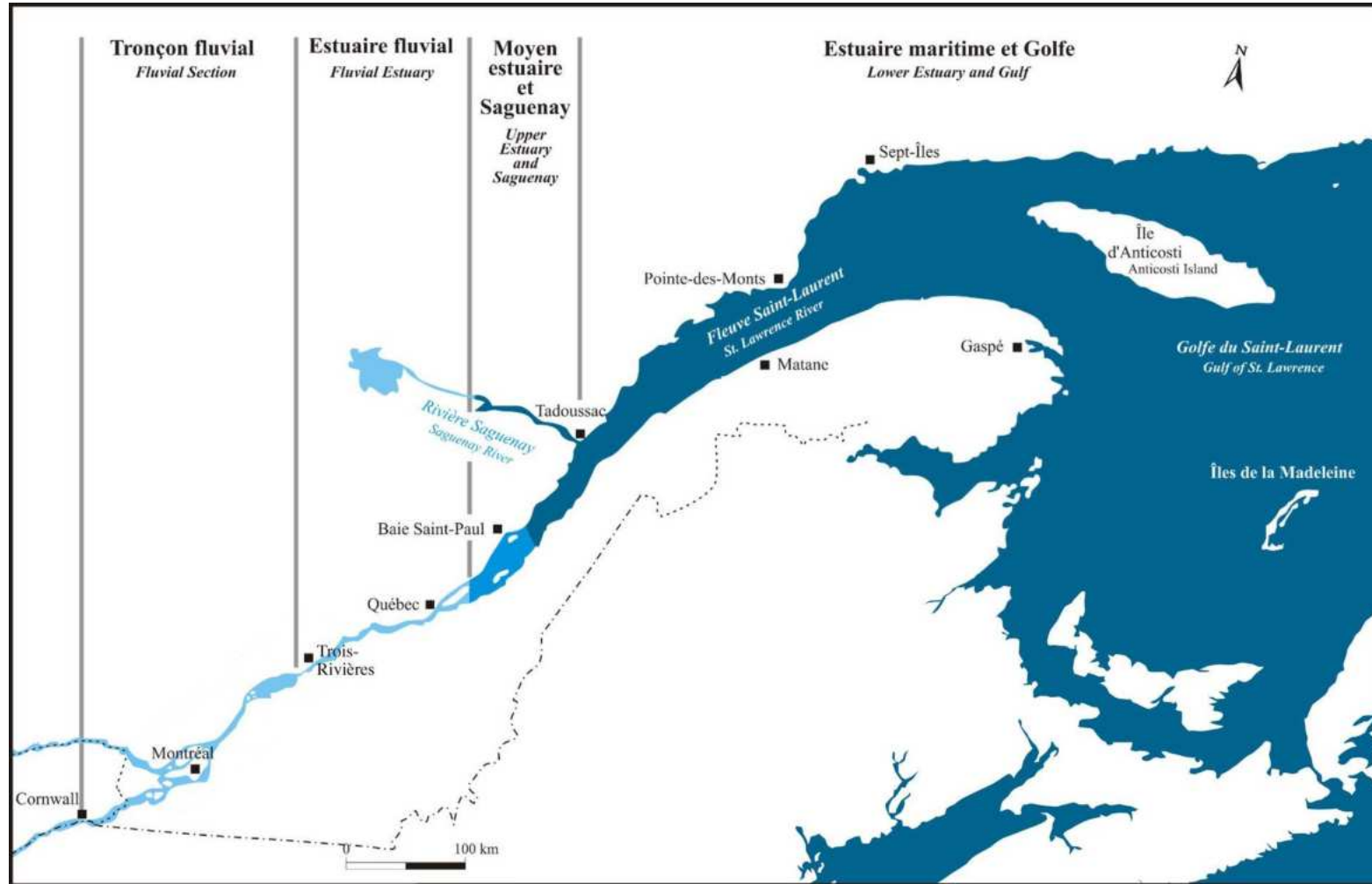
PILOT PORTABLE UNITS

**VN-301 DIRECTIVES
INTEGRATION PROJECT**

ANPRA 2023

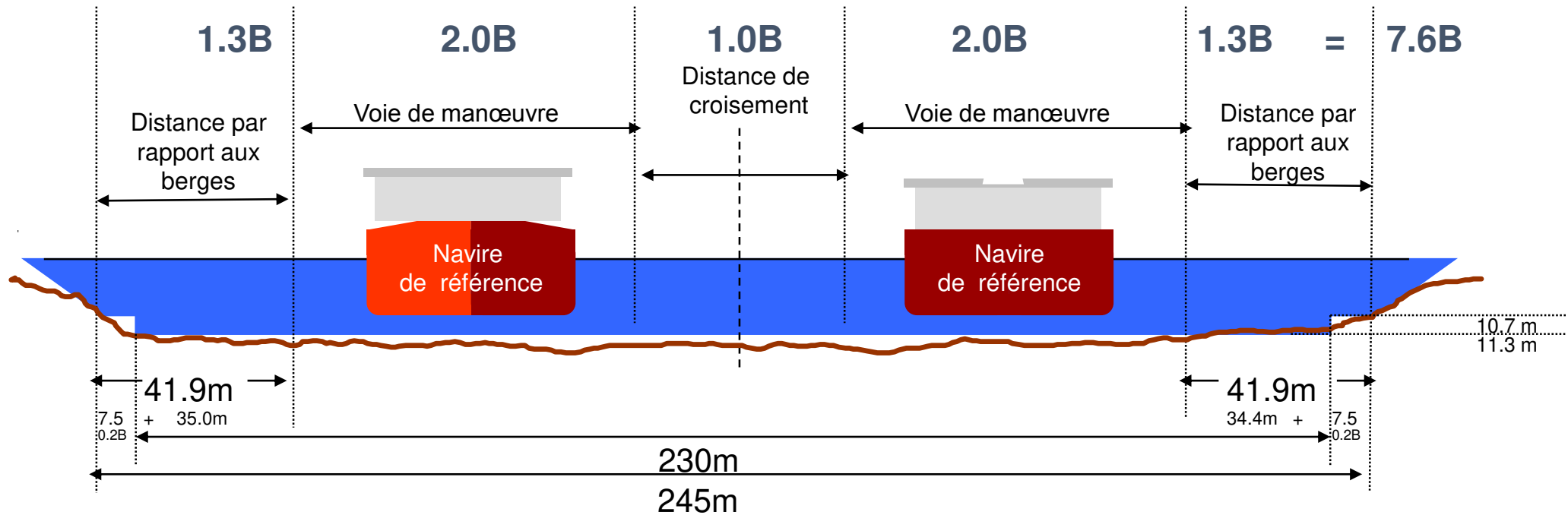


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Post Panamax Vessel in the St-Lawrence River

Coast Guard Waterway Design Guidelines



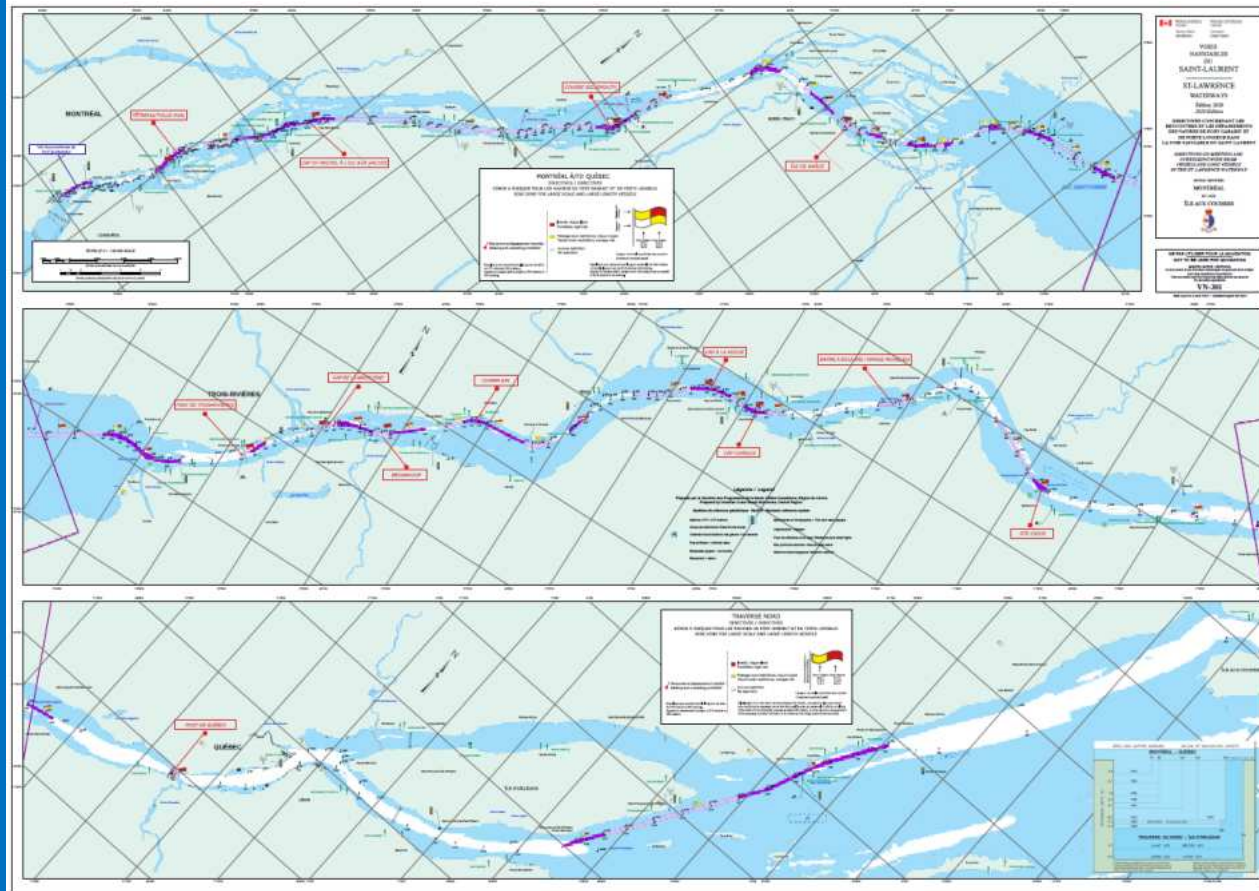
Reference vessel
 $B_{max} = 32.2m$

Risk Study

- A risk study was conducted and a Working Group was formed between Canadian Coast Guard, Transport Canada, Laurentian Pilotage Authority and the pilots corporations, resulting in guidelines for the passage of Post-Panamax vessels, imposing certain restrictions where vessels cannot meet or pass each other.



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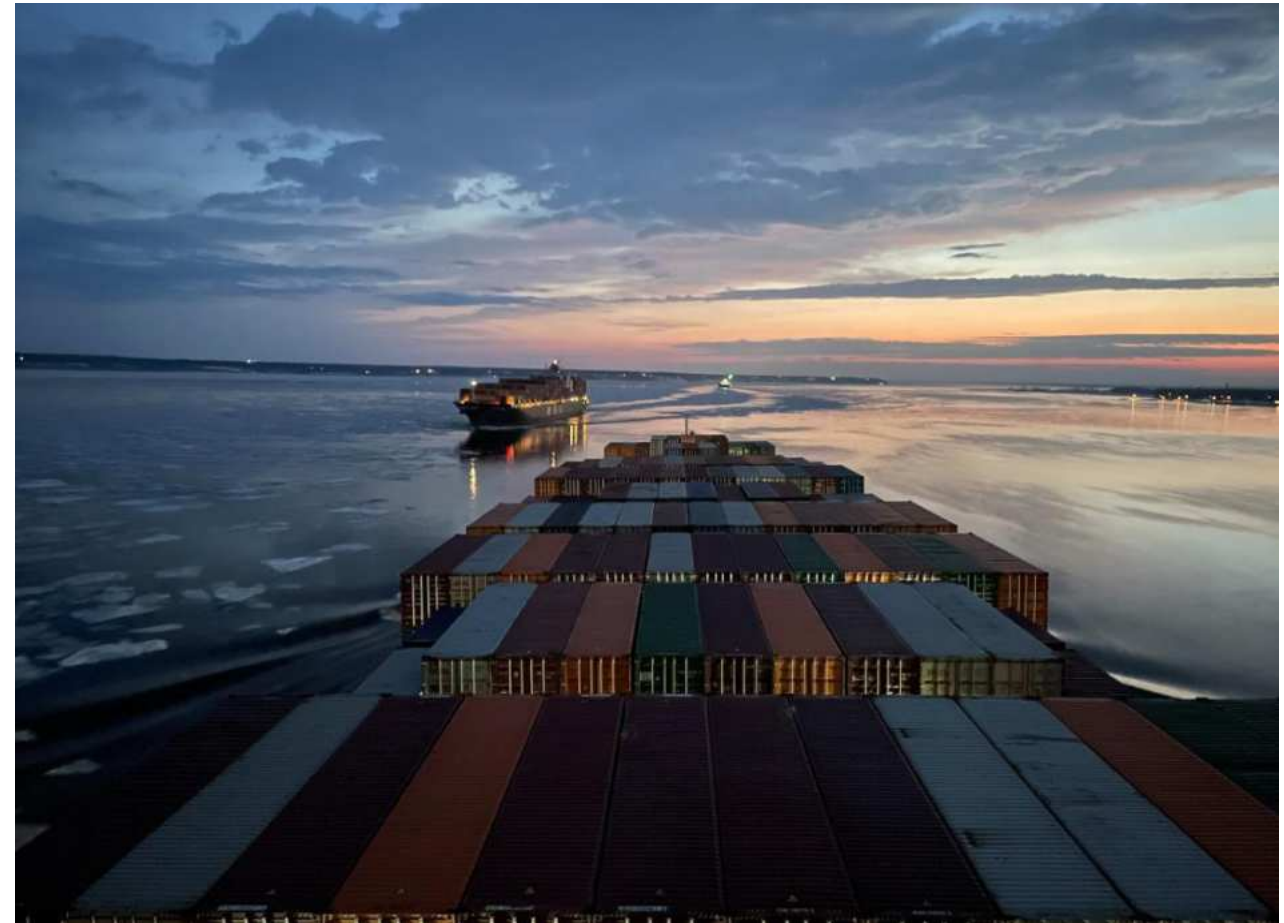
CORPORATION
PILOTES
SAINT-LAURENT CENTRAL

NAVIGATION GUIDELINES - VN301



New tools to face a more complex environment

- Graphical Integration of VN-301 in the PPU
- Improved «Meeting Point» function
- VN-301 meeting checks



Technical Committee

CPSLC



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CORPORATION
PILOTES
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The project and its partners

- The Laurentian Pilotage Authority
- Navsim Technology is the developer of the Argus software
- Mid St-Lawrence Pilots technical committee



Administration
de pilotage
des Laurentides

Laurentian
Pilotage
Authority

NavSim
TECHNOLOGY

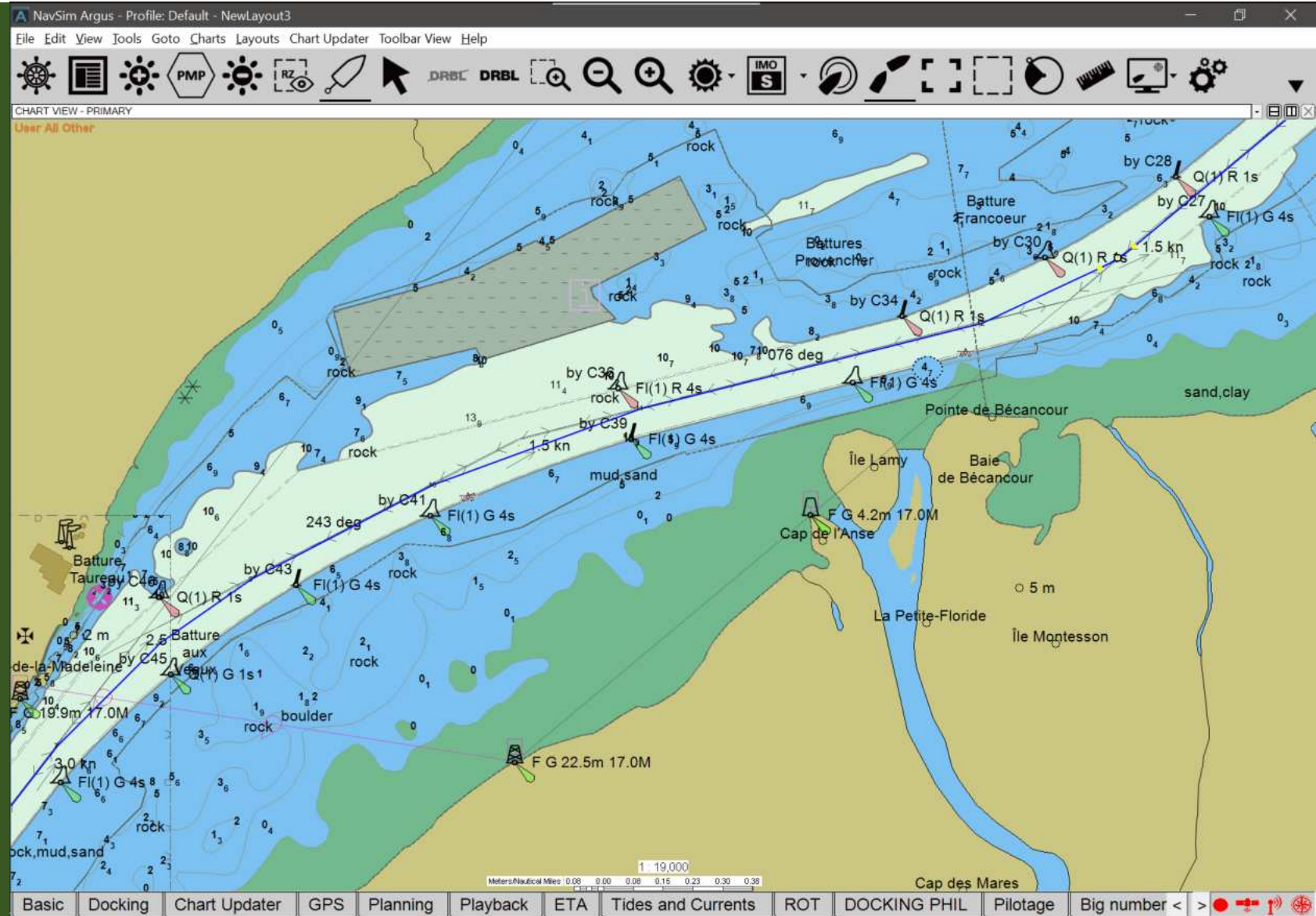


Essential Characteristics



Usability

Reliability

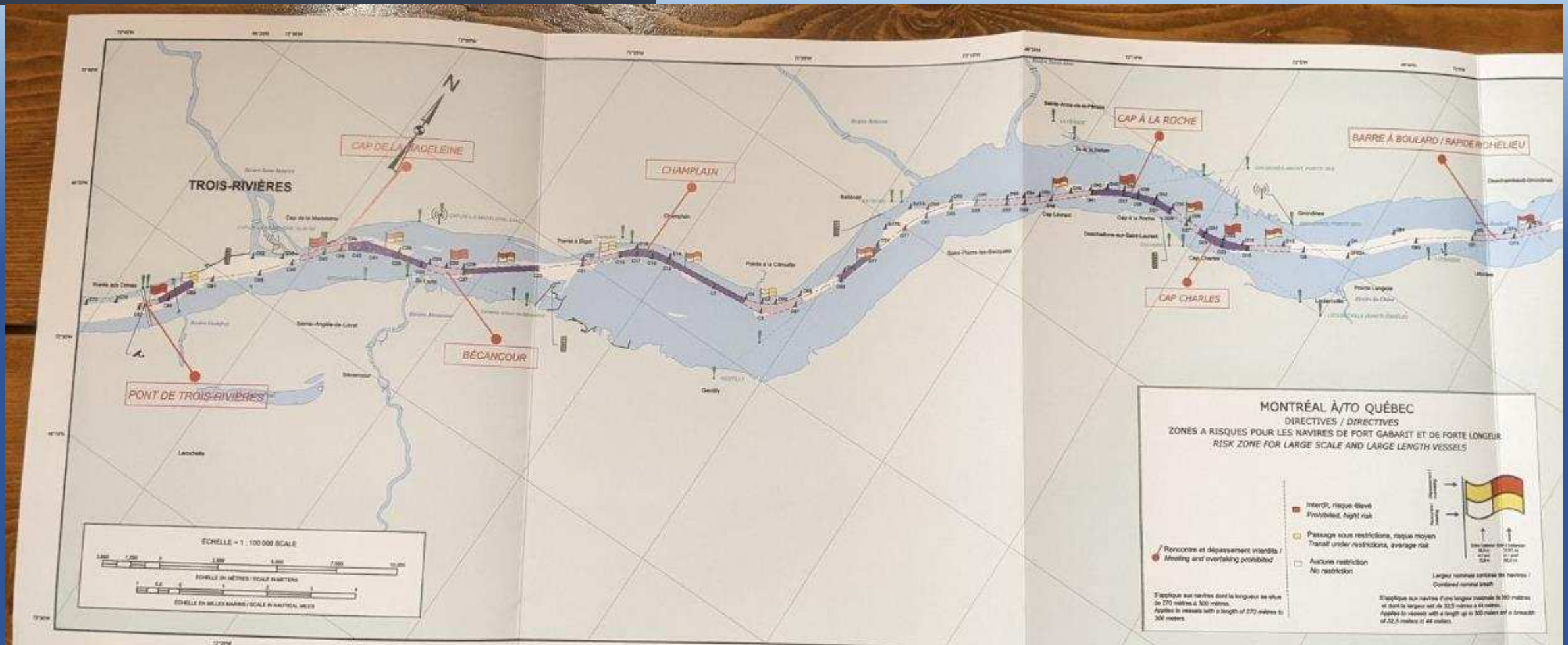


**NATIONAL CENTRE OF EXPERTISE
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VN-301

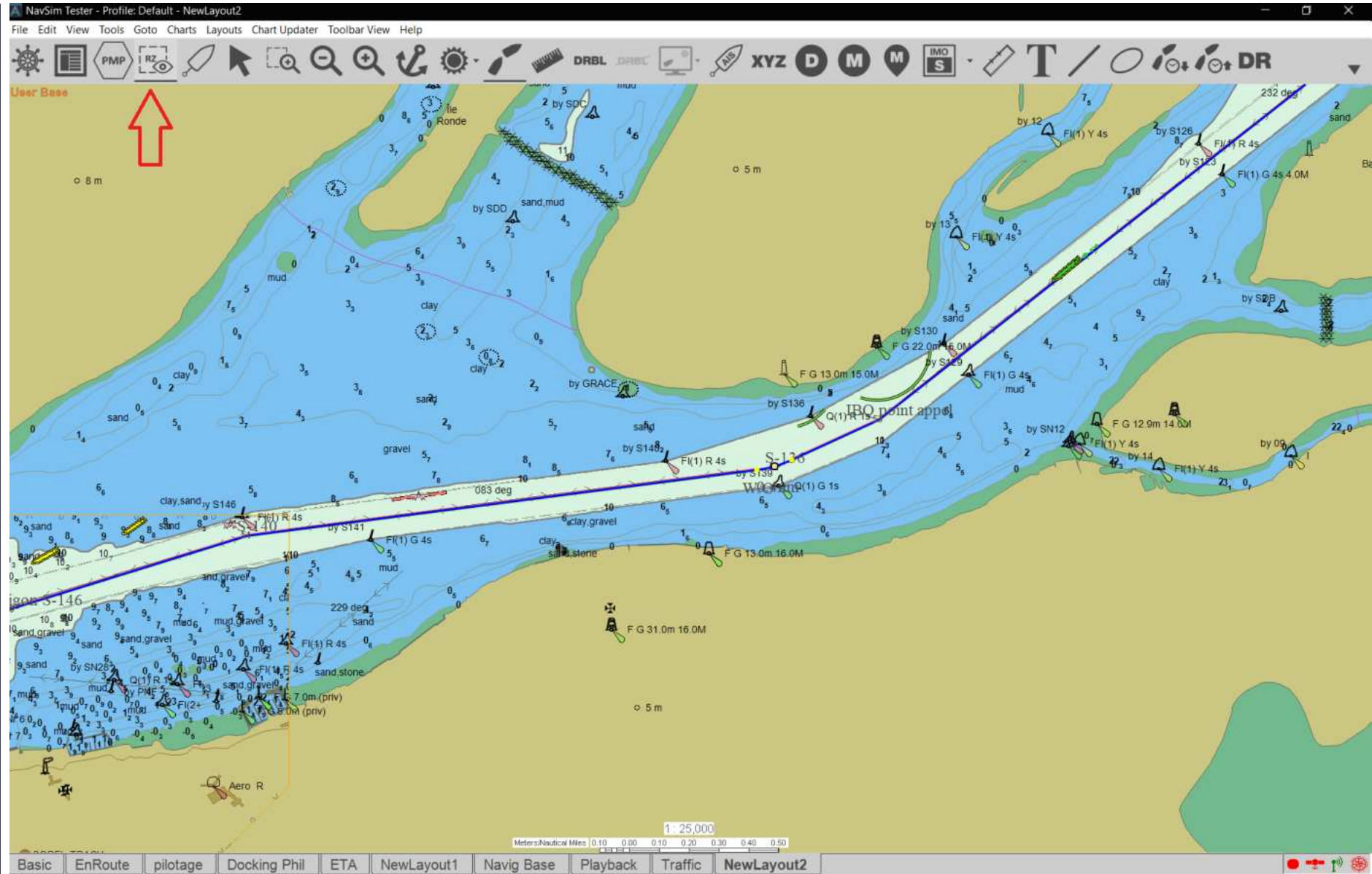
Graphical Integration

BEFORE



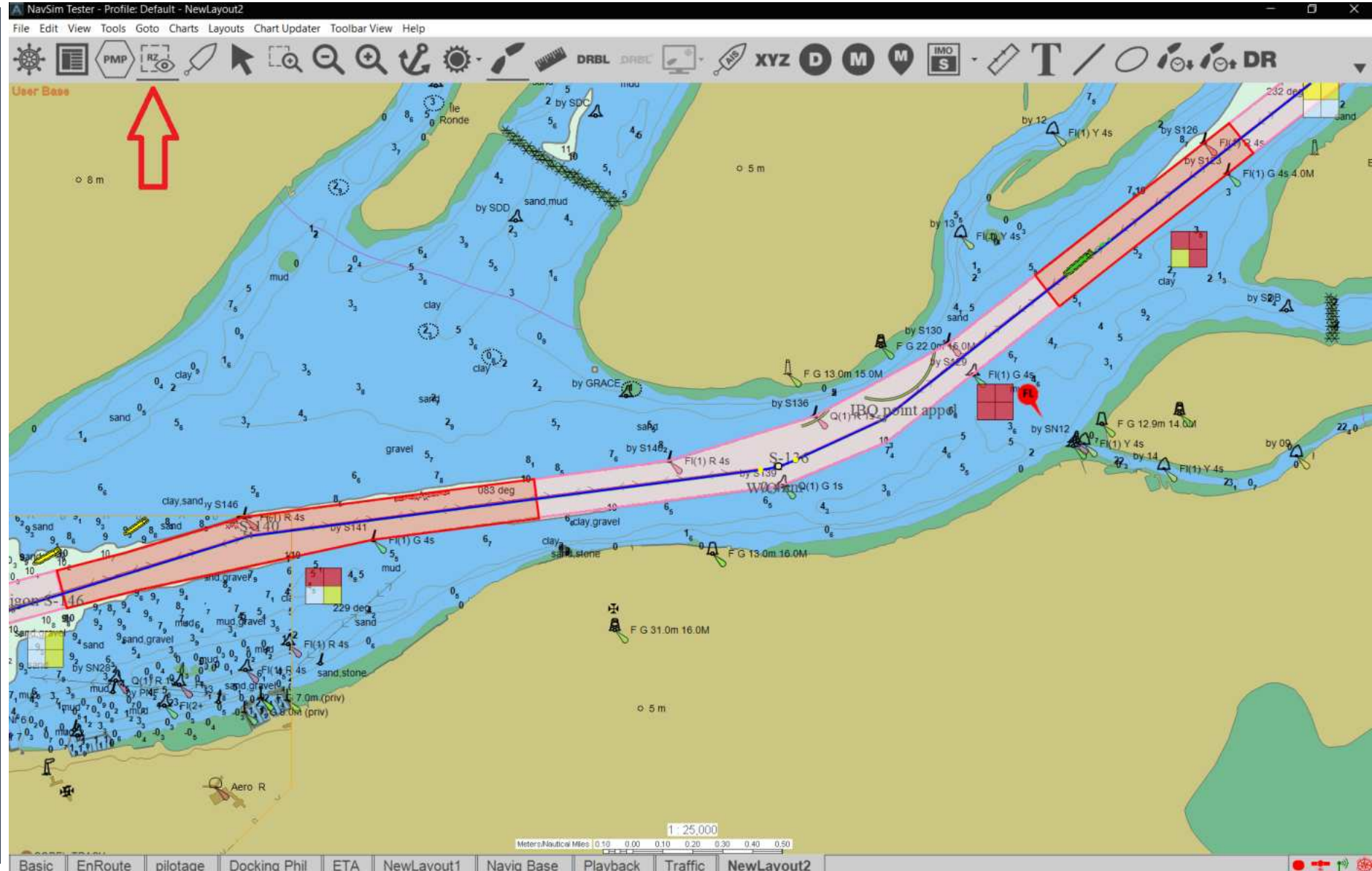
VN-301 Integration

NOW



VN-301 Integration

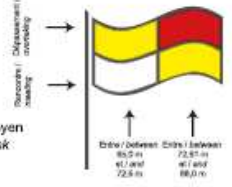
NOW



VN-301 Integration

Before

MONTRÉAL À/TO QUÉBEC
DIRECTIVES / DIRECTIVES
ZONES A RISQUES POUR LES NAVIRES DE FORT GABARIT ET DE FORTE LONGUEUR
RISK ZONE FOR LARGE SCALE AND LARGE LENGTH VESSELS



Interdit, risque élevé
 Prohibited, high risk

Passage sous restrictions, risque moyen
 Transit under restrictions, average risk

Aucune restriction
 No restriction

Rencontre et dépassement interdits /
 Meeting and overtaking prohibited

S'applique aux navires dont la longueur se situe de 270 mètres à 300 mètres.
 Applies to vessels with a length of 270 meters to 300 meters.

S'applique aux navires d'une longueur maximale de 300 mètres et dont la largeur est de 32,5 mètres à 44 mètres.
 Applies to vessels with a length up to 300 meters and a breadth of 32,5 meters to 44 meters.

Risk Zone Properties

Risk Zone Manager

Name:

Sector:

Description:

Color:

Transparency:

Locked Source: Admin

Risk Matrix Rules

Meeting & Overtaking Restrictions

Overtaking	Prohibited High Risk	Prohibited High Risk
Meeting	No Restrictions	Proceed Under Caution Average Risk

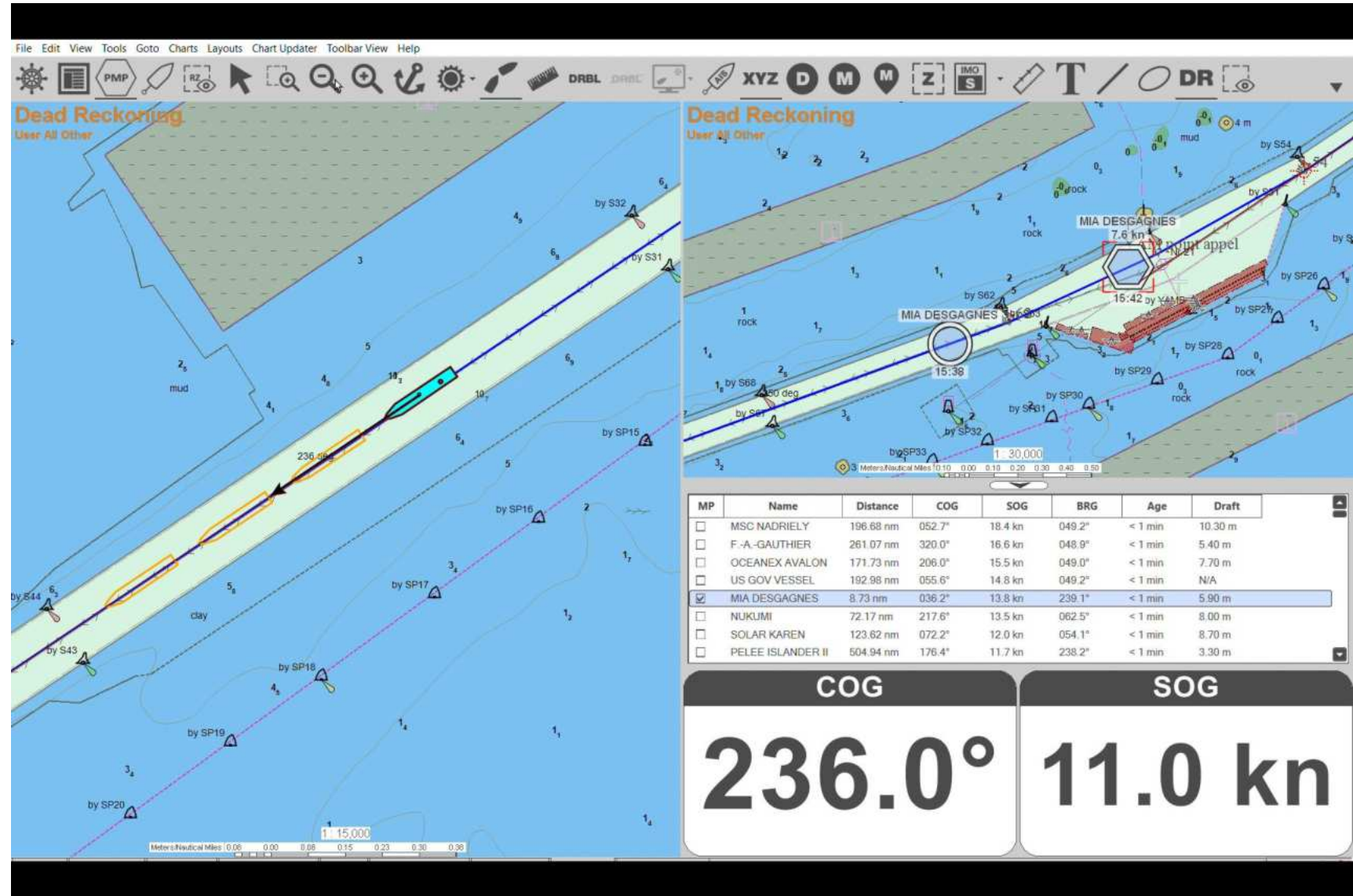
Combined Beam Between m **And** m **Between** m **And** m

Long Vessel Restrictions: Yes No
 ** Meeting and Overtaking prohibited for vessels with LOA of 270 m to 300 m

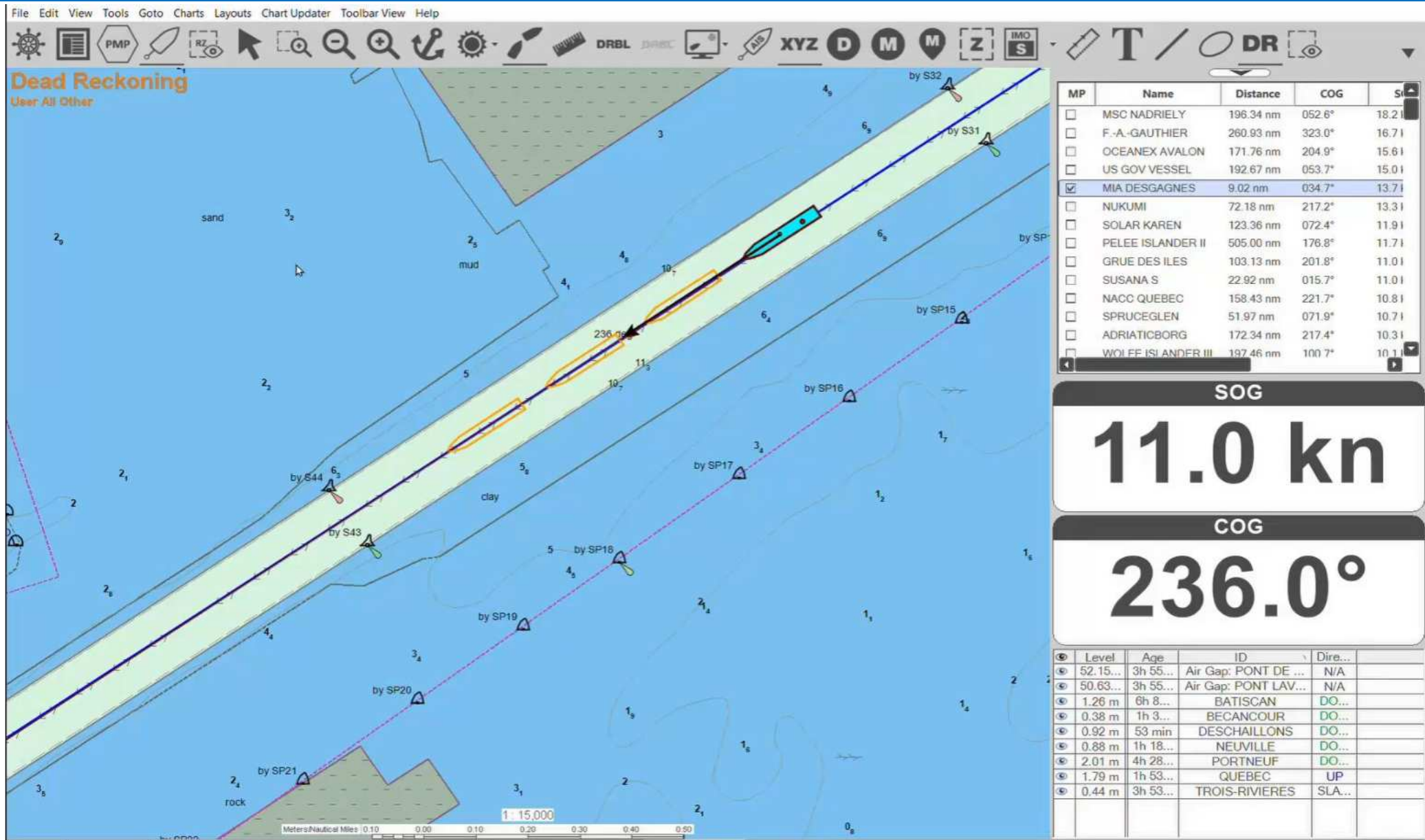
Coordinate Info

#	Name	Coordinate
1		46° 22.755' N, 072° ...
2		46° 22.729' N, 072° ...
3		46° 22.721' N, 072° ...
4		46° 22.630' N, 072° ...
5		46° 22.541' N, 072° ...
6		46° 22.511' N, 072° ...
7		46° 22.300' N, 072° ...

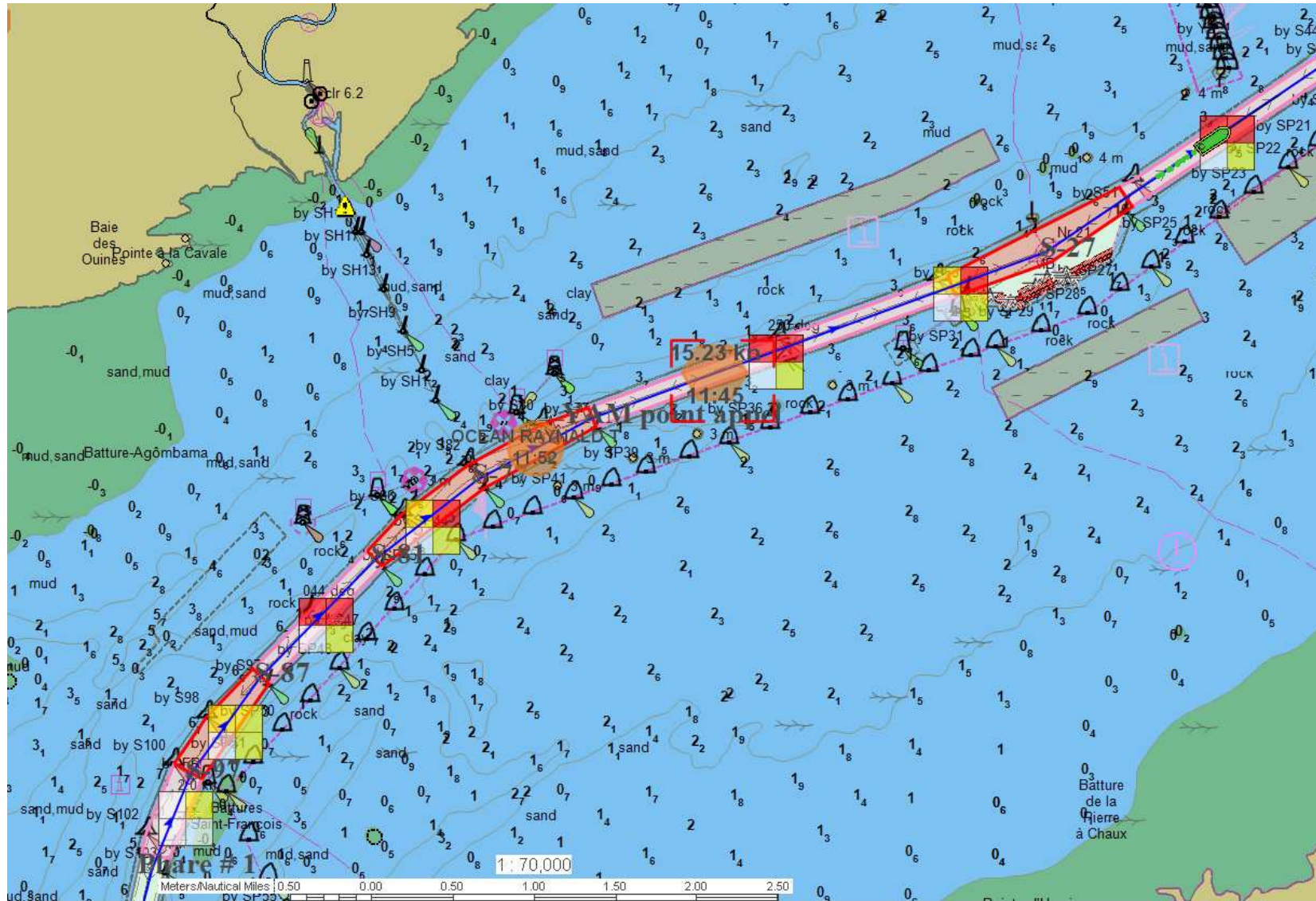
« Improved » Meeting Point function



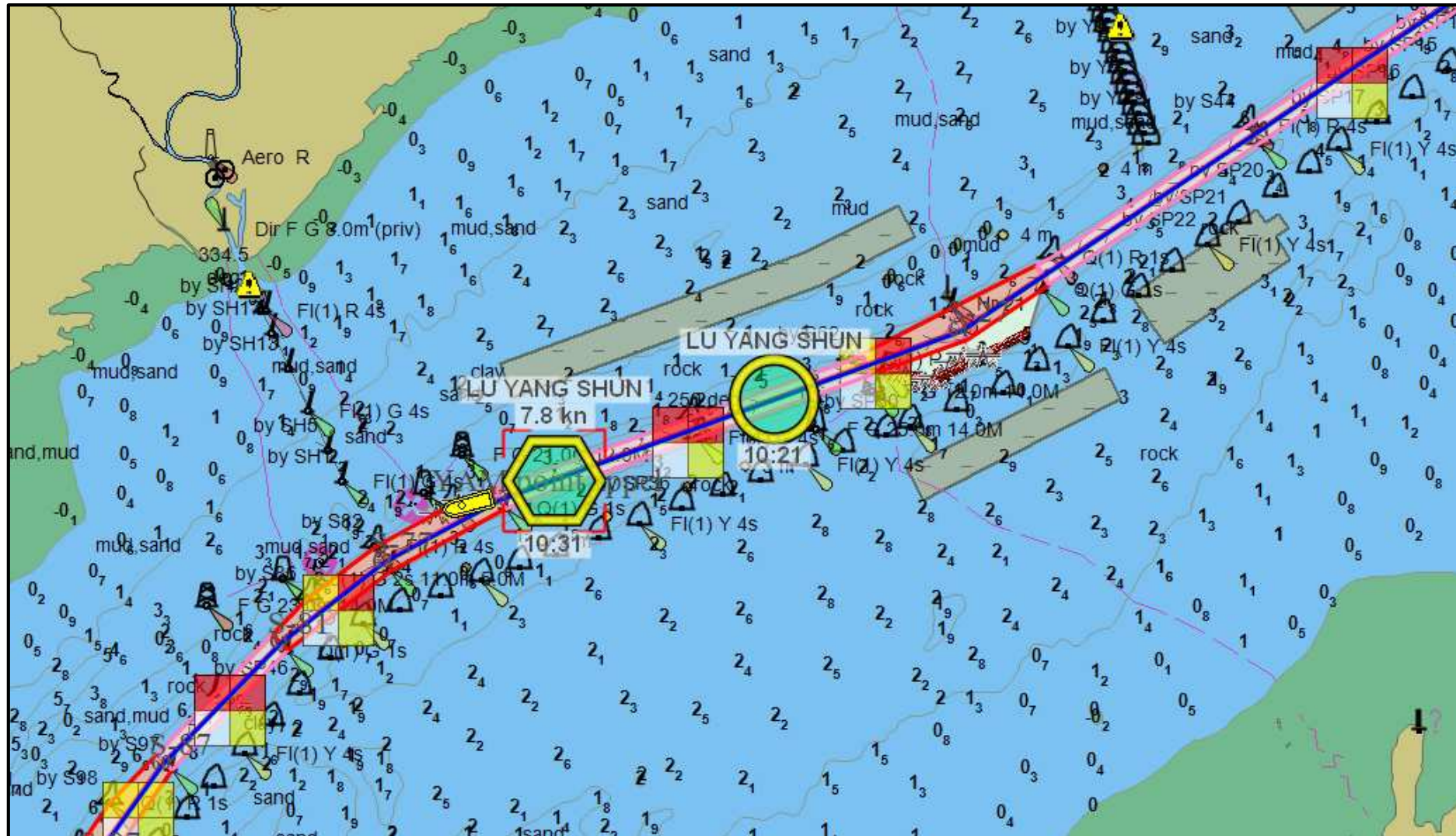
« Improved » Meeting Point function



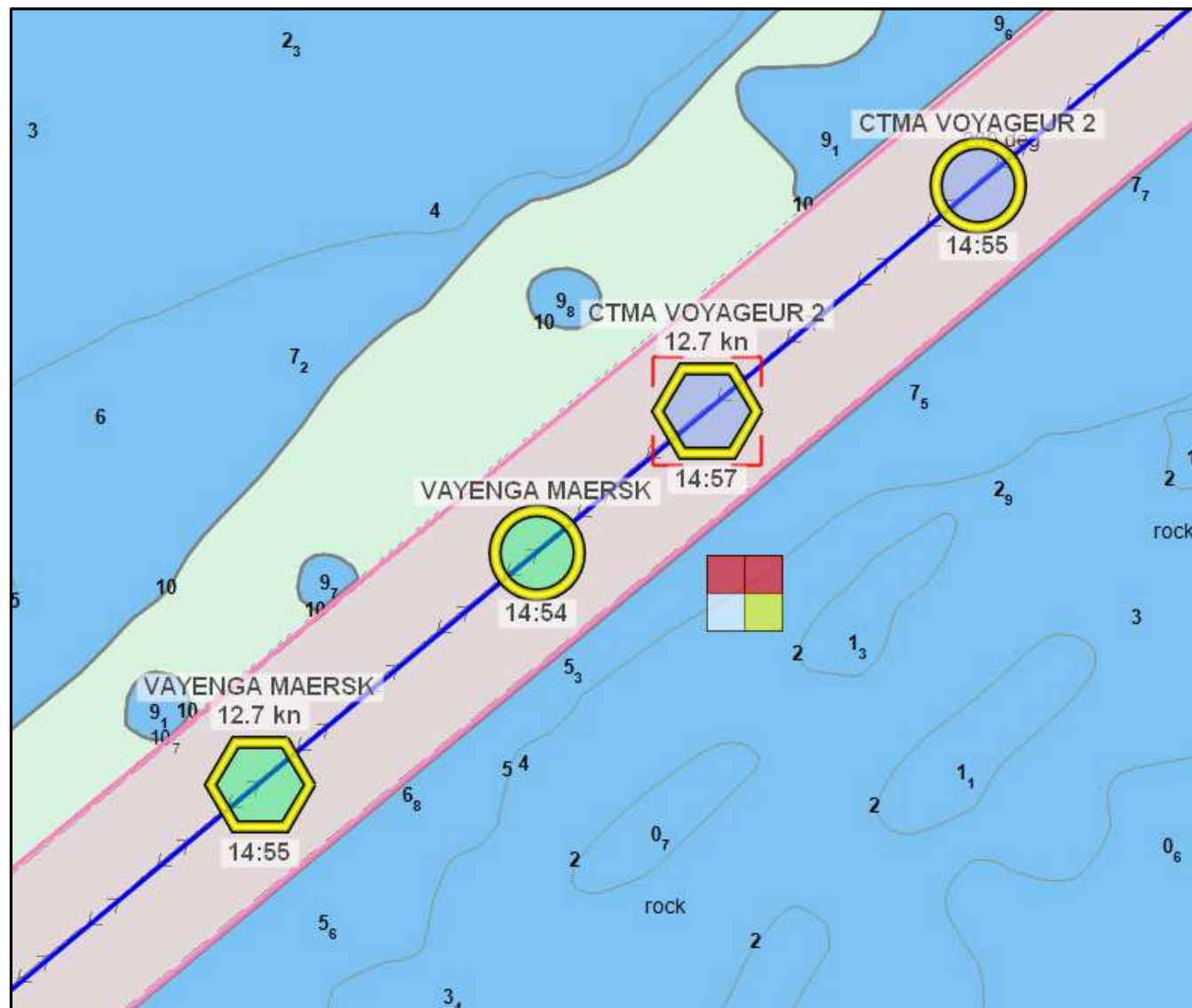
« Improved » Meeting Point function



« Improved » Meeting Point function



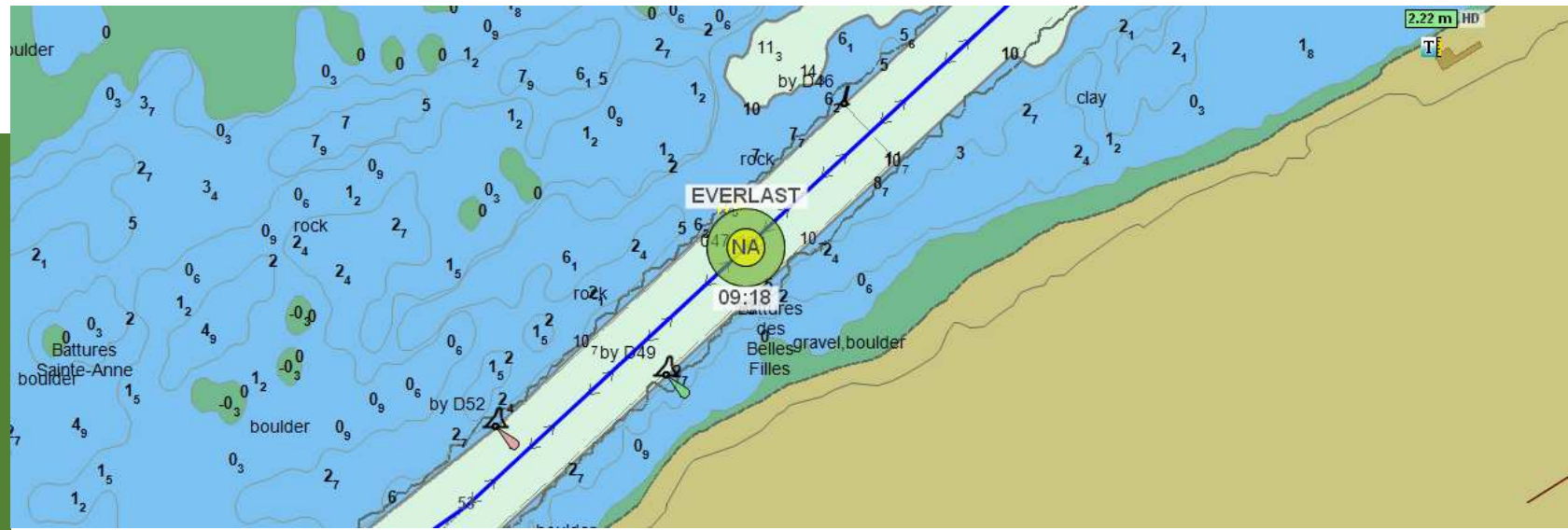
« Improved » Meeting Point function



MEETING CHECKS



RELIABILITY



PMP Table															
Vessel Name	MMSI	Go To Vessel	Beam	Comb. Beam	LOA	Ownship SOG	Planned Speed	Type	Go To	DTG	TTG	Risk Zone Name	Risk Matrix	Long Vessel Restriction	M/O Permitted
MSC SORAYA	370271000	Go To Vessel	40 m	70.48 m	277 m	19.63 km/h	35.48 km/h	MP	Go To MP	4.82 km	14min 42s	Risk Zone 6		YES	NO
								PMP	Go To PMP	6.17 km	10min 25s	Risk Zone 6		YES	NO
FRANK JAHN	367505030	Go To Vessel	10 m	40.48 m	26 m	19.63 km/h	35.48 km/h	MP	Go To MP	4.96 km	15min 8s	Risk Zone 6		YES	YES
								PMP	Go To PMP	5.62 km	9min 29s	Risk Zone 6		YES	YES
BOW PALLADIUM	257246000	Go To Vessel	27 m	57.48 m	165 m	19.63 km/h	35.48 km/h	MP	Go To MP	N/A	N/A	N/A	N/A	N/A	N/A
								PMP	Go To PMP	N/A	N/A	N/A	N/A	N/A	N/A

VERIFICATION FUNCTION

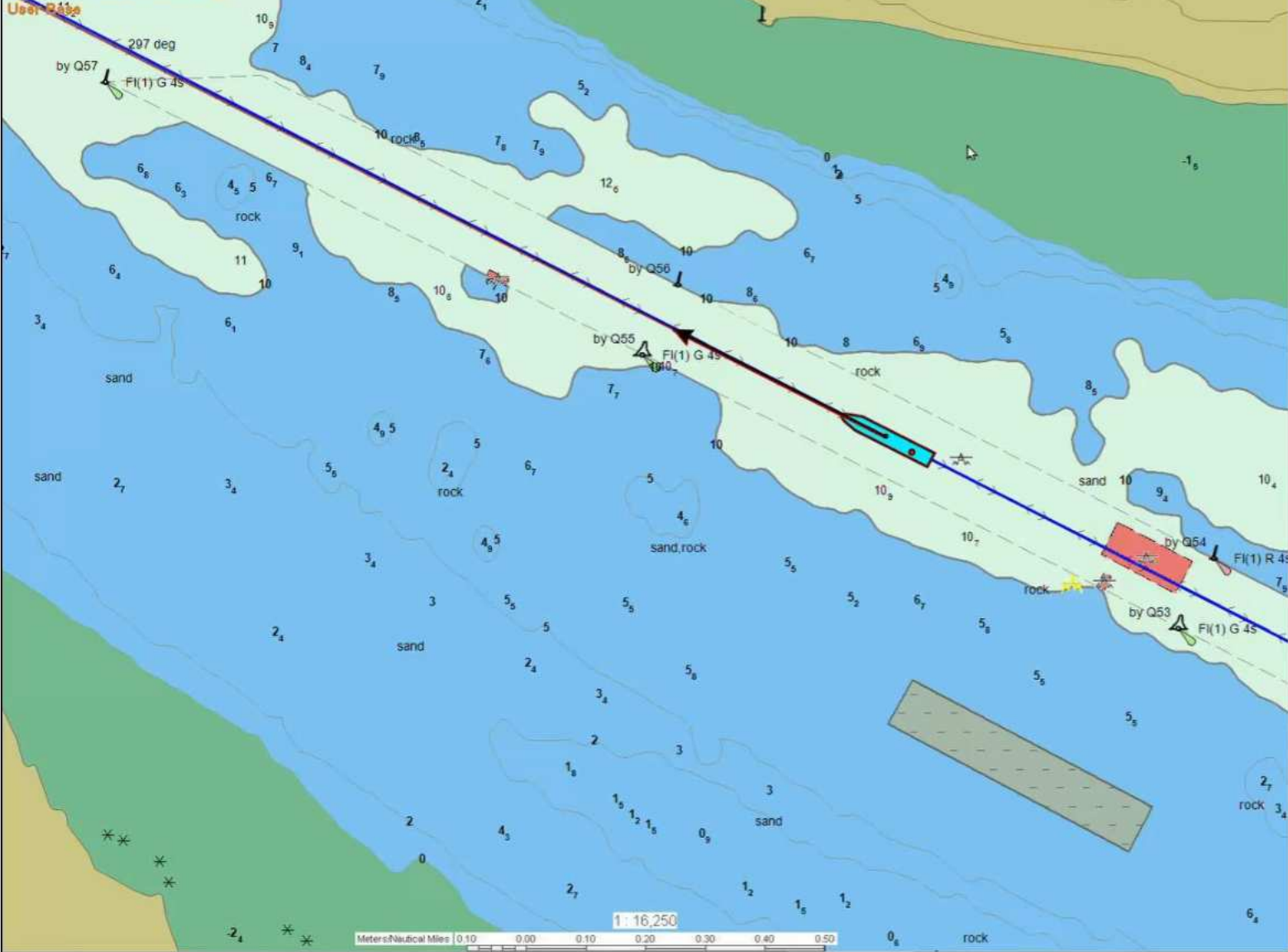
VESSEL'S CHARACTERISTICS



LLOYD'S DATA BASE



Dead Reckoning



MP	Name	Distance	COG	St...
<input type="checkbox"/>	GENEVAN TRADER	26.46 nm	191.0°	0.0 kr
<input type="checkbox"/>	SUNSET	29.01 nm	335.0°	0.0 kr
<input checked="" type="checkbox"/>	THUNDER BAY	32.02 nm	076.1°	11.8
<input checked="" type="checkbox"/>	OCEANEX CONNAIGF	32.80 nm	075.6°	17.0
<input type="checkbox"/>	POINT VIM	36.32 nm	151.6°	0.0 kr
<input type="checkbox"/>	JAMNO	36.56 nm	165.6°	0.0 kr
<input type="checkbox"/>	MEGA II	36.67 nm	342.0°	0.0 kr
<input type="checkbox"/>	ALGOMA NIAGARA	36.82 nm	311.7°	0.0 kr
<input type="checkbox"/>	STAR GWYNETH	36.96 nm	281.5°	0.0 kr
<input type="checkbox"/>	DUGA	36.97 nm	323.3°	0.0 kr
<input type="checkbox"/>	OCEAN BRAVO	36.99 nm	189.5°	0.0 kr
<input type="checkbox"/>	OCEAN CHARLIE	37.02 nm	340.7°	0.0 kr
<input type="checkbox"/>	UMIAK 1	37.22 nm	046.0°	0.0 kr
<input type="checkbox"/>	OCEAN LAVIOLETTE	39.09 nm	086.2°	0.0 kr

SOG

12.0 kn

COG

297.0°

Level	Age	ID	Dir...
2.21 m	22 min	PORTNEUF	N/A
4.65 m	17 min	QUEBEC	N/A
0.70 m	7 min	TROIS-RIVIERES	N/A

QUESTIONS /COMMENTS ?

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NATIONAL CENTRE OF EXPERTISE
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