

Marine Autonomy Research Site and Smart Ships Coalition

December 4, 2018



Great Lakes
Research Center
Michigan Technological University



GREAT LAKES
ST. LAWRENCE
GOVERNORS
& PREMIERS

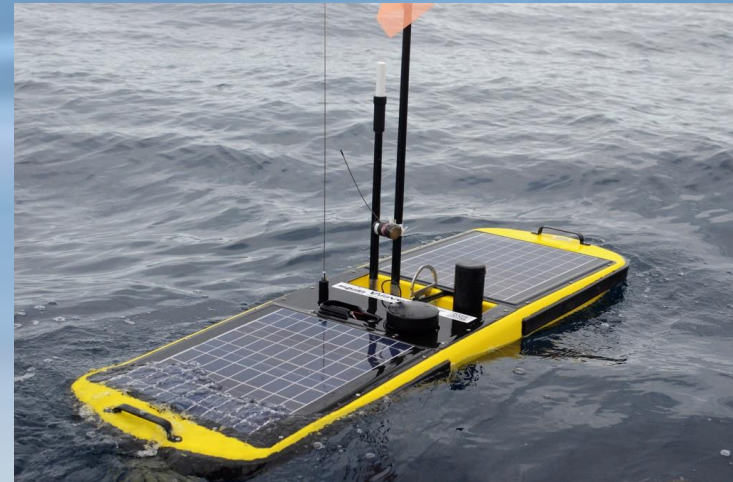


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Robbins Professor of Sustainable Marine Engineering



SMART SHIPS
COALITION
OF THE GREAT LAKES-ST. LAWRENCE

Next Generation Marine Technology



Smart Ships Coalition Background



Founding Members



Great Lakes Research Center
Michigan Technological University



Detroit, Michigan and Windsor, Ontario
October 20, 2017

RESOLUTION

COLLABORATION
among the
CONFERENCE OF GREAT LAKES AND ST. LAWRENCE
GOVERNORS and PREMIERS
the
MARINE AUTONOMY COALITION
and the
NORWEGIAN FORUM for AUTONOMOUS SHIPS

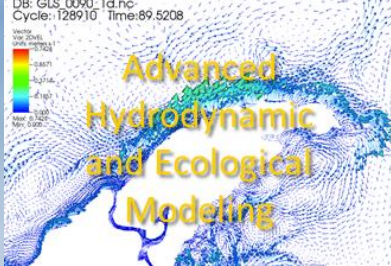
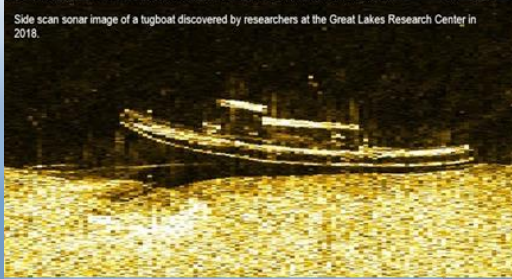
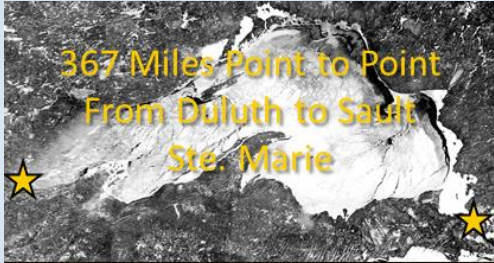


Michigan Technological University Great Lakes Research Center (GLRC)

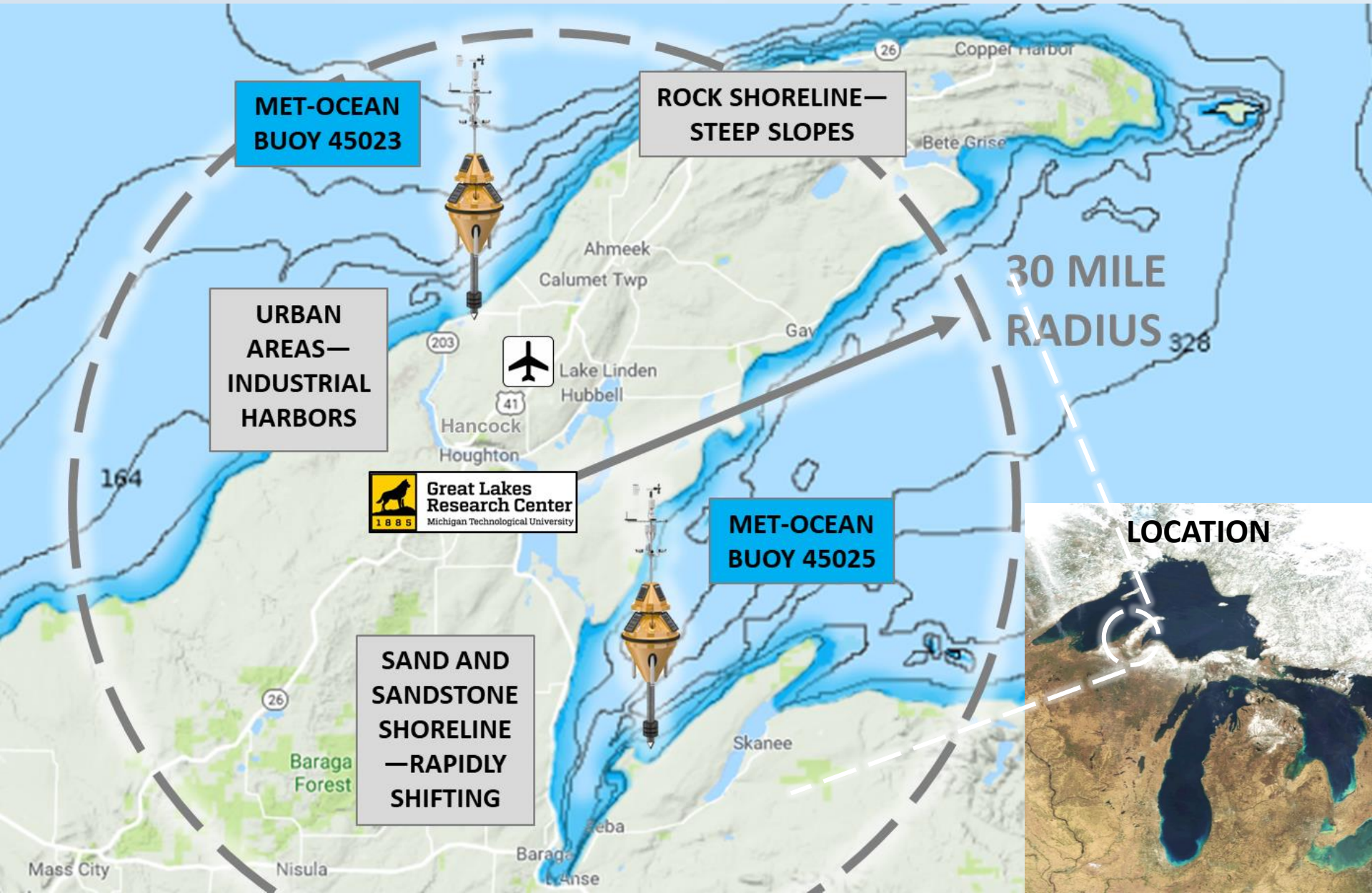
[http:// http://www.mtu.edu/greatlakes/](http://www.mtu.edu/greatlakes/)



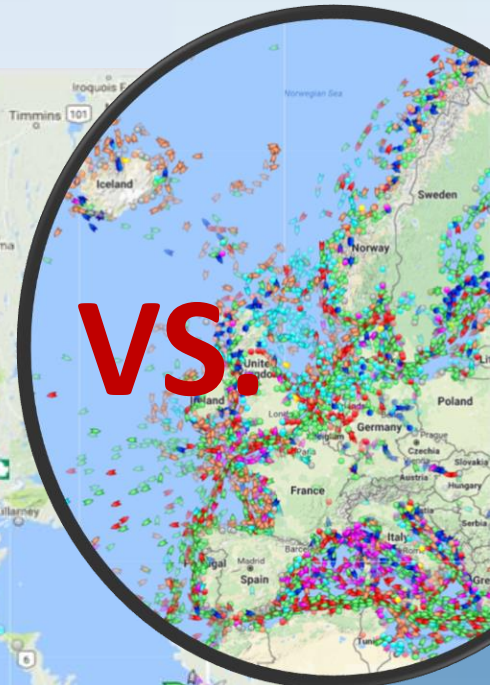
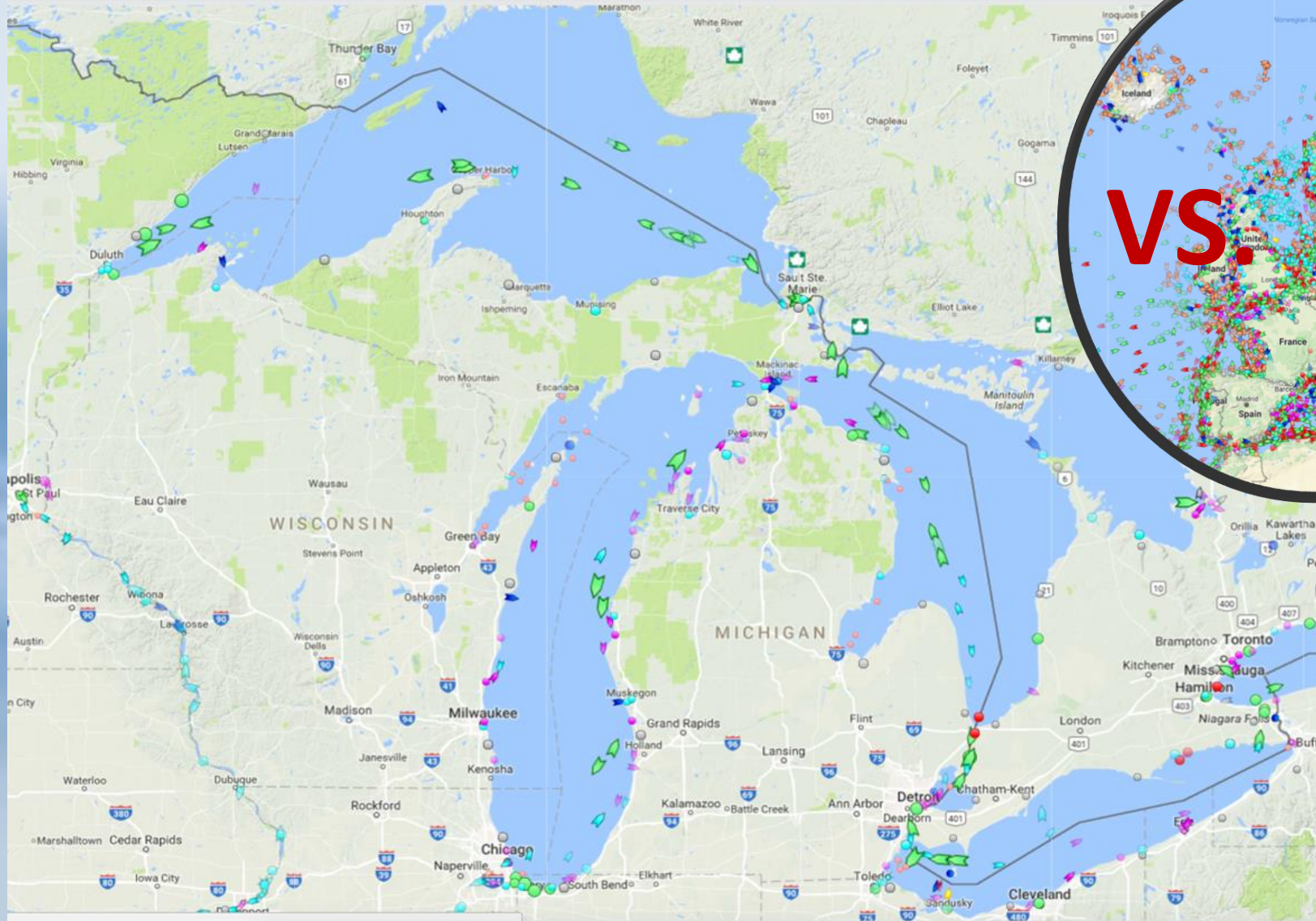
What We Do...



Marine Autonomy Research Site



Low Density of Marine Traffic



VS.

Services and Facilities

- *Cutting-edge equipment and support:*

State of the Art Research Facility and Work Space



“Large” and Small Vessel Support



Experienced Professional Support Staff



Services and Facilities

Cutting-edge equipment and support:

Advanced Underwater Vehicles and Platforms



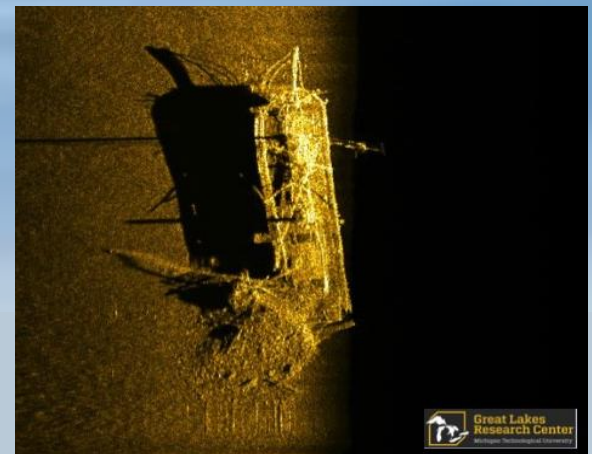
Monitoring Platforms



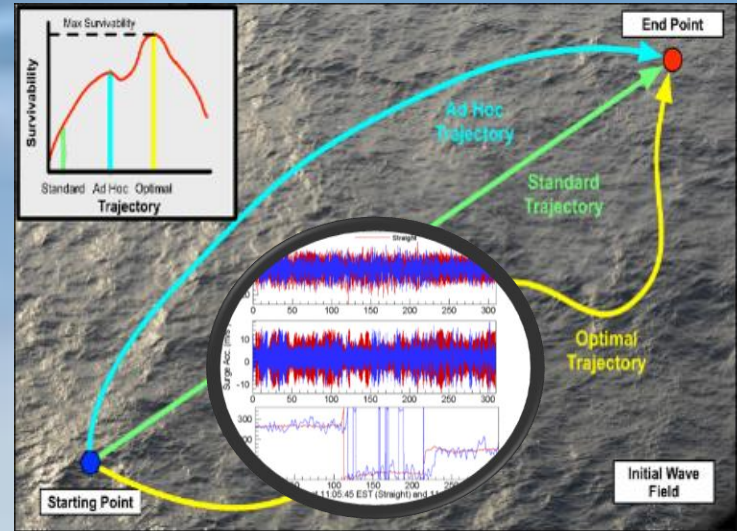
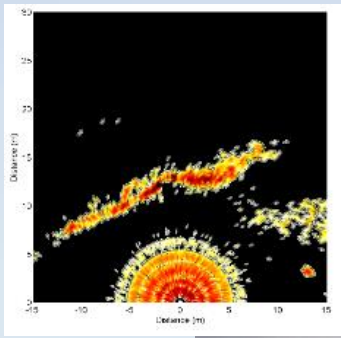
Real-time Remote Observation



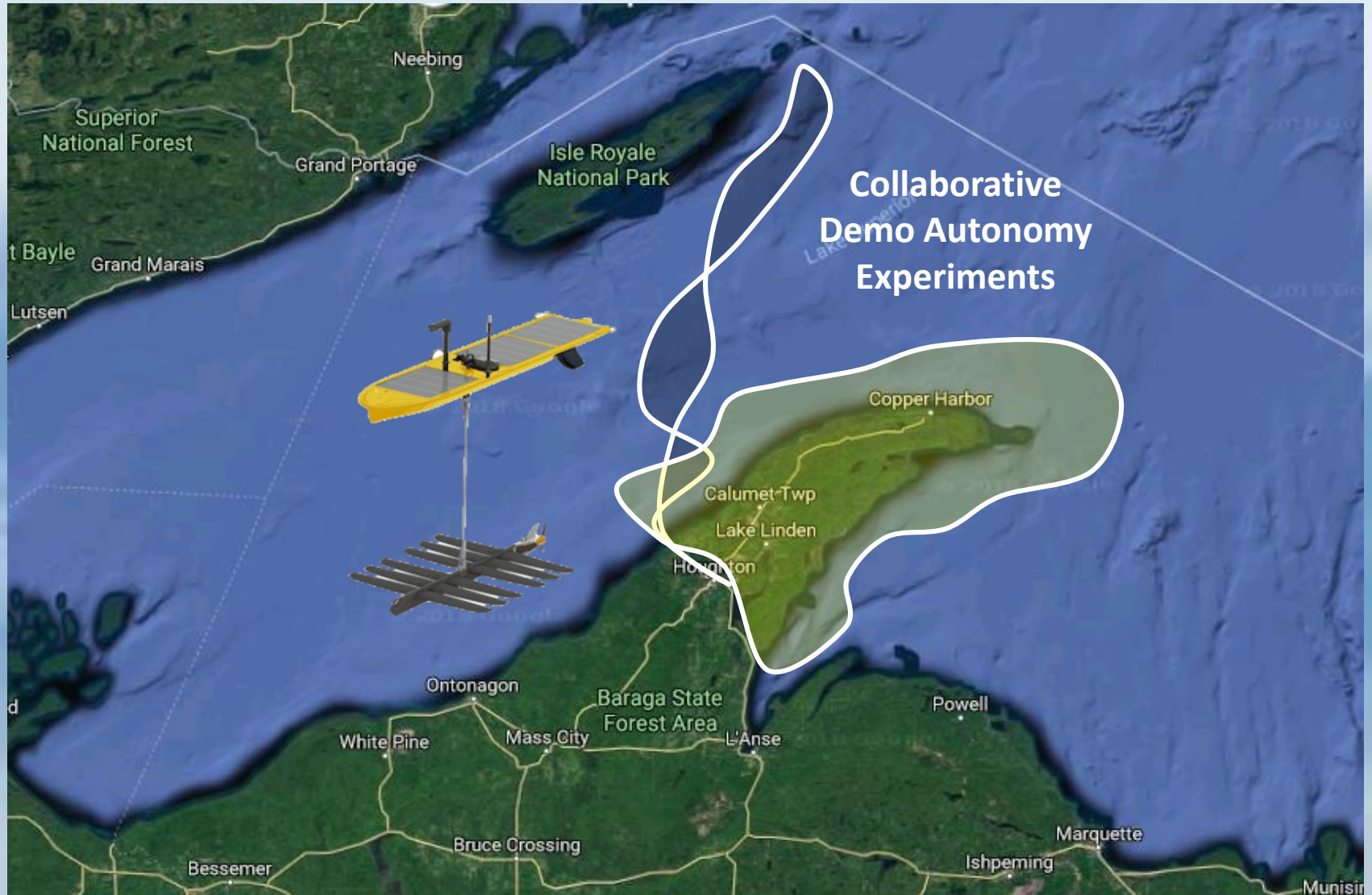
Advanced Sonar Systems



Testing Activities

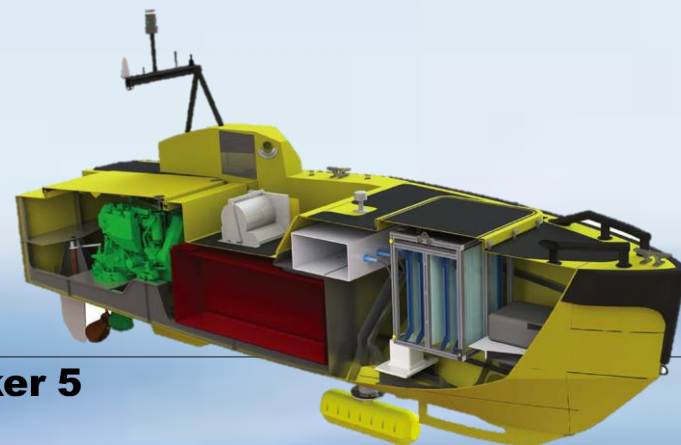


Next Steps for MARS



Next Steps for MARS

State of the Art Fully Autonomous Surface Vessel for Collaborative Testing and R&D



ASV Global C-Worker 5 Specifications

Length	5.5m
Beam	1.7m
Draft	0.9m
Height	1.8m
Weight	1350kg lightship
Propulsion	Direct driver fixed propeller 1x Yanmar 57hp diesel engine
Speed	10 knots
Endurance	7 days at 7 knots
Payload Capacity	20kg (mast), 35kg (cargo rack)
Payload Power	1kw
Control	ASView direct, semi-autonomous or fully autonomous control
Communications	IP Radio

Next Steps for SSC

Business Planning and
Membership Engagement

Current Membership



Learn More

www.smartshipscoalition.org

Thank You!

Questions?



Photo courtesy of FTC&H