Next Generation Marine Technology
Smart Ships Coalition Background

Founding Members

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://www.mtu.edu/greatlakes/
What We Do...

- Dedicated Experts and Support Staff
- High-Performance Computing Infrastructure
- Advanced Real-time Sensing and Monitoring Network
- Marine Autonomy Research Site (MARS)
- Advanced Marine Technology
- Extreme Winter Arctic-Like Conditions
- Very Severe Wave Climate and Storm Impact on Coastal Zones
- Vast Remote Location and Light Marine Traffic
- 4 Season Environment and Diverse Coastal Geographic Features
- Advanced Hydrodynamic and Ecological Modeling
- Accessible and Cost-Effective Testing Location

Great Lakes Research Center
Michigan Technological University
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

Collaborative Demo Autonomy Experiments
Next Steps for MARS

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

<table>
<thead>
<tr>
<th>ASV Global C-Worker 5 Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
</tr>
<tr>
<td><strong>Beam</strong></td>
</tr>
<tr>
<td><strong>Draft</strong></td>
</tr>
<tr>
<td><strong>Height</strong></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
</tr>
<tr>
<td><strong>Propulsion</strong></td>
</tr>
<tr>
<td><strong>Speed</strong></td>
</tr>
<tr>
<td><strong>Endurance</strong></td>
</tr>
<tr>
<td><strong>Payload Capacity</strong></td>
</tr>
<tr>
<td><strong>Payload Power</strong></td>
</tr>
<tr>
<td><strong>Control</strong></td>
</tr>
<tr>
<td><strong>Communications</strong></td>
</tr>
</tbody>
</table>
Next Steps for SSC

Business Planning and Membership Engagement

Current Membership

Fincantieri
Buffalo Automation

Grand Valley State University
Robert B. Annis Water Resources Institute

The Interlake Steamship Company
Sea Grant Michigan

Netsco
Netsco

NOAA - Great Lakes Environmental Research Laboratory

Pro/Nav Schottel

SeaView Systems

Transport Canada

Canada

USGS

science for a changing world

Learn More
www.smartshipscoalition.org
Thank You!
Questions?