The Company

Founded by 2 MIT ocean engineers and serial entrepreneurs, Buddy Duncan and Jigger Herman

SeaTrac designs, builds, sells, leases and supports self-driving boats for scientific, commercial and defense applications

We view our platform as a pickup truck…
Open, Simple, Reliable and Cost-Effective ASV
Metocean

- Wind and air temperature
- Water temperature
- Water quality
- Wave height
- Surface current
- Sub-surface current
Asset Communications and Tracking

RF Link
Acoustic Link

Sea
Surface

Onshore data
center

AUV
Glider
Submarine
Sensor
Ship
ROV
Sensor

4
Mobile Positioning – USBL/LBL

SeaTrac

USBL

glider

AUV

Sea Surface

LBL
Acoustic Monitoring

Defense Applications

- Anti-Submarine Warfare
- Intrusion Detection

Sea Surface

Towed Hydrophone Array

Commercial Applications

- Aircraft Pinger Monitoring
- Boundary Monitoring

Sea Surface
Hydrography

SeaTrac
Development Platform

The Red Boat:

• Testing and experimentation
• Design validation
• Missions and demonstrations
SeaTrac SP-48 Vehicle

The Yellow Boat: production
The SP-48 Vehicle

Sensor agnostic platform
70kg (154 lbs.) payload capacity
## Model Comparison

<table>
<thead>
<tr>
<th></th>
<th>ST-1 (Red Boat)</th>
<th>SP-48 (Yellow Boat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOA</td>
<td>14 ft</td>
<td>15.7 ft</td>
</tr>
<tr>
<td>Solar Panel Power</td>
<td>600 W</td>
<td>750 W</td>
</tr>
<tr>
<td>Battery Capacity</td>
<td>4.3 kWh</td>
<td>6.75 kWh</td>
</tr>
<tr>
<td>Motor Power</td>
<td>150 W</td>
<td>500 W</td>
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<tr>
<td>Top Speed</td>
<td>3.25 kts</td>
<td>4.5 kts</td>
</tr>
<tr>
<td>Typical Cruise Speed</td>
<td>3 kts</td>
<td>3 kts</td>
</tr>
<tr>
<td>Endurance</td>
<td>Months</td>
<td>Months</td>
</tr>
</tbody>
</table>
Communications

SeaTrac

- Satellite
- Database / Server
- Dashboard Control Software
- Handheld Remote
- Cellular
- RF Signal
- Subsea Communications
- The Boat
Launch & Recovery

Lift Point for deployment from crane
**Mission:** Harmful Algae Bloom (HAB) monitoring in Gulf of Maine

**Goal:** Provide required instrumentation power to facilitate mobile HAB monitoring

**Instrument:** IFCB (Imaging FlowCytobot), 35W continuous power requirement
**Mission**: Water quality monitoring in the bays of Duxbury, Kingston and Plymouth

**Goal**: Conduct water quality monitoring on the entire embayment bay within a tidal cycle - deeper waters in low tide to shallower waters as the tide came in
Mission: Data Harvesting – WHOI CMR

**Mission:** Data Retrieval for subsea instrumentation in Woods Hole

**Goal:** Retrieval and transmission of stored data from subsea asset back to remote control center

**Instrument:** Benthos acoustic modem
Mission: Subsea Asset Tracking and Data Communications Relay in Newport

Goal: Track UUV position, relay UUV status to remote command center and send commands to UUV from remote command center

Instrument: Benthos acoustic modem