Update Autonomous Surface Vehicle
Waveglider Operations

Impacts to NDSF & Science community

- Added Capability for over the horizon operations
- Increased overall efficiency of cruises
- Has “saved” several Sentry dives from abort
- Reasonably low maint.
- With no increase to at sea staffing, issues or problems with waveglider can be resource limited.
- Increase in Facility staffing and overall workload increased.

Talking points

- Opportunities for the waveglider w/out vehicles?
- Whats is community consensus on past experience with the waveglider?
- Usage is only increasing leading the facility to be more reliant on access to the vehicle (Which we don't own) and a more robust funding structure.
- Can this capability be added to the facility?
- Remote/Telepresence capabilities are driving new technologies and methods for ocean research
### Waveglider Operations

#### Typical waveglider cruise budget

- **Shipping** (65%)
- **Airtime** (18%)
- **Consumables** (3%)
- **Cruise-items** (5%)
- **Insurance** (7%)

#### Including waveglider in NDSF budgets

- If added to NDSF budget: +1%
- If added to Sentry day rate: +4-5%
- Projected day rate: $700 - 1000/day

#### Reduction in operating costs

- An expected decrease in costs once spares are better allocated for the vehicle from more frequent use.
- Integrate into Sentry containers if possible to save shipping costs.
- Reduction in airtime costs with reduced and more efficient data transfer.

#### Facility

- Increase in staffing/support for waveglider on shore
- Increase in logistics and shipping for waveglider operations
- More complex mobilizations for Sentry/Jason

#### Future capabilities

- Waveglider is necessary for bootstrapping multivehicle ops in NDSF and other WHOI vehicles.
- Potential use with Alvin/Jason to monitor seafloor equipment such as elevators or landers during cruise?
- What else ???