

# Top 10 things I wish new users knew about **Alvin** for a cruise

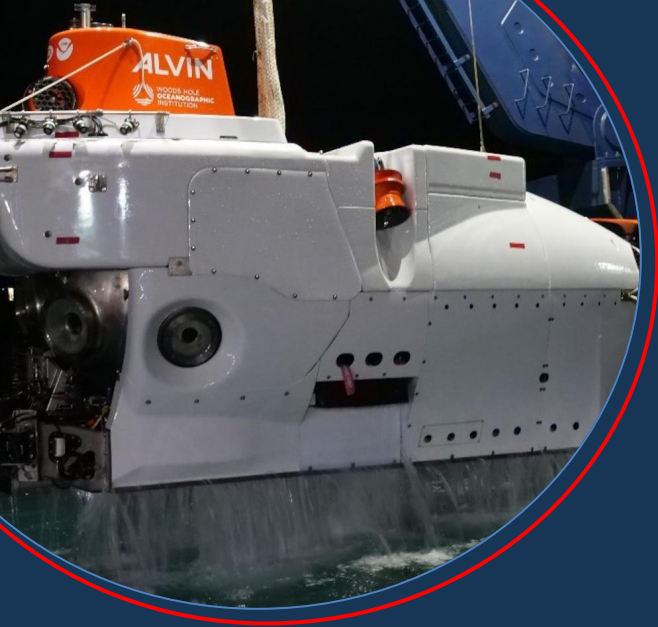
---

Bruce Strickrott – DSV Alvin Program Manager



WOODS HOLE  
**OCEANOGRAPHIC**  
INSTITUTION





6500m depth rated DSV, capable of large payloads  
with an extensive sensor and imaging suite.

Missions last approx. 9 hours (avg 6 hrs on bottom).

- 1 ■ Connect with the Alvin Team to discuss your goals and objectives
- 2 ■ Schedule multiple pre-cruise conversations with our team
- 3 ■ Ask us for engineering guidance for new samplers or sensors
- 4 ■ Every fifth dive of a voyage is a Pilot in Training dive (1 PIT seat)
- 5 ■ Work with our team to obtain NAVY dive clearances
- 6 ■ Deck test your samplers in sea water before the cruise
- 7 ■ Work with our at-sea leads to prioritize your dive objectives
- 8 ■ Maps for navigation need positional info (.grd or corner locations)
- 9 ■ Equipment used in-hull needs special testing
- 10 ■ External equipment housings need special testing

# Top 10 things I wish new users knew about Jason for a cruise

Matt Heintz - ROV Jason Program Manager



WOODS HOLE  
**OCEANOGRAPHIC**  
INSTITUTION





Jason is a remotely operated vehicle (ROV) system designed and built by WHOI's Deep Submergence Laboratory and funded by the National Science Foundation to allow scientists to have access to the seafloor without leaving the deck of a ship.

- 1 ROVs are dragging a ship along with them, making them slower moving than an untethered vehicle, this slower pace is more than made up for by working around the clock, i.e. longer dives are more efficient
- 2 ROV are more effective when they work 24-hour ops, use of elevators helps bring samples up while keeping the ROV down on long dives
- 3 Jason has done dives as long as 7 days and covered hundreds of km on a single dive
- 4 Jason brings 8-10 operators
- 5 Jason operators typically work 4on/4off while Jason is on a dive, 3 operators are in the van, pilot, co-pilot navigator, joined by 3 scientists, watch lead, and 2 data/videographers trained by the Jason team
- 6 When you learn that you are funded for a cruise, it's never too early to reach out to the vehicle manager
- 7 Start with a brief outline of your cruise objectives, send to the vehicle manager and we'll set up meetings to discuss
- 8 Include ROV and non ROV evolutions you anticipate accomplishing, when you learn which ship you'll be on, include the ship in these comms
- 9 Make sure you have multibeam maps. Send that data to the operator well in advance, if no maps are available add that time into your cruise plan and make sure the ship operator has a functioning MB, and knows you plan to use it
- 10 If integrating nonstandard equipment onto Jason send the specs, depth rating, wiring/power/data requirements early, send cabling early

# Top 10 things I wish new users knew about **Sentry** for a cruise

---

Sean Kelley - AUV Sentry Program Manager



WOODS HOLE  
**OCEANOGRAPHIC**  
INSTITUTION





6000m depth rated AUV, capable of large payloads with an extensive sensor suite. Missions last from 20 to 30 hours depending on payloads and sensor package. AUV Sentry is designed for rough terrain and low altitude surveys.

- 1 ■ Reach out during Proposal writing
- 2 ■ Pre-cruise planning is key to success at sea
- 3 ■ Understand the data products
- 4 ■ Understand how to prioritize dive objectives
- 5 ■ Meet to discuss capabilities
- 6 ■ Communicate what is critical for your science
- 7 ■ ROV/AUV concurrent operations are complex
- 8 ■ Sentry group provides engineering for development projects
- 9 ■ Don't forget to submit your shiptime request (for Sentry)
- 10 ■ PCAR feedback is critical for helping us improve