

Summer 2022

It is deep summer in Woods Hole and all of the NDSF vehicles are in action. *Jason* and *Sentry* have just completed dives for a West Coast axial project under Bill Chadwick of Oregon State University. *Jason* deployed instruments on the seafloor and did exploratory dives to identify new sites to study, and *Sentry* collected high-resolution bathymetry of the area. *Alvin* is headed back to sea. And the facility has welcomed a cohort of summer interns. Keep reading for more.

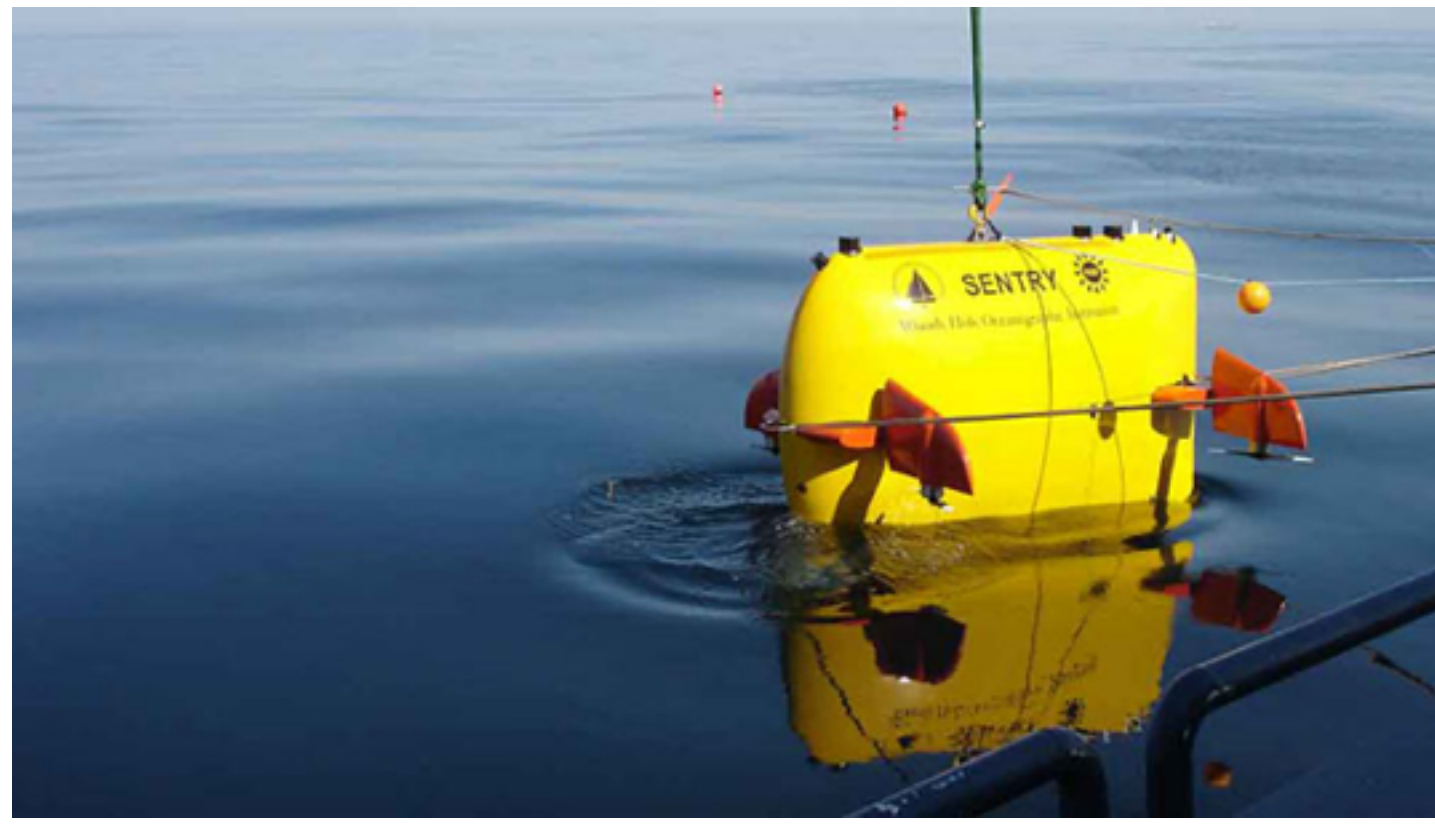
## Alvin heads back to sea



(Photo by Chris German, ©Woods Hole Oceanographic Institution)

*Alvin* is underway on research vessel *Atlantis* to resume testing to reach 6500 meters (21,325 feet)—its deepest dive yet. This renewed effort comes after test dives were temporarily halted last November. The engineering team has redesigned the attachment points of the specialized syntactic foam used to provide buoyancy to the 43,000-pound human-occupied research submersible. [Read our blog for regular updates, pictures, and video from this next chapter of \*Alvin's\* journey.](#)

## Around the facility



### How to study an underwater earthquake from shore

Scientist Chris German on a successful AUV *Sentry* mission when the science team could not travel to sea



### Jason and Sentry on #Escanaba2022

Blue microbes, hydrothermal vents (active and inactive), and more from a *Jason* and *Sentry* expedition to the Escanaba Trough



### Meet the Team: Justin Fujii

A research engineer on autonomous reconnaissance and adapting the vehicle to new tasks

## Welcome, summer interns!



**I want to study the ocean because it has so much biodiversity within it. I am learning how much research is needed for just the ocean twilight zone. This internship is also allowing me to explore other career opportunities.” —Jessica Barrow**

Jessica Barrow, is a junior studying environmental, natural resources, and plant science at Tuskegee University and interning through the NOAA Ocean Exploration Cooperative Institute (OECI). Barrow will be studying molecular approaches to studying marine biodiversity in the ocean twilight zone and working with WHOI Biologist Annette Govindarajan.



**The most intriguing part for me is trying to solve the unknown. In the ocean there are so many unknown areas or things we simply have no understanding of. As an engineer I want to create safe and effective paths to explore and discover new things.” —Fernando Billups**

Fernando Billups, is a junior studying mechanical engineering at Tuskegee University and also an OECI Intern. Billups will be designing a 5000-meter pressure housing for the vehicle Nereid Under Ice and working with WHOI Senior Engineer Mike Jakuba.



**I want to study ocean engineering in order to explore. Also, designing for the harsh underwater environment keeps projects always interesting.” —Syenna Graham**

Syenna Graham, is a junior studying ocean engineering at Virginia Polytechnic and State University interning through the Marine Advanced Technology Education (MATE) program. Graham will be going to sea with AUV *Sentry* and working with Sentry Group Lead Sean Kelley.



**I have always been intrigued by the teamwork in this field: engineers, scientists, and technicians all working together to explore and collect data from depths that were never possible before! It’s thrilling.” —Sarah Sergent**

Sarah Sergent is a sophomore studying Marine Technology at Northwestern Michigan College and is also a MATE Intern. Sergent will be going to sea with ROV *Jason*.

## Bruce + Alvin screening in Woods Hole



August 20, 7:30pm ET

On Cape Cod this summer? Join us for a screening of the documentary *Bruce + Alvin* followed by a panel discussion and Q&A with *Alvin* Pilot Bruce Strickrott and Filmmaker Josh Seftel. The panel will also include WHOI scientists who have used *Alvin* in their research. This event is free and open to the public. [Register here.](#)

## Where are our vehicles now?