



Update on imagery training

NDSF NATIONAL
DEEP SUBMERGENCE
FACILITY



NDSF Imagery Training: Goals

1. Provide a majority of Alvin pilots and Jason watch standers with a 2-3-day hands-on intensive course in underwater photography and videography sufficient to provide significant improvement in their imaging skills and help them be a resource to science
2. Provide vehicle/system specific training videos that can be provided to science both on and off the ship for self-study in order to prep them to follow up to operations personnel with questions. This includes both:
 - a) Operation of imaging systems specific to NDSF vehicles (HOV Alvin or ROV Jason)
 - b) best practices on how to “Get the most out of their video” through discussions of common use cases.

NDSF Imagery Training: Class Topics

- Introduction to underwater videography and still imaging fundamentals – framing, focusing, exposure, camera movement, zoom operation.
- Introduction to underwater lighting fundamentals– Back scatter, color shift, white balance
- Proper/preferred aiming and positioning of lighting and camera equipment on vehicles
- The anatomy of creating a “shot”
- Understanding differences between operational imaging requirements and detailed observational/cinematic requirements. What makes imagery most useful/desirable to media outlets such as Nat Geo, Discovery, OceanX, etc. Video formats?
- Best practices for common situations/scenes
 - Stationary, transiting, photomosaicing, extreme close up, reduce visibility environments,

NDSF Imagery Training: User Videos

- Introduction to Alvin Imaging Controls
- Introduction to Jason Imaging Controls
- Introduction to underwater videography and still imaging fundamentals – framing, focusing, exposure, camera movement, zoom operation.
- Introduction to underwater lighting fundamentals– Back scatter, color shift, white balance
- ????

NDSF Imagery Training: Status

- RFP Out and Responses Back
- Need to make Evaluation and Award ASAP
- Goal is class late fall 2020 COVID and cruise schedules permitting
- Goal is first videos done by end of CY2020 – other videos will likely move into 2021 for both time and budget reasons