

Alvin Operations

- **7 cruises completed, 81 dives**
Costa Rica, Juan de Fuca, Guaymas Basin, Southern California
 - **1 cruise remaining, 12 dives**
East Pacific Rise
- **Three month layup**
March-June
- **3 dives lost to weather, 2 to mechanical issues, 1 to clearance**
- **Average dive duration: 7.46 hrs**
- **Average bottom time: 5.32 hrs**
- **Completed successful NAVSEA sustaining certification in April**
- **Added 12-dive Nooner cruise to schedule on short notice with minimal effort – demonstrates interchangeability/adaptability of Facility assets**

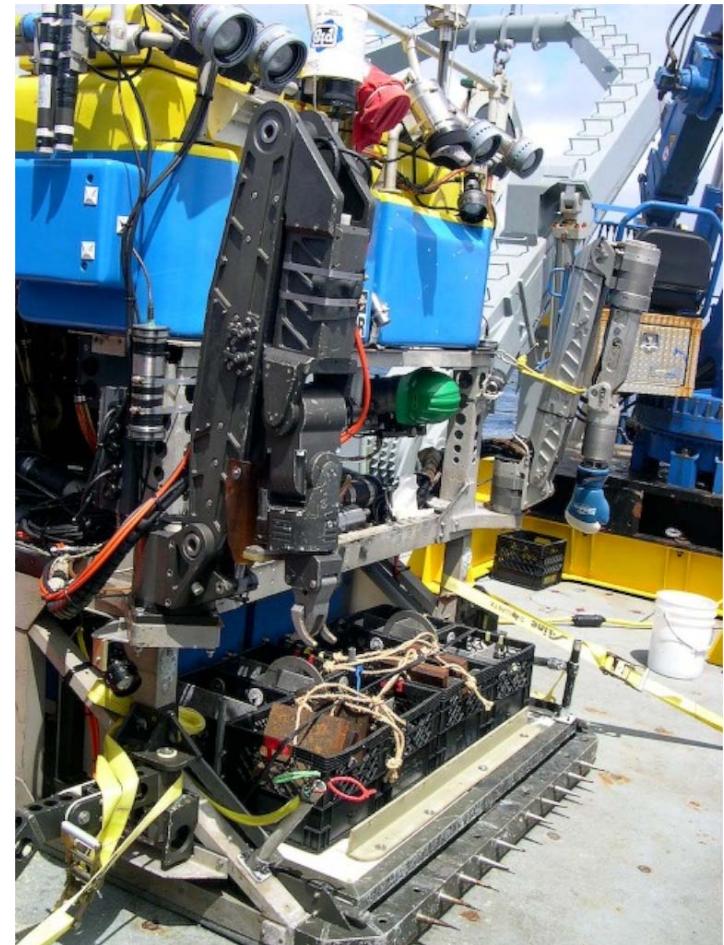


NDSF 2009 Vehicle Operations Summary

DeSSC
Dec 2009

Jason Operations

- **7 cruises completed**
Tasman Sea, Mariana Arc, Lau Basin, Gulf of Mexico, Loihi Seamount
- **97 lowerings**
- **Longest lowering: 49 hrs**
- **Over 1,260 hrs bottom time**
- **Vessels used: *TG Thompson, Ron Brown, Kilo Moana***
- **Highlights:**
 - *Integrated two Kraft manipulators*
 - *HD camera*
 - *Sonardyne USBL system*
 - *Turn-around time flexibility*



NDSF 2009 Vehicle Operations Summary

DeSSC
Dec 2009

Sentry Operations

- **2 cruises completed**
MacDonald, Valentine
Gulf of Mexico, Southern California
- **20 lowerings**
- **Longest lowering: 12 hrs**
- **Over 156 survey hours**
- **327 kms surveyed**
- **Vessels used: *Brooks McCall, Atlantis***
- **Highlights:**
 - *Multibeam, camera, mass spec, Eh surveys*

