



Alvin Hull Inspection Issues





- A hull inspection is now required every two years since finding the hull anomalies in 2006
- The 2008 hull inspection ultrasonic testing (UT) procedure found no changes in known acceptable flaws
- The 2010 UT procedure detected 4 new indications in an area which had previous acceptable flaws
- The new indications were further characterized using a CTD (Crack Tip Deflection) technique
- The results of these inspections were evaluated by Carderock Facility
- On May 14 WHOI received a call from the Navy informing us that:
 - three of the minor flaws were being considered one flaw because of their proximity to each other, making this flaw unacceptable at the present time;
 - 2. they require the original hull construction documentation to evaluate the welding technique; and
 - 3. they have directed that additional testing be done on the new flaws using a different standard and more sensitive equipment, which might lead to reclassifying the flaw as a minor defect.

DESSC May, 2010





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Current Actions:

- 1. Alvin cannot dive until the hull issue is resolved
- 2. WHOI is investigating the earliest opportunity we can get an inspector onto the *Atlantis* for the additional testing requested a Los Angeles port stop or in the Sacramento River?
- 3. Attempting to find additional documentation on original hull construction
- 4. Going to contact Southwest Research Institute for a "second opinion"
- 5. Jason is on standby to do the Cowen leg if needed

As of noon today (5/18) – no NAVSEA decision yet