

SENTRY Debrief Summaries 2009

SUMMARY:

- 2 Programs: first with many problems (Summer '09) and one with no significant problems (Fall '09).
- Things appear to be moving in the right direction (problems corrected)
- But only 2 data points. Additional proof of reliability necessary before SENTRY can be relied upon by PI's

1. PreCruise Planning

No problems here. Well organized and planned

2. Mobilization/Demobilization

No major problems though short transit times to shore forced rapid turn-arounds in some cases.

3. Operations at Sea

Vehicle

One cruise: Sentry not really ready. Testing at sea with damage/repairs

First 2/3rd of program, only 50% functional

Dive weight release problems

Other cruise: no problems, no problems, only minor delays in pre-dive preparations

NDSF Equipment

Camera Problems: unexpected shut-off, focus, strobe synchronization; inadequate lighting system?

Second cruise had excellent camera results.

No navigation problems; large improvement over 2007 system

OCTANS MRU system down in one cruise

User Equipment

Problems with ship UBSL and winches on one cruise (not *Atlantis*)

Good adaptation for use of Tethys MS, CTD, Eh and Methane sensors

4. Data Hand-Over

No problems. Even with very short transit time to shore, data were provided within 1 week.

5. Recommendations

System was not ready for the project. The first 2/3rds of a cruise was needed to resolve operational problems. After that, all systems seemed to work very well. Inadequate preparation.

Sentry/Alvin coordination is excellent and very effective

Sentry can be used effectively as a 'night program' with ~12 hr dives in conjunction with Alvin diving

Summary:

SENTRY system was sent to sea before it was fully ready.

Efforts by the seagoing personnel resulted in extensive improvements and refinements that were evident in a later cruise.

SENTRY can perform well, but has not yet established a substantial track record that would provide PI confidence and readiness for full integration into NDSF.