## Jason debrief summaries - 05/08

Lonsdale Ma	y 2008	Atlantis	Gulf of California
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Primary objective: rock sampling

26 dives; 1 per day; each a different location

#### 1) Pre-cruise planning

- PI felt pressured to use Alvin instead of Jason
- Not clear to PI that digital bathy was wanted
- 8-hour turn-around time between dives was agreed upon in advance, with a daily dive schedule consisting of a 16 hr dive (4pm-8am) and 8 hrs on deck. Atlantis deck crew helped with launch and recovery.

### 2) Mobilization

 No major issues. Jason was ready to dive 4 hrs out of port.

#### 3) Operations - vehicle

- Excellent. Only loss of dive time (~8hr) was due to a manipulator arm leak on last dive.
- Payload not an issue for this expedition.

#### 4) Operations - NDSF provided equipment

- Video & DSC worked well
- LBL navigation not used, doppler performed poorly on steep slopes
- First use of new control vans seemed to work well, although screen layout changed from watch to watch. Could it be standardized?

- 5) Operations User provided equipment
  - None

### 6) NDSF Personnel - Expedition leader

 Excellent, except that dive durations were "over-zealously inflexible"

### 7) NDSF Personnel - Jason Team

• PI was impressed with the caliber and quality of the team - "best sailed with since 1970s"

### 8) Data hand-over

No issues

### 9) Demobilization

No issues

#### **10) Other recommendations**

- PI felt strongly that US deep submergence community has not been best served by pooling of resources into a single-entity NDSF
- PI felt the deep submergence community would be better served by multiple ROVs vs. HOVs
- PI disappointed by lack of support for multibeam ops on Atlantis (system obsolete & techs untrained to make maps in support of dives)

#### HDTV update from August 2007 Jason cruise

- 1-hour HDCAM highlight tapes made (but tapes cost \$65; decks cost \$20-50K!)
- Solution: HDV is an HD format on mini-DV tape (tapes cost \$5; decks cost \$1-2K).
   Video looks good, but not for frame grabs.
   (Can users record directly to HDV in future?)
- ROPOS has decided to go digital HDTV to computer with 10 terabytes of storage. Plan is for users to walk off ship with HD video on terabyte hard drives. Users will need suitable computer and editing software.

### Feedback Response - Jason

- Not clear to PI that supplying digital bathy was preferred
  - Multibeam data important for DVL overlays
- LBL navigation not used, Doppler performed poorly on steep slopes
  - 300 kHz Doppler still does not work properly on steep terrain
- First use of new control vans seemed to work well, although screen layout changed from watch to watch. Could it be standardized?
  - First cruise sort out with experience
- Dive durations were "over-zealously inflexible"
  - Need a steady cycle for ops team; first time we tried
    8-hour turnaround time





