Appendix V

ATLANTIS Post Shakedown Availability

<u>R/V Atlantis Upgrades</u> Joe Coburn Woods Hole Oceanographic Institution

Accomplished @ PSA-1

<u>PSA -\$2.8 M</u>

- o Incl. \$1 M WHOI cost sharing
- . Bow thruster noise abatement
 - o Hydrodynamic and acoustic treatment
 - resulted in 7to 10 db reduction in noise (to 75 dBA) in staterooms at 1 00% thruster RPM
 - o Air injection (variation of USN Prairie/Masker)
 - engineering development continues
- Fwd science hold and access
- Upgraded DPS

Accomplished @ PSA - 2

- Anchor clanging noise abatement
 - o Improved, but problem still exists under some circumstances
- Aft weather door to main lab
- Wet lab weather door
- Installed mission announcing system
- HVAC improvements on 01 Level
- Additional thermal insulation on 01, 02, and 03 decks
- Expanded telephone system
 - Service to all staterooms

Accomplished @ PSA - 3

UNOLS DESSC Meeting 06/1998 - Appendix V

- 2 additional fume hoods and isolation of fume hood exhausts
- 2 additional transducer hull fittings
- Transducer void air lock
- Upgraded Port (ROV) Hydroboom
- Upgraded propulsion control & monitoring system
- Much more, directed towards engineering and operations

Backlog or pending projects

Funding for these has not been identified Priorities have not been established- the order is random

- Complete propulsion control upgrade
- Further HVAC improvements
- Rationalize lab power
 - More extensive UPS & clean power distribution

Backlog or pending projects - 2

- Correct anchor handling deficiency
 - o chain-wildcat problem
- Improve lab drains
- Add'l deck drains
- Workboat launch & storage system
- Renew several weather doors rusted out from within
- Increase & improve lab LP air

Backlog or pending projects - 3

- Increase space for gymnasium workout
- 2nd phase of crane upgrade (whip speed)
- Improve trawl wire leads and arrangements
- Improve STBD Hydroboom fairlead
- Complete installation of 2nd fuel oil purifier
- Install add'l drinking fountains

Backlog or pending projects -4

• Make another attempt to fix anchor clanging

- Complete next phase of bow thruster noise abatement
 - Increase air flow
- Increase fresh water storage capacity
 - o had to buy water in foreign ports
- Correct Alvin battery charging power
 - Soft start for cranes may rectify problem
- Improve Alvin dehumidifier system

Backlog or pending projects - 5

- Procure 2 critical circuit breaker spares
- Improve mooring chocks
 - o improper installation, damaged again
- Reorient bulwark door to open outward
- Design & install accommodation ladders
- Modify (fix) AFFF system

Backlog or pending projects - 6

- Bring SeaBeam performance up to specs
 - o SBI is working on this
- Improve darkroom
 - o deficiencies remain from Halter
- Install shower grab bars
- Replace engine coolers
 - jacket water coolers have temp. fix
 - o fuel oil coolers need replacing

R/V Atlantis - Post Shakedown Availability

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 - Hydrodynamic and acoustic treatment
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