

ALVIN Overhaul Plans and Priorities



National Deep Submergence Facility

May 2000 DESSC Meeting

Overhaul Timeline

- ◆ **Offload ATLANTIS on arrival in December**
- ◆ **Begin overhaul work January 2, 2001**
- ◆ **Complete overhaul work May 31, 2001**
- ◆ **Sea trials and certification June 2001**
- ◆ **Operational July 1, 2000**
- ◆ **<http://www.marine.who.edu/ships/alvin/alvin.htm>**



Possible Upgrades

- ✦ **Improve pan/tilt controls**
 - Observer positions, flexibility
- ✦ **Improve ergonomics**
 - Better cushions, more floor space in sphere
- ✦ **Investigate “modular” basket design**
 - “Erector Set” to modify as required
- ✦ **Retain Benthos 35mm cameras**
 - Digital frame grabs will eventually replace
- ✦ **Investigate fiber optic penetrator**
 - determine need, technical review



Possible Upgrades cont.

- ✦ Upgrade single chip cameras
 - Better single chip or small 3-chip
- ✦ Install flat screen displays
 - Pilot and Observer monitors
- ✦ Acoustic modem for depth/position telemetry
 - Increased navigation options
- ✦ Digital video recorders
 - miniDV cam (pro format) masters
- ✦ Doppler Navigation w/RLG
 - Continuous fixes with acoustic updates
- ✦ Lateral thruster with DP control

