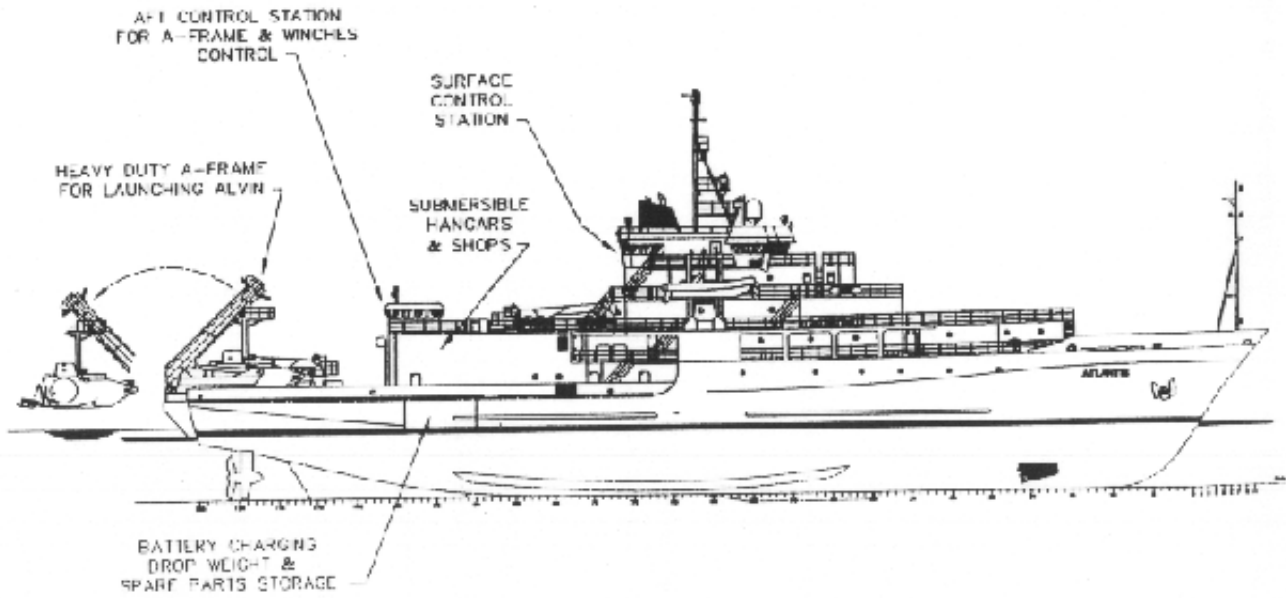


APPENDIX XI

Outboard Profile of *R/V Atlantis* with Deep Submergence Modifications Highlighted



ATLANTIS OUTBOARD PROFILE STARBOARD

Installed Equipment in *Atlantis*

P-Code GPS

Doppler Speed Log

Dynamic Positioning System

Acoustic Positioning / Navetronix

Swath Bathymetry System / SeaBeam 2112

Bottom Profilers / 12 kHz, 3.5 kHz

ADCP / Narrow Band 150 kHz

2 Air Compressor / Price A-300

IMET / Sea Surface Sensors

Attitude Sensors (Heading, Roll, Pitch, Yaw)/ASHTEC + Hippy

Winches

- **Two Markey DESH-5**
10,000 m .322EM or 1/4" Hydro-wire
- **One Traction with Dual Storage Reels**
 - Fiber Optic (.68")
 - EM
 - 9/16" Trawl wire

Cranes

- **2 Telescopic Cranes**
42,000 lb. lift capacity
- **2 Portable "Hiabs"**
2,200 lb. lift capacity

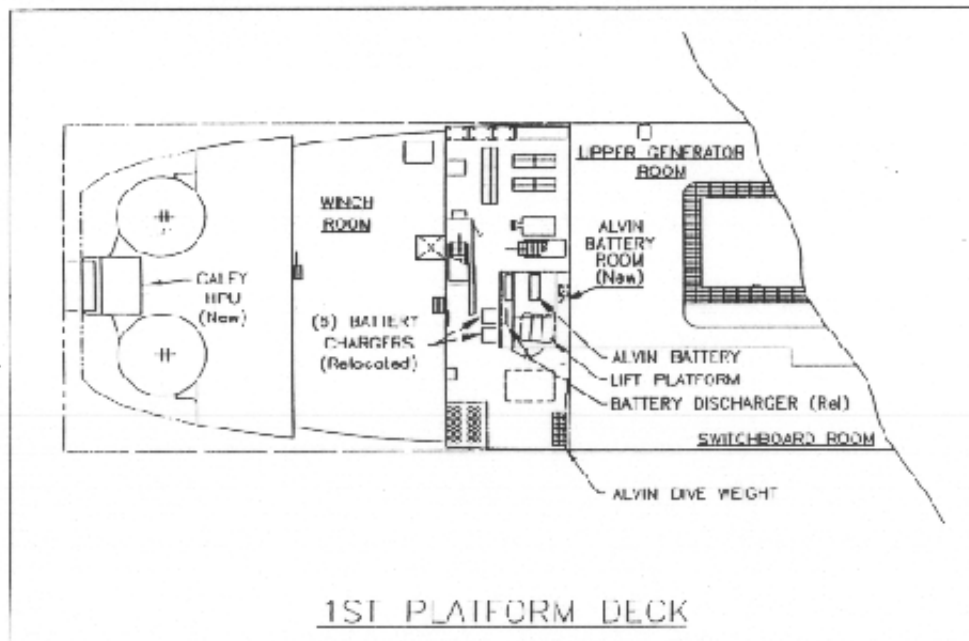
Van Spots - 6 above main deck

Lab Space - 4,000 square feet

Science Berths - 24

***Alvin* Dive Weight, Battery Charging and Spare Part Storage**

- Co-located conveniently immediately below *Alvin* hangar.
- Battery service facility includes charger, storage for replacement battery and hydraulic lift for removing/installing heavy battery units.
- *Alvin* uses 1,000 lbs. of steel as descent weights on each dive. Typically the ship will carry 75,000 lbs. of expendable weights.
- Having an adjacent dedicated large spare parts storage for submersibles will greatly enhance the at-sea groups' efficiency.



Plan View of *Atlantis* Main Deck

New Features:

Alvin A-Frame and Tracks

- A-Frame will be taken from *Atlantis II*, completely refurbished and new, more powerful hydraulic system.
- Positive control traversing and track system to move *Alvin* into and out of hangar.

Alvin Hangar

- To provide secure, covered storage and easy access for maintenance.

Shops (Mechanical, Electric, and Electronics)

- Near hangar for efficiency.

ROV Bay

- For Storage and maintenance of WHOI ROV's.

