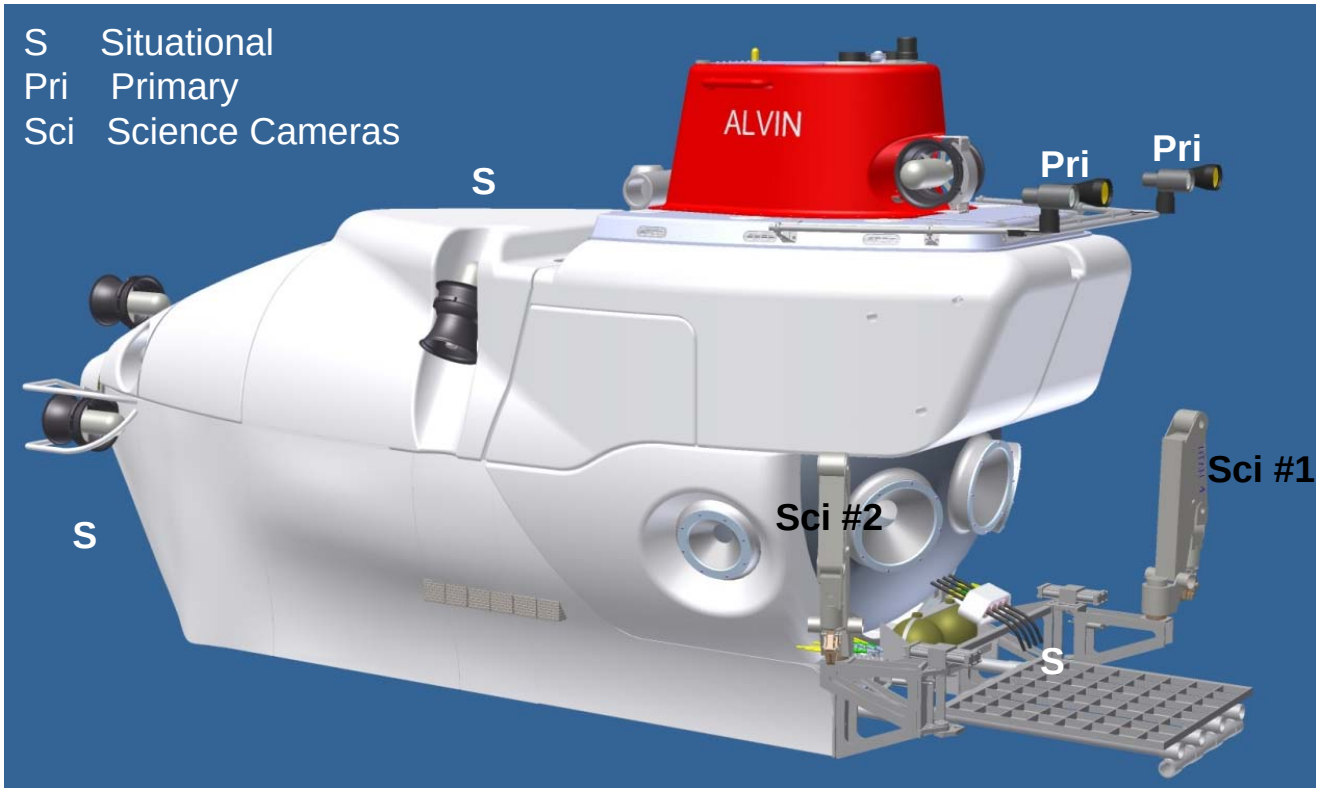
DeSSC Update
Imaging & Illumination



- File based image storage to reusable HDD
- Long-term data storage
- Primary Cameras: 1920 x 1080 HD, 10x zoom
- Science Cam #1: 1920 x 1080 HD, Video optimized
- Science Cam #2: Still image optimized plus HD Video

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- Current Design is very similar to previous approach but relies upon COTS equipment and utilizes a simpler approach

- Exterior
- Interior
- Offload and Processing

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Exterior

- "One-line" cartoon on wall
- Help from Woods Hole Marine Systems (Jim Newman)
- Camera choices
  - Science camera 1 from AIVL
  - Science camera 2 COTS
  - Mini Zeus' on brow
  - Internal PATZ lower down (nominal)
- Support Infrastructure
  - Symmetric approach, port + starboard
  - Single bottle each side, power + telemetry
    - Also supports *Jason*-like science interface
- Uses available fibers, leaves room for growth
- Design is well advanced, some components on order

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Interior

- Design based upon conferences with pilots and frequent *Alvin* users
- System design by Willis Group, design drawing on wall
- Balance of performance and space/complexity
- Switcher feeding monitors and recorders
- Recorder candidate is Atomos Samurai
  - Ninja tested on recent *Jason* cruise
  - Has visible display
- Integration into sphere will determine final layout of components

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Offload and Processing

- Disk based recording and transfer
- Data copied to RAID, accessible via network
- Raid copied to LTO5 for archiving
- HDV and DVD copying supported
- Edit station in main lab
- System design by Willis Group, design drawing on wall