

Upgrades to NDSF

DESSC
May 2007

Alvin

Near Term (June 2007)

- Install Adept / Lotus Notes
- Install precision time standard
- Install Frangibolt release devices
- Install RTD temperature instrument
- Test LED lighting
- Test new LBL data acquisition system / trigger system

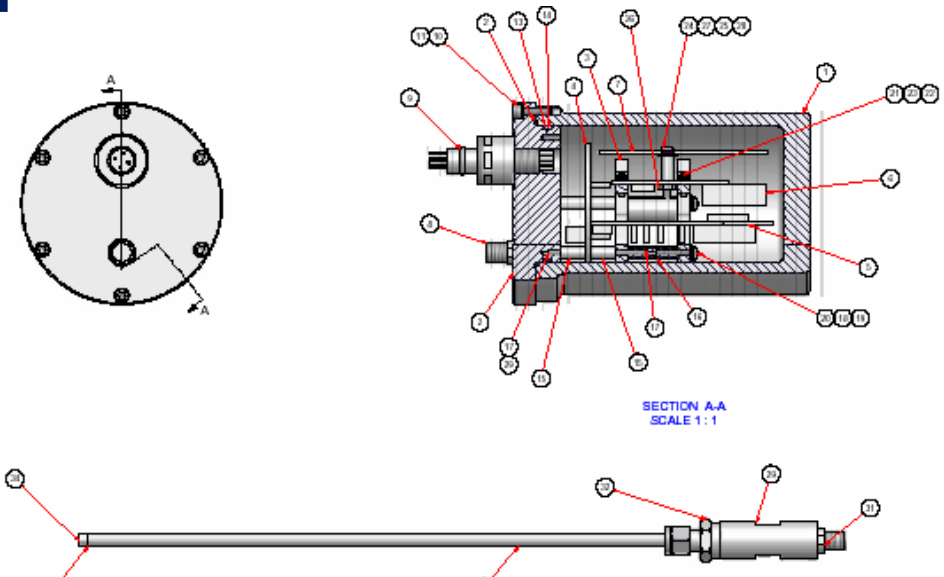


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Alvin (cont.)

RTD Temp Instrument



- Replaces Low T and Hi T instruments
- Range: 0 to 480 deg C
- Platinum RTD

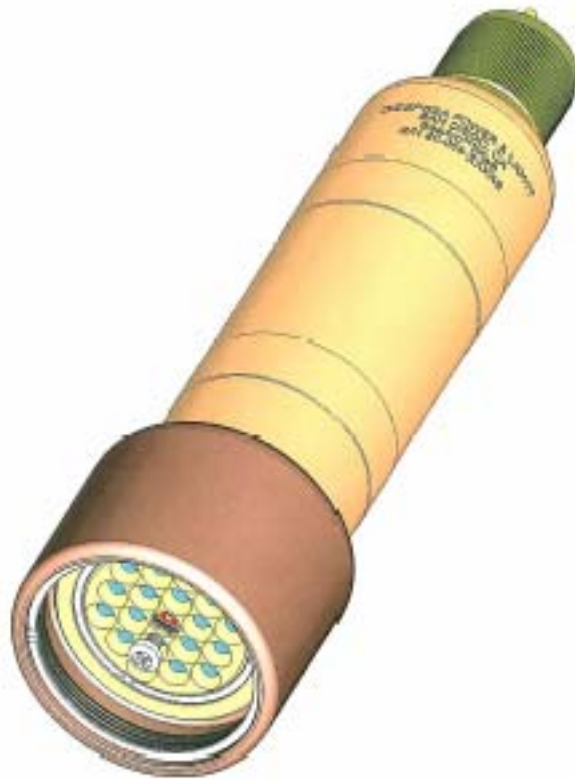


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Alvin (cont.)

LED Lighting



- Pressure compensated
- 3,000 to 4,000 lumens
(compared to 2800)
- 6,500 to 7,000 color temp



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Alvin (cont.)

Precision Time Standard



- Provide Network Time Protocol (NTP) to *Alvin* computer bank
- Provide timing signals to *Alvin* navigation system
- Allow for synchronized LBL navigation with *Atlantis*
(more reliable navigation)



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Alvin (cont.)

Later in 2007:

- Install PHINS (inertial navigation)
- Test rate-controlled hydraulic control system for stbd manipulator
- Test digital still camera controller

