

Healy science support: Plans Ideas Desires

March 2006

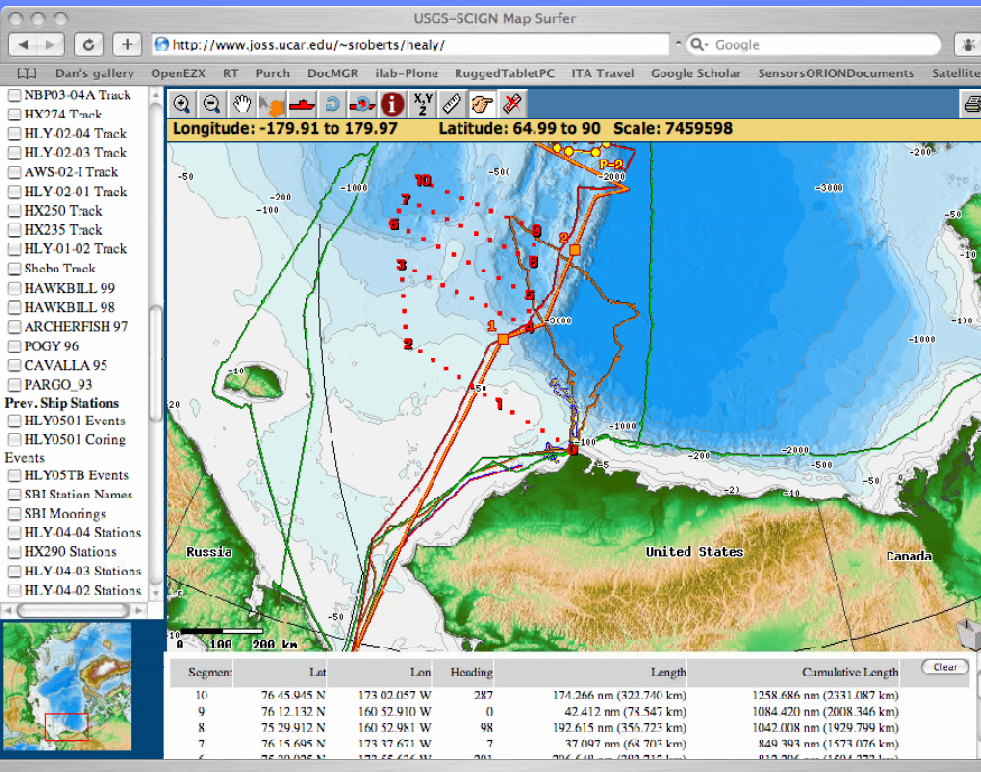
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Order of items in this
presentation is random
&
a VERY mixed bag

Trash Van

- Trash management is a significant issue for all
- May consume another container slot

Mapserver (Opensource real-time GIS)



- Shipboard mapserver
- Shore version w/ planning and post cruise
 - controlled access)
- Install kit for other ships

Shipboard metadata capture system

(hardware and software)

- Web forms based tool for station and observational data
- Tablets for data entry
 - Sunlight readable
 - Rugged
 - wireless

Terascan upgrade

- New (bigger) antenna
- Already in the works
- Long term consideration of alternate hardware and software

POS/MV-320

- Flakey instance on Healy
- Vendor support has been very good (significant loaner support during '05 season)
- There was a configuration (transfer) problem when the PCS was swapped at Barrow
- PCS electronics has been upgraded (version 3 -> 4)
- Reinstall PCS prior to shakedown, evaluate underway

Bathy2000 upgrade

- Replace inboard transceiver electronics with Bathy2010 (or 2005)
- Continue to use the 10KW LPT
- Still desire to rationalize the subbottom profiler “spares” situation

Network upgrade

- Install previously purchased new hardware
- Improved performance
- Improved management & monitoring
- Easier maintenance

Climate Control Chambers and Science Reefers

- Need clear statement of problem
- Design study -> plan -> money -> work

Watchstander Workstation

- Small scale improvements (3rd bay)
- Enhanced displays
- Spare for display server

Ice Images

- Improved turnaround
- Better quality

Science Seawater (multiple purposes)

New location for TSG

- Add through-hull temperature probe
- Replace plumbing going aft ('06 shipyard?)
- Add "bumpers" around the "new" intake slots ('06 shipyard)

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Multibeam Existing system

- Produces mediocre data
- Up-time (reliability) issues
- Support issues
- Not suitable for work on the shelf
- Un-resolved interface issues
- Old hardware
- Minor fix: proper venting of transducer wells
- No significant short term “fixes”

Multibeam Options

- No realistic short term options, all require significant planning
- “As built” underhull measurements during ‘06 drydock
- Clear statement of the problem (January ‘06)
- Evaluate options to replace or upgrade

Computer hardware (spares and alternates)

- SDLT tape drive(s) stand alone for high volume images
- SDLT robot (spare for backup mechanism)
- ?

(relatively) small scale software & hardware

- UPS integration into SNMP system
- Better (more reliable) '*mediaprep*'
- Faster DVD drives
 - for end-of-leg/cruise data
 - consider BlueRay test?
 - Improved data reporting

High latitude comms

- Not such a big issue for '06
- Assume to be in '07
- continue to explore option for TDRS at high latitude
- Evaluate improvements in parallel Iridium hardware (ReachBacks)

Lab renovations (desires)

- Storage
- Computer Lab
- Aft Con
- Future Lab
- Met Lab
- Distributed printers in lab spaces
- 02 Copier Room (to accommodate second large format plotter and printer)
- Bow eqt: power, Unistrut, networking (if used in '06)

CTD cart

- Keep an eye on future needs particularly in rough conditions
- Monitor UNOLS handling system evaluation

Winches & Wires

- We've installed fiberoptic 0.681" wire and winch on Healy in '05 and expect to install one in '06
- Need to consider when it makes sense to install an appropriate winch and wire