

INITIAL CRUISE PLANNING INFO

OPERATION HALLOWEEN SHAKEDOWN

EX-08-02

Points of Contact

<i>Lead POC</i>	<i>Supporting Planning Team Members</i>
Nicky Samuelson, OER	Jeremy Weirich, EX Ops Officer Catalina Martinez, OER Craig Russell, OER

Goals, Objectives, Activities Description(s)

<p>Objectives include the following:</p> <ol style="list-style-type: none"> 1. Test the VSAT system and networks, from ship to satellite, to I2, to land-based consoles. 2. Test newly installed sensors independently, as well as integrated into the larger network of systems on board. 3. Continue with system familiarization in the ROV control room, to include development of SOPs for newly installed software programs. 4. Refine SOPs for operation of mission specific equipment and operations. 5. Test bow thruster operation with the newly installed insulation. 6. Test CTD and pinger. 7. Continue with training and familiarization of deck and bridge crew. 8. Continue to test the capabilities and limitations of the multibeam system 9. Burn enough fuel in the forward tanks for safe offloading of remaining fuel prior to the winter in port in preparation for hot-work and tank repairs.

Participants

<i>Ship</i>	<i>NOAA Science</i>	<i>Other</i>
LCDR Jeremy Weirich SST Elaine Stuart SST Colleen Peters CET Richard Conway ET Don Jones	Catalina Martinez - OER Nicky Samuelson - OER Webb Pinner - OE	

Duration/Schedule

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Dates	Location	Operation
10/30/2008	0900 Depart Sand Point Transit to Puget Sound	Begin VSAT testing Ship Drills
10/31/2008	Puget Sound and Juan de Fuca Strait area between Possession Point, San Juan Islands and Port Angeles	Test temperature probe Test VSAT Integrate TSG into EM302
11/1/2008	Puget Sound and Juan de Fuca Strait area between Possession Point, San Juan Islands and Port Angeles	Sound and air quality test Test VSAT
11/2/2008	0000 Transit Juan de Fuca Strait to Lat/Long? 1200 reverse track back to Juan de Fuca Strait	Make water Test VSAT
11/3/2008	Transit through Puget Sound to Blake Island Hold station in DP mode	Start bow thruster test Test XBT cable
11/4/2008	Blake Island Hold station in DP mode	Bow thruster test CTD cast
11/5/2008	Blake Island Hold station in DP mode	CTD Cast
11/6/2008	0900 Arrive at Pier 66	

Equipment/Systems Needed/Tested

<input checked="" type="checkbox"/> DP <input type="checkbox"/> A-Frame <input type="checkbox"/> Traction Winch <input checked="" type="checkbox"/> Hydro Winch <input type="checkbox"/> ROV Crane <input type="checkbox"/> General Purpose Crane <input checked="" type="checkbox"/> EM302 <input checked="" type="checkbox"/> Deep Water Echo Sounder <input checked="" type="checkbox"/> Sub-bottom Profiler <input checked="" type="checkbox"/> VSAT Pipe Mbps # days full pipe 7 <input type="checkbox"/> Cameras <input type="checkbox"/> Telepresence <input type="checkbox"/> CCTV <input type="checkbox"/> ROV <input type="checkbox"/> Sled <input type="checkbox"/> xBot	<input checked="" type="checkbox"/> Seawater flow-through system <input checked="" type="checkbox"/> TSG <input checked="" type="checkbox"/> Fluorometer <input checked="" type="checkbox"/> CTD (deck unit) <input type="checkbox"/> CTD w/o Rosette <input checked="" type="checkbox"/> CTD w/ Rosette <input type="checkbox"/> SCS Outputs <input type="checkbox"/> Hazardous Storage Describe: <input checked="" type="checkbox"/> Other(s): Describe All: J-frame
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Contingencies & Dependencies (e.g, actions, conditions, equipment, etc)

<ul style="list-style-type: none"> - Must be able to make water during the third day of the cruise or else the ship will have to come in somewhere to top off - VSAT testing needs to be clear of interference from land based sources for some of the tests, and need a variety of sea states and headings to test connectivity and tracking properly - CTD operations need to be stationary and in calm weather - Only conduct Multibeam operations if it doesn't interfere with VSAT testing - In the event of inclement weather the ship will stay in the Juan de Fuca Strait and Puget Sound.

Lead Time and Long Lead Time Items (e.g., permits, etc)

Any multibeam sonar operations within the Olympic Coast National Marine Sanctuary shall only be conducting in specially designated areas outlined by the Office of National Marine Sanctuaries and subsequently authorized by the U.S. Navy.

Shore-side support (besides staffing, what other stuff is needed)

Telepresence shore support for network testing:

- Bob Knott at URI
- Ridgley Liepins at PMEL

Items to Test

Part I – Puget Sound Tests (Oct 30 – Oct 31)

1. Continuously run to burn fuel
2. VSAT: Test how well the VSAT works with the networks in terms of overall performance and communications
3. Check USBL input into the DP system using tracklink simulation mode.
4. TSG:
 - Test the temperature probe that was installed at the bow
 - Integrate TSG with EM302
5. Telepresence
 - Test the network from the ship to I2
 - File transfers, intercoms, streaming video, etc.
 - Work with URI (Bob Knott) and PMEL (Ridgley Liepins) for tests. This will satisfy a remaining warranty item in the contract.
6. XBT
 - Test the newly installed cable
7. Standard Operating Procedures
 - Refine SOP associated with winch operations
 - Refine ROV deployment and recovery SOP
 - Develop SOPs associated with use of software programs in control room (IP Director, EVS/GPS, XFile, etc.)
8. Familiarization with software programs in control room for Catalina, Nicky and Webb (IP Director, EVS/GPS, XFile, etc.)

Part II – Juan de Fuca and offshore Tests (Nov 1 – Nov 2)

1. Continuously run to burn fuel and make water
2. Conduct VSAT testing:
 - Test the newly installed hardware in various sea states to see how well it maintains connectivity: test in high and low bandwidth modes
 - Test the tracking in various sea states and various headings
3. Multibeam:
 - Offset a trackline off WA coast from previous (stick method)
 - Time and conditions permitting, conduct a small 5-line survey off shore to test the water column features of the multibeam
 - Test the shallow limitations of the EM 302
 - Tests of generation of Bridge DP lines from Hypack using Matlab tool
 - Familiarization with multibeam system for Nicky
4. Continue Telepresence testing
5. Continue Standard Operating Procedure development

6. Continue Control room software familiarization

Part III – Puget Sound Tests (Nov 3 – Nov 5)

1. Hold station off either Possession Point or Blake Island
2. Run in DP mode – bow thruster down for at least one day, and up for at least one day
3. Conduct CTD cast:
 - Test new weights
 - Test CTD rosette: fire all bottles at different depths
 - Test pinger without CTD
 - Train deck crew on CTD deployment and recovery, and winch ops
4. Continue Telepresence testing
5. Continue VSAT testing
6. Continue Standard Operating Procedure development
7. Continue Control room software familiarization

Data Management Objectives or Activities

Sonar surveys conducted off the coast Washington, especially within the Olympic Coast National Marine Sanctuary (OCNMS), are subject to embargo by the U.S. Navy. Acquiring sonar data in these areas will be for the purposes of testing equipment, and shall be planned in such a way as to offset previous data acquired by the EX for the purposes of expanding our knowledge of the area. All such sonar data will be archived only with OE and its direct NOAA data management partners until such time that the data may be distributed further. Any data acquired within the OCNMS will be given directly to the Sanctuary for archiving and distribution to the U.S. Navy.

Outputs

- Draft SOPs for HYPACK, Tracklink, CTD Winch, IP Director and other control room specific software
- Results of VSAT tests
- Results of Telepresence acceptance
- Results of bow thruster performance
- More performance standards of the EM302