



Pre-Cruise Meeting April 17, 2014
AT26-19, Charles Langmuir, Aug 28 - Sept 11, 2014.
RV Atlantis with OSU Coring Facility

General Program Overview:

1. Scientific Objectives:

Our aim is to obtain as many and as deep jumbo piston cores as possible to investigate the potential temporal variability of hydrothermal activity on the Juan de Fuca Ridge. COring sites are currently planned to be west of the Juan de Fuca ridge axis. We will also try to obtain high resolution multibeam bathymetry out to a crustal age of 2 million years (~40 miles off-axis from the ridge).

Activities:

- Jumbo piston coring, box cores, multibeam mapping, possibly some wax coring and rock dredging on the axis of the Juan de Fuca.
- Depth range - 2200 to 3200 meters

2. Identify other PIs associated with the cruise:

3. Identify the at-sea Chief Scientist: Charles Langmuir

4. Identify operating area:

- 44° - 45.0N, 131° 0.0'W = 305nm transit = 28hrs from Columbia River

5. Voyage Dates and Leg #: **August 26 to Sept 11, 2014 / AT26-19**

6. Science party (size) - **34 bunks** available for science party

Pre-cruise and Administrative:

1. **Diplomatic clearance** requirements for operations in EEZs: None Req.
2. **Financial responsibility:** POs? How many to set up?
(For port / loading logistical expenses)
3. **Personnel forms** (Passports, Drivers Lic, Visas, Entry Fees)
 - Personnel forms req. 1 month prior to cruise.
 - We will need list for foreign collaborators if any.
4. Any Special Food Requirements (Gluten Free, Vegetarian, Kosher, etc.)
5. **Berthing Plan** - 1 week prior to mobilization;
<http://www.whoi.edu/page.do?pid=822>
6. Lab Layout plan:
<http://www.whoi.edu/main/ships/atlantis/lab-science-spaces>

Jumbo Piston Corer Set up RV Atlantis:

Mobe Aug 26th and 27th - Astoria OR.
OSU Core technicians -

A. Installation of Jumbo Piston Corer on Stbd side:

Crane set up;

Deck plates / space needed

Power requirements?

Length?

B. Gravity Corer / test coring - how? Ship or OSU system?

C. Deployment and Recovery procedure for JP Corer:

**D. Any information about the bottom type based on past cores or coring?
Sticky sediment? Sandy sediment? Anticipated pull out tensions if bottom
type known?**

E. Rock Dredging / Wax Coring / Other:

RV ATLANTIS Instrumentation & Technician Support

[Installed Scientific Equipment]

1. General Duties of Marine Technicians (SSSG techs)
Dave Simms and Ellen Roosen are scheduled SSSG techs for this cruise.

2. WHOI general use equipment required for cruise *[Installed Scientific Equipment]*:
 - A. 12kHz pinger for wire
 - B. Multibeam - Produce maps of survey area ?
 - C. Deionized H2O
 - D. ADCP 75 kHz ?
 - E. Bathymetry 12 kHz
 - F. Bathymetry 3.5kHz
 - G. Multicore (ships? OSU?)
 - H. Gravity corer (ships? OSU?)
 - I. Box Corer (ships? OSU?)
 - J. Walk in Freezer? OSU Cold Storage Van?
 - K. Walk in Refer?
 - L. High Seas Net
 - M. Met sensors
 - N. Towed Magnetometer
 - O. Rock saw?

Science Party Supplied Equipment:

From OSU Coring group.

- OSU VAN #1 = Tool van
- OSU Van #2 = Cold van for cores
- Core Splitter Core Logger (Rad Authorization - via WHOI)
- Other? - Rock Dredge supplied by OSU or WHOI?

Ship [Other Requirements] [Shipboard Equipment/Nav]

1. Science / Ship Operations
 - a. Instrument Deployment / Recovery Procedures:
OSU + Science + Atlantis Deck Crew working together
 - b. Overboarding Equipment: (ISM) - OSU Coring, CTD?, Dredge, Magnetometer
 - c. Vans: 2 OSU Core Vans, Core Logger Van? Locations? Weights?
 - d. Hazards: [weight, bulk, chemical, pres.] Types?
 - e. Night Operations: YES
2. Deck Safety - Safety Shoes (X), Experience (X)
 - a. Science personnel have Training/Experience to operate/deploy gear
3. Lab Safety - PPE (X), Lab Training (X)
4. Hazardous Material- Please Fill out **HAZMAT INVENTORY FORM**

<http://www.whoi.edu/sbl/liteSite.do?litesiteid=7092&articleId=10875>

- a. Chemicals & Compressed Gases?
 - i. Inventory Form
 - ii. Spill Kit
 - iii. Loading and waste removal logistics
- b. Isotope Use [**Isotope Use Approval**] - **OSU Core logger**

<http://ehs.whoi.edu/ehs/DesktopDefault.aspx?tabindex=2&tabid=5&itemID=543>

5. Policies: (speed, departure/arrival times, moving aboard, etc)
6. Ship Navigation
7. Communication (voice, fax, e-mail)
8. Equipment
 - a. Cranes (X)

- b. Oceanographic winches: Hydro (X), Trawl (X),
- c. CTD (X)
- d. Air Tuggers (X)
- e. Electrical power (X)

Logistics [Notes]

1. Shipping gear to and from vessel?
 - 2 day Mobe in Astoria Oregon August 26 & 27
 - Extra containers or gear may be able to remain on dock during cruise.
 - Demobe Sept 12 (and arrival day Sept 11)

Post-Cruise:

1. Actions departing ship. LABELING all items left behind and properly packed.
2. UNOLS cruise evaluation [Chief Scientist & Master] - UNOLS PCA.
3. Reports to foreign government/State Department [required for work in EEZs]- n/a
4. Data delivery [shipboard underway data].
5. Data archiving policy:

All data on a WHOI Cruise Data Distribution (which includes all underway data) will, by default be considered publicly available once a copy of it has been delivered to the chief scientist at the end of the cruise. Please review the [Cruise Assignment of Data Access Protection](#)