

SOMTS pre-cruise meeting notes

**PRE-CRUISE PLANNING & CHECKLIST**

**General Info**

<b>Meeting date</b>	2010-04-14, Wed
<b>Ship</b>	R/V New Horizon
<b>Cruise Name</b>	NH1007
<b>Cruise Start Date</b>	2010-06-03, Thu
<b>Cruise End Date</b>	2010-06-16, Wed
<b>Load Start Date</b>	2010-05-26, Wed
<b>Load End Date</b>	2010-06-03, Thu
<b>Off-load Start Date</b>	2010-06-16, Wed
<b>Off-load End Date</b>	2010-06-16, Wed
<b>Chief Scientist</b>	Dr. Brad A. Seibel
<b>Start Port</b>	Guaymas, Mexico
<b>Intermediate Ports</b>	N/A
<b>End Port</b>	Guaymas, Mexico
<b># of Scientific Participants</b>	~15-17 + 1 SIO tech + 1-2 Mexican observer(s)

**Equipment Requirements**

<b>Equipment Requirements</b>	See notes below (includes: tugger, MOCNESS software, Restech Avon, filling tank compressor)
<b>24 HOUR OPERATIONS ?</b>	No; science party will handle off-hour ops
<b>Trawl Winch (9/16”M, 0.680EM)</b>	Yes, 0.680; unsupported nonstandard termination requested; SIO will also carry standard termination
<b>CTD Winch (0.322EM)</b>	Yes
<b>CTD Equipment</b>	Yes, small bottles acceptable; ~1 cast/day; upper limit ~1000m; altimeter; oxygen sensor; PAR sensors
<b>Hydro Winch (0.25’M)</b>	No
<b>Portable Winches</b>	Air tugger requested for lifting science party's mounted pole array in/out of water
<b>Navigation</b>	Science party has own radio gear tuned to Argos, not need to mount antenna
<b>Dynamic Positioning</b>	No
<b>Multibeam Sonar</b>	No
<b>ADCP</b>	No
<b>Doppler Sonar</b>	No
<b>PDR (3.5kHz, 12kHz)</b>	No
<b>Magnetometer</b>	No

SOMTS pre-cruise meeting notes

<b>Gravity</b>	No
<b>IMET</b>	No
<b>XBT</b>	No
<b>Seismics (Air/Water Guns, Hydrophone Streamers, etc.)</b>	No
<b>Air Compressor Vans</b>	No
<b>Coring (Gravity, Piston, Multi, etc.)</b>	No
<b>Explosives</b>	No
<b>Containers/Vans</b>	No
<b>Electrical, Special Requirements</b>	Need to wire 220V for squid float tunnel and 1.5- and 2-horsepower chillers
<b>Foreign Shipments</b>	No; small items will be hand-carried
<b>Isotopes</b>	No
<b>Hazmat (chemicals, lithium batteries.) Battery Specialties ??</b>	Formaldehyde, ethanol, liquid nitrogen, tiny lithium batteries for flashlights, one tank of oxygen
<b>Hazmat response issues</b>	Materials will be removed in San Diego
<b>Laser</b>	No
<b>Freezers/Reefers</b>	Minus 80-degree freezer; walk-in cold room
<b>SIO Technicians</b>	1 MT
<b>Data Processing</b>	Standard
<b>Communications</b>	Need to run a video feed from the fish finder to the bridge; need to communicate with Mexican observer
<b>Clearances</b>	Mexico
<b>Internet Requirements</b>	Standard

***Additional Notes***

Science party boarding:

- 6-7 people from RI will ride the transit
- 9-10 people will board in Guaymas
- 2 spaces reserved for the Mexican observer(s)
- Science party includes 2 undergraduate students (no sea experience) and 4 graduate students

Operations:

- Science party will run deck during off-hours; 2-3 people can operate the trawl, the PI will handle the acoustics equipment, and the science party can run CTD casts

## SOMTS pre-cruise meeting notes

### Acoustics:

- PI needs air tugger for lifting her own mounting pole array in/out of water
- Acoustics will be mounted for the duration of the cruise on port-side of back deck
- Equipment will be set up in San Diego before the boat leaves; won't be in water before Guaymas

### Trawl:

- MOCNESS software requested; verify availability with Restech
- 3 three-cubic meter, 30m long

### Float tunnel for squid:

- 800L tunnel (11' x 14' x 5' x 3' tank in the aft lab)
- Uses the ship's bow thruster as propeller
- Equipment: 220V, 1.5- and 2-horsepower chillers, 11.6A motor

### Other equipment:

- Fish finder
- Need to wire video feed from the fish finder to the bridge so that the bridge can use it for depth-finding

### Blue water diving:

- Majority of divers will go to 60'; a couple may drop to 90' where oxygen-rich zone is shallow
- ~10 dives, roughly half during the day, half during the night
- Dives typically 1/2 mile from vessel
- Use Restech Avon
- No wire over the side while boat is deployed and divers in the water
- Science party has ordered 2 medical-grade oxygen tanks and will bring as surplus
- Science party can provide blue water rig
- Restech will obtain compressor for filling tanks
- 18 cylinders require storage (pure nitrogen, special mixes, and one cylinder of pure oxygen)
- 5-6 cylinders will be in the lab at a time while in use
- For emergencies, divers encouraged to have DAN

### Loading:

- Larger items will be loaded in San Diego; no large equipment will be loaded in Guaymas
- Expect a large off-load

## SOMTS pre-cruise meeting notes

Special needs:

- 1 vegetarian