

SOMTS pre-cruise meeting notes

**PRE-CRUISE PLANNING & CHECKLIST**

**General Info**

<b>Meeting date</b>	2010-04-26, Mon
<b>Ship</b>	R/V Melville
<b>Cruise Name</b>	MV1010 (Offshore Southern California)
<b>Cruise Start Date</b>	2010-08-14, Sat
<b>Cruise End Date</b>	2010-08-27, Fri
<b>Load Start Date</b>	2010-08-12, Thu
<b>Load End Date</b>	2010-08-13, Fri
<b>Off-load Start Date</b>	2010-08-28, Sat
<b>Off-load End Date</b>	2010-08-30, Mon
<b>Chief Scientist</b>	Dr. Monica Kohler
<b>Start Port</b>	San Diego, California, USA
<b>Intermediate Ports</b>	N/A
<b>End Port</b>	San Diego, California, USA
<b># of Scientific Participants</b>	8 Science Party + 2 OBS Techs + 2 OBS Students + 2 SIO Techs + 2 Cadets

**Equipment Requirements**

<b>Equipment Requirements</b>	Replicate bridge navigation display to Martin Rapa's location
<b>24 HOUR OPERATIONS ?</b>	Yes (crew/science party/cadets will operate cranes and other equipment during off-hour ops)
<b>Trawl Winch (9/16”M, 0.680EM)</b>	No
<b>CTD Winch (0.322EM)</b>	Yes
<b>CTD Equipment</b>	Yes (CTD equipment only for SSP; no water samples)
<b>Hydro Winch (0.25’M)</b>	Yes (for 3 acoustic rosette tests up to 3500-4000m)
<b>Portable Winches</b>	No
<b>Navigation</b>	Standard
<b>Dynamic Positioning</b>	Yes
<b>Multibeam Sonar</b>	Yes (need watchstander to turn on/off when on/off station)
<b>ADCP</b>	Yes
<b>Doppler Sonar</b>	N/A
<b>PDR (3.5kHz, 12kHz)</b>	Yes (SEG-Y, no hardcopy)
<b>Magnetometer</b>	Yes
<b>Gravity</b>	Yes
<b>IMET</b>	Yes (not need data feeds in realtime)

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<b>XBT</b>	Yes (one per day unless notified otherwise ahead of time; additional XBTs will be charged)
<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>	No
<b>Foreign Shipments</b>	No
<b>Isotopes</b>	No
<b>Hazmat (chemicals, lithium batteries.) Battery Specialties ??</b>	Lithium batteries
<b>Hazmat response issues</b>	Lithex
<b>Laser</b>	No
<b>Freezers/Reefers</b>	No
<b>SIO Technicians</b>	1 CT + 1 MT
<b>Data Processing</b>	Will be done by science party onboard. Full-time access to at least one onboard computer terminal requested.
<b>Communications</b>	Standard. May need to periodically contact Naval Ops via Melville Captain if schedule changes near naval test sites. Video lecture (will use Googlechat with cameras on, as on Reville last year).
<b>Clearances</b>	None required
<b>Notice to Mariners</b>	None required
<b>Internet Requirements</b>	Standard

***Additional Notes***

1. Will need a gravimeter, a magnetometer, and multibeam software for en route collection and processing.
2. Will provide a list of water depths if necessary for XBT wire lengths.
  - Note: Fast Deeps (1000m) will be used, unless other probes are supplied by the science party.

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3. Science party needs computer access to the local onboard system for at least 5 laptops at any one time. Full-time internet is preferred if possible. One member of the science party needs access to a computer terminal that is part of the onboard system for 24-hour data analysis and processing of bathymetry data and all underway geophysical data.
4. OBSIP needs access to the ship's hull transducer. Will need to know if connectors on Melville have changed recently for correct mating leads.
5. All OBSs will be loaded directly on the deck. All electronics, checkout, etc. will use the ship's internal lab space.
6. Will need information about the printers in advance to make sure we have drivers on our laptops.
  - two HP Color LaserJet cp2025dn printers
  - one HP DesignJet 1055cm large-format plotter (please notify ahead of time if planning many print jobs on this printer)

### Meeting Notes:

Will deploy 34 OBSes near islands off Southern California

- Shallow deployments near shore: 2 hours between stations (14 sites <1000m)
- Stations at most 75 km apart

Science party: co-PIs Monica Kohler and Dayanthie Weeraratne

- Dietary needs: vegetarian

Equipment needs:

- Multibeam (700-4650m)
- 12kHz transducer for communicating with equipment
  - Midship or aft transducer available
  - Aft might not be preferable because thrusters may blow bubbles should the ship need to back up (e.g., to maintain position)
- 1/day Fast Deeps included (12 knots, 1000m max): additional drops will be charged
  - If other types of probes are preferred, the science party must provide them
  - Alternative: CTD (more accurate SSP)
- At least 1-2 data processing computer requested; can supply 3-4
  - Request 1 terminal with map and bathymetry
  - Need mbsystem 5.1.2 and corresponding version of GMT loaded on scientists' laptops
  - Science party advised to bring an external USB HDD for data storage

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### Communication needs:

- HSN will be unavailable when the antenna is blocked (NE heading); FleetBB used as backup
- Dr. Weeraratne would like to give a video lecture (Googlechat + Roadnet cameras)
- Satellite phone (VoIP available for local calls; other calls require a calling card)
- Cruise will not be in cell phone range

### Load-in/load-out:

- Departure: 0800; arrival: 1600 (dock staff will not be available after 1630)
- Substantial ship maintenance and new 3.5 array will be done prior to load-in
- Load-out involves minimal equipment, and can be done on Monday, August 30.

### Notices to science party:

- Wear closed-toed, closed-heeled shoes for ops
- No alcohol aboard
- Retain physical ability forms, and then destroy for privacy reasons