Sea Trials ex. Hobart, April 2012

Itinerary

Depart Hobart
Tuesday 10 April 2012

Arrive Hobart
Tuesday 10 April 2012

Principal Investigator

Stephen McCullum
CMAR / MNF
Phone: 0459 138 656  Email: Stephen.mccullum@csiro.au
Voyage Objectives

1. **Winch Testing (CMAN2 8.1)**

All winches: test operation; spooling; and controls (dogbox, cathouse, remote controls, bridge controls) by paying out and retrieving while underway. May need suitable terminations and weights.

**Duration:** 6-8 hours

**Conditions required:** Underway

**Owner:** Mate, ship’s staff

Power up all controls & Pneumatics
Check all potentionmeters are balanced on control valves
Check Bridge remote controls on all winches work without main pumps on
Check Dog & Cat house remote controls on all winches work without main pumps on
Run all pumps & check for leaks
Check all pneumatic control to make sure none are leaking air
Calibrate stepper motor on electrical tension control

Gilson winch Stbd
Lift load off deck & make sure winch holds for 5 minutes

Gilson winch Port
Lift load off deck & make sure winch holds for 5 minutes

Towed body winch run out 200M of wire & retrieve
Check all controls & tension control work correctly
Check spooling gear is aligned
Check brakes work

Coring winch
Check all controls & tension control work correctly
Check spooling gear is aligned
Check brakes work

Trawl winch Port-Run out 2 layers of wire
Check all controls & tension control work correctly
Check spooling gear is aligned
Check brakes work

Trawl Winch Stbd-Run out 2 layers of wire
Check all controls & tension control work correctly
Check spooling gear is aligned
Check brakes work

Check & adjust F212 valves on trawl gear by hanging a weight from each wire and seeing if they ease away together

CTD Winch-Both drums
Carry out test drop with weight.
Check all controls & tension control work correctly
Check spooling gear is aligned
Check brakes work

Check tension feedbacks & load meters are working

Check all deck gear & piping for leaks
2. **Winch Monitoring Testing (CMAN2 8.1)**

Operational testing of winch monitoring system following maintenance during the port period. This would be carried out during proposed testing of scientific winches (above).

**Duration:** In conjunction with Winch testing

**Conditions required:** Underway

**Owner:** Mate, ship’s staff and MNF electronics. Greg Taylor + two Taylor Brothers Technicians

3. **Electrical thermographic test**

Thermography of Main Switchboards and associated Control Panels.

**Duration:** No ship time required

**Conditions required:** Normal operations.

**Owner:** Trevor Grant + Tech

4. **CTD Winch testing**

One CTD test cast will be undertaken in conjunction with testing of the two CTD winches systems, the second CTD winch will be tested with a small weight.

**Duration:** 1 hours

**Conditions:** 60m depth

**Owner:** Ships Crew, Drew Mills and Hugh Barker

5. **Acoustics Calibration**

EM300 and Doppler log calibration will be performed through a series of 6 runs at the designated site. This operation to be designed and performed by CMAR Acoustics group.

**Duration:** 2 hours

**Requirements:** 60m position 43°13.00S 147°35.00E

**Owner:** Tara Martin & Drew Mills

6. **Main Engine and Turbo Charger (CMAN2 2.1)**

A series of controlled power increases and inspections will be undertaken in accordance with Main Engine Manufactures testing guidelines

**Testing of Main Engine**

**Duration:** 7 hours

**Owner:** Chief Engineer

7. **Met Station Testing**

Operational testing of the Met system following maintenance during the port period. This would be carried out opportunistically and should be transparent to vessel operations.

**Duration:** no ship time required

**Owner:** Hugh Barker
8. Various DAP systems testing

Operational testing of various ship’s scientific systems will be carried following maintenance during the port period. These will be carried out opportunistically and should be transparent to vessel operations.

Including:

- Swath mapping (continuous, with no preferred track)
- Topas (as above)
- Test Next G data connection
- Test near real-time data transmission to shore
- Check all sensors and acquisition systems.
- Investigate issues with VmDAS ship motion correct for SDIV
- Monitor for Endeavour on the bridge

**Duration:** no ship time required

**Owner:** Hugh Barker


Setup and testing of underway air /water greenhouse sensor system

**Duration:** Underway

**Conditions required:** Underway

**Owner:** Chris Caldow

Voyage Track / Time Estimates

There are about 12 hours of operation time required and all testing/calibration is required so is of equal high priority.

The Acoustics calibration requires the vessel to be in 60M of water. The Winch testing will be done underway, and CTD casts will be performed at the completion of the EM300 and Doppler log testing.
Personnel List – Science

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<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Stephen McCullum</td>
<td>Voyage Manager, CSIRO</td>
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<td>Lindsay MacDonald</td>
<td>CSIRO</td>
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<td>Drew Mills</td>
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<td>Brett Muir</td>
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<td>Hugh Barker</td>
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<td>Tara Martin</td>
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<td>Muhtar Latif</td>
<td>Kongsberg</td>
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<td>Trevor Grant</td>
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<td>Scott Fletcher</td>
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<td>Chris Caldow</td>
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<td>Dagmar Kubistin</td>
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<td>Clare Murphy</td>
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<td>Graham Kettlewell</td>
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<td>Greg Taylor</td>
<td>Taylor Bros</td>
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<td>Nathan Krakawiak</td>
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<td>Nick Fleming</td>
<td>P&amp;O Engineer</td>
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