



MARINE
NATIONAL FACILITY

voyageplan
ss2012_e01

2012

RV Southern Surveyor

program

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
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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 & Pnuematics

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 controls 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

9. Air and Water greenhouse sensor System.

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

Stephen McCullum	Voyage Manager, CSIRO
Lindsay MacDonald	CSIRO
Drew Mills	CSIRO
Brett Muir	CSIRO
Hugh Barker	CSIRO
Tara Martin	CSIRO
Muhtar Latif	Kongsberg
Trevor Grant	TGE
Scott Fletcher	Thermography
Chris Caldow	UoW
Dagmar Kubistin	UoW
Clare Murphy	UoW
Graham Kettlewell	UoW
Greg Taylor	Taylor Bros
Nathan Krakawiak	Taylor Bros
TBC	Taylor Bros
Nick Fleming	P&O Engineer