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Not to be cited without reference to the FRS Marine Laboratory, Aberdeen

FRV Alba na Mara

Cruise 0509A

PROGRAMME

2-6 April 2009

Loading: Fraserburgh, 16 March 2009 Unloading: Fraserburgh, 6 April 2009

In setting the cruise programme and specific objectives, etc the Scientist-in-Charge needs to be aware of the restrictions on working hours and the need to build in adequate rest days and rest breaks as set out in FRS' Working Time Policy (Lab Notice 34/03). In addition, the Scientist-in-Charge must formally review the risk assessments for the cruise with staff on-board before work is commenced.

In the interest of efficient data management it is now mandatory to return the Cruise Report, to Iain Gibb and the Cruise Summary Report (old ROSCOP form) to Dougal Lichtman, within four weeks of a cruise ending. In the case of the Cruise Summary Report a nil return is required, if appropriate.

Personnel

C Hall (SIC) J Hunter N Collie M Burns P Copland 2 April D Lichtman 3 April J Dunn 3 April M Geldart 3 April

Out-turn days per project: FRELI1 - 5 days

Equipment

RCTV towed TV vehicle RoxAnn Umbilical cable 600m "Sentinel" spar buoy & hydrographic "U"-mooring Demountable net-drum winch Transducer pole (port-side) Trawl BT158 & Morgere doors DMIKT OCEAN Seabird Water Sampler SBE32

Objectives

- 1) To test deployment and recovery procedures for a variety of instrumented platforms and environmental sensors, including the towed TV (RCTV), DMIKT and OCEAN plankton samplers, and the CTD water sampler SBE32/911.
- 2) A test deployment and recovery of a U shape mooring will be attempted using a Sentinel buoy, suitable chain anchors, but with no instrumentation.
- 3) Calibrate the RoxAnn system.
- 4) Develop procedures to attach, deploy and recover instruments on trawl doors and nets.
- 5) Test deployment and recovery of the port-side transducer pole.
- 6) Develop and test software drivers for external instrumentation connected to the DAVIS-SHIP data acquisition system.

Procedure

Scientific equipment (DMIKT, transducer pole, deck-mounted net-drum, BT158 and Morgere doors) will be transported to Fraserburgh on 16 March to load the vessel and staff will visit during w/b 30 March to set-up selected survey equipment prior to the cruise. Staff will join *Alba na Mara* during the morning of 2 April, when RoxAnn trials will start as soon as possible in the Moray Firth, in an area where the sea-bed type is known to be sand. After the RoxAnn trials, the DMIKT plankton sampler will be deployed, towed and recovered, using the central winch. During the deployments, data from the scientific navigation plotter will be monitored for integration with the DAVIS-SHIP data acquisition system. *Alba na Mara* will return to Fraserburgh that evening to drop-off P Copland.

On Friday 3 March the DMIKT will be off-loaded and more equipment delivered (Sentinel buoy, Seabird water sampler and CTD logger, hydrographic mooring and OCEAN plankton sampler). J Dunn, M Geldart and D Lichtman will join the vessel to oversee the deployment and recovery of a "U"-mooring. The mooring wire will be loaded onto the deck-mounted net-drum and the 911 CTD tested. *Alba na Mara* will then sail to a suitable area in 40m of water to deploy and recover the CTD, then deploy and recover the mooring. On completion the port-side transducer pole will be deployed with a logging accelerometer attached to the base, before steaming at a range of speeds to determine the degree of vibration in the pole with and without the fore and aft stays. If time permits after recovery of the pole the OCEAN plankton sampler will be deployed, towed and recovered, using the central winch. *Alba na Mara* will return to Fraserburgh that evening to drop-off J Dunn, M Geldart and D Lichtman, and to off-load the hydrographic mooring, deck-mounted net-drum and transducer pole. If the OCEAN sampler has not been tested it will remain on-board. The RCTV will then be loaded, the cable for which will have been left on board after the previous cruise

Alba na Mara will sail on Saturday 4 March to complete OCEAN sampler trials, to shoot the trawl and to determine procedures for attaching load-cells ahead of the doors and at the wing-ends. Pre-assessment in the harbour may determine that door-mounted load-cells have to be attached while the vessel is alongside. The vessel will anchor on Saturday evening to practice removal of the load-cells from the doors. Deployment and recovery of the RCTV will be undertaken when gear-trials have been completed.

After the trials, Alba a Mara will return to Fraserburgh for unloading on 6 April 2009.

Normal contacts will be maintained with FRS.

Submitted C Hall 25 February 2009

Approved I Gibb 2 March 2009