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

MRV *Alba na Mara*

Survey 1413A

PROGRAMME

16 – 21 October 2013

Loading: Fraserburgh, Tuesday 15 October 2013
Unloading: Fraserburgh, Monday 21 October 2013

In setting the survey 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 Marine Scotland's 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 Survey Report to Iain Gibb and the Survey Summary Report (old ROSCOP form) to Matt Geldart, within four weeks of a survey ending. In the case of the Survey Summary Report a nil return is required, if appropriate.

Personnel

C Hall (SIC)
J Hunter
N Collie
C Shand
Savante Ltd engineers (x2) 17 October (TBC)

Out-turn days per project: FRPRM9 (20040) - 6 days

Equipment

300m armoured cable
TV drop frame
Flow-meters and calibration bridle
Over-side transducer pole
Track-point USBL location system
SubC1 HD camera
Video Ray ROV & Dyneema recovery line
Acoustic pop-up recovery system
3-D laser imaging system
"Heel & pitch" attitude sensor

Objectives

1) To test and compare a variety of TV and HD cameras and associated lights.

2) To test and calibrate the alignment of laser stripe projectors.

3) To assess a commercial 3-D laser imaging system (Savante Ltd) and underwater instrumentation (Heel & Pitch sensor).

4) To test the deployment, recovery and efficiency of short-base-line acoustic positioning systems and a “pop-up” recovery marker using a hydrophone mounted on the port-side transducer pole.

5) To calibrate plankton-sampler flow-meters.

6) Staff training in the deployment, operation and recovery of a VideoRay ROV.

Procedure

Scientific equipment will be transported to Fraserburgh on 15 October. The TV cable will be loaded on to the winch and deck equipment set-up. If necessary, set-up will be completed when staff join *Alba na Mara* during the morning of 16 October, after which TV trials will start in the Moray Firth in areas of sandy sea-bed and 100m depth. *Alba na Mara* will return to Fraserburgh at the end of each day during the survey to exchange staff and to review data.

Trials of the short-base-line system will proceed as weather permits, using the port-side transducer-pole with attached hydrophone to locate a sea-bed target (drop-frame). An acoustic “pop-up” recovery marker will be attached to the drop-frame to assess its suitability as an aid to recovering lost equipment. Other instrumentation will be tested on the drop-frame as conditions permit. Various laser projectors will be tested to calibrate and verify the beams, and a commercial 3-D laser imaging system will be deployed to assess its suitability for benthic impact studies. Staff training in the deployment and use of the Video Ray ROV will be undertaken while the vessel is at anchor in sheltered waters. The flow-meters will be calibrated by towing at a range of fixed speeds in reciprocal directions

After the trials, *Alba na Mara* will un-load equipment in Fraserburgh on 21 October.

The 300m armoured cable will be left on the TV winch in preparation for survey 1813A.

Normal contacts will be maintained with the Laboratory

Submitted
C Hall
01/09/2013

Approved:
I Gibb
07/10/2013