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FRV *Alba na Mara*

Cruise 0312A

PROGRAMME

28 Feb– 12 March 2012

Loading: Fraserburgh

Change-over: Flexible

Unloading: Fraserburgh

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 Scotlands' Working Time Policy (Notice 34/03).

In addition, the Scientist-in-Charge must formally review the risk assessments for the survey 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 I Gibb and the Survey Summary Report (old ROSCOP form) to M Geldart, within four weeks of a survey ending. In the case of the Survey Summary Report a nil return is required, if appropriate.

Personnel

P Hayes

C Shand

P Stainer

G Graham (MSS Reserve)

D Smith (BGS)

S Ritson (BGS)

D Wallis (BGS Reserve)

Fishing gear: Day grabs; TV drop frame with lasers and armoured cable; Agassiz trawls; RoxAnn system, acoustic boomers.

Objectives

1. To undertake sub-bottom profiling of the Crown Estate lease areas for offshore wave development (Figure 1). The sites will focus on the north coast of Scotland west of Orkney and south-west Shetland.
2. To collect video footage from the Crown Estate lease areas to assist in the macro benthos, substrate and biotype identification.
3. Contingency work has also been identified for additional EMEC renewable test facilities (Sound of Eday and Shapinsay Sound) and SNH MPA work to the east of Shetland.

Estimated Days per Project: 14 days, 10804

Procedure

Providing weather conditions are suitable, *FRV Alba na Mara* will depart Fraserburgh harbour on 28 February for southwest Shetland. The visitors involved in the sub-bottom profiling work will also join the survey at Fraserburgh with the MSS staff.

If, at the start of the survey the weather conditions for southwest Shetland are poor, survey work will focus on the north coast of Scotland to make best use of the time available before moving on to Shetland. The survey area is out side the Pentland Firth. Once a weather window is available the vessel will make passage to SW Shetland.

If the weather forecast for the second half of the survey is poor, the vessel will make a port call allowing BGS staff to disembark and additional reserve MSS staff to join the survey.

RoxAnn transects will guide the deployment of the drop frame TV and, where practical, the deployment of a day grab and agassiz trawl. The survey work undertaken at the proposed sites will be similar to survey work undertaken on previous surveys.

On completion of the survey work, the vessel will return to unload at Fraserburgh Harbour on 12 March 2012.

Sub Bottom Profiling

Transects across the survey area will be determined in advance in readiness for loading directly onto the ship's computer. The survey transects will be spaced at 300m intervals and will run parallel to the coast for each survey area with the exception of Costa Head where they will run NW-SE in alignment with the likely tidal flow in and out of the Westray Firth. Additional transects will be run at 1 km intervals perpendicular to the survey transects. These will only be undertaken providing suitable weather conditions.

The sub bottom profiling survey for each site will progress as follows:

1. Every other survey transect will be run to ensure a coarse coverage of the site.
2. Those missed out will be completed next
3. Perpendicular transects next.
4. Ad hoc survey lines in the event of finding something unusual
5. Grab samples possible TV

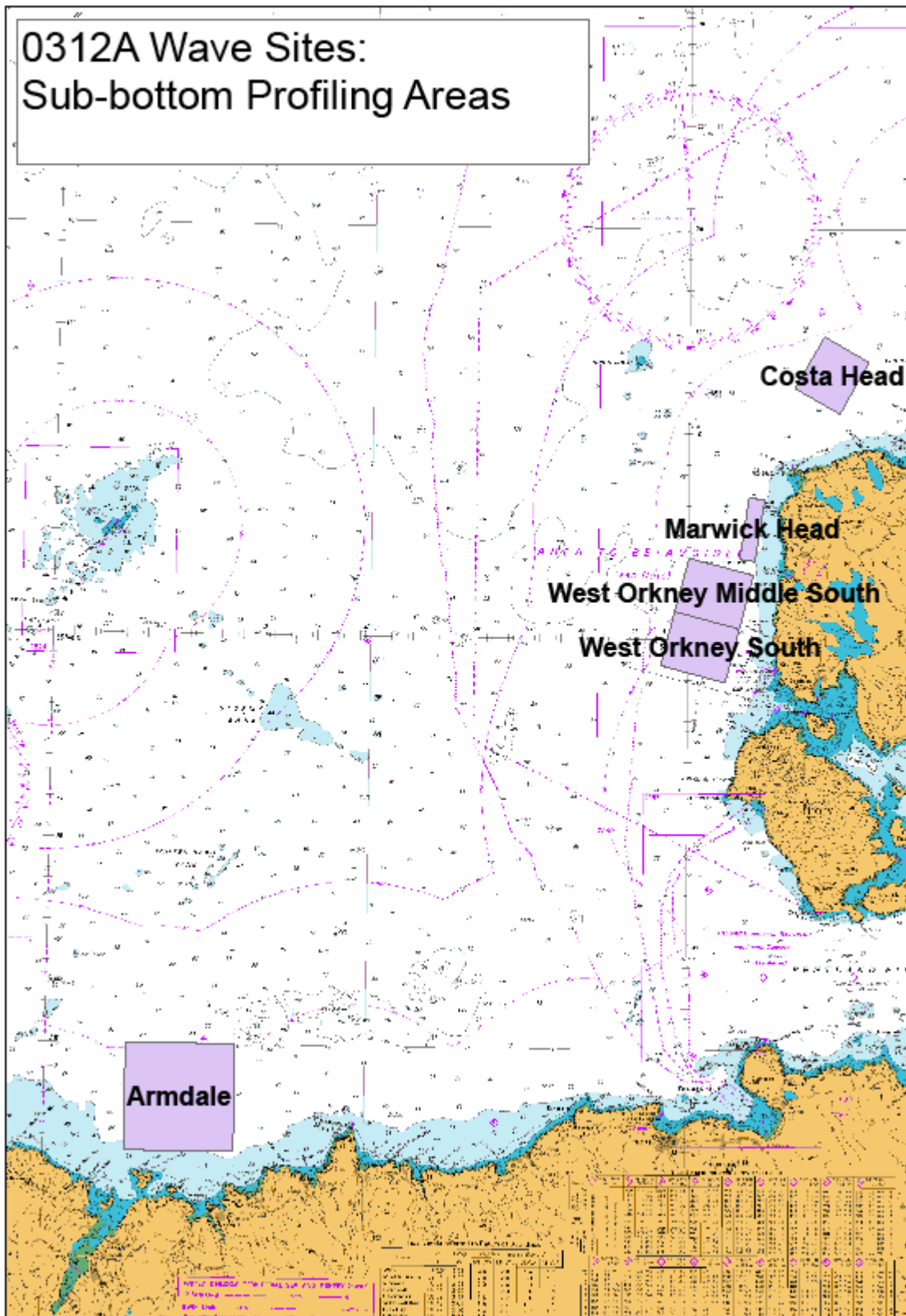
The survey speed will be between 3 to 5 knots with the equipment deployed from the scallop booms, 10m astern of the vessel, floating on the surface. In the event of poor weather, additional survey lines can be added to the survey sites where the weather conditions allow continued work e.g. transect spacing could be reduced to 150m or less.

Normal contacts will be maintained with the Marine Laboratory.

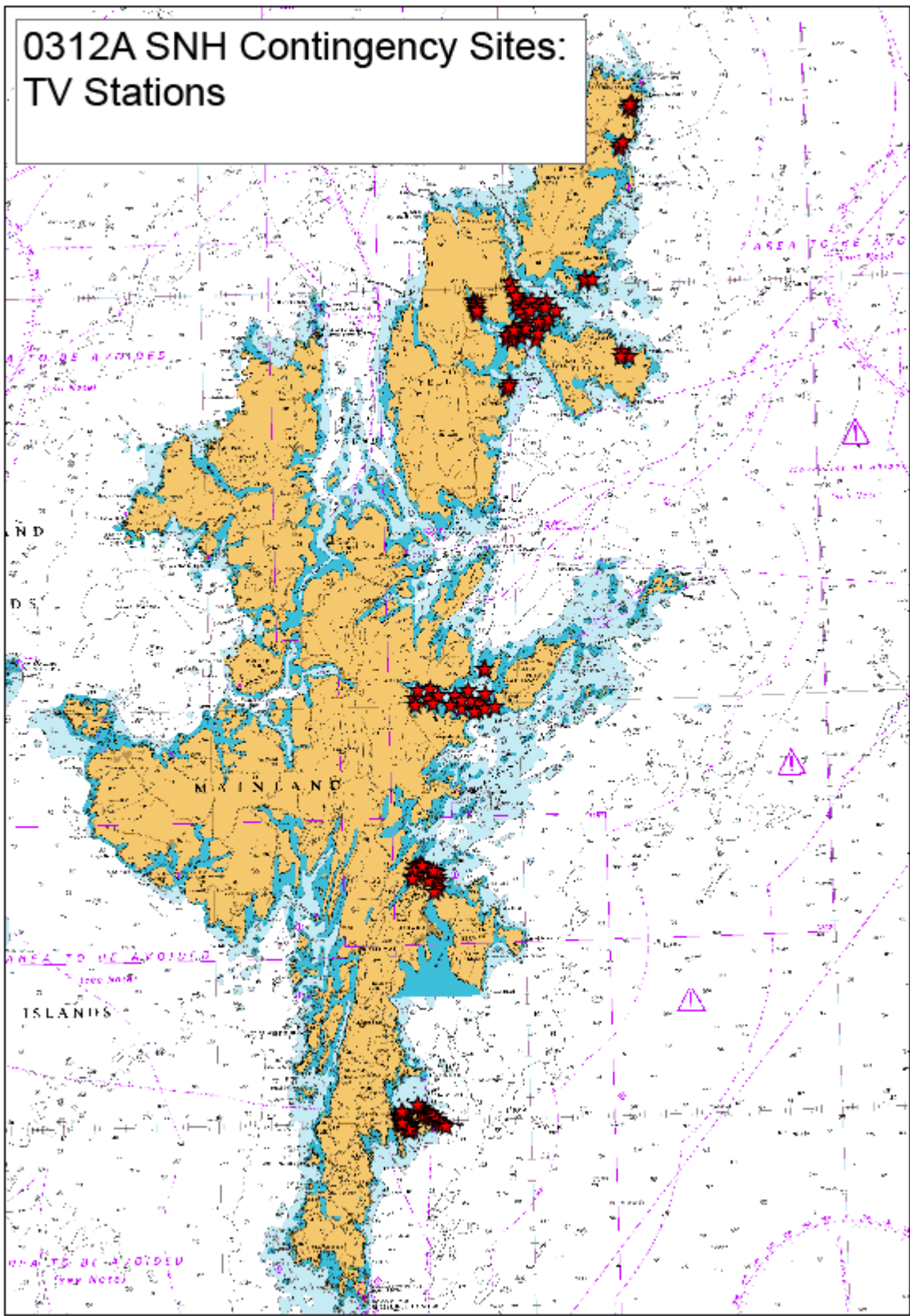
Submitted: P Hayes, 24 January 2012

Approved: I Gibb, 30 January 2012

0312A Wave Sites: Sub-bottom Profiling Areas



0312A SNH Contingency Sites:
TV Stations



0312A EMEC Contingency Sites
Sub-bottom Profiling Areas
and TV

