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FRV *Scotia*

Cruise 1311S

## **PROGRAMME**

15 October–3 November 2011

**Loading:** Aberdeen, 13 October 2011

**Change-over:** Lerwick/Scalloway, 24 October 2011

**Unloading:** Aberdeen, 3 November 2011

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 Marine Scotland 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 I Gibb and the Cruise Summary Report (old ROSCOP form) to M Geldart, within four weeks of a cruise ending. In the case of the Cruise Summary Report a nil return is required, if appropriate.

## **Personnel**

P Hayes  
D Moore  
C Megginson  
M Rose  
C Shand  
P Stainer  
J Heron  
P Copland  
E Armstrong  
G Graham  
R Duncan  
T Roberts  
H Niner

**Fishing gear:** Day grabs; TV drop frame with lasers and armoured cable; Agassiz trawls; Swathe multibeam echosounder system; RoxAnn system.

## **Objectives**

1. To undertake bathymetric and groundtruthing survey work in connection with potential offshore wet renewable developments located to the southwest of Shetland.

Contingency survey work is included, undertaking the same survey work along the north coast of mainland Scotland and east of Shetland.

**Estimated Days per Project:** 20 days, 10804

## **Procedure**

*FRV Scotia* will depart from Aberdeen harbour on 15 of October. The nature of the work will be heavily dependant on the prevailing weather conditions encountered. The proposed survey work for southwest Shetland is very similar to the work undertaken in the Pentland Firth (2009) and west of Lewis and Fair Isle (2010). The bathymetric survey work will involve a series of transects collecting swathe and RoxAnn data, the deployment of the TV drop frame and, where practical, the deployment of a day grab. On arrival at the survey sites, two tide gauges will be deployed for the full duration of each survey. Sound velocity profiles will be recorded on a daily basis and deployment of the day grab will be considered after each TV tow.

The sites outside southwest Shetland will be surveyed in the same manner as above.

*FRV Scotia* will complete a half landing at Lerwick/Scalloway on 24 October to exchange scientific staff. On completion of the survey work *Scotia* will return to unload at Aberdeen harbour on 3 November.

Normal contacts will be maintained with the laboratory.

Submitted:  
*P Hayes*  
13 October 2011.

Approved:  
*I Gibb*  
13 October 2011

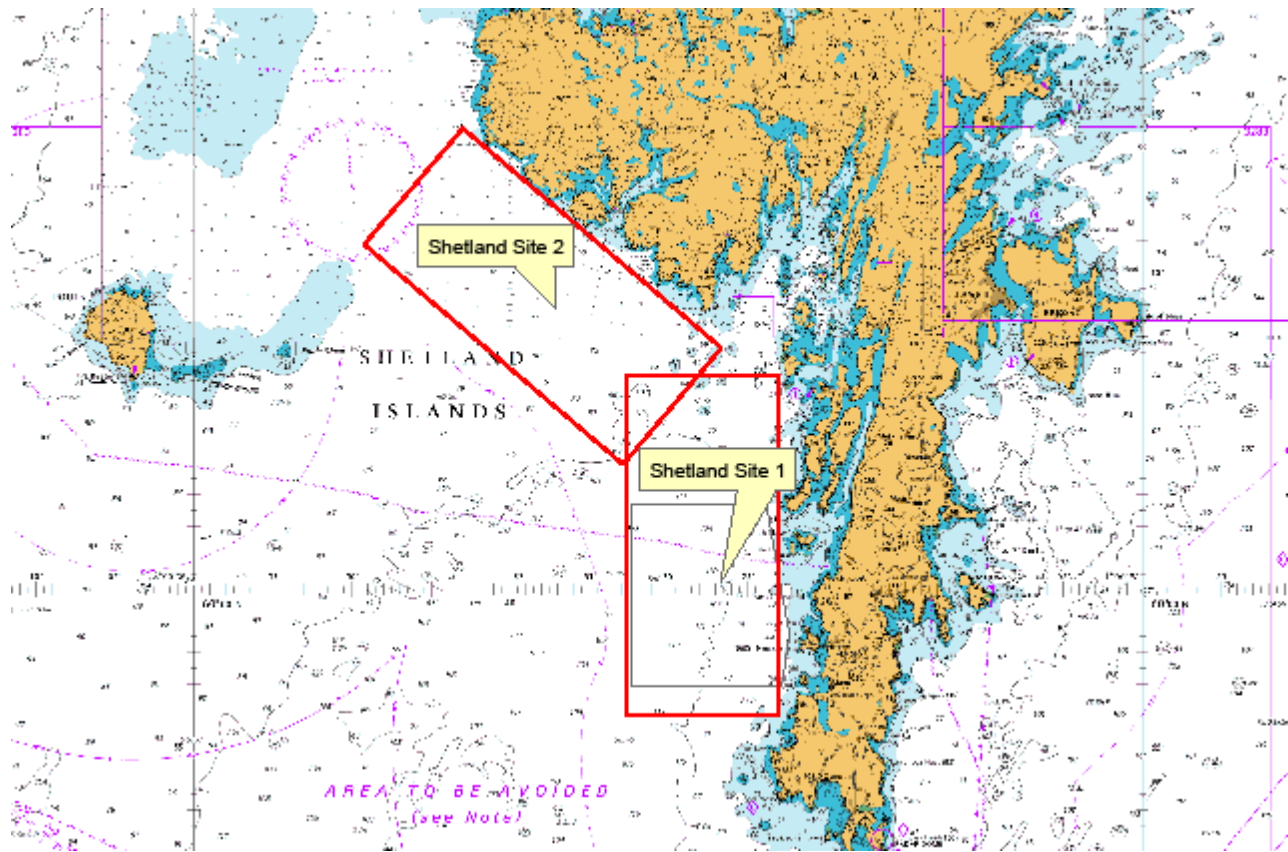
km	km	m	Swathe m	100% Overlap	No of Lines	Speed km	Time for 1 line hrs	Days to Complete Area
20	9	60	240	120	75	14.8	1.35	4.22
km	km	m	Swathe m	75% Overlap	No of Lines	Speed km	Time for 1 line hrs	Days to Complete Area
20	9	60	240	150	72	14.8	1.35	4.05
km	km	m	Swathe m	50% Overlap	No of Lines	Speed km	Time for 1 line hrs	Days to Complete Area
20	9	60	240	180	60	14.8	1.35	3.38

km	km	m	Swathe m	100% Overlap	No of Lines	Speed km	Time for 1 line hrs	Days to Complete Area
20	9	60	240	120	75	7.408	2.70	8.44
km	km	m	Swathe m	75% Overlap	No of Lines	Speed km	Time for 1 line hrs	Days to Complete Area
20	9	60	240	150	72	7.408	2.70	8.10
km	km	m	Swathe m	50% Overlap	No of Lines	Speed km	Time for 1 line hrs	Days to Complete Area
20	9	60	240	180	60	7.408	2.70	6.75

Survey times based on an area 20 by 9 km with vessel speeds set of 8 (14.8 km/hr) and 4 (7.408 km/hr) knots.

No. of Staff	Scientific Crew	No. of Staff First Half	No. of Staff Second Half	Cabin	Cruise Participation
1	P Hayes		1	B	24 Oct 2011 to 3 Nov 2011
2	D Moore	1	1	SIC	15 Oct 2011 to 3 Nov 2011
3	G Graham		1	D	15 Oct 2011 to 24 Oct 2011
4	C Megginson		1	G	24 Oct 2011 to 3 Nov 2011
5	M Rose	1		E	15 Oct 2011 to 24 Oct 2011
6	C Shand	1	1	H	15 Oct 2011 to 3 Nov 2011
7	J Heron	1		G	15 Oct 2011 to 24 Oct 2011
8	P Copland	1		B	15 Oct 2011 to 24 Oct 2011
9	E Armstrong	1	1	F	15 Oct 2011 to 3 Nov 2011
10	R Duncan	1		D	24 Oct 2011 to 3 Nov 2011
11	P Stainer		1	E	24 Oct 2011 to 3 Nov 2011
12	T Roberts	1	1	J	15 Oct 2011 to 3 Nov 2011
13	H Niner		1	A	15 Oct 2011 to 24 Oct 2011

Scientific crew involved in 1311S.



Location of survey areas west of Shetland.