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MRV *Scotia*

Survey 1312S

PROGRAMME

29 September - 13 October 2012

Loading: Aberdeen, 27 September 2012

Unloading: Aberdeen, 13 October 2012

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'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 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

G Slesser (SIC)
J Dunn
A Gallego
M Geldart
D Lee
R O'Hara Murray
G Hermann

Out-turn days per project: 15 days: ST03P

Gear

Sea-Bird CTDs, ADCP and current meter instrumentation, water level recorders, temperature mini-loggers, mooring equipment, recovery trawl.

Objectives

1. Recover service and redeploy the instrument mooring off Stonehaven near the inner Long Term Monitoring position.
2. Perform hydrographic surveys along the JONSIS long term monitoring section in the northern North Sea.
3. Perform hydrographic surveys along the long term monitoring Faroe-Shetland Channel sections.
4. Take samples for long term storage at Fair Isle – Munken stations FIM-01 and FIM-06.

5. Take salinities for St. Andrews University at the Fair Isle - Munken station FIM-05 and Nolso – Flugga station NOL-04
6. Recover service and redeploy three ADCP moorings and recover one ADCP mooring in the Faroe-Shetland Channel.
7. Perform 13 hour CTD surveys and VMADCP profiling at ADCP positions and CTD surveys across the Fair Isle Channel, across the Shelf Edge and East of Shetland as time allows.

Procedure

On sailing from Aberdeen (29 September) *Scotia* will sail to the Stonehaven LTM site to recover, service, download instrumentation and redeploy the oceanographic instrumented mooring (56° 56.95'N 002° 08.10'W). Once this mooring work has been completed a suitable position will be selected to carry out trial CTD deployments before proceeding to the JONSIS line. Sampling will be undertaken along this section using the CTD and carousel water sampler. Following this work *Scotia* will make way to the Faroe-Shetland Channel to commence mooring operations. Three ADCP moorings, NWSE (60° 16.48'N 004° 19.84'W), NWSD (60° 26.97'N 004° 22.41'W) and NWSG (60° 30.51'N 004° 34.03'W) will be recovered, data downloaded from the recovered instrument, mooring refurbished and the mooring redeployed. The fourth ADCP mooring, NWSF (60° 12.01'N 004° 00.45'W) will be recovered, data downloaded and brought back to the laboratory for a manufacturer's service and calibration. On completion of this mooring work passage will be made to commence sampling the Fair Isle – Munken and Nolso – Flugga long term monitoring sections using the CTD and carousel water sampler. Salinity samples required for St. Andrews and for long term storage will be taken during the sampling of these sections. On completion the remaining time will be spent carrying out CTD and vessel mounted ADCP profiling at the ADCP mooring positions, CTD sections across the shelf edge, the Fair Isle section or East of Shetland before returning to Aberdeen.

The thermosalinograph will be run throughout the survey.

(NOTE: The survey will take *Scotia* into the Foinaven Development Area. This is now standard practice, and normal on-site communications will be established with the Foinaven co-ordinating officer).

Normal contacts will be maintained with the laboratory.

Submitted:
G Slesser
14 September 2012

Approved:
I Gibb
20 September 2012

JONSIS Line

	Name	Latitude	Longitude	Depth	Spacing
01	JO 1	59° 17.00' N	02° 14.00' W	75 m	
02	JO 1A	59° 17.00' N	02° 05.00' W	90 m	8.5 km
03	JO 2	59° 17.00' N	01° 56.00' W	100 m	8.5 km
04	JO 3	59° 17.00' N	01° 48.00' W	80 m	7.6 km
05	JO 4	59° 17.00' N	01° 40.00' W	90 m	7.6 km
06	JO 5	59° 17.00' N	01° 30.00' W	95 m	9.5 km
07	JO 6	59° 17.00' N	01° 20.00' W	110 m	9.5 km
08	JO 6A	59° 17.00' N	01° 10.00' W	120 m	9.5 km
09	JO 7	59° 17.00' N	01° 00.00' W	125 m	9.5 km
10	JO 8	59° 17.00' N	00° 40.00' W	120 m	18.9 km
11	JO 9	59° 17.00' N	00° 20.00' W	140 m	18.9 km
12	JO10	59° 17.00' N	00° 00.00' W	135 m	18.9 km
Totals				1180 m	126.9 km

Fair Isle - Munken (Ammended for presence of Foinaven oil platform)

	Name	Latitude	Longitude	Depth	Spacing
01	FIM-01	60° 10.00' N	03° 44.00' W	150 m	
02	SEFOS	60° 13.00' N	03° 51.50' W	170 m	8.9 km
03	FIM-02	60° 16.00' N	03° 59.00' W	200 m	8.9 km
04	SEFOS	60° 18.00' N	04° 04.50' W	330 m	6.3 km
05	<i>FIM-03</i>	<i>60° 20.25' N</i>	<i>04° 09.00' W</i>	<i>390 m</i>	<i>6.3 km</i>
06	FIM-04	60° 25.00' N	04° 19.00' W	655 m	12.4 km
07	FIM-05	60° 29.00' N	04° 26.00' W	995 m	9.8 km
08	FIM-06	60° 35.00' N	04° 45.00' W	1090 m	20.6 km
09	FIM-6a	60° 38.00' N	04° 54.00' W	1030 m	9.9 km
10	FIM-07	60° 43.00' N	05° 06.00' W	915 m	14.3 km
11	FIM-08	60° 47.00' N	05° 16.00' W	830 m	11.7 km
12	FIM-09	60° 51.00' N	05° 29.00' W	600 m	13.9 km
13	FIM-10	61° 02.00' N	05° 57.00' W	280 m	32.4 km
14	FIM-11	61° 12.00' N	06° 22.00' W	240 m	
Totals				7,585.0 0	155.40

Nolso-Flugga

	Name	Latitude	Longitude	Depth	Spacing
01	NOL-01	60° 56.00' N	01° 00.00' W	110 m	
02	SEFOS	60° 58.70' N	01° 17.70' W	125 m	16.7 km
03	SEFOS	61° 01.40' N	01° 35.40' W	155 m	16.7 km
04	NOL-02	61° 04.00' N	01° 53.00' W	270 m	16.7 km
05	SEFOS	61° 06.00' N	02° 01.50' W	440 m	8.5 km
06	NOL-03	61° 08.00' N	02° 10.00' W	550 m	8.5 km
07	SEFOS	61° 09.30' N	02° 17.50' W	630 m	7.1 km
08	NOL-3a	61° 11.00' N	02° 25.00' W	730 m	7.4 km
09	NOL-04	61° 14.00' N	02° 40.00' W	1080 m	14.5 km
10	NOL-05	61° 21.00' N	03° 10.00' W	1370 m	29.6 km
11	NOL-06	61° 28.00' N	03° 42.00' W	1235 m	31.2 km
12	NOL-07	61° 35.00' N	04° 15.00' W	990 m	31.9 km
13	NOL-08	61° 42.00' N	04° 51.00' W	235 m	34.2 km
14	NOL-09	61° 49.00' N	05° 21.00' W	180 m	29.3 km
15	NOL-10	61° 54.00' N	05° 45.00' W	290 m	22.9 km
16	NOL-11	62° 00.00' N	06° 12.00' W	125 m	26.0 km
Totals				8250 m	301.20 km