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MRV *Alba na Mara*

Survey 1216A/1316A

## **PROGRAMME**

12-22 July 2016

**Loading:** Fraserburgh, 8 July 2016

**Unloading:** Fraserburgh, 22 July 2016

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 (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**

|                 |                                |
|-----------------|--------------------------------|
| R O'Hara Murray | (SIC)                          |
| D Lee           |                                |
| A Vogler        | (Visitor – UHI)                |
| D Sutherland    | (Visitor – UoE; 8 - 17 July)   |
| L Carse         | (Visitor – UHI; 8 - 13 July)   |
| S Baston        | (Visitor – ICIT; 13 - 22 July) |
| B Berx          | (17 - 22 July)                 |

**Out-turn days per project:** 11 days: RE01U

## **Gear**

MSS gear: Sea-Bird 25 CTD, ADCPs, ADCP bed frames, polypropylene rope for moorings, shackles and other mooring accessories, acoustic releases and accessories, over the side pole including new mounting plate for ADCP, laptops etc., Plankton net.

Gear belonging to visitors will be loaded on 11 July and later from Kirkwall during the survey

## **Objectives**

1. Use the ship board multi-beam system to image the seabed prior to ADCP deployments.
2. Deploy and recover up to six ADCP moorings in the Falls of Wareness EMEC site.
3. Deploy three moorings in Westray Firth on bed frames (to be left behind).
4. VM-ADCP transect work in Hoy Sound.

5. CTD grid in Hoy Sound.
6. Deploy a single string mooring in the Pentland Firth.
7. Perform VMADCP transect work in the Inner Sound of Stroma during a flood tide.
8. Use the multi-beam system to image the cables on the bed in the Inner Sound of Stroma.
9. Deploy an ADCP bed frame in the inner sound of Stroma.

## **Procedure**

On sailing from Fraserburgh and after all drills, *Alba* will make passage to the Fall of Warness EMEC site. The following three to four days will be spent in the EMEC test centre deploying and recovering ADCP moorings on bed frames. A port call will be made on the evening of 13 July to exchange scientific staff and pickup new ADPC bed frames.

During 17-18 July the vessel will work slightly further north in Westray Firth deploying three ADCP bed frame moorings. A port call will be made in Kirkwall on the evening of 17 July to exchange scientific staff and pickup an ADPC bed frame.

The vessel will then sail to Hoy Sound on 18 July and conduct VM-ADCP and CTD survey work.

On 20 July *Alba* will sail to the Pentland Firth, deploy a single string mooring and continue to the Inner Sound of Stroma. The remaining time will be spent in Inner Sound of Stroma before returning to Fraserburgh for the evening of 21 July.

The vessel will be unloaded on 22 July with all equipment and staff returning to the laboratory.

Much of this survey is collaborative work with the University of Edinburgh (UoE), ICIT, and the University of the Highlands and Islands (UHI).

## **Mooring Positions (Deployment)**

EMEC Fall of Warness (provisional locations):

59° 09.22' N, 002° 50.00' W (NW1)

59° 07.74' N, 002° 48.08' W (SE)

59° 08.28' N, 002° 47.83' W (SP1)

59° 08.12' N, 002° 48.29' W (SP2)

59° 08.00' N, 002° 48.77' W (SP3)

59° 07.93' N, 002° 49.10' W (SP4)

59° 11.09' N, 002° 53.05' W (Westray Firth #1)

59° 11.80' N, 002° 54.90' W (Westray Firth #2)

59° 12.50' N, 002° 56.69' W (Westray Firth #3)

58° 43.10' N, 003° 13.90' W (Merry Men of Mey)

58° 39.70' N, 003° 09.50' W (Inner sound of Stroma)

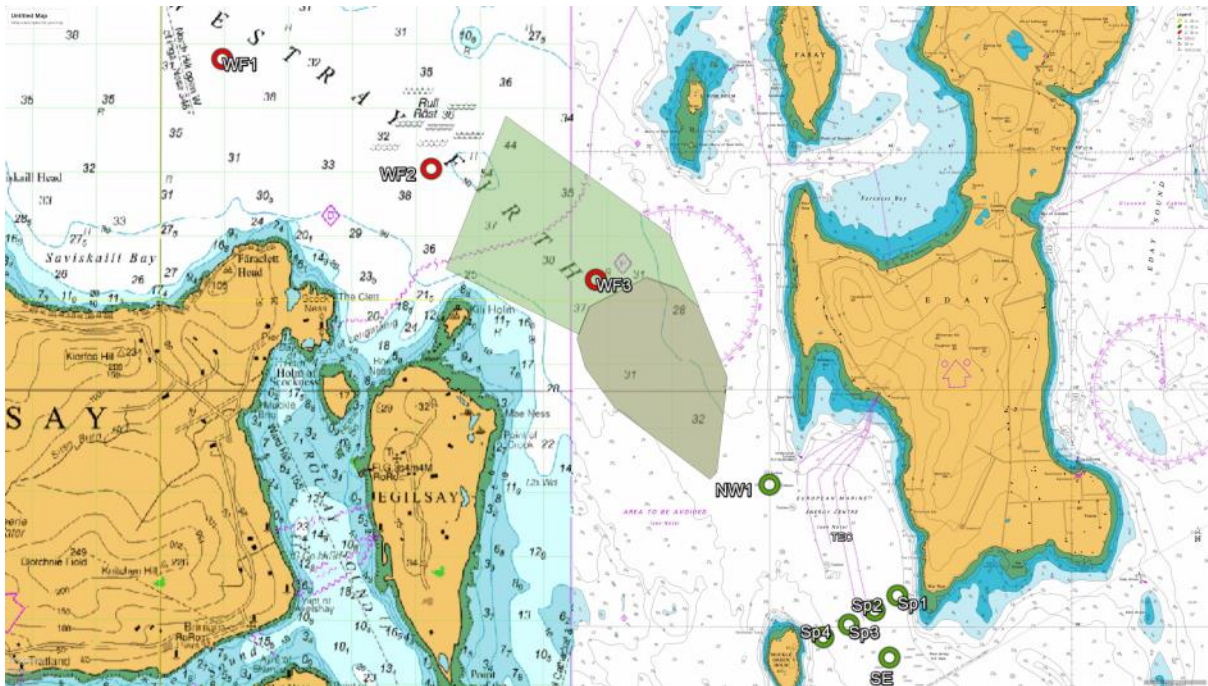
## **Health and Safety**

The procedures described above are covered by the following Oceanography Group risk assessments:

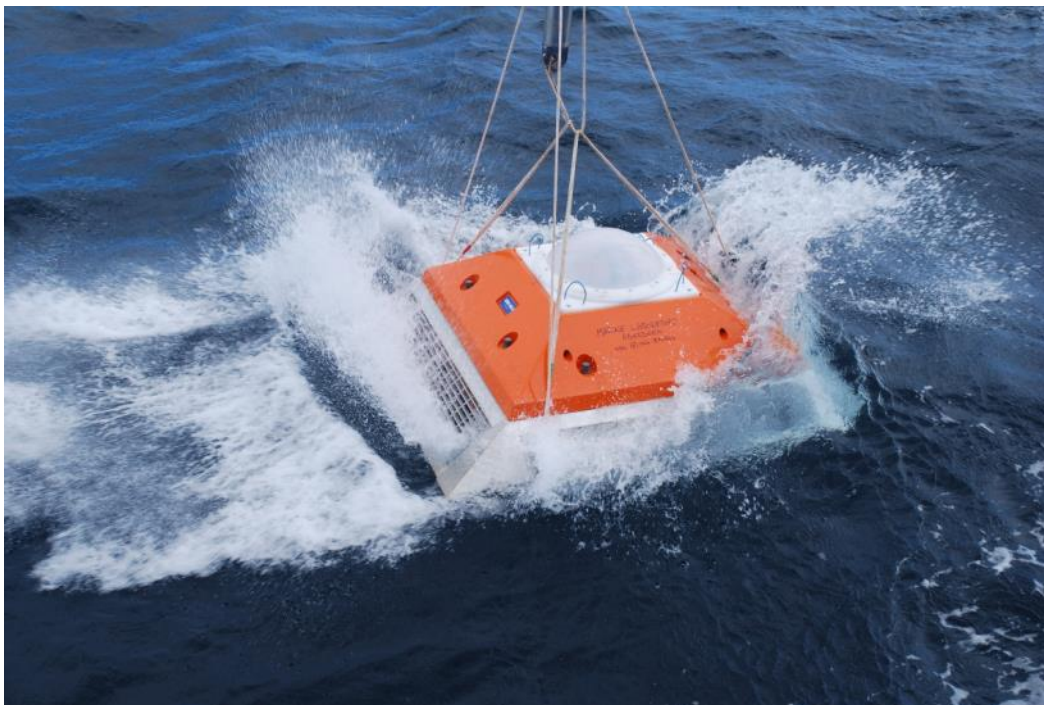
- 01 – Mobilisation of Equipment
- 03 – Deployment and Recovery of Moorings
- 04 – Operation of 911+/Sealogger Carousel and CTD
- 08 – Deployment of small CTD
- 17 – Plankton sampling
- 18 – Supervising students and other visitors

Submitted:  
R O'Hara Murray  
27 June 2016

Approved:  
I Gibb  
30 June 2016

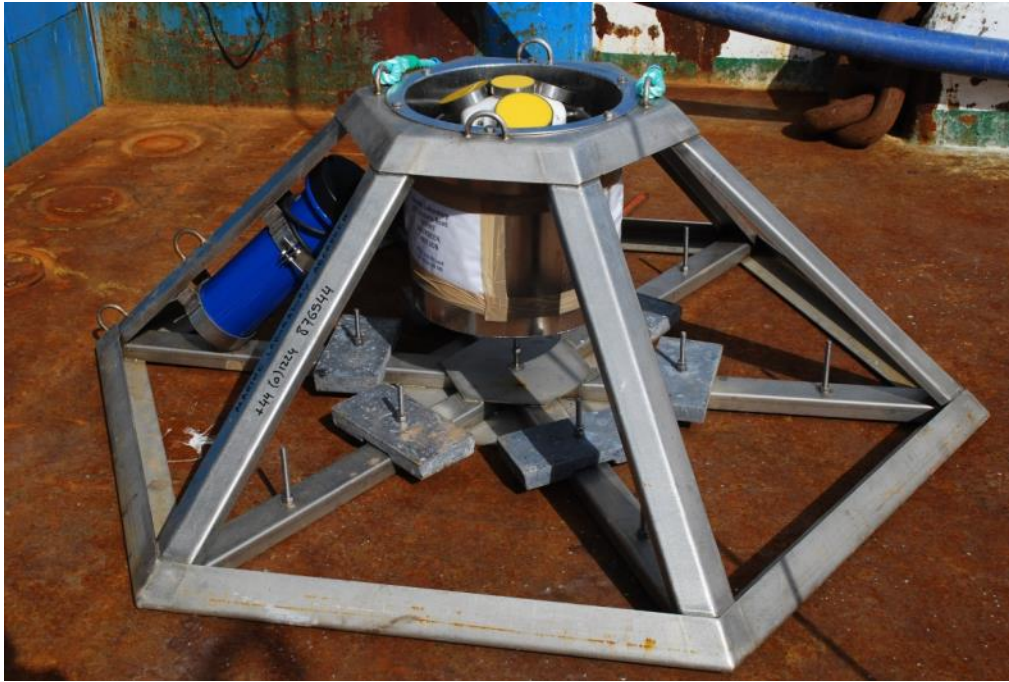


Approximate mooring locations in the Falls of Wareness EMEC site (NW1, Sp1-4 and SE) and Westray Firth (WP1-3).

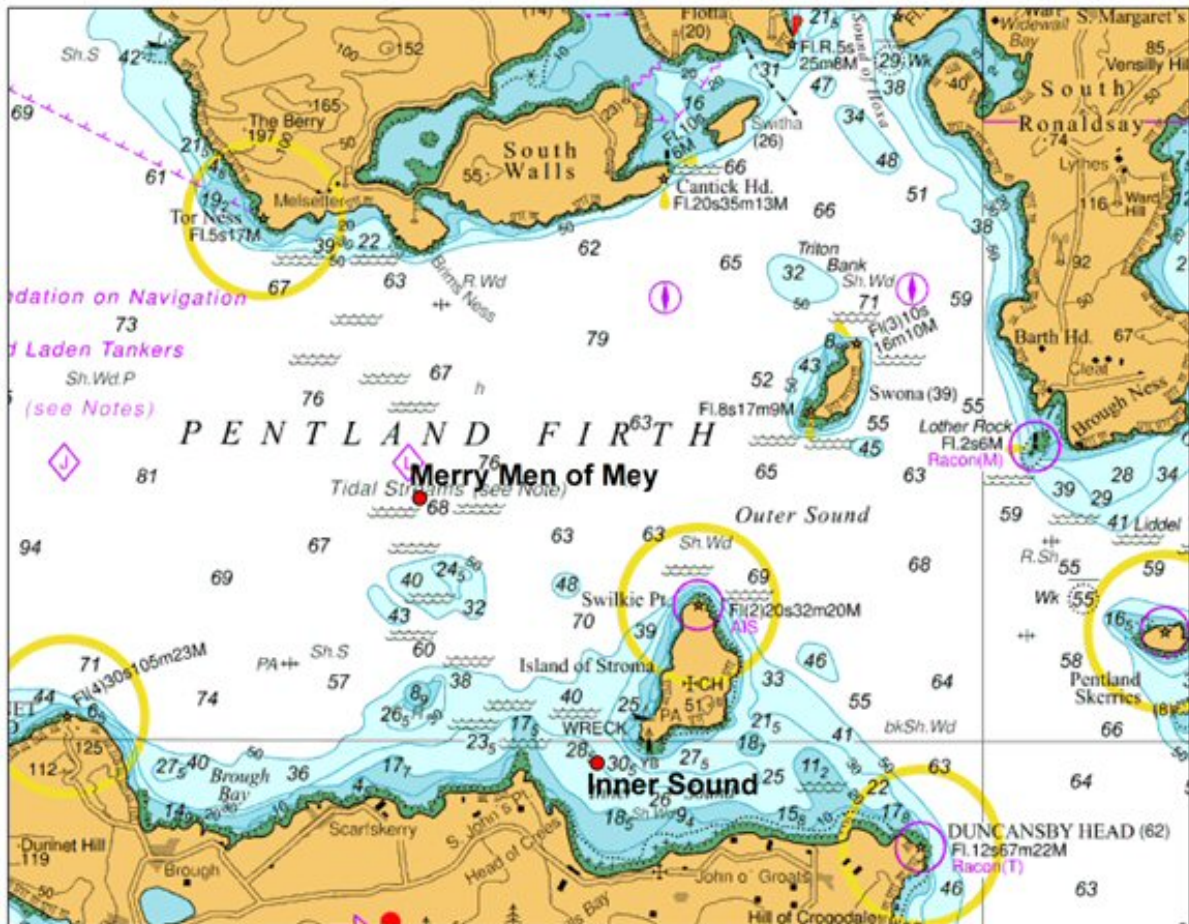


AL-200 trawl-resistant ADCP frame.





AWAC/ADCP frame.



The positions of the Merry men of Mey and Inner Sound moorings.