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MRV Alba na Mara

## Survey 1217A

### PROGRAMME

19-28 July 2017

#### Ports

**Loading:** Fraserburgh, 17 July 2017

**Unloading:** Fraserburgh, 28 July 2017

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 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 Stainer | (SIC)                  | 19 - 28 July |
| R Duncan  |                        | 19 - 28 July |
| A Tait    |                        | 19 - 28 July |
| E Edwards |                        | 19 - 23 July |
| R Main    | (TBC – if time allows) | 23 - 28 July |

**Project:** 20231, 10 days

**Gear:** Surface and sub-surface passive acoustic monitoring (PAM) moorings.

#### Objectives:

To retrieve and re-deploy a series of moorings comprising either dhan buoys (seven surface marked moorings) or acoustic release systems (23 subsurface acoustic release moorings) and the acoustic recording devices attached to them (30 C-POD and 10 SM units) as part of the east coast marine mammal monitoring programme (ECOMMAS). Table 1 and Figure 1 give the locations for the moorings.

#### Procedure:

Loading of all equipment will be carried out on 17 July when the previous survey (1117A) returns to Fraserburgh. *Alba na Mara* will sail from Fraserburgh on the morning of 19 July and make for the first mooring position. The ultimate order in which the moorings are retrieved/deployed will be dictated by the weather forecast and the likely shelter that can be sought along the east coast. Accurate position records will be kept detailing where the moorings are eventually placed as this may differ slightly from the planned position.

Moorings that cannot be found or retrieved will be replaced with the same type of mooring as long as there are enough remaining of that same type. Recovered PAM devices will be returned to the Marine Laboratory at the end of the survey.

Once all the moorings have been retrieved and redeployed *Alba na Mara* will return to Fraserburgh to unload remaining gear and allow scientific crew to disembark and return to Aberdeen.

E Edwards will disembark the ship on 23 July. If time allows, R Main will join the vessel to retrieve moorings from Aberdeen Bay (TBC).

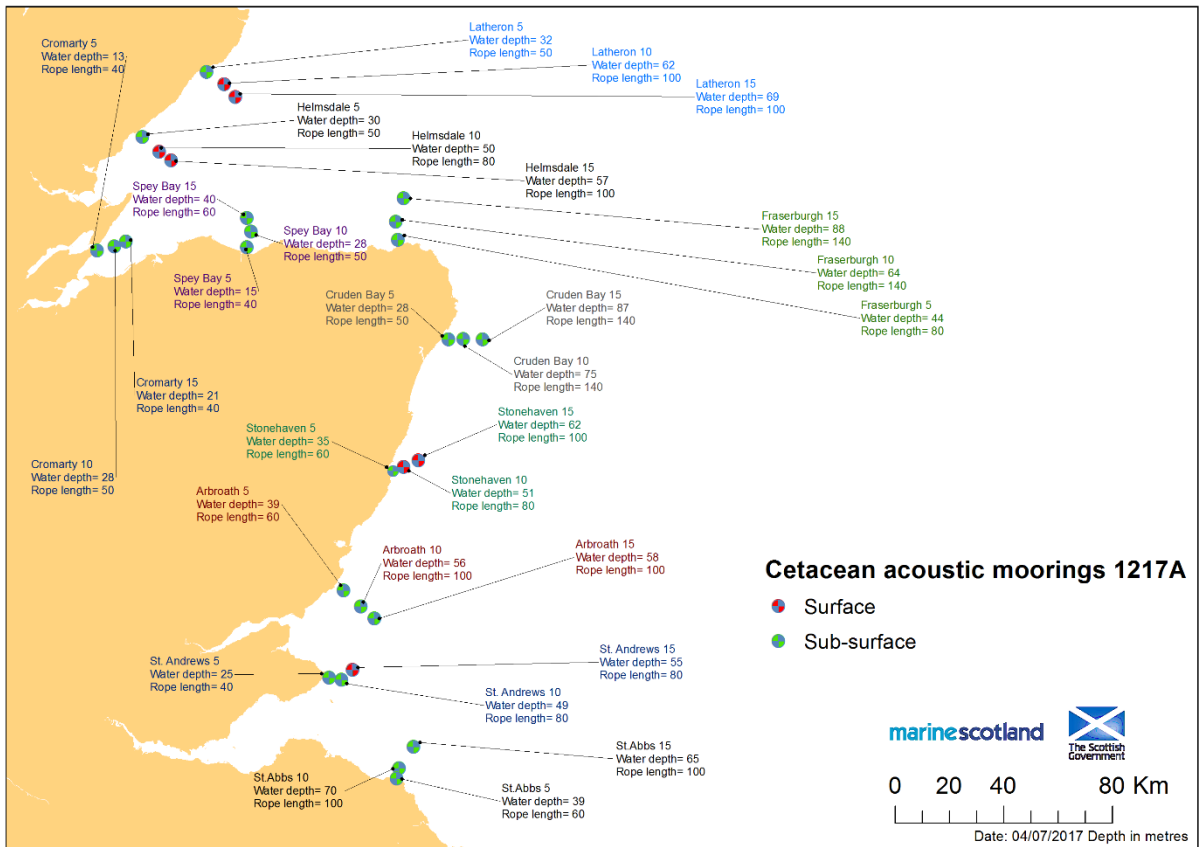
Normal contacts will be maintained with the Marine Laboratory.

Submitted:  
P Stainer  
04 July 2017

Approved:  
I Gibb  
05 July 2017

| Location name  | Lat (dec deg) | Long (dec deg) | Depth (m) | Mooring type | SM unit |
|----------------|---------------|----------------|-----------|--------------|---------|
| Arbroath 10    | 56.50         | -2.38          | 56        | Sub-surface  | Y       |
| Arbroath 15    | 56.46         | -2.30          | 58        | Sub-surface  |         |
| Arbroath 5     | 56.55         | -2.48          | 39        | Sub-surface  |         |
| Cromarty 10    | 57.69         | -3.88          | 28        | Sub-surface  |         |
| Cromarty 15    | 57.71         | -3.81          | 21        | Sub-surface  | Y       |
| Cromarty 5     | 57.67         | -3.99          | 13        | Sub-surface  |         |
| Cruden Bay 10  | 57.38         | -1.74          | 75        | Sub-surface  |         |
| Cruden Bay 15  | 57.38         | -1.62          | 87        | Sub-surface  |         |
| Cruden Bay 5   | 57.38         | -1.83          | 28        | Sub-surface  | Y       |
| Fraserburgh 10 | 57.77         | -2.14          | 64        | Sub-surface  |         |
| Fraserburgh 15 | 57.85         | -2.09          | 88        | Sub-surface  |         |
| Fraserburgh 5  | 57.71         | -2.13          | 44        | Sub-surface  | Y       |
| Helmsdale 10   | 58.01         | -3.61          | 50        | Surface      |         |
| Helmsdale 15   | 57.98         | -3.54          | 57        | Surface      | Y       |
| Helmsdale 5    | 58.05         | -3.72          | 30        | Sub-surface  |         |
| Latheron 10    | 58.23         | -3.21          | 62        | Surface      |         |
| Latheron 15    | 58.19         | -3.14          | 69        | Surface      |         |
| Latheron 5     | 58.27         | -3.32          | 32        | Sub-surface  | Y       |
| Spey Bay 10    | 57.74         | -3.04          | 28        | Sub-surface  | Y       |
| Spey Bay 15    | 57.79         | -3.06          | 40        | Sub-surface  |         |
| Spey Bay 5     | 57.69         | -3.06          | 15        | Sub-surface  |         |
| St. Andrews 10 | 56.26         | -2.50          | 49        | Sub-surface  | Y       |
| St. Andrews 15 | 56.29         | -2.43          | 55        | Surface      |         |
| St. Andrews 5  | 56.26         | -2.57          | 25        | Sub-surface  |         |
| St.Abbs 10     | 55.96         | -2.16          | 70        | Sub-surface  |         |
| St.Abbs 15     | 56.03         | -2.08          | 65        | Sub-surface  |         |
| St.Abbs 5      | 55.93         | -2.18          | 39        | Sub-surface  | Y       |
| Stonehaven 10  | 56.96         | -2.11          | 51        | Surface      |         |
| Stonehaven 15  | 56.98         | -2.02          | 62        | Surface      |         |
| Stonehaven 5   | 56.95         | -2.18          | 35        | Sub-surface  | Y       |

**Table 1:** Name, position, mooring type and use of SM unit or not of all 30 moorings deployed in May during-1217A.



**Figure 1:** Positions of all 30 moorings, with depth in metres and type of mooring to be firstly retrieved, then re-deployed or replaced during survey 1217A.