### P17/6

Not to be cited without prior reference to the FRS Marine Laboratory, Aberdeen

FRV Alba

Cruise 0408A

### **PROGRAMME**

30 May - 6 June 2008

#### **Ports**

Loading: Fraserburgh Unloading: Fraserburgh

\*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 FRS' Working Time Policy (which is published on the Intranet). 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 John Morrison and the Cruise Summary Report (old ROSCOP form) to Dougal Lichtman, within four weeks of a cruise ending. In the case of the Cruise Summary Report a nil return is required, if appropriate.

#### Staff

### Onboard FRV Alba na Mara

Mike Breen (Diving Officer / SIC)
Keith Summerbell (Equipment Officer)
Martin Burns

### **Shore Based**

Morag Campbell Barry O'Neill Jim Mair

## **Equipment**

## **Equipment Required on board Alba na Mara**

Trawl (BT158) & Trawl Doors
Clump Weight for Twin Trawl (to be used as target during TUV training)
Towed Underwater Vehicle (TUV) & associated equipment;
TUV Towing Cable;
Hard-wire communications system;
TUV Umbilical Cable;
Diving First Aid Kit
Theraputic Oxygen Equipment

Quad of Nitrox Gas Nitrox pumps (x2) and Gas Bank (Mobile Quad); Underwater Photography and Video equipment;

## **Equipment Required at Shore Base (Buckie Harbour)**

Secure containers; Diving First Aid Kit Stretcher; Mobile Air (Breathing ) Compressors (x1); and Miscellaneous personal diving equipment.

### **Procedure**

## **Objectives**

- Undertake "work up" dives and basic rescue training;
- Train personnel in the operation of the manned Towed Underwater Vehicle (TUV III) aboard the new research vessel "FRV Alba na Mara"; and
- Test all TUV operational systems, including an umbilical cable.

### General

These objectives will be undertaken with two different Diving Operations:

- A. Basic Training and Work-up Dives; and
- B. TUV Specific Training and Engineering Trials

Operation A will take place off Collie Rocks (Macduff) (Chart 1), in Cullen Bay (Chart 2) and Spey Bay (Chart 3), Moray Firth. Initial work-up training will take place at Collie Rocks (Macduff) near Banff. Training will continue in Cullen Bay and Spey Bay from 31/5/08 onwards.

Operation B will take place in Spey Bay or Cullen Bay. Both locations provide large areas of shallow water where the TUV training can take place in which the maximum depth will not exceed 25m.

### **Loading & Transportation**

The Alba na Mara will be loaded in Fraserburgh on Wednesday 28 May with fishing gear, diving equipment, diving gas, TUV, cables and communications equipment in preparation for departure on Saturday 31 May, 2008. On the same day, containerised equipment will be transported directly to Buckie harbour and sited at the far end of the jetty, immediately opposite the Harbour Master's office. A shore base, including secure containers and changing facilities will be established at the harbour.

## **Operation A: Initial Training Operations**

The Diving Team and equipment will travel from the Marine Laboratory on Friday 30 July rendezvousing at Banff Harbour at 1500. Initial training will take place off Collie Rocks (Macduff) and in Banff Harbour (surface only), weather permitting. This will include 10m work-up dives and rescue training. When the training operations are complete, staff will transfer by road to Buckie, where training will continue the following day. Diver training will continue in Spey Bay or Cullen Bay with 20m workup dives and rescue training, including a simulated casualty evacuation from Buckie Harbour.

"Work-up dives" are for the purpose of re-familiarising the diver with using appropriate diving equipment at depth.

# **Operation B: TUV Training Operations**

Diving operations with FRV Alba na Mara will begin in Spey Bay on Saturday 31 May 2008. The Alba na Mara will rendezvous with the Buccaneer at ~1300 outside Buckie Harbour.

The TUV and associated equipment will be prepared on board Alba na Mara prior to arriving at Buckie. Once all initial training exercises are completed, the Buccaneer will return to the Alba na Mara to practice manoeuvres around the TUV, while the Alba na Mara practices deploying and recovering the TUV, clump weight and trawl gear (BT158). If time allows, the first manned operation of the TUV from the Alba na Mara will be attempted.

If practicable, the Alba na Mara will berth in Buckie overnight, to permit the transfer of staff and equipment in preparation for exercises the following day.

On Sunday 1 June 2008, the arrival of the Buccaneer will be delayed until 1500. This time will be used by the Diving Team to prepare equipment for operations in the afternoon and, by the Alba na Mara, to test the deployment and operations of the TUV with the umbilical cable. Diving operations will cease at 1800, to allow the RIB and shore-based staff to return to Buckie within Buccaneer's working day.

Operations will continue throughout the week with further training exercises using the TUV. These will initially consist of the vehicle alone, when the Diving team will practice emergency evacuation procedures. Training will progress to manoeuvring the TUV around a towed clump-weight and then onto full scale trawl gear.

For details of the diving operations please refer to Diving Project Plan 01/08.

# **Demobilisation and Transportation**

Diving operations will end on Thursday 5 June 2008. The shore-based staff will demobilise the shore-base in Buckie and prepare it for transportation. The Alba na Mara will be demobilised and offloaded in Fraserburgh on Friday 6th June 2008.

All staff and equipment will return to Aberdeen on Friday 6 June.

*J A Morrison* 29 May 2008