

R1/12

Not to be cited without prior reference to the Laboratory

FRV *Scotia*

Cruise 1395S

## REPORT

15 - 27 September 1995

### Ports

Loading: Aberdeen  
 Unloading: Aberdeen  
 Half Landing: Thorshavn

### Personnel

W R Turrell PSO (in charge - part time)  
 P A Gillibrand HSO (in charge - part time)  
 R Payne HSO  
 G Slessor HSO  
 R D Adams SO  
 P Bloor Visitor

### Objectives

1. To perform hydrographic surveys along the standard Faroe-Shetland Channel sections.
2. To deploy a single deepwater mooring in the centre of the Faroe-Shetland Channel.
3. To investigate the feasibility of deployment of the Faroese designed trawl-proof ADCP housing.
4. To lay four moorings on the Viking Bank.
5. To perform hydrographic surveys along the JONSIS standard section, in the vicinity of the Viking Bank and elsewhere as time permits.
6. To collect caesium samples for MAFF Lowestoft (Aberdeen and Fair Isle).

Out-time costs per project: BKC1 4.0; C514 3.0; GBG1 6.0

### Narrative

FRV *Scotia* sailed from Aberdeen at 1000 hours on Tuesday 15 September, and proceeded to the start of the Fair Isle - Munken standard section. Both caesium samples for MAFF Lowestoft were collected on route. CTD casts and water sampling started along the line at 0653 hours on 16 September. Midway along the section, the hydrographic survey was suspended while the deepwater mooring was prepared and laid. The survey then continued and the line was completed at 1500 hours on 17 September. A section along the axis of the Faroe-Shetland channel was then conducted from 2000 hours 17 September to 2300 hours 18 September. *Scotia* then proceeded to Thorshavn where she docked at 0930 hours on 19 September. During the day, scientists and officers from the *Scotia* visited the Fiskirannsoknarstovan (Fisheries Laboratory) to inspect the

trawl-proof ADCP housing and discuss the feasibility of deployment from *Scotia*. Some difficulties were envisaged and will be considered further. Other matters of interest to scientists at both laboratories were discussed, including an agreement to conduct a laboratory inter-calibration of salinity analysis.

On 20 September, Dr Turrell disembarked *Scotia* and the vessel sailed at 0800 hours. At 0950 hours, CTD casts and water sampling commenced along the Nolso-Flugga line and was completed at 1000 hours on 21 September. After transferring the mooring buoys from the aft to the forward deck in sheltered waters close to Shetland, a standard line east of Shetland was worked until 0400 hours on 22 September when *Scotia* proceeded to the first of the buoy positions at Viking Bank. During daylight hours, two buoys were laid and at 1600 hours work commenced along a line of stations across Viking Bank. However, at 2200 hours, due to deteriorating weather conditions, work was suspended. Poor weather conditions ensued until 1600 hours on 23 September when the Viking Bank line was recommenced and completed. Poor weather on the morning of 24 September delayed the deployment of the remaining two Viking Bank moorings until the afternoon and evening. Following the successful deployment, at 2030 hours *Scotia* proceeded to the start of the JONSIS line, arriving at 2030 hours the following day. Due to the bad weather, the line could not be started and *Scotia* sheltered overnight. However, in the morning (26 September) weather conditions were still poor and were not forecast to improve and so *Scotia* proceeded to the Moray Firth. A line of CTD stations off Spey Bay was started at 1500 hours and completed at 1900 hours, following which *Scotia* steamed to Aberdeen.

## Results

- Objective 1: Full hydrographic surveys were completed along both standard Faroe-Shetland sections. In all, 39 CTD casts were made in the Faroe-Shetland Channel.
- Objective 2: The deepwater mooring was successfully deployed in the centre of the Faroe-Shetland Channel.
- Objective 3: The Faroese trawl-proof ADCP housing was inspected and its deployment from *Scotia* considered. Some difficulties were envisaged.
- Objective 4: All four Viking Bank moorings were successfully deployed.
- Objective 5: Due to bad weather, sampling along the JONSIS line was not possible. However, sections across Viking Bank, east of Shetland and in the Moray Firth were worked. A total of 36 CTD casts were made in the North Sea.
- Objective 6: Caesium samples at Aberdeen and Fair Isle were collected for analysis by MAFF Lowestoft.

P A Gillibrand  
3 October 1995

Seen in draft: J Nichols