Scottish Marine Biological Association

Dunstaffnage Marine Research Laboratory

Cruise Reports

R.R.S. CHALLENGER

Cruise 15/1983

9-10 November 1983

R.R.S. FREDERICK RUSSELL

Cruise 21/1983

27 November-2 December 1983

R.R.S. CHALLENGER, Cruise 15/1983

Planned duration: 9-24 November 1983

Planned locality: Rockall Channel and Scottish continental shelf, 51° to 59°N.

Staff: D.T. Meldrum

Dr. D.A. Booth

C. Griffiths

N.D. Pascoe

Mrs. C.M.L. Petre

N. MacDougall

Miss J. Lennon (Marine Biology Station, Portaferry)

A.J. Harrison (IOS, Bidston)

Dr. J. Wild (Department of Geology, Univ. Coll., London)

Aims:

- (1) To service four SMBA and MAFF current meter moorings on the South-western Porcupine Bank slope zone.
- (2) To recover two SMBA moorings in the central Rockall Channel.
- (3) To release nine satellite-tracked drogues in the northern Rockall Channel.
- (4) To service three SMBA moorings across the slope in 59 N, and recover a Dundee University temperature-transmitting buoy, and to service the Tiree Passage current meter mooring.
 - (5) To deploy two IOS Bidston tide gauges for tests in the Porcupine Sea Bight.
 - (6) To obtain cores on the outer shelf in $59^{\circ}N$ for University College, London.
 - (7) To work shelf CTD sections with associated chlorophyll and nutrient sampling for Portaferry and radiocaesium sampling for MAFF and the Chemistry Department, Glasgow University.

Marrative:

CHALLENGER sailed from Falmouth at 1600 h, 9 November, but developed serious boiler trouble soon after getting to sea. The ship returned to Falmouth on its second boiler, docking at 2030 h. Investigations during 10 November established that the boiler was not immediately repairable, and the cruise was abandoned.

Results:

No aims were accomplished, but limited parts of the programme were subsequently attempted from other ships:

Aims 1 and 5) The homeward passage of FREDERICK RUSSELL, cruise 20/1983, was extended by several days into cruise 21/1983 in order to attempt these aims in the Porcupine Bank, but was unsuccessful due to bad weather.

Aim 3) Four of the satellite-tracked drogues were released by

Mr. Griffiths from r.v. SCOTIA on 12 December at a position between Rosemary

Bank and the Wyville-Thomson Ridge, by kind permission of Mr. J.H.A. Martin,

Chief Scientist of the cruise.

Aim 4) The Tiree Passage mooring was recovered by FREDERICK RUSSELL during cruise 20 by courtesy of Professor Simpson.

Aim 7) Samples between Barra Head and the Sound of Mull for radiocaesium determination were collected on 17 November during Professor Simpson's RUSSELL cruise.

D.T. MELDRUM

20 December 1983.