

CRUISE REPORT CR/10/89 LOUGH FOYLE CRUISE LF/10/89  
Dates : 6-10 March 1989

PERSONNEL

D J Agnew HSO SIC  
J Peel TASO (Wed 8/3/89 - Fri)  
Derek Turnbull )  
J Murphy ) Marine microsystems, Cork (Mon 6/3/89 - Tues)

OBJECTIVES

1. To install and calibrate USP ROXANN and MICROPLOT on Lough Foyle.
2. To investigate towed body movements using pitch and tilt meters.
3. To investigate calibration techniques for hydroacoustics.
4. Trial hydroacoustics in the Irish Sea.

NARRATIVE

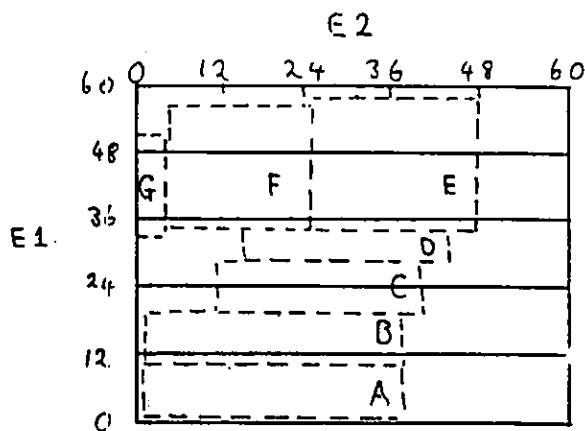
Lough Foyle was in port all day Monday whilst RP2 radar options and Shipmate Navigator repairs were carried out, and whilst ROXANN was installed. This was successfully completed and the ship sailed 0700 Tuesday to set the gains on ROXANN, returning from the test site (copelands) at 1200 for a radio inspection.

During Mon-Tues some equipment was tested and found faulty, resulting in the failure to complete parts (2) and (4) of the objectives. These will be completed at a later date.

Lough Foyle sailed 0800 Wed and proceeded North owing to unfavourable weather conditions (Force 9) in the Irish Sea. Calibration of ROXANN was carried out in Red Bay on Wed, and also on Thurs after anchoring overnight in Red Bay due to continuing high winds. The ship then proceeded to Belfast Lough and after anchoring overnight carried out ROXANN calibration on Nephrops grounds in the Irish Sea. Calibration of the hydroacoustic gear was attempted east of Isle of Magee but was abandoned due to high currents (2+ Kn) and winds. The ship docked 1730 Belfast.

RESULTS

A total of 12, 15-30min tows were completed using the scallop dredges on sites in and around Red Bay, and around the area 54°22'N, 5°11'W. 9 Grab samples were also taken from various areas using a Day Grab. From subjective analysis of the tow and grab samples outline boxes were input into ROXANN (see page 2).



- A Soft ground/mud
- B Sand
- C Sand/shell + stones
- D Intermediate rough ground

- E Heterogeneous rough ground
- F Pebbles/clay? hard homogenous
- G Hard mud

There appeared to be an artificial upper limit of E1 of 45, and E2 read 0.0 for much of the muddy mid-Irish sea area. E2 increased markedly when going over areas of shell/maerl and in highly heterogeneous, stable rocky areas. Well swept pebble banks on hard clay/mud gave high E1(40-45) and low E2(10-20) whereas sandy (scallop) areas gave low E1 and E2. Terebratulina retusa was found in moderate abundance at 55°4.5'N 5°58.5W.

D J Agnew