No. T. C. RG

G.U 16/03

R1/4

In Confidence - not to be quoted without reference to the Laboratory

FRV Goldseeker
Cruise 1/84

1GR84

Report
16 January - 10 February 1984

Objectives

1 Development of gear instrument data logging computer system.
2 Set net instrumentation calibration and development.
3 Ship and net speed log calibration.
4 Data collection for solid state spreadmeter development.
5 Telemetering net speed log development.
6 Load cell trials following modifications to the electronics.

Narrative Severe snow storms and exceptionally low temperatures throughout the cruise caused some delays and a number of minor problems with equipment. Goldseeker was able to operate every day, however, and the following results were obtained:-

Results 1 The Quarndon computer was taken to Fort Augustus but due to late delivery of the CPU board and a fault with the A to D board little was achieved and the computer was not taken aboard Goldseeker.

2 The set net headline heightmeter was calibrated over its working range of 0-5m at depths from 0 to 20m. Further tests were carried out to establish the maximum working depth with normal inflation of the headline air reservoir. This was found to be about 80m.

3 Some apparent anomalies between various speed logs and read out units were resolved using Decca Trisponder as a standard of distance measurement. Calibrations were then obtained for a standard BFM 001 log a deep towed series 1,000 log and a self recording net mounted log on the Goldseeker PT162 semi pelagic trawl. In addition, a speed versus depth calibration was obtained for the series 1000 log at various warp lengths both with and without an additional 45 kg sinker weight.

4 Two alternative prototype spreadmeter systems using solid state memory recording were tested with some success. A specially adapted spreadmeter with a cable connection was used to tape record signals in a variety of conditions for use in future development in the Laboratory.

5 Objective 5 was not pursued so that more time could be devoted to objective 4.

6 New analogue circuitry was introduced to improve the reliability of the microprocessor warp tensionmeters. A number of hauls were made in order to test the design change with satisfactory results.

Gordon Urquhart

G Urquhart
15 March 1984

Seen in draft
W B Reid
Officer in Charge