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FRV *CLUPEA*

Cruise 0794C

**REPORT**

11-15 April 1994

**Personnel**

R B Mitchell	SSO	In charge
J T M Hunter	PTO	
M J Burns	ASO	

**Objectives**

1. To conduct trials of new programmable OCEAN Sampler.
2. To complete development of dual-net Methot Net.
3. To confirm successful operation of reconditioned cod-end diameter measurement system (CEDRIC) and self-recording headline height meter.
4. To conduct further trials of long-range spreadmeter and long-range Scanmar distance sensors.

**Out-turn cost per project**

GBFI 2.0; IBDI 3.0

**Narrative**

*Clupea* sailed from Fraserburgh at 1300 hours on 11 April 1994 to begin towed sampler trials in the Moray Firth area. Tests on the programmable OCEAN sampler and dual-net Methot Net were performed until midday on 13 April 1994. Fishing gear was then rigged to conduct trials of CEDRIC and self-recording headline height meter.

On 14 April 1994, in poor weather conditions, *Clupea* anchored in Golspie bay where trials of the long-range Scanmar and spreadmeter systems were conducted in conjunction with the vessel's rubber boat.

*Clupea* arrived at Fraserburgh at 1530 hours on 15 April 1994 after passage was delayed due to steering failure. Personnel returned to Aberdeen the same evening.

## Results

Four tows were completed using the programmable OCEAN sampler. Successful operation was confirmed on each occasion by visual inspection and by analysis of the instrument's stored data. Four tows using the dual-net Methot net were performed. Operation was confirmed by using an underwater television camera mounted on the towing bridles, and by inspection of stored data. Both sampling systems were successfully used throughout the subsequent charter cruise on the Norwegian vessel *G O Sars*.

The CEDRIC system operated satisfactorily, giving measurements of cod-end diameters in the range 0.4-0.7m throughout its deployment.

Range data produced by the self-recording headline height meter were consistent when the instrument was deployed over the side of the stationary vessel, but became erratic when towed on the headline. Further development is required to filter out noise problems.

The long-range Scanmar sensors operated correctly and calibration was confirmed.

The long-range spreadmeter operated consistently to a range of 1000 m but became erratic above 1200 m.

R B Mitchell  
29 December 1994