

R1/6

Not to be cited without prior reference to the Marine Laboratory, Aberdeen

FRV *CLUPEA*

Cruise 0494C

REPORT

1 - 11 March 1994

Personnel

| | |
|---------------|------------------------------|
| R D Galbraith | SSO (in charge) |
| R B Mitchell | SSO (3-4 and 7-11 March) |
| J T M Hunter | PTO |
| R J Kynoch | SO (7-11 March 1994) |
| M J Burns | ASO (7-11 March) |
| M Watson | Senior Craftsman (1-7 March) |

Objectives

1. To complete development work with long range underwater measuring equipment (Trackpoint II).
2. To carry out instrumented fishing gear trials working in cooperation with a chartered pair seine team.

Out turn days per project: 11 days IAIZ

Narrative

Staff and equipment travelled to Fraserburgh on 1 March but bad weather prevented sailing until the following day. *Clupea* then steamed west to the Inner Moray Firth to set up a Trackpoint beacon array in sheltered waters. R B Mitchell joined *Clupea* by rubber boat from Burghead early on 3 March when trials commenced in 60 m water depth. One of the beacon moorings was lost although the anchored unit continued to function. Trials continued on 4 March and R B Mitchell left *Clupea* that evening by rubber boat at Lossiemouth. With a shift of wind expected *Clupea* steamed across to the Dornoch Firth on 5 March and instrument development continued at anchor there until the evening of 6 March when *Clupea* entered Buckie.

A staff changeover took place in Buckie on 7 March when the chartered vessels *Concorde* (BF68) and *Charisma* (BF296) met up with *Clupea*. *Concorde* was immediately sent out to recover the lost beacon using single boat seine net gear while *Charisma* has shipboard instrumentation installed. *Concorde*, having successfully recovered the beacon, returned to Buckie where similar instrumentation was fitted. Two partly instrumented hauls were carried out in the South Deeps on 8 March but no work was possible on 9 March due to bad weather. A fully instrumented haul was made off Burghead on 10 March but damage sustained by the pole on which the Trackpoint transducer was mounted brought the trials to an end. *Clupea* entered Fraserburgh that evening and staff and instrumentation returned to Aberdeen on 11 March.

Results

The experiments demonstrated the viability of using *Clupea* as a third vessel to record Trackpoint measurements simultaneously with Scanmar data. Both a basic logging program and software to compute beacon geometry were developed for subsequent long range gear measurement exercises. With adverse weather conditions persisting throughout the trials only one fully instrumented haul was made, but this was found to be invalidated due to the gear becoming fouled while deploying instrumentation.

R D Galbraith

21 June 1994

Seen in draft: A Simpson