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Charter vessel MFV *Hope* (BCK 59)

Cruise 1193H

## REPORT

17-21 May 1993

### Personnel

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### Objectives

To test instrumentation and software for measuring seine net engineering performance under commercial fishing conditions.

### Narrative

Staff and instrumentation travelled to Buckie to join MFV *Hope* on 17 May. A caravan with mains power was used as a shore base for instrument servicing and repair. The vessel operated from Buckie on a daily basis, returning to port each evening. The trials ended on 21 May when staff and equipment returned to Aberdeen.

### Results

1. Self recording headline height meter - This instrument has not yet been developed so no trials were possible.
2. Self recording long range spreadmeter - With one unit suspended below a free floating dhan and the other at the vessel communication was achieved up to 1,500 m. A good deal of development work is still required.
3. Short range distance measurement (CEDRIC) - This instrument was damaged on the first haul so no assessment could be made. It is thought that netting may have become entangled with the cable plugs during shooting, always the most hazardous part of instrumented seine net operations.
4. Trackpoint II - Using the free floating dhan technique described above, measurements of only just over 1,000 m were achieved. When attached to the gear ie floated above bunt bobbins three coils out from the net, a range of 1,300 m was measured, but only with vessel and gear stopped. This suggests that alignment of the beacons on the gear may be more important than previously realised.
5. Archimedes software - The vessel track during shooting and hauling was successfully logged (example attached). A logging frequency of 12 seconds would appear an adequate rate for plotting out rope shape while shooting. The output programme to transfer data from solid state instruments to Archimedes is not yet available so a BBC computer had to be used for this purpose.

R D Galbraith

4 June 1993