Cruise Report for British Enterprise Four Leg 1

Wednesday 1st August -Wednesday 15th August 1984

by

J A Chesher

CRUISE REPORT FOR BRITISH ENTERPRISE FOUR - LEG 1, WEDNESDAY 1st AUGUST - WEDNESDAY 15th AUGUST 1984

# Summary

The majority of the first leg was involved in mobilisation at Leith, and shakedown of the vessel as was anticipated. Consequently it was only the latter part of the leg that sampling within the survey area on the Sutherland Sheet was accomplished, and this was of insufficient duration to fully assess the potential of the vessel. It is hoped that the second leg will see the ship in a fully routine operational mode when ship and equipment can be properly evaluated in terms of the geological endjoint.

#### Personnel

J	Chesher	(Chief Scientist)					
Α	Fyfe	(Duty Geologist)	D	Long	(Night	Duty	Geologist)
S	Alexander	(Data Manager)	P	Balson	(Night	Geol	ogist)
N	Ruckley	(Day Laboratory)	J	McGuigan	(Night	Labor	ratory)
W	Lonie	(Day Technician)	N	Campbell	(Night	Techi	nician)
Т	Pheacant	(Development Engineer)					

Additional personnel: A Bell and P Wiggins (Technical).

#### Survey Area

Continental shelf and Slope off NW Scotland.

# Mobilisation

The time spent for mobilisation was slightly longer than anticipated due to significant modification required on the ship's hydraulic system to make vibrocorer deployment a safe and routine operation. Additionally accidental damage to the power hoist cable by the shipyard lost over a day's time. For a full account of the technical details of the mobilisation see report by J Pheasant.

In order to utilise steaming time en route from Leith to the survey area additional technicians remained on board to complete outstanding technical jobs.

#### Survey

After completion of mobilisation and steaming to survey area only one day remained to commence the survey operation. This work was undertaken using only gravity corer and shipek grab as the vibrocorer launch system had not been finalised and was awaiting delivery of a winch for the A frame at the port call. Fourteen sites were successfully occupied on the Sutherland sheet prior to the routine port call.

#### Acknowledgements

Acknowledgements are due to the master and crew for all their assistance during mobilisation and commencement of the geological survey, and to our own technical staff without whose effort the mobilisation would not have been so effectively achieved.

#### Summary Log

### Wednesday 1st - Wedneday 8th August

In port Leith for ship mobilisation

# Thursday 9th August

0000 - 2100	In port Leith for ship mobilisation
2100 -	Departed Leith
2100 2200	Stoomed to anchon off Chanton for equipment tr

2100 - 2300 Steamed to anchor off Granton for equipment trials
2300 - Fault on ships A frame hydraulic system in that it would
not sustain load.

2300 - 2400 At anchor off Granton awaiting further trials.

### Friday 10th August

0000 - 1400	At anchor off Granton modifying A frame hydraulics
1400 - 1630	Workboat ashore to collect hydraulics engineer
1630 - 2030	Continued work of ships A frame hydraulics
2030 - 2130	Workboat ashore to return hydraulics engineer
2130 - 2400	Continued equipment trials when earth leakage fault detected
	and leak on underwater transformer pot.

#### Saturday 11th August

0000 - 1200	At anchor off Granton testing equipment
1200 - 1245	Workboat ashore to collect electrical engineer and put
	J Pheasant ashore to remachine underwater transformer
	pot faces
	Continued sorting out electrical problems
1830 - 1930	Workboat ashore to return electrical engineer (R Cross)
1930 - 2230	Continued equipment trials
2230	J Pheasant returned to ship with underwater pots via pilot
	vessel
2230 - 2400	At anchor off Granton for equipment trials.

# Sunday 12th August

0000 - 1300	At anchor off Granton testing equipment deployment. Oil
	leak detected on Staffa motor on A frame winch
1300	Weighed anchor
1300 - 1600	Steamed to deeper water in outer Forth to test ships DP
	system
1600 - 1645	Off Elie Ness testing DP transponders from workboat and ships
	side. Ship would not function in automatic DP mode.
1645 - 2400	Steaming to Aberdeen to pick up engineer from GEC for DP system and spare winch motor for A frame.

# Monday 13th August

0000 - 0800	Steaming to Aberdeen
0800	At anchor off Aberdeen. J Pheasant ashore in pilot boat,
	and GEC engineer brought on board.
0800 - 1400	Testing and repairing ships DP system off Aberdeen.

1400 - GEC engineer ashore in pilot boat after satisfactory repairs to DP system together with W Lonie and A Bell with A frame winch parts

1400 - 2030 At anchor off Aberdeen awaiting return of BGS engineers

2030 BGS engineers return to vessel via pilot boat 2030 - 2400 Continued steaming north towards survey area

### Tuesday 14th August

0000 - 0900 Steaming north towards survey area

0900 - 2400 Gravity coring and shipek grabbing NW of Orkneys on Sutherland Sheet

#### Wednesday 15th August

0000 - 0100 Routine sampling on Sutherland Sheet

0100 - 0900 Steaming towards Scrabster for routine port call

0900 - 2400 In port Scrabster for routine port call