

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD  
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1973 RESEARCH VESSEL PROGRAMME

REPORT: R V CLIONE: CRUISE 6

(PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF

J W Ramster (NIC)  
J A Durance  
J A Bedwell  
K J Medler  
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F Ronday (Belgium)

DURATION

Left Lowestoft 1340 h, 27 March  
Arrived Lowestoft, 1430 h, 5 April  
All times are Greenwich Mean Time

LOCALITY

Northern North Sea

AIMS

1. To re-lay JONSIS Station A and service JONSIS Station B.
2. To lay 8 moored current meter stations in a line stretching across the northern North Sea from Rattray Head, Scotland to Lim Fjord, Denmark. At each of the stations hydrographic serial observations will be made and 50 Woodhead sea-bed drifters released.
3. To make a temperature, salinity survey of UK coastal waters between Rattray Head and Flamborough Head and as far eastwards as the longitude of JONSIS Station B.

NARRATIVE

On leaving Lowestoft CLIONE moved through several fog banks en route for JONSIS Station A which was reached during the early hours of 28 March. After an early breakfast a moored current meter rig was laid in ideal conditions and the MAFF acoustic release system tested successfully insofar as the signal from the unit on the rig was turned on and off. The ship then sailed to JONSIS Station B and attempts were made to locate the rig acoustically at a range of 5 miles but were all unsuccessful. The motor circuits of the shipboard unit failed at this time and it was suspected that sea water had entered the underwater package. Station B was found to be in very good order. The new rig was laid within two cables and then attempts were made to turn on either or both of the acoustic releases that lay within 1 mile of the ship. There was no response from either and it was clear that the shipboard unit was not transmitting at anything like full power. Consequently the rig that had been in the water for 82 days was recovered from the surface buoy end.

By mid-afternoon on 28 March the ship was on passage to station L, the easternmost station of a line of moorings extending across the northern North Sea from Denmark to Scotland. The station was reached at 1715 h the following day and within two hours a rig had been launched and a hydrographic serial station completed. The ship reached station K at midnight but with nine fishing vessels in view and the wind and sea making it was decided not to risk a night-launch. By dawn a full south-westerly gale was blowing and the ship dodged all day. At 1745 h, 30 March conditions had improved and the vessel moved back to the original station K, where a water-bottle cast was made. The trawlers and seine-netters seen the previous night were still working the region and so the ship moved northwards for 2 miles before a rig launching was attempted. In marginal conditions two current meter fins were broken in two separate attempts to get the station established. The operation was therefore postponed until the following morning when the swell at least had subsided to some extent. The rig was put out between 0745 and 0830 h, and the vessel then moved along the line to station J. The wires and buoys for the station were made up on deck once the station had been reached but wind and sea conditions prevented any attempt at launching that night or throughout the whole of the next day, 1 April. Contact with the Lowestoft Laboratory was made on the morning of 1 April and one day's extension to the cruise granted, a second day was granted subsequently.

At first light on 2 April station J was launched and station H followed it into the water some six hours later. The wires and buoys for station E were made up on deck during an uncomfortable passage to that station but by the time it was reached a full northerly gale was blowing and the vessel had to dodge throughout the night and into the afternoon of 3 April. The swell began to rapidly disappear by 1430 h, however, and station E was put out in ideal conditions between 1500-1600 h. The vessel moved to station D, the most westerly station of the planned line, and en route received notice that a southerly gale was imminent. By 2130 hours the wind and sea were making again and so the vessel stopped 12 m southwest of the planned position and launched the final rig without further delay.

CLIONE then turned south and set course for Lowestoft pausing only to reduce to half-speed in the teeth of a south-westerly gale during the morning of 4 April and to pick up stores at Hartlepool at 2230 h. The vessel docked at Lowestoft at 1430 h, 5 April.

## RESULTS

- (Aim 1) 1. JONSIS Station A was re-established and Station B serviced. The current meters recovered from Station B were in excellent condition both externally and internally after 82 days at sea.
- (Aim 2) 2. Six of the planned moored current meter stations on the Rattray Head-Lim Fjord line were established. It was not possible to put out the equilateral triangle of stations planned for the region around station H,

Hydrographic serial observations were made at each of the current meter stations but the planned Woodhead sea-bed drifter release was postponed pending an assessment of Dr Dickson's results from a recent tracking exercise.

- (Aim 3) 3. It was not possible to make a hydrographic survey of UK coastal waters.
4. Field testing of the MAFF acoustic release system was continued. The unit at JONSIS Station B responded to signals from the transmitter in air and with the "dummy load" in use after 82 days at sea. The guillotine was brought back to Lowestoft for testing since the ship-board system leaked at the critical moment and a full field test was not possible.

Releases were put on all the northern North Sea rigs except that at station L and where it was possible to test all responded promptly to on/off commands from the ship.

J W Ramster  
18 April 1973

SEEN IN DRAFT: Captain M Sutcliffe  
Skipper A HB

INITIALLED: AJL

DISTRIBUTION

Basic list

Mr Ramster  
Mr Durance  
Mr Bedwell  
Mr Medler  
Mr Lammin (Grimsby)  
Mr Ronday (Belgium)