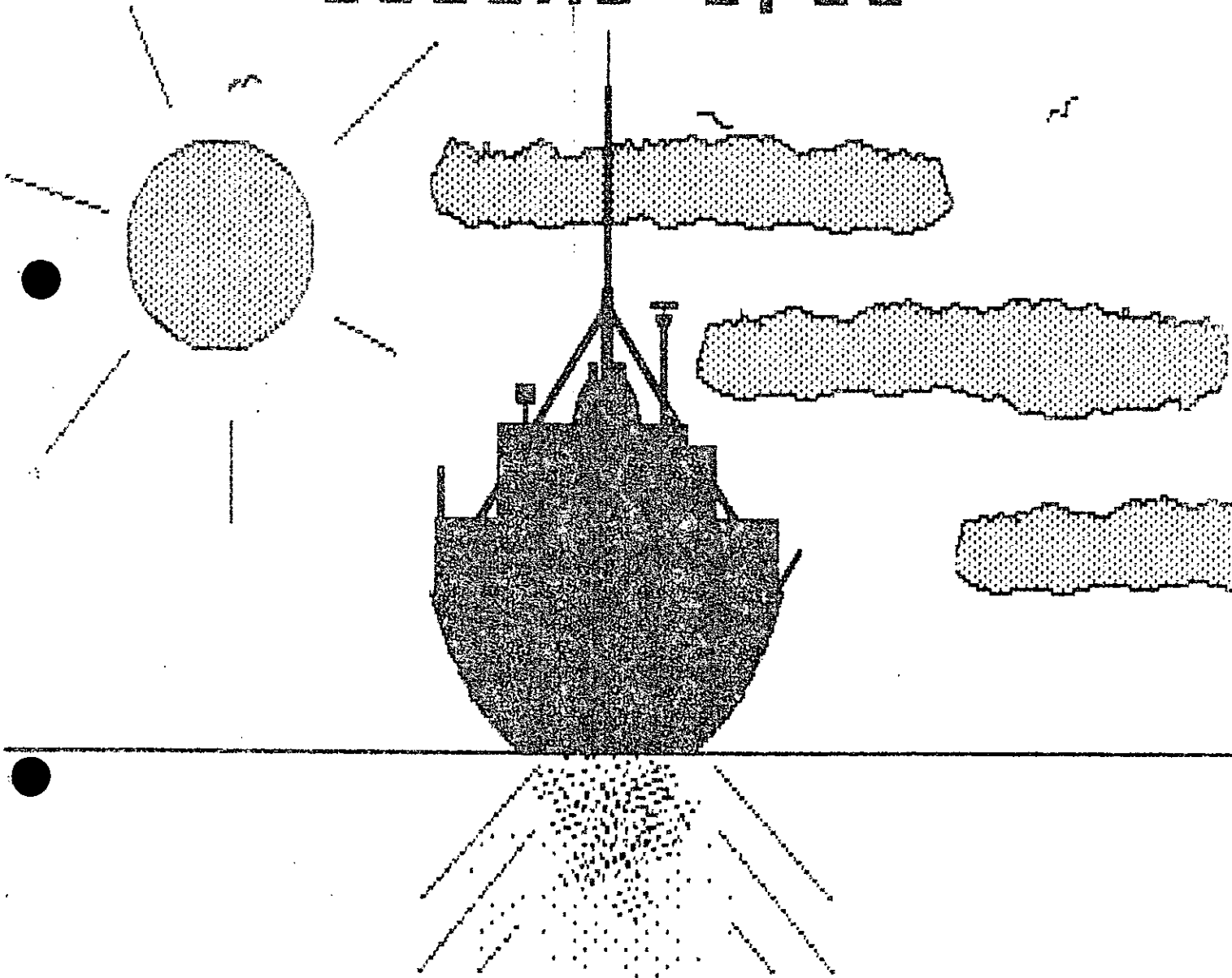


C1ione 3/88



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

1988 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE 3a

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

STAFF:

J A Durance (SIC)
Miss C A Hudson
M C Fulcher
J M Rees
R J Chapman
P Bluett

DURATION:

Left Lowestoft 1500 h 25 February 1988
Arrived Lowestoft 0010 h 10 March 1988
(All times are Greenwich Mean Time)

LOCATION:

Eastern Irish Sea

AIMS:

1. To recover four current meter stations laid by CIROLANA 1/88.
2. To recover the Near Bed Velocity recorder (NBVR) and its 3 guard buoys laid by CIROLANA 1/88.
3. To make four short term deployments of the NBVR and anchor nearby for 25 hours taking water samples for suspended load and particle size analysis on board at hourly intervals.
4. To work CTD sections between the Isle of Man and the Scottish/English /Welsh coast. (This aim will only be attempted if conditions are unsuitable for Aim 3.)
5. To collect surface water samples for a nutrient sample preservation experiment.

NARRATIVE:

RV Clione sailed at 1500 h on 25 February and set course for the Irish Sea arriving at the first current meter station (D), at 1110h on 28 February. The buoy was sighted but as weather conditions were totally unsuitable to attempt a recovery the vessel proceeded to a sheltered anchorage in Douglas Bay. The following morning RV Clione returned to the working area. Weather conditions were no better than the previous day so no recovery could be attempted. After sighting all four of the buoys the ship returned to the anchorage in Douglas Bay. It was noticed that buoy D was 4 cables to the north of the recorded launch position. At 0715 h the following day RV Clione weighed anchor and returned to buoy D. As conditions were still unsuitable for buoy recovery the vessel

proceeded north to Wigtown Bay and returned on a parallel course to the east taking water samples for a nutrient sample preservation experiment. By the time the ship returned to the current meter station the weather had moderated sufficiently for recovery. Lifting of buoy C commenced at 1600 h. This station and buoys D and S were recovered by 1827 h when darkness prevented further work. Buoy D showed clear evidence of interference but all equipment was recovered although one meter was badly damaged. The vessel lay overnight to recover the last current meter station by 0741 h the next day (Wednesday 2 March), before steaming to the NBVR position.

On arrival at the station only two of the three guard buoys were seen. These buoys and the NBVR were recovered without incident by 1042 h. The weather forecast did not hold much hope of anchoring, and the NBVR would not be ready for redeployment for a number of hours, so a CTD section from St Bees Head to the Isle of Man was begun. The wind steadily increased from the north west and the section was completed in marginal conditions by 1745 h. The vessel then sought a sheltered anchorage in Laxey Bay. The next morning the weather had not improved and the forecast for the next two days was not good so RV Clione weighed anchor at 0830 h and docked at Douglas at 0900 h on Thursday 3 March to take on fresh water.

The ship sailed from Douglas at 0830 h on Friday 4 March and set course for the first anchor station near St Bees Head. Rigging of the NBVR was begun but conditions on deck were unsuitable even at reduced speed, so work was suspended until the station was reached at 1230 h. The NBVR was ready to deploy by the time the swell had moderated sufficiently to anchor at 1505 h, when the NBVR and DCRM were deployed. The anchor station commenced at 1630 h and continued until 1730 h the following day. After recovering the NBVR the vessel moved to the second anchor station but by this time the wind had increased too much for the vessel to anchor or the NBVR to be deployed. The second 25 hour station was begun at 1930 h without anchoring the vessel. The DCRM was not deployed. Throughout the station the weather conditions were poor and on a number of occasions its termination was considered. At 1030 h on Sunday 6 March the rosette swung violently against the stern of the vessel and two Niskin bottles were smashed and lost together with one set of reversing thermometers. The remaining set of thermometers was removed and the station continued. No further loss or damage occurred before the station was completed at 2045 h, and RV Clione set course for Lowestoft, taking surface water samples on route. At 2100 h a flashing light was seen and identified as a MAFF buoy, presumed to be the missing guard buoy from the NBVR station recovered earlier in the cruise. The buoy was recovered by 2146 h and the vessel resumed course and surface water samples. Water sampling was completed by 0040 h on Monday 7 March.

At 0830 h on Wednesday 9 March the CTD was lowered near the Channel Tunnel workings at Shakespeare Cliff, a 60 litre water sample was taken to test sediment sampling and analysis techniques. The sediment load was found to be too high and the particle size too large for this purpose so the CTD station and water sample was repeated at 1300 h when the vessel was crossing the Thames estuary.

RESULTS:

1. The four current meter stations laid by CIROLANA 1/88 were recovered.
2. The Near Bed Velocity recorder (NBVR) and its 3 guard buoys was recovered.

2. One short term deployment of the NBVR and 25 hour anchor station was completed. A second 25 hour station was completed without anchoring the ship or deploying the NBVR. Water samples for suspended load and particle size were analysed on board.
4. One CTD section between St Bees Head and the Isle of Man was completed.
5. Fifty six surface water samples for a nutrient sample preservation experiment were collected.
6. Water samples to test sediment and particle size analysis techniques were taken near Shakespeare Cliff and in the outer Thames Estuary.

J A Durance
15 March 1988

Seen in draft: G Sinclair
R C Newrick

INITIALLED: H W H

DISTRIBUTION:

Basic List +
J A Durance
Miss C A Hudson
M C Fulcher
J M Rees
R J Chapman
P Bluett

