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

1976 RESEARCH VESSEL PROGRAMME

REPORT: RV CIROLANA: CRUISE 3b

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

STAFF

- J W Ramster (NIC)
- G C Baxter
- S R Jones
- J W Read
- K J Medler
- D G Hughes

DURATION

Left Yarmouth 1255 h 5 March Arrived Grimsby 1358 h 11 March

LOCALITY

North Sea

AIMS

- 1. To service the existing current meter stations JONSIS 1 (J1), JONSIS 2 (J2), North East 1 and 2 (NE1, NE2) and the Tyne Buoy.
- 2. To lay stations North East 3 and 4 (NE3, NE4) for the first time.
- 3. To lay 11 other current meter stations in the North Sea between 56° and 58°26' as the joint MAFF-Danish contribution to the Project INOUT phase of the Joint North Sea Data Acquisition Project 1976 (JONSDAP 76).
- 4. To do serial casts along 58°26' for both salinity and caesium-137 samples.

NARRATIVE

RV CIROLANA left Great Yarmouth at 1255 h, 5 March and set course for JONSDAP station 28 which is also station NE3. (See Figure). This station and station 29 (NE4) were laid before midnight in a strong south-easterly wind and rising seas. Passage was made during the night to station 30 (J1) and this rig laid by mid-day, 6 March after much of the morning had been spent rigging the gear. (The large heap of anchor chain lying across the ramp doors and the 16 toroidal buoys and associated paraphernalia filling the fishing deck prevented any grappling for the single current meter left from the previous servicing of the station). Then in the next 24 hours, in rapidly improving wind and sea conditions, stations J2, NE2 and NE1 were serviced and JONSDAP stations 31, 34 and 33 established. In round terms this meant that the

MINISTRY OF ASRIGULTURE FISHERIES AND FOUR RECEIVED 29 MAR 1976

ISHERIES LIMBON

work that had taken 8 days in the early part of Cruise 2/76 had been done in only 2 days on this cruise, just because weather conditions had been favourable and all the buoys to be serviced were in position.

The vessel then moved round most of the rest of the planned Lowestoft contribution to the Project INOUT network laying stations 35-45 in perfect conditions during the period 2000 h, 7 March to 1630 h, 9 March. Station 32 could not be laid on this cruise because the proposed navigation buoys marking its position were not yet in place and station 37 was omitted as a balance had to be drawn between the number of current meters available and the nature of the sampling pattern further north. Wireless contact with RV METEOR, the off-shore communications centre for JONSDAP 76, was made on 8 March and daily situation reports were sent to her.

At 1845 h, 9 March temperature, salinity and caesium 137 sampling began along the line of stations 45-72-46 with alternate moored buoy stations being sampled and extra stations inserted where unduly large gaps occurred. The wind freshened quickly during the early morning and by 0600 h, 10 March a full southerly gale was blowing. Fortunately this fell away as suddenly as it had developed and the sampling was finished by 1800 h. As each moored station was sighted its condition was checked visually and eventually a report was passed on to the Aberdeen Communications Centre.

After reaching station 46 the ship moved to station 32 and 100 Woodhead sea-bed drifters were released there during an hydrographic cast in the early hours of 11 March. The ship then set course for Grimsby and was secured by 1358 h 11 March. The scientific staff spent the day clearing up the debris from the cruise itself and attending to various features of the hydrographic winch and laboratory. They eventually arrived back in Lowestoft during the afternoon of 12 March.

RESULTS

- 1. All the planned aims were achieved except:
 - (a) The Tyne Buoy could not be laid because some changes in the character of the station are being considered. However a routine hydrographic series was done at the station position and 100 Woodhead sea-bed drifters released.
 - (b) Station 37 was omitted in order to strengthen the samplingpatterns at stations 39 and 40 since these are at the southern boundary of a region of particular interest.
 - (c) The remains of the previous station J1 could not be explored for practical reasons but this will be done on cruise 5. (One current meter and the sub-surface buoy have already been returned from the lay in question).
- 2. The condition of each of the JONSDAP 76 stations on the line between stations 521 and 46 was checked and reported to either RV METEOR or the Aberdeen Communications Centre.

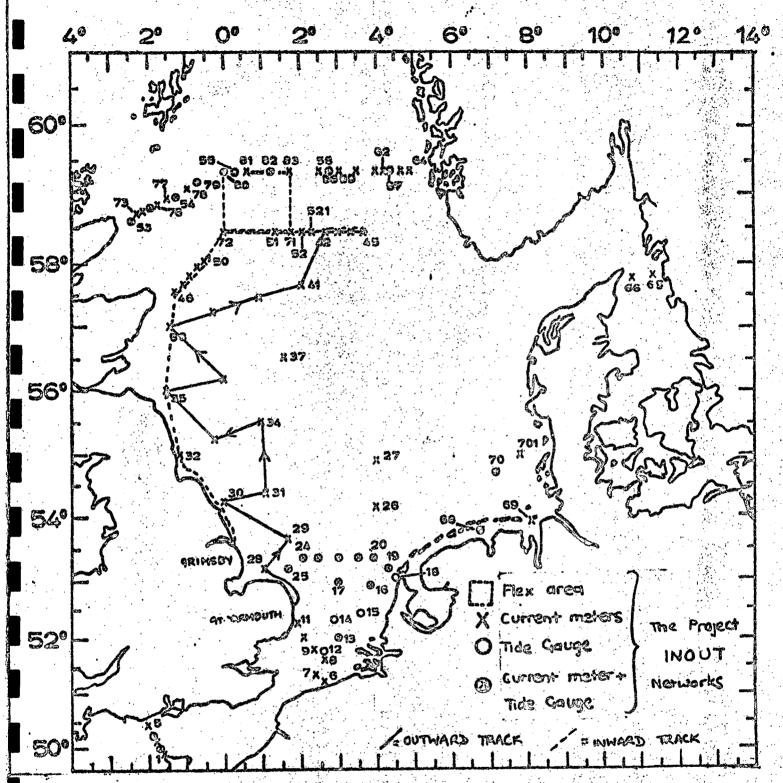


Fig.1 Cirolana 38176: Cruise track during the lounch phase of Project INOUT.

- 3. Fifteen sets of duplicate salinities were collected in accordance with the arrangements made among JONSDAP 76 participants for a formal intercalibration of salinometers.
- 4. The MAFF acoustic release at station NE2 worked perfectly but that at station NE1 did not respond to either the call-up or the "fire" signals. The release at station J2 could not be tested in the firing mode because the pellet was not visible.
- 5. A feature of the cruise was the lack of shipping of any kind in the vicinity of the buoys being serviced, laid or checked.

J W Ramster 23 March 1976

SEEN IN DRAFT

T H Finn

G W Argumont

INITIALLED

 ΛJL

DISTRIBUTION Basic List

J W Ramster

G C Baxter

S R Jones

J W Read

K J Medler

D G Hughes