

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

1977 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 5

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

STAFF

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DURATION

Left Lowestoft 0920h 23 March
Arrived Lowestoft 0640h 1 April
All times are Greenwich Mean Time

LOCALITY

Irish Sea

AIMS:

1. To establish an array of current meter stations in the eastern Irish Sea to complement the array to be laid by IOS Bidston earlier in the month.
2. At each current meter station (both MAFF and IOS) to:
 - a. take water samples for analysis of Caesium 134 and 137
 - b. work a standard hydrographic station
 - c. release 50 Woodhead seabed drifters

NARRATIVE

RV CORELLA sailed from Lowestoft at 0920h 23 March carrying 8 complete current meter rigs. On passage to the Irish Sea two of these rigs were assembled completely and a further two buoys were partially built. Surface water temperature measurement from a thermistor in the deck hose water supply was commenced at 1530 h 23 March, and surface water samples for Caesium determination commenced at 1845h, the first station being in the Dover Strait. Surface water samples were taken at approximately 80 mile intervals through the English Channel and at 30 mile intervals from Lands End to Anglesey. At 0745h 24 March a surface Nansen bottle cast was made at the third water sample station in order to calibrate the thermistor system.

The vessel arrived off the north coast of Anglesey at 2152h 25 March and commenced standard hydrographic stations and bottom water Caesium samples by Niskin bottle in addition to the surface samples from the deck hose supply. These stations were continued through the night, sea bed drifters being released at each station except the first. IOS buoy No 8 was sighted but IOS buoy No 19 could not be found (we were later to learn that it had been laid $4\frac{1}{2}$ miles NW of the intended position).

At 0704h on the 26 March the vessel arrived at MAFF buoy station No 21, by 2108h buoys 21, 27, 28, 30 and 25 had been laid. Buoys 24, 29 and 26 could not be laid because of shortage of equipment, but Caesium samples were taken, a hydrographic station worked and sea bed drifters released at all stations. Work recommenced at 0505h the following day with the laying of buoys 32, 22 and 23 and at 1145h the vessel set course for Fleetwood via buoy station 14. A surface Caesium sample was taken in the Wyre channel at 1404h and the vessel docked at 1540h. Buoys for the last 3 stations were loaded and assembled that evening. The depth at buoy station No , having been measured on passage to Fleetwood, enabled the meter wire for this station to be assembled.

RV CORELLA sailed from Fleetwood at 0420h 28 March and proceeded to buoy station 14. The laying of this buoy and the hydrographic observations were completed by 0755h and the vessel proceeded to buoy station 5. On route the water bottle station at IOS buoy 9 was completed. Buoy 5 was laid by 1111h and the vessel proceeded via IOS stations 3, 1 and 2 to the final MAFF buoy station no 7 which was established by 1838h. Water sampling, hydrographic stations and sea bed drifter releases at IOS stations 10, 15, 12 and 16 were completed by 0239h the following morning and the vessel set course for IOS buoy 33 in St Goerges Channel. Arriving there at 1420h, surface and bottom caesium samples were taken and sea bed drifters released.

On passage to Lowestoft surface Caesium samples were taken at 3 stations from the Channel Islands to the Dover Strait and the vessel docked at Lowestoft at 0640h 1 April.

RESULTS

1. All current meter stations were established with the exception of those stations for which equipment was not available.
2. Aim 2 was completed at all but 5 of the IOS buoy stations and at two additional stations.
3. Surface caesium samples were taken at 15 stations between the Dover Straits and the Irish Sea.
4. All caesium samples were filtered and the caesium extracted from the filtrate.

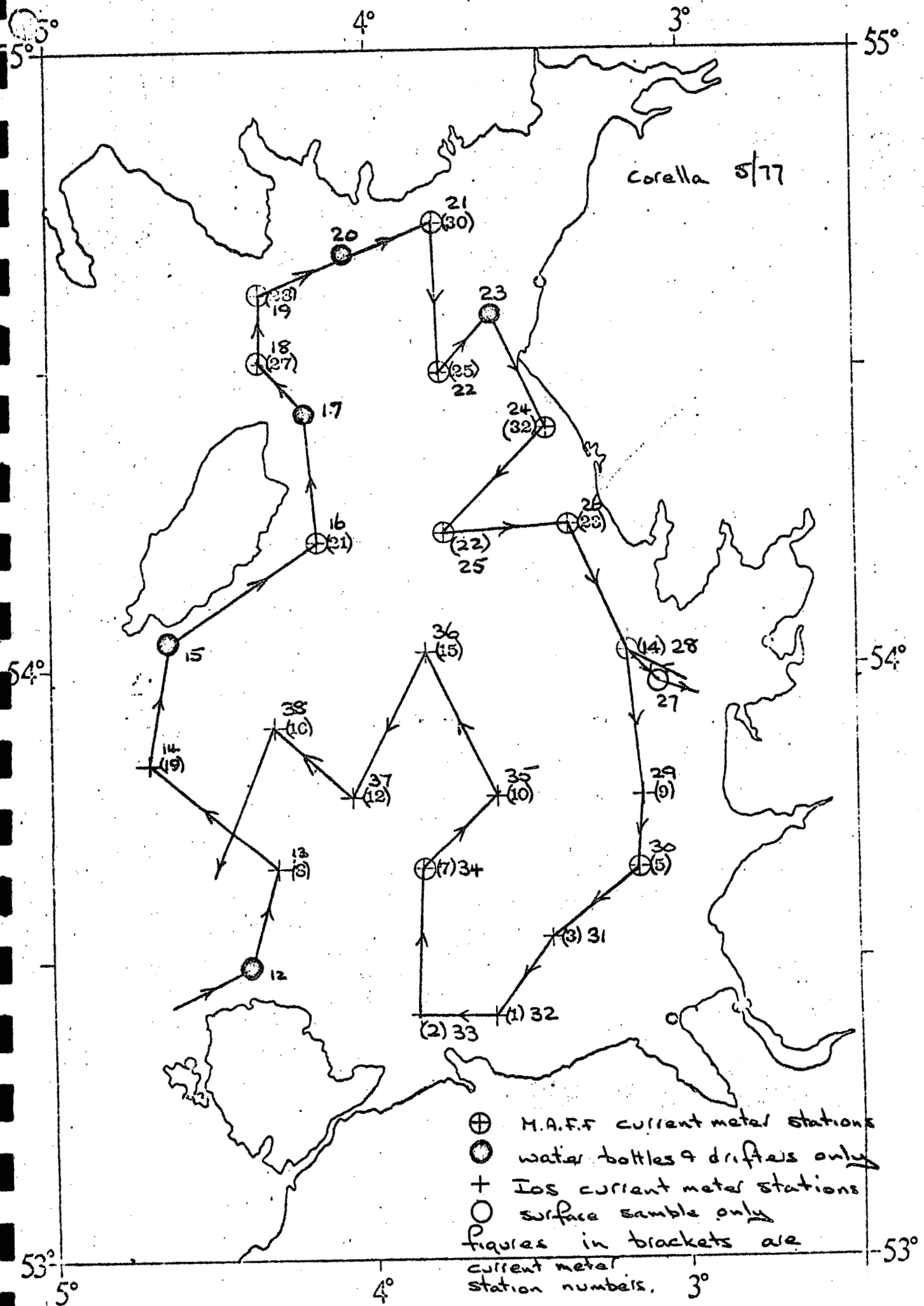
J A Durance
15 April 1977

SEEN IN DRAFT: J E M Balfour - Master
E T Bridge - Fishing Skipper

INITIALLED: AJL

DISTRIBUTION:

Basic List
J A Durance
K J Medler
J Wooltorton
A K Steele
D J Lawrence
G C Baxter



⊕ M.A.F.F current meter stations
 ● water bottles & drifters only
 + Ios current meter stations
 ○ surface sample only
 figures in brackets are current meter station numbers.

Corella 5/77

