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

1971 RESEARCH VESSEL PROGRAMME

REPORT: R V CORELLA: CRUISE 4

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

STAFF:

D S Tungate
J H Nichols
J M Last
J Dann
M Smith

DURATION:

Left Lowestoft 1800 hrs on 22 February
Arrived Lowestoft 1300 hrs on 2 March

All times are B S T

LOCALITY:

East Channel, Southern North Sea

AIMS:

1. To carry out a survey of fish eggs and larvae in the Eastern English Channel and the Southern North Sea.

2. To monitor turbidity, chlorophyll 'A', and temperature continuously in the sea surface water.

3. To release Woodhead seabed drifters at selected positions in the English Channel and Southern North Sea.

4. To echo-survey along the ship's track for fish traces.

5. To measure bottom temperatures and surface salinities for ICES.

NARRATIVE

CORELLA sailed at 1800 hours 22 February and after calibrating the plankton samplers proceeded to survey the Channel grid. Commencing at 1415 hours 23 February and completing the grid of 33 stations at 0700 hours 25 February.

The Southern North Sea grid was commenced at 1000 hours 25 February and the whole of the grid of 82 plankton stations was completed by 0900 hours 1 March. Plaice eggs and clean seawater were collected for the laboratory hatcheries and additional plankton sampler calibrations completed. With all the aims completed and with deteriorating weather conditions, CORELLA docked at Lowestoft at 1300 hours 2 March.

RESULTS

Aim 1. The East Channel grid of 33 stations was completed. Few plaice eggs were found at any of the stations indicating that the spawning is very advanced.

The Southern North Sea grid of 82 stations was completed. Again plaice egg counts were comparatively low and numbers of larvae were found in the stations covering the Brown Ridges area, indicating that this spawning was also well advanced.

Aim 2. Chlorophyll 'A', turbidity and temperature were monitored continuously along the ship's track. Highest surface temperatures in the centre of the Channel grid were 8.8°C, and the temperature of the water over the Brown Ridges spawning area was 7.6°C.

Aim 3. Woodhead bottom drifters at a density of 50 per station were released at each of 9 stations in the Eastern Channel grid and at 15 stations in the Southern North Sea, making a total release onnthis cruise of 1200.

Aim 4. The Kelvin Hughes echo-sounder was run continuously throughout the cruise. The results show concentrations of fish to the east of the Isle of Wight and along the Dutch coast extending out to the Brown Ridges.

Aim 5. Bottom temperatures for ICES were collected at 41 stations with a bathythermograph which was fixed to the plankton sampler.

D S Tungate
9 March 1971

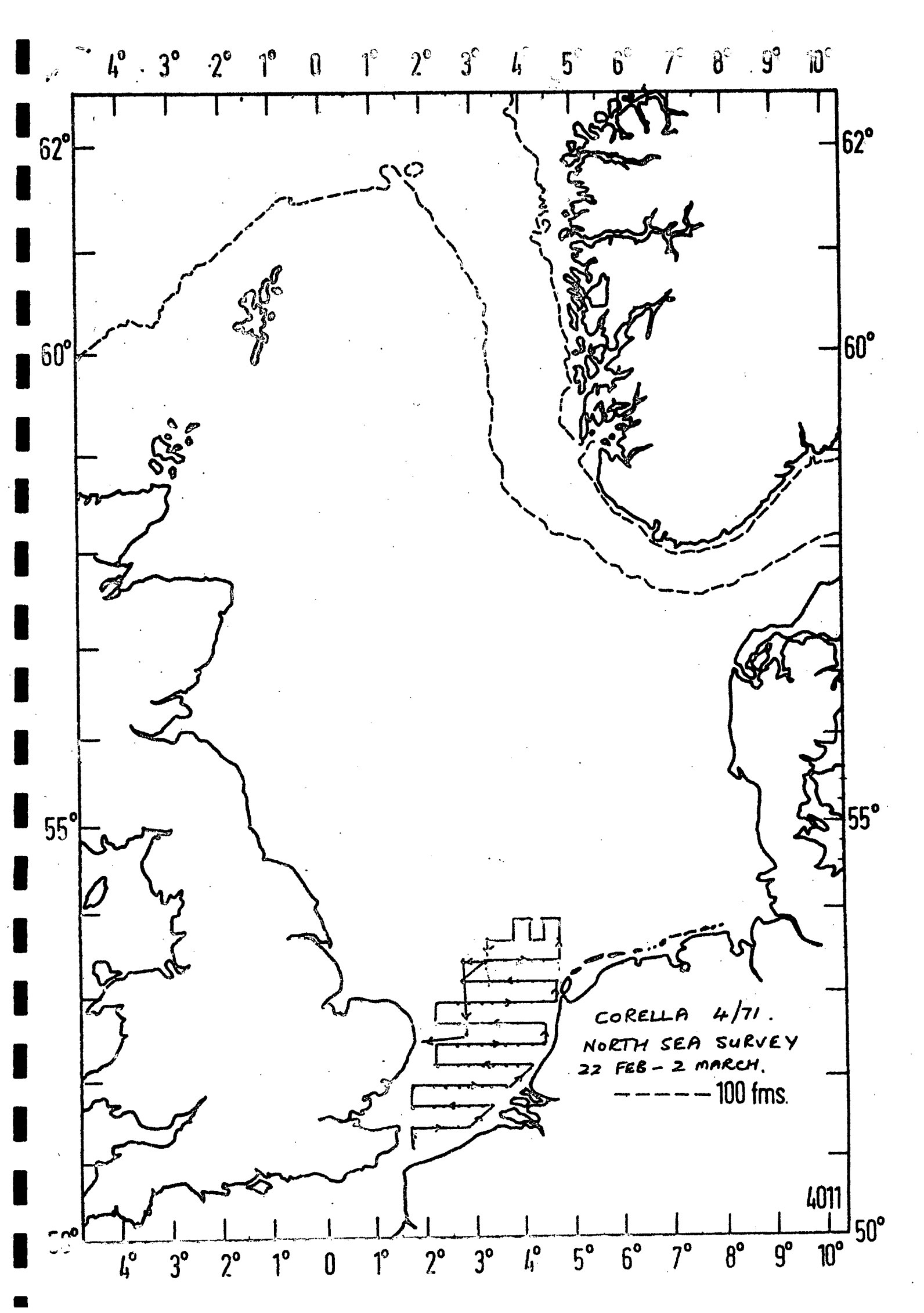
SEEN IN DRAFT: J E Balfour (Master)

INITIALLED: A J L

DISTRIBUTION:

Basic List

Mr Tungate
Mr Nichols
Mr Last
Mr Dann
Mr Smith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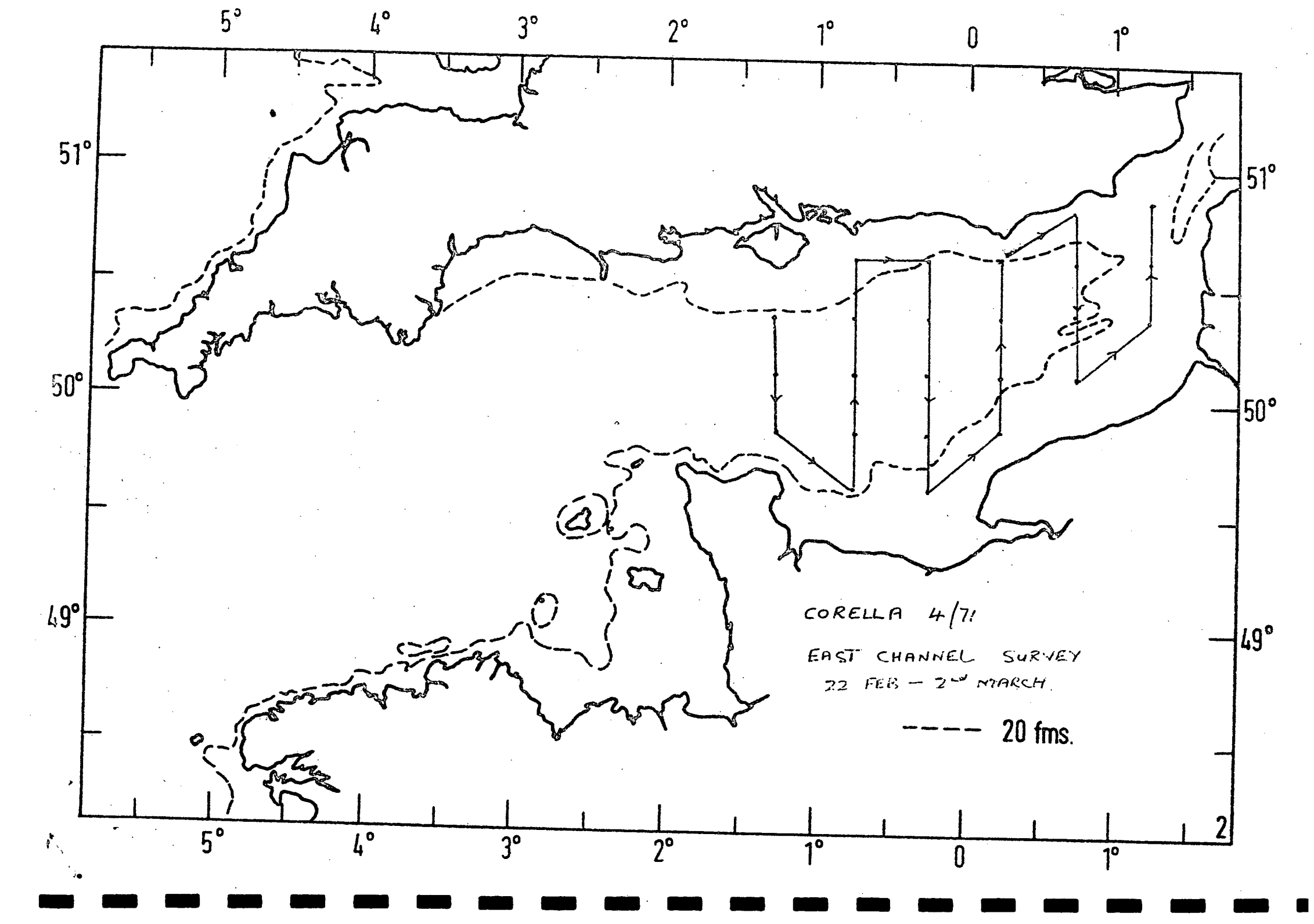
62°
60°
55°
50°
CORELLA 4/71.
NORTH SEA SURVEY
22 FEB – 2 MARCH.
100 fms.
4011


5°
4°
3°
2°
1°
0
1°
51°
50°
49°
CORELLA 4/71
EAST CHANNEL SURVEY
22 FEB – 2nd MARCH
20 fms.
2