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MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK NR33 OHT ENGLAND

1985 RESEARCH VESSEL PROGRAMME

REPORT RV CLIONE: CRUISE 2

STAFF:

- P O Johnson
- N D Pearson (Part-time 1-8 Feb)
- C R Hood (Part-time 8-15 Feb)
- J Dann
- S Warnes
- S T Forbes (DAFS)
- A G Lopez (British Council Student)

LOCALITY:

Southern Bight of North Sea and Eastern English Channel

DURATION:

Sailed Lowestoft 1700h 1 February
Docked Lowestoft 0515h 15 February
(All times GMT)

AIMS:

1. To carry out an acoustic survey for herring in the Southern Bight and eastern English Channel.
2. To obtain samples of herring by pelagic trawling for ageing and biological studies.
3. To carry out in situ target strength measurements on herring using the Scottish dual-beam sounder.
4. To carry out high speed townet stations in the eastern Channel for herring larvae (additional aim).

NARRATIVE:

CLIONE first proceeded to an area off Southwold for calibrations of the towed body transducer and associated equipment, also the DAFS dual beam sounder. This work was completed by the early hours of the following morning when CLIONE made passage to a position near the Galloper light vessel where the acoustic survey commenced at 0830h on 2 February. The first stage of the survey covered the eastern English Channel to 0°10'W and also incorporated the townet stations of which 19 were completed in generally fine weather by the morning of 5 February. The weather continued settled and the survey then concentrated over the area between the outer Thames and Scheldte estuaries ending at midnight on 7 February when the weather deteriorated. CLIONE then made passage to Ijmuiden docking there in a strong easterly gale at 0930h on 8 February where a changeover of electronics staff was made, but remained weatherbound until 0800h on 11 February when she sailed again to resume the acoustic survey. However, the wind again increased and brought work to a halt at 2200h that evening which necessitated dodging in an easterly gale until 0830h on 13 February. The final stage of the survey covered the area between the English and Dutch coasts to 52°25'N where it ended about 20 miles off Lowestoft at 1830h on 14 February with the development of a NE'ly gale. After dodging overnight CLIONE docked at Lowestoft at 0515h the following morning.

RESULTS:

1. A total of 1225 nautical miles were acoustically integrated covering the eastern English Channel to 0°10'W and Southern Bight to 52°25'N.

Pelagic traces were generally very sparse or absent within the eastern Channel whilst in the Southern Bight appeared as very extensive patches of diffuse trace with generally low acoustic density with little difference between day and night. Pelagic trawl samples showed a considerable mixture of species with predominantly whiting, grey gurnards, spent herring and sprat. Herring predominated in the North Hinder - Bligh Bank area where commercial fishing was being undertaken by Dutch pair trawlers from Ijmuiden. Details of the recent Dutch herring fishery and some length distributions from their catches were obtained during the visit to Ijmuiden.

2. 19 high speed townet stations were completed in the eastern Channel, together with CTD profiles. There were no signs of recently hatched herring larvae and most of those caught were quite large (15mm).
3. Tests were carried out on the DAFS dual beam transducer and after initial faults were rectified some recordings were made with the vessel passively drifting since the towed body proved unstable at speed.
4. Samples of herring and sprat were deep frozen for further biological analysis at the laboratory and a selection of other species were retained for the fish identification courses.
5. Initial trials were made using an 'APRICOT' computer for storage of the basin acoustic survey data and this proved successful, the data being stored on disc file in a form suitable for further analysis. Data was also collected for a critical evaluation of the relative outputs of the QM and QD systems.
6. Sole ovaries were also collected from the Ijmuiden laboratory which had been preserved for Mr Houghton's fecundity studies.

P O Johnson
22 March 1985

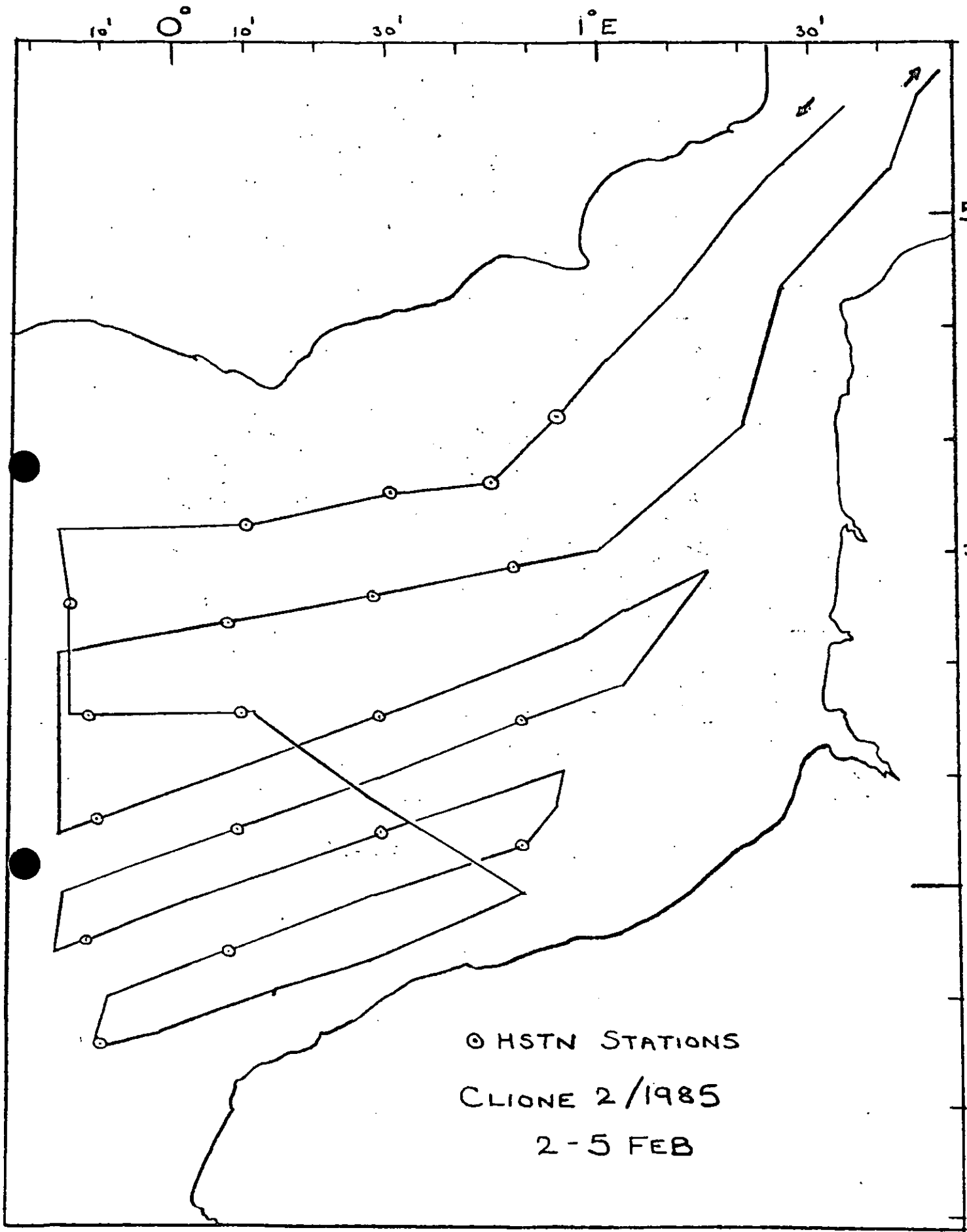
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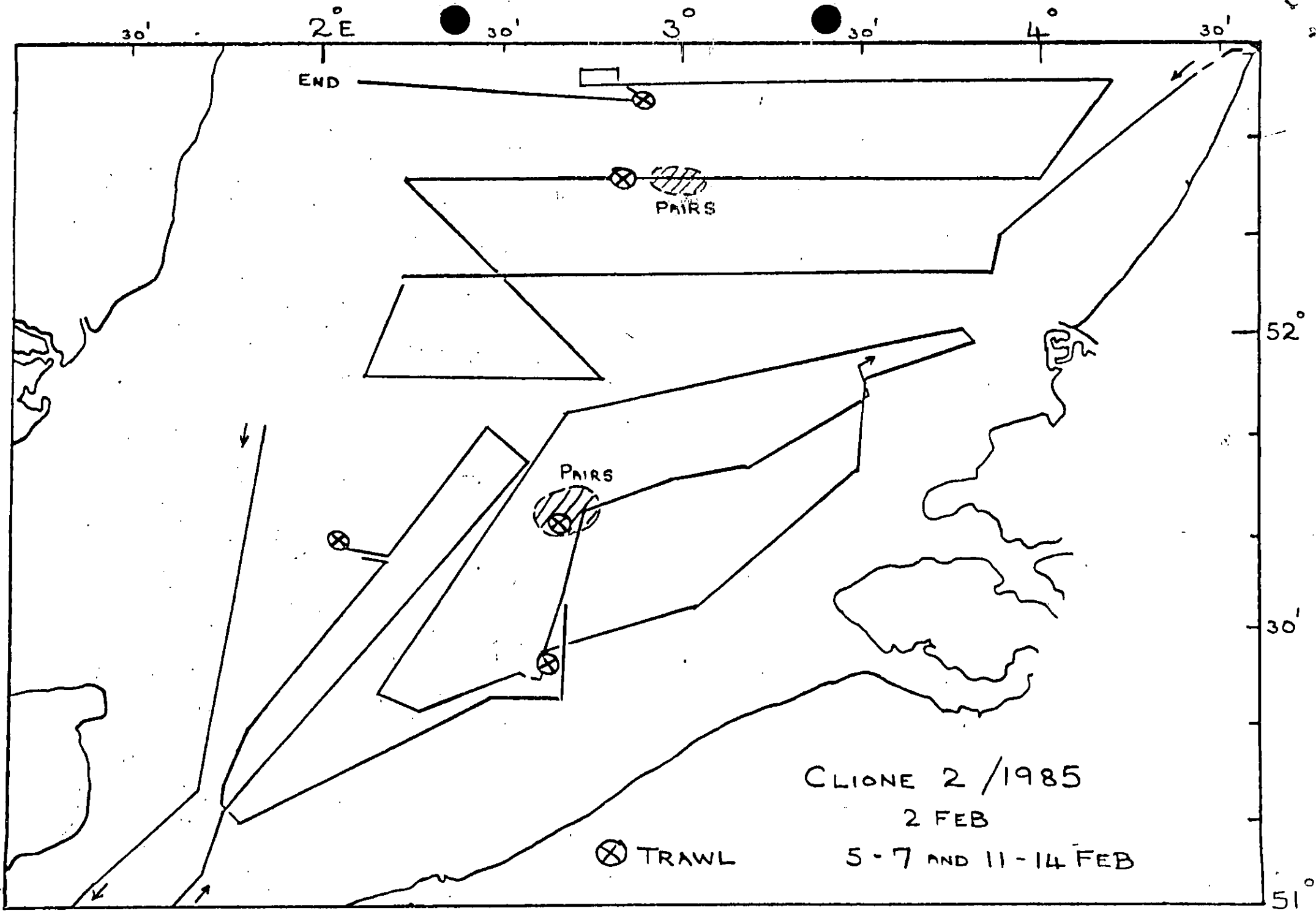
Master: M J Willcock
Fishing Skipper: K C Newrick

INITIALLED: D J Garrod

DISTRIBUTION:

Basic list+
P O Johnson
N D Pearson
C R Hood
J Dann
S Warnes
St Forbes (DAFS)
Ag Lopez





END

PAIRS

PAIRS

⊗ TRAWL

CLIONE 2 / 1985

2 FEB

5-7 AND 11-14 FEB