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

1992 RESEARCH VESSEL PROGRAMME

REPORT: RV CORYSTES: CRUISE 9

STAFF:	T K Stokes, SIC C L Whiting K Ramsay D R Eaton J Dann R P Flatt A Tetard (French observer) — 4-9 August only
DURATION:	Left Lowestoft 2030 h GMT 29 July 1992 Docked Lowestoft 0830 h GMT 13 August 1992
LOCALITY:	Southern Bight, English Channel

AIMS:

1. To measure the distribution and abundance of commercial flatfish species by means of a beam trawl survey as part of an ICES coordinated programme covering parts of Divisions IVa-c and VIId-e.

2. To collect additional biological data on sole, plaice, dab, turbot, brill and *Cancer pagurus*.

3. To describe the seabed sediments and epibenthos using photographic and trawl by-catch data.

4. To test the ROXANN acoustic seabed discrimination system against photographic and grabbing methods.

5. To bring back to the laboratory, alive, 50 or more plaice greater than 25 cm in length caught from separate short tows in order to check on survival rates for the purposes of tagging studies.

6. To study the length and age of sole and plaice in relation to depth, by carrying out additional 30 min tows at specified depths in Rye Bay.

NARRATIVE:

The cruise was delayed due to a fault with the ship's radar system. Instead of sailing on the morning tide of 29 July, the cruise was started on the evening of that day. Additional time was lost on 31 July when the ship had to spend time in Rye Bay with a radar engineer on board. Nevertheless, the survey along the English coast was completed by 3 August, including an additional 7 stations added since last year. In addition to the main trawl stations, grab samples were taken after the majority of trawls and ROXANN records were made for all tows where the depth was greater than 12 m. On completing the English part of the survey, an overnight steam allowed the early (0500 h) picking up of Alain Tetard, a French observer, from Cherbourg. After picking up the observer, surveying resumed at 0832 h on the original trackline. The survey of the French coast in VIId, including one new station in Rectangle 29E9, was completed late afternoon on 8 August, allowing an overnight steam to Alderney and the completion of 2 new stations by lunchtime on 9 August. No grab samples were taken along the French coast although ROXANN readings were observed. The French observer was put ashore at Cherbourg during the afternoon of 9 August after which a steam to Rye Bay allowed an early start to 2 days of work to investigate the relationship between plaice and sole (by length/age/sex) and depth. Nine stations in five depth bands were surveyed on the first day. On the second day the same stations were surveyed in the same order but opposite direction with a delay of one hour. In addition, six 10-min tows were carried out in Rye Bay during which 65 live plaice were collected. Three of the remaining 5 survey stations were completed on 12 August before the return journey to Lowestoft; the final two stations were abandoned due to deteriorating weather conditions. No time was lost for gear damage.

RESULTS:

1. The stations shown in the attached cruise plot were sampled in the routine way. 86% of sole and 65% of plaice were 1-3 group.

2(a) During the main survey, otoliths were taken from all sole, turbot and brill caught in VIId and from a sample of plaice and dabs as tabulated below. No otoliths were taken from fish in VIIe.

	Sole	**Plaice**	**Dab**	**Brill**	**Turbot**
VIId total	600	420	253	17	10
VIId English side	363	188			
VIId French side	237	232			

Plaice, dab and sole otoliths were all read at sea, allowing for ALDs to be prepared before the end of the cruise. An additional 277 sole otoliths were collected, but not read at sea, during two days' work at Rye Bay (see 6 below).

2(b) All crab caught on the cruise were measured.

3. The non-fish trawl catch was evaluated by estimating the abundance of key species and, for the first 65 stations, by a photographic record. Later catches were not photographed due to problems with the deck camera. The routine photography from the

beam trawl appeared to work satisfactorily when deployed in the English Channel stations.

4. The ROXANN system was turned on at the beginning of the cruise and recordings were made throughout the survey on the English coast when a photographic record was made and grab samples were taken whenever the depth was greater than 12 m. ROXANN readings were in agreement with 6 of the 24 grab samples taken, quite at odds with 12 and debatable in 6 cases. Due to restrictions on grabbing on the French coast, and because of survey station priorities, it was not possible to conduct extensive work with ROXANN. The system clearly has great potential but realisation will depend upon careful usage, documentation, 'truthing' and training.

5. Sixty-five live plaice over 25 cm were caught during six 10-min tows in Rye Bay on 10 August. These were transferred to the holding tank and 63 live fish were returned to Lowestoft.

6. Nine stations covering 5 depth bands (< 10 m, 10-15 m, 15-20 m, 20-25 m and > 25 m) were completed on 10 August and again on 11 August. 428 plaice and 280 sole were caught during 18 tows.

7. Additional documentation on ROXANN and the Rye Bay work has been given to A Emery and R Millner.

8. The FSS was used on the cruise and substantial documentation has been prepared (and faxed) for ISG to facilitate quick and necessary revisions and additions. This documentation is attached to this report, together with a checklist of amendments which are recommended.

T Kevin Stokes, SIC
13 August 1992

SEEN IN DRAFT: R Taylor, P MacKay

INITIALLED: GPA, JGS

DISTRIBUTION:

Basic list +
R Millner
C L Whiting
K Ramsay
D Eaton
J Dann
R Flatt
A Tetard (Ouistreham, France)
M Giret (Ouistreham, France)
A Souplet (Boulogne, France)
A Rijnsdorp (Ijmuiden, Netherlands)
R deClerck (Oostende, Belgium)
Kent and Essex, Sussex, Southern SFCs
States of Guernsey CFO
States of Jersey CFO

Cruise : **CORY 9/92**

Query/Problem	ISG Response	Complete
Unable to run processing jobs selecting individual station/rectangles	Stratum codes for station and rectangle were incorrect. Corrected STRATUM codes. Jobs re-run on land on return	Yes
Occasionally when 2 users logged into system at the same time entering station data the following error occurred *E_U5125C Deadlock detected whilst entering length data. Your single or multi query transaction has been aborted.* User is returned to prompt.	This error was intermittent. Error is being monitored on subsequent cruises.	No
If a processing job name is >8 characters an error occurs - *Error in device name or inappropriate device type*	Processing jobs can be >8 characters. The job resulting in this problem was set up containing a space. User error.	Yes
Biological data entry - Could not save inserted data into previously saved Biological data	Missing permit on table. This was set up.	Yes
CA (catch reports) and LE (length reports) not standardising correctly for time and volume swept.	Coding corrected.	Yes
Slow response times from system for processing jobs	Monitoring situation (Ian Simcoe)	No
Is it possible to produce average catch by rectangle for more than 1 rectangle at a time	Yes - unable to do so at sea because of incorrect stratum code set-ups (see above)	Yes
User Guide not clear enough on how to set up processing jobs for certain situations i.e. individual ALK's by station, ALD's based on ALK for whole cruise but LD by individual stations.	Examples will be added to User guide	Yes
Incorrect error message 576 in Biological screen	Error message corrected	Yes
The condition factor report can only be printed for the whole cruise not by selected stations.	This was never a requirement. The condition factor report was set-up as an ad hoc report based on the *whole cruise*	Yes
Setting up species data by cruise series is time consuming	This is only required to be set-up for the cruise series so after initial set-up should not require too much amending	Yes
Biological screen movement codes do not allow for movement from SEX to next row, FISH WEIGHT to next row and MATURITY to next row	The options for movement were set up as defined by the UAC's, changes to these would result in major changes to coding if requested.	Yes
Access violation when running certain ALK jobs	Problem being investigated	No
ALD - Standard deviation values do not match those expected	Problem being investigated	No

NB Incorrect stratum codes were set up by ISG these were corrected by them on our return .

The item in the table refering to Biological screen movement is a tabbing problem at present you have to tab through all the fields you do not want to enter data in which is very time consuming and tedious . It appears from ISG's response that we would have to put in a request for change to alter the present set up .
The condition factor report is required for checking throughout the cruise as are the biological form reports . We had this facility on the HP but do not have it now.

In addition to the points covered in the attached table the following problems were encountered .

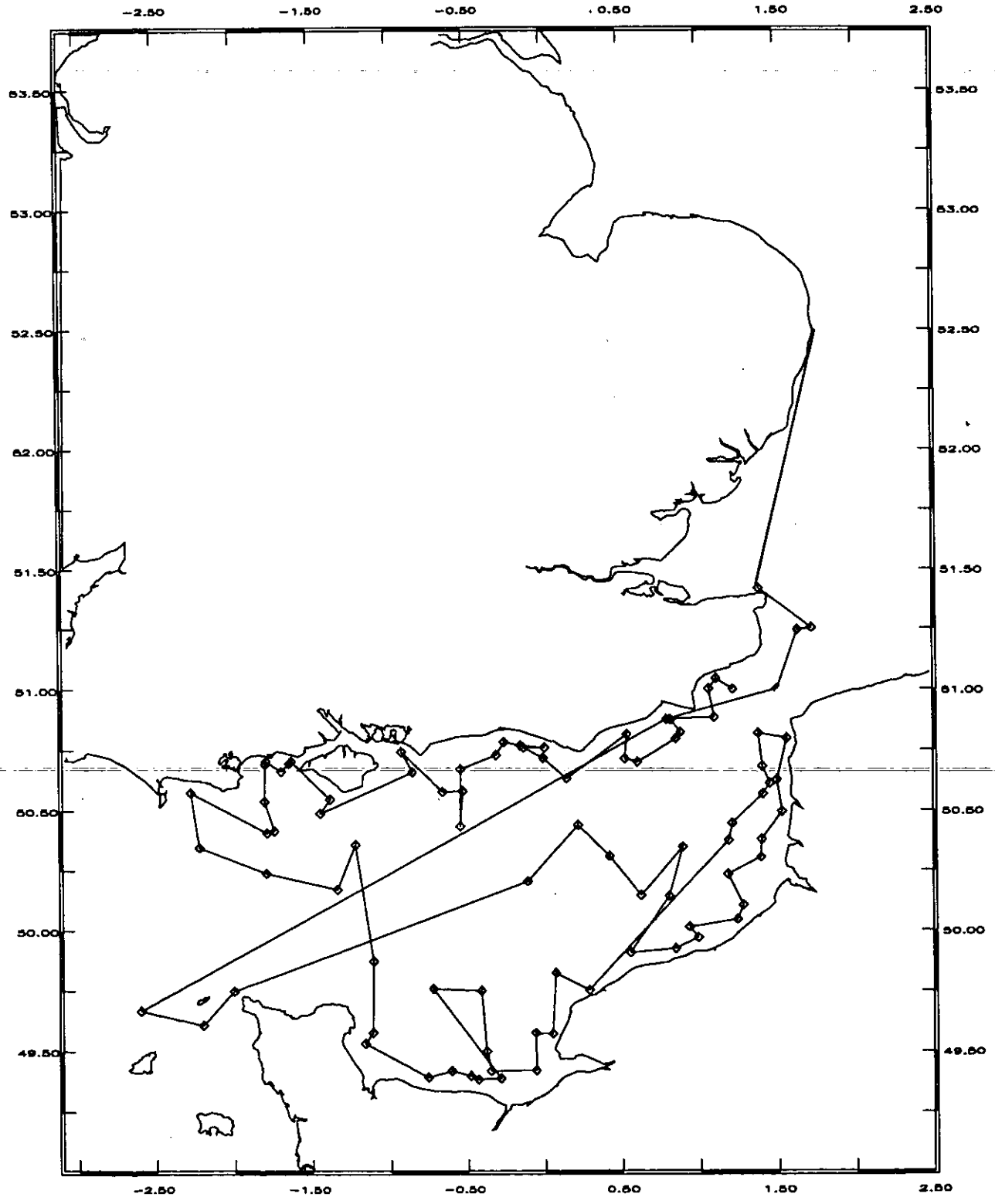
(i) In the biological data entry screen a find on 43 results in you getting 43 or 34 and can go across fields e.g. if the station is 24 and length is 31 the 4 and 3 will be selected . This method of find is not really satisfactory but ISG intimated that as each row of data is saved as a continuous record nothing could be done about it .

(ii) I made several recommendations regarding ALD outputs which are mainly cosmetic and which will require discussion with other users before any action can be taken

(iii) The TRACK problem we encountered i.e. stations were joined in the order they were entered into the data base and not in numeric order has been resolved by adding a sort command to the FSS coding .

CRUISE TRACK CORYSTES 9/92

SHOWING :
CRUISE TRACK
STATION POSITION
COASTLINE



RYE BAY STATIIONS

SHOWING :
STATION POSITION
STATION NUMBER
COASTLINE