

CEFAS LOWESTOFT LABORATORY, SUFFOLK

1997 RESEARCH VESSEL PROGRAMME

REPORT: RV CIROLANA: CRUISE 6

STAFF:

D S Kirkwood (SIC)			a
J Read		p/t	a
D B Sivyver			a
A Reeve			a
J Taylor			a
P King		p/t	a
B Fogg		p/t	a
R Gowen	DANI	p/t	a
G Klappell	DANI	p/t	a
G McCullough	DANI	p/t	a
B Stewart	DANI	p/t	a
R Sanders	UEA		a
M Trimmer	UE		a
A Wade	WS Ocean Systems	p/t	a
A Hammerstein	UWB		a
S Kratzer	UWB		a
I Smith	UEA	p/t	a
J M Rees (SIC)			b
N D Pearson			b
M Mason	UC		b
P Murray	UC		b
S Bass	UC		b
D Limpenny			b
M Hurst			b
L Jones			b
Divers x 4	Divetech Ltd		b

(Personnel are CEFAS unless otherwise indicated)

DURATION: (a) 30 June 1997 - 16 July 1997
(b) 17 July 1997 - 20 July 1997

LOCALITY: (a) North Sea, Thames Estuary, Western Irish Sea and Liverpool Bay
(b) North Sea and Wash

AIMS:

1. To undertake sampling and process measurements at sites in the Thames estuary, southern North Sea, Liverpool Bay, and the Irish Sea to determine the impact of land-derived nutrients on the marine ecosystem (A1208 and C956J168).

2. To service prototype SMART moorings in Liverpool Bay and in the western Irish Sea (A1108).
3. To undertake trial tows of U-Tow and CPR (SAHFOS).
4. To undertake bio-optical measurements at the key process sites in the Thames estuary, southern North Sea, Liverpool Bay and the Irish Sea (UWB/CSG extra-mural).
5. To deploy drifting buoys in the Celtic Sea.
6. To recover seabed landers from Race Bank (A0902) with diver support.
7. To undertake survey work in Race Bank area.

NARRATIVE: (all times are GMT)

Part a

RV Cirolana sailed from Lowestoft on the 1730 tide on 30 June and proceeded to Long Head Spit (process site TH2) in the outer Thames estuary where coring operations (using the new NIOZ corer) to obtain samples for sediment process studies, commenced at 2100, followed by a CTD at 2200, to provide water for primary production studies.

The ship then proceeded through the English Channel and Celtic Sea to the vicinity of The Smalls off the Pembroke coast where ARGOS buoys were released at three sites (a.m. 02 July), thence to Ardglass (NI) (0900 03 July) to pick up DANI staff by Searider.

Cirolana then proceeded to the Western Irish Sea gyre (process site DB 38) which was occupied for ~29 hours to 1800 04 July for coring operations, primary production studies, mooring recovery, and deployment of plankton nets, CTD and optical instruments.

After an overnight steam to Liverpool Bay, the SMART moorings at sites A and B were recovered (a.m. 05 July) and an anchor station was worked (as for DB 38) at process site LB 10 until noon 06 July. Moorings were then relaid (p.m.) at sites A and B.

A grid of CTD stations was worked from 0600 to 1800 07 July, in the course of which the mooring at site B was revisited by Searider to replace a failed light on a marker buoy. At Llandudno at 1700, J Read, P King and A Wade were put ashore and B Fogg joined the ship by Searider.

Cirolana then steamed to Drogheda Bay (site 47) and worked an anchor station from 0200 to 2300 08 July during which time B Stewart was put ashore at Kilkeel by Searider.

On 09 July the gyre site (38A) was re-occupied at 0120 for a CTD and plankton net haul before steaming via Land's End and the English Channel to the Warp anchorage in the Thames estuary (process site TH1) which was occupied from 0600 11 July to 1300 12 July, during which time G Klappell was put ashore at Southend and I Smith joined the ship by Searider. A transect of alternate CTD and steam-through stations was then worked to site TH3 (Outer Gabbard) 1900.

On 13 July process site TH2 was re-visited for comparison purposes and an anchor station was worked from 0200 to 2300.

On 14 July the Thames grid of CTD stations was worked before proceeding to process site TH3 for the final anchor station 0200 to 2300 15 July.

On 16 July the Outer Gabbard grid of CTD stations was worked from 0500 to 1130 prior to rendezvous with the Lowestoft pilot at ~1800.

Part b

RV Cirolana sailed on the evening tide on the 17th and proceeded to the Wash. A Minipod and guard buoy were recovered on the morning of the 18th from near Skegness but high winds precluded any other recoveries that day. Sediment samples for tracer analysis were collected from the inner Wash.

Early on the morning of the 19th a Minipod and guard buoy were recovered from the North Docking Shoal Buoy before heading south to the "Nut and Spanner" site. Whilst recovering the Minipod at this site the bowthruster hit the seabed stopping operations. The Cirolana slowly sailed for Lowestoft and after an inspection by divers entered Lowestoft on the evening tide on the 20th. The remaining gear (Tetrapod, one Minipod and 4 Guard buoys will be recovered by Corystes 6/97)

RESULTS:

Part a

All objectives were achieved.

Part b

I) Three Minipods were recovered intact and contained 100 % data return

II) Approximately 25 sediment samples were recovered for tracer analysis.

**SEEN IN DRAFT: Master
Senior Fishing Mate**

DISTRIBUTION:

Basic list + Crew List
S J Malcolm