CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE
LOWESTOFT LABORATORY, SUFFOLK, NR33 0HT

2016 RESEARCH VESSEL PROGRAMME

REPORT: RV Endeavour CEND 06/16

STAFF:

Sue Ware (SIC)
Bill Meadows (Lead Technician)
Annie Brown (MIST)
Marc Whybrow (MIST)
James Cook (MIST)

DURATION:
Depart Lowestoft 08:30 (18/04/16), Docking Lowestoft 08:15 (19/04/16)

LOCATION:

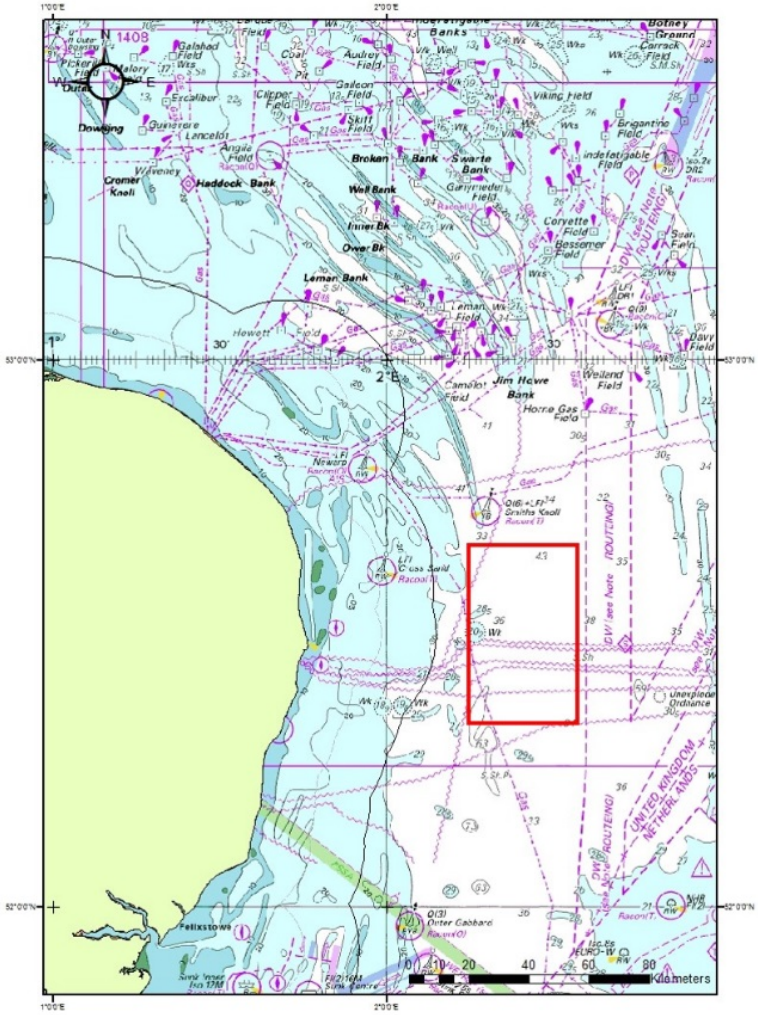

Figure 1. Location of survey area.

AIMS:

Cefas have taken delivery of a major capital item in January (Deep water camera system) and are required to prove it in the field before actual use on surveys planned in May/June. A replacement sidescan towfish is also being tested along with some new acoustic beacons obtained as a result of satisfactory trials using the HIPAP positioning system.
The trials are detailed by Aim, Equipment, method and results/output.

High level aims can be categorised as:

- MPA survey capability–Verification/development of equipment critical to multidisciplinary survey work.
- Vessel capability–Verification/development of equipment critical for a range of multidisciplinary surveys.

The aims are listed in priority order. The completion of aims lower in priority will be subject to high priority aim completion. Specific aims and outputs are as follows:

1. **Camera trials**
   - Proves vessel fibre optic infrastructure is working,
   - New cameras able to be deployed routinely on drop and 2000m fibreoptic cable off starboard gantry. New cameras able to be deployed via 500m coax tow cable off aft gantry using camera sledge,
   - Re- Assessment of camera system performance – specifically the HD camera.

2. **Sidescan evaluation**
   - Proves Edgetech sidescan is able to be positioned using best available information (Cable out in real time, HIPAP in Transponder and Responder mode),
   - Proves Benthos sidescan is/isn't viable as a backup system.

NARRATIVE:

On arrival at the survey area (11:30), the new sidescan system was tested and positional accuracy tested. This element of the gear trials was successfully completed at 17:00. The new camera system was then tested using the drop camera frame as a platform, deployed from the side gantry. Camera trials continued until 01:30 (19/04/16) when one of the HD cameras failed. The vessel then transited back to Lowestoft for a timed arrival to meet the pilot.

RESULTS:
All aims were fully achieved. The failed HD camera was fixed by the supplier (STR) for use on the subsequent survey (CEND07/16).

Sue Ware
Scientist In Charge
Date: 28/04/16

SEEN IN DRAFT

Master:
Senior Fishing Mate:

INITIALLED:

DISTRIBUTION: