

Provisional: Not to be quoted without reference to the writer

Library

R V ERNEST HOLT

Report on Cruise 9/1969

Staff: J W Talbot                      Duration: 7 to 25 October  
         G C Baxter  
         T C Doddington  
         J Woollorton  
         S R Jones

Aim

To conduct a diffusion and current meter exercise in the North Sea in the area to the southeast of the Leman Bank.

Narrative

ERNEST HOLT sailed from Grimsby on 7 October and docked in Great Yarmouth at 0945 hours 8 October. Hydrographic equipment was then loaded and the ship sailed again at 0955 hours 9 October. The laying of current meters began at 1600 hours that day and all rigs were in position by 1340 hours, 10 October. The ship then anchored one mile from one of the buoyed current meters and made additional current measurements using Direct Reading Current Meters. On 11 and 12 October stations within the area of the moored current meters were worked for salinity and temperature, all moored meters being passed during this survey. It was observed during the night of 11 October that two of the buoys were not showing flashing lights and these were visited again during daylight on 12 October for further examination and repair of these lights.

A second station was worked using Direct Reading Current Meters during the afternoon of 12 October and the ship then set course for Great Yarmouth to collect additional spares and Rhodamine-B dye. The ship docked in Great Yarmouth at 0030 hours, 13 October, collected all necessary items and sailed again at 1230 hours the same day.

On leaving Yarmouth the ship proceeded to check all current meter buoys and to replace a light on one buoy. Five of the buoys were in order but one could not be found. A further search in daylight on 14 October revealed no trace of this buoy and steps were therefore taken to recover the meters from this station. Both meters were recovered by 1500 hours that day, one of them having a damaged propeller. There was no trace of the missing buoy with its tower, flashing light, ballast weight and bridles.

After checking the remaining five current meter buoys during the night of 14 October, 50 gallons of Rhodamine-B solution was released at 1015 hours the following morning at a position close to the current meter array.

Survey work on this dye patch commenced immediately after the release and continued until 0002 hours, 18 October. By this time the detectable dye patch was 6 miles long by 1 mile wide with its length in a NE-SW direction. Both the oscillation of the patch on the tide and its residual drift were measured in addition to its diffusion.

After completing the Rhodamine-B survey the ship checked that all current meter buoys were on station and lighted before steaming to IJmuiden where she docked at 0850 hours, 18 October.

ERNEST HOLT left IJmuiden 0955 hours, 19 October and steamed to the position of the moored current meters. Measurements of current were made from the ship that afternoon and all buoys checked during the night. A small release of Rhodmine-B was made on 20 October at 52°27'N, 2°39'E and this was surveyed on the day of release and the following day. Current measurements in the release area were made on 22 October. Each night all buoy stations were checked, two of the buoys were lifted on 21 October and the remaining three on 23 October. The ship then returned to Great Yarmouth, docking at 1044 hours, 24 October. The scientific staff left the ship in Yarmouth and the hydrographic equipment was also removed. The ship sailed for Grimsby on the evening tide arriving the following morning at 0610 hours.

During the cruise selected ship meteorological observations were made at synoptic hours.

J. W. Talbot  
27 October 1969

Seen in draft: E A B  
W J S

Initialed: A J L

Distribution:

Basic list, plus the following:

Mr Talbot  
Mr Baxter  
Mr Doddington  
Mr Woollorton  
Mr S Jones