

**PROVISIONAL CRUISE REPORT**

VESSEL: RV Squilla

LOCATION: Eddystone Rocks, Plymouth

PERIOD: 20-22 April 1982

PERSONNEL: A J Marks SSO  
E J Moore PTO3  
B M Norman ASO (Senior Scientist)  
L Whitlock ASO

OBJECTIVES: To recover Eddystone Waverider plus sub-surface float.  
To recover Eddystone Wavecrest plus sub-surface float.  
To locate and recover sub-surface float that was used on a previous Eddystone deployment.

PROCEDURE AND  
METHODS:

20.4.82 Launched inflatable at Plymouth Sailing Club slipway. Rendezvous with Squilla at 1540 at Sutton Marina. Loaded diving equipment, etc aboard Squilla.

21.4.82 Rendezvous with Squilla at 0830. Sailed for Eddystone at 0900.  
Arrived at Eddystone at 1015. Both buoys were easily sighted from a distance of approx  $\frac{1}{2}$  mile. The inflatable, which had been carried on the stern deck, was launched over the stern. Loading of the inflatable was carried out over the gun-whale.  
The Waverider buoy was tackled first as records showed that its sub-surface float would probably be the deeper of the two. By doing the deepest dive first maximum use can be made of the available dive time.  
The visual inspection showed the buoy to be in good condition although its rubber fender was missing.  
BMN and AJM dived with LW as standby. Squilla lay off a little way. The rubber fender was found directly below the buoy, caught on the top termination of the rubber cord. The crab pot marker was also tangled up around this part of the mooring. The tide was still running at approx  $\frac{1}{2}$  knot, making it slightly difficult to get to the sub-surface float, also, the rubber cord was covered in marine growth, making it difficult to grip. The sub-surface float was at 13 metres. BMN used a hacksaw to cut through the riser chain, just below the sub-surface float.  
The Waverider and the sub-surface float were left connected while they floated on the surface, to make recovery easier.  
The Wavecrest and its sub-surface float, which was at a depth of 9 metres, were dealt with in an identical manner.  
When both buoys and the sub-surface floats were on the surface, Squilla moved in to retrieve them. BMN went aboard Squilla while AJM, EJM and LW stayed in the inflatable to manoeuvre the buoys to the Squilla. The Wavecrest was light enough to be lifted aboard by hand. All other buoys were lifted using the winch through a block attached to the side of the 'A' frame.

PROCEDURE AND  
METHODS: (Contd)

21.4.82 When everyone was back on board, an attempt was made to find the third sub-surface float, which had no surface marker. Squilla carried out an echo sounder grid search using Decca coordinates for approximately one hour but failed to locate it. Abandoned search and sailed for Plymouth at 1300.

On arrival at Plymouth fish quay the skipper of Squilla telephoned MBA and arranged for their lorry to take our equipment back to MBA for storage that night.

22.4.82 am Transferred all equipment from MBA's lorry to IOS lorry. Returned to IOS(T).

EQUIPMENT  
PERFORMANCE:

Wavecrest 110 was deployed on 19.1.82 replacing the faulty Wavecrest 104. On 10.3.82 it was noted that Wavecrest 110 was transmitting a very odd "warbling" tone. Although the Wavecrest receiver was locked on to this signal no data was being recorded.

This situation continued until 31.3.82 when it was noted that no signal whatsoever was being received from the Wavecrest buoy.

On return to IOS(T) the Wavecrest was opened. The buoy contained approx 2-3 pints of sea water. There was no obvious leakage point but there was also no sign of vaseline or silicon grease used on the sealing 'O' ring. Two of the hatch securing screws were notably slacker than the rest.

On the 20 May BMN took Wavecrest 110 to NBA for a closer inspection at the factory. The inner sphere was opened to reveal two of the four ligament wires tangled together. The wires were not as tangled as those on buoy 104 but even so this had obviously caused some problems. It was impossible to tell where the water had entered the buoy as no suitable testing facilities were available.

All equipment used onboard Squilla worked perfectly; the crew were very helpful and obviously skilled in their work.

ITINERARY:

20.4.82 am Loaded vehicle, drove to Plymouth.  
1500 Launched inflatable, rendezvous with Squilla.

21.4.82 0830 Rendezvous with Squilla.  
0900 Sailed for Eddystone.  
1015 Arrived at site.  
1030 Dived on 1st Sub surface float.  
1043 Dived on 2nd Sub surface float.  
1140 Began grid search.  
1300 Sailed for Plymouth.  
1420 Arrived at Fish quay, unloaded Squilla.

22.4.82 0830 Rendezvous with DHJ, loaded lorry.  
1005 Left for IOS(T).  
1200 Arrived at IOS(T).  
pm Unloaded lorry.

Prepared by: B M NORMAN

Approved by: A P SALKIELD

Date: 4/5/82

# INSTRUMENT DETAILS AND POSITIONS

Eddystone Waverider: Buoy No: 67201  
Calibrated: 14.10.81  
Sensitivity: 1.852 Hz m<sup>-1</sup>  
Position: 50°10'34"N  
04°15'42"W  
Decca position: Chain 1B/MP (SW British)  
Red A 11.70  
Green C 46.25  
Date laid: 4.11.81  
Time laid: 1100  
Date recovered: 21.4.82  
Time recovered: 1030  
Depth: 42.4 m mid tide.

Eddystone Wavecrest: Buoy No: 110 (electronics package No 116)  
Calibrated: 23.12.81  
Sensitivity: 1.827 Hz m<sup>-1</sup>  
Position: 50°10'36"N  
04°15'51"W  
Decca position: Chain 1B/MP (SW British)  
Red A 11.70  
Green C 46.60  
Date laid: 19.1.82  
Time laid: 1210  
Date recovered: 21.4.82  
Time recovered: 1043  
Depth: 40.5 m mid tide.