

**PROVISIONAL CRUISE REPORT**

**VESSEL:** MFV 777 'Devonian'

**OWNER:** John J McGuire  
5 Swan Court  
DARTMOUTH  
Devon  
Tel: Dartmouth (080 43) 3639

**LOCATION OF WORK:** Start Bay, Devon and Eddystone Rock

**CRUISE PERIOD:** 12-15 February 1981

**PERSONNEL:** J D Humphery HSO (Senior Scientist)  
A J Marks SSO  
G N Crisp HSO  
E J Moore P + TO IV  
B M Norman ASO

**OBJECTIVES:** To determine the float-track of a trial buoy for the SAR experimental buoy to be deployed in Start Bay in the summer of 1981. To perform in-date training dives. To replace the Eddystone Waverider.

**PROCEDURES AND METHODS:** 12.2.81 Loaded Waverider, spar buoy and associated equipment onto Devonian using new IOS(T) inflatable. Assembled spar buoy on deck, and lowered it over side while still at mooring in River Dart. Buoy sank. Made weight adjustments until buoy floated with only spar showing. Recovered buoy on board, and sailed for Start Bay at 1300.

Deployed spar buoy approximately 1 km NW of bell buoy; made several weight adjustments until approximately 60 cm of scaffold pole showed above surface. Allowed buoy to drift, plotting Decca positions periodically.

Recovered spar buoy with some difficulty at 1830, and returned to Dartmouth. Wind S 4-5, some chop. GNC returned to Taunton.

13.2.81 Sailed approximately 1000 into SE breeze 6-7. Steep seas in harbour entrance, 2 m sea and swell outside. Proceeded to position slightly sheltered by Start Point and Skerries Bank. Performed in-date training dive 1145-1210 in 21 m water. Returned to Dartmouth, as weather precluded any possibility of performing Eddystone Waverider work.

14.2.81 Sailed from Dartmouth 1000 after obtaining weather forecast of E 3-5, decreasing E 2-3 later at Eddystone, from Plymouth meteorological office. Assembled Waverider mooring on deck. Arrived at Eddystone Waverider station in good conditions

(wind E 2) at 1430. Tide completely slack on arrival. Lowered inflatable over side, loaded Waverider, diving equipment and divers. Moored inflatable to old Waverider. Used a line from a surface marker buoy to the Waverider mooring sub-surface float. Exchanged new Waverider and mooring for the old ones, and released the surface marker buoy. Returned to Devonian, recovered all equipment and sailed for Dartmouth, arriving 2200.

15.2.81 Rendezvous with Devonian 0900. Unloaded all equipment with inflatable, returned to IOS (T), arriving 1400.

#### EQUIPMENT PERFORMANCE:

Calculated weight required for spar buoy proved too great during trials in Dartmouth Harbour. Considerable weight adjustment was made. Buoy did not drift in direction or at rate anticipated; SE breeze might have upset neap tidal flow or drift characteristics of buoy.

The Waverider and mooring were prepared in the laboratory prior to departure, and assembled on deck during the run to the Eddystone. Recordings made since deployment have been satisfactory.

Radar, Decca Navigator and VHF Radiotelephone used on board Devonian performed satisfactorily.

#### ITINERARY:

12.2.81

0900 - Rendezvous with GNC and Devonian. Started to load equipment.

1300 - Sailed for Skerries Bank Bell Buoy.

1430 approx - Deployed spar buoy and made weight adjustments.

1830 - Recovered spar buoy, returned to Dartmouth.

1930 - Moored in Dartmouth.

13.2.81

1000 - Sailed for Skerries Bank.

1145 - Performed in-date dive.

1210 - Surfaced from dive; returned to Dartmouth.

1400 - Moored in Dartmouth.

14.2.81

1000 - Sailed for Eddystone.

1430 - Arrived Eddystone.

1630 - New Waverider deployed, old one recovered.

1730 - Sailed for Dartmouth.

2200 - Moored in Dartmouth.

15.2.81

0900 Rendezvous with Devonian. Unload all equipment  
with inflatable. Return to Taunton.

Prepared by:

*John Humphery*

SD HUMPHERY

Approved by:

*A P Salkield*

A P SALKIELD

Date:

*2 / 3 / 81*

# STATION LIST

## Decca Chain IB/MP (SW British)

Fix	Time	Red	Purple	Comments
1	1540	B 9.54	B 59.35	First recorded position
2	1551	B 9.40	B 59.46	
	1555	-	-	Added more lead to buoy
3	1641	B 8.73	B 59.22	
4	1644	B 8.69	B 59.12	
5	1657	B 8.26	B 58.83	
6	1720	B 8.04	B 58.24	
7	1737	B 7.63	B 57.49	
8	1751	B 7.42	B 56.90	
9	1809	B 7.05	B 56.13	
10	1825	B 6.75	B 55.18	Buoy then recovered

## Waverider Details: (Eddystone)

Waverider No:- 67042

Roofhatch No:- L-119

Sensitivity:- 1.816 Hz m<sup>-1</sup> on 4.6.80

Position:- Decca Chain IB/MP (SW British)

Red	A	11.7
Green	C	46.85
Purple	A	71.72

Depth of Sub-surface float - 22 m (at high tide)

Water Depth: 43m

Frequency: 26.990 MHz

Date: 14.2.81

Time: 16.12

EDDYSTONE WAVERIDER DEPLOYMENT, FEBRUARY 1981

Buoy No:- 67042

Roofhatch No:- L-119

Calibration:- 4.6.80

Sensitivity:-  $1.816 \text{ Hz m}^{-1}$

Position:- Decca Chain IB/MP (SW British)

Red	A	11.7
Green	C	46.85
Purple	A	71.72

Date deployed:- 14.2.81

Time deployed:- 1612 GMT

Frequency:- 26.990 MHz

Output meter reading:- 6.3

New batteries fitted:- 3.2.81

Battery voltage:- 20.6 and 20.7 V

Water depth:- 41 m mid tide