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PROVISIONAL CRUISE REPORT

VESSEL: M.T. SEPIA

LOCATION: EDDYSTONE WAVERIDER SITES

PERIOD: 19th and 20th January 1982

PERSONNEL:

J D Humphery	HSO	Senior Scientist
A J Marks	SSO	
E J Moore	PTO3	
B M Norman	ASO	

OBJECTIVES: To recover Wavecrest No.104 from the Eddystone station. To deploy Wavecrest No.110 on same mooring. To check Waverider 67201 on station at the Eddystone Rocks. To locate Waverider 6851 at the Eddystone Deepwater station, if possible. To deploy Waverider 67041 at the Eddystone Deepwater station.

PROCEDURE AND METHODS:

Rendezvous with Sepia at the Barbican fish quay at 10.30. Loaded Wavecrest buoy No.110 and mooring components.

19.1.82 Departed for Eddystone Rocks. Arrived alongside Wavecrest buoy No.104 at approx. 11.55. Buoy appeared in good condition, no visible fault.

Lifted Wavecrest from water using A-frame, and tied large surface marker buoy onto rubber cord, (in case it was necessary to let the mooring go). Removed Wavecrest 104 and its stabilizing chain from the rubbercord, and removed aerial from the buoy. Fitted aerial to Wavecrest 110 (no spare Wavecrest aerial was available), and connected the new buoy and its stabilizing chain to the rubbercord. Removed the surface marker buoy from the rubbercord, lowered the buoy into the water from the A-frame, and released the mooring. (Sepia had been maintained in position by skilful use of the engines and steering.) Noted Decca positions and time.

Moved alongside Eddystone Waverider 67201. Rubber fender missing, but otherwise the buoy was apparently in good order. Checked Decca positions.

Steamed for the Eddystone Deepwater station. Used the Decca to pin-point the position, and looked for the buoy and listened for it on a hand-held direction finder. Nothing seen or heard. Steamed east and west, (ie the directions in which a trawler is likely to drag the buoy and mooring) of the nominal position for three Decca lanes - nothing seen. Abandoned search.

Trawled for Norway pout on the way home and arrived at the Barbican at approx. 1600.

20.1.82 Met the Sepia at the Barbican at 10.30 again. Loaded

Waverider 67041, its mooring and diving equipment. Steamed for Eddystone Deepwater position.

Arrived on site, prepared buoy and mooring.

Lowered anchor and mooring into the water by hand, and lowered them on the mooring rope to the bottom. Allowed the tide to carry the boat back on the mooring to dig the anchor in, and lowered Waverider into the water from the A frame. Released the mooring; rubbercord pulled buoy back strongly in the water. Noted depth, time and Decca positions.

Trawled for small squid on way back home, and arrived at Barbican fish quay approx 1600.

WEATHER: Fresh breezes on the night of 18th/19th had brought up a 2 m swell which persisted during the cruise period on the 19th, despite the fact that the wind dropped to force 3-4 during the day. The swell dropped to approx 1 m during the night of 19th/20th, but picked up to approx 2.5 m maximum during the following day under the influence of the fresh southerly breeze, force 5.

EQUIPMENT PERFORMANCE: Wavecrest 104 had never produced sensible records since it was deployed on 4.11.81. Furthermore the transmitter (which had always been weak) had stopped working sometime over the Christmas period. Wavecrest 110 had been borrowed from NBA (Controls) Ltd who had prepared the buoy prior to calibration at NMI Hythe. Its transmitter output was checked with an absorption wavemeter prior to deployment. Waverider 67041 and its mooring were prepared in the IOS(T) laboratory prior to deployment. Checks on the transmissions from all three buoys were made at HMS Cambridge (the receiving station) on 21.1.82; satisfactory signals were received.

The new Wavecrest worked on 27.040 MHz; this ensured that its transmissions were 5 kHz removed from the nearest (illegal) CB Channel. This is the same frequency displacement as the Eddystone Waverider from CB emissions, and thus the two buoys should suffer a similar amount of interference.

All equipment used on board Sepia worked perfectly; the crew were very helpful and obviously skilled in their work.

Weather conditions did not allow any diving to be carried out.

ITINERARY:

18.1.82	Loaded van, drove to Plymouth.	
19.1.82	1030	Rendezvous with Sepia at the Barbican.
	1045 approx	Departed for Eddystone.
	1200	Recovered Wavecrest 104.
	1205	Deployed Wavecrest 110.
	1210	Inspected Waverider 67201.
	1300 approx	Unsuccessful search for Waverider 6851.
	1600	Returned to the Barbican.
20.1.82	1030	Rendezvous with Sepia at the Barbican.

	1315	Deployed Deepwater Waverider
	1600	Returned to Barbican
21.1.82	1000	Checked and modified receiving systems at HMS Cambridge. Changed all cassettes and cartridges.
	1245	Arrived IOS(T)

PREPARED BY: J D HUMPHERY

APPROVED BY: A.P. Salkield AP SALKIELD

DATE: 10-2-82.

INSTRUMENT DETAILS AND POSITIONS:

EDDYSTONE WAVERIDER:

Buoy No:	67201
Calibrated:	14.10.81
Sensitivity:	1.852 Hz m^{-1}
Position:	50°10'34"N
	04°15'42"W
Decca positions:	Chain 1B/MP (SW British)
	Red A 11.70
	Green C 46.25
Date laid:	4.11.81
Time laid:	11.00
Depth:	42.4m mid tide

EDDYSTONE WAVECREST:

Buoy No:	110 (electronics package No.116)
Calibrated:	23.12.81
Sensitivity:	1.827 Hz m^{-1}
Position:	50°10'36" N
	04°15'51" W
Decca positions:	Chain 1B/MP (SW British)
	Red A 11.70
	Green C 46.60
Date laid:	19.1.82
Time:	12.10
Depth:	40.5m mid tide

EDDYSTONE DEEPWATER WAVERIDER:

Buoy No:	67041
Calibrated:	18.8.81
Sensitivity	1.814 Hz m^{-1}
Position:	50°08'02" N
	04°16'40" W
Decca positions:	Chain 1B/MP (SW British)
	Red A 16.0
	Green B 31.85
Date laid:	19.1.82
Time laid:	1315
Depth:	73 m mid tide