

IMER 1/80

**VESSEL** R.V. OCEAN CREST  
**CRUISE PERIOD** 14-18 January 1980  
**PERSONNEL** M.B. Jordan H.S.O. Senior Scientist  
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**ITINERARY** A track chart was issued with the programme for this cruise  
 Sunday 13 January Travelled to Swansea.  
 Monday 14 January Set up equipment.  
 Tuesday 15 January Sailed on Track 3.  
 Wednesday 16 January Sailed on Track 2.  
 Thursday 17 January Sailed on Track 1.  
 Friday 18 January Unloaded equipment and returned to Plymouth.

**OBJECTIVES** To cover as much of the Bristol Channel monitoring cruise area as possible with an alternative array of sensing equipment on a charter vessel. It was required to make continuous surface measurements of salinity, temperature and fluorescence using the Fast Continuous Plankton Recorder as well as taking discrete samples for salinity and chlorophyll calibration and for the estimation of turbidity and dissolved nitrate-nitrogen.

**EQUIPMENT PERFORMANCE** The ship's deck generator failed on the first day consequently it was not possible to use our peristaltic pump to collect water samples. The vessels' fire-main was rigged to provide a continuous water supply. On recovery of the F.C.P.R. on the second day it was seen to have hit the bottom. The bows and the diving shute of the body were damaged, the flash-gun of the fluorometer had flooded and the M.D.T.R., although dry, was not operating. It is thought that the accident occurred when the vessel turned sharply immediately after launching the body. The frequency of taking discrete samples was increased to compensate for the loss of F.C.P.R. data.

**RESULTS** Although problems were experienced on this cruise it does appear feasible to use the F.C.P.R. for monitoring cruises, but it would not be possible to tow this instrument array and a 30" Lowestoft plankton sampler simultaneously from a small vessel. Detailed results await laboratory analysis.

Prepared by: M.B. Jordan  
 Approved by: *M.B. Jordan*  
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