

*treat as cruise report pending full report-(if any) indexed #RR. 12/6*

R.R.S. CHALLENGER CRUISE 11/87 17th FEBRUARY - 9th MARCH

APPENDIX TO ROSCOP FORM

1. TRACK CHART

The cruise surveying tracks are shown on the accompanying chart at a scale of 1 : 10000000. Gravity and magnetic measurements were made along these tracks together with Air-Gun and Pinger seismic reflection profiles. The Hebrides Terrace Seamount is centred on 10° 30' W, 56° 30' N.

2. SCIENTIFIC REPORTS

Preliminary results of the cruise will be given at a meeting of the Geological Society to be held at Burlington House, Picadilly on the 18th and 19th of March. The main body of the results will be incorporated into a Ph.D. thesis by M. A. Omran which is expected to be completed in about two years. Aspects of the sedimentology and igneous activity will be published over the next two years.

3. EXECUTION OF THE CRUISE

The major disappointment of the cruise was the inability to use the gravity cover due entirely to the lack of safety in deploying the corer either over the midship side or the stern of the vessel. Although successful gravity covering may well have been possible it was decided that the inherent risk involved in launching and recovery of the 1000 lb corer far exceeded the scientific return. If this vessel is to be used for further cruises in which gravity coring is to be carried out, a major effort must be made to modify the vessel to permit safe manipulation of the corer.

Mr. Michael Geoghagen of the Irish Geological Survey, Dublin accompanied this cruise as the Irish Observer. Mr. Geoghagen took an active part in the general scientific work of the cruise.

Despite some electronic problems with the hydrophone and the Pinger, some excellent seismic reflection profiles were obtained. A prototype thermal line-scan recorder made by Waverley Electronics of Weymouth was ran as a seismic recorder in addition to the standard EPC recorders. The line scan recorder gave excellent results without the odious smell, belt and styli problems and the dust of the conventional EPC recorders. Although some modifications are required to this Waverley recorder I strongly suggest that it is the next generation of recorders and that at least one unit be purchased for further evaluation by RVS.

*Robert J. Whittington 13/3/87*