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Report on Sector Scanning trials, incorporating
Cruise Report CLUPEA 15th - 20th April, 1968.

All operations were carried out in accordance with the programme. The first part of the operation was devoted to trials of the Coastal Radio scanner, and the second part to trials, on CLUPEA, of the "phase only" digital sonar developed by Birmingham University.

Part I. The Coastal Radio scanner was shown to work effectively, but a limitation of range is imposed by excessive scanning noise. At short range clear discrimination of targets 30° apart in angle was obtained in both the additive and multiplicative mode. Further work on this equipment is required a) to reduce the scanning noise and b) to improve reliability and certain aspects of the display circuitry. A further brief report on these trials will be prepared by Mr. Forbes.

Part II. The "phase only" sonar proved to be highly effective in situations where reverberation was minimal. It appears however to be less effective than other types of sonar when reverberation is limiting. On the whole, the experiments carried out on fish shoals gave a more favourable impression than those on small fixed targets. A fuller report will, no doubt, be available in due course from Birmingham University.

R. E. CRAIG
24th April, 1968