

R1/7

6bMR78

In Confidence: Not to be quoted without reference to the Laboratory

FRV "MARA"

Cruise 6(b) 1978

REPORT

19 - 30 June 1978

Personnel	J Main SSO (in charge)
	G I Sangster SO
	E Wright ASO
	P Barkel PTO IV

Objectives

To record observations of scallop dredges towed by FRV "Clupea" using a low light television camera from the diver's towed underwater vehicle TUV II.

To study water flow around a 4 Panel Trawl Net.

To make surface video recordings of the diving operations and trawl work.

Procedure

The "Mara" was based at Buckie and liaised with the "Clupea" either off Buckie or Lossiemouth each day during the first week as the work dictated. The diving team operated with the TUV II from the "Clupea" and recorded on video tape the behaviour of the scallop dredges on both smooth and hard ground. Weather conditions and water clarity were poor but suitable recordings were made. In the second week the "Mara" worked in Spey Bay. For the first three days measurements and observations of the sand clouds of both the polyvalent and vee boards were made using the TUV II and TV system.

The fourth day was suitable for free diving and a number of measurements were made with the hand held flow meters one meter inside and outside identified points all along the top panels of the 100 HP 4 panel trawl.

Measurements of the inclination of the net panels to the water flow were also made and these together with the flow meter readings and video tapes will be analysed to define the angles and speeds of netting panels where small fish escape from the gear.

Some video film recordings were made of the diving procedure and the launching of the TUV II.

J Main
22 August 1978

Seen in draft: James A Calder (O/C "Mara")