

R1/7

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3MR72

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

Cruise Report

FRV Mara

7 March - 24 March 1972

Narrative

Personnel joined 'Mara' at Ardrossan on 7 March 1972. The gear was loaded and the instruments were set up on that day. Instrumented hauls were carried out beginning on the 8th using the Mark 1m pelagic trawl off Ardrossan and later in deeper water off the North East corner of Arran. Further hauls took place in Loch Linnhe and in the Moray Firth on the homeward passage. FRV Mara docked at Buckie on 24 March.

Results

Nineteen three hour instrumented hauls were carried out during the cruise. The Mark 1m pelagic trawl was fished with Suberkrub, Hong Kong and flat board to evaluate the engineering performance of the trawl and to compare the relative performances of the trawl boards. The warp aft was kept constant throughout all the hauls and the engine revs were varied in a set pattern. Trawl toads were also tested during the trials.

The Furuno Netzonde malfunctioned during the trials and had to be replaced by a Kelvin Hughes headline transducer and cable.

A table of preliminary results in summary is attached. The results have been analysed and a comprehensive report is being written.

A Corrigall
26 October 1972

Preliminary Table of Results

(constant data warp aft 75 fms.)

7 - 24 March 1972

Speed Knots	Net Opening Fathoms			Net Spread Fathoms			Board Spread Fathoms			Board Depth Fathoms			Total Gear Drag Cwt			Net Drag Cwt			Total Gear Horse Power H.P.			Board Spreading Force Cwt			Board Drag Cwt		
	S	H	F	S	H	F	S	H	F	S	H	F	S	H	F	S	H	F	S	H	F	S	H	F	S	H	F
2	8.5	8.4	1	6	5	-	14	11	-	20.5	22.5	26.5	17.8	14.6	19.8	13.4	15.8	12.8	13.2	14.6	13.8	1.92	1.79	0.73	1.1	1.56	1.26
2.5	7.8	7.6	1	6.5	5.5	-	17	13	-	11.8	16.5	23.5	23	25	25	20	21.5	14.5	21	25	21.6	3.2	2.8	1.2	1.75	2.35	2.0
3	7	6.7	4	7	6	3	19	16	7	5.5	12.5	21	28.4	38	30.4	26.5	28	18	30.5	37.7	31.8	4.4	4.1	1.83	2.54	3.48	2.8
3.5	6.2	5.9	4	7.5	6.5	5	22	18	11	2	10.0	19	34	53	36	32	35	27	41.7	53.2	44	6	5.6	2.58	3.46	4.75	3.9
4	5.5	5.3	4	8	7	7	24	20	16	0.5	8.0	18	40	68	42	38	42	36	54	68.2	57.5	7.85	7.4	3.4	4.4	6.2	5.05

S - SUBERKRUB

H - HONG KONG

F - FLAT