

Not to be cited without prior reference to the MSS, Marine Laboratory, Aberdeen

MRV Scotia

Survey 1521S

PROGRAMME

23 - 29 October 2021

Loading: Aberdeen 20 October 2021

Departure: Aberdeen 23 October 2021

Unloading: Aberdeen 29 October 2021

In setting the survey programme and specific objectives, etc. the Scientist-in-Charge needs to be aware of the restrictions on working hours and the need to build in adequate rest days and rest breaks as set out in Marine Scotland's Working Time Policy (Lab Notice 34/03). In addition, the Scientist-in-Charge must formally review the risk assessments for the survey with staff on-board before work is commenced.

In the interest of efficient data management, it is now mandatory to return the Survey Report, to I Gibb and the Survey Summary Report (old ROSCOP form) to M Geldart, within four weeks of a survey ending. In the case of the Survey Summary Report a nil return is required, if appropriate.

Estimated days by project: 7 days – SU02N0 (20154)

Fishing Gear

BT137 GOV trawl rigged with ground gear A.

BT237 (Figure 1) rigged with Light hopper rig (Figure 2).

1 set GOV (Morgere) polyvalent trawl doors (1100kg).

1 New Thyboron trawl doors - 1300kg (Figure 3).

Objectives

1. To assess the fishing performance, in terms of gear geometry, of the BT237 trawl with new Thyboron trawl doors to configure correct warp/depth ratios. Either 15 or 20 minute hauls will be made using Scanmar and bottom contact sensor in water depths ranging from 30m to approximately 500m.
2. To obtain underwater observations of net shape (BT237) using a self-recording mini TV system attached to different areas of the trawl.
3. To assess the performance of the GOV trawl with the new Thyboron trawl doors.

Procedures

General

All fishing gear will be loaded aboard on 20 October with the BT237 trawl rigged onto the lower drum and GOV rigged onto the top drum. The Thyboron Type 11 trawl doors will be used first and the GOV polyvalent doors stored on the upper castles.

Scotia will sail on 23 October and after all safety drills have been completed, make passage for the Moray Firth where trials will commence to evaluate the performance of the new Thyboron trawl doors. Thereafter and weather permitting the intention is to work around the Shetland Islands for the duration of the survey with trawling operations conducted between 07:00 and 20:00hrs

Survey schedule and operations will be decided by SIC after daily consultation with Captain and Fishing Master.

During the survey one member of scientific staff will undergo Scientist in Charge Training (SIT).

Fishing

The main objective of this survey is to assess the performance of the new Thyboron trawl doors and ensure that the correct gear geometry of BT237 is achieved. Once the new trawl doors are operating correctly, short hauls will be made to collect gear geometry data to define the correct warp/depth ratio for BT237. Results from this set of gear trials are to be reported to WGIBTS (2022) in support of developing a replacement for the existing GOV survey trawl. The intention is to operate both trawls with the new Thyboron and existing Morgere trawl doors to compare the performance of modern compared to older trawl door designs. Observation hauls ~30 mins will be made using the self-recording TV system during the survey.

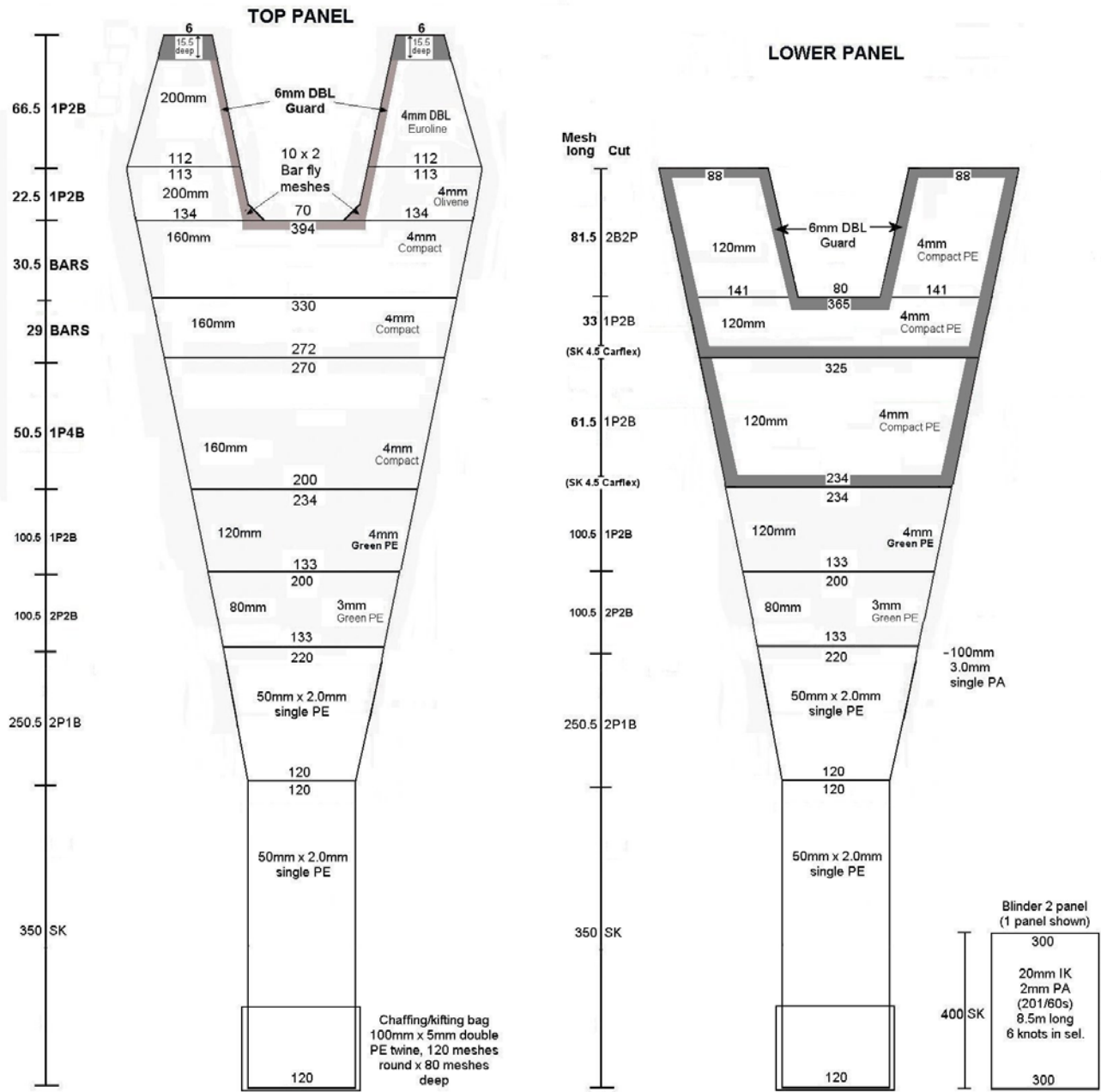
The survey will finish in Aberdeen on 29 October when all staff, some scientific equipment and most fishing gear will be returned to the Marine Laboratory. The GOV trawl (Morgere) trawl doors will be left aboard for survey 1721S.

Normal contacts will be maintained with MSS.

Submitted:
R. J. Kynoch
12 October 2021

Approved:
I. Gibb
18 October 2021

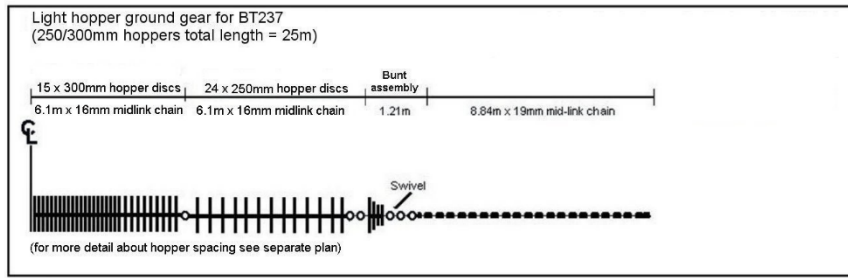
Figure 1 – BT237 trawl with revised 120mm belly panels replacing 160mm netting



H/L = 45.73m (150ft) x 24mm Polywire
H/L hung 35 x 2.5 & 10 x 10"
Chain extensions = 2 x 0.81m x 5/8 ML chain
156 x 200mm titanium floats
Upper wingline - 13.11m x 24mm Polywire

F/L = 25.91m (82ft) x 24mm Polywire
F/L hung 30 x 2.5" roped to eye
610 x 6.25" S.B Trawl

Figure 2 Wire rig and ground gear



WIRE RIG

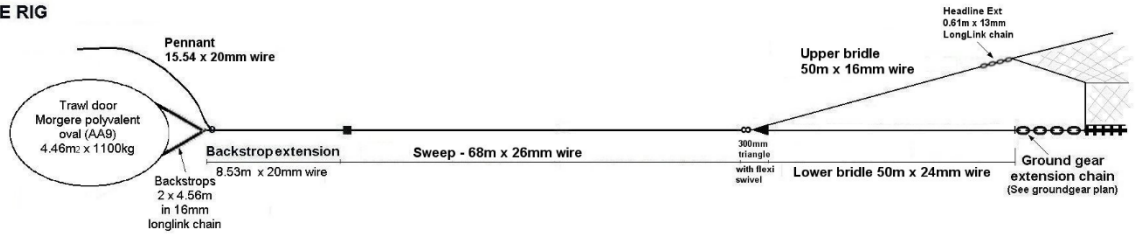


Figure 3 – Thyboron Type 11 doors 1300kg

