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Not to be cited without prior reference to FRS Marine Laboratory, Aberdeen

Charter Fishing Vessel *Pegasus* KY442

Cruise 0902H

REPORT

2-7 February 2003

Port

Loading: Methil

Unloading: Methil

Personnel

R J Kynoch (In charge)

N Collie (2-7 February)

I Penny

Objective

To carry out fully instrumented single trawl gear measurement trials at various towing speeds and warp lengths on a vessel in the under 10 m category.

Narrative

Staff travelled to Methil on the evening of Sunday 2 February. The underwater instrumentation and mobile laboratory cited at the Methil boat club from the previous charter (0802H) was again used as a shore base to service the underwater instrumentation. Staff commenced rigging the instrumentation aboard the vessel during the morning of 3 February. The vessel sailed during the afternoon of 3 February and thereafter, fully instrumented hauls were made on fishing grounds in the Firth of Forth for the remainder of the cruise. The trials ended on the afternoon of 7 February with N Collie returning with the underwater instrumentation to Aberdeen. Messrs Kynoch and Penny remained in Methil until 8 February to assist in the uplift of the mobile laboratory by R B Farquhar's of Huntly.

Results

Gear performance measurements were made on two different 80 mm *Nephrops* trawls during the trials both were fished with the same towing rig. Three hauls were made with a 250 mm diameter hopper trawl and five with a *Nephrops* scraper trawl with a ground gear comprising of 75 mm diameter rubber discs. Warp length varied between 108 m to 180 m and water depth ranged from 31 m to 61 m. The haul procedure was the same for all eight hauls and consisted of blocks (15 minute periods while towing at constant rpm) at systematically varied speeds. The reciprocal tow method as recommended by ICES was used to allow for tidal changes. The engineering data obtained will be analysed in the Laboratory.

R J Kynoch
26 April 2004