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Provisional: Not to be quoted without reference to the writer

R. V. CORELLA

Report on Cruise 7/1969

Staff: J. P. Bridger

Duration:

1930 hours, 14 April -

1030 hours, 18 Lpril

I. L. Davies B. Mumford

E. Shreeve

B. Riches .S

Aims

- To measure the effect of various rigs of tickler chain on the otterboard 1. and wing end spread of a C3 trawl.
- 2. To collect any dabs caught for Mr. C. Lee.

Narrative

CORELLA sailed at 1930 hours, 14 April and proceeded to the north of the Cleaver Bank. The job of attaching 100 Khz transducers to the port otter board and wing end began at 0700 hours, 15 April and was completed by 1100. The C3 trawl, on 9 ft legs and 5 fm bridles and fitted with $4\frac{1}{2}$ inch rubber groundropes, wrapped with 3/8 inch chain, was first shot at 1130 hours. Three further hauls were made that day.

By 0700 hours, 16 April the westerly wind was gusting to 35 knots, making further work with this equipment impossible so CORELLA steamed south where prospects seemed better. A further haul was made that evening on the Rising Ground. On this haul water got into the equipment and no further work was possible that night. During the night the steam south continued and work was resumed at 0600 hours, 17 April some twelve miles east of Smith's Knoll Lightvessel. Five hauls were made in this area that day with various amounts of tickler chain and useful records of wing and spread were obtained. By 1800 hours, 17 April the wind had freshened to over 30 knots and CORELLA then steamed in close to the lightvessel in the hope of working there. This proved impossible since the wind was by then north by west and so no lee was obtainable. of present weather and a forecast of more wind to come the cruise was terminated and the ship proceeded to anchor in Corton Roads and docked at 1030 hours, 18 April.

Results

Ten instrumented hauls were completed. Six were made without tickler chains, one with a 110 ft dan leno tickler only, one with this dan leno tickler and a 60 ft mid-wing tickler, one with a 155 ft door tickler, the dan leno tickler and the mid-wing tickler and one haul with the den leno tickler, a 90 ft wing end and the mid-wing tickler. In all, three records of otter board spread, seven records of wing end spread and six measures of board spread from warp divergence were obtained at various speeds. While the presence of a 155 ft $\frac{1}{2}$ inch chain between the otter boards reduced their speed by some 20 ft, none of the chains used had any appreciable effect on wing end spread.

The new conical holders for the wing end transducer and its target functioned well when attached to the headline leg some 7 ft from the wing ends. When attached to the wing ends themselves they fouled in the netting and gave poor results.

Catches were poor throughout, especially of flatfish, but about 300 dabs were collected from the Cleaver Bank area and deep frozen. Elsewhere $\frac{1}{2}-1\frac{1}{2}$ baskets of cod per hour were taken.

J. P. Bridger

Seen in draft: M. R. S.

C. N. S.

Initialled: A.

A. J. L.

Distribution:

Basic list plus the following:

Mr. Bridger

Mr. Davies

Mr. Mumford

Mr. Shreeve

Mr. Riches