R.1/4 5 In confidence: Not to be quoted without reference to the Laboratory, 9ER67

## CRUISE REPORT

## F.R.S. "EXPLORER"

6th November - 6th December 1967

The aim of this cruise was to compare the performances of a Granton trawl with 60 fm bridles and standard boards and the SARO type A trawl with  $62\frac{1}{2}$  fm bridles and large curved boards.

After loading gear and instruments on the 7th November, "Explorer" sailed from Aberdeen to join the F.R.V. "Ernest Holt" on the Fladen grounds for instrumentation tests and final adjustment of the gears on both ships. This was successfully completed by the 9th November and both ships returned to Aberdeen to off-load instruments.

Sailing for the second part of the cruise was delayed till 09.00 hours on 12th November due to gale-force winds in the North Sea. Both vessels made a good passage to the grounds where work was to be commenced (Helmes Bank off the north coast of Norway), calling briefly at Tromso on the way for water and, in the case of "Ernest Holt", fuel.

Work was commenced on Friday, 17th November, in excellent weather and continued through till Wednesday, 29th November with only a few breaks due to adverse weather conditions. During this period a total of 27 valid pairs of hauls were made. Initially fishing was very good in the area with catches of 70-80 baskets being taken per  $1\frac{1}{2}$  hours tow. In order to permit adequate treatment of the fish caught, the duration of hauls was reduced to 1 hour, but towards the end of the period catch rates fell to the order of 10-20 baskets, and the haul duration was increased to  $1\frac{1}{2}$  hours again.

The catches consisted almost entirely of cod (size range 20 to 100 cm), haddock (size range 12 to 80 cm) and redfish (size range 10 to 55 cm).

"Explorer" returned to Aberdeen in the early hours of 6th December, bad weather being encountered on most of the homeward journey.

The results of the experiment are being statistically analysed at present and a report will be prepared in conjunction with the Lowestoft laboratory in due course.

JAMES A. POPE 26th December, 1967