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<u>Confidential</u>: Not to be quoted without reference to the Laboratory.

CRUISE REPORT
F.R.S. "SCOTIA"
30th January-7th February 1958

Delay in completing the refit postponed "Scotia's" departure from Aberdeen until the 30th January. Work was then begun on the most northerly section of the grid, and continued uninterruptedly for thirty-six hours, during which nine stations were completed. A south-westerly gale then intervened, and, when it was discovered that most of the ship's water had escaped through the overflow, it was necessary to return to Aberdeen to "Scotia" sailed again from Aberdeen on the next replenish the supply. tide, and worked continuously until the morning of the 5th February. During this period progress was badly hampered by unfavourable weather and only fifteen stations were completed. On the 6th February, as the weather continued to be unsuitable for working, it was decided to go to Grangemouth for fuel. When this operation had been completed "Scotia" proceeded to sea again, but only one station was completed before it was necessary to seek shelter. Two stations, not on the programme, were done in the Firth of Forth, before "Scotia" docked in Leith on the afternoon of the 7th February.

Hydrography

Temperatures and salinity samples were taken at twenty-three stations and six groups of drift bottles were released. Surface temperatures ranged from 5.3°C to 7.2°C, with the higher temperatures in the eastern part of the area surveyed.

<u>Plankton</u>

The volume of the plankton was rather small throughout, but was particularly poor in the north-eastern part of the survey area. West of the prime meridian the hauls were dominated by euphausid furcilia and S. elegans, with copepods virtually absent from the samples. To the east of the prime meridian Calanus was more abundant and euphausid furcilia were less plentiful. Pleurobrachia was taken only east of 0°, but was nowhere abundant. Clione and Aglantha were found only east of the prime meridian to the north of 57°N; south of this they extended right to the coast and into the Firth of Forth.

Herring larvae, of a size range of 20-40 mm, were taken in small numbers as far east as 2°20'E on the most northerly section. South of this none was caught east of 1°E. A pleasing feature of this cruise was the success of the gallows fitted in the stern of "Scotia" to facilitate handling of the High-Speed Sampler. This allowed the equipment to be handled with ease in weather which would have been quite unworkable with the previous arrangement.

ALAN SAVILLE.

19th February, 1958.