/969 Ref. R. 23.

SUMMARY OF RESULTS OF JANUARY CRUISE BY "SCOTIA".

Two sections of the Central North Sea were worked, (a) from Longstone to Esbjerg, and (b) from Skagerrak to Aberdeen.

Trawling:

Although a small 20' otter trawl was used, catches were consistently good. Whiting was the commonest species of economic importance - most of the fish being from 21-30 cm, in length. Little evidence was found of good recruitment from the 1948 brood to the whiting stocks as was experienced towards the end of last year on the "Explorer". Haddocks were scarce except in one haul on Fisher Bank where 94 fish mostly of large size and reaching an upper limit of 66 cm. were caught. Fifty-seven of these fish belonged to the 1945 or older broods. No concentration of the 1948 brood of haddock was obtained. Prime flatfish were scarce although small common dabs and long rough dabs were plentiful. This latter fact together with the good representation of invertebrates in the catches showed that the "Scotia's trawl was sampling the bottom fauna effectively. A few cod and small codling were taken in nearly every haul, and skate, particularly Raia clavata, were well represented. Two species of fish rarely taken in Scottish research vessel catches were caught off the Longstone - an Anchovy, Engraulis enchrasicolus, and an Armoglossus laterna.

Plankton:

Stramin townets (1-metre diameter), Hensen, and Standard vertical nets were employed throughout the cruise. On the scuthern section Sagitta, Diphyes, Pleurobrachia, Schizopods, larval Clupeoids and Gobies were taken. Similar organisms, with Aglantha in addition, were recognised from hauls off the Danish Coast where several adult three-spined sticklebacks were caught at the surface at one position.

One station in the Norwegian Deep (L11/c) revealed the presence of glass eels (Anguilla), larval clupeoids and Schizcpeds at the surface, mere Clupeoids, Meganyctiphanes, Berce at 50m. and one large Pasiphaea, Aglantha etc. at 300 m. depth.

Six more glass eels were caught at L13b, and the northern section from this point westwards showed the presence of Sagitta, Physophoga and Pleurobrachia in small numbers,

Hydrography:

Temperatures showed little variation from place to place and from one depth to another. On the southern section W. of 20E longitude readings ranged from 70 to 7.50C. East of this point temperatures were slightly lower from 60 to 6.60C. In each case bottom readings were slightly higher than these at the surface. On the northern section temperatures ranged from 6.40°C. to 7.57°C., Slightly higher results being obtained as the ship proceeded westwards.

BENNET B. RAE S.S.O. in Charge

7. 2. 1949.

CIRCULATION.

Mr. Balmain Capt Bruce Dr. Jespersen Capt. Champness Mr. Rae (Hull) Dr. Wood Dr. Henderson (Leith) Mr. Brown Dr. Carruthers Mr. Graham Dr. Rae Dr. Taning Capt Sandison Dr. Lucas Mr. Ellis Mr. Lea Mr. Parrish (5 others) Mr. Sinclair Mr. Wimpenny Dr. Blegvad