

In Confidence: Not to be quoted without reference to the Laboratory

FRV "EXPLORER"

R1/4 /JR

CRUISE 6/83

REPORT

6ER83

17 June - 7 July 1983

Objectives:

1. International O-group gadoid survey in the North Sea.
2. Capture of live whiting for aquarium experiments.

Narrative

"Explorer" left Aberdeen at 0930 on 18 June and steamed east. Trawling began later that day in the Swatchway area. The ship worked in a northerly direction as far as 61° 15' N and then southwest, towards the outer Moray Firth. Strong westerly winds at the end of the first part of the cruise made it necessary to work east of the Orkneys rather than west, as had been planned, but no working time was lost and "Explorer" called at Kirkwall at 1000 on 27 June, having completed 31 trawling stations. Work was resumed on 28 June, west of the Orkneys. Strong southwesterly winds during the second part of the cruise caused some logistical problems, but all except one of the 59 stations had been completed by the time "Explorer" docked at Aberdeen at 2030 on 6 July. In addition, handlines were worked east of Fair Isle on 4/5 July and in the Moray Firth on 6 July.

Results

1. Trawling

(a) O-group gadoids

O-group cod, haddock and whiting were all relatively abundant in 1983. The highest catch rates of cod were obtained in the vicinity of Ling and Fisher Banks. Haddock were as usual most abundant in the deeper parts of the northern North Sea but relatively large catches were also taken west of the Orkney Islands. The largest catches of whiting were taken west of the Orkney Islands and east and northeast of the Shetland Islands. The catch rates of Norway pout in 1983 were well below average. Saithe and blue whiting were also rather scarce. For both of these species the largest catches were made in the Viking Bank area.

(b) Other fish

The largest component of the by-catch was Sandeels but these were not particularly abundant in 1983. O-group Sprats and herring were caught in small numbers only and the distribution of the latter was much less widespread than in 1982. An interesting feature of the cruise was the presence of unusually large numbers of Maurollicus mulleri in the area between the Fladen Ground and Bressay Bank.

(c) Macroplankton

(i) Scyphomedusae: Aurelia aurita (L), Cyanea capillata (L), Cyanea lamarckii (Peron and Lesuer) and Pelagia noctiluca (Forsk.) were the species caught. The distribution of Cyanea capillata was as usual, more extensive than that of Cyanea lamarckii and Aurelia although these latter species were more widely distributed than normal for the time of the year. All three species, particularly Aurelia in the Moray Firth, were more abundant than in the previous two years. A few Pelagia noctiluca were found in the north and west of the survey area.

(ii) Other species: 16 other macroplankton species were recorded  
Ctenophora - Pleurobrachia pileus, Beroe cucumis and Bolinopsis infundibulum.

Hydromedusae - Laodicea undulata, Cosmetira pilosella, Staurophora mertensi,  
Halopsis ocellata, Neoturris pileata, Aequorea sp. and Bougainvillia sp.

Thaliacea - Salpa fusiformis

Euphausiacea - Meganyctiphanes norvegica, Thysanoessa inermis, Thysanoessa raschii,  
Thysanoessa longicaudata and Nyctiphanes couchii.

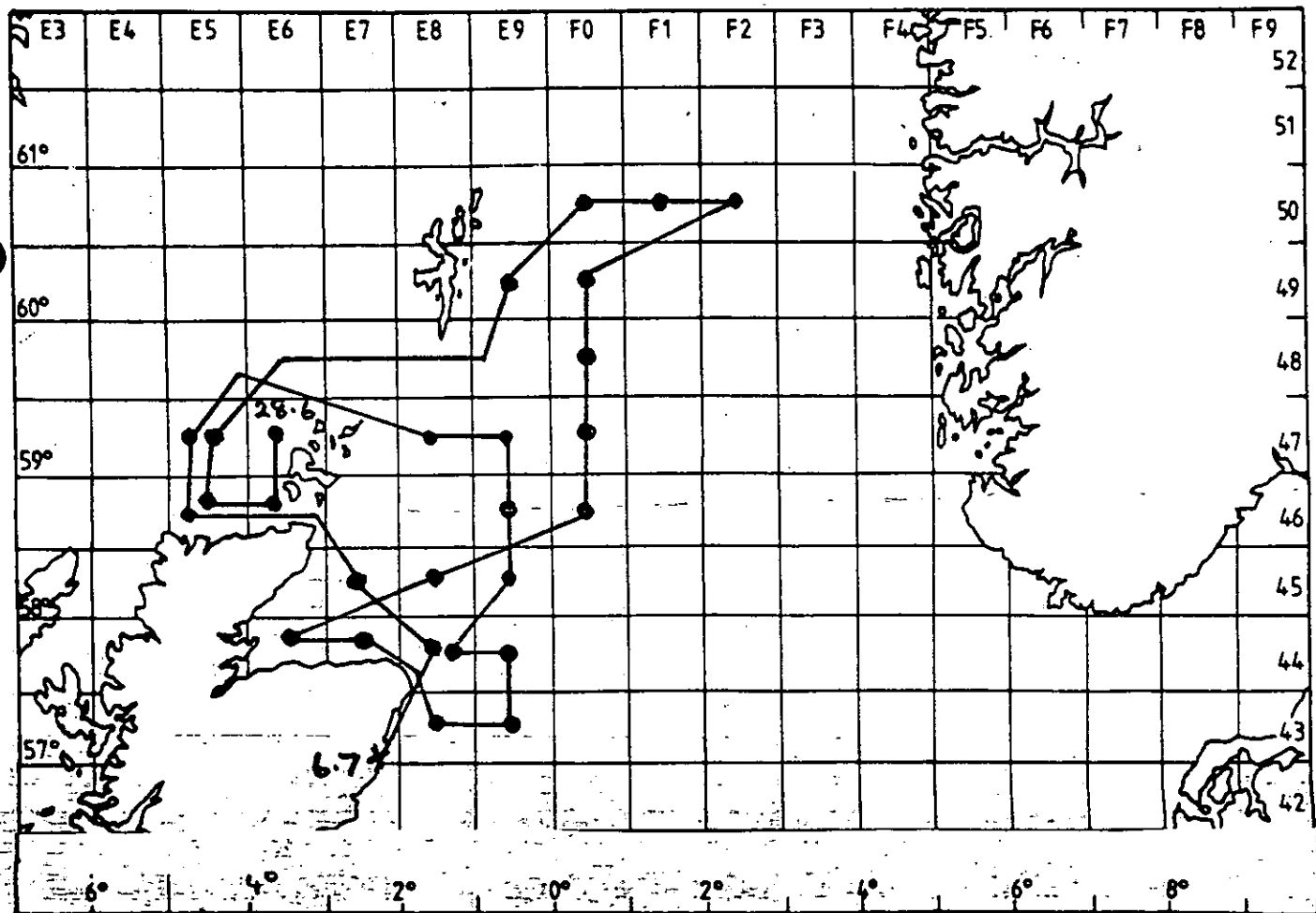
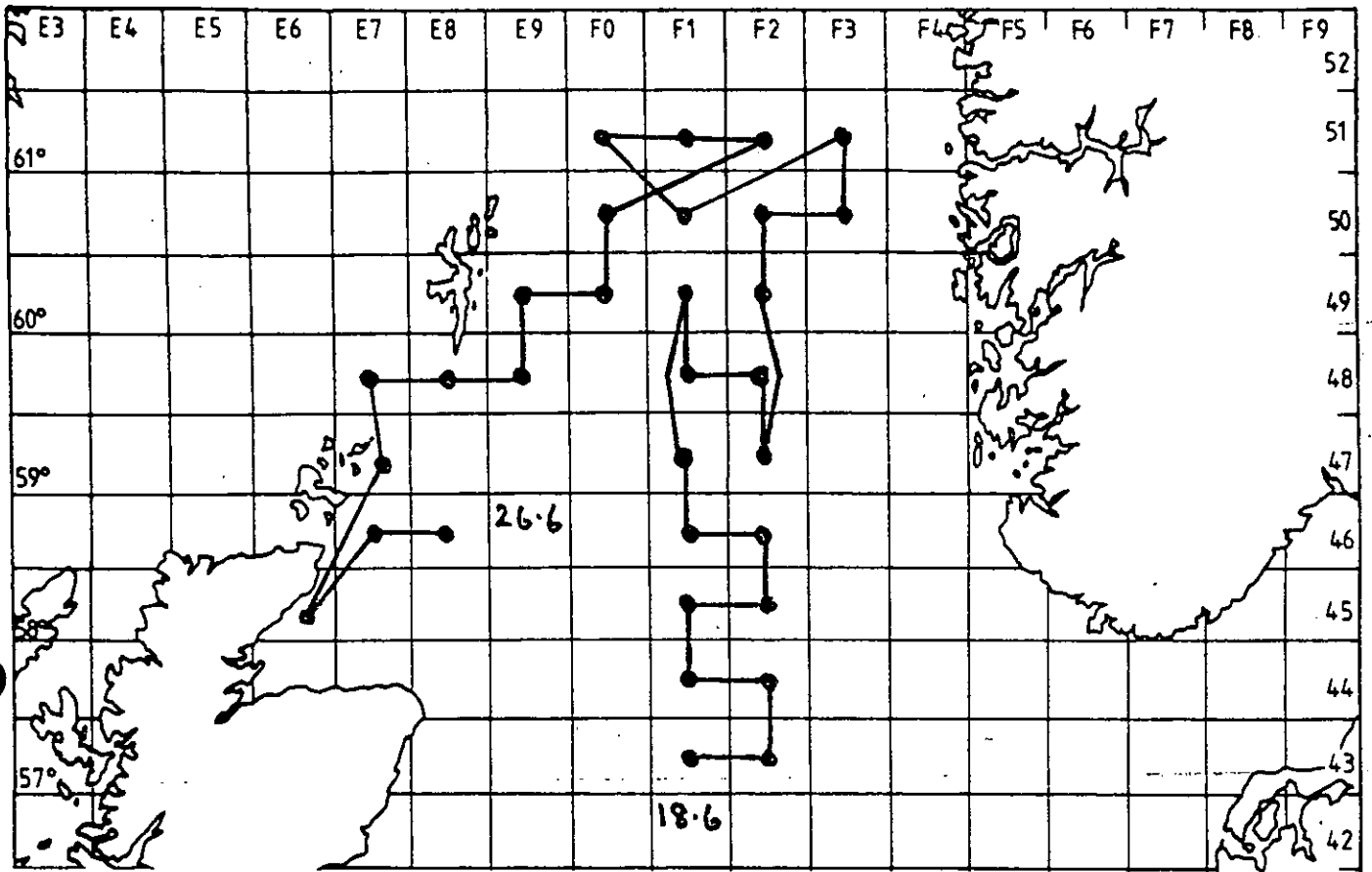
2. Lining

Handlines were worked off Fair Isle and in the Moray Firth. It proved difficult to locate suitable concentrations of whiting and only about 30 line whiting were brought back to the Laboratory.

J R G Hislop

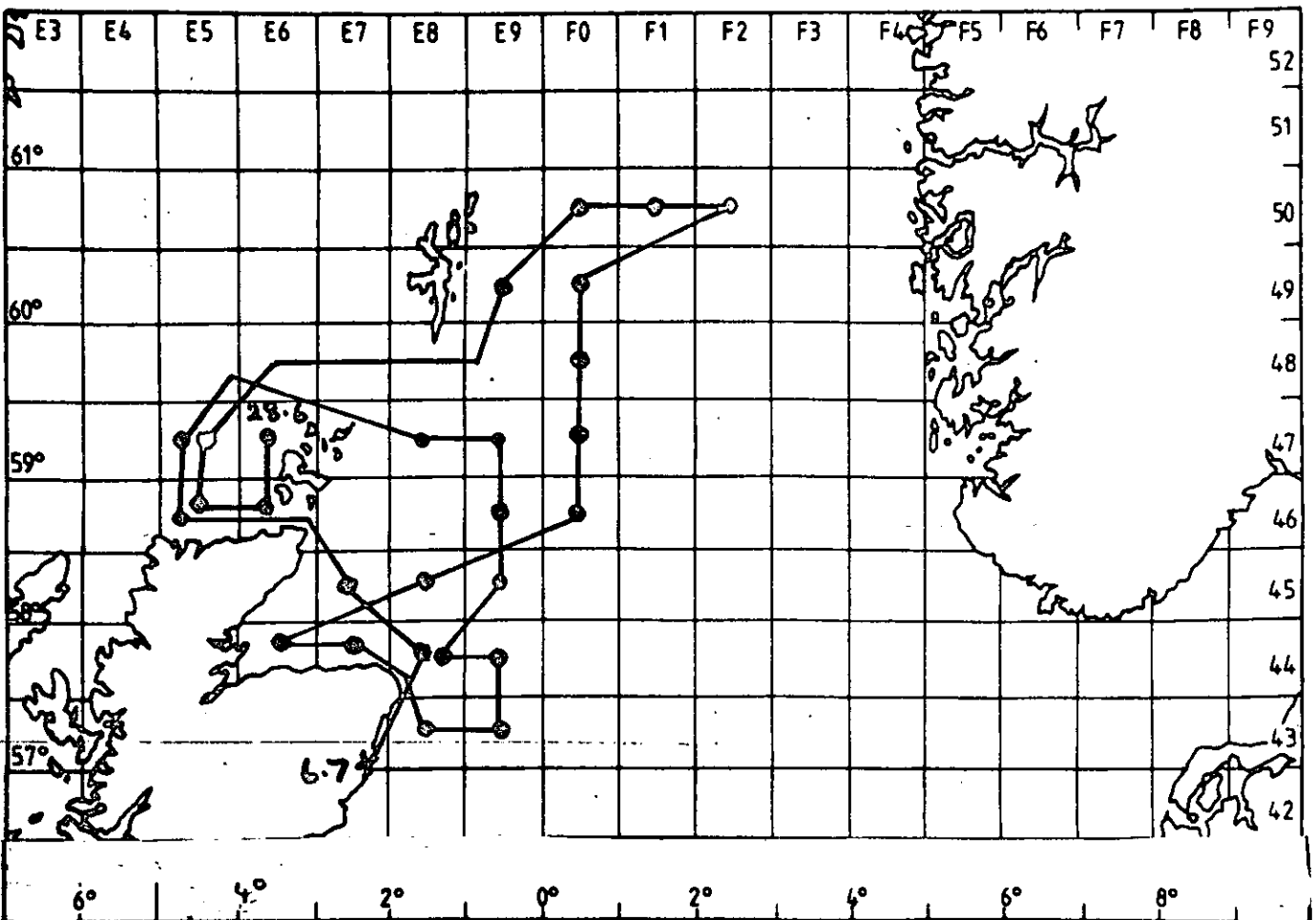
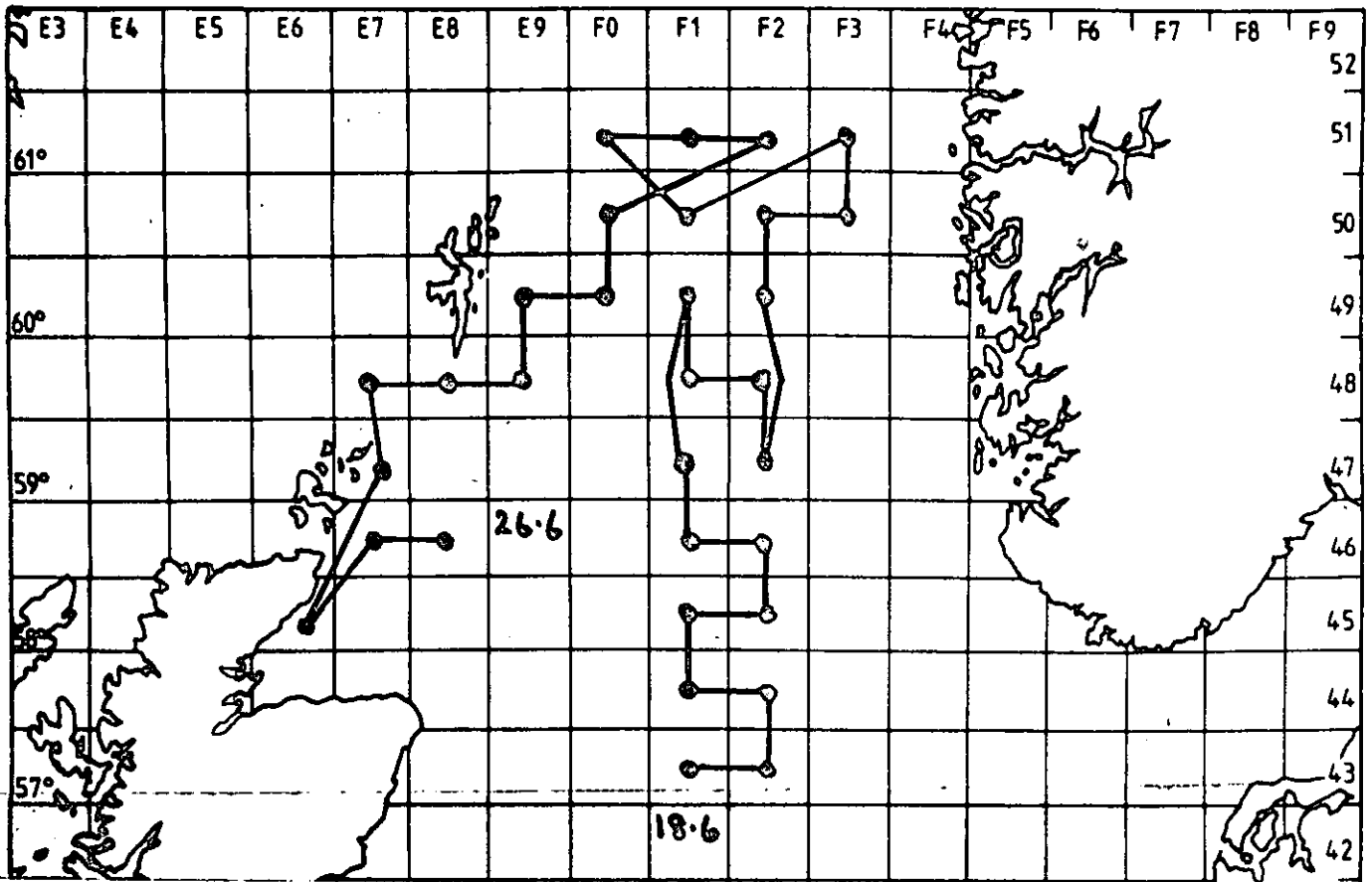
7 September 1983

Seen in draft: B A Hall



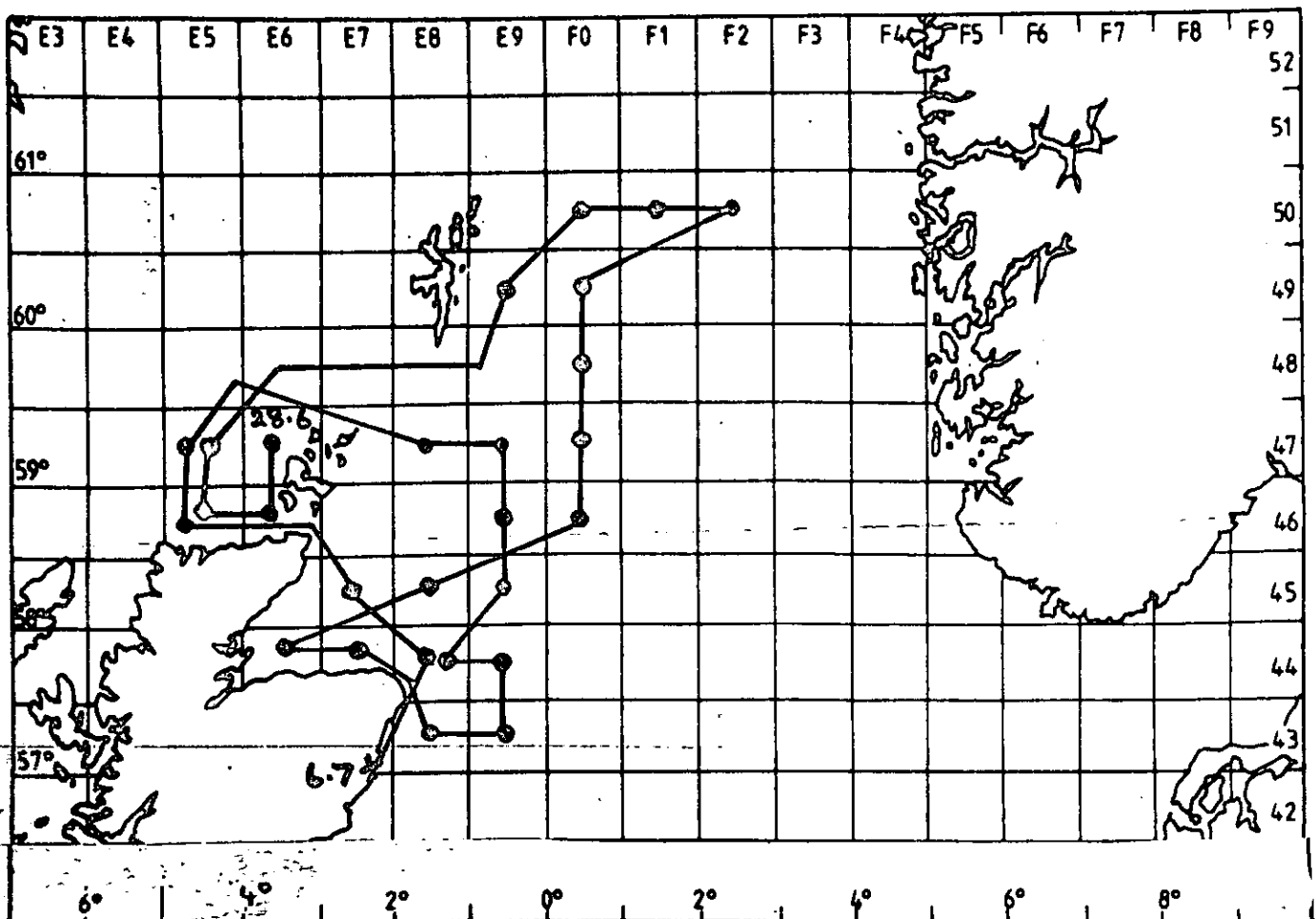
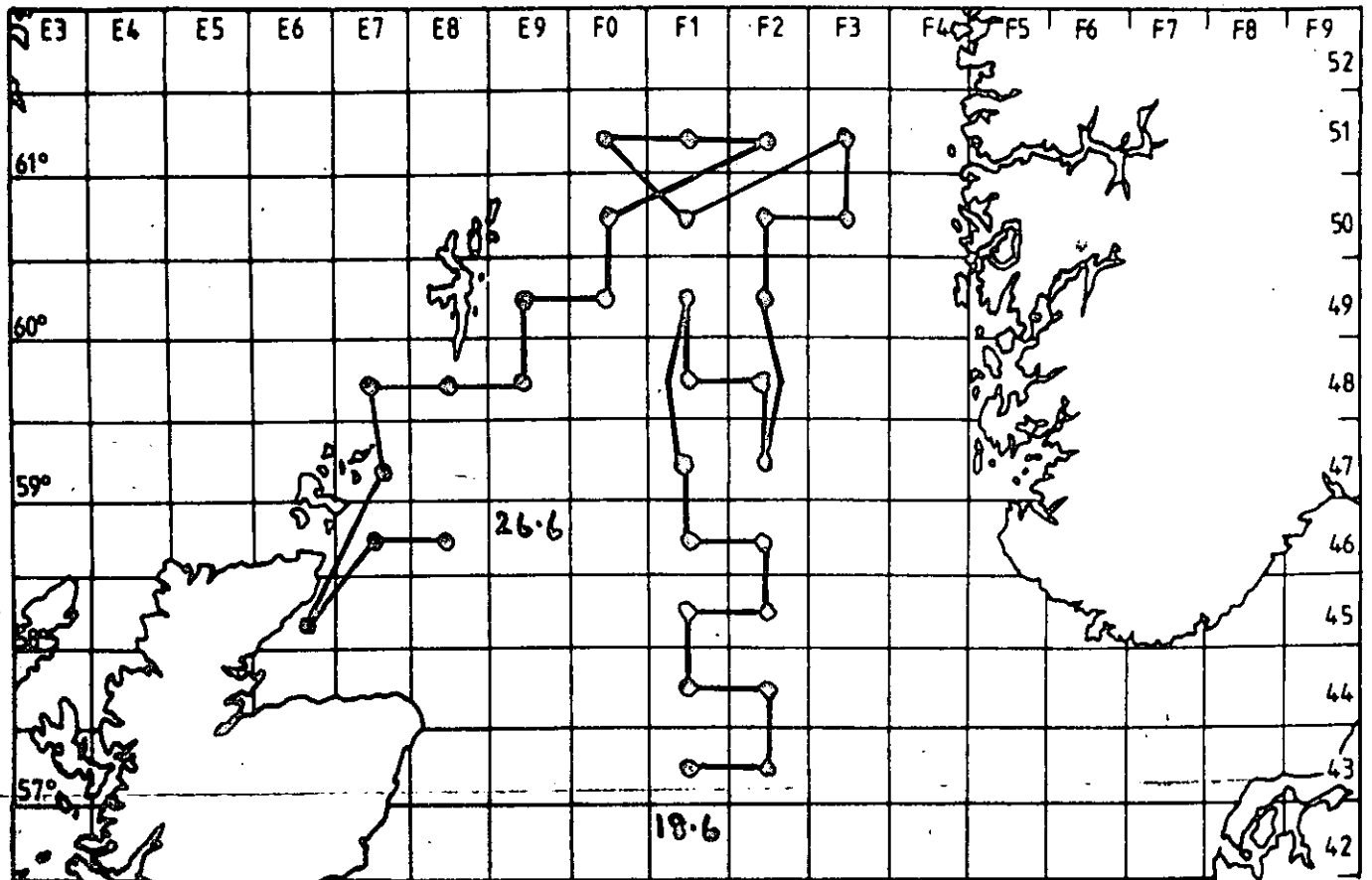
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