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the Northwest Atlantic Fisheries

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Preliminary recommendations for standard sections
in the Northwest Atlantic

by

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At the Environmental Working Group meeting in September 1974, agreement was reached by those present, with respect to some of the standard sections, while others were left in abeyance. In turn I agreed to examine the standard sections proposed at this meeting and to submit a recommendation with regard to positions of the oceanographic stations and sampling depths.

It was agreed by the Working Group that the geographic siting of some sections would be exactly those that have been occupied historically by one or more nations. For others, it was agreed that the siting should be influenced by the historical data recognizing that actual geographic siting might result in a completely new list of station positions.

While some of the needed information was already on hand to complete the task, additional had to be sought. Unfortunately, I have not yet been completely successful in this endeavor and therefore the task is not fully completed. I have felt however that a partial listing should be provided at this time so that at least some of the sections might be agreed upon by ICNAF this year. Additions could be made

subsequently when more complete information becomes available.

Where new geographic siting of sections is proposed it was difficult to determine the most appropriate station spacing. Ideally the spacing could best be determined after examination of any existing oceanographic data in the general vicinity of these sections. Unfortunately this has been possible to do only to a very limited extent. Thus, where new sections are proposed, the station spacing has not been developed on physical or biological grounds, apart from the general principle of spacing stations more closely on the continental shelf than in the deeper oceanic areas. Therefore, for these sections I would recommend only provisional adoption, until sufficient information is available (either from analysis of existing data or after new data has been acquired) to make a permanent adoption possible.

SUBAREA 1

With the possible exception of the Cape Farewell section, it was agreed by the Working Group that the Danish sections as outlined in Document 74/82 be considered for adoption. It was agreed that the Cape Farewell section should be reassessed for possible "re-alignment" so as to fall on a section line joining Seal Island and Cape Farewell. Accordingly, this has been done, and new station positions are identified for the Cape Farewell section. Res Doc. 75/96 prepared by the U.S.S.R. makes proposals for subarea 1 which with the exception of section 9A (Res. Doc. 75/96), appear to be included in this recommendation. Additionally, the U.S.S.R. document recommends extension of some sections to the Canadian coastline off Labrador and Baffin Island. It is

recommend that the Working Group consider sections 9A, 10A and 11A with the view of including one or more of them. It would appear particularly valuable to have at least one section off the Canadian Coastline north of Hudson Strait. Accordingly, I would recommend that section 11A be incorporated. The most seaward station on this section should be identical with the outboard end of the Fylla Bank section.

SUBAREA 2

The Working Group agreed that there should be 3 sections off the Labrador Coast and that one of these should be the Seal Island Line. I have not yet been able to acquire much precise information on where sections have been run off the central and northern Labrador Coast. Res. Doc. 75/96 suggests that the Cape Desolation and Frederikshab section off West Greenland should be extended to line up with the Canadian section, "Farmyard" and "Nachvak" respectively. However, straight line extensions (on Mercator projections), fall considerably north of the Canadian sections. In light of the relatively infrequent occupation of the Canadian sections, and lacking any compelling physical or biological reasons for adopting a particular site, sections have been proposed on the basis of extensions from the established Danish lines off West Greenland.

Noting the recommendations in Summ. Doc. 75/7 and Res. Doc. 75/96, the Canadian positions for the Seal Island line are proposed. Additionally, this line has been extended to join the Cape Farewell line.

SUBAREA 3

As identified in Summary Document 75/7, the following sections are recommended:

- a) Bonavista section from Cape Bonavista to 50°N, 50°W, using the Canadian station positions.
- b) The Flemish Cap Section, running along the 47°N latitude line as far east as Flemish Cap to approximately 2000 meters, using the Canadian station positions.
- c) U.S. Coast Guard line 3.
- d) U.S. Coast Guard line 4.

SUBAREA 4,5 and beyond

As identified in Summary Document 75/7, the following sections are recommended:

- a) Cabot Strait section using the Canadian station positions.
- b) Banquereau section using the Canadian station positions.
- c) Halifax section using the Canadian station positions.
- d) U.S. Coast Guard Section 5, extended shoreward to the Maine coastline.
- 3) U.S. Coast Guard Section 6.

No recommendation for sections in the George's Bank area nor in the Western Scotian Shelf is provided. although there are sections that have been occupied a number of times, it is recommended that a selection be made after the current review of the herring stocks of the Gulf of Maine - George's Bank - Southwestern Nova Scotia area is completed.

At the September 1974 Working Group meeting, it was also urged that U.S. Coast Guard Section 7 be occupied whenever possible because of the implications to the region further north.

SAMPLING DEPTHS

The standard Physical Oceanographic sampling depths are recommended as follows: 0, 10, 20, 30, 50, 75, 100, 150, 200, 250, 300, 400, 500, 600, 800, 1000, 1200, 1500, 2000, m. A sample should also be taken if possible within 5 m of the bottom.

May 23, 1975

PROPOSED STANDARD ICNAF OCEANOGRAPHIC SECTIONS

| <u>ICNAF SUBAREA</u> | <u>SECTION NAME</u> | <u>LATITUDE</u> | <u>LONGITUDE</u> |
|--------------------------|-----------------------|-----------------|------------------|
| 1 | Cape Farewell | 59°38'N | 44°09'W |
| | | 59 27 | 44 30 |
| | | 59 16 | 44 46 |
| | | 59 00 | 45 20 |
| | | 58 46 | 45 50 |
| | | 58 23 | 46 34 |
| | | 58 00 | 47 16 |
| 1 | Cape Desolation | 60°50'N | 48°45'W |
| | | 60 43 | 49 11 |
| | | 60 28 | 50 00 |
| | | 60 15 | 50 44 |
| | | 60 02 | 51 27 |
| 1 | Frederikshåb | 61°57'N | 50°00'W |
| | | 61 52 | 50 35 |
| | | 61 47 | 51 09 |
| | | 61 41 | 51 45 |
| | | 61 34 | 52 30 |
| | | 61 26 | 53 25 |
| 1 | Fylla Bank | 64°01'N | 52°19'W |
| | | 63 58 | 52 44 |
| | | 63 55 | 53 07 |
| | | 63 53 | 53 22 |
| | | 63 48 | 53 56 |
| | | 63 45 | 54 30 |
| | | 63 37 | 55 30 |
| | | 63 31 | 56 25 |
| | | 63 25 | 57 20 |
| | | 63 19 | 58 15 |
| | | 63 12 | 59 10 |
| 1 | Lille Hellefiskebanke | 65°06'N | 53°00'W |
| | | 65 06 | 53 32 |
| | | 65 06 | 53 59 |
| | | 65 06 | 54 28 |
| | | 65 06 | 54 58 |
| | | 65 06 | 55 43 |
| | | 65 06 | 56 30 |
| | | 65 06 | 57 30 |
| | | 65 06 | 58 32 |

| <u>ICNAF SUBAREA</u> | <u>SECTION NAME</u> | <u>LATITUDE</u> | <u>LONGITUDE</u> |
|--------------------------|-------------------------------|---|---|
| 1 | Holsteinsborg | 66°53'N 66 50 66 46 66 43 66 41 66 36 | 54°10'W 54 42 55 36 56 07 56 38 57 30 |
| 1 | Egedesminde | 68°00'N 68 02 68 04 68 07 68 08 | 55°00'W 55 28 56 00 56 44 57 17 |
| 2 | Ryans Bay* | 59°38'N 59 43 59 47 59 53 59 59 60 05 60 10 60 15 | 63°34'W 63 04 62 34 62 05 61 34 61 03 60 34 60 04 |
| 2 | Beachy Island* | 57°07'N 57 19 57 23 57 32 57 40 57 48 57 55 58 03 | 61°06'W 60 41 60 15 59 49 59 23 59 00 58 35 58 09 |
| 2 | Seal Island | 53°14'N 53 20 53 37 53 55 54 12 54 29 54 37 54 47 55 04 | 55°39'W 55 30 55 00 54 30 54 00 53 30 53 14 53 00 52 30 |
| 1,2 | Ryans Bay - * Frederikshåb | 59°38'N 59 43 59 47 59 53 59 59 60 05 60 10 60 15 60 30 | 63°34'W 63 04 62 34 62 05 61 34 61 03 60 34 60 04 58 45 |

| <u>ICNAF SUBAREA</u> | <u>SECTION NAME</u> | <u>LATITUDE</u> | <u>LONGITUDE</u> |
|--------------------------|--------------------------------------|-----------------|------------------|
| 1,2 | Ryans Bay - * Frederikshåb | 60°43'N | 57°24'W |
| | | 60 58 | 56 03 |
| | | 61 10 | 54 44 |
| | | 61 26 | 53 25 |
| | | 61 34 | 52 30 |
| | | 61 41 | 51 45 |
| | | 61 47 | 51 09 |
| | | 61 52 | 50 35 |
| | | 61 57 | 50 00 |
| 1,2 | Beachy Island - * Cape Desolation | 57°07'N | 61°06'W |
| | | 57 19 | 60 41 |
| | | 57 23 | 60 15 |
| | | 57 32 | 59 49 |
| | | 57 40 | 59 23 |
| | | 57 48 | 59 00 |
| | | 57 55 | 58 35 |
| | | 58 03 | 58 09 |
| | | 58 27 | 56 46 |
| | | 58 52 | 55 30 |
| | | 59 15 | 54 20 |
| | | 59 39 | 52 52 |
| | | 60 02 | 51 27 |
| | | 60 15 | 50 44 |
| | | 60 28 | 50 00 |
| 60 43 | 49 11 | | |
| 60 50 | 48 45 | | |
| 1,2 | Seal Island - Cape Farewell | 53°14'N | 55°39'W |
| | | 53 20 | 55 30 |
| | | 53 37 | 55 00 |
| | | 53 55 | 54 30 |
| | | 54 12 | 54 00 |
| | | 54 29 | 53 30 |
| | | 54 37 | 53 14 |
| | | 54 47 | 53 00 |
| | | 55 04 | 52 30 |
| | | 55 35 | 51 40 |
| | | 56 10 | 50 47 |
| | | 56 34 | 49 54 |
| | | 57 03 | 49 02 |
| | | 57 30 | 48 10 |
| | | 58 00 | 47 16 |
| 58 23 | 46 34 | | |
| 58 46 | 45 50 | | |
| 59 00 | 45 20 | | |
| 59 16 | 44 46 | | |
| 59 27 | 44 30 | | |
| 59 38 | 44 09 | | |

| <u>ICNAF SUBAREA</u> | <u>SECTION NAME</u> | <u>LATITUDE</u> | <u>LONGITUDE</u> |
|--------------------------|---------------------|-----------------|------------------|
| 3 | Bonavista | 48° 43' N | 53° 03' W |
| | | 48 46 | 52 55 |
| | | 48 55 | 52 34 |
| | | 49 09 | 52 00 |
| | | 49 22 | 51 30 |
| | | 49 35 | 51 00 |
| | | 49 42 | 50 39 |
| | | 49 47 | 50 30 |
| | | 49 55 | 50 11 |
| | | 50 00 | 50 00 |
| | | 3 | Flemish Cap |
| 47 00 | 52 02 | | |
| 47 00 | 51 00 | | |
| 47 00 | 50 00 | | |
| 47 00 | 49 00 | | |
| 47 00 | 48 00 | | |
| 47 00 | 47 30 | | |
| 47 00 | 47 12 | | |
| 47 00 | 46 30 | | |
| 47 00 | 46 00 | | |
| 47 00 | 45 00 | | |
| 47 00 | 43 54 | | |
| 47 00 | 43 28 | | |
| 3 | Coast Guard-3 | 43° 38' N | 43 44' W |
| | | 43 45 | 44 26 |
| | | 43 53 | 45 08 |
| | | 44 00 | 45 50 |
| | | 44 07 | 46 32 |
| | | 44 15 | 47 12 |
| | | 44 19 | 47 33 |
| | | 44 23 | 47 54 |
| | | 44 25 | 48 07 |
| | | 44 27 | 48 21 |
| | | 44 30 | 48 36 |
| | | 44 33 | 48 50 |
| | | 44 36 | 49 05 |
| 44 40 | 49 20 | | |
| 3 | Coast Guard-4 | 37° 20' N | 50° 20' W |
| | | 37 50 | 50 20 |
| | | 38 20 | 50 20 |
| | | 38 50 | 50 20 |
| | | 39 20 | 50 20 |
| | | 39 50 | 50 20 |
| | | 40 20 | 50 20 |
| | | 40 50 | 50 20 |
| | | 41 20 | 50 20 |

| <u>ICNAF SUBAREA</u> | <u>SECTION NAME</u> | <u>LATITUDE</u> | <u>LONGITUDE</u> |
|--------------------------|------------------------------|-----------------|------------------|
| 3 | Coast Guard-4 (Continued) | 41°50'N | 50°20'W |
| | | 42 10 | 50 20 |
| | | 42 30 | 50 20 |
| | | 42 40 | 50 20 |
| | | 42 50 | 50 20 |
| | | 43 00 | 50 20 |
| | | 43 10 | 50 20 |
| 4 | Cabot Strait | 47°35'N | 59°20'W |
| | | 47 26 | 59 33 |
| | | 47 16 | 59 47 |
| | | 47 06 | 59 59 |
| | | 46 57 | 60 13 |
| 4 | Banquereau | 45°49'N | 59°51'W |
| | | 45 29 | 59 31 |
| | | 45 09 | 59 10 |
| | | 44 49 | 58 51 |
| | | 44 28 | 58 30 |
| | | 44 08 | 58 10 |
| | | 43 47 | 57 50 |
| | | 43 24 | 57 26 |
| 4 | Halifax | 42°32'N | 61°24'W |
| | | 42 51 | 61 44 |
| | | 43 10 | 62 06 |
| | | 43 20 | 62 17 |
| | | 43 29 | 62 26 |
| | | 43 41 | 62 40 |
| | | 43 50 | 62 49 |
| | | 43 53 | 62 53 |
| | | 43 59 | 62 59 |
| | | 44 07 | 63 09 |
| | | 44 16 | 63 19 |
| 44 24 | 63 28 | | |
| 4,5 | Coast Guard-5 | 37°20'N | 62°00'W |
| | | 37 45 | 62 20 |
| | | 38 10 | 62 40 |
| | | 38 35 | 63 00 |
| | | 39 00 | 63 20 |
| | | 39 25 | 63 40 |
| | | 39 50 | 64 00 |
| | | 40 15 | 64 20 |
| | | 40 40 | 64 40 |
| | | 41 05 | 65 00 |
| | | 41 30 | 65 20 |
| | | 41 55 | 65 40 |
| | | 42 15 | 66 05 |

| <u>ICNAF SUBAREA</u> | <u>SECTION NAME</u> | <u>LATITUDE</u> | <u>LONGITUDE</u> |
|--------------------------|------------------------------|-----------------|------------------|
| 4,5 | Coast Guard-5 (Continued) | 42°25'N | 66°11'W |
| | | 42 38 | 66 22 |
| | | 42 50 | 66 33 |
| | | 43 04 | 66 47 |
| | | 43 17 | 66 56 |
| | | 43 30 | 67 07 |
| | | 43 45 | 67 19 |
| | | 43 57 | 67 30 |
| | | 44 20 | 67 44 |
| | | Outside | Coast Guard-6 |
| 32 14 | 70 35 | | |
| 32 33 | 71 05 | | |
| 32 52 | 71 35 | | |
| 33 11 | 72 05 | | |
| 33 30 | 72 35 | | |
| 33 49 | 73 05 | | |
| 34 08 | 73 35 | | |
| 34 27 | 74 05 | | |
| 34 36 | 74 20 | | |
| 34 46 | 74 35 | | |
| 34 56 | 74 50 | | |
| 35 05 | 75 05 | | |
| Outside | Coast Guard-7 | 28°35'N | 74°55'W |
| | | 28 35 | 75 30 |
| | | 28 35 | 76 05 |
| | | 28 35 | 76 40 |
| | | 28 35 | 77 15 |
| | | 28 35 | 77 50 |
| | | 28 35 | 78 25 |
| | | 28 35 | 79 00 |
| | | 28 35 | 79 18 |
| | | 28 35 | 79 35 |
| | | 28 35 | 79 53 |
| 28 35 | 80 10 | | |

* PROVISIONALLY RECOMMENDED SECTIONS

