Northwest Atlantic Fisheries Organization

Serial No. N1361 NAFO SCS Doc. 87/19

SCIENTIFIC COUNCIL MEETING - JUNE 1987

Synopsis of Scientific Council Requirements for Fishery Statistics

by

NAFO Secretariat

RESUMÉ

Article VI(1) of the NAFO Convention outlines the functions of the Scientific Council, which include the provision of scientific advice to coastal states and to the Fisheries Commission. Article VI(3) then states that "the Contracting Parties shall furnish to the Scientific Council any available statistical and scientific information requested by the Council for the purposes of this Article.

Article VI(3) of the earlier (1949) ICNAF Convention contained essentially the same wording as Article VI(3) of the NAFO Convention. At its Meeting in 1960, the ICNAF Standing Committee on Research and Statistics (STACRES) recommended "that ICNAF use the definitions, classifications and prescribed forms that were recommended by ESTANA" (FAO/ICES/ICNAF Statistics Meeting, Edinburgh, Scotland, September 1959). Over the years, these forms (STANA forms) were further developed in accordance with recommendations by STACRES and they became known as STATLANT 21A and 21B forms in 1971. The STATLANT system of reporting was taken over by NAFO upon its formation in 1979 as being the basic forms for the reporting of catch and effort statistics in the Convention Area.

The STATLANT 21A form is for the early reporting of provisional nominal catches by species and NAFO division (or subdivision) for the calendar year, with a submission deadline of 15 April for the preceding year's data.

The STATLANT 21B form is for the reporting of final statistics of nominal catches and the corresponding fishing effort. The data should cover the total fishing activity and should provide a breakdown by species, month, fishing gear, vessel type and size, main species sought, and NAFO divisions (or subdivision). The categories to be used for each of these elements are indicated in the notes for completion of the forms, which should be submitted to the NAFO Secretariat by 30 June for the preceding year's data.

The Scientific Council emphasizes that the timely and complete submission of STATLANT 21A and 21B forms by the statistical services of Contracting Parties constitutes an essential element in the assessment of the fisheries of the Convention Area.

Introduction

At its meeting in June 1986 (NAFO, 1986), the Scientific Council recognized the need of national authorities for complete and precise knowledge of their obligations under the NAFO Convention (NAFO, 1980) and requested the Secretariat to prepare a document, for consideration at the June 1987 Meeting, on the catch and fishing effort statistics to be submitted by Contracting Parties in accordance with Article VI(3) of the Convention, which states that "the Contracting Parties shall funish to the Scientific Council any available statisitcal and scientific information requested by the Council for the purpose of this Article. The full text of Article VI of the NAFO Convention is at Attachment 1.

Further elaboration of statistical matters is given in Rule 5 of the Scientific Council's Rules of Procedure (NAFO, MS 1986), which specifies the names of its standing committees, one of which is the Standing Committee on Research Coordination (STACREC). The various functions of that Committee include two which are related to the acquisition of fishery statistics: (i) to develop and recommend to the Scientific Council policies and procedures for the collection, compilation and dissemination of statistical and sampling information on the living resources and fisheries of the Convention Area and environmental information from oceanographic investigations; (ii) to coordinate the compilation and maintenance of statistics and records and their dissemination, including liaison with coastal states in the Convention Area.

The above-noted citations emphasize the importance of fishery statistics to the work of the Scientific Council and provide the basis for the maintenance of a comprehensive system by the NAFO Secretariat for the acquisition, compilation and dissemination of fishery statistics in as much detail as is required by the Scientific Council.

Evolution of the Statistical System

At the very first Annual Meeting of ICNAF in April 1951, the Standing Committee on Research and Statistics (STACRES) recommended some minimal requirements for the collection and reporting of basic fishery statistics, involving both the quantities of different species landed and the corresponding fishing effort in terms of number of days absent from port and number of days actually spent fishing (ICNAF, 1951). Further recommendations involved the establishment of liaison with statisitcal officers in all countries fishing in the Convention Area and with FAO and ICES to determine the adequacy of the statistics and the problems involved in improving them.

The present system of acquiring fishery statistics rapidly evolved from these first meager recommendations, following the breakdown of the Convention Area and its subareas into divisions and subdivisions, the development of fishing effort measures for the various gears used in the offshore fisheries (vessels larger than 50 GRT), the classification of fishing vessels into tonnage classes, the development of a comprehensive list of species which are caught commercially in the Northwest Atlantic, and the requirements for reporting monthly catch and effort statistics. A very significant development during the 1950's was the collection of data for facilitate the conversion of landed weights to nominal catches (i.e. whole weight equivalent of the landings).

The need for standardization of fisheries terminology and procedures was recognized in the 1950's, and FAO convened an inter-governmental meeting of experts on fishery statistics in the North Atlantic (FAO, 1962). That conference led to the formation of the CWP (Continuing Working Party on Fishery Statistics in the North Atlantic Area) which held its first meeting in May 1960 and its second meeting in June 1961. Founding inter-governmental organizations were FAO, ICES and ICNAF. On the basis of the statistical requirements of these organizations, standardized statistical forms (called STANA forms) were developed for collecting fishery statistics, and the STANA 1W form was adopted by ICNAF in 1963 (see Attachment 2), following which use of the various ICNAF forms were discontinued.

When participation in the CWP (renamed Coordinating Working Party on Atlantic Fishery Statistics) was expanded to include organizations responsible for fishery statistics in the Central and South Atlantic regions in 1969 (FAO, 1969), the statistical forms became known as STATLANT forms, which for ICNAF were called STATLANT 21 forms because the Northwest Atlantic region was designated as FAO Major Fishing Area 21. For comparison with the earlier STANA 1W form, a reduced verion of a STATLANT 21B form is at Attachment 3 (actual size of form is 42 cm high and 36.5 cm wide). Apart from the preprinted species names and codes in the left most columns of the current 21B form (in use since about 1971), its general layout is essentially the same as the old STANA 1W form (Attachment 2), which came into use for the reporting of detailed catch and effort data nearly 25 years ago.

Requirements for Statistical Reporting

The Scientific Council has continued to support the procedures for acquiring Northwest Atlantic fishery statistics through the STATLANT System which was inherited from ICNAF in 1979. The system is coordinated by the Senior Fishery Statistican, FAO Fisheries Department, who acts as Secretary of the CWP and dispatches STATLANT forms for NAFO and other CWP member agencies (ICES, ICSEAF, ICCAF, etc.). The NAFO forms are dispatched early in the year to the statistical offices of all countries known to have fished in the Northwest Atlantic during the preceding calendar year. The basic NAFO forms, known as STATLANT 21A and STATLANT 21B, are printed in English, but detailed guidelines for completing the forms are distributed in English, French or Spanish, depending on their distination. Notes on the completion of STATLANT 21A and 21B forms are given in Attachments 4 and 5 respectively.

1. STATLANT 21A (Annual Catch Summary)

This form, or similar format, was designed for use in the reporting of provisional nominal catches (i.e. live weight equivalent of landings, in metric tons) by species and NAFO division (or subdivision, where relevant) for the calendar year. The deadline for the submission of these provisional reports by national statistical officers is 15 April of each year for the preceding year's data. These data represent the initial inventory of nominal catches for use by the Standing Committee on Fishery Science (STACFIS) for stock assessments at the June Meeting of the Scientific Council and to allow early evaluation of fishery trends relative to the catches of individual species and groups of species on an annual basis.

The early deadline of 15 April is intended to provide sufficient time for the STATLANT 21A reports to reach the Secretariat before the June Meeting of the Scientific Council so that a reasonably complete inventory of the preceding year's catches would be available at the start of the meeting. Although the preparation of this inventory as a summary document for the June Meeting was consistently achieved during the 1970's of the ICNAF regime, based on the timely submission of STATLANT 21A reports, it was not achieved during the early years of the NAFO regime due to a rapid deterioration in the timely submission of reports, despite the fact that there was no change in the reporting requirements or the submission deadline. As indicated in Table 1, many STATLANT 21A reports were not available at the end of May and some were not received for several months afterwards in 1983 and 1984. There has been considerable improvement in the acquisition of

data for 1985 and 1986, with data for most countries being available before the end of the meeting (if not before its start).

Table 1. Receipt dates of STATLANT 21A reports relevant to data for 1983-86.

Country or Component	STATLANT 21A (Deadline, 15 April)			
	1983	1984	1985	1986
Bulgaria	(No fishing)	(No fishing)	(No fishing)	(No fishing)
Canada-M	03 Apr 84	04 Apr 85	09 Apr 86	16 Apr 87
Canada-N	17 Apr 84	03 Jun 85*	28 May 86	15 May 87
Canada-Q	30 Apr 84	24 May 85	16 May 86	27 Apr 87
Cuba	06 Jun 84*	17 May 85	10 Apr 86	05 Jun 87*
+Denmark	12 Apr 84	17 Apr 85	16 Apr 86	26 May 87
+France	06 Jun 84*	25 Nov 85*	02 Jun 86*	10 Jun 87*
+Germany, F. R.	14 May 84	15 Apr 85	21 Apr 86	03 Jun 87*
+Italy	18 Feb 85*	X *	X *	X *
+Portugal	22 May 84	07 Jun 85*	07 Jun 86*	03 Jun 87*
+Spain	01 Jun 84*	24 Jun 85*	05 May 86	02 Jun 87*
+United Kingdom	08 Mar 85*	24 Jun 85*	(No fishing)	(No fishing)
Faroe Islands	07 Jun 84*	20 Jun 85*	05 Mar 87*	05 Mar 87
German Dem. Rep.	19 Apr 84	27 Mar 85	04 Apr 86	04 May 87
Greenland	01 Jun 84*	13 Apr 85	04 Jun 86*	29 Apr 87
Iceland	(No fishing)	(No fishing)	(No fishing)	(No fishing)
Japan	18 May 84	23 May 85	11 Jun 86*	14 May 87
Norway	08 Jun 84*	07 Jul 85*	14 Apr 86	10 Mar 87
Poland	27 Jul 84*	13 Aug 85*	05 May 86	29 May 87
Romania	(No fishing)	(No fishing)	(No fishing)	(No fishing)
USSR	30 Apr 84	22 May 85	28 Apr 86	06 May 87
USA	06 Jun 84*	20 Jun 85*	28 May 86	01 Jun 87
Total reports	22	22	22	22
Rec'd by 31 May	12	12	16	16
Time after 31 May	9 mo.	6 mo.	11 days	10 days

* Report not available by 31 May despite the 15 April deadline.

2. STATLANT 21B (Detailed Catch and Effort)

This form, or similar format, was designed for use in the reporting of final statistics of nominal catches (i.e. live weight equivalent of the landings, in metric tons) and corresponding fishing effort, in accordance with the degree of detail given in the headings of the 21B form and the Notes for the completion of the form (see Attachment 5). The deadline for the submission of these final STATLANT 21B reports by statistical offices is 30 June of each year for the preceding year's data. These statistics represent the final catch and effort data which are entered into the Secretariat's computerized database and subsequently used to generate the various tables of NAFO Statistical Bulletin as well as for stock assessments and other purposes. The Statistical Bulletin was published annually under the aegis of ICNAF for 28 years (1951-78) and of NAFO since 1979 (Vol. 29).

The fishery statistics to be recorded on STATLANT 21B forms (or in STATLANT 21B format) are two or three levels of fishing effort and nominal catches of individual species items by calendar month for each type of fishing gear, vessel type (side or stern for trawlers), tonnage category, main species, and NAFO division (and subdivision, where relevant). Thus, it is clearly evident that the number of sheets (or blocks of statistical data, in the case of computer printout or magnetic tape) to be reported depends on the permutation of variables pertinent to vessel type and size, gear, main species, division fished, etc.

To facilitate the standardized reporting of fishery statistics to the various international organizations (ICES, ICSEAF, NAFO, FAO, etc.), standard classifications of the various statistical parameters (definitions, abbreviations and identifiers) have bene developed by the CWP and adopted by these international orgranizations. In addition to being listed in the notes for completing the STATLANT forms, the lists of standard definitions and abbreviations, which are relevant to the Northwest Atlantic region, are updated and published annually in NAFO Statistical Bulletin (pages 9-16). These lists include: (a) common and scientific 3-alpha identifiers; (b) definitons and abbreviations for about 40 gear categories; (c) fishing effort measures and their definitions for different gear categories; (d) tonnage classes and their codes; and (e) standard 3-alpha abbreviations for countries. All of these statistical classifications were in regular use during the last 10-15 years of the ICNAF regime and have been used by NAFO since 1979.

During the ICNAF regime in the 1970's, the 30 June deadline for the submission of STATLANT 21B

catch and effort data usually resulted in the acquisition and compilation of all data in sufficient time to publish the Statistical Bulletin within 6-8 months after the deadline (i.e. data for 1975 were published in January 1977). However, during the NAFO regime, the Secretariat have found it increasingly difficult to acquire and publish the fishery statistics within a reasonable time period after the deadline, the delay being usually 15-18 months (i.e. data for 1984 should ahve been published by January 1986 but were not published until December 1986). The recent delays are usually due to the non-receipt of STATLANT 21B statistical reports from two or three countries, whose statistical officers do not respond to periodic reminders by letter and telex for as long as 12 months after the deadline.

3. Fishery Statistics from Cooperative Arrangements

Following the extension of jurisdiction over fishery resources to 200 miles by coastal states in 1977, the development of cooperative arrangements between coastal states and several countries resulted in confusion regarding responsibility for reporting fishery statistics accruing from such arrangements. Problems associated by double-counting and undercounting of catches were anticipated and discussed at the 9th Session of the CWP in August 1977 (FAO, 1977) when it was agreed that in all instances the flag of the (fishing) vessel should be the determining feature that establishes the country to whose national production the catches and landings should be allocated, regardless of fishing area or point of landing, and that this policy should only be overriden when it is obvious that the wording of charting and joint operation contracts indicate otherwise. Further discussion of this matter at subsequent sessions of the CWP has led to some clarification of the nationality issues. In the report of the 13th Session of the CWP at FAO, Rome, Italy, on 11-18 February (FAO, 1987), the principle was defined as follows:

"The flag of the vessel performing the essential part of the operation catching the fish should be considered the paramount indication of the nationality assigned to the catch data, and that indication should be overriden only when one of the following arrangements between the foreign flag vessel and the host country exists: (a) the vessel is chartered by the host country to augment its fishing fleet; and (b) the vessel fishes for the country by joint-venture contract or similar agreement (as opposed to the ad hoc practice of a vessel selling catches to a foreign vessel or landing catches in a foreign port) and the operation of such a vessel is an integral part of the economy of the host country.

"When governments negotiate joint venture or other contracts in which vessels of one country land their catches to vessels of another country, and the above criteria are applicable, the assignment of nationality to such catches and landings data should be specified in the agreements."

The above-noted principle concerning the nationality of catches is an important feature of the STATLANT System, in that countries whose vessels engage in joint-venture operations with a coastal state should report the fishery statistics from such ventures on separate STATLANT 21A and 21B forms, which are clearly labelled "Charter" or "Joint venture" and the name of the coastal state involved. It should also be clearly noted that these "joint-venture" data are not included with official national statistics on other STATLANT 21A and 21B forms. Due to inadequate labelling of the completed STATLANT forms, the Secretariat has sometimes experienced considerable delay in obtaining clarification from national statistical offices.

References

FAO. 1962. Requirements and improvements of fishery statistics in the North Atlantic Region (based on documents presented at the meeting of experts in Edinburgh, Scotland, 22-29 September 1959). FAO Fish. Rep., No. 3.

1969. Report of the sixth session of the Coordinating Working Party on Atlantic Fishery Statistics, Copenhagen, Denmark, 3-7 February 1969. FAO Fish. Rep., No. 70.

1977. Report of the ninth session of the Coordinating Working Party on Atlantic Fishery Statistics, Dartmouth, Nova Scotia, Canada 17-23 August 1977. FAO Fish. Rep., No. 197.

1987. Report of the thirteenth session of the Coordinating Working Party on Atlantic Fishery Statistics, Rome, Italy, 11-18 February 1987.

ICNAF. 1951. Report by the Chairman concerning the first meeting. ICNAF Annu. Rep., No. 1.

NAFO. 1980. Origin and development of NAFO. App. I. Convention on future multilateral cooperation in the Northwest Atlantic Fisheries. NAFO Annu. Rep., Vol. 1.

1986. Report of Scientific Council, June 1986 meeting. NAFO Sci. Coun. Rep., 1986, p. 30 and 97.

MS 1986. Rules of procedure for the Scientific Council. NAFO SCS Doc., No. 28, Serial No. N1266.

ATTACHMENT 1

ARTICLE VI OF THE NAFO CONVENTION

1. The functions of the Scientific Council shall be:

a) to provide a forum for consultation and cooperation among the Contracting Parties with respect to the study, appraisal and exchange of scientific information and views relating to the fisheries of the Convention Area, including environmental and ecological factors affecting these fisheries, and to encourage and promote cooperation among the Contracting Parties in scientific research designed to fill gaps in knowledge pertaining to these matters;

b) to compile and maintain statistics and records and to publish or disseminate reports, information and materials pertaining to the fisheries of the Convention Area, including environmental and ecological factors affecting these fisheries;

c) to provide scientific advice to coastal States, where requested to do so pursuant to Article VII; and

d) to provide scientific advice to the Fisheries Commission, pursuant to Article VIII or on its own initiative as required for the purposes of the Commission.

2. The functions of the Scientific Council may, where appropriate, be carried out in cooperation with other public or private organizations having related objectives.

3. The Contracting Parties shall furnish to the Scientific Council any available statistical and scientific information requested by the Council for the purpose of this Article.

ATTACHMENT 2

(a) FISHING GEAR (METHOD)	(b)	(c) TONNAGE CLASS	(d) MAIN SPECIES SOUGHT	(e) ICNAF DIVISION	(f) COUNTRY	(g) YEAR	(h) SHEET No. ____ OF ____ SHEETS	(i)

STANA 1W

FAO / ICNAF FORM FOR REPORTING STATISTICS ON FISHING EFFORTS AND NOMINAL CATCHES

A LINE	B CODE	C EFFORT AND SPECIES	D JANUARY	E FEBRUARY	F MARCH	G APRIL	H MAY	I JUNE	J JULY	K AUGUST	L SEPTEMBER	M OCTOBER	N NOVEMBER	O DECEMBER	P NOT KNOWN	Q TOTAL	(A) LINE
		FISHING EFFORTS															
1	FISHING TIME	No. of hours or 1000 hooks fished															1
2		No. of hauls, drags or sets made															2
3		No. of days fished															3
4		No. of days on grounds															4
5		No. of days absent from port															5
6		No. of trips made															6
7	FISHING POWER	Average gross tonnage															7
8																	8
9																	9
10		No. of fishing units operating															10
11		Percent estimated															11
		NOMINAL CATCHES *(IN METRIC TONS)*															
12																	12
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70																	70

For species order, grouping and listing, see Appendix VI

APPENDIX VII

DRAFT FORM

STANA 1W

FI 47-2 1162 (A)

ATTACHMENT 3

NAFO / CWP

FORM FOR REPORTING STATISTICS ON NOMINAL CATCHES IN METRIC TONS
FORMULAIRE POUR LA DÉCLARATION DES STATISTIQUES DES CAPTURES NOMINALES EN TONNES METRIQUES
FORMULARIO PARA INFORMACION ESTADISTICA DE CAPTURAS NOMINALES EN TONELADAS METRICAS

STATLANT 21 A

(a) YEAR / ANNÉE / AÑO	(b) COUNTRY / PAYS / PAIS	(c)	(d)	(e)	(f)	(g) MAJOR FISHING AREA / PRINCIPALE ZONE DE PECHE / AREA PRINCIPAL DE PESCA	(h)	(i)	(j)	(k)
198 5		All commercial, industrial and subsistence fisheries. Toute la pêche commerciale, industrielle et de subsistance. Toda la pesca comercial, industrial y de subsistencia				21				No. 1 Of / De 4 SHEETS / FEUILLES / HOJAS

A Line/Ligne Línea	B 3-alpha identifiers	C SPECIES ITEMS. Use blank lines to record species not listed below	D NAFO Codes	E TOTAL AREA 21	F	G 01 Division 0A	H 02 Division 0B	I 09 Division 0(NK)	J Subareas 0 TOTAL	K 11 Division 1A	L 12 Division 1B	M 13 Division 1C	N 14 Division 1D	O 15 Division 1E	P 16 Division 1F	Q 19 Division 1(NK)	R Subareas 1 TOTAL	(A) Line/Ligne Línea
1		GRAND TOTAL																1
2																		2
3	COD	Atlantic cod	101															3
4	HAD	Haddock	102															4
5	RED	Atlantic redfishes	103															5
6	HKS	Silver hake	104															6
7	HKR	Red hake	105															7
8	POK	Pollock (= Saithe)	106															8
9	PLA	American plaice	112															9
10	WIT	Witch flounder	114															10
11	YEL	Yellowtail flounder	116															11
12	GHL	Greenland halibut	118															12
13	HAL	Atlantic halibut	120															13
14	FLW	Winter flounder	122															14
15	FLS	Summer flounder	124															15
16	FLX	Flatfishes, n.e.i.	129															16
17	ANG	American angler (= goosefish)	132															17
18	SRA	Atlantic searobins	136															18
19	USK	Tusk (= Cusk)	144															19
20	GRC	Greenland cod	148															20
21	OPT	Ocean pout	164															21
22	RNG	Roundnose grenadier	168															22
23	HKW	White hake	186															23
24	CAT	Wolffishes (= Catfishes)	188															24
25	CAA	Atlantic wolffish	189															25
26	CAS	Spotted wolffish	190															26
27																		27
28																		28
29																		29
30																		30
31																		31
32	GRO	Groundfishes, n.e.i.	199															32
33																		33
34	HER	Atlantic herring	202															34
35	MAC	Atlantic mackerel	204															35
36	BUT	Atlantic butterfish	212															36
37	MHA	Atlantic menhaden	216															37
38	SAU	Atlantic saury	220															38
39	BLU	Bluefish	228															39
40	BFT	Northern bluefin tuna	280															40
41																		41
42																		42
43																		43
44																		44
45																		45
46	PEL	Pelagic fishes, n.e.i.	293															46
47																		47
48	ALE	Alewife	302															48
49	ARG	Argentines	312															49
50	SAL	Atlantic salmon	318															50
51	CAP	Capelin	340															51
52	DGS	Spiny (= Picked) dogfish	462															52
53	DGX	Dogfish sharks n.e.i.	469															53
54	POR	Porbeagle	482															54
55	SHX	Large sharks, n.e.i.	489															55
56	SKA	Skates, n.e.i.	479															56
57																		57
58																		58
59																		59
60																		60
61																		61
62	FIN	Finfishes, n.e.i.	499															62
63																		63
64	SQL	Long-finned squid (Loligo)	502															64
65	SQI	Short-finned squid (Illex)	504															65
66	SQU	Squids, n.e.i.	509															66
67	PRA	Northern prawn	632															67
68	PAN	Pink (= Pandalid) shrimps	639															68
69																		69
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This form consists of four sheets with columns for the various divisions (and subdivisions) of Subareas 0, 1, 2, 3, 4, 5 and 6.

ATTACHMENT 4

NOTES ON THE COMPLETION OF FORM STATLANT 21A FOR THE 1985 CALENDAR YEAR (NORTHWEST ATLANTIC)

Prepared by

The Secretary
Co-ordinating Working Party on Atlantic Fishery Statistics (CWP)

and the

Northwest Atlantic Fisheries Organization (NAFO)

Food and Agriculture Organization of the United Nations
ROME, January 1986

W/R 0560

NOTES ON THE COMPLETION OF FORM STATLANT 21A

FORM FOR REPORTING STATISTICS ON NOMINAL CATCHES

IN THE NORTHWEST ATLANTIC (FAO MAJOR FISHING AREA 21)

Copies completed with calendar year data for 1985

should be submitted to reach

NAFO and FAO

before

****
* *
* 15 April 1986 *
* *
****

1. PURPOSE OF THIS FORM

1.1 This form is to be used by national offices for reporting each year to NAFO (with copy to FAO) the annual nominal catch data on all commercial, industrial and subsistence fishing activities and operations in the Northwest Atlantic (FAO Major Fishing Area 21 - see Appendix I).

1.2 The particulars of the data to be reported for the calendar year 1985 are as follows:

- for the Northwest Atlantic (FAO Major Fishing Area 21) as a whole, and
- for each NAFO division and subdivision
  - the annual NOMINAL CATCHES (LIVE weight equivalent of the landings) for each aquatic animal or plant species item (see Section 5 and Appendix II).

1.3 Countries using automatic data processing systems, which can provide computer printouts reflecting a format of data presentation similar to that of the form, could, instead of completing the form, provide copies of such computer printouts.

2. GENERAL REMARKS

2.1 Description of form STATLANT 21A

This form is designed for the reporting of nominal catch statistics by species items on a calendar year basis for Major Fishing Area 21 as a whole and for each NAFO division or subdivision.

A sample STATLANT 21A form, consisting of four sheets, showing detailed column headings (subareas, divisions or subdivisions) and stub entries (species items) is attached (see Appendix III).

A supply of blank sheets is provided; this should be sufficient for both drafting purposes and for submission of statistics.

2.2 Retention of copies in national office

One set of completed forms (or copies) should be retained in the national reporting office (i) for reference purposes to facilitate subsequent correspondence about the submitted data, and (ii) to facilitate the re-submission of the material in case the original submission gets lost en route to its destination.

2.3 Submission of completed forms to NAFO and FAO

After completion, one set of the original forms, or a computer printout, is to be despatched by AIRMAIL, preferably registered, or by diplomatic pouch, to reach the following before 15 April 1986:

(a) The Assistant Executive Secretary
Northwest Atlantic Fisheries
Organization (NAFO)
P.O. Box 638
DARTMOUTH, N.S. B2Y 3Y9
Canada

(b) The Chief
Fishery Information, Data and Statistics Service
Fisheries Department, FAO
00100 ROME
Italy

2.4 Despatch of copies to EUROSTAT

Member States of the European Communities (EC) are also requested to forward a set of the completed forms (copies) or a magnetic tape accompanied by a computer printout to:

Directorate for Agricultural, Forestry, Fishery
and Energy Statistics
EUROSTAT
B.P. 1907
LUXEMBOURG
(Grand Duchy)

3. DEFINITION OF COVERAGE

3.1 General coverage

As indicated in boxes (c), (d) and (e) of the form the nominal-catch (LIVE weight equivalent of the landings) for the calendar year 1985 should cover the quantitative results from all kinds of commercial, industrial and subsistence fishing operations and activities undertaken by all types and classes of national fishing units in the waters of the Northwest Atlantic (FAO Major Fishing Area 21).

3.2 Examples of sectors that should NOT be overlooked in the data coverage

By means of footnotes to the form or in a separate memorandum, indicate if any particular "branch" or "sector" of the national fishing industry cannot be covered by the catch data provided, and, whenever possible, provide estimates or give some indication of the magnitudes of the quantities not included in the body of the form.

Below are listed a few examples of "branches" or "sectors" of the national fishing industry which should be included in the regularly reported statistics, but which, for one reason or another, might not yet be covered by the national collection of data:

- units of the national fishing fleet whose catches are landed directly in foreign ports (see Section 3.3 below);
- operations with fixed gears (traps, weirs, etc);
- fish-farming and shellfish culture operations;
- subsistence fishing;
- small-scale "artisanal" fishing operations;
- seaweed harvesting (quantities to be reported on a wet-weight basis).

3.3 Nationality of nominal catches

The flag of the vessel catching the fish, should be considered the paramount indication of the nationality assigned to the catch data and this indication overridden only when one of the following arrangements between a foreign flag vessel and the host country exists:

(a) the vessel is chartered by the host country to augment its fishing fleet; and

(b) the vessel fishes for the country by joint venture contract or similar agreements (as opposed to the ad hoc practice of a vessel selling catches to a foreign vessel or landing catches at a foreign port) and the operation of such vessel is an integral part of the economy of the host country.

When governments negotiate joint ventures or other contracts in which vessels of one country land their catches at ports of another country or unload their catches to vessels of another country and the above criteria are applicable, the assignment of nationality to such catches and landings data should be specified in the agreements.

Countries involved in cooperative fishing arrangements with coastal states in Northwest Atlantic should:

a) Record on the appropriate STATLANT 21 forms in the usual way the relevant national fishery statistics for all fishing activity not related to cooperative arrangements; and

b) Use separate STATLANT forms to record fishery statistics accruing from cooperative arrangements with coastal states, ensuring that these sheets are properly identified in Box (i) of the forms with appropriate wording to indicate the nature of the operations and the name of the coastal state with which the cooperative arrangement existed.

4. COMPLETION OF BOXES (a) THROUGH (k)

4.1 Box (a): Year

This box indicates the calendar year for which the data are to be reported - 1985.

4.2 Box (b): Country

Insert the name of the reporting country or its component territory where applicable.

4.3 Boxes (c), (d) and (e)

These boxes simply indicate the general coverage required, exceptions to which should be indicated by means of footnotes to these boxes or in a separate memorandum (see Sections 3.2 and 3.3).

4.4 Box (f)

This box is not to be used.

4.5 Box (g): FAO Major Fishing Area 21

The Northwest Atlantic is designated by the two-digit code "21".

4.6 Box (h)

This box is not to be used.

4.7 Box (i)

Use only for special purposes, e.g. to note that the statistics pertain to cooperative arrangements with a coastal state, see 3.3(b).

4.8 Box (j)

Insert "P" in this box should all or part of the data be provisional.

4.9 Box (k): Numbering of sheets

Used for numbering the sheets of the STATLANT 21A form submitted for 1985.

5. COMPLETION OF LINES (1) THROUGH (80): NOMINAL CATCHES

5.1 Nominal catch data

(a) For the species items listed in column C of the form, insert on lines (1) through (80) the nominal catch data for the calendar year 1985 for the total, and for each NAFO division and subdivision (as indicated in column headings E through R) for the Northwest Atlantic (FAO Major Fishing Area 21).

(b) The blank lines in column C are to be used for inserting the names of species caught which do not appear in the pre-printed list of species (see Appendix II and also Section 5.4).

(c) The aggregates of the data for the NAFO divisions and subdivisions on each line must be reconciled, wherever necessary, with the total (for Major Fishing Area 21 as a whole) by suitable entries for the balances under the columns marked "not known". However, every attempt should be made to minimize the quantities in these columns by assigning proportions of these quantities to the appropriate divisions and subdivisions.

5.2 Weight unit for nominal catch data

The nominal catch data (the LIVE weight equivalent of the landings, i.e. landings on a round or whole fresh weight basis) should be expressed in metric tons (tonnes).

5.3 The concept "nominal catch"

The following must be taken into account when determining the coverage of the concept NOMINAL CATCH and its relationship to LANDINGS:

(a) Adjustments:

(i) Conversion factors (yield rates) are used to convert those quantities nationally recorded on a "landed" weight basis to their LIVE weight equivalent;

(ii) The "nominal catch" data refer to the calendar year of capture, and the "landings" data to the calendar year of landing. Adjustments must be made to allow for catches taken in one year and landed in the succeeding year.

(b) Nominal catch data include:

(i) All quantities caught by national fishing units for any commercial industrial or subsistence purposes, including also the results of such fishing activities as fixed-gear fishing, fish farming, shellfish culture, seaweed harvesting, etc.;

(ii) All quantities caught by fishing vessels flying the flag of the reporting country, and landed not only in the harbours of the reporting country but also in foreign harbours (see Section 3.3);

(iii) All quantities caught during the calendar year 1985 indicated in box (a) of the form, although landed in the subsequent calendar year (1986).

(c) Nominal catch data exclude:

(i) All quantities caught in recreational fisheries by sports fishermen;

(ii) All quantities caught by fishing vessels flying a foreign flag, and landed in the harbours of the reporting country (see Section 3.3);

(iii) All quantities caught during the preceding calendar year (1984) but landed during the calendar year 1985 indicated in box (a);

If there are such quantities which have not been included in the 1984 report, then they should be reported in a separate memorandum so that 1984 statistics can be updated;

(iv) All discards ("discarded" catches), i.e. WHOLE FISH returned to the sea.

5.4 Provision of nominal catch data by species items

(a) Detailed information (e.g. definitions, descriptors, etc.) about the Northwest Atlantic species items and their groupings and tabular arrangements are presented in Appendix II of these Notes.

(b) Additional details about Northwest Atlantic species items are available also in:

(i) NAFO Statistical Bulletin;

(ii) FAO's Yearbook of Fishery Statistics - tables in Section B and table C-21(a) in the "Catches and Landings" volume;

(iii) Various other documents obtainable on request from the NAFO or FAO Secretariats.

(c) National offices are expected to write in the blank lines on the form the names of any other species items for which catches are made.

(d) In all instances where statistically significant quantities of fish, crustaceans, molluscs and other marine invertebrates are reported to the national office as "unspecified", "unsorted", "other", "various" or "miscellaneous", an attempt should be made by the national office to provide estimates of the species composition of such catches for insertion on the form. Such estimates are to be added to the quantities actually reported for the relevant species items. In this way, the quantities reported for such unidentified groupings can be kept to a minimum.

6. ADDITIONAL REMARKS ON THE COMPLETION OF THE FORM

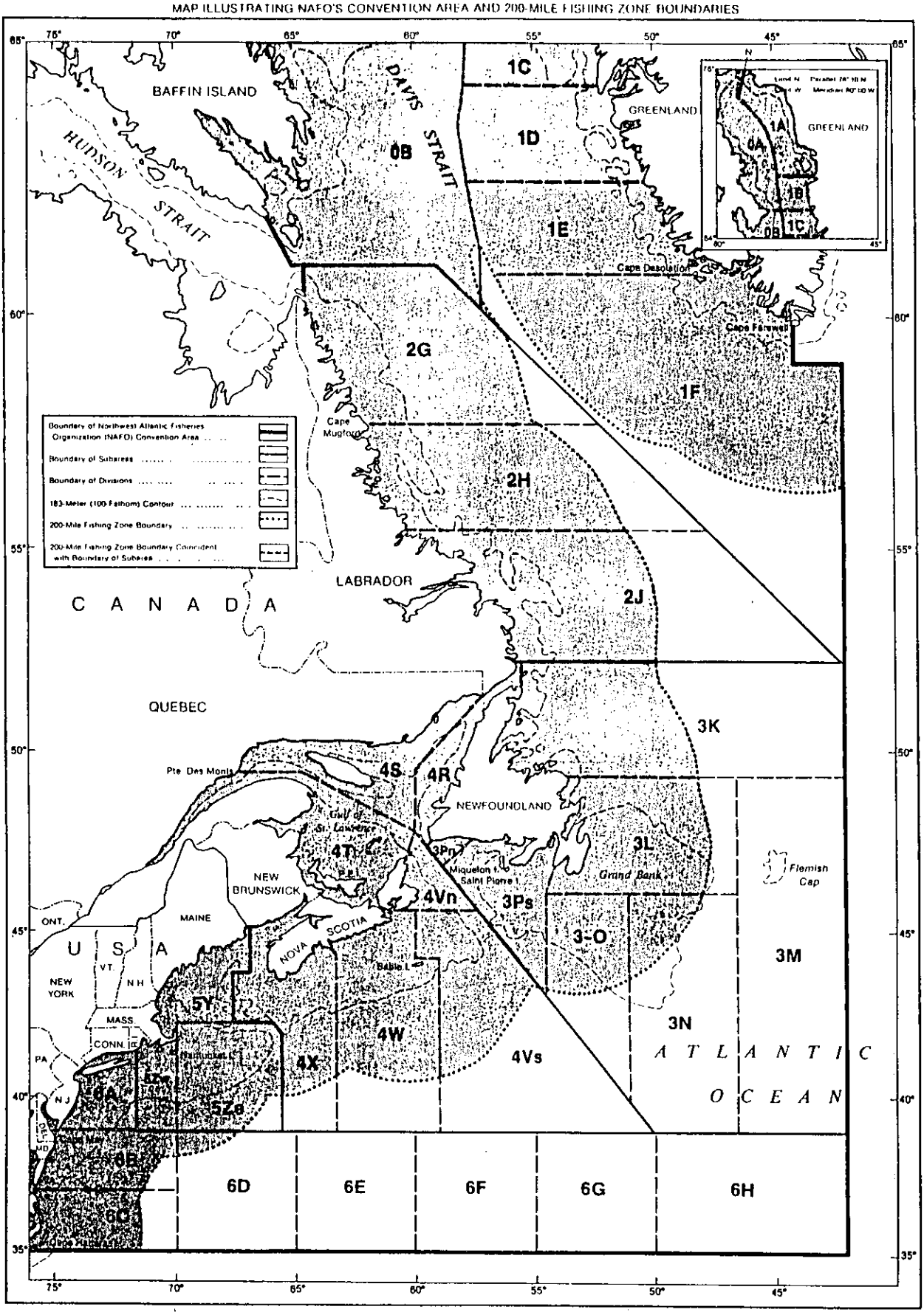
6.1 Quantities less than 0.5 metric tons should be shown as "0" on the form.

6.2 Nil entries should be indicated by dashes "-".

6.3 Where data are not yet available use the symbol "...".

Appendix I

MAP ILLUSTRATING NAFO'S CONVENTION AREA AND 200-MILE FISHING ZONE BOUNDARIES



Appendix II

NAFO List of Species Items (revised Oct. 1985)

NAFO Code	Common English name	Scientific name	3-alpha ident.
	Groundfish		
101	Atlantic cod	*Gadus morhua*	COD
102	Haddock	*Melanogrammus aeglefinus*	HAD
103	Atlantic redfishes (NS)	*Sebastes* sp.	RED
104	Silver hake	*Merluccius bilinearis*	HKS
105	Red hake	*Urophycis chuss*	HKR
106	Pollock (Saithe)	*Pollachius virens*	POK
108	Golden redfish	*Sebastes marinus*	REG
109	Beaked redfish	*Sebastes mentella*	REB
112	American plaice	*Hippoglossoides platessoides*	PLA
114	Witch flounder	*Glyptocephalus cynoglossus*	WIT
116	Yellowtail flounder	*Limanda ferruginea*	YEL
118	Greenland halibut	*Reinhardtius hippoglossoides*	GHL
120	Atlantic halibut	*Hippoglossus hippoglossus*	HAL
122	Winter flounder	*Pseudopleuronectes americanus*	FLW
124	Summer flounder	*Paralichthys dentatus*	FLS
125	Windowpane flounder	*Scophthalmus aquosus*	FLD
129	Flatfishes (NS)	*Pleuronectiformes*	FLX
132	American angler	*Lophius americanus*	ANG
136	Atlantic searobins	*Prionotus* sp.	SRA
138	Atlantic tomcod	*Microgadus tomcod*	TOM
139	Blue Antimora	*Antimora rostrata*	ANT
140	Blue whiting (Poutassou)	*Micromesistius poutassou*	WHB
142	Cunner	*Tautogolabrus adspersus*	CUN
144	Cusk (Tusk)	*Brosme brosme*	USK
148	Greenland cod	*Gadus ogac*	GRC
151	Blue ling	*Molva dypterygia*	BLI
152	Ling	*Molva molva*	LIN
154	Lumpfish (Lumpsucker)	*Cyclopterus lumpus*	LUM
158	Northern kingfish	*Menticirrhus saxatilis*	KGF
160	Northern puffer	*Sphoeroides maculatus*	PUF
162	Eelpouts (NS)	*Lycodes* sp.	ELZ
164	Ocean pout	*Macrozoarces americanus*	OPT
166	Polar cod	*Boreogadus saida*	POC
168	Roundnose grenadier	*Coryphaenoides rupestris*	RNG
169	Roughhead grenadier	*Macrourus berglax*	RHG
172	Sandeels (Sand lances)	*Ammodytes* sp.	SAN
174	Sculpins (NS)	*Myoxocephalus* sp.	SCU
176	Scup	*Stenotomus chrysops*	SCP
180	Tautog	*Tautoga onitis*	TAU
182	Tilefish	*Lopholatilus chamaeleonticeps*	TIL
186	White hake	*Urophycis tenuis*	HKW
188	Wolffishes (NS)	*Anarhichas* sp.	CAT
189	Atlantic wolffish	*Anarhichas lupus*	CAA
190	Spotted wolffish	*Anarhichas minor*	CAS
199	Groundfishes (NS)		GRO
	Pelagic fish		
202	Atlantic herring	*Clupea harengus*	HER
204	Atlantic mackerel	*Scomber scombrus*	MAC
212	Atlantic butterfish	*Peprilus triacanthus*	BUT
216	Atlantic menhaden	*Brevoortia tyrannus*	MHA
220	Atlantic saury	*Scomberesox saurus*	SAU

NAFO Code	Common English name	Scientific name	3-alpha ident.
224	Bay anchovy	*Anchoa mitchilli*	ANB
228	Bluefish	*Pomatomus saltatrix*	BLU
232	Crevalle jack	*Caranx hippos*	CVJ
236	Frigate tuna	*Auxis thazard*	FRI
240	King mackerel	*Scomberomorus cavalla*	KGM
244	Atlantic Spanish mackerel	*Scomberomorus maculatus*	SSM
252	Sailfish	*Istiophorus platypterus*	SAI
256	White marlin	*Tetrapturus albidus*	WHM
260	Blue marlin	*Makaira nigricans*	BUM
264	Swordfish	*Xiphias gladius*	SWO
272	Albacore tuna	*Thunnus alalunga*	ALB
274	Atlantic bonito	*Sarda sarda*	BON
276	Little tunny	*Euthynnus alletteratus*	LTA
280	Northern bluefin tuna	*Thunnus thynnus*	BFT
278	Bigeye tuna	*Thunnus obesus*	BET
282	Skipjack tuna	*Katsuwonus pelamis*	SKJ
284	Yellowfin tuna	*Thunnus albacares*	YFT
289	Tunas (NS)	*Scombridae*	TUN
299	Pelagic fishes (NS)		PEL
	Other finfish		
302	Alewife	*Alosa pseudoharengus*	ALE
304	Amberjacks (NS)	*Seriola* sp.	AMX
306	American conger	*Conger oceanicus*	COA
308	American eel	*Anguilla rostrata*	ELA
310	American shad	*Alosa sapidissima*	SHA
312	Argentines (NS)	*Argentina* sp.	ARG
314	Atlantic croaker	*Micropogonias undulatus*	CKA
316	Atlantic needlefish	*Strongylura marina*	NFA
318	Atlantic salmon	*Salmo salar*	SAL
320	Atlantic silverside	*Menidia menidia*	SSA
322	Atlantic thread herring	*Opisthonema oglinum*	THA
326	Baird's slickhead	*Alepocephalus bairdii*	ALC
330	Black drum	*Pogonias cromis*	BDM
332	Black seabass	*Centropristis striata*	BSB
334	Blueback herring	*Alosa aestivalis*	BBH
340	Capelin	*Mallotus villosus*	CAP
342	Chars (NS)	*Salvelinus* sp.	CHR
344	Cobia	*Rachycentron canadum*	CBA
346	Common (Florida) pompano	*Trachinotus carolinus*	POM
354	Gizzard shad	*Dorosoma cepedianum*	SHG
356	Grunts (NS)	*Pomadasyidae*	GRX
360	Hickory shad	*Alosa mediocris*	SHH
365	Lanternfish	*Notoscopelus* sp.	LAX
370	Mullets (NS)	*Mugilidae*	MUL
380	North Atlantic harvestfish	*Peprilus alepidotus* (=Paru)	HVF
390	Pigfish	*Orthopristis chrysoptera*	PIG
400	Rainbow smelt	*Osmerus mordax*	SMR
402	Red drum	*Sciaenops ocellatus*	RDM
404	Red porgy	*Pagrus pagrus*	RPG
406	Rough scad	*Trachurus lathami*	RSC
410	Sand perch	*Diplectrum formosum*	PES
412	Sheepshead	*Archosargus probatocephalus*	SPH
414	Spot croaker	*Leiostomus xanthurus*	SPT
416	Spotted weakfish	*Cynoscion nebulosus*	SWF
418	Squeteague (Gray weakfish)	*Cynoscion regalis*	STG
420	Striped bass	*Morone saxatilis*	STB

NAFO Code	Common English name	Scientific name	3-alpha ident.
422	Sturgeons (NS)	*Acipenseridae*	STU
430	Tarpon	*Tarpon* (=Megalops) *atlanticus*	TAR
432	Trouts (NS)	*Salmo* sp.	TRO
440	White perch	*Morone americana*	PEW
442	Alfonsinos (NS)	*Beryx* sp.	ALF
452	Spiny (=Picked) dogfish	*Squalus acanthias*	DGS
459	Dogfishes (NS)	*Squalidae*	DGX
462	Porbeagle	*Lamna nasus*	POR
469	Large sharks (NS)	*Squaliformes*	SHX
479	Skates (NS)	*Raja* sp.	SKA
499	Finfishes (NS)		FIN
	Invertebrates		
502	Long-finned squid (*Loligo*)	*Loligo pealei*	SQL
504	Short-finned squid (*Illex*)	*Illex illecebrosus*	SQI
509	Squids (NS)	*Loliginidae, Ommastrephidae*	SQU
512	Atlantic razor clam	*Ensis directus*	CLR
514	Hard clam	*Mercenaria mercenaria*	CLH
516	Ocean quahog	*Arctica islandica*	CLQ
518	Soft clam	*Mya arenaria*	CLS
520	Surf clam	*Spisula solidissima*	CLB
529	Clams (NS)	*Prionodesmacea, Teleodesmacea*	CLX
532	Bay scallop	*Argopecten irradians*	SCB
534	Calico scallop	*Argopecten gibbus*	SCC
535	Icelandic scallop	*Chlamys islandica*	ISC
536	Sea scallop	*Placopecten magellanicus*	SCA
539	Scallops (NS)	*Pectinidae*	SCX
542	American cupped oyster	*Crassostrea virginica*	OYA
552	Blue mussel	*Mytilus edulis*	MUS
562	Whelks (NS)	*Busycon* sp.	WHX
564	Periwinkles (NS)	*Littorina* sp.	PER
589	Marine molluscs (NS)	*Mollusca*	MOL
602	Atlantic rock crab	*Cancer irroratus*	CRK
604	Blue crab	*Callinectes sapidus*	CRB
606	Green crab	*Carcinus maenas*	CRG
608	Jonah crab	*Cancer borealis*	CRJ
610	Queen crab	*Chionoecetes opilio*	CRQ
612	Red crab	*Geryon quinquedens*	CRR
614	Stone king crab	*Lithodes maia*	KCT
619	Marine crabs (NS)	*Reptantia*	CRA
622	American lobster	*Homarus americanus*	LBA
632	Northern prawn	*Pandalus borealis*	PRA
633	Aesop shrimp	*Pandalus montagui*	AES
638	Penaeus shrimps (NS)	*Penaeus* sp.	PEN
639	Pink (=Pandalid) shrimps	*Pandalus* sp.	PAN
649	Marine crustaceans (NS)	*Crustacea*	CRU
652	Sea urchin	*Strongylocentrotus* sp.	URC
669	Marine worms (NS)	*Polychaeta*	WOR
672	Horseshoe crab	*Limulus polyphemus*	HSC
699	Marine invertebrates (NS)	*Invertebrata*	INV
	Seaweeds		
702	Brown seaweeds	*Phaeophyceae*	SWB
704	Red seaweeds	*Rhodophyceae*	SWR
709	Seaweeds (NS)	*Algae*	SWX
	Seals		
901	Harp seal	*Pagophilus groenlandicus*	SEH
902	Hooded seal	*Cystophora cristata*	SEZ

Appendix III

NAFO CWP FORM FOR REPORTING STATISTICS ON NOMINAL CATCHES IN METRIC TONS
FORMULAIRE POUR LA DECLARATION DES STATISTIQUES DES CAPTURES NOMINALES EN TONNES METRIQUES
FORMULARIO PARA INFORMACION ESTADISTICA DE CAPTURAS NOMINALES EN TONELADAS METRICAS

STATLANT 21 A

(a) YEAR ANNEE AÑO	(b) COUNTRY PAYS PAIS	(c)	(d)	(e)	(f)	(g) MAJOR FISHING AREA PRINCIPALE ZONE DE PECHE AREA PRINCIPAL DE PESCA	(h)	(i)	(j)	(k)
198 5		All commercial, industrial and subsistence fisheries Toute la pêche commerciale, industrielle et de subsistance Toda la pesca comercial, industrial y de subsistencia				21				No. 1 OF 4 SHEETS FEUILLES HOJAS

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	(A)
Line/Ligne Lines	3-alpha Identifiers	SPECIES ITEMS Use blank lines to record species not listed below	NAFO Codes	TOTAL AREA 21		01 Division 0A	02 Division 0B	09 Division 0(NK)	Subarea 0 TOTAL	11 Division 1A	12 Division 1B	13 Division 1C	14 Division 1D	15 Division 1E	16 Division 1F	19 Division 1(NK)	Subarea 1 TOTAL	Line/Ligne Lines
1		GRAND TOTAL																1
2																		2
3	COD	Atlantic cod	101															3
4	HAD	Haddock	102															4
5	RED	Atlantic redfishes	103															5
6	HKS	Silver hake	104															6
7	HKR	Red hake	105															7
8	POK	Pollock (= Saithe)	106															8
9	PLA	American plaice	112															9
10	WIT	Witch flounder	114															10
11	YEL	Yellowtail flounder	116															11
12	GHL	Greenland halibut	118															12
13	HAL	Atlantic halibut	120															13
14	FLW	Winter flounder	122															14
15	FLS	Summer flounder	124															15
16	FLX	Flatfishes, n.e.i.	129															16
17	ANG	American angler (= goosefish)	132															17
18	SRA	Atlantic searobins	136															18
19	USK	Tusk (= Cusk)	144															19
20	GRC	Greenland cod	148															20
21	OPT	Ocean pout	164															21
22	RNG	Roundnose grenadier	168															22
23	HKW	White hake	166															23
24	CAT	Wolffishes (= Catfishes)	188															24
25	CAA	Atlantic wolffish	189															25
26	CAS	Spotted wolffish	190															26
27																		27
28																		28
29																		29
30																		30
31																		31
32	GRO	Groundfishes, n.e.i.	199															32
33																		33
34	HER	Atlantic herring	202															34
35	MAC	Atlantic mackerel	204															35
36	BUT	Atlantic butterfish	212															36
37	MHA	Atlantic menhaden	216															37
38	SAU	Atlantic saury	220															38
39	BLU	Bluefish	228															39
40	BFT	Northern bluefin tuna	280															40
41																		41
42																		42
43																		43
44																		44
45																		45
46	PEL	Pelagic fishes, n.e.i.	299															46
47																		47
48	ALE	Alewife	302															48
49	ARG	Argentines	312															49
50	SAL	Atlantic salmon	318															50
51	CAP	Capelin	340															51
52	DGS	Spiny (= Picked) dogfish	452															52
53	DGX	Dogfish sharks n.e.i.	459															53
54	POR	Porbeagle	462															54
55	SHX	Large sharks, n.e.i.	469															55
56	SKA	Skates, n.e.i.	479															56
57																		57
58																		58
59																		59
60																		60
61																		61
62	FIN	Finfishes, n.e.i.	499															62
63																		63
64	SQL	Long-finned squid (Loligo)	502															64
65	SQI	Short-finned squid (Illex)	504															65
66	SQU	Squids, n.e.i.	509															66
67	PRA	Northern prawn	532															67
68	PAN	Pink (= Pandalid) shrimps	539															68
69																		69
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79																		79
80																		80

This form consists of four sheets with columns for the various divisions (and subdivisions) of Subareas 0, 1, 2, 3, 4, 5 and 6.

NOTES ON THE COMPLETION OF FORM STATLANT 21B FOR THE 1985 CALENDAR YEAR (NORTHWEST ATLANTIC)

Prepared by

The Secretary
Co-ordinating Working Party on Atlantic Fishery Statistics (CWP)

and the

Northwest Atlantic Fisheries Organization (NAFO)

Food and Agriculture Organization of the United Nations
ROME, January 1986

NOTES ON THE COMPLETION OF FORM STATLANT 21B

FORM FOR REPORTING STATISTICS ON CATCH AND EFFORT IN THE NORTHWEST ATLANTIC (FAO MAJOR FISHING AREA 21)

Copies completed with calendar year data for 1985

should be submitted to reach

NAFO

before

****
* 30 June 1986 *
****

1. PURPOSE OF THIS FORM

1.1 This form (version labelled "1985" in box (a)) is to be used by national offices for reporting each year to NAFO the catch and effort data on all commercial, industrial and subsistence fishing activities and operations in the Northwest Atlantic (FAO Major Fishing Area 21 - see Appendix I).

1.2 The particulars of the data to be reported for the calendar year 1985 are as follows:

- for each class of fishing unit (gear/vessel combinations), and
- for each NAFO division or subdivision
  - the FISHING EFFORT in accordance with the three levels of priority, and
  - the corresponding NOMINAL CATCHES (LIVE weight equivalent of the landings) for each aquatic animal or plant species item (see Section 6 and Appendix II)
    (i) on a monthly basis; and
    (ii) on a calendar year basis.

1.3 Countries using automatic data processing systems, which can provide computer printouts reflecting a format of data presentation similar to that of the form, could, instead of completing the forms, provide copies of such computer printouts.

2. GENERAL REMARKS

2.1 Description of form STATLANT 21B

This form is designed for the reporting of nominal catch and effort statistics by species items for each NAFO division or subdivision.

A sample STATLANT 21B form, of one sheet, showing detailed column headings (months) and stub entries (species items), is attached (see Appendix III).

As many forms should be used as there are data to insert, for:

(i) All relevant categories of fishing gear (see Section 4.3), and vessel type (see Section 4.4), where applicable.

(ii) All relevant GRT categories of vessel size (see Section 4.5);

(iii) All relevant "main species sought" (see Section 4.6); and

(iv) All relevant fishing areas (NAFO divisions and subdivisions - see Appendix I).

A supply of blank sheets is provided; this should be sufficient for both drafting purposes and for submission of statistics. Additional forms, if required, may be obtained from the Chief, Fishery Information, Data and Statistics Service, Fisheries Department, FAO, 00100 ROME, Italy (Telex: 610181 FAO I or 610127 FAO I; telephone: Rome 5797.6414).

2.2 Retention of copies in national office

One set of completed forms (or copies) should be retained in the national reporting office (i) for reference purposes to facilitate subsequent correspondence about the submitted data, and (ii) to facilitate the re-submission of the material in case the original submission gets lost en route to its destination.

2.3 Submission of completed forms to NAFO

After completion, one set of the original forms, or a magnetic tape accompanied by a computer printout is to be despatched by AIRMAIL, preferably registered, or by diplomatic pouch, to reach the following before 30 June 1986:

The Assistant Executive Secretary
Northwest Atlantic Fisheries
Organization (NAFO)
P.O Box 638
DARTMOUTH, N.S. B2Y 3Y9
Canada

2.4 Despatch of copies to EUROSTAT

Member States of the European Communities (EC) are also requested to forward a set of the completed forms (copies) or a magnetic tape accompanied by a computer printout to:

Directorate for Agricultural, Forestry, Fishery
and Energy Statistics
EUROSTAT
B.P. 1907
LUXEMBOURG
(Grand Duchy)

3. DEFINITION OF COVERAGE

3.1 General coverage

The nominal catches (LIVE weight equivalent of the landings) and the corresponding fishing effort, where available, for each month of the calendar year 1985 should cover the quantitative results of all kinds of commercial, industrial and subsistence fishing operations and activities undertaken by all types and classes of national fishing units in the waters of the Northwest Atlantic (FAO Major Fishing Area 21).

A separate STATLANT 21B sheet must be used for each different class of fishing unit indicated in boxes (c), (d) and (e), for each "main species" in box (f), and for each "division or subdivision" in box (h).

NAFO requires that the fishery statistics reported on STATLANT 21B forms represent the complete and final national statistics for publication. Except where the earlier deadline for the submission of STATLANT 21A forms necessitated the reporting of provisional data, the total of the annual catches of the species items recorded on all sheets of form 21B should correspond with the annual nominal catch data submitted on form 21A.

3.2 Examples of sectors that should NOT be overlooked in the data coverage

By means of footnotes to the form or in a separate memorandum, indicate if any particular "branch" or "sector" of the national fishing industry cannot be covered by the catch data provided, and, whenever possible, provide estimates or give some indication of the magnitudes of the quantities not included in the body of the form.

Below are listed a few examples of "branches" or "sectors" of the national fishing industry which should be included in the regularly reported statistics, but which, for one reason or another, might not yet be covered by the national collection of data:

- units of the national fishing fleet whose catches are landed directly in foreign ports (see Section 3.3 below);
- operations with fixed gears (traps, weirs, etc);
- fish-farming and shellfish culture operations;
- subsistence fishing;
- small-scale "artisanal" fishing operations;
- seaweed harvesting (quantities to be reported on a wet-weight basis).

3.3 Nationality of nominal catches

The flag of the vessel catching the fish, should be considered the paramount indication of the nationality assigned to the catch data and this indication overridden only when one of the following arrangements between a foreign flag vessel and the host country exists:

(a) the vessel is chartered by the host country to augment its fishing fleet; and

(b) the vessel fishes for the country by joint venture contract or similar agreements (as opposed to the ad hoc practice of a vessel selling catches to a foreign vessel or landing catches at a foreign port) and the operation of such vessel is an integral part of the economy of the host country.

When governments negotiate joint ventures or other contracts in which vessels of one country land their catches at ports of another country or unload their catches to vessels of another country and the above criteria are applicable, the assignment of nationality to such catches and landings data should be specified in the agreements.

Countries involved in cooperative fishing arrangements with coastal states in the Northwest Atlantic should:

(a) Record on the appropriate STATLANT 21 forms in the usual way the relevant national fishery statistics for all fishing activity not related to cooperative arrangements; and

(b) Use separate STATLANT forms to record fishery statistics accruing from cooperative arrangements with coastal states, ensuring that these sheets are properly identified in Box (i) of the forms with appropriate wording to indicate the nature of the operations and the name of the coastal state with which the cooperative arrangement existed.

4. COMPLETION OF BOXES (a) THROUGH (k)

4.1 Box (a): Year

This box indicates the calendar year for which the data are to be reported - 1985

4.2 Box (b): Country

Insert the name of the reporting country or of its component territory where applicable.

4.3 Box (c): Fishing gear/method

Insert whichever of the following is pertinent to describe the class of fishing unit.

Use the standard abbreviations and the NAFO codes for gears used in the Northwest Atlantic (FAO Major Fishing Area 21).

If fishing has been carried out by a gear for which no NAFO code has been assigned, insert the name of the gear and standard abbreviation, if applicable.

Gear Categories	Standard Abbreviation	ISSCFG Code	NAFO Code
SURROUNDING NETS		01.0.0	-
With purse lines (purse seines)	PS	01.1.0	31
- one boat operated purse seines	PS1	01.1.1	-
- two boat operated purse seines	PS2	01.1.2	-
Without purse lines (lampara)	LA	01.2.0	-
SEINE NETS		02.0.0	-
Beach seines	SB	02.1.0	- 24
Boat or vessel seines	SV	02.2.0	-
- Danish seines	SDN	02.2.1	21
- Scottish seines	SSC	02.2.2	22
- Pair seines	SPR	02.2.3	23
Seine nets (not specified)	SX	02.9.0	-
TRAWLS		03.0.0	-
Bottom trawls		03.1.0	-
- beam trawls	TBB	03.1.1	18
- otter trawls 1/	OTB	03.1.2	10
- pair trawls	PTB	03.1.3	16
- nephrops trawls	TBN	03.1.4	-
- shrimp trawls	TBS	03.1.5	-
- bottom trawls (not specified)	TB	03.1.9	-
Midwater trawls		03.2.0	-
- otter trawls 1/	OTM	03.2.1	13
- pair trawls	PTM	03.2.2	17
- shrimp trawls	TMS	03.2.3	-
- midwater trawls (not specified)	TM	03.2.9	-
Otter twin trawls	OTT	03.3.0	-
Otter trawls (not specified)	OT	03.4.9	-
Pair trawls (not specified)	PT	03.5.9	-
Other trawls (not specified)	TX	03.9.0	-

Gear Categories	Standard Abbre-viation	ISSCFG Code	NAFO Code
DREDGES		04.0.0	-
Boat dredges	DRB	04.1.0	71
Hand dredges	DRH	04.2.0	72
LIFT NETS		05.0.0	-
Portable lift nets	LNP	05.1.0	-
Boat operated lift nets	LNB	05.2.0	-
Shore operated stationary lift nets	LNS	05.3.0	-
Lift nets (not specified)	LN	05.9.0	-
FALLING GEAR		06.0.0	-
Cast nets	FCN	06.1.0	-
Falling gear (not specified)	FG	06.9.0	-
GILLNETS AND ENTANGLING NETS		07.0.0	-
Set gillnets (anchored)	GNS	07.1.0	41
Drift nets	GND	07.2.0	42
Encircling gillnets	GNC	07.3.0	-
Fixed gillnets (on stakes)	GNF	07.4.0	-
Trammel nets	GTR	07.5.0	-
Combined gillnets-trammel nets	GTN	07.6.0	-
Gillnets and entangling nets (not specified)	GEN	07.9.0	-
Gillnets (not specified)	GN	07.9.1	40
TRAPS		08.0.0	-
Stationary uncovered pound-nets	FPN	08.1.0	61
Pots	FPO	08.2.0	62
Fyke nets	FYK	08.3.0	-
Stow-nets	FSN	08.4.0	-
Barriers, fences, weirs, etc.	FWR	08.5.0	63
Aerial traps	FAR	08.6.0	-
Traps (not specified)	FIX	08.9.0	60
HOOKS AND LINES		09.0.0.	-
Hand-lines and pole-lines (hand operated) 2/	LHP	09.1.0	53
Hand-lines and pole-lines (mechanized) 2/	LHM	09.2.0	55
Set lines (longlines set)	LLS	09.3.0	51
Drifting longlines	LLD	09.4.0	52
Longlines (not specified)	LL	09.5.0	50
Trolling lines	LTL	09.6.0	54
Hooks and lines (not specified) 3/	LX	09.9.0	-
GRAPPLING AND WOUNDING		10.0.0	-
Harpoons	HAR	10.1.0	81
HARVESTING MACHINES		11.0.0	-
Pumps	HMP	11.1.0	-
Mechanized dredges	HMD	11.2.0	-
Harvesting machines (not specified)	HMX	11.9.0	-

Gear Categories	Standard Abbreviation	ISSCFG Code	NAFO Code
MISCELLANEOUS GEAR 4/	MIS	20.0.0	90
RECREATIONAL FISHING GEAR	RG	25.0.0	-
GEAR NOT KNOWN OR NOT SPECIFIED	NK	99.0.0	99

1/ See Section 4.4.
2/ Including jigging lines.
3/ Abbreviation LDV (NAFO code 58) for dory operated line gears will be maintained for historical data purposes.
4/ This item includes: hand and landing nets, drive-in-nets, gathering by hand with simple hand implements with or without diving equipment, poisons and explosives, trained animals, electrical fishing.

4.4 Box (d): Vessel type (bottom and midwater otter trawls only)

NAFO requires that data for vessels using bottom and midwater trawls be reported separately by vessel type; insert in Box (d) whichever of the following is pertinent:

(i) bottom otter trawls - side: OTB 1 (NAFO code 11)
(ii) bottom otter trawls - stern: OTB 2 (NAFO code 12)
(iii) midwater otter trawls - side: OTM 1 (NAFO code 14)
(iv) midwater otter trawls - stern: OTM 2 (NAFO code 15)

4.5 Box (e): Vessel size

Insert whichever of the following NAFO codes is appropriate to describe the GRT category of the fishing unit.

GRT Category	NAFO Code	
0 - 49.9	2	
50 - 149.9	3	
150 - 499.9	4	
500 - 999.9	5	
1 000 - 1 999.9	6	
2 000 - 99 999.9	7	
Not known	0	
0 - 24.9	1	Canada only
25 - 49.9	2	

4.6 Box (f): Main species sought

Insert the name of the main species sought. This is determined as the species towards which the fishing effort was mainly directed, as determined by the manner or method of fishing. In many cases this is one species which dominates in the catches. Every effort should be made to compile national statistics of catch and effort by "main species sought", and separate forms should be used to report the data for each "main species" instead of combining data and reporting under the category "mixed".

4.7 Box (g): FAO Major Fishing Area 21

The Northwest Atlantic is designated by the two-digit code "21".

4.8 Box (h): NAFO division or subdivision

Insert the designated name of the respective NAFO division or subdivision (where applicable) to indicate where the catches were made.

Statistics for Divisions 3P, 4V and 5Z have for several years been required to be reported by subdivisions, and it is essential that data are compiled and reported for 3P (north), 3P (south), 4V (north), 4V (south), 5Z (east) and 5Z (west) separately.

A chart showing the boundaries of each NAFO subarea, division and subdivision of the Northwest Atlantic (FAO Major Fishing Area 21) is in Appendix I of these Notes.

Larger scale charts may be obtained from the NAFO Secretariat, P.O. Box 638, DARTMOUTH, Nova Scotia, B2Y 3Y9, Canada.

4.9 Box (i)

Use only for special purposes, e.g. to note that the statistics pertain to cooperative arrangements with a coastal state.

4.10 Box (j)

Insert "P" in this box should all or part of the data be provisional.

4.11 Box (k): Numbering of sheets

To be used for numbering the forms of the STATLANT 21B series submitted for 1985

5. COMPLETION OF LINES (1) THROUGH (3): FISHING EFFORT MEASURES

5.1 For detailed standard specifications and definitions of the various types of effort, as required to be reported in lines (1) to (3) for the type of fishing gear recorded in box (c) of the form, see Section 5.3 below.

5.2 The data for all three levels of priority for effort measures specified in lines (1), (2) and (3) should be provided.

(a) In the case of effort measures at level of priority A on line 1, the descriptor to be inserted in the blank space after the letter "A" must be chosen from the "A" list in Section 5.3 below to correspond with the the fishing gear specified in box (c) of the form.

(b) If the data to be reported for effort at the level of priority A on line 1 of the form deviate from the "standard definition" for the gear type given in box (c), it is important that such deviation be indicated in a separate memorandum or preferably in a footnote at the bottom of the form.

5.3 Descriptors and definitions of fishing effort measures by gear categories (lines (1) through (3)).

Level of priority	Fishing gear	Effort measure descriptors	Definitions
A. FIRST	Surrounding nets (purse seines)	No. of sets	Number of times the gear has been set or shot, whether or not a catch was made. This measure is appropriate when school size and packing density is related to stock abundance or sets are made in a random manner.
	Beach seines	No. of sets	Number of times the gear has been set or shot, whether or not a catch was made.
	Boat seines (Danish seine, etc.)	No. of hours fished	Number of hours during which the seine was on the bottom and fishing.
	Trawls	No. of hours fished	Number of hours during which the trawl was in the water (midwater trawl), or on the bottom (bottom trawl), and fishing.
	Boat dredges	No. of hours fished	Number of hours during which the dredge was on the bottom and fishing.
	Gillnets (set or drift)	No. of effort units	Length of nets expressed in 100-metre units multiplied by the number of sets made (= accumulated total length in metres of nets used in a given time period divided by 100).

Level of priority	Fishing gear	Effort measure descriptors	Definitions
A. FIRST (continued)	Gillnets (fixed)	No. of effort units	Length of net expressed in 100-metre units multiplied by the number of times the net was cleared.
	Traps (uncovered pound nets)	No. of effort units	Number of days fished times the number of units hauled.
	Covered pots and fyke nets	No. of effort units	Number of lifts times the number of units (= total number of units fished in a given time period).
	Longlines (set or drift)	Thousands of hooks	Number of hooks fished in a given time period divided by 1000.
	Handlines (pole, troll, jig, etc.)	No of line-days	Total number of lines used in the given time period.
	Harpoons	-	(Report effort levels B and C only)
B. SECOND	All gears	No. of days fished	The number of days (24-hour periods, reckoned from midnight to midnight) on which any fishing took place. For those fisheries in which searching is a substantial part of the fishing operation, days in which searching but no fishing took place should be included in "days fished" data.
C. THIRD	All gears	No. of days on grounds	The number of days (24-hour periods, reckoned from midnight to midnight) in in which the vessel was on the fishing ground, and includes in addition to the days fishing and searching also all the other days while the vessel was on the ground.

6. COMPLETION OF LINES (5) THROUGH (75): NOMINAL CATCHES

6.1 Nominal catch data

(a) For the species items listed in column C of the form, insert on lines (5) through (75) the nominal catch data for the calendar year 1985 in column R (Total), with a breakdown on a monthly basis in columns E to P, which are headed with the names of the months. Insert in column Q only those catches which cannot be assigned to the appropriate months.

(b) The blank lines in column C are to be used for inserting the names of species caught which do not appear in the pre-printed list of species (see Appendix II and also Section 6.5).

(c) The aggregates of the monthly catch must be reconciled with the annual total wherever possible. Quantities that cannot be allocated to the appropriate month of capture should be recorded in column Q. However, every attempt should be made to minimize the quantities in column Q by assigning proportions of these quantities to the appropriate months.

6.2 Relation of nominal catch to effort

The nominal catch of the various species items recorded in each of the vertical columns (E) to (R) must be those for which the effort data are recorded on lines (1) to (3) in the corresponding columns; even if the effort data are not available the monthly catch data should be reported.

6.3 Weight unit for nominal catch data

The nominal catches (the LIVE weight equivalent of the landings, i.e. landings on a round or whole fresh weight basis) should be expressed in metric tons (tonnes).

6.4 The concept "nominal catch"

The following must be taken into account when determining the coverage of the concept NOMINAL CATCH and its relationship to LANDINGS:

(a) Adjustments:

(i) Conversion factors (yield rates) are used to convert those quantities nationally recorded on a "landed" weight basis to the LIVE weight equivalent;

(ii) The "nominal catch" data refer to the calendar year of capture, and the "landings" data to the calendar year of landing. Adjustments must be made to allow for catches taken in one year and landed in the succeeding year.

(b) Nominal catch data include:

(i) All quantities caught by national fishing units for any commercial, industrial or subsistence purposes, including also the results of such fishing activities as fixed-gear fishing, fish farming, shell-fish culture, seaweed harvesting, etc.;

(ii) All quantities caught by fishing vessels flying the flag of the reporting country, and landed not only in the harbours of the reporting country, but also in foreign harbours (see Section 3.3);

(iii) All quantities caught during the calendar year 1984 indicated in box (a) of the form, although landed in the subsequent calendar year (1985).

(c) Nominal catch data exclude:

(i) All quantities caught in recreational fisheries by sports fishermen;

(ii) All quantities caught by fishing vessels flying a foreign flag, and landed in the harbours of the reporting country (see Section 3.3);

(iii) All quantities caught during the preceding calendar year (1984) but landed during the calendar year 1985 indicated in box (a).

If there are such quantities which have not been included in the 1983 report, then they should be reported in a separate memorandum so that the 1983 statistics can be updated;

(iv) All discards ("discarded" catches), i.e. WHOLE FISH returned to the sea.

6.5 Provision of nominal catch data by species items

(a) Detailed information (e.g. definitions, descriptors, etc.) about the Northwest Atlantic species items and their groupings and tabular arrangements are presented in Appendix II of these Notes.

(b) Additional details about Northwest Atlantic species items are available also in:

(i) NAFO Statistical Bulletin;

(ii) FAO's Yearbook of Fishery Statistics - tables in Section B and table C-21(a) in the "Catches and Landings" volume;

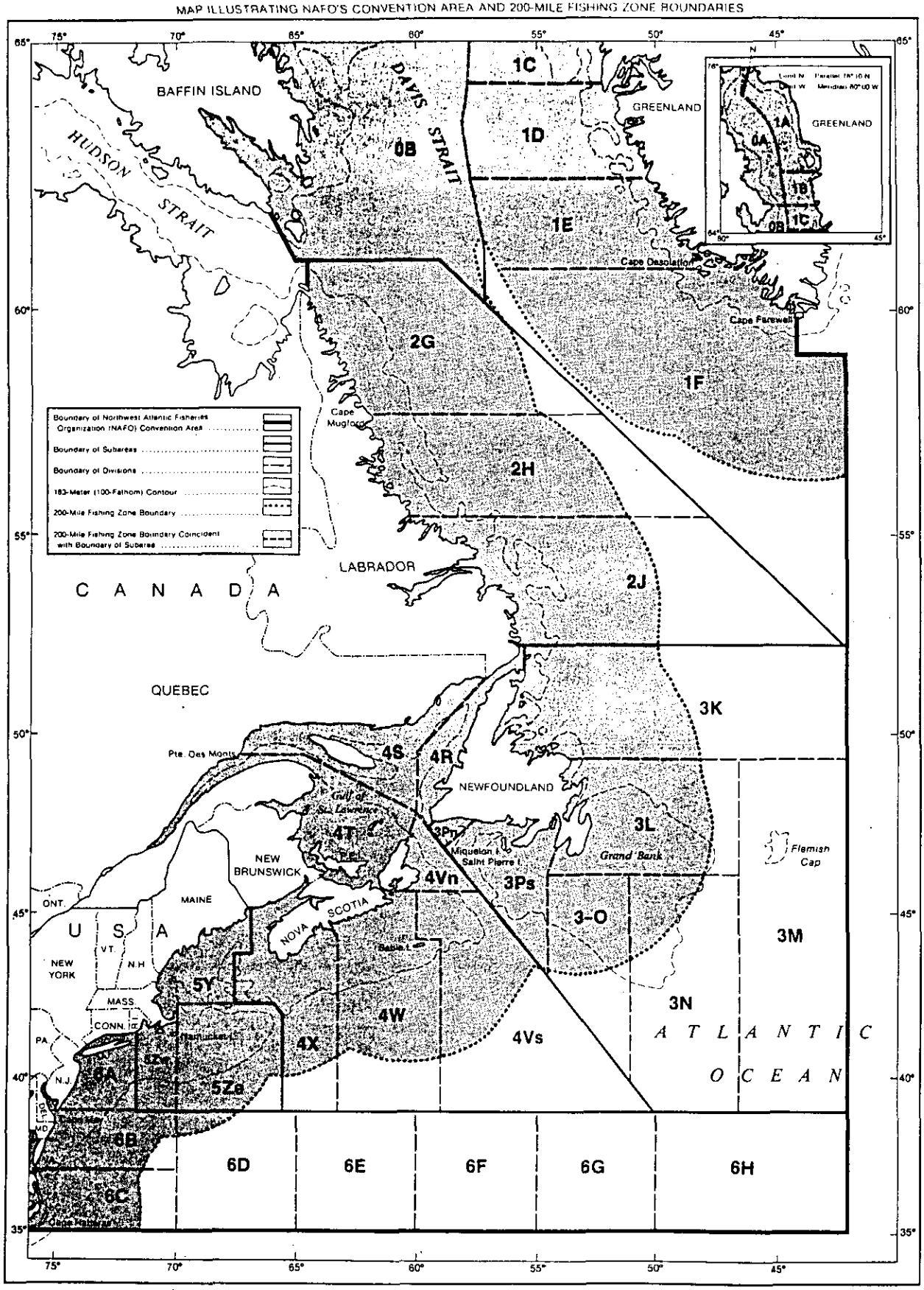
(iii) Various other documents obtainable on request from the NAFO or FAO Secretariats.

(c) National offices are expected to write in the blank lines on the form the names of any other species items for which catches are made.

(d) In all instances where statistically significant quantities of fish, crustaceans, molluscs and other marine invertebrates are reported to the national office as "unspecified", "unsorted", "other", "various" or "miscellaneous", an attempt should be made by the national office to provide estimates of the species composition of such catches for insertion on the form. Such estimates are to be added to the quantities actually reported for the relevant species items. In this way, the quantities reported for such unidentified groupings can be kept to a minimum.

Appendix I

MAP ILLUSTRATING NAFO'S CONVENTION AREA AND 200-MILE FISHING ZONE BOUNDARIES



Appendix II

NAFO List of Species Items (revised Oct. 1985)

NAFO Code	Common English name	Scientific name	3-alpha ident.
	Groundfish		
101	Atlantic cod	*Gadus morhua*	COD
102	Haddock	*Melanogrammus aeglefinus*	HAD
103	Atlantic redfishes (NS)	*Sebastes* sp.	RED
104	Silver hake	*Merluccius bilinearis*	HKS
105	Red hake	*Urophycis chuss*	HKR
106	Pollock (Saithe)	*Pollachius virens*	POK
108	Golden redfish	*Sebastes marinus*	REG
109	Beaked redfish	*Sebastes mentella*	REB
112	American plaice	*Hippoglossoides platessoides*	PLA
114	Witch flounder	*Glyptocephalus cynoglossus*	WIT
116	Yellowtail flounder	*Limanda ferruginea*	YEL
118	Greenland halibut	*Reinhardtius hippoglossoides*	GHL
120	Atlantic halibut	*Hippoglossus hippoglossus*	HAL
122	Winter flounder	*Pseudopleuronectes americanus*	FLW
124	Summer flounder	*Paralichthys dentatus*	FLS
125	Windowpane flounder	*Scophthalmus aquosus*	FLD
129	Flatfishes (NS)	*Pleuronectiformes*	FLX
132	American angler	*Lophius americanus*	ANG
136	Atlantic searobins	*Prionotus* sp.	SRA
138	Atlantic tomcod	*Microgadus tomcod*	TOM
139	Blue Antimora	*Antimora rostrata*	ANT
140	Blue whiting (Poutassou)	*Micromesistius poutassou*	WHB
142	Cunner	*Tautogolabrus adspersus*	CUN
144	Cusk (Tusk)	*Brosme brosme*	USK
148	Greenland cod	*Gadus ogac*	GRC
151	Blue ling	*Molva dypterygia*	BLI
152	Ling	*Molva molva*	LIN
154	Lumpfish (Lumpsucker)	*Cyclopterus lumpus*	LUM
158	Northern kingfish	*Menticirrhus saxatilis*	KGF
160	Northern puffer	*Sphoeroides maculatus*	PUF
162	Eelpouts (NS)	*Lycodes* sp.	ELZ
164	Ocean pout	*Macrozoarces americanus*	OPT
166	Polar cod	*Boreogadus saida*	POC
168	Roundnose grenadier	*Coryphaenoides rupestris*	RNG
169	Roughhead grenadier	*Macrourus berglax*	RHG
172	Sandeels (Sand lances)	*Ammodytes* sp.	SAN
174	Sculpins (NS)	*Myoxocephalus* sp.	SCU
176	Scup	*Stenotomus chrysops*	SCP
180	Tautog	*Tautoga onitis*	TAU
182	Tilefish	*Lopholatilus chamaeleonticeps*	TIL
186	White hake	*Urophycis tenuis*	HKW
188	Wolffishes (NS)	*Anarhichas* sp.	CAT
189	Atlantic wolffish	*Anarhichas lupus*	CAA
190	Spotted wolffish	*Anarhichas minor*	CAS
199	Groundfishes (NS)		GRO
	Pelagic fish		
202	Atlantic herring	*Clupea harengus*	HER
204	Atlantic mackerel	*Scomber scombrus*	MAC
212	Atlantic butterfish	*Peprilus triacanthus*	BUT
216	Atlantic menhaden	*Brevoortia tyrannus*	MHA
220	Atlantic saury	*Scomberesox saurus*	SAU

NAFO Code	Common English name	Scientific name	3-alpha ident.
224	Bay anchovy	*Anchoa mitchilli*	ANB
228	Bluefish	*Pomatomus saltatrix*	BLU
232	Crevalle jack	*Caranx hippos*	CVJ
238	Frigate tuna	*Auxis thazard*	FRI
240	King mackerel	*Scomberomorus cavalla*	KGM
244	Atlantic Spanish mackerel	*Scomberomorus maculatus*	SSM
252	Sailfish	*Istiophorus platypterus*	SAI
256	White marlin	*Tetrapturus albidus*	WHM
260	Blue marlin	*Makaira nigricans*	BUM
264	Swordfish	*Xiphias gladius*	SWO
272	Albacore tuna	*Thunnus alalunga*	ALB
274	Atlantic bonito	*Sarda sarda*	BON
276	Little tunny	*Euthynnus alletteratus*	LTA
280	Northern bluefin tuna	*Thunnus thynnus*	BFT
278	Bigeye tuna	*Thunnus obesus*	BET
282	Skipjack tuna	*Katsuwonus pelamis*	SKJ
284	Yellowfin tuna	*Thunnus albacares*	YFT
289	Tunas (NS)	*Scombridae*	TUN
299	Pelagic fishes (NS)		PEL
	Other finfish		
302	Alewife	*Alosa pseudoharengus*	ALE
304	Amberjacks (NS)	*Seriola* sp.	AMX
306	American conger	*Conger oceanicus*	COA
308	American eel	*Anguilla rostrata*	ELA
310	American shad	*Alosa sapidissima*	SHA
312	Argentines (NS)	*Argentina* sp.	ARG
314	Atlantic croaker	*Micropogonias undulatus*	CKA
316	Atlantic needlefish	*Strongylura marina*	NFA
318	Atlantic salmon	*Salmo salar*	SAL
320	Atlantic silverside	*Menidia menidia*	SSA
322	Atlantic thread herring	*Opisthonema oglinum*	THA
326	Baird's slickhead	*Alepocephalus bairdii*	ALC
330	Black drum	*Pogonias cromis*	BDM
332	Black seabass	*Centropristis striata*	BSB
334	Blueback herring	*Alosa aestivalis*	BBH
340	Capelin	*Mallotus villosus*	CAP
342	Chars (NS)	*Salvelinus* sp.	CHR
344	Cobia	*Rachycentron canadum*	CBA
346	Common (Florida) pompano	*Trachinotus carolinus*	POM
354	Gizzard shad	*Dorosoma cepedianum*	SHG
356	Grunts (NS)	*Pomadasyidae*	GRX
360	Hickory shad	*Alosa mediocris*	SHH
365	Lanternfish	*Notoscopelus* sp.	LAX
370	Mullets (NS)	*Mugilidae*	MUL
380	North Atlantic harvestfish	*Peprilus alepidotus* (=Paru)	HVF
390	Pigfish	*Orthopristis chrysoptera*	PIG
400	Rainbow smelt	*Osmerus mordax*	SMR
402	Red drum	*Sciaenops ocellatus*	RDM
404	Red porgy	*Pagrus pagrus*	RPG
406	Rough scad	*Trachurus lathami*	RSC
410	Sand perch	*Diplectrum formosum*	PES
412	Sheepshead	*Archosargus probatocephalus*	SPH
414	Spot croaker	*Leiostomus xanthurus*	SPT
416	Spotted weakfish	*Cynoscion nebulosus*	SWF
418	Squeteague (Gray weakfish)	*Cynoscion regalis*	STG
420	Striped bass	*Morone saxatilis*	STB

NAFO Code	Common English name	Scientific name	3-alpha ident.
422	Sturgeons (NS)	*Acipenseridae*	STU
430	Tarpon	*Tarpon* (=Megalops) *atlanticus*	TAR
432	Trouts (NS)	*Salmo* sp.	TRO
440	White perch	*Morone americana*	PEW
442	Alfonsinos (NS)	*Beryx* sp.	ALF
452	Spiny (=Picked) dogfish	*Squalus acanthias*	DGS
459	Dogfishes (NS)	*Squalidae*	DGX
462	Porbeagle	*Lamna nasus*	POR
469	Large sharks (NS)	*Squaliformes*	SHX
479	Skates (NS)	*Raja* sp.	SKA
499	Finfishes (NS)		FIN
	Invertebrates		
502	Long-finned squid (*Loligo*)	*Loligo pealei*	SQL
504	Short-finned squid (*Illex*)	*Illex illecebrosus*	SQI
509	Squids (NS)	*Loliginidae, Ommastrephidae*	SQU
512	Atlantic razor clam	*Ensis directus*	CLR
514	Hard clam	*Mercenaria mercenaria*	CLH
516	Ocean quahog	*Arctica islandica*	CLQ
518	Soft clam	*Mya arenaria*	CLS
520	Surf clam	*Spisula solidissima*	CLB
529	Clams (NS)	*Prionodesmacea, Teleodesmacea*	CLX
532	Bay scallop	*Argopecten irradians*	SCB
534	Calico scallop	*Argopecten gibbus*	SCC
535	Icelandic scallop	*Chlamys islandica*	ISC
536	Sea scallop	*Placopecten magellanicus*	SCA
539	Scallops (NS)	*Pectinidae*	SCX
542	American cupped oyster	*Crassostrea virginica*	OYA
552	Blue mussel	*Mytilus edulis*	MUS
562	Whelks (NS)	*Busycon* sp.	WHX
564	Periwinkles (NS)	*Littorina* sp.	PER
589	Marine molluscs (NS)	*Mollusca*	MOL
602	Atlantic rock crab	*Cancer irroratus*	CRK
604	Blue crab	*Callinectes sapidus*	CRB
606	Green crab	*Carcinus maenas*	CRG
608	Jonah crab	*Cancer borealis*	CRJ
610	Queen crab	*Chionoecetes opilio*	CRQ
612	Red crab	*Geryon quinquedens*	CRR
614	Stone king crab	*Lithodes maia*	KCT
619	Marine crabs (NS)	*Reptantia*	CRA
622	American lobster	*Homarus americanus*	LBA
632	Northern prawn	*Pandalus borealis*	PRA
633	Aesop shrimp	*Pandalus montagui*	AES
638	Penaeus shrimps (NS)	*Penaeus* sp.	PEN
639	Pink (=Pandalid) shrimps	*Pandalus* sp.	PAN
649	Marine crustaceans (NS)	*Crustacea*	CRU
652	Sea urchin	*Strongylocentrotus* sp.	URC
669	Marine worms (NS)	*Polychaeta*	WOR
672	Horseshoe crab	*Limulus polyphemus*	HSC
699	Marine invertebrates (NS)	*Invertebrata*	INV
	Seaweeds		
702	Brown seaweeds	*Phaeophyceae*	SWB
704	Red seaweeds	*Rhodophyceae*	SWR
709	Seaweeds (NS)	*Algae*	SWX
	Seals		
901	Harp seal	*Pagophilus groenlandicus*	SEH
902	Hooded seal	*Cystophora cristata*	SEZ

Appendix III

NAFO/CWP FORM FOR REPORTING NOMINAL CATCHES AND CORRESPONDING FISHING EFFORT

STATLANT 21B

(a) YEAR	(b) COUNTRY	(c) FISHING GEAR / FISHING METHOD	(d) VESSEL TYPE	(e) VESSEL SIZE	(f) MAIN SPECIES SOUGHT	(g) FAO MAJOR FISHING AREA	(h) NAFO DIVISION OR SUBDIVISION	(i)	(j)	(k) SHEET
1980			Trawler-side ☐ Trawler-stern ☐ ..... ☐			21				no. 1 OF 1 SHEETS

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	(A)
LINE		Use Blank lines to record species not listed below		Jan 1-31	Feb 1-28	Mar 1-31	Apr 1-30	May 1-31	Jun 1-30	Jul 1-31	Aug 1-31	Sep 1-30	Oct 1-31	Nov 1-30	Dec 1-31	MONTH NOT KNOWN	TOTAL	LINE
FISHING EFFORT MEASURES (See Section 5.3 of Notes on the Completion of Form STATLANT 21B for appropriate descriptor of Effort level A)																		
1	A.: (INSERT EFFORT DESCRIPTION)		001															1
2	B. No. of days fished		002															2
3	C. No. of days on grounds		003															3
4																		4
NOMINAL CATCHES (LIVE WEIGHT EQUIVALENT OF THE LANDINGS, IN METRIC TONS)																		
5		GRAND TOTAL																5
6																		6
7	COD	Atlantic cod	101															7
8	HAD	Haddock	102															8
9	RED	Atlantic redfishes	103															9
10	HKS	Silver hake	104															10
11	HKR	Red hake	105															11
12	POK	Pollock (= Saithe)	106															12
13	PLA	American plaice	112															13
14	WIT	Witch flounder	114															14
15	YEL	Yellowtail flounder	116															15
16	GHL	Greenland halibut	118															16
17	HAL	Atlantic halibut	120															17
18	FLW	Winter flounder	122															18
19	FLS	Summer flounder	124															19
20	FLX	Flatfishes, n.e.i.	129															20
21	ANG	American angler (= goosefish)	132															21
22	SRA	Atlantic searobins	136															22
23	USK	Tusk (= Cusk)	144															23
24	GRC	Greenland cod	148															24
25	OPT	Ocean pout	164															25
26	RNG	Roughnose grenadier	168															26
27	HKW	white hake	184															27
28	CAT	wolffishes (=Catfishes)	188															28
29	CAA	Atlantic wolffish	189															29
30	CAS	Spotted wolffish	190															30
31																		31
32																		32
33																		33
34																		34
35																		35
36	GRO	Groundfishes, n.e.i.	199															36
37																		37
38	HER	Atlantic herring	202															38
39	MAC	Atlantic mackerel	204															39
40	BUT	Atlantic butterfish	212															40
41	MOA	Atlantic menhaden	216															41
42	SAU	Atlantic saury	220															42
43	BLU	Bluefish	228															43
44	BFT	Northern Bluefin tuna	280															44
45																		45
46																		46
47																		47
48																		48
49																		49
50	PEL	Pelagic fishes, n.e.i.	290															50
51																		51
52	ALE	Alewife	302															52
53	ARG	Atlantic argentines	312															53
54	SAL	Atlantic salmon	318															54
55	CAP	Capelin	340															55
56	DGS	Spiny (= Picked) dogfish	452															56
57	DGX	Dogfishes, n.e.i.	459															57
58	POR	Porbeagle	462															58
59	SHX	Large sharks, n.e.i.	469															59
60	SKA	Skates, n.e.i.	479															60
61																		61
62																		62
63																		63
64																		64
65																		65
66	FIN	Finfishes, n.e.i.	489															66
67																		67
68	SQL	Long-finned squid (Loligo)	502															68
69	SQI	Short-finned squid (Illex)	504															69
70	SQU	Squids, n.e.i.	509															70
71	PRA	Northern prawn	632															71
72	PAN	Pink (= Pandalid) shrimps	639															72
73																		73
74																		74
75																		75

PI 47-6 1500 – P0747-6

COMMENTS:

Dec. 1980