

Northwest Atlantic



Fisheries Organization

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SCIENTIFIC COUNCIL MEETING - JUNE 1990

Report to the CWP on NAFO Statistical Program,

Publications and ADP

by

Assistant Executive Secretary

1. The appended report was prepared, in accordance with NAFO's commitment as a participating agency of the CWP (Coordinating Working Party on Atlantic Fishery Statistics), for presentation at the 14th Session of the CWP, which was held in Paris, France, during 5-9 February 1990.
2. The proposed venue (Miami, USA) announced after the CWP *ad hoc* consultation held in Bergen in October 1988 and considered by STACREC (NAFO Sci. Coun. Rep. 1989, page 123 and 124) was changed to Paris, France in January 1990 by the CWP.
3. As recommended by the Scientific Council (NAFO Sci. Coun. Rep. 1989) the Assistant Executive Secretary, the Chairman of STACREC and representatives from USSR attended the Session.

**Coordinating Working Party on Atlantic
Fishery Statistics**

**Fourteenth Session
5-9 February 1990**

Report of NAFO Fishery Statistical Program, Publications and ADP

January 1990

Report of NAFO Fishing Statistical Program, Publication and ADP

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A. ACQUISITION OF FISHERY STATISTICS

The Scientific Council of NAFO continues to support the acquisition of fishery statistics for the Northwest Atlantic (FAO Fishing Area 21) through the STATLANT system, which is coordinated by the CWP. The system, which was inherited by NAFO in 1979 when it replaced ICNAF (one of the founding members of the CWP in 1960), involves basically the distribution for NAFO of STATLANT 21A and 21B forms and notes by the CWP Secretary to the statistical offices of all countries known to have fished in the region.

1. STATLANT 21A (Annual Catch Summary)

The deadline for the submission of this provisional report is 15 April of each year for the preceding year's data. These provisional data represent the initial inventory of nominal catches by species and NAFO division for review and use by the Standing Committee on Fishery Science (STACFIS) at the June Meeting of the Scientific Council. The early deadline is intended to provide sufficient time for the reports to reach the NAFO Secretariat before the June Meeting, so that a reasonably complete inventory of the preceding year's nominal catches would be available at the start of the meeting.

Although sufficient data were generally available to allow the timely production of the annual inventory during the ICNAF regime prior to 1980, this has not been achievable during the past 8-9 years due to the lack of attention being given by a few countries to the submission of STATLANT 21A reports. For example, 1988 (Table 1) less than half of the STATLANT 21A reports were available on 31 May (6 weeks after the deadline), and the production of a partial inventory during the course of the June Meeting in these years was not warranted due to the missing reports. Consequently, the "Fishery Trends" sections of the reports of the Standing Committee on Fishery Science (STACFIS) and the Scientific Council could not be completed for approval until the Annual Meeting in September of each year. The situation significantly worsened in 1989 when the provisional nominal catches 1988 Summary Document could not be compiled until November 1989, well after the September Annual Meeting of the Scientific Council.

2. STATLANT 21B (Detailed Catch and Effort Data)

Although the deadline for the submission of STATLANT 21B reports has remained the same as traditionally (30 June for the preceding year's data), significant delays in the acquisition of the final catch and effort statistics from members states of Contracting parties in recent years has had a detrimental impact on the timely publication of the NAFO Statistical Bulletin and the annual updating of statistics for assessment purposes.

- a) Reports for 1986 (Table 1). Ten of the STATLANT 21B reports were outstanding on 31 August 1987 (2 months after the deadline), and 9 were still outstanding at the end of 1987 (i.e. Canada-N, Cuba, Faroe Islands, France, Denmark, Greenland, Romania, USA and South Korea). The French and Canada (N) reports were the last to be received in 1989 (22 months after the deadline). The French report for 1986 was initially very deficient in that there was no separation of FRA (M) and FRA (SP) data and no breakdown of

the catch and effort data by tonnage class. The separation of the two French components was finally resolved and a partial breakdown of tonnage class received in their final submission. *NAFO Statistical Bulletin* Vol. 36 for 1986 was finally published in October 1989.

- b) Reports for 1987 (Table 1). Analysis of the STATLANT 21B returns indicated that 10 reports were outstanding on 31 August 1988, and 9 were not available at the end of 1988 (Canada-M, Canada-N, Faroe Islands, France, Denmark, Bulgaria, Romania, Greenland, and USA). The Canada-M report became available in early 1989. The absence of Faroese and French data for 1987 and some problems with one component of the Canadian data has considerably delayed publication of *NAFO Statistical Bulletin* Vol. 37. (Data were still missing in December 1989.) Publication of the Bulletin will be undertaken as soon as possible, hopefully before mid 1990.
- c) Reports for 1988 (Table 1). Analysis of the STATLANT 21B returns indicated that 11 reports were outstanding on 31 August 1989 and, despite the 30 June deadline, 8 were not available at the end of 1989 (Bulgaria, Canada-N, Iceland, Italy, Faroe Islands, Greenland, Romania, and USA). The French report provided separation of data for France (M) and France (SP) but no breakdown of catch and effort data by tonnage class. Canada-M and Spain data for 1988 are in hand but are not considered as final data. Publication of *NAFO Statistical Bulletin* Vol. 38 will be undertaken as soon as the STATLANT 21B database for 1988 is complete, hopefully before the end of 1990.

Table 1. Dates of receipt of STATLANT 21A and 21B reports for 1986-88 (as of December 1989). (* = EEC member states; ** = represented by Contracting Party Denmark; X = no report to date.)

Country	STATLANT 21A (deadline, 15 April)			STATLANT 21B (deadline, 30 June)		
	1986	1987	1988	1986	1987	1988
Bulgaria	No fishing	X	X	No fishing	X	X
Canada-M	16 Apr 87	02 Jun 88	14 Apr 89	19 Jun 87	06 Jan 89	Dec 89
-N	15 May 87	25 Apr 88	21 Apr 89	15 Sep 89	X	X
-Q	22 Apr 87	19 Apr 88	12 Apr 89	27 Apr 87	27 Jun 88	22 Jun 89
Cuba	05 Jun 87	26 May 88	12 Jun 89	05 Jun 89	26 May 88	12 Jun 89
*Denmark (excluding Faroe Islands and Greenland)	26 May 87	19 Apr 88	21 Jul 89	19 Feb 88	14 Nov 89	21 Jul 89
*France-M						
-SP	10 Jun 87	14 Jun 88	14 Nov 89	25 Sep 89	X	14 Nov 89
*FRG	03 Jun 87	08 Jun 88	04 Jul 89	14 Aug 87	29 Jul 88	04 Jul 89
*Italy	X	10 Jun 88	X	From USA	From 21A	X
*Portugal	03 Jun 87	11 May 88	24 May 89	15 Jun 87	08 Jul 88	25 May 89
*Spain	02 Jun 87	08 Jun 88	06 Jul 89	02 Jun 87	08 Jun 88	06 Jul 89
*UK	No fishing	09 May 88	02 May 89	02 Nov 87	09 May 88	02 May 89
**Faroe Islands	05 Mar 87	17 Jun 88	X	X	X	X
GDR	04 May 87	19 Apr 88	28 Mar 89	18 Jun 87	28 Jun 88	13 Jun 89
**Greenland	29 Apr 87	15 Jun 88	09 May 89	04 Jan 88	13 Jun 89	X
Iceland	X	No report	X	04 Aug 87	No report	X
Japan	14 May 87	15 Jun 88	09 May 89	14 May 87	08 Jul 88	24 May 89
Norway	10 Mar 87	06 Apr 88	17 Apr 89	23 Jun 87	01 Jun 88	04 Jun 89
Poland	29 May 87	14 Apr 88	28 Apr 89	23 Jun 87	01 Jun 88	04 Jun 89
Romania	X	X	X	X	X	X
USSR	06 May 87	17 May 88	03 May 89	11 Aug 87	08 Jun 88	24 Jul 89
Ireland	No fishing	No fishing	No fishing	No fishing	No fishing	No fishing
South Korea	X	X	X	22 Apr 88	08 Sep 88	31 Aug 89
USA	01 Jun 87	13 Jun 88	07 Jun 89	08 Nov 88	18 Oct 89	X
Total reports	24	24	24	24	24	
21A by 31 May	20	20	11			
21B by 31 August				21	14	12

3. Delinquency in National Reporting of Fishery Statistics

The Scientific Council continues to be greatly concerned about the delinquency in the national reporting of fishery statistics through the STATLANT System. Although the problem had been particularly with submission of STATLANT 21B reports before, in 1989 there was an exceptional delay in two STATLANT 21A submissions. The 1988 21A data compilation of provisional catches which was expected to be available for assessment work at the June 1989 Meeting of the Scientific Council, was not completed until late November. Similarly, as a result of significant delays in submission of 21B data for 1986 and the publication of the *NAFO Statistical Bulletin* being delayed till October 1989, the Scientific Council expressed its grave concern to the Contracting Parties through the Fisheries Commission.

The Secretariat, in its customary role, regularly sends reminders to the statistical offices and sometimes to national representatives of Contracting Parties attending the Scientific Council meetings. This process, however, does not necessarily bring adequate results. CWP should discuss methods by which timely submission of STATLANT data could be achieved.

B. SUMMARY OF AUTOMATIC DATA-PROCESSING OF FISHERY STATISTICS

1. Introduction

STATLANT 21A data form the basis of the provisional inventory of nominal catches in the Northwest Atlantic by species and division. These data are compiled and tabulated on the computer usually in time for the June Meeting of the Scientific Council. STATLANT 21B with the more detailed catch and effort data usually become available several months later and these are finalized and published in the *Statistical Bulletin*.

2. Computer Facilities

Computer processing of STATLANT 21A and 21B fishery statistics has been operational in the ICNAF/NAFO Secretariat since early 1972, and procedures remained essentially unchanged until May 1988. The Secretariat then replaced the IBM Mainframe with an IBM Compatible PC (see Appendix I for details of the new system).

The computer system had worked well over the years, however, the computers required updating. With the installation of the new PC system the data treatment has not changed significantly. The major contributors of data (Canada and USA) continue to provide their fishery statistics in digital STATLANT 21B format, but on computer diskettes which are compatible with the NAFO system. Several countries with comparatively small amounts of data submit their statistics on computer printout while others submit the STATLANT forms. A detailed description of the old processing system was presented at an earlier session of the CWP (see Doc. CWP-10/11). This report provides the update.

3. Treatment of STATLANT 21A Statistics

Annual nominal catch statistics by species and division are transcribed from the STATLANT 21A forms to standard 80-column coding sheets and thence to computer diskettes. Since these data are called as provisional and used primarily for Scientific Council Meeting purposes, the coding, format and computer programs are designed for direct input and paper output. Data are temporarily stored on a hard disk until they are finalized and stored permanently after STATLANT 21B reports are received.

The record for each species under each division in the following format:

<u>Col.</u>	<u>Item</u>
1-2	Last 2 digits of calendar year
3-10	Country name (for identification only)
11-12	Country code
14-15	NAFO division code
16-18	Species code
19-25	Catch (metric tons)

Approximately 2,500 records are involved and these are sorted by species on input. The compilations of the various tables are carried out in 2 successive computer runs. One to produce a summary table by species and subarea and the other to produce tables of individual species catches (also species group tables) by country and division. Examples of tables are given in Appendix II.

4. Treatment of STATLANT 21B Statistics

The detailed catch and effort statistics, reported on STATLANT 21B forms, are transcribed to 80 column coding sheets and subsequently input and verified on computer diskettes. A record contains the monthly catches of a species listed on a line of a STATLANT 21B form. The 3 effort categories are coded as if they were species.

The card format is set out as follows:

<u>Col.</u>	<u>Item</u>
1-2	Last 2 digits of the calendar year
3-4	Country code
5-6	Gear code
7	Tonnage class code
8-9	Main species code
10-11	NAFO division code
12-14	Species cod (and effort code)
15	Identifier for effort or no effort
16-20	Catch, month (not specified)
21-25	" January
26-30	" February
31-35	" March
36-40	" April
41-45	" May
46-50	" June
51-55	" July
56-60	" August
61-65	" September
66-70	" October
71-75	" November
76-80	" December

Each STATLANT 21B sheet could consist of several records on the computer, depending on the number of linear records of effort categories and species. Thus for each sheet of data, Col. 1-11 and 15 contain coded information common to all catch and effort data listed on the sheet, and thus forms the "key" for organizing the data so that catch and effort data can be extracted on a monthly basis.

Approximately 15,000 records are involved and the particular formats of the various Statistical Bulletin tables require that the data be inputted to a disk file, sorted in several ways and compiled through the application of separate programs for each table (Appendix II gives examples of each table). Diskette files are maintained of the basic data file and two other files derived from compilations done during the processing and the data are archived on hard disks.

5. Database

Expansion of the computerized database of Northwest Atlantic fishery statistics from before 1972 has progressed well and the updated database now includes data for all years back to 1963. These data are available to users in the form of one diskette per year of data.

C. NAFO MATTER RELEVANT TO THE CWP

1. NAFO Statistical Boundary Between Canada and USA

Following the decision in 1984 of the International Court of Justice which defined the maritime boundary between Canada and USA between NAFO Subareas 4 and 5, and the proposal adopted by the General Council in 1986 (see Doc. CWP 13/10), the Scientific Council in 1986 decided that fishery statistics should be reported separately for Subdivision 5Zc and 5Zu.

The Council noted in 1989 (NAFO Sci. Coun. Rep., 1989, page 124) that catch and effort statistics had been presented in the Statistical Bulletin in separate columns for 5Zu (statistics from the USA waters) and 5Zc (statistics from Canadian waters) without reference to 5Ze. It was agreed that the Bulletins should include a note that total catch and effort from these two units correspond to the Subdivision 5Ze. A modification of the map illustrating the NAFO Divisions and Subdivisions was also proposed and is presented in Figure 1. The Scientific Council suggested that Contracting Party representatives verify that any charts being produced that show NAFO statistical areas reflect changes in the boundary between Subarea 4 and Subarea 5 adopted by the General Council and also show the division being used for statistical reporting between the Canadian and USA waters.

D. RESEARCH AND STATISTICAL PUBLICATIONS AND REPORTS

1. Publications (January 1987-December 1989)

- a) NAFO Statistical Bulletin, Vol. 34 for 1984 (December 1986)
" " " Vol. 35 for 1985 (December 1987)
" " " Vol. 36 for 1986 (October 1989)
- b) Scientific Council Reports, 1987 (December 1987)
" " " 1988 (December 1988)
" " " 1989 (December 1989)
- c) Journal of Northwest Atlantic Fishery Science, Vol. 7(2) (December 1987)
" " " " " Vol. 8 (December 1988)
" " " " " Vol. 9(1) (September 1989)

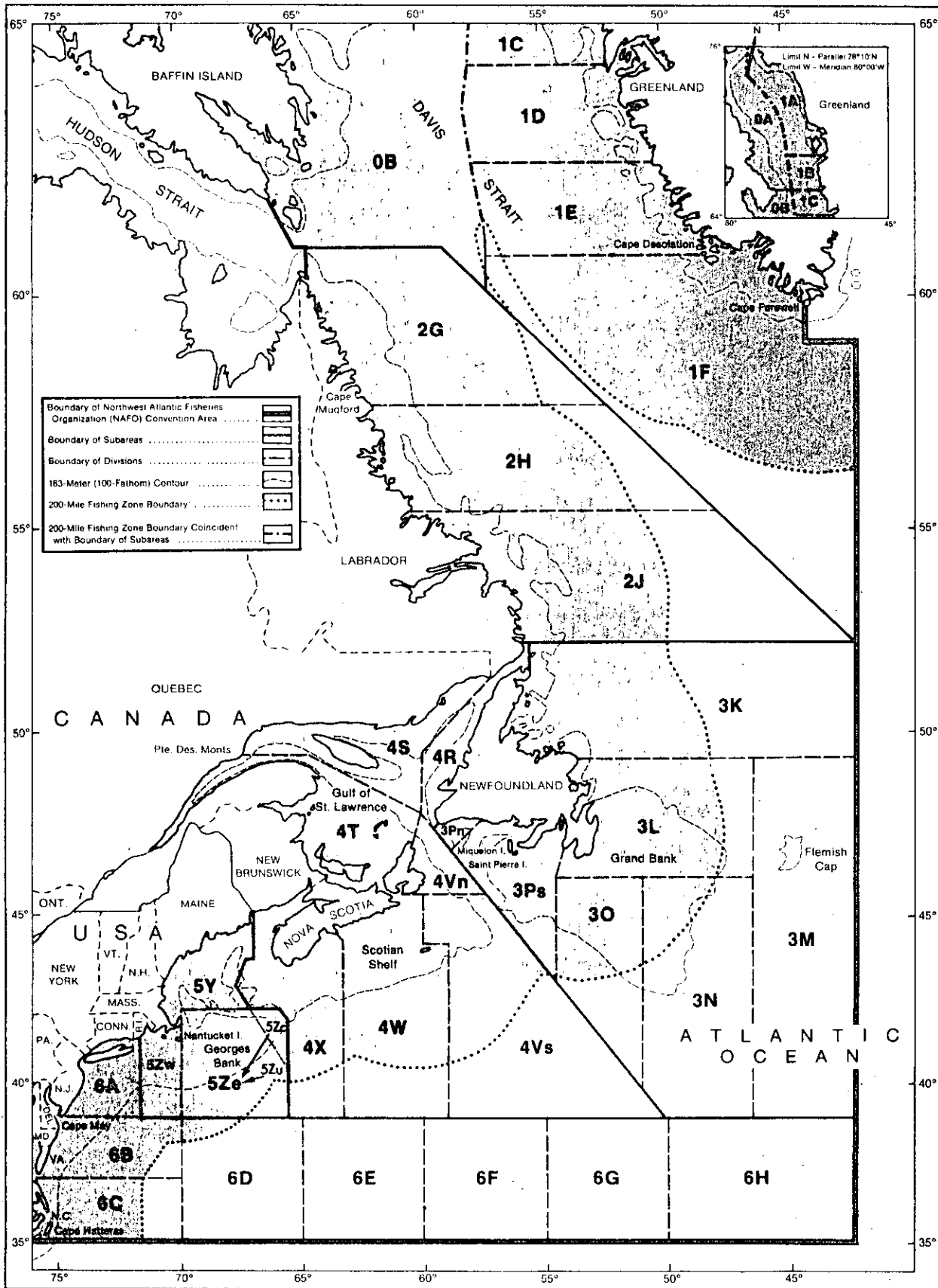
- d) NAFO Scientific Council Studies, No. 11 (March 1987)
 " " " No. 12 (March 1988)
 " " " No. 13 (November 1989)
- e) Provisional Index of Research & Summary Documents for 1986 (May 1987)
 " " " " " " 1987 (August 1988)
 " " " " " " 1988 (July 1989)
- f) List of Fishing Vessels, 1986 (July 1988)
- g) Inventory of Sampling Data, 1979-1984 (April 1989)

2. Meeting Documents Relevant to Statistics (January 1987-December 1989)

- a) Historical catches of selected species by stock area and country for the period 1975-85 (NAFO SCS Doc. 87/03, 38 pages)
- b) Report to the CWP on NAFO statistical program, data-processing and publications, 1984-86 (NAFO SCS Doc. 87/06, 9 pages)
- c) Tagging activities reported for the Northwest Atlantic in 1986 (NAFO SCS Doc. 87/08, 5 pages + addendum)
- d) Report of the Thirteenth Session of the Coordinating Working Party on Atlantic Fishery Statistics (CWP), February 1987 (NAFO SCS Doc. 87/10, 30 pages)
- e) Lists of biological sampling data for 1985 (NAFO SCS Doc. 87/11, 45 pages)
- f) Synopsis of Scientific Council requirements for fishery statistics (NAFO SCS Doc. 87/19, 40 pages + addendum)
- g) Provisional nominal catches in the Northwest Atlantic, 1986 (NAFO SCS Doc. 87/20, 53 pages)
- h) Historical catches of selected species by stock area and country for the period 1976-86 (NAFO SCS Doc. 88/01, 38 pages)
- i) List of biological sampling data for 1986 (NAFO SCS Doc. 88/02, 40 pages)
- j) Tagging activities reported for the Northwest Atlantic in 1987 (NAFO SCS Doc. 88/07, 4 pages + addendum)
- k) Notes on statistical activities and publications since June 1986 (NAFO SCS Doc. 88/11, 2 pages)
- l) Provisional nominal catches in the Northwest Atlantic, 1987 (NAFO SCS Doc. 88/18, 59 pages)
- m) Summary of sampling data (1983-86), collecting data methods used, and level of scientific information available on stocks occurring in the Regulatory Area (NAFO SCS Doc. 88/19, 16 pages)
- n) Tagging activities reported for the Northwest Atlantic in 1988 (NAFO SCS Doc. 89/06, 4 pages)

- o) Historical catches of selected species by stock area and country for the period 1977-87 (NAFO SCS Doc. 89/07, 38 pages)
- p) List of biological sampling data for 1987 (NAFO SCS Doc. 89/10, 49 pages)
- q) Notes on statistical activities and publications since June 1988 (NAFO SCS Doc. 89/12, 2 pages)
- r) Sections of the Convention relevant to reporting statistics separately for waters within the Regulatory Area and for Convention waters under Coastal State jurisdiction (NAFO SCS Doc. 89/18, 2 pages)
- s) Provisional nominal catches in the Northwest Atlantic, 1988 (NAFO SCS Doc. 89/21, 44 pages)

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



APPENDIX I

NAFO COMPUTER SYSTEM HARDWARE AND SOFTWARE

NEC 386 Model 340 (IBM Compatible) consisting of:

- . 80386 CPU 16Mhz
- . 2Mb RAM
- . One 1.2 Mb floppy disk drive
- . One 40 Mb fixed disk drive
- . EGA monitor board
- . Two serial, one parallel ports
- . MS DOS/GW Basic V3.3
- . Logitech Bus mouse

80387-16 math co-processor chip

3.5" 720 Kb mini floppy disk drive
and separate controller

Archive 40 Mb tape drive for backups

10Mhz Turbo XT (IBM Compatible) Personal computer with 20 Mb hard drive
including:

- . 8088-10 Processor
- . 640 K6 RAM
- . Multi I-O drive card
- . Parallel and serial ports
- . Joystick port
- . Enhanced keyboard with lock
- . MS-DOS 4.0
- . 5-1/4 " floppy drive
- . GM-6 plus mouse

NEC LC890 8 ppm laser printer with dual hoppers
3Mb RAM, 35 internal fonts, Postscript

Panasonic KX-P1180 multi-mode Printer

Relevant Software:

- . Ashton-Tate DBase IV
- . Ventura Publishing software
- . Word Perfect V5.0
- . Lahey Fortran Compiler

APPENDIX II

EXAMPLES OF STATLANT 21A COMPILATIONS

A.

Table 1. Provisional nominal catches by species and subarea, 1988.

Species	Subareas							1988 Total	1987 Total
	0	1	2	3	4	5	6		
Atlantic cod	-	61126	59006	303464	157786	46731	279	628392	592473
Haddock	-	-	-	10712	16002	8849	6	35569	34253
Atlantic redfishes	-	1403	1030	95084	54310	1152	2	152981	195795

B.

TABLE 2. NOMINAL CATCHES OF SPECIES GROUPS BY DIVISION AND COUNTRY - 1988.

Groundfish

	SUBAREA 0			SUBAREA 1								SUBAREA 2				
	0A	0B	TOTAL	1A	1B	1C	1D	1E	1F	1NK	TOTAL	2G	2H	2J	2NK	TOTAL
CAN-M	1	0	1	0	0	0	0	0	0	0	0	0	448	8383	0	8831
CAN-N	0	2	2	0	0	0	0	0	0	0	0	45	12	52481	0	52538
CAN-Q	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

C.

TABLE 3. NOMINAL CATCHES OF INDIVIDUAL SPECIES BY DIVISION AND COUNTRY - 1988.

Atlantic cod

	SUBAREA 0			SUBAREA 1								SUBAREA 2				
	0A	0B	TOTAL	1A	1B	1C	1D	1E	1F	1NK	TOTAL	2G	2H	2J	2NK	TOTAL
CAN-M	0	0	0	0	0	0	0	0	0	0	0	0	438	8219	0	8657
CAN-N	0	0	0	0	0	0	0	0	0	0	0	0	6	50334	0	50340
CAN-Q	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D.

Table 4. Joint venture catches in 1988, as received from Canada and Japan. (These catches are included in the preceding tables, under the national statistics of the countries involved.)

Country	Species	0A	0B	1A	1B	1C	1D	2G	2H	2J	3K	3O	4Vs	4W	4X	Total
Denmark	Northern prawn	398	577	-	-	-	-	130	572	730	204	-	-	-	-	2609
	Total	398	577	-	-	-	-	130	572	730	204	-	-	-	-	2609
Faroese	Northern prawn	555	632	-	-	-	-	501	1088	853	754	-	-	-	-	4383

EXAMPLES OF STATLANT 21B COMPILATIONS IN STATISTICAL BULLETIN

A.

TABLE A. Nominal catches of All Species in the Northwest Atlantic, 1971-85.

Thousand Metric Tons Round Fresh

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Bulgaria	45	41	37	30	28	20	12	2	10	1	-	-	-	-	-
Canada	1146	956	925	845	848	906	1014	1147	1238	1177	1213	1213	1128	1084	1199
Cuba	1	2	-	-	7	30	18	13	13	9	7	19	15	21	24
Denmark	38	41	45	52	49	47	64	71	82	103	109	106	101	84	86

B.

TABLE B. Nominal catches of selected species in the Northwest Atlantic, 1971-85.

Thousand metric Tons Round Fresh

Country/Subarea	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Atlantic cod															
Canada	245	219	177	158	154	193	235	291	370	418	432	511	507	472	474
Denmark	19	23	19	20	19	16	24	37	46	46	53	48	45	24	13
Faroe Islands	34	29	21	16	15	15	14	9	8	6	7	7	6	4	3

C.

TABLE 1. NOMINAL CATCHES BY SPECIES AND SUBAREA — 1985.

Species	Subareas						1985	1984	
	0	1	2	3	4	5	6	Total	Total
Atlantic cod	-	14876	12302	335928	225983	48928	299	638316	641341
Haddock	-	-	-	11946	27438	10782	2	50168	48182
Atlantic redfishes (NS)	1	4040	1000	80916	42063	4282	-	132302	128752

D.

TABLE 2. NOMINAL CATCHES OF SPECIES GROUPS BY DIVISION AND COUNTRY — 1985.

SUBAREA 0														SUBAREA 1							SUBAREA 2					METRIC TONS ROUND FRESH									
0A			0B			TOTAL		1A		1B		1C		1D		1E		1F		1GK		TOTAL		2G		2H		2J		2GK		TOTAL			
ALL SPECIES																																			
TOTAL																																			
2640			1080			3720		20372		23282		15189		13589		7628		11095		471		91626		203		4929		37174		-		42306			
CAN-M			149			-		149		-		-		-		-		-		-		-		-		-		1625		671		-		2296	
CAN-N			53			-		53		-		-		-		-		-		-		-		-		10		1839		15765		-		17614	

E.

TABLE 3. NOMINAL CATCHES OF INDIVIDUAL SPECIES BY DIVISION AND COUNTRY — 1985.

														METRIC TONS ROUND FRESH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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F.

TABLE 4. NOMINAL CATCHES OF SELECTED SPECIES BY DIVISION, COUNTRY AND MONTH — 1985.

Atlantic Cod												METRIC TONS ROUND FRESH			
DIV	COUNTRY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NK	TOTAL
1A	GRL	7	1	-	3	1	8	30	15	23	29	26	6	-	149
	TOTAL	7	1	-	3	1	8	30	15	23	29	26	6	-	149
1B	GWL	20	29	47	57	233	1228	782	41	48	85	45	53	268	2936

G.

TABLE 5. NOMINAL CATCHES AND FISHING EFFORT BY DIVISION, COUNTRY, GEAR, TONNAGE CLASS, MAIN SPECIES, AND MONTH — 1985.

															METRIC TONS ROUND FRESH				
DIV	COUNTRY	GEAR	TUN	MSP	SPECIES/EFFORT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NK	TOTAL
04	CAN-M	018	5	PAN	N PHARM	-	-	-	-	-	-	-	-	5	-	-	-	-	5
TOTAL						-	-	-	-	-	-	-	-	5	-	-	-	-	5
HOURS FISHED						-	-	-	-	-	-	-	-	25	-	-	-	-	25

H.

TABLE 6. NOMINAL CATCH AND EFFORT STATISTICS FOR COUNTRIES WHOSE VESSELS FISHED IN THE NORTHWEST ATLANTIC, UNDER COOPERATIVE ARRANGEMENTS WITH COASTAL STATES IN 1985.

DENMARK

DIV	GEAR	TUN	MSP	SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NK	TOTAL
04	UTB*	5	PAN	IN PHARM	0	0	0	0	0	0	0	0	0	619	176	0	0	795
TOTAL					0	0	0	0	0	0	0	0	0	619	176	0	0	795
A.					0	0	0	0	0	0	0	0	0	1921	525	0	0	2446