PART VI

(pages 193 to 241)

Fisheries Commission Meeting, 13th Annual Meeting, 9-13 September 1991

Fisheries Commission Meeting
13th Annual Meeting, September 1991

PART I. Report of the Fisheries Commission

Tuesday, 10 September (1330-1700 hours)
Wednesday, 11 September (0900-1700 hours)
Thursday, 12 September (0900-1700 hours)
Friday, 13 September (0915-1300 hours)

1. Opening of the Meeting (items 1 to 5 of the Agenda)

1.1 The 13th Annual Meeting of the Fisheries Commission was opened by O. Muniz (Cuba), Chairman of STACTIC, at 1345 hours, 10 September 1991 at the Holiday Inn, Dartmouth, Nova Scotia.

1.2 The members of the Fisheries Commission present were: Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), European Economic Community (EEC), Japan, Norway, Poland and the Union of Soviet Socialist Republics (USSR) (Annex 1).

1.3 Mr Muniz explained that in the absence of J. Zygmanowski (Poland), Chairman of the Fisheries Commission, and G. Etchegarry (Canada), Vice-Chairman, in accordance with the Rules of Procedure he was assuming the Chair to preside over the election of an interim Chairman to conduct the meeting to its conclusion.

1.4 The representative of Canada explained that the previous Vice-Chairman was no longer a NAFO Commissioner. Canada therefore proposed M. Yeadon, a NAFO Commissioner of Canada, as interim Chairman. The proposal was **adopted** unanimously.

1.5 The Chairman called the meeting to order.

1.6 A. Donohue (Canada) was **appointed** Rapporteur.

1.7 For the Agenda, Canada proposed the addition of a new item 18: **Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 1993.** Denmark asked that item 19 be moved up for discussion before item 15. Both proposals were accepted and item 19 was renumbered as item 15. Following Agenda items were re-numbered accordingly. The agenda **was adopted** as amended (Annex 2).

1.8 The Chairman welcomed the Observers from the USA.

1.9 The meeting **adopted** the Chairman's proposal to follow the usual practice of a media blackout for the duration of the meeting with a Press Release being released at the end of the week. The Press Release and Quota Table for 1992 are attached herewith at Annex 7.

2. Administration (items 6 to 9 of the Agenda)

2.1 The Report of the 12th Annual Meeting, September 1990 (FC Doc. 90/12, Revised) was **adopted** as circulated.

2.2 The Chairman noted that the Fisheries Commission had been advised that the GDR had ceased to be a Contracting Party to the Convention and the EEC had succeeded to former

(ex) GDR's rights and obligations under the NAFO Convention. The change brought total membership of the Fisheries Commission to nine and quorum to six.

2.3 Procedures for election of Officers were postponed until the end of the meeting. On 13 September the meeting unanimously **elected E. Wiseman (Canada) and P. Hillenkamp (EEC)** as Chairman and Vice-Chairman of the Fisheries Commission, respectively.

2.4 Decision on clarification of the rules of procedure regarding the seconding of motions was referred to the General Council.

3. Commission Proposals (items 10 and 11 of the Agenda)

3.1 The Chairman noted that the consolidation of Status of Proposals had been updated to July 1991 and circulated. The document was **adopted** as circulated.

3.2 The Chairman noted that during the past year a STACTIC Working Group on Inspection and Control had been established, and invited the Chairman of STACTIC, Mr Muniz (Cuba) to report on its work.

3.3 The Chairman of STACTIC presented the following documents: FC Doc. 91/1, FC Doc. 91/2, Reports of the two Meetings of the Working Group, held in Brussels and Dartmouth, respectively; FC Working Paper 91/1 which reflects the amendments adopted by the Working Group for Fisheries Commission approval; STACTIC W.G. Working Paper 91/17, draft report to the Fisheries Commission; and FC Doc. 90/9, Mandate of the Working Group on Improvements to Inspection and Control in the Regulatory Area.

3.4 Further he explained in detail the Report of the STACTIC Working Group on Improvements to Inspection and Control in the Regulatory Area to the Fisheries Commission (STACTIC W.G. Working Paper 91/17). The full text of this report is in the STACTIC Report in Part II. He asked the Fisheries Commission for directions on how the Working Group should proceed and on its relationship to STACTIC.

3.5 Denmark (in respect of the Faroe Islands and Greenland), Canada and the EEC indicated their acceptance of the presentation. There being no further comments, the Chairman thanked STACTIC for its work and declared documents FC Doc. 91/1, 91/2, STACTIC W.G. Working Paper 91/17 and FC Working Paper 91/1 **adopted** subject that STACTIC continue the work of the Working Group as outlined in STACTIC W.G. Working Paper 91/17.

3.6 The Representative of the USSR commented that while the USSR was prepared to continue to work in STACTIC it reserved its position on the Report of the STACTIC Working Group.

4. International Control (items 12 to 14 of the Agenda)

4.1 The Chairman indicated that item Annual Return of Infringements was to be discussed in STACTIC and would be considered in the Fisheries Commission at the conclusion of deliberations of that body.

4.2 The Chairman indicated that the item Fishing Vessel Registration was to be discussed in STACTIC and would be considered in the Fisheries Commission at the conclusion of deliberations of the STACTIC Report.

4.3 Discussion under item Report of STACTIC was deferred to later in the week at the end of the meeting.

4.4 The Canadian representative made a statement on Effective International Controls in which he focussed on the problems facing NAFO as an institution and as a practical fisheries organization. He drew attention to NAFO's failure to prevent overfishing and severe stock declines and to scientists' inability to perform proper stock assessments as a result of misreporting by fleets from Contracting Parties and lack of reporting by non-Contracting Parties vessels fishing in the Regulatory Area. He pointed out that three commitments were required on the part of all NAFO Contracting Parties: first, they must adopt sustainable development as the approach; second, NAFO decisions must be accepted and NAFO reinforced as an institution; third, effective control of fleets. The Canadian representative concluded his remarks by stating that Canada's objective at the meeting was to make NAFO an effective international organization (Annex 3).

4.5 The representative of Denmark (in respect of the Faroe Islands and Greenland) agreed with the Canadian statement and stated all fish managers had the same objectives within their own zones. NAFO should consider how quickly it could achieve its long-term objectives but had to initially achieve short-term objectives. Problems could only be solved in a spirit of cooperation.

4.6 At the end of the meeting, the Chairman of STACTIC delivered the Report on the deliberations of STACTIC. He reminded delegates of his report on the work of the STACTIC Working Group (STACTIC W.G. Working Paper 91/17 and FC Doc. 91/1, 91/2). The Working Group had agreed on amendments to the NAFO Conservation and Enforcement Measures to provide for a hail system. Additional amendments to the NAFO Conservation and Enforcement Measures were underlined in FC Doc. 91/7 and outlined in STACTIC Report (see Part II).

4.7 As it was reported, STACTIC had considered additional amendments to the NAFO Conservation and Enforcement Measures, and some of those had been deferred to the next meeting of STACTIC. Among these was Canada's proposal to amend the hail system to incorporate a catch reporting feature (STACTIC Working Paper 91/4).

4.8 Following discussion on the use in FC Doc. 91/7 of terminology that does not correspond to that used in the NAFO Convention, the representative for Denmark (in respect of Faroe Islands and Greenland), seconded by the representative for Canada, moved adoption of the Report of STACTIC and the recommended amendments to the Conservation and Enforcement Measures (FC Doc. 91/7 and STACTIC Report). The motion was **adopted**.

4.9 The representative of the USSR asked that his objection be noted and that the USSR would lodge a formal objection to the air surveillance amendments. **Noted.**

4.10 The EEC representative called for consideration on their amendments in STACTIC Working Paper 91/5 to the hail system explaining the EEC fishermen had implemented the present hail system on the understanding that the amendment proposed by the EEC would be incorporated as soon as possible.

4.11 The delegates expressed their views as follows: the representative of Denmark (in respect of the Faroe Islands and Greenland) with concurrence of the Norwegian representative noted it was premature to change the hail system at this stage; however, other features could be explored.

4.12 The EEC representative moved his proposal (STACTIC Working Paper 91/5) to vote first for paragraphs (a), (b), and (d) as amendments to the hail system. The proposal seconded by Canada and supported by Norway was **adopted** unanimously.

4.13 The EEC representative asked for a separate vote for paragraph (c) (STACTIC Working Paper 91/5) which reads: "For the application of the hail system, the Div. 3N and 3O shall be considered as one division." He explained that it referred to a distinct stock. The Canadian representative indicated that the meeting had three choices: drop the line, maintain the status quo or do the same for the line between 3N and 3O as was done for the line between 3L and 3N.

The result of the vote: For: 2 (EEC, Poland), No: 5, Abstain: 1 (USSR): **defeated**.

4.14 The Canadian representative proposed that the line between Division 3N and 3O be treated in the same way as the line between 3L and 3N in the amendment just adopted in respect of paragraph (d) (STACTIC Working Paper 91/5; item 4.12 of this Report) so as to establish a 10 mile corridor on each side of the line between divisions 3N and 3O and provide for hails every 24 hours. The proposal was **adopted** unanimously.

4.15 The adopted amendments of the EEC and Canadian proposals were incorporated in the text of the hail system (Annex 4) for further presentation to the Contracting Parties in accordance with the provisions of Article XII.1 of the Convention.

4.16 Canada proposed a mandatory review of the hail system at the next meeting of NAFO, including an examination of the cost effectiveness in terms of conservation measures and implementation of the amendments and of other ways to improve the hail system.

4.17 The EEC supported this proposal which it considered reflected its support for effective conservation measures and for limiting costs to fishermen. The EEC proposed that the Scientific Council consider whether effective scientific assessment required reporting catches by precise division along divisional lines for each stock. **Noted.**

5. Transfer of Quotas Between Contracting Parties

5.1 The representative of Denmark (in respect of the Faroe Islands and Greenland) said that Greenland and the Faroes are small entities that have only one quota between them. Fishing opportunities in the Regulatory Area were restricted by low TACs and quotas. There appeared to be a fixed method for distributing quotas on the basis of historic fishing rights. This resulted in permanent denial of quotas to those without them. Denmark was suggesting that the "Others Quota" could be used to provide additional quotas to Contracting Parties with low quotas if it was increased to a reasonable size. He referred to the practice of quota swaps between Parties with large quotas which occurred without reference to the needs of other Contracting Parties. This practice was unfair and difficult for Denmark to live with.

He suggested that to help a small country like Greenland the size of the "Others Quota" should be increased. He suggested that discussion on the issue could be deferred to an appropriate opportunity later.

5.2 The EEC representative commented that this was a complex issue and the views of Contracting Parties would need to be sought.

5.3 Canada indicated its agreement with the EEC reaction. Discussion was **deferred**.

6. Conservation

Summary of scientific advice by the Scientific Council (item 16 of the Agenda)

6.1 The Chairperson introduced this item by drawing attention to the detailed assessment – SCS Doc. 91/19, available since late June, and the Executive Summary which was distributed just prior to the meeting. The Chairperson congratulated the Chairman of the Scientific Council for an excellent Executive Summary.

6.2 In prefacing his substantive remarks, the Chairman of the Scientific Council, B. Jones (EEC), explained that the Scientific Council had met at NAFO Headquarters 5-19 June 1991. Its Report (SCS Doc. 91/19) included stock summary sheets on pages 3-21. Additional detailed stock assessments were contained in the Report of the Standing Committee on Fishery Science at Appendix I. The assessments included responses to questions posed by the coastal states as well those requested by the Fisheries Commission. Appendix II was the Report of the Standing Committee on Research and Co-ordination and Appendix III was the Report of the Standing Committee on Publications. The assessment for the capelin stock in Div. 3L had to be postponed to the present meeting and would be reported separately.

6.3 Continuing his introductory remarks, Mr Jones noted that the Scientific Council had welcomed as the new Chairman of the Scientific Council V. P. Serebryakov of the USSR.

6.4 The Chairman of the Scientific Council answered the questions of the Fisheries Commission at its last meeting on the following subjects: cod in Div. 2J and 3KL; flounder in Div. 3LNO; witch flounder in Div. 3NO; squid in Subareas 3 and 4; capelin in Div. 3NO. He then commented on individual stock assessments under the following headings: 3M cod, 3NO cod, 3M redfish, 3LN redfish, 3M American plaice, 3LNO American plaice, 3NO witch flounder, 3LNO yellowtail flounder; 3NO capelin and squid in Subareas 3 and 4.

6.5 The representative of Denmark (in respect of the Faroe Islands and Greenland) echoed the Chairperson in complimenting the Scientific Council on the innovative Executive Summary. Referring to the table on page 33 of the full Report showing estimates of unreported catches, he suggested future reports begin with this type of table.

6.6 The EEC representative joined in the compliments on the Executive Summary but regretted the way advice was formulated and expressed the following concerns: except for one stock, the Scientific Report did not offer options based upon different fishing mortalities; the absence of criteria for the choice of a recommended TAC, protection of the spawning biomass, prevention of recruitment failure, yield-per-recruit etc.; these omissions made it difficult, if not impossible, to build dialogue between managers and the Scientific Council; it is of paramount importance that for each stock, the management body be offered a range of options including a review of potential biological and ecological consequences; uncertainty affecting the assessments and the resulting recommendations of single numbers which could be severely misleading. The EEC delegation welcomed the forthcoming special workshop on calibration techniques and comparative methods. He urged the Scientific Council to take its findings into account, and requested the Scientific Council provide the next annual NAFO meeting with a series of management options, including the risks associated with each option, for all NAFO managed stocks. The EEC accepted partial responsibility for the unsatisfactory situation described in the report. It was an urgent priority to obtain data on the various stocks. The EEC would redouble its efforts to provide all available information.

6.7 The Canadian representative agreed that the lack of analytical analyses was distressing. He pointed out that this was caused by absence of adequate data on which to base such assessments. The lack of these analyses potentially masked bad news concerning the health of the stocks.

6.8 The Chairman of the Scientific Council said the Council also regretted its inability to provide a range of management options for each stock. The Scientific Council would examine the possibility of applying different methods for performing analytical analyses in accordance with the suggestion of the EEC representative. Unreported landings were not biologically sampled. Another difficulty was late availability of data, reducing the time available for performing assessments and contributing to the lack of evaluation by other assessment methods.

6.9 The Chairman of the Scientific Council provided a summary of his earlier description of the state of each stock and answered questions on the following stocks in items 17 and 18 of the Agenda:

3M Cod

6.10 The EEC representative asked whether the low abundance of cod in Div. 3M was attributable to high fishing mortality or partly to migration. The Chairman replied that while migration patterns were being studied, the main cause of the decline in the stock was heavy exploitation over the last few years.

6.11 The representative of Denmark (in respect of the Faroe Islands and Greenland) asked that the Scientific Council examine the age and size composition of fish caught by each type of fishing gear. The Chairman of the Scientific Council reiterated that due to the very high level of unreported catches sampling had been drastically low and information very limited. He promised to consult his colleagues and report.

6.12 The Canadian representative posed questions in relation to the comment in the summary sheet that the spawning stock biomass in 1990 was at the lowest limit of its critical size. He inquired as to the source of the information on which the Scientific Council based its estimates of unreported catches of 39 000 tons in 1989 and 30 000 tons in 1990 and who made those unreported catches. Mr Jones, expressing concern for protecting confidential sources, said he could not reply.

6.13 A short discussion followed Canada's request for a general breakdown of countries not reporting their catches. The representative of Denmark, supported by the EEC, thought this was an inspection and control problem that should be referred to STACTIC. The representative of Canada agreed and said that there was a need to understand the high fishing mortality and its implications in light of the biomass being at the lowest limit of its critical size.

6.14 The Chairman of the Scientific Council commented that catches of young fish were high which reduced the recruitment of abundant year-classes to the spawning stock. The representative of Denmark (in respect of Faroe Islands and Greenland) commented that there appeared to be a correlation between low spawning biomass and improved abundance. The Chairman replied that management strategy should aim at reducing pressure on new year classes to ensure their survival long enough to provide an economically viable fishery. Scientists could not at the moment find a clear relationship between spawning stock size and subsequent recruitment. The fishery had developed into an opportunist fishery which exploited year-classes as soon as they recruited to the fishery. Scientists were worried about

the size of the spawning stock despite the fact that small stock sizes could produce good year-classes. If the fishery was exploited in this way threatening stability, there was a risk that spawning stock biomass would be endangered.

6.15 The USSR representative asked which of divergent results of biomass surveys conducted by different vessels was accurate. He also sought confirmation that the current fishery was exploiting the 1985 and 1986 year-classes. The Chairman of the Scientific Council could not state which of the surveys was the most accurate but all confirmed a downward trend in the biomass, and confirmed the accuracy of the statement concerning the 1985 and 1986 year-classes. In response to further questions by the USSR representative, the Chairman stated that surveys did not consider the effect of environmental factors on biomass.

6.16 In response to a question from the EEC representative, the Chairman confirmed that commercial catch data was helpful but that the proportion sampled depended on the relationship of actual landings to the TACs and quotas. Even with reliable catch and biological sampling data, it would take a number of years to develop a series of data that could form the basis of analytical assessments of this stock. In the meantime, scientists would continue to depend on research vessel survey data and other available biological data such as that from tagging experiments conducted in the area.

6.17 In response to questions from the representative of Canada, the Chairman of the Scientific Council explained that the sampling data that had been received related only to the reported portion of total catches and agreed that the lower the biomass, the greater the risk to survival of the stock.

6.18 Stating that while the risk to the spawning biomass could not be ignored but should not be exaggerated, the EEC representative asked whether the stock could withstand moderate exploitation. The Chairman explained that if the fishery was managed at levels of fishing mortality that result in a small spawning biomass, the overall biomass would remain low. High levels of fishing mortality would result in a "pulse fishery" which was difficult to manage and inefficient.

6.19 In ensuing discussion, the EEC representative commented that reopening the fishery would result in more effective sampling since legal catches would be available. The Chairman of the Scientific Council pointed out that sampling data from a directed fishery was available for the first time in 1991. It had not yet been analyzed. He undertook to review the actual level of sampling. The EEC representative called for the use of rational fishing patterns and for measures to prevent the use of gear that catches too many small fish.

6.20 At the conclusion of the discussion on 3M cod, the Norwegian representative summation was that better surveillance and control, especially aerial surveillance, was needed to end massive unreported catches. For halting disproportionately high catches of small fish, minimum fish size in addition to mesh size requirements could be helpful. He asked the Scientific Council to advise on the appropriate mesh size to maximize yield per recruit.

3M Redfish

6.21 Discussion opened with Canada's request for an explanation of the reduction in the recommended TAC from 43 000 tons in 1991 to 35 000 tons in 1992. The Chairman explained that the advice for 1991 was based on the assumption that catches in 1990 would not exceed the recommended TAC of less than 50 000 tons. Actual catches in 1990

amounted to 83 000 tons indicating the reduction in the recommended TAC. In response to questions from the USSR representative, he explained that the Scientific Council was confident in the accuracy of its estimate of catches of 83 000 tons including approximately 16 000 tons of unreported catches.

6.22 The Canadian representative pointed out that for 5 years catches had exceeded TACs and unless reduced, there was risk of long-term reduction of the size of the stock. In discussion concerning accuracy of the biomass estimate, the Chairman explained that the margin of error meant that the actual biomass could be higher or lower but there was a clear and sharp downward trend.

6.23 The EEC representative was disappointed that a range of management options from $F_{0.1}$ to F_{max} was not provided. Conceding the need to reduce catches, he requested an assessment of the risks associated with a gradual rather than immediate reduction of TACs to the $F_{0.1}$ level. The Chairman of the Scientific Council answered that the stock could not sustain the high catches of recent years – most of the risk was from catches in excess of the TAC – but if TACs were respected, he could not say that fishing at above $F_{0.1}$ would be disastrous. Nevertheless, catches should be reduced to help the stock stabilize and recover. Reducing catches would speed up recovery. The TAC should be set in line with management objectives for recovery of the stock. The Canadian representative called for adoption of exploitation rates providing for stability of the stock. The EEC representative stated that while the current exploitation rate had reduced the biomass, there was no evidence this exploitation rate was unsustainable.

3M American Plaice

6.24 In response to an inquiry by the EEC representative, the Chairman of the Scientific Council stated that he thought the apparent reduction in catches in 1990 was due to effort being diverted to other fisheries. The representative of Canada drew attention to the "Special Note" in the "summary sheet" indicating that age composition data was required from commercial catches. He hoped the data would be available to assist in the preparation of the scientific assessment for 1992.

3NO Cod

6.25 The representative of Canada noted that the Scientific Council was only able to provide a general indication of mortality. With catches exceeding the TAC every year, biomass had declined to the lowest level observed. In this context why was the Scientific Council recommending the status quo? A more conservative TAC was needed.

6.26 The Chairman explained that the Scientific Council had recommended that the TAC "not exceed" 13 600 tons. He agreed that the condition of the stock was not good; the biomass was low; there was a need to rebuild the stock with lower catch levels leading to faster recovery.

6.27 In response to an inquiry by the EEC and Canadian representatives, the Chairman explained that an analytical assessment was not possible in 1991 due to unacceptably high uncertainty resulting from unreported catches.

6.28 In response to a question from the USSR representative, the Chairman said that recommended TACs were reduced in the late 1980's in response to falling biomass which had been on the increase in the early 1980's. In response to an inquiry from the EEC representative, he said that the index of abundance provided by Canadian and USSR research was more reliable than that for redfish in Div. 3M and was being handled in the same way.

6.29 In response to an inquiry by the representative of Denmark (in respect of Faroe Islands and Greenland) about the size composition of fish caught by different gear types, the Chairman of the Scientific Council noted that detailed size reports were available in the national research reports of Portugal and the Faroe Islands with some data for Spain available in SCR Doc. 91/78. Generally, longliners take larger fish than those taken by trawlers. No information was available for gillnets but catches were being sampled and size composition information should be available to the Scientific Council in June 1992.

6.30 He also elaborated the earlier reply concerning improved sampling of cod in 1991. While sampling had improved, the main obstacle was still the absence of sampling of illegal catch which data would be needed to construct length and age compositions that would be representative of the total catch.

6.31 In response to another question, he said that using the current legal mesh size of 130 mm it is possible that up to 50% of 45 cm cod would be retained. He thought the mean selection size and current legal mesh size were appropriate for cod in this area.

3LN Redfish

6.32 The Chairman of the Scientific Council then resumed the summary advice beginning with 3LN redfish. There were no questions on this stock.

6.33 He then noted an error on page 21 of the Executive Summary. The label on the right-hand axis of the graph at the bottom of the page should have read "abundance in millions" not "billions".

3LNO American Plaice

6.34 In response to a question from the Canadian representative concerning the use of an "effective mesh size" as low as 60 mm, particularly in the Spanish fishery of this stock, the Chairman of the Scientific Council explained that "effective mesh size" referred to the actual mesh size corresponding to the size of the fish being caught in large quantities. An effective mesh size lower than the actual size being used could be achieved by rigging or other techniques. Using a small effective mesh size causes high mortality, reduces yield per recruit and eliminates fish before they recruit to the spawning biomass.

6.35 In response to a question by the EEC representative, the Chairman of the Scientific Council indicated that a range of management options were not offered because an analytical assessment was not possible due to the high level of unreported and therefore unsampled catches. The representative of Denmark (in respect of Faroe Isalnds and Greenland) suggested that management measures for this stock should include control of exploitation patterns in addition to TAC. In this regard, the EEC representative suggested the Scientific Council be asked to provide a range of technical options.

6.36 The Scientific Council did not provide an explanation to the question of the Canadian representative, as to whether higher reported catches of wolffish and skate were a result of higher incidental catches of these species in other fisheries or arose from new fisheries directed for these two species. The Canadian representative also sought the opinion of the Scientific Council on whether large amounts of small flounder were being caught incidentally in fisheries directed for skate and wolffish and if so, whether use of a small mesh size was appropriate when directing for skate and wolffish. The Chairman thought the small flatfish were being caught in a fishery directed for flatfish. In his view, there was no need to use a

smaller mesh size when fishing skate and wolffish than what is legal for flatfish. Supporting Canada's request for more information, the EEC representative requested an analysis of technical interactions among fisheries for different species.

Later in the Meeting the Scientific Council noted that only one country directed fisheries for skate and there was no justification for using a mesh size smaller than 130 mm.

3LNO Yellowtail Flounder

6.37 The Chairman of the Scientific Council referred to an error in the Executive Summary at page 25, Graph C, the right hand axis, "250 million", should have read "150 million".

6.38 At Canada's request the meeting noted the high level of catches of yellowtail flounder in 3LNO by South Korea (6 000 tons in 1990) the highest value in the 9 years that this country has been in the fishery. It was also noted that while South Korean catches were estimated to be 42% of the total catch, there was no sampling data available.

3LNO Witch Flounder

6.39 In response to a Canadian inquiry, the Chairman of the Scientific Council indicated that to be able to perform a satisfactory evaluation research vessels should sample the deeper waters that are exploited by the commercial fishery. There was no further discussion.

3LNO Capelin

6.40 The Canadian representative noted that the advice for this stock would be reviewed and there was a need to be prudent. The Chairman confirmed that the Scientific Council was advising that a decision on the TAC should be deferred, if possible, until that additional report was available. In response to a question from the USSR representative, he indicated that acoustic survey findings of the reduction in estimated biomass from the estimate of a similar survey conducted in the previous year on 3L capelin were unexpected and quite unexplained. There had been unusual environmental conditions in the area in the current year but it was not known whether these were the cause of the apparent decline in abundance in 3L. The scientists of the Scientific Council believed that capelin stocks in the two areas were not completely independent, with "some degree of interchange between the two areas", and proposed to review the 3N0 assessment at the same time as that for 3L. The USSR representative disagreed that there was a sufficient nexus between the two capelin stocks to warrant deferral of advice on 3NO capelin, and stated there were no scientific grounds for failing to set the TAC. His question as to whether the stock could withstand a 20% exploitation rate was referred for review to the Scientific Council.

Later in the Meeting the reply was: in the absence of a proper assessment, the Council could not evaluate the effect of a 20% exploitation rate.

3+4 Squid

6.41 There was no discussion on this fishery. The recommended TAC remained 150 000 tons.

2J3KL Cod

6.42 The EEC representative reiterated his request for a Scientific Council Assessment of 2J3KL cod for the following reasons: it was a straddling stock; all parties fishing the stock should have

access to the same information; a dynamic analysis should review fisheries both inside and outside 200 miles. He commented that some observers might find it difficult to understand how, with only 5% of the stock outside 200 miles, it could be overfished. The representative of Canada pointed out that requests for future work by the Scientific Council would be dealt with under other Agenda item.

7. Conservation

Management measures for fish stocks in the Regulatory Area (items 17 and 18 of the Agenda)

Discussion on these items began with **informal proposals** for each stock in accordance with the listing in items 17 and 18 of the Agenda.

7.1 For **3M Cod** the Danish, EEC and USSR representatives suggested a TAC at the 1991 level and the addition of technical measures to regulate excessive catches of small fish. A minimum fish size of 40-45 cm was suggested with appropriate inspection and control measures. To avoid by-catches of juvenile fish, the USSR proposed limiting the fishery to longlining gear.

7.2 The Canadian representative noted that the scientific advice indicated the stock would improve only if fishing ceased. Convincing justification was required for departure from scientific advice. It was essential to publicly demonstrate that control measures would be genuinely more effective than in 1991. He was concerned about requiring a minimum fish size which could encourage discards. He suggested that an international observer program was needed to protect this stock.

7.3 The representative of Denmark (in respect of Faroe Islands and Greenland) countered that while the scientists had it right, the stock was not threatened. He suggested a licensing system to limit the number of vessels fishing this stock. The EEC representative pointed to progress in controlling catches. It was the success of these measures that would permit the stock to be fished in 1992.

7.4 The USSR representative could not agree to an extension of the moratorium into 1992 since he expected the 1985 year-class to replenish the 1991 spawning biomass and the 1986 year-class to replenish the 1992 spawning biomass.

7.5 For **3M Redfish** the USSR representative suggested that the Scientific advice for this stock was too conservative; the 1991 TAC was more appropriate with appropriate measures such as seasonal fishing to reduce the incidence of juvenile by-catch.

7.6 The EEC representative favoured a reduced exploitation rate which could be achieved by strict adherence to the TAC, set at the 1991 level. He thought that reducing the TAC would provide an undue advantage to non-Contracting Parties vessels fishing this stock.

7.7 For **3M American Plaice** the USSR suggested that the advice of the Scientific Council be accepted and the EEC thought a moderate increase would be welcome to offset the reduced TACs of other stocks.

Informal discussions then moved to management measures for fish stocks overlapping national fishing limits.

7.8 For **3NO Cod** the EEC and Canada suggested that the TAC be set at 13 600 tons with Canada adding that additional control measures and sampling or monitoring were needed.

7.9 For **3LN Redfish** the USSR supported fishing this stock at F_{max}, while Canada favoured more sampling and a TAC set at the 1991 level but properly enforced.

7.10 For **3LNO American Plaice** Canada suggested a TAC of 25 800 tons and reminded the meeting of the need to reduce catches of young fish below the minimum recommended size.

7.11 For **3LNO Yellowtail Flounder** Canada proposed a TAC of 7 000 tons but warned that the stock would continue to decline unless effective controls were implemented.

7.12 For **3NO Witch Flounder** Canada proposed a TAC of 5 000 tons but pointed to the need for more detailed biological information especially for deep water.

7.13 For **3NO Capelin** the USSR submitted that there was no scientific justification for recommending a 10% exploitation rate. While the USSR would accept a TAC at the 1991 level, it was asking the Scientific Council for advice on whether the stock could withstand a higher exploitation rate. The Chairman of the Scientific Council said the advice would be available following the meeting of the Scientific Council in February or March 1992. With EEC support, Norway proposed a TAC of 30 000 tons, subject to review after the Scientific advice was received. The USSR noted that the revision could be upward or downward.

7.14 For **3+4 Squid** Canada suggested the TAC continue to be set at 150 000 tons.

The meeting adjourned at 1030 hours and resumed at 1130 hours to consider **formal proposals** for 1992. All votes were held by the formula "affirmative (for), against, abstain", as presented hereafter.

3M Cod

7.15 Denmark (in respect of the Faroe Islands and Greenland), seconded by the USSR, proposed a TAC of 12 965 tons with a minimum legal length of 40 cm. The USSR proposed that longlining gear could be used. The EEC supported the proposal, noting that longlines were not excluded and asked that the Scientific Council recommend ways to improve fishing patterns.

7.16 Canada said consideration should be given to imposing controls on discards of small fish and to whether such discards should count against quotas. Discussion ensued. It was suggested that control of legal size limits should be referred to STACTIC for review and that the scientists take this problem into account when sampling. The EEC suggested that in view of the need to reduce catches of undersized fish, catches of small fish should be retained and reported instead of discarded.

7.17 Canada reiterated its position that the TAC be established at a level no higher than recommended in the scientific advice.

7.18 The vote on the Danish proposal of a TAC of 12 965 tons and a minimum fish size of 40 cm; for = 7, against = 1(Canada), abstain = 0; **carried.**

The meeting adjourned at 1200 hours and resumed at 1352 hours with a statement by Canada.

7.19 The Canadian representative reviewed the achievements of NAFO against its objectives. He said that the decline of stocks was likely to continue and quotas would continue to be reduced.

He reviewed the role of NAFO in controlling fishing activity, the use of the objection procedure and said it was unfair that the EEC set its own quotas of certain stocks. In his view, lack of control was the biggest threat to NAFO as was the increasing effort of non-Contracting Party fleets. Canadian fisheries had decreased by 50% from levels of 5 years previous. He cited the estimated figures by which TACs had been overfished and the commensurate figures by which Canadian fisheries had been reduced with accompanying destructive effect on Canadian fishing communities. He concluded that NAFO was not the success it could be and the negative consequences of this affected all Parties fishing in the Regulatory Area. He called for a re-examination of NAFO, bearing in mind the future of families dependent on the fisheries. He quoted from the speech of the Spanish Fisheries Minister at La Toja, Spain, on the need for effective management and control. He said NAFO's next steps were critical, the existence of NAFO depended on them. A process for reform was needed and to this end, he was proposing a special meeting to consider appropriate measures (Annex 5).

After a brief intermission the meeting resumed with a statement by the EEC representative.

7.20 The EEC representative suggested that the statement by the Canadian delegate reflected domestic problems and considerations and that the meeting was not an appropriate forum to air them. He felt that it ignored the serious efforts that the EEC had made to deal with problems facing NAFO and that differences of view between Canada and the EEC should be dealt with bilaterally. In his view the remarks were out of order and disrupted the agenda to which the meeting should return.

The meeting resumed on formal proposals of management measures for fish stocks.

3M Redfish

7.21 The EEC proposed a TAC of 50 000 tons on the understanding that in this particular case this would be a real limit which would not be exceeded. Canada proposed a TAC of 35 000 tons. The USSR supported the EEC proposal. The Norwegian delegate, supported by Cuba and Japan, proposed that fishing mortality be reduced in steps, with a 1992 TAC set at 43 000 tons. The EEC amended its proposal to 45 000 tons (a 10% reduction from 1991). Canada then indicated its support for the Norwegian proposal.

Proposal: TAC 45 000 tons (by EEC); vote: for = 1(EEC), against = 6, abstain = 1(USSR), **defeated.**

Proposal: TAC 43 000 tons (by Norway); vote: for = 6, against = 0, abstain = 2 (USSR, EEC), **carried.**

7.22 At the conclusion of the vote, the USSR representative stated that while a reduction in the TAC was not scientifically justifiable, the USSR would abide by the result. He called on the Executive Secretary to develop rules of procedure for adoption of TACs that did not require the seconding of proposals. This idea was supported by most delegations.

3M American Plaice

7.23 Proposal: TAC 2 200 tons (by EEC); vote: for = 1(EEC), against = 6, abstain = 1 (USSR), **defeated.**

Proposal: TAC 2 000 tons (by Canada); vote: for = 6, against = 0, abstain = 2 (USSR, EEC), **carried.**

3NO Cod

7.24 Proposal: TAC 13 600 tons (by Canada); minimum fish size of 40 cm (EEC); **carried**, consensus.

3LN Redfish

7.25 Proposal: TAC 14 000 tons (by Canada); vote: for = 6, against = 0, abstain = 2 (EEC, USSR), **carried**.

3LNO American Plaice

7.26 Proposal: TAC 25 800 tons (Canada); **carried**, consensus.

3LNO Yellowtail Flounder

7.27 Proposal: TAC 7 000 tons (Canada); **carried**, consensus.

3NO Witch Flounder

7.28 Proposal: TAC 5 000 tons (Canada); vote: for = 7, against = 0, abstain = 1 (EEC), **carried**.

The EEC representative noted that management decisions were needed to reduce catches of juvenile fish. He asked that the Scientific Council recommend technical measures to achieve this. **Noted**.

3NO Capelin

7.29 Proposal: TAC 30 000 tons, subject to review in early 1992 following the meeting of the Scientific Council (Canada); **carried**, consensus.

The USSR commented that there was no scientific justification for a 10% exploitation rate and requested that the Scientific Council provide a solid scientific basis for its recommendation. **Noted**.

3+4 Squid

7.30 Proposal: TAC 150 000 tons (by Canada); vote: for = 6, against = 0, abstain = 2 (EEC, USSR), **carried**.

3L Cod (if available in the Regulatory Area in 1992)

7.31 Canada proposed the moratorium on 3L cod be extended to 1992.

7.32 The EEC representative suggested that 2J3KL cod should be managed by NAFO. Citing Article 63(2) of the United Nations Convention on the Law of the Sea that requires parties fishing straddling stocks to cooperate on conservation and management and Article XI.3 of the NAFO Convention, he said that the EEC could not accept that the entire TAC, including those portions occurring inside and outside Canada's 200 mile limit, should be

allocated entirely to Canadian fishermen. The EEC had continuously objected to the 3L cod moratorium on the grounds that it was not scientifically justifiable, nor consistent with the fixing of a TAC inside Canadian waters. He advised that in the absence of a NAFO scientific assessment that would make it possible to establish an appropriate TAC, the EEC would abstain until its own scientific advice was available, at which time its final position would be decided.

7.33 The Canadian representative stated that the poor state of the stocks, particularly in 1991, made it more important to maintain the moratorium in 1992.

7.34 The representative of Denmark (in respect of the Faroe Islands and Greenland) said that his delegation had difficulties with the moratorium but would respect the decision of the Fisheries Commission.

7.35 The USSR representative said he understood the EEC position on UNCLOS but was sympathetic to the plight of Canadian fishermen. The USSR was facing a similar problem in the Central Bering Sea where the international fishery conducted in 5% of the area, took catches equal in magnitude to those of the two coastal states combined. He said that to make a moratorium successful, a cooperative effort was needed. The USSR was ready to support the 1992 3L moratorium.

7.36 The representative of Japan said his views were close to those of the Danish and USSR representatives except with respect to the Central Bering Sea situation.

7.37 The EEC proposed a minimum legal size of 40 cm for this stock.

7.38 In response to Canada's comment that it was inappropriate for the Fisheries Commission to adopt management measures for 2J3KL cod, the EEC proposed a minimum cod size for the entire Regulatory Area. It was agreed that this could be discussed later in the context of "control measures".

7.39 The Norwegian representative said that his views on this issue were similar to those of the USSR representative. The moratorium was a question of principle and of the obvious interest of the coastal state. Norway would not in 1992 fish in 3L in the Regulatory Area.

7.40 The continuation of the moratorium on 3L cod in the Regulatory Area in 1992 was put to a vote: for = 4 (Japan, Cuba, USSR, Canada), against = 0, abstain = 4 (Denmark, EEC, Poland, Norway). **Carried.**

7.41 The meeting proceeded with the following discussions of the distribution of quotas for the NAFO managed stocks in 1992 to the Contracting Parties:

7.42 Canada proposed that the traditional distribution be maintained in 1992.

7.43 The representative of Denmark (in respect of the Faroe Islands and Greenland) agreed except with respect to 3NO cod. He suggested informally that the "Others Quota" be increased by 10%.

7.44 The EEC representative commented that it was too late to modify the distribution for 1992. However, there was merit in reconsidering distribution including for conservation purposes and to prevent discards. Well balanced packages which took into account technical

interactions, should be adopted in future years. The representative of Canada agreed and the representative of Denmark (in respect of Faroe Islands and Greenland) asked that the Report reflect the discussion which could be resumed in 1992. **Noted.**

7.45 The existing traditional distribution key based on "Quota Table" in Schedule I of NAFO Conservation and Enforcement Measures was **adopted for 1992 by consensus** (Annex 5). The EEC representative said the EEC reserved its position with respect to stocks on which it had abstained in the vote on TACs.

7.46 The meeting returned to the questions posed earlier to the Scientific Council, that is, Canada's (FC Working Paper 91/5) request of (a) the application of a minimum mesh size of 130 mm throughout the Regulatory Area; and, (b) the lengths of American plaice, yellowtail flounder and witch flounder of which 5% would be retained by 130 mm diamond mesh. The replies by the Chairman of the Scientific Council are:

For (a), 130 mm mesh size was appropriate with specific exceptions for such species as capelin and squid; for (b), data was available only for yellowtail; for 130 mm mesh, the size of which 5% would be retained was 21.5 cm, and 23 cm was the size of which 10% would be retained. Very few fish of these sizes were actually caught with 130 mm mesh.

7.47 In response to an inquiry from the EEC representative, the Chairman of the Scientific Council said that an exception from the uniform minimum mesh size requirement might also be made for grenadier. In the discussion on how to handle exceptions, he concluded that the best approach would be to include all marginal species in the list of derogations, until the Scientific Council could make a final determination. The EEC delegate inquired as to whether there were any areas where smaller species could be fished without impact on larger species. A careful review was in his view needed, before abandoning the 120 mm mesh size equivalent. It was **agreed** to refer the matter for further review to the Scientific Council, by amending FC Working Paper 91/4 (Annex 6).

8. Formulation of Request to Scientific Council for Scientific Advice for Management of Fish Stocks in 1993 (item 19 of the Agenda)

8.1 The meeting agreed to the suggestion of the Canadian representative that discussion be deferred on this item until delegations received a draft document to be prepared by Canada. The EEC representative said his delegation would be preparing a similar document setting out EEC requests. After some discussion Canada, agreed to include the question of uniform mesh size for the Regulatory Area in the draft request for scientific advice (Annex 6).

8.2 The EEC representative said, with regard to 2J3KL cod, that there was a need for scientific advice on technical interactions of catches outside 200 miles with fisheries inside the zone to enhance understanding without prejudice to possible management decisions. He asked for the views of other representatives.

8.3 The Canadian representative said that this was an issue that went back to 1985. Canada did extensive research in 2J3KL ($35 million in 1990) and has discussed this issue bilaterally with the EEC. It was prepared to share the results of its research but it was clear that the overwhelming responsibility for this stock was that of the coastal state.

8.4 The EEC representative wished to put its proposal into perspective and to distinguish between Scientific Assessment and management. While he appreciated the offer for scientific cooperation, it was, in his view logical to assess the impact of fisheries outside the

zone on fisheries inside. He said that if other Contracting Parties could be blamed for the state of Canadian fisheries it was logical to have an assessment.

8.5 In the following discussion it was pointed out that the consent of the coastal state was required for assessment of 2J3KL cod but that Contracting Parties could conduct their own research in the Regulatory Area and present it to the Scientific Council.

9. **Adjournment** (items 20 to 22 of the Agenda)

9.1 Decision on time and place of next meeting was deferred to the General Council.

9.2 Under Agenda item 21, Other Business, the EEC asked that its request for an assessment of the minimum cod size that may be caught in the Regulatory Area be referred to the next meeting of the Fisheries Commission. There was no other business.

9.3 Canada thanked the Chairman and the Chairman thanked the Executive Secretary and the Rapporteur. The meeting was adjourned at 1300 hours on 13 September.

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13th Annual Meeting
Dartmouth, Nova Scotia, Canada, 9-13 September 1991

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W. H. Champion, Administrative Assistant

F. D. Keating, Finance and Publications Clerk-Steno

B. J. Cruikshank, *Senior Secretary*

D. C. A. Auby, Clerk-Typist

F. E. Perry, Documents and Mailing Clerk-Steno

G. Moulton, Senior Statistical Clerk

B. Crawford, Clerk-Duplicator Operator

R. Myers, Clerk-Duplicator Operator

SECRETARIAT ASSISTANCE

C. McCormick, Secretary, Office of the Minister of Fisheries, 15th-200 Kent St., Ottawa, Ontario, Canada K1A 0E6

Annex 2. Agenda

13th Annual Meeting
Dartmouth, Nova Scotia, Canada, 9-13 September 1991

FISHERIES COMMISSION

Opening Procedures

1. Opening by the Chairman of STACTIC, O. Muniz (Cuba)

   a) Election of an interim Chair for the Meeting
   b) Opening by the Chairperson M. Yeadon (Canada)

2. Appointment of Rapporteur

3. Adoption of Agenda

4. Admission of Observers

5. Publicity

Administration

6. Approval of the Report of the 12th Annual Meeting, September 1990 (FC Doc. 90/12, Revised)

7. Review of Commission Membership (withdrawal of GDR: letter GF/90-370 of 30 Nov 90 and GF/91-171 of 16 Apr 91)

8. Election of Officers – Chairman and Vice-Chairman

9. Clarification of the Rules of Procedure regarding the "seconding" of all motions (GC Working Paper 91/1)

Commission Proposals

10. Status of Proposals (Circular Letter 91/65)

11. Conservation and Enforcement Measures (STACTIC Working Group Reports, FC Doc. 91/1 and 91/2, FC Doc. 90/8, FC Working Paper 91/1)

International Control

12. Annual Return of Infringements

13. Fishing Vessel Registration

14. Report of STACTIC

Conservation

15. Transfer of quotas between Member States (Request by Denmark on behalf of Faroes and Greenland - FC Doc. 90/2, FC Doc. 90/12-item 115, FC Doc. 91/3)

16. Summary of scientific advice by the Scientific Council (The stock summary sheets and the detailed assessments in the report of the June 1991 meeting of the Scientific Council-SCS Doc. 91/19)

17. Management measures for fish stocks in the Regulatory Area

    a) Cod in Div. 3M
    b) Redfish in Div. 3M
    c) American plaice in Div. 3M

18. Management measures for fish stocks overlapping national fishing limits

    a) Cod in Div. 3NO
    b) Redfish in Div. 3LN
    c) American plaice in Div. 3LNO
    d) Yellowtail flounder in Div. 3LNO
    e) Witch flounder in Div. 3NO
    f) Capelin in Div. 3NO
    g) Squid (*Illex*) in Subareas 3 and 4
    h) Management measures for the following stocks, if available in the Regulatory Area, in 1991:

    Cod in Div. 3L

19. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 1993

Adjournment

20. Time and Place of Next Meeting

21. Other Business

22. Adjournment

Annex 3. Statement by Canadian Representative on Effective International Control

13th Annual Meeting
Dartmouth, Nova Scotia, Canada, 9-13 September 1991

Mme Chair. The Canadian delegation would like to take this opportunity, as we introduce discussion on international control, to comment on the grave problems that are facing NAFO, as an institution and as a practical fisheries management organization, as we begin the 13th Annual Meeting.

I will be drawing largely from remarks made by the Minister of Fisheries and Oceans for Canada, the Honourable John C. Crosbie in La Toja, Spain at a Ministerial conference earlier this week.

At the 1988 annual meeting, Canada described NAFO as an organization in crisis. TACs have been severely overfished, stocks were declining, and fishermen from many Contracting Parties were paying the price. NAFO was at a crossroads Canada said – it was up to NAFO Members to make the right choices.

Since then, NAFO has failed to prevent overfishing and severe stock declines have resulted. Misreporting by fleets from Contracting States and lack of reporting by non-NAFO fleets ... many operating under flags of convenience ... has become so significant that scientists are losing the ability to carry out proper stock assessments. Quotas fixed by NAFO are subject to an objection procedure under which any state can simply set higher unilateral quotas and profit from the forbearance of others.

But the most damaging factor of all is the lack of effective control over fleets fishing in the NAFO Regulatory Area ... In the absence of control by a Contracting State over its fleet, quotas NAFO sets for that Contracting Party ... or even unilateral quotas the Contracting Party sets for itself ... become meaningless. Add to this a significant and growing fleet of vessels re-flagged to avoid all controls. All of this has resulted in biomass and abundance levels for most NAFO-managed stocks that are the lowest ever recorded.

For example, the advice from the NAFO Scientific Council for the Total Allowable Catch of Southern Grand Banks (3NO) cod in 1992 is 13 600 tons down from 40 000 tons in 1988 ... for Grand Banks (3LNO) American plaice, the advice is for a TAC of 25 000 tons in 1992, down from 55 000 tons, in 1986 and for Grand Banks (3LN) redfish the recommended TAC is 14 000 tons, down from 25 000 tons in 1990.

Collectively, NAFO Contracting Parties face a choice for the 1990's. We can suffer continuing declines in the state of straddling stocks, with lower quotas and diminishing catch rates. Or we can achieve rebuilt fish stocks, higher quotas and healthy catch rates. Amazingly, we seem to be heading for depletion rather than abundance and continued decline rather than a more secure future.

How do we deal with this situation? In spite of strong representatives from many quarters to take more radical action, Canada is still seeking to make NAFO work as it was intended to work. To achieve this, three things are needed on the part of all NAFO Contracting States.

First, we must approach these issues from the perspective of sustainable development ... in the words of the Brundtland Commission "development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs".

Second, if NAFO is to succeed, its decisions must be accepted and it must be reinforced as an institution. In order to achieve common benefits sustainable over the long term, all states must yield some of their freedom of action to a responsible international institution such as NAFO.

Third, even if we do these things but we fail to take the practical measures, individually and jointly through NAFO, to effectively control our fleets, then overfishing and stock depletion will continue.

Proposals discussed over the past year include maintaining patrol vessels in the NAFO Regulatory Area for the whole period while fleets are fishing, a hail system involving catch reports and integration of aerial surveillance. We need to act on these, as well as to develop new measures under NAFO, like a licensing scheme, observers and electronic tracking, that should prove more effective and, potentially, less expensive. While many technical and practical elements need to be worked out, I am confident that by acting together we can succeed in exerting effective international control over fleets operating in the NAFO Regulatory Area.

As Fisheries Managers, we have a collective responsibility ... and a collective self interest ... that needs to be urgently addressed. We must act together to achieve more effective and ecologically responsible international fisheries management. That is key to achieving a prosperous fishery, sustainable for the long term, as we approach the 21st century. Since 1977, we have learned to manage the fishery within our own respective zones. We must now apply what we have learned in our own zones in international waters.

That is Canada's objective at this meeting, Mme Chair, to make NAFO an effective international organization.

Annex 4. Hail System

13th Annual Meeting
Dartmouth, Nova Scotia, Canada, 9-13 September 1991

Proposed Amendments to Part III, Section E(1)
of the Conservation and Enforcement Measures*

A Contracting Party shall ensure that vessels of that Party to which the Scheme of Joint International Inspection and Surveillance applies shall report to their competent authorities:

a) each entry into the Regulatory Area. This report shall be made at least six (6) hours in advance of the vessel's entry and shall include the date, the time and geographical position of the vessel.

b) each exit from the Regulatory Area and **except as provided in (c)**, each movement from one NAFO division to another NAFO division. This report shall be made prior to the vessel's exit from the Regulatory Area or entry into a NAFO division and shall include the date, time and geographical position of the vessel.

c) **When vessels conduct a fishery between Divisions 3L and 3N, and 3N and 3O which necessitates crossing the line between the divisions more than once during a period of twenty-four (24) consecutive hours, and provided that they remain within ten (10) miles of the line between the divisions the vessels concerned shall not report each change of division but shall instead report when first crossing the line between the divisions, and at intervals not exceeding twenty-four (24) hours thereafter, the date, the time and their geographical position. When such vessels leave the delimited area of 10 miles either side of the line between the divisions concerned, they shall again report the date, the time and their geographical position.**

Without prejudice to Schedule II of Part V of the NAFO Conservation and Enforcement Measures, after each radio or fax transmission of information to the competent authorities of Contracting Parties the following details are to be immediately entered in the logbook:

- ◊ Date and time of transmission
- ◊ In cases of radio transmissions, name of radio station through which the transmission is made.

* FC Doc. 91/9

Annex 5. Notes for an Address by B. Rawson, Deputy Minister of Fisheries for Canada

13th Annual Meeting
Dartmouth, Nova Scotia, Canada, 9-13 September 1991

As a new NAFO Commissioner, I asked myself what is it that NAFO is to achieve. I looked first to the NAFO Convention of 1978. It states ... beginning with the preamble ... that,

> The Contracting Parties ... desiring to promote the conservation and optimum utilization of the fisheries resources of the Northwest Atlantic ... encourage international co-operation and with respect to these resources ... have agreed [and I refer to Article II] to establish and maintain an international organization to [achieve] optimum utilization, rational management and conservation of the fishery resources of the [NAFO] Convention area.

Against the experience of the last 13 years have we succeeded in this objective? Let us look at the cold facts.

The first step in management of fisheries resources is scientific assessment of the resource. What is the state of each fish stock? Is it growing or declining? How should we regulate harvesting to achieve optimal yields, on a long-term sustainable basis?

NAFO has an outstanding record in resource assessment. Contracting Parties can take pride in their professional and collegial scientific effort through the Scientific Council toward achieving the most accurate and reliable assessment of NAFO-managed fish stocks. But, Madam Chairman, those efforts are now being undermined and the work of the Scientific Council is being called into question.

This is not because of anything that our scientists have failed to do. Rather it is because, as the scientists themselves have pointed out, it has now become impossible to do; to properly assess the state of the resource.

It has become impossible because overfishing of quotas continues to deplete stocks and because an ever-increasing share of catches is unreported or misreported. No one can tell precisely how bad things are. We know only that the state of almost all NAFO-managed stocks has become worse, year by year.

The second step is resource management: Total Allowable Catch for each stock, allocation of quotas among Contracting Parties, and related conservation measures. In these matters, the NAFO Fisheries Council also has a solid record of performance.

TAC's have been based consistently on the advice of the Scientific Council – toward the objective of optimal sustainable yield. As for allocations among Contracting Parties, these have been made throughout NAFO's history on the basis of traditional shares. Other important conservation measures, for example relating to mesh size, have been adopted.

There should be a high degree of transparency, certainty, stability and confidence. There is not. Instead, there is deep anxiety that depletion of resources will continue and, therefore, quotas will continue to decline. Why? We have to look at the third step and most difficult element of NAFO's role: control of fishing.

One NAFO Contracting Party, the European Community for years has set for itself quotas higher than those allocated to it by NAFO. That is unfair to other Contracting Parties whose fleets harvest under NAFO quota constraints.

More fundamental, however, is the lack of effective control over certain fleets in the NAFO Regulatory Area. In the case of Contracting Parties let me take an obvious example, 3M cod. The moratorium adopted for 1988, 1989 and 1990 was flouted and the stock was heavily overfished. And, in the case of non-NAFO fleets, they simply fish at will, wherever they want for whatever they want.

This lack of control is the Achille's heel of NAFO. This is the biggest threat we face.

These three problems: Unilateral quotas, inadequately controlled fleets from Contracting Parties and increasing effort by non-NAFO fleets have led to precipitous resource declines. Canada has suffered more than 50 per cent reduction in its NAFO quotas in five years. Let me repeat that. We have lost one half of what we legitimately had five years ago.

Canadians are deeply worried for those whose lives were a part of our Atlantic fishery ... who have been forced to leave, not only their jobs, but their homes, their friends and their communities. They have been cut adrift from the moorings of their lives. And those who continue to rely on stocks that can be fished outside 200 miles fear for their futures. Why? Because collectively, as Contracting Parties, we have failed to make of NAFO the success that it could be.

The same case can be made for other Contracting Parties. A decline in quotas leads ... or at least it should lead ... to a decline in catches. That means fewer fishermen can continue to fish from those Contracting Parties that abide by NAFO quotas. Unchecked, it will mean fewer fishermen from every fleet, even those fishing in excess of NAFO quotas, simply because there will be fewer fish.

Let us re-examine urgently and with all our skill what NAFO is suppose to achieve. In this re-examination, there is more to consider than science ... more than technical management measures. Let us re-examine NAFO bearing in mind the future of communities and families that had a legitimate belief they would be part of a stable and prosperous fishery ... but now see only disruption, decline and poverty. The consequences of the lack of effective international controls goes beyond statistics and technical matters - it can be seen in the faces of men, women and children.

What should we do? Let me quote (in translation) from the powerful opening statement of the Spanish Fisheries Minister, Mr Solbes at the Ministerial Fisheries Conference held earlier this week at La Toja, Spain:

> "It is a moral duty and an economic necessity to establish fisheries management policies that not only regulate overall fishing effort but that also avoid harvesting of juvenile fish. We must remember that however good may be the scientific basis for fisheries management, it will not be effective in the absence of adequate control measures to guarantee compliance by fleets. Thus, of even greater importance than the design of the management measures are the means to ensure their effectiveness. Management and control represent two fundamental elements of what is needed."

Mr Solbes continued:

> "Resources constitute the foundation upon which the fishery is based, the reason for the fisheries existence. Stock conservation, stock recovery, in short avoiding

> suicidal over-exploitation through control of fishing effort must come first if we are to avoid destruction of the very fisheries upon which we rely ... It is only logical that resources be carefully managed and voices be raised in alarm if those resources are menaced."

Mr Solbes speaks wise words and express clear thoughts.

Since the extension of jurisdiction to 200 miles ... each of our countries has sought to put in place the means to control catches by fleets within our 200 mile zones. We have learned by experience. Now is the time to apply that experience together in NAFO.

We look back in order to learn the lessons of experience. We look to the present to see what now needs to be done. And, we look ahead to see how quickly and how well the lessons of experience can be applied to meet the needs of today. What we see is the need for significant reform to strengthen international control of fisheries under NAFO.

As Contracting Parties we must choose to go forward with effective controls or to drift into further decline and to waste our precious gifts. We all want a growing resource. And we all want a prosperous fishing industry. This year we face the crushing reality of a declining resource and a declining fishing industry. We can have a better future, but only if we commit ourselves now to work toward designing and implementing the measures needed to achieve that future.

We *cannot*, and we should not decide today or tomorrow all that needs to be done. That is not the nature of this meeting. Our next steps will be the most important ever taken by NAFO. What we can do at this meeting is to believe in the need for reforms and to put in place a process of working together to achieve those reforms. To help do this, Canada will bring forward a proposal for a special meeting of NAFO devoted solely to the purpose of reform.

The support of every Contracting Party around this table is essential. We need commitment. We need determination. We need every country's creative solutions. The commitment we need is one that is set out in NAFO Convention and one that was called for this week in La Toja. People everywhere on both sides of the Atlantic are counting on us.

Annex 6. Fisheries Commission's Request for Scientific Advice on Management in 1993 of Certain Stocks in Subareas 3 and 4*

13th Annual Meeting
Dartmouth, Nova Scotia, Canada, 9-13 September 1991

1. The Fisheries Commission with the concurrence of the Coastal State as regards the stocks below which occur within its jurisdiction, requests that the Scientific Council, at a meeting in advance of the 1992 Annual Meeting, provide advice on the scientific basis for the management of the following fish and invertebrate stocks or groups of stocks in 1993:

   Cod (Div. 3NO; Div. 3M)
   Redfish (Div. 3LN; Div. 3M)
   American plaice (Div. 3LNO; Div. 3M)
   Witch flounder (Div. 3NO)
   Yellowtail flounder (Div. 3LNO)
   Capelin (Div. 3NO)
   Squid (Subareas 3 and 4)

2. The Commission and the Coastal State request the Scientific Council to consider the following options in assessing and projecting future stock levels for those stocks listed above:

   a) For those stocks subject to analytical dynamic-pool type assessments, the status of the stock should be reviewed and management options evaluated in terms of their implications for fishable stock size in both the short and long term. In those cases where present spawning stock size is a matter of scientific concern in relation to the continuing productive potential of the stock, management options should be evaluated in relation to spawning stock size. As general reference points the implications of fishing at $F_{0.1}$, F_{1990} and F_{max} in 1993 and subsequent years should be evaluated. The present stock size and spawning stock size should be described in relation to those observed historically and those expected in the longer term under this range of options.

      Opinions of the Scientific council should be expressed in regard to stock size, spawning stock sizes, recruitment prospects, catch rates and TACs implied by these management strategies for 1993 and the long term. Values of F corresponding to the reference points should be given and their accuracy assessed.

   b) For those stocks subject to general production-type assessments, the time series of data should be updated, the status of the stock should be reviewed and management options evaluated in the way described above to the extent possible. In this case, the general reference points should be the level of fishing effort or fishing mortality (F) which is calculated to be required to take the MSY catch in the long term and two-thirds of that effort level.

   c) For those resources of which only general biological and/or catch data are available, no standard criteria on which to base advice can be established. The evidence of stock status should, however, be weighed against a strategy of optimum yield management and maintenance of stock biomass at levels of about two-thirds of the virgin stock.

*FC Doc. 91/10

d) Spawning stock biomass levels that might be considered necessary for maintenance of sustained recruitment should be recommended for each stock.

e) Presentation of the result should include the following:
   i) for stocks for which analytical dynamic-pool type assessments are possible:

      ◊ a graph of yield and fishing mortality for at least the past 10 years.

      ◊ a graph of spawning stock biomass and recruitment levels for at least the past 10 years.

      ◊ a graph of catch options for the year 1993 over a range of fishing mortality rates (F) at least from $F_{0.1}$ to F_{max}.

      ◊ a graph showing spawning stock biomass at 1.1.1994 corresponding to each catch option.

      ◊ graphs showing the yield-per-recruit and spawning stock per-recruit values for a range of fishing mortality.

   ii) for stocks for which advice is based on general production models, the relevant graph of production on fishing mortality rate or fishing effort.

In all cases the three reference points, actual F, F_{max} and $F_{0.1}$ should be shown.

3. The Fisheries Commission with the concurrence of the Coastal State requests that the Scientific Council continue to provide information, if available, on the stock separation in Div. 2J+3KL and the proportion of the biomass of the cod stock in Div. 3L in the Regulatory Area and a projection if possible of the proportion likely to be available in the Regulatory Area in future years. Information is also requested on the age composition of that portion of the stock occurring in the Regulatory Area.

4. The Scientific Council should analyze the various technical measures which could permit the elimination of massive catches of juvenile flatfishes in the NAFO area. This should cover the implementation of minimum legal sizes and the introduction of a single basic mesh size. Special attention should be paid to multispecies analyses and especially technical interactions.

5. With respect to cod in Div. 3M, the Scientific Council is requested to provide advice on means of improving the utilization (yield-per-recruit) of the resource.

6. With respect to redfish in Div. 3M, the Scientific Council is requested to provide advice on means of reducing the harvest of juvenile fish, including such factors as seasonality of fishing.

7. With respect to squid in SA 3 and 4, the Scientific Council is asked to examine all data available to it and if possible to present options for the management of the stock that are based on the NAFO principles of optimum utilization and conservation. The Council is asked also to provide information on the distribution throughout the year of the stock and on the factors that determine whether the resource becomes available within the NAFO area.

8. With respect to capelin in Div. 3NO, the Scientific Council is requested to advise on the most rational level of management, on the basis of the main principles of NAFO: optimum utilization

and conservation of stocks. The Council should evaluate the importance of capelin at different stages of their life history to the marine ecosystem and in particular, given the mass mortality following spawning, the significance of a management option that refers to harvesting during the period immediately prior to spawning. Management options such as maintaining minimum spawning biomass, a 10% and a 20% exploitation rate should be evaluated in terms of both maintaining stock size and the impact on the ecosystem.

9. The Scientific Council is asked to review further the question of a standard 130 mm mesh size for otter trawling in the Regulatory Area, and particularly to consider the species for which derogation would be required. The Council is asked to include consideration of area and season in this review, to advise on appropriate mesh sizes for fisheries for which the 130 mm would be too large, to advise on appropriate by catch limits for other species (in aggregate or individually) in fisheries using small mesh sizes and to report on any interactions between the various fisheries.

10. The Scientific Council is asked to consider the question of a minimum fish size for cod in the different parts of the Regulatory Area, both in terms of the current regulation of mesh size in otter trawls and in terms of increasing yield per recruit.

Annex 7. Press Release

13th Annual Meeting
Dartmouth, Nova Scotia, Canada, 9-13 September 1991

1. The 13th Annual Meeting of the Northwest Atlantic Fisheries Organization (NAFO) was held in Dartmouth, Nova Scotia, Canada during 9-13 September 1991, under the chairmanship of K. Hoydal (Denmark in respect of the Faroe Islands and Greenland), President of NAFO. The sessions of the General Council, the Scientific Council, and the Fisheries Commission and all subsidiary bodies were held at the Holiday Inn.

2. The delegations attending the meeting were from the following Contracting Parties: Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), European Economic Community (EEC), Japan, Norway, Poland and the Union of Soviet Socialist Republics (USSR). Observers from the United States of America were present at the meeting.

3. The Scientific Council, under the chairmanship of B. W. Jones (EEC), provided the scientific assessment and recommendations pursuant to the Convention on the management of the fishing stock in the Convention Area. The Chairman of the Scientific Council reported to the Fisheries Commission on the questions pertaining to the scientific basis for the management and conservation of fishery resources within the Regulatory Area.

4. Under the umbrella of the Scientific Council there was a Symposium on "Changes in abundance and biology of Cod stocks and their possible causes". The Symposium was held at NAFO Headquarters in Dartmouth during 4–6 September. The Scientists from different Contracting Parties presented and discussed 24 reports and papers on the different topics of major changes in abundance of cod stocks and their biology in relation to environmental variability and as functions of the fisheries. The scientific presentation will be published in 1992 as the Scientific Council Studies which will contribute further to better understanding of the basic principles of the management of the cod stocks.

5. The Fisheries Commission, under the chairmanship of M. Yeadon (Canada) considered and took decisions on several important issues pertaining to the management and conservation of the fisheries resources in the Regulatory Area as follows:

   On the basis of the scientific advice from the Scientific Council the Contracting Parties agreed on the Total Allowable catches and allocations in 1992 for the fishing stocks which are either entirely in the Regulatory Area or associated with the stocks within the 200-mile fishing zones. The TACs and allocations decided by the Commission are presented in the attached Quota Table.

   On the basis of the deliberations and presentation of the Standing Committee on International Control (STACTIC) under the chairmanship of O. Muniz (Cuba), the Fisheries Commission adopted new proposals for international measures of control and enforcement within the Regulatory Area for the purpose of improvements on inspection and surveillance in the Regulatory Area. In a new Scheme of Joint International Inspection and Surveillance there are provisions for coordination of all "Hail System" reports on activity of the fishing vessels in the Regulatory Area via the NAFO Headquarters in Dartmouth and implementation of the aircraft surveillance.

6. The Contracting Parties agreed to continue the moratorium for 1992 on cod fishing by Contracting Parties in Division 3L outside the 200-mile Canadian Zone, in the continuation of the conservation measures for the purpose of the stock recuperation.

7. Upon the presentation of the Standing Committee on Finance and Administration (STACFAD), the General Council adopted the Organization's budget and accounts for 1992.

8. The new Standing Committee on Fishing Activities by non-Contracting Parties in the Regulatory Area (STACFAC), under the chairmanship of C. C. Southgate (EEC), examined important questions on the fishing by vessels of non-Contracting Parties and presented its report and recommendations to the General Council, which adopted further measures designed to curtail and eliminate such unregulated fishing in the Regulatory Area. The most important measures include; active diplomatic initiates individually and jointly, intensive effort from the office of the Executive Secretary in communication with non-Contracting Parties, improvement in statistical information on non-Contracting Parties catches and on imports of groundfish species from non-Contracting Parties whose vessels fish in the NAFO Regulatory Area.

9. The General Council endorsed the UN Resolution 45/197 on large-scale pelagic drift-net fishing and reconfirmed that such fishing is not presently practiced by NAFO Contracting Parties in the Convention Area.

10. Several elections took place for Chairmen and Vice-Chairmen of constituent and subsidiary bodies of the Organization, as follows:

Chairman of the General Council, President of the Organization	– K. Yonezawa (Japan)
Vice-Chairman of the General Council	– P. Gullestad (Norway)
Chairman of the Fisheries Commission	– E. Wiseman (Canada)
Vice-Chairman of the Fisheries Commission	– P. Hillenkamp (EEC)
Chairman of the Scientific Council	– V. P. Serebryakov (USSR)
Vice-Chairman of the Scientific Council	– H. Lassen (Denmark in respect of the of the Faroe Islands and Greenland
Chairperson of the Standing Committee on Finance and Administration (STACFAD)	– D. Gill (Canada)
Vice-Chairman of the Standing Committee on Finance and Administration (STACFAD)	– H. Koster (EEC)
Chairman of the Standing Committee on International Control (STACTIC)	– E. Lemche (Denmark in respect of the Faroe Islands and Greenland)

NAFO Secretariat
Dartmouth, Nova Scotia, Canada
13 September 1991

QUOTA TABLE. Total allowable catches (TACs) and quotas (metric tons) for 1992 of particular stocks in Subareas 3 and 4 of the NAFO Convention Area. The values listed include quantities to be taken both inside and outside the 200-mile fisheries zone, where applicable.

	Cod		Redfish		American plaice		Yellowtail	Witch	Capelin	Squid (*Illex*)[2,3]
Contracting Party	Div. 3M	Div. 3NO	Div. 3M	Div. 3LN	Div. 3M	Div. 3LNO	Div. 3LNO	Div. 3NO	Div. 3NO	Subareas 3+4
1. Bulgaria	–	–	645	–	–	–	–	–	–	500
2. Canada	100	6 484	1 075	5 964	150	25 425	6 825	3 000	800	N.S.[4]
3. Cuba	480	–	3 762	1 372	–	–	–	–	750	2 250
4. Denmark (Faroe Islands and Greenland)	2 900	–	–	–	–	–	–	–	–	–
5. European Economic Community	6 465	5 016	6 665	476	350	328	140	–	750	N.S.[4]
6. Iceland	–	–	–	–	–	–	–	–	–	–
7. Japan	–	–	860	–	–	–	–	–	2 800	2 250
8. Norway	1 200	–	–	–	–	–	–	–	9 000	–
9. Poland	500	–	–	–	–	–	–	–	900	1 000
10. USSR	1 270	1 624	29 777	6 104	1 000	–	–	1 950	15 000	5 000
11. Others	50	476	216	84	500	47	35	50	–	5 000
12. Special Reservation[1]	–	–	–	–	–	–	–	–	–	–
Total Allowable Catch	12 965	13 600	43 000	14 000	2 000	25 800	7 000	5 000	30 000	150 000[5]

[1] There are no Special Reservations for 1992.

[2] The opening date for the squid (*Illex*) fishery is 1 July.

[3] Any quota listed for squid may be increased by a transfer from any "coastal state" as defined in Article 1, paragraph 3 of the NAFO Convention, provided that the TAC for squid is not exceeded. Transfers made to Contracting Parties conducting fisheries for squid in the Regulatory Area shall be reported to the Executive Secretary, and the report shall be made as promptly as possible.

[4] Not specified because the allocation to these Contracting Parties are as yet undetermined, although their sum shall not exceed the difference between the total of allocations to other Contracting Parties and the TAC.

[5] The TAC would remain at 150 000 tons subject to adjustment where warranted by scientific advice.

PART II. Report of the Standing Committee on International Control (STACTIC)

13th Annual Meeting
Dartmouth, Nova Scotia, Canada, 9-13 September 1991

The Standing Committee on International Control (STACTIC) met on several occasions during the week of 9-13 September 1991. The initial session convened at 1015 hours on 9 September 1991.

1. Opening of the Meeting

1.1 The Chairman of STACTIC, O. Muniz (Cuba), welcomed the delegates to the 13th Annual Meeting of NAFO and in particular to the STACTIC meeting. STACTIC delegations included: Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), European Economic Community (EEC), Japan, Norway and the Union of Soviet Socialist Republics (USSR). The Chairman welcomed the delegation from the USA as observers. (Annex 1)

1.2 R. J. Prier (Canada) was appointed Rapporteur.

1.3 The agenda was adopted as presented (Annex 2).

1.4 The Chairman of STACTIC raised a point of procedure in relation to STACTIC mandate under its Rules of Procedure and the task of the STACTIC Working Group on Improvements to Inspection and Control in the Regulatory Area, and he concluded that agendas and tasks of those are very similar.

The EEC delegate recommended that the Working Group and STACTIC be amalgamated and that Mr Muniz act as Chairman.

1.5 After discussions, the **consensus was reached** to proceed with deliberations of STACTIC Working Group recommendations under the STACTIC Agenda and its mandate, and then report to the Fisheries Commission. The delegations agreed with the EEC recommendation that the report should include the amendments discussed and those scheduled for discussion. For this purpose the Canadian and the EEC delegations formed a drafting group.

2. Review of Annual Return of Infringements

2.1 The Chairman referred the delegates to Note 1 of Appendix 7 to NAFO Circular Letter 91/68 which listed those Contracting Parties who had submitted Annual Return of Infringements and requested that all Contracting Parties review these returns and those Contracting Parties who have not submitted their returns to do so.

2.2 The item was opened to discussion on 12 September and the Canadian delegate asked if Contracting Parties for which infringements had been identified in 1990 could report on the disposition of those infringements. The EEC reported that due to an error in interpretation the information was not available and stated that in the future the information will be provided. The USSR had no comment. The Chairman emphasized the importance of the disposition of apparent infringements as it is an essential aspect of our control system.

2.3 The Chairman indicated that reports of surveillance activities and inspections carried out in the Regulatory Area was not on the agenda. However, this is implied under this item and he

invited Contracting Parties to table such reports if available. Reports were presented by Canada and the EEC.

3. Review of Registration of Vessels Fishing in the Regulatory Area

3.1 The Chairman referred to Note 2 of Appendix 7 of NAFO Circular Letter 91/68 and asked Contracting Parties to review the list of registered vessels and then return to this item at a later meeting. Denmark (in respect of the Faroe Islands and Greenland) asked the Executive Secretary to provide a summary list of vessels.

3.2 The Executive Secretary provided the list of vessels and a summary by Contracting Party of the number of vessels anticipated to fish in the Regulatory Area. As there were no further questions, the item **was closed.**

4. Review of the Progress made on Improvements to Inspection and Control in the Regulatory Area

4.1 The Chairman referred to FC Doc. 91/1 and FC Doc. 91/2 which were the reports of the two meetings of the Working Group held in Brussels and Dartmouth respectively. These reports will be issued as independent Fisheries Commission documents.

4.2 The USSR stated they had lodged an objection against the hail system and would now be willing to agree in principle to the hail system but it would be subject to clarification of the cost. They further requested Canada, if it was possible, to send messages from vessels to the Executive Secretary utilizing Canadian facilities and excluding the cost to vessels of Contracting Parties.

5. Conservation and Enforcement Measures (consideration on any revisions and improvements)

5.1 The Chairman proposed to review the recommended enforcement measures contained in FC Working Paper 91/1, the hail system and the proposed amendments, and to request the Executive Secretary to report to STACFAD on the cost of implementing the proposed Japanese amendment. This was **accepted** by all delegations.

5.2 The revised STACTIC W.G. Working Paper-Draft Report to the Fisheries Commission (STACTIC W.G. Working Paper 91/17) was **accepted** by all delegates without comment (Annex 3).

5.3 The delegations discussed the Conservation and Enforcement Measures (FC Working Paper 91/1) with the following results:

The EEC recommendation that the Executive Secretary should sequentially number all messages transmitted by him to the Contracting Parties was **accepted by all delegates.** The guidelines for the Coordination and Optimization of Inspection and Control outlined on page eleven should be separate from the Enforcement Measures and will be repositioned either as an appendix or at the beginning of the text.

The USSR with the concurrence of the EEC sought clarification with regard to International law concerning the overflight of vessels by aircraft and safety of such operations, as well as the accuracy and reliability of the information obtained by aircraft.

As was agreed previously, during meetings of the Working Group in October 1990 and July 1991, the majority of delegations stated air surveillance would be a useful tool and at this stage the question of air surveillance should not be discussed. Further it was pointed out the aircraft adhere to rules of safety which are international and are used world-wide for fisheries surveillance, and they have proven to be cost effective and provide reliable and accurate information. That was agreed.

5.4 The Chairman noted the concerns of Contracting Parties and requested those delegates who use air surveillance to put forth rules for use of air surveillance in the Regulatory Area.

5.5 It was agreed by delegations that the Chairman would recommend to the Fisheries Commission in his report on the work of the Working Group approval of:

FC Doc. 91/1 and 91/2, Reports of STACTIC Working Group, Brussels, 17-19 October 1990, and Dartmouth, 3-5 July 1991;
FC Working Paper 91/1, Conservation and Enforcement Measures;
STACTIC W.G. Working Paper 91/2, Japanese Amendment to Hail System;
STACTIC W.G. Working Paper 91/3, Danish amendment to Hail System;
STACTIC would take over responsibilities of the Working Group;
STACTIC was to continue examining short and long term measures outlined in FC Doc. 90/8;
STACTIC would continue to develop measures aimed at effective International Control in the Regulatory Area; and,
other recommendations contained in STACTIC Working Paper 91/17.

5.6 The Canadian delegate explained their proposal to incorporate catch reporting data into the hail system indicating that by accepting this amendment we would:

ensure a higher level of accountability of catch on board a vessel and provide NAFO Inspectors with reported quantities in advance of inspection;

improve inspection and control in the Regulatory Area; and,

provide for better utilization of inspection platforms and allow them to concentrate on specific areas or vessels.

5.7 The EEC delegate did not support that proposal and stated that EEC vessels do not keep production logs. He noted further that in particular a reference to conversion factors is essentially the problem and serious problems were caused in developing standard conversion factors. In summary the EEC stated production logs as a legal instrument will not facilitate inspection and would complicate the inspection and not add to the control envisaged.

5.8 The USSR delegate stated standard conversion factors are difficult to develop because of the different types of vessels and equipment being used. They further stated while some USSR vessels are using production logs they have no legal standings. In addition it would be difficult to verify conversion factors even within one ship owner.

5.9 The Japanese delegate stated that Japanese vessels carry a fishing log as well as a production log and that they calculate their round weight from their production log using company developed conversion factors. Therefore, they understand the remarks of Canada.

5.10 The Cuban delegate indicated they have maintained fishing and production logs on their vessels since 1981.

5.11 The Canadian delegate explained the points made by the delegates regarding conversion factors are understood and Canada's proposal aims to make inspectors jobs more effective. The delegate emphasized they were not asking for standardization of conversion factors.

5.12 The Chairman not obtaining consensus **deferred this item** to the next meeting of STACTIC.

5.13 The Chairman stated that the request for advice on Regulatory Measures respecting use of gillnets and longlines in the Regulatory Area would be referred to the Fisheries Commission for them **to seek the advice of the Scientific Council.**

5.14 It was **agreed to defer** the Canadian proposal to limit the quantity of regulated species taken in fisheries for unregulated species to 2 500 kg in total or 10% by weight in nets hauled in the presence of an inspector until the next meeting of STACTIC.

5.15 The delegates reviewed the Canadian proposal regarding the composition of an inspection party and agreed **to defer** this amendment **to the next meeting of STACTIC** as several delegations (the EEC and the USSR) would like to consider thoroughly all legal and technical aspects of any such arrangements.

5.16 The Committee **approved a NAFO seal for use by inspectors** in the NAFO Regulatory Area that was proposed by the Executive Secretary and requested that these seals be approximately 3 inches longer than the one shown for demonstration. The Executive Secretary was **authorized** to obtain an appropriate number for distribution to Contracting Parties.

5.17 It was **agreed** to use the forms provided by the Executive Secretary to report air surveillance activities. These forms to be divided into two parts (C and D) one form to be for the originator, the other for the receiver of the information. The Contracting Parties would review the forms and forward recommendations for amending the forms to the Executive Secretary prior to the next meeting of STACTIC in order that the forms can be finalized at the next meeting of STACTIC.

5.18 The Executive Secretary reported he has been in contact with IMO to confirm if signals used with reference to helicopters are still valid. The answers received from IMO were not adequate and he will attempt to get more definitive answers **for the next meeting of STACTIC.**

5.19 For other amendments to the Conservation and Enforcement Measures which the Executive Secretary was to report on, the following was **agreed:**

the Contracting Parties **would report every calendar month** on the number of inspections carried out in the Regulatory Area to the designated authority;

the inspection questionnaire will be published by NAFO in the official language of this Organization (English) and therefore it will be the responsibility of Contracting Parties to translate the questionnaire at their own expense; and,

the colours for the various pages of the Surveillance Report which the Executive Secretary showed to the delegates of STACTIC could be preferably **1 golden rod and 1 blue.**

5.20 The Committee agreed on a Hail System Message Format (based on STACTIC Working Paper 91/7) which shall be sent to the Executive Secretary from the vessels of Contracting Parties in the Regulatory Area (Annex 4). No consensus was reached on the format proposed by Japan for hail messages to be sent by fax.

5.21 The USSR raised a question on how a captain of a vessel can identify an inspector who is operating from an aircraft. The Executive Secretary indicated the identity of an inspector can be obtained from the forms he is required to sign. The Chairman stated that aircraft employed on NAFO surveillance are required to be registered with NAFO and the USSR will have this list available to them. The USSR still has concerns about this issue and view this as a serious issue. The Chairman **deferred** this issue until the next meeting.

6. Discussion on the Feasibility of the Implementation of the Long-Term Measures

6.1 The EEC delegate reported that under the terms of reference of the Working Group they undertook to produce a paper on electronic surveillance. This study is not yet completed. It is hoped by the end of October the report will be available for internal discussion. Therefore they were not in a position to report on electronic surveillance.

6.2 The Canadian delegate gave a brief up-date on electronic monitoring indicating that a private company is involved in a pilot project. However the status of the project is not known. It is expected by 1992 when Canada will have an indication of the feasibility of the project.

6.3 The USSR delegate felt long range measures were difficult to address at this time. Information presented by Canada on electronic monitoring are interesting, but would like to draw attention to the development of such a system as follows: it is a costly system; there are legal provisions to be addressed; International Conventions to be reviewed; and, systems must be automated to free captains from work related to them.

6.4 The Canadian delegate raised the concept of an International Observer Scheme and stated that based on the concerns expressed by the Scientific Council regarding the lack for information for stock assessments, the need for improved control measures through an observer program could address many of the concerns. Canada sees an international observer scheme providing trained observers to engage in scientific observations, in accordance with the program decided by the Scientific Council, and to monitor compliance with the NAFO Conservation and Enforcement Measures. Observers would not have the authority of NAFO inspectors but would support and improve overall control. The observer scheme would be a cost effective management system and could be recommended to the Fisheries Commission as proposed by the Canadian delegation.

6.5 The EEC had serious reservations implementing an observer scheme in international waters. They mentioned a few of the problems they foresee in such a program as: status of the observers; the collection of information to be used for compliance; the cost of the program; and, the logistic problems envisaged. They foresee a lot of reservations and will be discussing them later.

6.6 The USSR delegate made an observation as a result of the Canadian proposal re long-term measures advising to ensure the measures are accurate and simple. The USSR agreed with the EEC with regard to proprietary rights. Within their vessels captains do not readily exchange information between themselves and for that matter neither do companies. Therefore it is unlikely observers would be allowed on board without the consent of the

owners. All these points have to be taken into consideration in developing long-term measures as well as the fact that we are operating on the high seas.

6.7 The Canadian delegate stated that the concerns expressed by other delegates were understandable. However, the task is to look at opportunities to improve the NAFO control system. The Canadian proposal is for a 3-year pilot project to see whether it will work and then to pursue it further. Whether NAFO can approve the observer scheme will be the subject of future discussions within NAFO.

6.8 The EEC delegate endorsed the remarks of the USSR regarding their reservations. The Canadian delegate called for further discussions at the next meeting of STACTIC because there are many points that need to be resolved before setting up a pilot project and time does not permit sufficient discussion at this meeting.

6.9 Japan indicated we must be careful regarding the Canadian proposal and restated that the Regulatory Area is high seas, therefore, the proposal needs more study.

6.10 The Chairman concluded the general opinion of STACTIC was that this proposal is one long-term measure which will require additional discussion at the next meeting of STACTIC.

7. Elaboration of the Report and Recommendations to the Fisheries Commission

7.1 STACTIC **agreed** to recommend to the Fisheries Commission the following: STACTIC shall continue examining short and long-term measures outlined in FC Doc. 90/8 "Terms of Reference" and it will take over responsibilities of the Working Group.

7.2 The summary of agreed proposals for amendments of the Conservation and Enforcement Measures will be presented to the Fisheries Commission in FC Doc. 91/7 and in the form of separate proposals throughout the STACTIC Report for their official adoption. This document is based on FC Working Paper 91/1 and STACTIC W.G. Working Paper 91/17 which were approved during this meeting and forwarded to STACTIC for final deliberation.

8. Election of Chairman

E. Lemche, Denmark (in respect of the Faroe Islands and Greenland) was **elected unanimously** as the next Chairman of STACTIC.

9. Time and Place of the Next Meeting

The next meeting will be held in 1992 in accordance with the decision of the Contracting Parties.

10. Other Matters

There were no other matters to discuss under this item.

11. Adjournment

The Chairman adjourned the STACTIC meeting at 2020 hours on 12 September 1991.

Annex 1. List of Heads of Delegations to STACTIC

13th Annual Meeting
Dartmouth, Nova Scotia, Canada, 9-13 September 1991

Canada	B. Allain
Cuba	B. Garcia Moreno
Denmark (in respect of the Faroe Islands and Greenland)	K. Hoydal
EEC	M. Newman
Japan	M. Yoshida
Norway	P. Gullestad
Poland	J. Stremlau
USSR	V. Tsoukalov

Annex 2. Agenda

Standing Committee on International Control (STACTIC), Dartmouth, Nova Scotia, Canada, 9-13 September 1991

1. Opening by Chairman, O. Muniz (Cuba)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Review of Annual Return of Infringements
5. Review of Registration of Vessels fishing in the Regulatory Area
6. Review of the progress made on Improvements to Inspection and Control in the Regulatory Area (reports of STACTIC Working Group, FC Doc. 91/1 and FC Doc. 91/2)
7. Conservation and Enforcement Measures (consideration on any revisions and improvements)
8. Discussion on the feasibility of the implementation of the long-term measures
9. Elaboration of the report and recommendations to the Fisheries Commission
10. Election of Chairman
11. Time and Place of Next Meeting
12. Other Matters
13. Adjournment

Notes to STACTIC Agenda

Note 1
(item 4 of Agenda)

To date, the Executive Secretary has received Annual Return of Infringements for 1990 from the following Contracting Parties: Canada, Cuba, USSR and EEC.

Note 2
(item 5 of Agenda)

To date, the Executive Secretary has received the notification of fishing vessels in the Regulatory Area for 1991 from the following Contracting Parties: Cuba, Denmark (in respect of the Faroe Islands and Greenland), EEC, Japan, Norway and USSR.

Annex 3. STACTIC Working Group Report on Improvement to Inspection and Control in the Regulatory Area

13th Annual Meeting
Dartmouth, Nova Scotia, Canada, 9-13 September 1991

The first meeting of the STACTIC Working Group on Improvements to Inspection and Control in the NAFO Regulatory Area was held in Brussels, 17-19 October 1990. The Working Group Report was subsequently approved by a mail vote of the Fisheries Commission, including recommendations regarding implementation of a NAFO hail system, vessel and gear markings and coordination of inspection activities by Contracting Parties in the Regulatory Area and exchanges of inspection information (FC Doc. 91/1).

The STACTIC Working Group on Improvements to Inspection and Control in the NAFO Regulatory Area met again in Dartmouth, 3-5 July 1991 and agreed to recommend to the Fisheries Commission certain amendments and revisions of Parts I, II, III and IV of the NAFO Conservation and Enforcement Measures as outlined in FC Working Paper 91/1.

The Working Group examined suggestions made by the delegations of Denmark (in respect of the Faroe Islands) and Japan as contained in STACTIC W. G. Working Papers 91/2 and 91/3 and agreed to recommend their adoption to the Fisheries Commission. The Working Group also recommends that the Fisheries Commission request advice from the Scientific Council as outlined in STACTIC W. G. Working Paper 91/6.

The Working Group requested the Executive Secretary to examine and report on the cost of implementing the proposed amendments to the hail system. The Executive Secretary's report is to be provided thereafter to STACFAD.

A number of other proposals to amend the NAFO Conservation and Enforcement Measures require further discussion. The Working Group agreed on the need to pursue its work on these proposals and to consider other possible amendments to the hail system. Time did not permit discussion of the long term measures as contained in FC Doc. 90/9.

In view of the need to continue consideration of measures to improve control in the Regulatory Area, the Working Group recommends that the Fisheries Commission:

a) confirm the need for the examination of both the short term and long term measures outlined in FC Doc. 90/8 (Revised) and any other measures which might be appropriate to improve control in the Regulatory Area; and

b) direct STACTIC to continue the discussions begun by the Working Group and, where appropriate, to include in its report to the Fisheries Commission at the 1991 Annual Meeting of NAFO recommendations regarding further measures aimed at effective international control in the Regulatory Area and tasks for future consideration by STACTIC.

Annex 4. Hail System – Proposed Message Format, by the EEC Delegation

13th Annual Meeting
Dartmouth, Nova Scotia, Canada, 9-13 September 1991

1. The communications shall be entitled "NAFO REPORT". The information to be transmitted, which shall be presented in the form specified, is as follows:

   1.1 Each entry of the vessel into the Regulatory Area. This report shall be made at least six hours in advance of the vessel's entry and shall contain the following particulars in the following order:

   - ◊ Name of vessel,
   - ◊ Call sign,
   - ◊ External identification letters and numbers,
   - ◊ The date, the time and geographical position,
   - ◊ Indication of the message code: "ENTRY",
   - ◊ the NAFO division into which the vessel is about to enter,
   - ◊ The name of the master.

   1.2 Each movement from one NAFO division to another NAFO division. These reports shall be made prior to the vessel's entry into a NAFO division and shall contain the following particulars in the following order:

   - ◊ Name of vessel,
   - ◊ Call sign,
   - ◊ External identification letters and numbers,
   - ◊ The date, the time and geographical position,
   - ◊ Indication of the message code: "MOVE"
   - ◊ the NAFO division into which the vessel is about to enter,
   - ◊ The name of the master.

   1.3 Each exit from the Regulatory Area. These reports shall be made prior to the vessel's exit from the Regulatory Area and shall contain the following particulars in the following order:

   - ◊ Name of vessel,
   - ◊ Call sign,
   - ◊ External identification letters and numbers,
   - ◊ The date, the time and geographical position,
   - ◊ Indication of the message code: "EXIT",
   - ◊ The NAFO division from which the vessel is about to leave,
   - ◊ The name of the master.