

COMISION INTERAMERICANA DEL ATUN TROPICAL
INTER-AMERICAN TROPICAL TUNA COMMISSION

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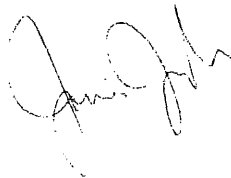
Date: November 6, 1978
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Memorandum

To: Director of Investigations
All Commissioners and attendees of the 36th Meeting

Subject: 36th Meeting of the Inter-American Tropical Tuna Commission

Transmitted herewith are the minutes of the first part of the 36th Meeting of the Inter-American Tropical Tuna Commission which was held in Tokyo, Japan on 16, 17 and 18 October 1978. Since the business of this 36th meeting was not completed, the meeting has been placed in recess and will be continued at a yet undetermined time and place.



INTER-AMERICAN TROPICAL TUNA COMMISSION

SUMMARY MINUTES OF THE THIRTY SIXTH MEETING
(PART I)

October 16-18, 1978
Tokyo, Japan

Chairman: Dr. Kunio Yonezawa

AGENDA

1. Opening of the Meeting
2. Consideration and Adoption of the Agenda
3. Review of Current Research
4. The Commission's Porpoise Program
(Background Paper No.5)
5. The 1978 Fishing Year
(Background Paper No. 1)
6. Assessment Studies of Yellowfin Tuna in the Eastern Pacific Ocean
(Background Paper No. 2)
7. Assessment Studies of Skipjack Tuna in the Eastern Pacific Ocean
(Background Paper No. 4)
8. Recommended Research Program and Budget for FY 1980/1981
(Background Paper No. 3)
9. Considerations of a New or Modified Tuna Convention
10. Place and Date of Next Meeting
11. Election of Officers
12. Other Business
13. Adjournment

SUMMARY MINUTES OF THE THIRTY-SIXTH MEETING (PART I)

AGENDA ITEM 1 - OPENING OF THE MEETING

The 36th meeting of the IATTC was opened by Chairman Kunio Yonezawa at 10:35, October 16, 1978, in the Main Conference Room, Ministry of Foreign Affairs, Tokyo, Japan. Chairman Yonezawa introduced the keynote speaker, Parliamentary Vice-Minister of Agriculture, Forestry and Fisheries, Mr. Takiichiro Hatsumura, who addressed the meeting on behalf of the Minister of Agriculture, Forestry and Fisheries. The full text of Vice-Minister Hatsumura's presentation is attached as Annex I.

After the keynote address, Chairman Yonezawa extended a cordial welcome to all Commissioners, government observers, representatives of international organizations and other attendees to the meeting. After welcoming them all he asked the leaders of the various delegations to introduce themselves and the members of their delegations. All member governments of the Commission were represented at the meeting. A list of attendees is attached as Annex II.

AGENDA ITEM 2 - CONSIDERATION AND ADOPTION OF THE AGENDA

After completing these formalities the Chairman introduced Agenda Item 2, which was concerned with the consideration and adoption of the agenda. The Chairman explained that a first draft of the agenda had been distributed to all delegations in July and that a second, revised draft was distributed at this meeting.

After opening the floor for discussion of the agenda, Commissioner Howard of the U.S. asked if perhaps Agenda Item 9 might not better be discussed after the Inter-Governmental Meeting, rather than before. The Chairman explained that Agenda Item 9 was not included in the agenda for purposes of debate, but only for purposes of informing all delegations of progress made during the year toward the drafting of a new convention for tuna conservation and management in the eastern Pacific. With this in mind he asked the U.S. delegation if it would object to leaving the agenda item as listed provided that, as the time approached for discussing it, a decision would be made in consultation with the group as to when it should be discussed. Commissioner Howard agreed, and the second draft of the agenda was adopted by unanimous consent.

The Chairman, in consultation with the group, selected the work schedule as follows: 9:30 - 12:30 : 2:30 - 5:30.

Commissioner Howard proposed that there be no formal meeting scheduled for the next morning (Tuesday) in order to allow delegations to consult informally with each other.

After listening to the Chairman explain that such recesses were not unusual in Commission meetings of the past, the conference unanimously agreed to a recess for Tuesday morning.

AGENDA ITEM 3 - REVIEW OF CURRENT RESEARCH

The Chairman next moved on to Agenda Item 3, explaining that it has been the customary practice of the Commission to have the Director present a brief review of the Commission's research during the current year. He called on the Director to make this presentation.

The Director began his review by explaining that during 1978 the Commission completed its 28th year of research on the tunas of the eastern Pacific Ocean and that if the research is to fulfill the objectives of the Commission, and to be responsive to the member governments as well, comments and opinions from the Commissioners are necessary. It was explained that a major share of the research effort of the staff was directed toward the collection of catch statistical data. For purposes of stock assessment such data may be collected several weeks or months after the catches take place, but for purposes of management the data must be collected on a current basis. Since the Commission maintains an active conservation program, a substantial share of the staff's research effort is directed toward the collection of statistical data on a current basis. To accomplish this the Commission maintains offices in most of the major tuna fishing ports of the eastern Pacific; the data gathered at these locations form the basis for the staff's statistical research.

After a detailed explanation of the basic data collection and analysis system utilized by his staff, the Director went on to highlight a few of the major research projects in which the staff is engaged.

He explained that in addition to major studies of yellowfin and skipjack tuna, recent increased efforts have been directed toward the study of bigeye and bluefin tuna. Joint studies of these two species with colleagues from Japan are currently underway.

Recent genetic studies of the population structure of yellowfin completed by the staff have demonstrated genetic heterogeneity within the eastern Pacific. The analyses are not sufficiently complete, however, to allow differentiation among components in the population. To elucidate such possible differences will require more detailed studies, which will be discussed further under Agenda Item 8.

The Director reviewed progress of the skipjack tagging program in French Polynesia which had been approved by the Commission at an earlier meeting. Two cruises had already been conducted in the area of the Marquesas Islands, and the third and final cruise will begin in November 1978.

A review of progress made in studies of growth using daily increments on the otoliths of yellowfin and skipjack was also given.

In closing, the Director indicated that the Commission's involvement in evaluating the use of remote sensing techniques as an oceanographic tool had been reduced substantially during 1978, and that there are no plans to increase it in the future.

AGENDA ITEM 4 - THE COMMISSION'S PORPOISE PROGRAM

Completing Agenda Item 3, the Chairman moved on to Agenda Item 4, a discussion of the Commission's current porpoise program. He asked the Director to review this item for the meeting.

The Director began the discussion by reviewing the nature of the tuna-porpoise problem in the eastern Pacific. He presented quantitative information on the levels of fishery-induced mortality, and noted that during the last two years this mortality had been substantially reduced. With regard to the Commission's porpoise program he noted that funding for the 1977/78 fiscal year had been received by the Commission late in the year and, since the funds had been received so late, a full program for 1977/78 could not be carried out. It is the intention of the staff to mount a full program during the 1978/79 fiscal year. The first scientific technicians are to be trained during 1978, and are expected to be placed aboard vessels at the beginning of the 1979 fishing year. Although other phases of the program are currently underway, they will not be operating at full capacity until 1979.

The Director then explained that he would like to postpone the discussion of fiscal matters concerning the 1977/78 budget until Agenda Item 8. Permission to do this was granted by the Chairman.

After completion of this agenda item the Chairman recessed the meeting for lunch at 12:40 .

The meeting was reconvened by the Chairman at 2:50.

AGENDA ITEMS 5 AND 6 - THE FISHING YEAR AND ASSESSMENT STUDIES OF YELLOWFIN TUNA IN THE EASTERN PACIFIC OCEAN

In introducing Agenda Item 5, discussion of the 1978 fishing year, the Chairman explained that since this agenda item was so closely tied to Agenda Item 6, assessment studies of yellowfin, he would ask the Director to discuss

both items together. The presentation, which took approximately two hours, was supplemented by numerous charts and graphs, all of which are shown in Background Documents 1 and 2. The most important points discussed by the Director were:

The Commission's conservation program for yellowfin tuna began in 1966, and has been in effect each year since. Early stock assessment studies suggested that an annual average catch of approximately 90 to 100 thousand short tons could be taken. Shortly after the initiation of the conservation program construction of new vessels caused the fleet to increase in size. This increase in fleet size increased competition, and vessels began fishing further offshore in areas that had not previously been exploited. At the same time the average size of the fish in the catch increased. These two factors increased the potential yield from the population relative to the period when the fishery was concentrated inshore on small fish. In order to generate information with which to quantify this increased potential yield the Commission began an experimental program of gradually increasing the quotas to test empirically the productivity of the stock. At the same time areas where effort had not previously been generated were experimentally removed from the CYRA. On the basis of the results of these programs the catch quotas had been gradually increased in recent years to 210 thousand tons.

Estimates of potential production from the stock have been made, using the results from these experiments. These estimates, made by employing general production models, suggest that on the average the population can sustain yields of about 175 thousand tons of yellowfin. The analysis further suggests that, if the models are correct, the population is at or slightly below the level at which it can sustain the maximum yield. However, since the catch has averaged about 190 thousand tons over the last five years, the risk of overexploitation by continuing experimental quotas in 1979 at the same level as the previous two years would appear minimal.

The size composition data, however, cause the staff to be concerned over the condition of the resource. In most years the major share of the catch of yellowfin by weight has been made up of 2-, 3- and 4-year-old fish, and the 1-year-old, or recruits, have comprised a minor share of the catch. In 1978, however, about 80% of the weight of the catch was 1-year-old fish. Two groups of fish are recruited to the fishery each year, the Y group which is first captured in quantity during the first half of the year and the X group that is first captured in quantity during the second half of the year. Normally the catch of 1-year-olds consists almost entirely of fish of the Y group, but in 1978, for the first time in the history of the fishery, large catches (more than 20 thousand tons) of one-year-olds of the X group were taken. Two important questions arise out of this situation. First, is the lack of large fish in the catch due to availability and/or vulnerability, low abundance or low effort. Second, is the large catch of small fish due to a strong year class, high availability and/or vulnerability of an average year class or a shift of effort to small fish due to a lack of large fish? Although many reasons for choosing one possibility over the other were discussed, the reason could not be identified with certainty.

In considering recommendations, all of these factors need to be taken into account, particularly the fact that tropical fish tend to have short life spans and moderate recruitment in each year, whereas temperate fish

tend to have longer life spans and much more variable recruitment. For the latter there may be very low recruitment for a number of years, followed by one or two years of very high recruitment and then a number of additional years with very low recruitment. Thus one or two cohorts may support the fishery entirely alone for several years. Such being the case, the catches tend to vary considerably from year to year. Such highly variable recruitment would not be possible for a tropical species with a short life span because it would become extinct if there were virtually no recruitment for several years.

The recruitment of yellowfin seems to have become more variable in recent years, the Y74 and possibly the Y78 and X78 cohorts being strong ones and the Y76, X76, Y77, and X77 apparently being weak ones. Also, the fishery seems to be becoming more dependent on age-1 fish, the catches of fish of this age being unusually high in 1973, 1974, and 1978. This is a cause for concern. If this pattern continues the catches could become more variable, due to dependence on fish of only one cohort at a time, and would probably be reduced due to the harvesting of the majority of the fish at sizes considerably less than the critical size. Further, if there are nothing but weak cohorts for several consecutive years, the catches would be so drastically reduced that severe economic hardship would be suffered by the majority of vessels owners and fishermen.

One way to reduce the dependence of the fishery upon age-1 fish would be to protect the fish less than a certain size from the fishery until they have had a chance to grow larger. This might be accomplished by (1) setting a minimum size limit, (2) prohibiting fishing in certain area-time strata in which small fish predominate, or (3) altering the opening date of the season in such a way that most of the vessels are subject to regulation at the time when small fish are most available. There are obstacles to such courses of action, however, for small and medium yellowfin are frequently mixed within schools, and skipjack are commonly associated in schools with small yellowfin. In the first case (minimum size limit) the fishermen would have the unfortunate choice of catching these schools and discarding large amounts of small yellowfin or passing the schools up and losing large amounts of skipjack and medium yellowfin. In the second and third cases the choice would be with the rule-makers; if the regulations were strict large amounts of skipjack and medium yellowfin might be lost, while if the regulations were lenient large amounts of small yellowfin might be caught. There is the possibility, however, that there are ways to achieve large savings of small yellowfin with relatively small losses of skipjack and medium yellowfin. The Commission's staff is not in a position at this time to estimate the impact of various schemes directed at saving small yellowfin.

Another way to reduce the dependence of the fishery upon age-1 fish would be to reduce the fishing effort in 1979, thereby allowing more of the age-1 fish to survive throughout that year and be available as age-2 fish in 1980, and so on. This would tend to make the age structure of the population revert to its condition of the 1960's and early 1970's, when age-2, -3 and -4

fish contributed most to the weight of the catch. The immediate result would be a reduction in the catch but this would eventually increase again.

The management scheme which is provided for 1979 should be flexible. The age structure of the fish in the catch should be monitored from the start of the season. If age-2 and age-3 fish are relatively abundant the quota might be set at 210 thousand tons. If age-1 fish are again predominant the quota might be set at considerably less than that in an attempt to reverse the trend toward dependence of the fishery on age-1 fish. Accordingly, it is recommended that the quota be set at 165 thousand tons, with provision for it to be increased incrementally to as much as 210 thousand tons, at the discretion of the Director of Investigations.

After completion of the review by the Director the Chairman explained that because of the lateness of the hour, there would be time for only a few brief questions, but that additional questions could be asked on the next day.

Commissioner Howard of the U.S. asked the Director that if the lower quota for 1979 was to be 165 thousand short tons would there be time early in the year to examine the size composition of the catch and to increase the quota beyond 165 thousand tons if conditions suggested it should be increased. The Director answered by stating that it would depend primarily on two factors: 1) the catch rate of yellowfin early in the year and 2) the abundance of skipjack during the first quarter of 1979. If the yellowfin catch rate was low and skipjack abundance high then there would probably be time. If, on the other hand, yellowfin catch rate was average or high and skipjack abundance low, action would have to be taken early in the year to close the fishery so as to stay within 165 thousand tons of yellowfin, and there would not be time to evaluate size composition data.

Commissioner Zarur of Mexico asked whether the closure date of May 6 was selected in 1978 because of a high catch of skipjack or because of a low abundance of yellowfin. The Director explained that it was due to both of these factors.

Commissioner Zarur also inquired of the Director as to whether there was a minimum size limit for yellowfin in the Atlantic Ocean and, if so, how effective it was. The Director stated that there was a 3.2 kg. minimum size limit on yellowfin, and that it had been in effect for several years. He was unable to comment conclusively on its effectiveness, but noted that there was an incidental catch allowance associated with it, and that there were mixed reports on its effectiveness.

Commissioner Howard of the U.S. asked the Director if the staff had any indication whether 1979 would be a good, medium or poor skipjack year. The Director replied that he would discuss that point under Agenda Item 7 the following day if agreeable to all delegations. It was so agreed.

Commissioner Beckett of Canada inquired as to whether the fishing pattern in 1978 was different from those of other years. The Director stated that 1978 was different than any other recent year, although it was somewhat similar to 1973 and 1974. 1978 was primarily a school-fish year. Approximately 80 percent of the yellowfin catch was taken in the inshore fishery and in schools associated with floating objects. Fish caught in such schools are smaller fish than those caught in schools associated with porpoises.

The Chairman recessed the meeting at 5:40, advising the group that the meeting would recommence at 2:30 the next day.

Tuesday, 17 October 1978

AGENDA ITEM 7 - ASSESSMENT STUDIES OF SKIPJACK TUNA IN THE EASTERN PACIFIC OCEAN

The Chairman opened the meeting at 2:55. After introducing several new delegates who had not attended the meeting the previous day he asked the Director to review Agenda Item 7, dealing with stock assessment studies of skipjack.

In introducing this subject the Director noted that Background paper 4 had been prepared for this agenda item, and that it dealt in more detail with the subject than would the oral presentation. In summary the major points discussed were:

On a world basis the catch of skipjack tuna is greater than that of any other species of tuna. This is also true for the Pacific Ocean, where catches reached approximately 600 thousand short tons in 1976. Approximately 24 percent of the Pacific catch of skipjack was taken in the eastern Pacific Ocean. Skipjack of the eastern Pacific Ocean are part of a larger population that extends throughout the central and possibly western Pacific. Recent tag returns from skipjack released in the eastern Pacific have demonstrated movements to as far west as the Marianas Islands, near the Philippine Sea. The skipjack caught in the eastern Pacific are all, or nearly all, the result of spawning in the central Pacific, and perhaps the western Pacific. They most likely enter the eastern Pacific on feeding forays which keep them in the area for only a few months of their lives. Their abundance in the eastern Pacific is quite variable, as is reflected by the fact that the catch has varied between 35 and 165 thousand tons per year. This variability in apparent abundance of skipjack appears to be fishery independent. General production models which are used to monitor the effect of fishing on stock abundance for yellowfin cannot be validly employed for skipjack until the stock structure is better understood. However, age-structured models in which estimates of yield per recruit are made for skipjack can be utilized. Such studies demonstrate that for skipjack in the eastern Pacific the best strategy in terms of obtaining the maximum

yield from each recruit is to catch them at any size they become available to the gear. The primary reason for these results is that skipjack are exposed to the fishery for only a short time.

A great deal of research has been done by the staff in an attempt to predict abundance of skipjack in the fishery. The Director described a model which is based on major meteorological conditions on a Pacific-wide basis. In essence, the model utilizes differences in the high pressure cell off Easter Island in the eastern Pacific and the low pressure cell over Indonesia in the western Pacific. Anomalies in this "southern oscillation" seem to affect ocean temperature in the major skipjack spawning areas, which in turn seems to be related to larval survival and skipjack abundance in the eastern Pacific one and a half years later.

Work on prediction models of these sorts and general studies of the dynamics of the fishery for skipjack will continue to be an important part of the staff's research.

Upon completion of the Director's presentation the Chairman opened the floor for further discussion of Agenda Items 5 and 6, as well as the just-presented Agenda Item 7.

The Commissioner from Japan, referring to paragraph 3, page 11, of Background Paper 2, asked which other techniques for controlling the catch of small fish might be used. The Director replied that in addition to considering the setting of minimum sizes, closed areas and seasons and changing the opening date of the seasons fishing, from a yield-per-recruit point of view consideration might be given to reducing the area of the CYRA to encompass only the areas where recruits are abundant, reduce the quota in that area and allow unrestricted fishing beyond the CYRA. Of course this approach could be taken without risk only if recruitment was independent of spawning stock size.

There being no further discussion on these agenda items, the Chairman asked the Director to review Agenda Item 8, after first explaining that copies of the budget for 1980/1981 had been sent to the Commissioners for their review in July.

AGENDA ITEM 8 - RECOMMENDED RESEARCH PROGRAM AND BUDGET FOR FY 1980/1981

The Director explained that the proposed 1980/81 budget represented a 17 1/2 percent or \$361,513 increase over the previous budget. Seven percent of the total increase is for inflationary fixed costs and the remainder attributable to two new items.

The first, \$125,800, is for the purchase of a minicomputer, associated printer and plotter and labor for converting existing software to the new system. The Director explained that, although the cost seemed high for the

purchase of a computer, there would be substantial savings to the Commission. Projected costs for computer time next year will be \$40,000. Nearly all of these costs could be eliminated if the staff had its own computer, which would pay for itself in 3 years and over a 10-year period would save the Commission approximately \$300,000. In addition to monetary savings to the Commission, there are other compelling reasons for the staff to have its own machine:

1. The turn-around time for the machine currently used by the staff is becoming longer and longer. It is costly to obtain faster turn-around time and in the future will become more so. The machine is old, and frequently not working. The staff must have nearly constant use of the machine during the open fishing season in order to monitor catch and catch rate, etc., to enable it to set the closure date at the proper time, and long waits and breakdowns are unacceptable if the dictates of the convention are to be realized.
2. The machine being currently used is primarily a scientific computer and not built for data handling. Consequently it would be costly even if there were no problem with turn-around time.
3. As the staff deals with ever-increasing quantities of confidential data security would be substantially improved if it had its own computer.
4. Most all of the commercial time-sharing systems available in the San Diego area have been examined; it has been found that these are more expensive than purchase of a machine.

The second major increase is \$104,000 for an extension of the Commission's genetics studies. Current studies, based on blood proteins, have demonstrated that genetic heterogeneity exists among yellowfin found in the eastern Pacific Ocean. However, because of the limited number of genetic systems which can be used, it has been impossible to describe in detail the form of this heterogeneity. In other words, although we can demonstrate, based on protein systems, the fact that more than one genetic subpopulation of yellowfin exists in the eastern Pacific, we cannot state how many there are nor where their boundaries lie either in space or time. There have recently been developed techniques employing X-ray spectrometry in which it is possible to trace the early life history of individual organisms based on statistical analysis of trace-element chemistry. These techniques have been applied to studies of the migratory behavior and stock structure of salmon, ducks and insects with great success. The \$104,000 increase in the 1980/81 budget is to conduct similar studies on tuna. This phase of the budget is being submitted contingent upon the results of a feasibility study that is currently underway. If the feasibility study demonstrates that these spectrometric techniques are not applicable to tuna, then the budget item for such studies would be removed from the estimated 1980/81 budget.

After completion of the Director's presentation of the budget the Chairman opened the floor for discussion.

Commissioner Howard of the U.S.A commented that the budget climate in the U.S.A was very poor and that the probability of obtaining increased funds for the 1980/81 budget was unlikely. He said that before he could satisfactorily evaluate the merits of the proposed budget he would need a very detailed "back-up" study of the proposed computer system. He stated furthermore that he did not understand why the staff was recommending the purchase of its own computer system when his advisor Mr. Barrett had informed him that the NMFS fisheries laboratory in La Jolla does quite well using the B6700 available on the UCSD campus, the same one available to the Commission, and furthermore has contracted to use commercial systems such as INFONET.

The Director explained once again that the B6700 was getting increasingly more expensive to use as well as less reliable because it was so frequently out of order. He reiterated that the INFONET system was examined, as well as many others, but that it was evident that substantial savings could be made for the Commission by the purchase of a minicomputer.

Commissioner Beckett of Canada stated that his opinions were much the same as those of Mr. Howard, that the budget situation in Canada is extremely tight and that the prospects for increases very dim. After further discussion Commissioner Beckett commented on the possibility that the staff might consider the rental of computing equipment or the possibility of leasing it with an option to buy. He proposed that a decision on the budget be deferred for four or five months and that in the interim the staff seek views from the respective governments on their budget situations. If conditions appear favorable at that time then the budget could possibly be approved. If, on the other hand, conditions appear unfavorable then a revised budget could be submitted for consideration and approval.

After a brief summary of the situation by the Chairman all delegations concurred with the proposal of Canada.

The Director next asked the Chairman for permission to discuss the 1977/78 and 1978/79 porpoise budgets. He began by explaining that the 1977/78 and 1978/79 budgets approved by the Commission were \$572,560 and \$640,427, respectively. At the time these budgets were submitted the regular corresponding Commission budgets had already been approved; therefore they have been treated as supplemental budgets.

The U.S.A. has approved \$500,000 as its share of the 1977/78 porpoise budget. Because this amount was approved so late in the year only \$108,666 of it was spent before the end of the fiscal year, thereby leaving a carry-over of \$391,334. The staff has been informed that at a maximum the U.S. contribution will be \$500,000 for 1978/79, which is \$140,427 less than the amount approved by the Commission. If receipts from other countries during 1978/79 amount to \$25,000 the porpoise program approved by the Commission would be short about \$115,000. It was therefore recommended by the Director that the carry over of \$391,334 be used as follows:

- 1) \$115,000 be added to the 1978/79 budget to bring it up to the level approved by the Commission.
- 2) \$90,000 be used for at-sea personnel costs, which had been considerably underestimated.
- 3) A share of the remaining amount be used to conduct a porpoise program in 1978/79 in the event funds for that year are not approved or that such funds come very late in the year as is often the case for Commission budgets.
- 4) The remainder be used for additional critical porpoise studies, particularly towards a resolution of the problem of school size which at present is poorly estimated but critically important to estimates of population size.

Commissioner Howard of the U.S. stated that the carry-over would not be needed for the 1978/79 budget because the U.S.A. would be contributing its share for the porpoise program, and such funding would come to the Commission starting at the beginning of the fiscal year. He also stated that rather than make the decision at present as to how the carry-over should be spent the Director should circulate among the governments, at a later date, various options for using the funds.

Commissioner Beckett of Canada asked that the possibility that the carry-over from 1977/78 be set against the amounts required to be paid by countries for porpoise work in 1978/79 be considered as one of the options.

AGENDA ITEM 9 - CONSIDERATIONS OF A NEW OR MODIFIED TUNA CONVENTION

The Chairman next introduced Agenda Item 9, which dealt with the subject of a new or modified tuna convention. He reiterated the fact that this agenda item was included merely as an opportunity for members of the Commission who had not been party to negotiations to draft a new convention which have been under way since 1977, to be brought up to date on what has transpired and to ask questions. He then asked whether any of the delegations wished to review progress.

Commissioner Howard of the U.S. asked the Chairman for permission for Ambassador John Negroponete of his delegation to present such a review.

In introducing his review, Ambassador Negroponete said that he would briefly summarize some of the negotiations in which his government had been involved, but hoped that other delegations would present their own reviews. He emphasized that his intention was to review, not to debate the subject.

He said that in September 1977 Costa Rica and Mexico jointly convened a meeting of plenipotentiaries to discuss a proposed set of principles to govern the establishment of a new treaty to manage tuna in the eastern

Pacific Ocean. Their proposals included (1) the establishment of an international management regime for the conservation of tuna, (2) an international licensing system, (3) the establishment of guaranteed allocations for coastal states of species under regulation. The meeting ended inconclusively because many of the ideas presented were new. Additionally, the background documents describing the proposed principles were not circulated prior to the meeting, and some of the governments wanted more time to study the documents. It was agreed that there would be another meeting as soon as possible in 1978. There were no further formal meetings; instead there was held a series of informal consultations. The U.S.A. participated in two further meetings in San Jose, Costa Rica, a bilateral meeting with Costa Rica in May 1978 and a meeting with Costa Rica, Nicaragua and Panama in June 1978. Additionally, the U.S.A. met again with Mexico and Costa Rica in August 1978 in Mexico City, at which time a document was drafted which elaborated on most of the points presented at the previous meetings. Following the Mexico City meeting Mexico suggested that every serious effort should be made to determine the likelihood and actively encourage the participation of Chile, Ecuador and Peru in the negotiations. Therefore, with this aim in mind, informal meetings were held in New York at the United Nations offices. As a result of these meetings Chile, Ecuador, Peru and Colombia held a meeting in Lima, Peru, to evaluate their position with reference to the documents which emanated from the September 1977 meeting in Costa Rica and August 1978 meeting in Mexico City.

For the purposes of formally discussing the positions of Chile, Ecuador, Peru and Colombia with regard to the Mexico-Costa Rica proposals Colombia convened a meeting in Bogota in October 1978. Based on that meeting it appears that there may be emerging serious reservations on the part of Chile, Ecuador and Peru concerning the approach advanced by Mexico and Costa Rica as detailed in the document presented at the September 1977 meeting in Costa Rica. It is the point of view of the U.S.A. that there exists a fundamental difference between the position of Chile, Ecuador and Peru and the proposal presented by Mexico and Costa Rica. The former countries appear to prefer, rather than an international management system, a series of national management systems in which the nations would be solely responsible for (1) licensing in their coastal zones, (2) determining the amounts of tuna that could be harvested from their coastal zones and (3) determining the surpluses to be harvested by other nations. On the other hand Mexico and Costa Rica proposed an international system which he had outlined earlier and which allows for a coastal state allocation that could be taken anywhere in the convention waters.

In summary, there has been a series of consultations with many of the governments based on a document that emanated from the meeting in Costa Rica in September 1977. With regard to a timetable for subsequent negotiations, there is a general feeling that if there is to be success with a new convention it should be accomplished as soon as possible, and from the point of view of the U.S.A. it should be in time to govern fishing in 1980. The experience from the September San Jose meeting demonstrated that it was

difficult and almost too unwieldy to get agreement among 15 to 20 countries. Therefore the approach of meeting in smaller, informal groups was followed. Without apologizing to those governments not included in the informal, small meetings, their indulgence was asked. When the stage of finally elaborating the text of a convention is reached meetings involving all governments will be called.

Minister Altmann of Costa Rica said that he only wished to make a brief statement to supplement the rather complete report presented by Ambassador Negro Ponte. He reviewed the fact that numerous meetings had been held on this subject and progress made. In addition to the meetings mentioned by Ambassador Negro Ponte, Costa Rica had held numerous internal meetings on the subject as well as personal exchanges of view with other governments. In essence, Minister Altmann explained that many positive points had been agreed to as a result of these meetings, and most are expressed in the background document presented by Mexico and Costa Rica in the September San Jose Meeting and further elaborated on in the Mexico City Meeting. The main efforts so far exerted are hopefully to lead to a rational and equitable use of the tuna resources of the eastern Pacific.

Although a consensus was not reached among the countries attending last week's meeting in Bogota, significant progress was made. It was indeed clear that all of the countries in attendance recognized the need for conservation of the tuna species and the necessity for some form of international organization. Most agreed to the need for international licensing, but the format for accomplishing it differed. Nearly all agreed on the need for a more equitable distribution of the wealth from the resource, especially for the coastal states which heretofore have not been able to develop their fisheries. In general there was a feeling of optimism emanating from the Colombia Meeting. Although there existed areas of disagreement, and areas of completely different viewpoints, there was still much support from countries that had not previously participated in these negotiations.

Ambassador Negro Ponte said that he would like to add to his discussion a point he forgot to make. He explained that in the Mexican-Costa Rican proposal the coastal states would be guaranteed an allocation to be based on the highest catch of the international fleet within 200 miles of the coast. He explained that his government had been deliberating a great deal on this matter, and was of the view that there are other ways to measure concentration of the resource. These ideas have already been discussed informally with the Director, and he would therefore ask him, if the rest of the delegations agreed, to (1) update the statistics with respect to historical catches within 200 miles, and (2) examine the question of measuring concentration of the resource inside and beyond 200 miles by using catch-per-unit-of-effort statistics.

Commissioner Solano of Mexico said that although he had very little to add to the reviews already presented, he would like to reiterate and join the statements made by Minister Altmann of Costa Rica. He further explained that it has been the ardent desire of Mexico to establish a new regime for the conservation and management of tuna in the eastern Pacific Ocean. He indicated that Mexico is ready to continue these negotiations and will be present at any meeting for the purpose of achieving that goal.

There being no further discussions under this agenda item the Chairman recessed the meeting at 5:30, to be resumed after the conclusion of the Intergovernmental Meeting which was to follow immediately.

Wednesday, October 18, 1978

The Chairman reopened the meeting at 4:07. He explained that Agenda Item 6 dealing with the conservation quota on yellowfin for the 1979 fishing year was still open. However, in view of the fact that the Intergovernmental Meeting could not reach agreement on recommendations for implementing the proposed conservation quota there was no alternative but to defer a decision on Agenda 6 until a later date. He suggested that further action on this issue should be through diplomatic channels. He also noted that action would not be required at this time on Agenda Items 10 and 11.

AGENDA ITEM 12 - OTHER BUSINESS

The Chairman called for discussion of Agenda Item 12, other business.

Commissioner Howard of the U.S. explained that his delegation noted with encouragement that the staff had begun its porpoise program and was pleased to learn that the Director had contacted member governments interested in participating in the program. He called attention to the fact that one or two governments were leaving the Commission, and expressed hope that they would continue to be involved in the porpoise program by providing observers to the Commission which would lead to further improving the situation. He indicated that if there was any intention on their part of disengaging in the program it would be helpful to know at this time. He noted further that even though such countries are leaving IATTC it is assumed that they will continue to cooperate in the porpoise program.

Commissioner Solano of Mexico noted that he could only reiterate what he had already said. Mexico will continue to support this type of program and he personally believed that through appropriate consultation he was reasonably certain that his country would continue to participate.

Minister Altmann of Costa Rica indicated that his government, being one of the pioneer nations in establishing a regime for tuna conservation, would continue to do so.

Commissioner Obarrio of Panama called attention to the fact that his government had trained two biologists as porpoise observers. Both of these biologists have made trips aboard purse seiners, and it is Panama's intention to cooperate in the Commission's program. In fact, details of this cooperation have already been discussed with the Director.

Commissioner Beckett of Canada stated that like Panama his government has trained porpoise observers on its staff, and two of these were placed aboard tuna vessels flying the Canadian flag. During the 140 days these observers spent at sea only one set on porpoise was made.

Completing this agenda item, the Chairman noted that the next item of business was adjournment. He called attention to the fact that the business of the IATTC 36th meeting was not completed and he therefore would recess the meeting to some undetermined time and place.

Nicaragua expressed to the Chairman, and through him to his government, his deep appreciation and thanks for hosting the meeting. He called particular attention to the brilliant manner in which the Chairman presided over the meeting.

All other delegations present joined Nicaragua in its statement.

The meeting was recessed at 5:15.

CHILE

Benjamin Concha

COLOMBIA

Jorge H. Osorio

ECUADOR

Luis Moreno

NEW CALEDONIA

Jean Claude Le Guen

NEW ZEALAND

W. M. V. Armstrong

REPUBLIC OF CHINA

Hsi-chiang Liu

REPUBLIC OF KOREA

Chong Hui Lee

PERU

Gabriel Garcia Pike

SPAIN

Jose Luis Meseguer

VENEZUELA

Francisco Torres

COMISION PERMANENTE DEL PACIFICO SUR

Arturo Montoya

IATTC

James Joseph
Regina Newman

APPENDIX II

LIST OF ATTENDEES AT THE 36TH MEETING OF THE IATTC

CANADA

James S. Beckett - Commissioner
E. Blyth Young - Commissioner

A. F. Burger
Michael Hunter
G. E. Waring

COSTA RICA

Manuel Freer - Commissioner

Fernando Altmann
Jaime Botey
Eduardo Bravo
Raul H. Canessa M.
Jose Luis Moreno
Bernd Niehaus
Rolando Ramirez Paniagua

FRANCE

Serge Garache - Commissioner

Bernard Guitton
Alain Sortais

JAPAN

Mitsuhiro Hazumi - Commissioner
Shoichi Masuda - Commissioner
Kunio Yonezawa - Commissioner

Yuichiro Harada
Koji Imamura
Eiji Ishihara
Toshio Isogai
Yoshinori Katori
Kenzo Kawakami
Shoji Kawamoto
Takeshi Mochizuki
Satoshi Moriya
Masaki Okada
Tatsuo Saito
Kenichi Sakurai
Koichiro Seki
Kazuo Shima
Kunio Shimizu
Shojiro Shimura
Yasuo Takase
Shoki Ueyanagi
Tamotsu Yonemori
Shiro Yoshizaki

MEXICO

Amin Zarur Menez - Commissioner

Alonso Lopez Cruz
Victor Manuel Solano

NICARAGUA

Octavio Gutierrez - Commissioner
Jamil Urroz Escobar - Commissioner

PANAMA

Juan L. de Obarrio - Commissioner

Herman Bern
Jesus Antonio Correa
Pedro Vasquez McKay

UNITED STATES OF AMERICA

Wymberley Coerr - Commissioner
Jack Gorby - Commissioner
Gerald Howard - Commissioner
Robert MacDonald - Commissioner

G. Kenneth Alameda
Izadore Barrett
Gordon C. Broadhead
Peter Buchan
James S. W. Drewry
August Felando
Diane D. Grant
Robert A. Grant
Brian S. Hallman
Martin D. Howell
James H. Johnson
Milton M. Kaufmann
Barbara Keith Rothschild
O. E. Kerns, Jr.
Mary E. McLeod
John P. Mulligan
John Negroponte
Anthony V. Nizetich
Manuel A. Silva
Richard E. Zellers

I understand that negotiations are under way for the purpose of modifying the present Convention in the light of the new order of ocean regime, where the right of coastal states to establish 200 mile fishery zone has been internationally recognized. No matter what kind of institution would be adopted, I sincerely hope that it should ensure the rational utilization of tuna resources and satisfy all the countries interested in the resources, taking into consideration the fact that tunas migrate in waters both inside and outside 200 mile fishery zones.

I earnestly hope that your efforts at this meeting would produce fruitful results in the field of conservation and rational utilization of tuna resources which are most valuable for mankind.

In closing, I wish all of you will enjoy your stay in Tokyo since October is the best season of the year in our country.

Thank you very much.

APPENDIX I

Address by His Excellency Minister Ichiro Nakagawa
at the Opening Session of the 36th meeting of
the Inter-American Tropical Tuna Commission
in Tokyo, Japan, October 16, 1978

Mr. Chairman, Honourable Commissioners, Ladies and Gentlemen:

It is a great pleasure for me to have this opportunity to say a few words of welcome on behalf of the Japanese Government on this occasion of the opening of the 36th meeting of the Inter-American Tropical Tuna Commission.

First of all, I would like to extend my sincere welcome to the Honourable Commissioners and their advisers, as well as observers, who have travelled a long way to attend this meeting.

As you are well aware, this Commission has greatly contributed, during 28 years since the Convention for the Establishment of Inter-American Tropical Tuna Commission entered into force in 1950, to the scientific management of tuna resources and particularly the commission has succeeded in maintaining yellowfin tuna resources at levels which permit the maximum sustainable catch.

These achievements cannot be made without the studious efforts of Commissioners, scientists and administrators of each member country, as well as research staffs of the secretariat who have obtained excellent results from their investigations of tuna resources in the convention area. I would like to express my deep admiration and appreciation for those efforts.

As one of very valuable animal protein sources for mankind, tuna has been utilized all over the world and has played an important role in the economy of fisheries. In Japan, too, tuna is one of the most popular fishery resources and is consumed in a great quantity.

Needless to say, this valuable fishery resource is found in every ocean of the world. Many countries have shown interests in tuna fisheries and been participating in the fishing. It should be noted that tunas migrate freely and widely around the ocean both within and outside the 200 mile fishery zones of coastal states and hence tuna fishing vessels are operating in both of these areas. I would like to emphasize, therefore, that it is the most rational way of the management of tuna resources to carry out the unified systematic control in the whole area of migration through an international organization such as the Inter-American Tropical Tuna Commission.