INTER-AMERICAN TROPICAL TUNA COMMISSION

PROVISIONAL AGENDA

MEETING OF INTER-AMERICAN TROPICAL TUNA COMMISSION

November 7, 8 and 9, 1972
Panama, Republic of Panama

Chairman: Juan L. de Obarrio

Secretary: Jose L. Cardona-Cooper

1. Opening of the Meeting by the Chairman.
2. Consideration and adoption of Agenda.
3. Review of Current Research
4. The 1972 fishing year (Background Paper No. 1)
   (Background Paper No. 2)
6. Recommended research program and budget for Fiscal Year 1974/1975
   (Background Paper No. 3)
7. Proportions of contributions.
8. Discussion of Annual Report
9. Place and Date of next Annual Meeting.
10. Election of Officers.
11. Other Business.
Mr. Seiya Nishida
Deputy Director-General, Economic Affairs Bureau, Ministry of Foreign Affairs.

Dr. Tomonari Matsushita
Director-General, Research Department,
Fisheries Agency

Adviser:

Mr. Shigeo Miyamoto
Technical Official, Fishery Agency

Mr. Susumu Kume
Research Official, Far Seas Fisheries Laboratory, Fishery Agency

Mr. Masao Miyoshi
Executive-Director, Deepsea Purse-Seine Fisheries Conference

Mr. Tsutomu Watanabe
Chief, Research Section, Federation of Japan Tuna Fisheries Cooperative Association.
NICARAGUA

Antonio Flores

PERU

Branko Zunjic
Oscar Boero Villavicencio
Luis Villacorta

ORGANISMOS INTERNACIONALES

AID

George Lindahl

CPPS

Roberto Bobenrieth Astete

FAO

Guy de Morás
Joe McAlister
J. Joraholmen
E. Nyholm
Eugene W. Magan

ICCAT

Peter M. Miyake

UNESCO

Luis Howell Rivero

FUNCIONARIOS DE LA CIAT

Juan L. de Obarrio - Presidente
José L. Cardona Cooper - Secretario
James Joseph - Director de Investigaciones
B. M. Chatwin - Staff
Aníbal Orbes - Staff
Julio Carranza - Staff
Observadores:

Carlos A. Arosemena Lacayo
Carmen de De Arriba
Alvaro Arroyo Sucre
Judith Avila
Rolando J. Bakes S.
Enrique L. Díaz
Juan Illueca
Elizabeth de Molina
Camilo Quintero
Roberto Ruiz Stout
Irma I. de Sáenz
Ernest D. Santos
Carlos Arellano Lennox
R. Oneal Smitherman

OBSEVADORES

COLOMBIA

Tito Mosquera Irurita

REPUBLICA DE CHINA

Liu Ting Tsu
Chen Tung Pai
Rong Tszong Yang

ECUADOR

Ernesto Illanes Edwards
Homero Larrea
Luis Arriaga Mosquera

EL SALVADOR

Manuel Aguirre
Carlos H. Montoya
Mauricio Martínez

INGLATERRA

T. D. Langbridge
John Wignall
MÉXICO

Comisionados:

Embajador Licenciado
Fernando Castro y Castro
Director en Jefe
Licenciado Arturo Díaz Rojo
Licenciado Joaquín Mercado
Biólogo Pedro Mercado
Biólogo Amin Zarur

Observadores:

Ingeniero Luis García Cacho
Señor Félix Iñiguez
Señor Roberto Rodríguez
Licenciado Jesús Nieto
Licenciado Jorge Echániz
Ingeniero Augusto Peña
Señor Gilberto Nuza

PANAMA

Comisionados:

Juan L. de Obarrio
Carlos López Guevara
Arquimedes Franqueza
Federico Humbert Jr.

Asesores:

Arnoldo Cano A.
Ramón Navarro D.
Asesores:

William W. Fox
George B. Gross
Brian S. Hallman
Gerald V. Howard
Brian J. Rothschild
Wilvan G. Van Campen
Ralph Spinello
Charles R. Carry
Oliver A. Schulz
Carl C. Marino
O. E. Kerns
August Felando
E. R. Insinger
Anthony Pisano
Gordon C. Broadhead

Observadores:

Peter Buchan
Robert B. Young
George Alameda
Anthony V. Nizetich

JAPON

Comisionados:

Seiya Nishida
Tomonari Matsushita

Asesores:

Shigeo Miyamoto
Susumu Kume
Katsuhiro Sameshima
Masao Miyoshi
Tsutomu Watanabe
REUNION ANUAL
COMISION INTERAMERICANA DEL ATUN TROPICAL

PANAMA, R. P.
Noviembre, 7 - 9, 1972
Lista de Participantes

PAISES MIEMBROS DE LA CIAT.

CANADA

Comisionados:

G. E. Waring
E. Blyth Young
Robert L. Payne

Asesores:

S. Noel Tibbo
G. F. M. Smith

COSTA RICA

Comisionados:

José L. Cardona Cooper
Arturo Volio Guardia
Eduardo Bravo Pérez

Asesores:

Stewart Heigold
Raúl Canessa Murillo
Roy Mora Chaves

ESTADOS UNIDOS

Comisionados:

John G. Driscoll
William H. Holmstrom
Donald P. Loker
William M. Terry
RESOLUTION

The Inter-American Tropical Tuna Commission

Taking note that the stock of yellowfin tuna exploited in the eastern Pacific Ocean prior to 1965 was being fished at a rate faster than the stock could naturally replace itself,

first

Taking note also that the conservation regime implemented in 1966 and maintained each year since has successfully maintained the stock of yellowfin tuna inhabiting the Commission's yellowfin regulatory area (CYRA) defined in the resolution adopted by the Commission on May 17, 1962, at high levels of abundance,

Considering the condition of the stock during late 1972,

Considering also that the program of experimental fishing designed to empirically ascertain the maximum sustained yield from the yellowfin stock has operated successfully since its inception,

Concludes that it is desirable to continue the conservation regime and experimental fishing program during 1973 and therefore

Recommends to the High Contracting Parties that they take joint action to:

1) establish the annual catch limit (quota) on the total catch of yellowfin tuna for the calendar year 1973 at 130,000 short tons from the CYRA, provided

a) that if the annual catch rate is projected to fall below 3 short tons per standard day's fishing, measured in purse-seine units adjusted to levels of gear efficiency previous to 1962, as estimated by the Director of Investigations, the unrestricted fishing for yellowfin tuna in the CYRA shall be curtailed so as not to exceed the then current estimate of equilibrium yield and shall be closed on a date to be fixed by the Director of Investigations,

b) that the Director of Investigations may increase this limit by not more than three successive increments of 10,000 short tons each, if he concludes from re-examination of the available data that such increases would offer no substantial danger to the stock,

2) obtain by appropriate measures the cooperation of those governments whose vessels operate in the fishery, but which are not parties to the convention for the establishment of an Inter-American Tropical Tuna Commission, to put into effect whatever conservation measures the Commission might adopt for 1973.
to be troublesome, it is assumed that the problems encountered by their fisher-
men must be quite similar to those of United States fishermen. He expressed
the hope that the member countries of the Commission would cooperate with one
another in working toward reducing such incidental catches of porpoise to the
maximum extent feasible. He noted in this connection the intention of the
United States to place on the agenda for the 1973 meeting of the Commission an
item specifically concerned with this question.

At the conclusion of these remarks the Chairman instructed the Director
to include such an item on the agenda for next year's meeting.

The Canadian section noted that Canadian Commissioner A. W. H. Needler has
retired from government service and has assumed the post of Director of the
Huntsman Marine Laboratory in Nova Scotia. Due to his heavy commitment to this
task and other duties he has asked to be relieved of his duties as a Commissioner
to the IATTC. His resignation was accepted by the government of Canada, effective

The Director of Investigations next brought to the attention of the group
the past confusion in the numbering and designation of Commission meetings.
Because in many instances more than one meeting is held per year (e.g. three in
1972), he suggested that meetings be called "Commission meetings" instead of
"annual meetings" and that they be numbered chronologically, starting with the
first meeting. According to this numbering scheme this current meeting, the 27th
one held by the Commission, would be called the 27th meeting of the Inter-American
Tropical Tuna Commission. All sections agreed with this suggestion, and the
Chairman suggested that the Director take appropriate action along these lines.

AGENDA ITEM XII - ADJOURNMENT

The Costa Rican section expressed to the Chairman and to the government
of Panama the profound thanks of those attending the meeting for the tremendous
support given the Commission in carrying out its work and for the gracious hospi-
tality extended to the attendees. All national sections in turn expressed similar
expressions of gratitude.

There being no further business, the Chairman adjourned the 27th meeting of
the Inter-American Tropical Tuna Commission at 1255 hours, November 11, 1972.
in Washington, D. C. All national sections agreed to this meeting site.

The Chairman then asked for comments regarding a suitable date for the next Commission meeting. After much discussion it was agreed that it should be held sometime between 15 October and 15 November 1973. The United States Section stated that the exact dates would be established in the very near future, after consultation with its government. Thereafter the Director would advise all interested parties of these dates.

AGENDA ITEM X - ELECTION OF OFFICERS

The Chairman opened this item of business by calling for nominations for Chairman. The Japanese Section nominated Commissioner William M. Terry of the United States as Chairman. This was seconded by Mexico and carried unanimously.

The next item of business being the election of Secretary, the Chairman called for nominations.

The Canadian Section proposed that the office of Secretary go to Japan. This was seconded by the United States and carried unanimously. The Japanese section accepted the honor and indicated that as soon as possible it would designate someone to fill this position and inform the Director of its choice.

AGENDA ITEM XI - OTHER BUSINESS

The Chairman opened this item of business by calling for comments from the national sections. Mr. Terry, United States Commissioner, commented on a recent law signed into effect in the United States entitled "The Marine Mammal Protection Act of 1972." The law, he stated, indicates a new awareness regarding the conservation of marine mammals. He also noted a similar concern and awareness evidenced by the United Nations' Conference on the Human Environment, held in Stockholm.

He noted that this law has provisions for dealing with the capture of porpoise incidental to the capture of tuna by United States fishermen. Although the law forbids the taking and importation of marine mammals and marine mammal products, certain exceptions are allowed. Such an exception allows the taking of porpoise, incidental to tuna fishing, for a period of 2 years. The exception is granted on the condition that the fishermen take certain steps to reduce the mortality of porpoise as much as possible. The immediate goal is to reduce the mortality and injury of porpoise resulting from tuna fishing to insignificant levels. He also stated that it is the intention of his government to insure that modified fishing techniques be developed and used in an effort to reduce such mortality. To do this he said that regulations which will apply to United States fishermen will be issued. He noted that during the 2-year period, extensive research will be undertaken to achieve this goal of reduced porpoise mortality. He said that once the United States establishes standards to regulate incidental porpoise catch the government is authorized to prohibit the importation of fish or fish products from fish captured commercially by methods which result in incidental kill or injury of marine mammals in excess of these standards. His government, he noted, wishes to begin discussions within the Commission of this problem, especially since it is not unique to vessels of the United States. He commented then, that although it is uncertain to what extent other countries have found incidental porpoise catch
The Chairman then called for approval of the budgets. The Mexican section moved that the budgets be approved provisionally, subject to the approval of its government.

This was seconded by Japan and carried unanimously.

AGENDA ITEM VII - PROPORTIONS OF CONTRIBUTIONS

The Chairman called on the Director to review this item. The Director explained that the tuna utilization data for 1972 were, of course, incomplete, and therefore an estimate for the 1974/1975 proportions could not be given at this time. He explained, however, that the proportions for the 1972/1973 budget, which were based on the 1970 utilization figures, were as follows:

<table>
<thead>
<tr>
<th>Country</th>
<th>Utilization in pounds</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A.</td>
<td>334,134,416</td>
<td>100,000</td>
</tr>
<tr>
<td>Mexico</td>
<td>20,843,873</td>
<td>6,2382</td>
</tr>
<tr>
<td>Japan</td>
<td>8,087,355</td>
<td>2,4204</td>
</tr>
<tr>
<td>Canada</td>
<td>4,271,547</td>
<td>1,2784</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>3,655,720</td>
<td>1.0941</td>
</tr>
<tr>
<td>Panama</td>
<td>---</td>
<td>Minimum contribution</td>
</tr>
</tbody>
</table>

He said that as further data became available they will be distributed to all sections. All national sections agreed to this action.

AGENDA ITEM VIII - DISCUSSION OF ANNUAL REPORT

The Chairman then asked the Director to review this item. The Director stated that since the current meeting was being held in November 1972, it was not possible to prepare the 1972 annual report for this meeting. He said that as in the past a draft of the annual report will be prepared and mailed to all Commissioners by April 1, 1973. This was agreed to unanimously.

The United States section proposed that in the future the format of the annual report be changed, but not the content. He suggested that all executive matters of the Commission appear at the beginning of the report, followed by the review of research and other matters related to the staff. The Director responded by saying that such a change would not introduce any problem. The other delegates supported unanimously this change in the format of the annual report.

The meeting was recessed at 1200 hours on Wednesday, November 8, 1972.

Saturday, November 11, 1972

AGENDA ITEM IX - PLACE AND DATE OF NEXT COMMISSION MEETING

The Chairman opened the meeting at 1200 hours. After reviewing the procedure followed by the Commission in the past to establish the place and date of the next meeting of the Commission, and commenting on the location of recent meetings, the Chairman opened this item for discussion.

The United States section indicated that its government would be honored to serve as host for the next meeting of the Commission, and suggested that it be held
problem on a Pacific-wide basis, but noted that funds to undertake such a study were still unavailable.

Questioning on this agenda item continued until 1045 hours, at which time the Chairman declared a short recess. After reconvening the Chairman moved to the next item of business.

AGENDA ITEM VI - RECOMMENDED RESEARCH PROGRAM AND BUDGET FOR FISCAL YEAR 1974/1975

The Chairman called upon the Director to discuss this agenda item. The Director referred to Background Paper No. 3, which had been in the hands of the Commissioners for some time. He explained that at its 23rd meeting (formerly referred to as the 22nd annual meeting) the Commission instructed the Director to prepare two budgets in the future. The first should be a recommended version, indicating the needed research regardless of the probability of obtaining such funding. The second should be an austerity version designed to maintain the research at current or slightly augmented levels. In keeping with these instructions, two budgets were presented in Background Paper No. 3.

The recommended budget which provided for a substantial tagging program was in the amount of $1,324,437. It was explained that nearly all of the increase of $585,389 over the austerity budget for 1973/1974 would be for the purchase of vessel time to conduct at-sea tagging experiments.

The austerity budget presented by the Director was in the amount of $790,549, an increase of $51,501 over the amount requested in the austerity budget for 1973/1974.

The Director noted that in the past 10 years neither the recommended amount nor the austerity budget had been granted to the Commission. He noted further that the present level of budget of the Commission is approximately $300,000 less than the 1974/1975 austerity budget. He further commented that in terms of actual purchasing power the Commission budget is about 40% less than the budget levels during 1956-1962. He stated that this was reflected in the size of the Commission staff, which is more than 40% smaller than in earlier years, when it sometimes exceeded 50 persons.

Commenting further, the Director called attention to the fact that he had recently been advised that an item of $51,000 to restructure and modernize the Commission's data system, so as to bring it up to date and make it more efficient, was disallowed in the the 1972/1973 budget. He noted that the 1974/1975 budget was prepared before learning of this fact, and therefore requested permission of the Commission to adjust the 1974/1975 austerity budget to include the $51,000 for the reorganization of the Commission data system.

Having completed his review, the Director answered a number of questions. A Commissioner of the United States asked whether the current level of budget was adequate to maintain a research program responsive to the needs of the Commission. The Director replied that it was not. He stated that much vitally-needed research could not be done because of the shortage of funds and personnel, and because of the fact that increasing demands are being placed on the staff to prepare special data reports and special studies of the probable effect of alternate management strategies on fleets and catches.
The Director then reviewed research on age-structure models and computer simulation models. These analyses provide estimates of the maximum sustainable yield ranging between 130,000 and 155,000 tons.

Because the overfishing experiment had not resulted in the stock being overfished, and because the above analyses indicate that the maximum sustainable yield is higher than thought previously, the Director suggested that consideration be given to establishing a quota for 1973 based on the level of catch during recent years with allowance to increase it by several increments to a higher level if data collected during 1973 indicate such action to be warranted.

Following the review by the Director the Chairman called for comments from the floor. A general discussion ensued which lasted throughout the remainder of the evening. At about 1730 the Chairman recessed the meeting until the following day due to an electrical power failure in the meeting hall. He said that additional questions concerning Agenda Item V could be made the following day.

**Wednesday, 8 November 1972**

The Chairman opened the meeting at 0920 hours by asking for further discussion of Background Paper No. 2. An extended series of questions and answers was exchanged between the Mexican Section and the Director. Many of these concerned the procedures employed by the staff in setting closure dates and estimating catches by countries. There was also a general discussion of fleet capacity and growth. The problem of dumping yellowfin tuna taken in excess of the 15% incidental allowance was discussed, as was the effect of mercury contamination on fishing strategy during 1971 and 1972. The Mexican section also asked the Director for his recommendation for a catch quota during 1973. The Director recommended that a base catch of 130,000 short tons be taken, with the option to increase this by three increments of 10,000 tons each if the condition of the stock indicated such action is warranted. He also recommended that the Commission again adopt the decision to terminate unrestricted fishing if the catch per unit of effort drops below 3 tons per day.

The Mexican Section raised the question of cooperation of non-member countries with the conservation program. Various possibilities of increasing such cooperation were explored.

The Mexican section next asked the Director why the tuna fishery west of the CYRA was not included in the conservation program. The Director replied that the series of data for this area includes only three years and does not indicate that controls are needed at this time to conserve the fish in this area. He noted that the catch had been increasing and the catch per unit of effort shows no decrease.

The Japanese Section questioned the Director on the relationship between the yellowfin taken by the longline fishery and those taken by the surface fishery. It asked whether the increased surface catches in the area to the west of the CYRA might decrease substantially the catches in the longline fishery. The Director noted that if the same stock of yellowfin is being harvested by both gears, and he suspected this to be so, then as the surface catches increase, the longline catches would likely decrease. He commented on a tentative arrangement between scientists from the Fisheries Agency of Japan and the Commission to examine this
AGENDA ITEM IV - THE 1972 FISHING YEAR

The Chairman asked the Director to review this agenda item. The Director commented that Background Paper No. 1 dealt fully with this subject, and then reviewed its contents. To date, during 1972, 140,747 short tons of yellowfin tuna and 26,322 short tons of skipjack tuna had been taken within the Commission's yellowfin regulatory area (CYRA). It was estimated that these figures would probably increase to about 143,000 and 30,000 tons, respectively, by the end of 1972. This catch was made by vessels of 12 nations, with a combined carrying capacity of about 117,445 tons. After the closure to unrestricted fishing a portion of the fleet fished to the west of the CYRA, where it captured about 40,000 tons of yellowfin and 1,000 tons of skipjack. The yellowfin catch from this area is expected to reach about 45,000 tons by the end of the year. In addition, the fleet made the following catches from the eastern Pacific: 12,599 tons of bluefin, 6,651 tons of bonito, 1,117 tons of bigeye tuna, 527 tons of albacore and 706 tons of black skipjack. About 40% of the monitored fleet operated in the eastern Atlantic, where it obtained about 23,000 tons of mixed yellowfin and skipjack through October 1972.

At the conclusion of this item of business the Chairman requested that the national sections hold their questions until after Agenda Item V had been discussed, at which time questions concerning both Agenda Items IV and V would be entertained.

AGENDA ITEM V - CONDITION OF THE YELLOWFIN STOCK AND QUOTA FOR 1973

The Chairman called upon the Director to review Agenda Item V. The Director, noting that the subject was covered in detail in Background Paper No. 2, proceeded to review very briefly and simply some of the theory of fishery dynamics and the effect of the fishery prior to 1960 on the stock of yellowfin. He noted that early estimates of the maximum sustainable yield from the stock of yellowfin then exploited in the eastern Pacific were about 95,000 short tons per year. He said that the logistic model was used to predict the decline in catch and catch per unit of effort observed in the early 1960's as a result of increasing effort, and stated that such predictions were quite accurate. He next commented that during the mid- and late-1960's, when great changes were taking place in the fishery, the predictions from the model no longer corresponded well to the actual catches and catches per unit of effort. He stated that both the catch and catch per effort were increasing, whereas the model led to predictions that both would decrease. He next noted that the Commission inaugurated an experimental program in 1969 designed to purposely over-exploit the stock so as to empirically ascertain its maximum yield on a sustained basis. He reviewed this experimental program pointing out that though an average of about 130,000 tons had been removed from the stock annually during the past five years, the catch per unit of effort had not dropped. He commented that the expansion of the fishery offshore had probably made a larger portion of the stock available to the fishery, and this could likely account for the poor estimates obtained from the model.

He next reviewed in detail some of the recent research the staff had completed on the dynamics of the yellowfin fishery. He first discussed the application of general production models to the fishery. In this category three estimation schemes were used. The results suggested a maximum sustainable yield considerably above the earlier estimates, ranging between 115,000 and 150,000 tons.
The Director reviewed the staff's efforts to predict the catches of skipjack in the eastern Pacific Ocean. He noted that the abundance of skipjack appears to be related to oceanic conditions in the central Pacific one and a half years previously. He commented that the use of atmospheric pressure data had been incorporated into the models developed to predict skipjack abundance.

Brief comments were made on the occurrence of bigeye tuna in the surface fishery of the eastern Pacific.

Commenting on the studies of size composition of the catch, the Director noted that the staff had developed an improved method of estimating the average size of the fish in the catch. The new method resulted from studies which indicated that the average size had been slightly overestimated in the past.

A review of the Commission's program to study the population structure of yellowfin tuna in the eastern Pacific was given. This is being accomplished by analyses of data on genetic and morphometric characters of the fish and on returns of tagged fish. A discussion of the methodology, sampling coverage and results was given.

A detailed review of the Commission's tagging program with respect to the evaluation of the methodology and parameter estimates was also given.

The Director next reviewed research concerning the fishery for billfishes in the eastern Pacific Ocean. He discussed trends in catch and effort and in species composition.

While reviewing the Commission's oceanographic research the Director noted that expenditures in oceanography had dropped from a maximum during 1960 of about 25% of the total budget of the Commission to about 5% at the present time.

In closing his review the Director noted that time did not allow him to review all aspects of the Commission's research program and therefore a number of research projects had not been discussed.

After presenting the review of research the Director introduced Background Paper No. 4, which deals with an overview of the problems of mercury contamination in tuna. He noted that during the fourth meeting of the Working Group on the Regulatory System of Yellowfin Tuna the staff was requested to prepare such a study. Because the staff's responsibility is to the Commission, rather than to the intergovernmental group, the Director stated that he believed that it would be appropriate to submit this report to the Commission. After reviewing it the Chairman called for questions from the floor for both the research review and the mercury study.

A general discussion of these topics followed thereafter, lasting more than one hour. The main topic of discussion was centered about the subject of stock structure of yellowfin tuna, consisting primarily of questions posed to the Director by the Commissioners of Mexico and the United States.

There being no further discussion on this item, the Chairman moved to the next item of business.
AGENDA ITEM I - OPENING OF THE MEETING BY THE CHAIRMAN

The meeting was called to order at 0940 hours by Mr. Federico Humbert, Jr., Commissioner for Panama, who expressed regrets that the Chairman, Mr. Obarrio, was unable to be present for the opening session and stated that he would endeavor to act as Chairman until Mr. Obarrio could join the meeting.

The provisional Chairman then welcomed all of the Commissioners, advisors and observers to Panama and, at the same time, expressed his wishes for constructive deliberation on all matters to come before the meeting and for a successful conclusion. He then asked the heads of the national sections to introduce themselves and their advisors. Following this he asked the many distinguished observers to introduce themselves; observers from seven countries and five other international organizations did so.

AGENDA ITEM II - CONSIDERATION AND ADOPTION OF THE AGENDA

The Chairman noted that the draft agenda for this meeting was patterned quite closely after those of past years. He also noted that the provisional agenda had been in the hands of the Commissioners for some time and asked for comments on it. After some discussion the United States section moved that the agenda be adopted as read. This was seconded by the Mexican section and carried.

AGENDA ITEM III - REVIEW OF CURRENT RESEARCH

The Chairman called upon the Director of Investigations to review the research of the Commission's staff during 1972. The Director noted that 1972 marked the 22nd year of research for the Commission's scientific staff. He commented that the single most important function of the staff is the collection, tabulation and analysis of records of total catch and of logbook data and related information from the tuna fleets operating in the eastern Pacific Ocean. He noted that the information must be collected in two forms because it is used for two purposes. When it is to be used for management of the fishery it is collected on a current basis. When it is to be used for analysis of long-term trends it is collected somewhat later, but in much more detail. The Commission has personnel stationed at the major ports of landing for tuna captured in the eastern Pacific Ocean to collect the information.

The Director then commented that the next most important task of the Commission is the study of the dynamics of the stock of yellowfin inhabiting the eastern Pacific Ocean. He stated that because this subject was discussed thoroughly in Background Paper No. 2, it would not be reviewed at this point.

Recent work of the staff has been concerned with the establishment of new size categories of vessels larger than the six classes used currently. Classes 1 through 5 would remain the same as the old classes 1 through 5 of the Commission, but new classes 6-13 would be substituted for the old class 6. Each of the new classes would correspond to a 200-ton interval, starting with 401-600 short tons, with the exception of class 13, which would include all vessels with capacities greater than 1800 tons. Class 7 (601-800 tons) was chosen as the standard as it appears that the fishing power does not increase significantly beyond that size. The Director commented briefly on the use of the stochastic purse-seine model for the vessel standardization studies.
COLOMBIA
Observer
Tito Mosquera Irurita

ECUADOR
Observers
Luis Arriaga Mosquera
Ernesto Illanes Edwards
Homer Larrea

EL SALVADOR
Observers
Manuel Aguirre
Mauricio Martínez
Carlos H. Montoya

NICARAGUA
Observer
Antonio Flores

PERU
Observers
Oscar Boero Villavicencio
Luis Villacorta
Branko Zunjic

REPUBLIC OF CHINA
Observers
T. P. Chen
Liu Ting Tsu
Rong Tszong Yang

UNITED KINGDOM
Observers
T. D. Langbridge
John Uignall

AID
George Lindahl

CPPS
Roberto Bobenrieth Astete

FAO
J. Joraholmen
Eugene W. Magan
Joe McAlister
Guy de Moras
E. Nyholm

IATTC STAFF
James Joseph, Director of Investigations
Julio Carranza
Bruce M. Chatwin
Anibal Orbes

ICCAT
Peter M. Miyake

UNESCO
Luis Howell Rivero

INTERPRETER
Carlos Diez
The 27th meeting of the Inter-American Tropical Tuna Commission was convened in plenary session at the Executive Hotel in Panama, Republic of Panama, at 0940 hours on November 7, 1972. The following persons were in attendance:

**CANADA**

**Commissioners**
- Robert L. Payne
- G. E. Waring
- E. Blyth Young

**Advisors**
- G. F. M. Smith
- S. Noel Tibbo

**COSTA RICA**

**Commissioners**
- Eduardo Bravo Pérez
- José L. Cardona-Cooper
- Arturo Volio Guardia

**Advisors**
- Raúl Canessa Murillo
- Stewart Heigold
- Roy Mora Chaves

**JAPAN**

**Commissioners**
- Tomonari Matsushita
- Seiya Nishida

**Advisors**
- Susumu Kume
- Shigeo Miyamoto
- Masao Miyoshi
- Katsuhiko Sameshima
- Tsutomu Watanabe

**MEXICO**

**Commissioners**
- Fernando Castro y Castro
- Arturo Díaz Rojo
- Joaquín Mercado
- Pedro Mercado
- Amin Zarur

**Observers**
- Jorge Echániz
- Luis García Cacho
- Félix Iñiguez
- Jesús Nieto
- Gilberto Nuza
- Augusto Peña
- Roberto Rodríguez Bustos

**PANAMA**

**Commissioners**
- Arquimedes Franqueza
- Federico Humbert-Jr.
- Carlos López Guevara
- Juan L. de Obarrio

**Advisors**
- Arnoldo Cano A.
- Ramón Navarro D.

**Observers**
- Carlos A. Arosemena Lacayo
- Carmen de De Arriba
- Alvaro Arroyo Sucre
- Judith Avilá
- Rolando J. Bakes S.
- Enrique L. Díaz
- Juan Illueca
- Elizabeth de Molina
- Camilo Quintero
- Roberto Ruiz Stout
- Irma E. de Sáenz
- Ernesto D. Santos
- R. Oneal Smitherman
- Carlos Arellano Lennox

**UNITED STATES**

**Commissioners**
- John G. Driscoll
- William H. Holmstrom
- Donald P. Loker
- William M. Terry

**Advisors**
- Gordon C. Broadhead
- Charles R. Carry
- August Pelando
- William W. Fox
- George B. Gross
- Brian S. Hallman
- Gerald V. Howard
- E. R. Insinger
- O. E. Kerns
- Carl C. Marino
- Anthony Pisano
- Brian J. Rothschild
- Oliver A. Schulz
- Ralph Spinello
- Wilvan G. Van Campen

**Observers**
- George Alamedda
- Peter Buchan
- Anthony V. Nizetich
- Robert B. Young
AGENDA

27th COMMISSION MEETING

November 7, 8 and 11, 1972
Panama, Republic of Panama

Chairman: Mr. Juan L. de Obarrio
Secretary: Mr. José L. Cardona-Cooper

1. Opening of the meeting by the Chairman
2. Consideration and adoption of the agenda
3. Review of current research
4. The 1972 fishing year (Background Paper No. 1)
5. Condition of the yellowfin stock and quota for 1973
   (Background Paper No. 2)
6. Recommended research program and budget for Fiscal Year 1974/1975
   (Background Paper No. 3)
7. Proportions of contributions
8. Discussion of annual report
9. Place and date of next Commission meeting
10. Election of officers
11. Other business (Background Papers Nos. 4 and 5)
12. Adjournment
INTER-AMERICAN TROPICAL TUNA COMMISSION
COMISION INTERAMERICANA DEL ATUN TROPICAL

SUMMARY MINUTES OF THE TWENTY-SEVENTH MEETING

RESUMEN DE LAS MINUTAS DE LA VIGESIMASEPTIMA
REUNION

November 7, 8 and 11, 1972
Noviembre 7, 8 y 11, 1972
Panama, Republic of Panama
Panamá, República de Panamá

Chairman: Mr. Juan L. de Obarrio, Panama
Presidente: Sr. Juan L. de Obarrio, Panamá

Secretary: Mr. José L. Cardona-Cooper, Costa Rica
Secretario: Lic. José L. Cardona-Cooper, Costa Rica
7. Elected Mr. William M. Terry of the United States as Chairman and voted the office of Secretary to Japan.

8. Agreed to alter the number and naming of the Commission's meetings.
INTER-AMERICAN TROPICAL TUNA COMMISSION  
c/o Scripps Institution of Oceanography  
La Jolla, California 92037

November 17, 1972  
Ref: 2946-154-150a

To: All Commissioners and other attendees of the 27th meeting of the Inter-American Tropical Tuna Commission

From: Director of Investigations

Subject: Minutes of the 27th Commission meeting

Transmitted herewith are the minutes of the 27th meeting of the Inter-American Tropical Tuna Commission, held in Panama, Republic of Panama, on November 7, 8 and 11, 1972.

All member countries were represented by three or more regular Commissioners throughout the entire meeting. The Republic of China, Colombia, Ecuador, El Salvador, Great Britain, Nicaragua and Peru were represented by observers, as were five international organizations -- the International Commission for the Conservation of Atlantic Tunas, the Permanent Commission of the South Pacific, FAO, UNESCO and AID.

The Commission took the following actions:

1. Agreed to the continuation of an experimental fishing program in 1973, with a quota of 130,000 short tons of yellowfin tuna, but authorized the Director to increase this limit in three successive increments of 10,000 tons each if in his opinion this action would not endanger the stock of yellowfin (Appendix I).

2. Agreed that if the annual catch rate is projected to fall below 3 tons per standard day’s fishing, unrestricted fishing for yellowfin tuna in the CYPRA shall be curtailed so as not to exceed the then current estimate of equilibrium yield (Appendix I).


5. Agreed to vote on the approval of the annual report for 1972 by mail after April 1, 1973.

6. Agreed to hold the 1973 meeting of the Commission in Washington, D. C., U.S.A., between October 15 and November 15, 1973, the exact date to be designated as soon as possible.