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U.S. SUPPORT FOR THE SOUTH PACIFIC COMMISSION
AND THE INTERNATIONAL AGENCY FOR RESEARCH
ON CANCER

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HEARING

BEFORE THE

SUBCOMMITTEE ON INTERNATIONAL
ORGANIZATIONS AND MOVEMENTS

OF THE

COMMITTEE ON FOREIGN AFFAIRS

HOUSE OF REPRESENTATIVES

NINETY-SECOND CONGRESS

SECOND SESSION

ON

H.J. Res. 1211

TO AMEND THE JOINT RESOLUTION PROVIDING FOR
MEMBERSHIP AND PARTICIPATION BY THE UNITED
STATES IN THE SOUTH PACIFIC COMMISSION

AND

H.J. Res. 1257

TO AUTHORIZE AN APPROPRIATION FOR THE ANNUAL
CONTRIBUTIONS BY THE UNITED STATES FOR THE SUP-
PORT OF THE INTERNATIONAL AGENCY FOR RESEARCH
ON CANCER

JULY 20, 1972



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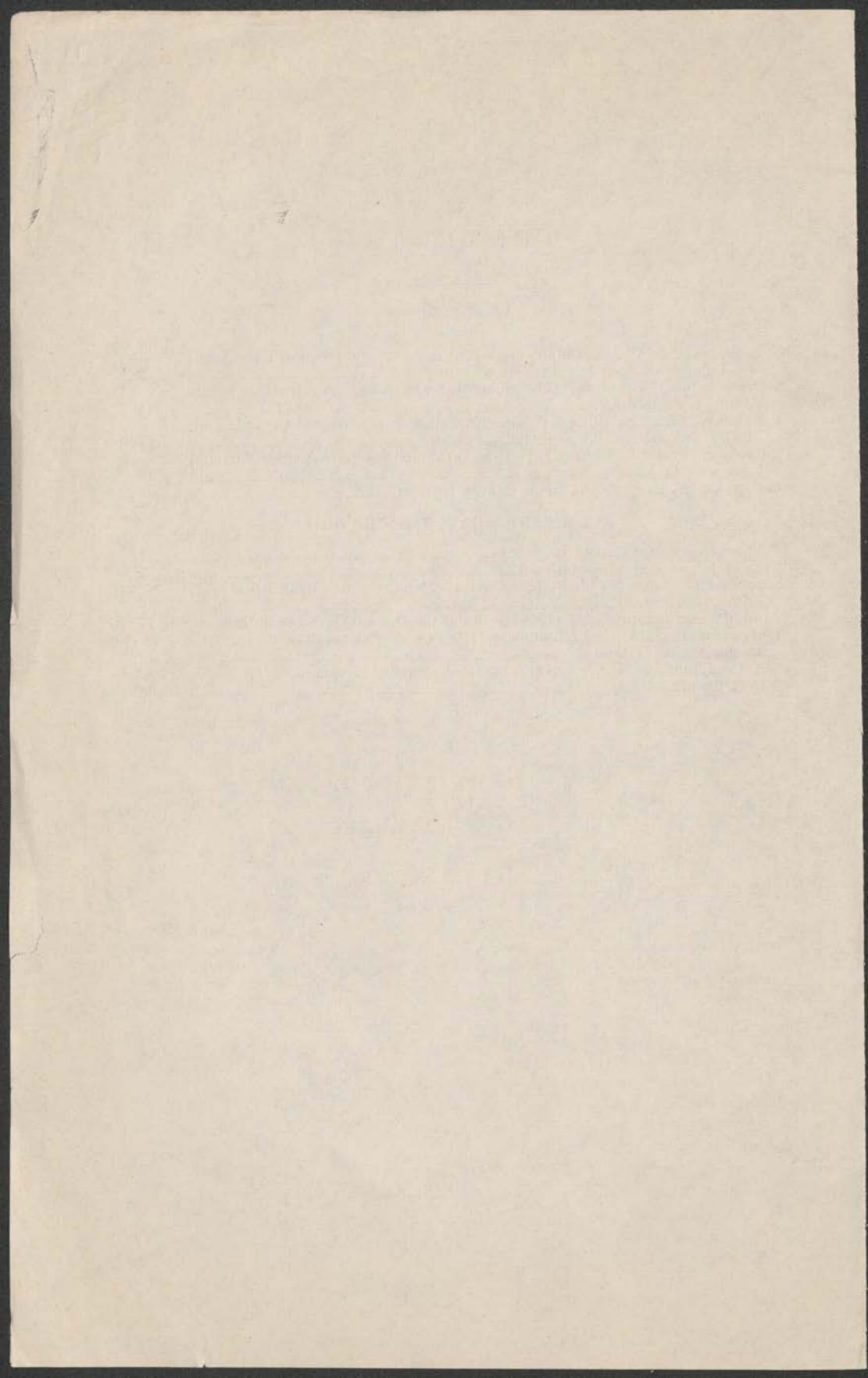
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U.S. SUPPORT FOR THE SOUTH PACIFIC COMMISSION AND THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

THURSDAY, JULY 20, 1972

HOUSE OF REPRESENTATIVES,
COMMITTEE ON FOREIGN AFFAIRS,
SUBCOMMITTEE ON INTERNATIONAL
ORGANIZATIONS AND MOVEMENTS,
Washington, D.C.

The subcommittee met at 2:40 p.m. in room 2255, Rayburn House Office Building, Hon. Donald M. Fraser (chairman of the subcommittee) presiding.

Mr. FRASER. The subcommittee will come to order.

Today we are meeting to hear testimony on two resolutions concerned with U.S. participation in international organizations—House Joint Resolution 1211 which would amend the joint resolution providing for membership in the South Pacific Commission and House Joint Resolution 1257 which would authorize appropriations in support of the International Agency for Research on Cancer.

(The texts of both bills follow:)

[H.J. Res. 1211, 92d Cong., second sess.]

JOINT RESOLUTION to amend the joint resolution providing for membership and participation by the United States in the South Pacific Commission

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That Public Law 403, Eightieth Congress, as amended (22 U.S.C. 280b), is hereby further amended by striking out "\$250,000" and inserting in lieu thereof "\$400,000" in section 3(a).

[H.J. Res. 1257, 92d Cong., second sess.]

JOINT RESOLUTION to authorize an appropriation for the annual contributions by the United States for the support of the International Agency for Research on Cancer

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, There are hereby authorized to be appropriated such sums as may be necessary for the annual payment by the United States of its share of the expenses of the International Agency for Research on Cancer as determined in accordance with article VIII of the Statute of the International Agency for Research on Cancer.

Mr. FRASER. Appearing on behalf of the South Pacific Commission resolution are Deputy Assistant Secretary of State Arthur W. Hummel, Jr., of the Bureau of East Asian and Pacific Affairs, and Hon. William B. Taylor III, senior U.S. Commissioner on the South Pacific Commission. Our witness for the resolution on international research on cancer is Dr. Frank Rauscher, Director of the National Cancer Institute of the National Institutes of Health.

We will consider House Joint Resolution 1211 on the South Pacific Commission first.

I might add that we expect some more members of the subcommittee momentarily, but since you have a prepared statement I think they will catch up as soon as they get here.

Mr. Hummel, you may proceed.

STATEMENT OF ARTHUR W. HUMMEL, JR., DEPUTY ASSISTANT SECRETARY, BUREAU OF EAST ASIAN AND PACIFIC AFFAIRS, DEPARTMENT OF STATE

MR. HUMMEL. Mr. Chairman, I appear before you today to testify on behalf of the proposed joint resolution which would amend Public Law 403, providing for membership and participation by the United States in the South Pacific Commission. The proposed amendment would replace the present authorization for appropriations in amounts not exceeding \$250,000 for each fiscal year with an authorization for appropriations in amounts not exceeding \$400,000 each fiscal year.

The South Pacific Commission is made up of the Governments of the United States, Australia, Fiji, France, Nauru, New Zealand, the United Kingdom, and Western Samoa. The scope of the Commission comprises, first, all those territories of the Pacific Ocean which are administered by the participating governments and which lie wholly or in part south of the equator and east from and including the Australian Territory of Papua and the Trust Territory of New Guinea, and Guam and the Trust Territory of the Pacific Islands—which are north of the equator—and second, three former Pacific territories that have become independent states: Fiji, Nauru, and Western Samoa. The dependent territories include Papua New Guinea, New Caledonia, French Polynesia, Wallis and Futuna Islands, Cook Islands, Niue, Tokelau Islands, the British Solomon Islands Protectorate, Gilbert and Ellice Islands, New Hebrides Condominium, American Samoa, Guam, and the Trust Territory of the Pacific Islands. In addition, the Kingdom of Tonga to some extent participates in Commission activities.

The area of the South Pacific Commission covers millions of square miles, yet contains slightly less than 4 million people. The islands are separated not only by vast distances, but also by different languages, cultures, and histories. There are three main groups of people in the islands—the Polynesians of the islands in the east, the Melanesians of the islands in the west, and the Micronesians of the islands to the north. In addition there are people of Asian and European origin who have settled in the islands.

Despite these differences, all the islands share the fact that World War II forced upon them a contact with the outside world that ended forever their isolation from each other and from the mainstream of world events. During World War II, Australia and New Zealand foresaw that there would be a need to pay more attention to the Pacific Islands and, when the war ended they proposed the establishment of an international body to provide technical advice and assistance to the islands. Those two countries invited other governments administering territories in the South Pacific to join them in an organization which

would pool resources to combat the problems facing the peoples of the region. This organization was born on February 6, 1947, when the Canberra agreement establishing the South Pacific Commission was signed in the capital of Australia.

The role of the Commission, set forth in the preamble to the Canberra agreement, was “* * * to encourage and strengthen international cooperation in promoting the economic and social welfare and advancement of the peoples of the nonself-governing territories of the South Pacific region * * *” The Commission is an advisory and consultative body with operations restricted to three fields: Economic development, social development, and health. It has no concern with political and military matters and has no apparatus for dealing with them. It is not a part of the United Nations system. It is the only international organization whose charter embraces specifically and exclusively the Pacific area, including now both independent and dependent entities. In the 25 years since it was founded, the Commission has developed into the principal reservoir of experience in dealing with problems of the Pacific.

The Commission—or SPC, as it is known—supports, supplements, and complements the programs of the participating governments. It carries on programs of research, conducts technical conferences and training courses, supplies technical advice to local administrations, acts as a clearinghouse for scientific and technical information applicable to the Pacific region, and publishes and disseminates this information. By bringing together the people of the Pacific at all levels in seminars, study groups, conferences, and meetings, the Commission has become, in effect, a means of giving to future leaders of the Pacific practical experience in Western democratic procedures and in the use of Western techniques of assembly, discussion, and decision.

The South Pacific Commission in no way impinges upon the sovereignty of any member government. Article XVII of the agreement specifically provides that—

nothing in this agreement shall be construed to conflict with the existing or future constitutional relations between any participating government and its territories or in any way to affect the constitutional authority and responsibility of the territorial administration.

The Canberra agreement provides that each member government may appoint two Commissioners, and the majority of the members have done so. Our Commissioners are William B. Taylor III, of Virginia, and Aaron G. Marcus, of Hawaii. These Commissioners meet once a year, either at the Commission's headquarters in Noumea, New Caledonia, or in one of the other islands. This year's meeting will be held in Apia, the capital of Western Samoa. The small permanent secretariat of some 70 persons is headed by a Secretary General. The incumbent is a Western Samoan, the second Pacific islander to hold the post. Three program directors handle the Commission's three fields of activity: Economic development, social development, and health. It is a matter of interest to note that the current program director—social—is an American, Frank Mahony, formerly a professor in the Department of Anthropology at the University of Hawaii.

The principal auxiliary body of the Commission is the South Pacific Conference, which meets annually and concurrently with the Com-

mission. It is composed of representatives of the island states and territories and provides a regular opportunity for island leaders to discuss and make recommendations on subjects of common interest, and to propose, evaluate, and suggest priorities among Commission projects.

Member governments contribute to the assessed budget of the Commission in the following fixed percentages:

Australia, 31 percent; Fiji, 1 percent; France, 14 percent; Nauru, 1 percent; New Zealand, 16 percent; United Kingdom, 16 percent; United States, 20 percent; and Western Samoa, 1 percent.

The budget is determined in terms of Australian dollars. The assessed budget for calendar year 1972, which is also the Commission's financial year, is, in Australian dollars, \$1,105,380. At the time this budget was approved, in October 1971, the U.S. share—20 percent—amounted to \$221,076 or \$247,605 U.S. dollars. However, since that time the rate of exchange between the Australian and the United States dollar has been changed and the U.S. contribution should now be \$263,079, some \$13,000 over the current legislative ceiling. An increase in the ceiling would permit us to honor our commitment, already made, to the 1972 budget and to contribute in the future to the orderly expansion of the Commission's activities. Recent increases have been modest and have, in fact, done little more than keep pace with inflation, while maintaining the Commission's activities at about the same level.

The economies of the Pacific Islands are traditionally primarily agricultural, with such tropical crops as coconut, banana, and sugarcane being the principal cash earners. Much of the Commission's work in economic development has gone into improving these crops, into improving land and land use, and into introducing useful plants. Allied to crop and land management is a program of plant quarantine and the control of insect pests. The most serious of the insect pests is the rhinoceros beetle, which preys on the coconut palm and thus is a serious threat to the largest cash crop of the Pacific Islands, copra. In 1964, the SPC began in conjunction with the United Nations development program a research project to find, if possible, a means for controlling or, even better, eradicating this beetle. Although no sure methods for doing either have yet been found, the results of the project have been encouraging enough for the SPC, the UNDP, and the FAO to decide to continue the project.

The Commission's economic development program has also included projects to intensify the exploitation of the area's vast marine resources. Training in fishery techniques and in the construction of fishing boats, both wooden and ferroconcrete, have been conducted. In addition, a South Pacific Island Fisheries Development Agency has been inaugurated with the UNDP.

In the field of social development, education has been the main focus of the Commission's attention. Two important projects in this area have been an English language training system and the community education training center. The Commission early recognized that the large number of languages and dialects spoken in the Pacific islands placed a severe limitation on development. In 1964, a specialist in methods of teaching a common language was added to the staff to advise and assist territories in the teaching of English as a second language. This program has seen the production of an oral English

language course for primary schools that is now widely used throughout the Pacific. Included in it has been the publication of over 1 million structurally controlled English language school readers designed to follow the oral course. The community education training center, set up by the SPC in 1963, is the first of its kind in the area. It has, in its 9 years of operation, trained 160 women from all island groups. These women are trained to be trainers, and return to their native islands to train other women. The center has been used by other international organizations as a model in other parts of the world.

One has a tendency to picture the Pacific Islands as paradises, with smiling, happy children playing on white sand beaches, with palms swaying overhead. It comes as a shock to learn that many of the islanders suffer from serious endemic diseases such as malaria and filariasis, in addition to nutritional problems, dental problems, and problems related to poor sanitation, rats, and insects. The Commission's health program has tackled all these problems, and in some cases, particularly in the smaller islands, has been enormously successful. Much remains to be done in the larger, less-developed areas such as Papua New Guinea and the Solomon Islands. Training courses have been undertaken in village hygiene, environmental sanitation, rat and insect control, maternal and child health, dental health, and food and nutrition. Health research programs have been directed at practical projects such as the development of small solar stills to distill fresh water from sea water, finding antidotes to fish poisons, eradicating malaria, and investigating diseases peculiar to the area such as a form of meningitis that is carried by rats.

All of the activities that I have referred to are of practical benefit to the people of the South Pacific region. They are neither grand in design nor do they require the expenditure of large sums of money. The largest single item in the work program for this year is \$25,000 to the Community Education Training Center. Of the remaining 55 individual items in the work program, 41 are budgeted for \$5,000 or less.

We in the Department of State are convinced that the South Pacific Commission performs a genuine service to an important area of the world, and its dissolution would create a real vacuum in the region. To continue to perform this service, the Commission should be permitted to grow so that its staff of highly qualified persons, the only real group of experts who have specialized in the problems peculiar to the South Pacific, can be kept together and continue their assistance to the people of the Pacific. Modest periodic increases in the budget serve to cover not only those normal increases in salaries and allowances, but also allow the Commission to undertake new projects of importance to the region. Among possible new projects that have great appeal to the people of the area but that have not yet been considered is finding some means for combating the "crown of thorns" starfish which attacks and kills living coral, causing reefs to break up under pressure from waves and thereby menacing lagoon life. This menace is already a serious problem in several areas, including the Trust Territory of the Pacific Islands and Guam. Another possible project would be research into a disease that kills the breadfruit tree, an important source of food in many of the islands.

I would like to emphasize for you that the increase we have proposed is intended to cover prospective budget increases for the next 5 years or more. It will not result in an automatic and sharp increase in the budget of the Commission because of checks spelled out in the Canberra Agreement, which require that major parts of the budget be subject to unanimous approval, with the remainder subject to approval by a two-thirds majority of the Commissioners. The budget goes through a series of reviews, both by the territorial delegates to the conferences, and finally, by the senior commissioners. Over the years, participating governments have indicated a truly responsible concern for sound economic operation by the Commission. I might add that at no time in the 25 years that the Commission has operated has a member refused to pay its assessed share of the budget, nor has any government been in arrears in its payments.

Mr. Chairman, the Department of State strongly supports the continuation of the South Pacific Commission. It has, we believe, proved itself a valuable instrument for the development of stability of this area of great importance to the United States, an area that can either be a bridge to our major allies and trading partners in the southwestern Pacific, or a barrier. Certainly the people of the islands in the area that are administered by the United States derive benefit from the Commission and its unique store of skill and technical knowledge on the problems of the South Pacific. One has only to attend a meeting of the Commission and see the active participation of the delegates from American Samoa, Guam, and the Trust Territory of the Pacific Islands to realize this.

From the standpoint of the U.S. foreign policy, our participation in the South Pacific Commission provides us with a useful means for maintaining friendly relations with the people of the Pacific, and for demonstrating to them our interest in their welfare and progress, all for a relatively small sum of money. I know of no other international organization from which we receive so much for so little. Except for Peace Corps programs in Western Samoa, Tonga, Fiji, and the Solomon Islands, the United States has no other assistance programs in the South Pacific.

We urge that this legislation be enacted into law before the end of this session of the Congress, in order that the U.S. Government can continue fully to play a constructive role in the work of the South Pacific Commission.

Mr. FRASER. Thank you very much.

We will now hear from Mr. Taylor, after which we will be able to address questions to both of you.

**STATEMENT OF HON. WILLIAM B. TAYLOR III, SENIOR U.S.
COMMISSIONER ON THE SOUTH PACIFIC COMMISSION**

Mr. TAYLOR. Mr. Chairman, I should like to add a few remarks to Ambassador Hummel's statement.

First, the South Pacific Commission engages only in activities which are of practical benefit to the various island peoples of the South Pacific—Melanesians, Micronesians and Polynesians. The SPC does an outstanding job of performing advisory and consultative functions to

promote health, economic development and social development throughout the vast South Pacific area.

Second, the SPC operates on an extremely austere budget. It is able to do this by not duplicating functions of the member nations such as the United States, though it works in close cooperation with them, by coordinating its activities with such U.N. bodies as the United Nations development program and the World Health Organization, again avoiding duplication, and by paying salaries commensurate with those of the area. These international organizations send observers to the annual SPC meetings where they are free to express their comments and recommendations. Indeed, their comments are solicited.

Third, the SPC provides an opportunity not otherwise available, for the leaders of all the various island groups—presidents, princes, prime ministers, ministers, secretaries and commissioners—to get together to discuss mutual problems in the areas of the Commission's interests, and to develop common approaches to solutions. Political problems are not discussed at the annual SPC meetings as political and military affairs are not within the SPC's competence.

The independent and self-governing Commonwealth countries situated in the South Pacific, with the support of Australia and New Zealand, have recently formed the South Pacific Forum which, among other things may discuss political matters, but this forum does not include non-self-governing territories, and therefore is not in competition with the Commission.

The South Pacific Commission is the paramount organization embracing all of these islands. The annual meeting of the South Pacific Commission is divided into two major parts—the Conference, chaired by an islander, and the Commission Session chaired on a rotational basis by a senior commissioner. The Commissioners attend the Conference and contribute to the discussion but do not vote. The Conference reviews the work program of the Secretary General and the staff, the money expended in the previous year, and the projected work program and budget for the coming year. It then makes its recommendations to the Commissioners. The Conference is the voice of the islanders. The competency of the attendees and level of debate is most impressive.

Pacific islanders, in general, are most friendly to the United States, due in no small measure to their contact with our military forces during World War II and to the jet age, with Americans from all walks of life now visiting every part of the Pacific. They place great value on the SPC as the one international organization dedicated to their betterment and hope for our continued support. There have been recent murmurings among the islanders that U.S. reluctance to go along with most budget increases in recent years is indicative of declining U.S. interest in the Pacific area. I know of no international organization that offers such a great return for such a modest expenditure.

We can, Mr. Chairman, demonstrate our continuing interest in the peoples of the Pacific Basin by modestly increasing our support for the SPC which now and in the future will return great dividends to the United States, to its Pacific territories, and to the millions of island peoples of the South Pacific.

Thank you, Mr. Chairman.

Mr. FRASER. Thank you very much, Mr. Taylor.

Perhaps it would be helpful if we had an indication of the budget amounts over the past 4, 5, or 6 years. Do you have those figures available?

Mr. HUMMEL. Yes, sir. I have them for calendar years 1969, 1970, 1971, and projected for 1972.

Mr. FRASER. Could you read the totals in the record? If you have a more detailed breakdown, it might be useful to submit them for the record.

Mr. HUMMEL. Yes, sir.

(The information requested follows:)

SOUTH PACIFIC COMMISSION

Budget for the calendar year 1969¹

Part I—Administrative services:	
Salaries and personnel expenses.....	\$124,124
Travel expenses and allowances.....	17,774
Equipment, supplies, and services.....	64,266
Total	<u>206,164</u>
Part II—Work program:	
Program direction.....	277,872
Program personnel.....	300,629
Program activities.....	210,642
Publications bureau.....	76,209
South Pacific Conference.....	17,920
Extraordinary expenditure (to restore loss to staff provident fund)	12,524
Total	<u>895,796</u>
Gross budget.....	1,101,960
Carryover and other income.....	-110,760
Assessment budget	<u>991,200</u>

¹ Converted from Australian dollars at the rate of one Australian dollar equals \$1.12.

Budget for the calendar year 1970¹

Part I—Administrative services:	
Salaries and personnel expenses.....	\$120,646
Travel	8,882
Equipment, supplies, and services.....	71,865
Total	<u>201,393</u>
Part II—Work program:	
Program direction.....	292,880
Program personnel.....	333,069
Program activities.....	210,048
Publications bureau.....	77,828
South Pacific Conference.....	30,240
Total	<u>944,065</u>
Gross budget.....	1,145,458
Carryover and other income.....	-148,658
Assessment budget.....	<u>996,800</u>

¹ Converted from Australian dollars at the rate of one Australian dollar equals \$1.12.

Budget for the calendar year 1971¹

Part I—Administration services:	
Salaries and personnel expenses.....	\$190,368
Travel.....	8,265
Equipment, supplies, and services.....	72,800
Total.....	<u>271,433</u>

Part II—Work program:	
Program direction.....	300,782
Program personnel.....	316,731
Program activities.....	241,673
Publications bureau.....	82,174
South Pacific Conference.....	19,600
Total.....	<u>960,960</u>

Gross budget.....	1,232,393
Carryover and other income.....	-185,849
Assessment budget.....	<u>1,046,544</u>

¹ Converted from Australian dollars at the rate of one Australian dollar equals \$1.12.

Budget for the calendar year 1972¹

Part I—Administrative services:	
Salaries and personnel expenses.....	\$219,650
Travel.....	9,496
Equipment, supplies, and services.....	81,485
Total.....	<u>310,631</u>

Part II—Work program:	
Program direction.....	368,989
Program personnel.....	347,024
Program activities.....	282,830
Publications bureau.....	97,104
South Pacific Conference.....	41,650
Total.....	<u>1,137,598</u>

Gross budget.....	1,448,229
Carryover and other income.....	-132,827
Assessment budget.....	<u>1,315,402</u>

¹ Converted from Australian dollars at the rate of one Australian dollar equals \$1.19.

Mr. FRASER. This will be U.S. dollars?

Mr. HUMMEL. Yes, sir.

Mr. FRASER. Then the most recent problem is this added problem of a change in valuation?

Mr. HUMMEL. Yes, sir.

For calendar year 1969 the assessment budget totaled \$991,200; for calendar year 1970, \$996,800; for calendar year 1971, \$1,046,544, and projected for 1972 the assessment budget totals \$1,315,402.

Mr. FRASER. Is this United States or Australian dollars?

Mr. HUMMEL. U.S. dollars.

Mr. FRASER. Then if you related the 1972 figure of \$1.3 million to Australian currency it would reflect a change in valuation?

Mr. HUMMEL. This figure does reflect the change in valuation as of December 1971 which causes us to pay more than we are now authorized to pay.

Mr. FRASER. Do you have the U.S. share for each of those 4 years?

Mr. HUMMEL. It is 20 percent for each of the 4 years. We pay 20 percent each year.

Mr. FRASER. The 20-percent figure has been fixed and remained the same since 1947?

Mr. HUMMEL. No, sir. The history is that in the 1947 agreement there were a smaller number of participants and at that time we paid 12½ percent.

Mr. FRASER. There were fewer beneficiaries, you mean?

Mr. HUMMEL. There were also fewer contributors at that time as well as fewer beneficiaries, fewer members of the Commission.

In 1951 we requested and obtained permission from the Commission to add the very large U.S. territories, the Trust Territory of the Pacific Islands and Guam to the area serviced and supported by the Commission, but our assessment was not changed at that time, it remained at 12½ percent.

Mr. FRASER. We asked that Micronesia and Guam, which are under our control, be added?

Mr. HUMMEL. Yes, sir.

In 1964 when the Netherlands withdrew from the South Pacific Commission, their percentage of the budget had to be allocated among the remainder and our contribution was raised to 20 percent and has been the same since then.

Mr. FRASER. In the absence of the revaluation of the dollar, what would the U.S. share have been in 1972?

Mr. HUMMEL. If you will pardon me, sir, I am confused between tables. It would have been \$247,605.

Mr. FRASER. Without the revaluation for this year you could have lived within the present authorization?

Mr. HUMMEL. That is correct.

Mr. FRASER. Now, because of the revaluation we go over by about \$13,000?

Mr. HUMMEL. Yes, sir.

Mr. FRASER. You asked for a change in the authorization of \$400,000 because you are trying to leave room down the road. You are not suggesting that next year the budget will rise so that our share will be \$400,000?

Mr. HUMMEL. No, sir. I can almost guarantee it will not rise to \$400,000 next year if Congress approves our request. We would like to allow for modest increases and expect the \$400,000 ceiling should be ample for us for the next 4 or 5 years.

The built-in programmatic procedures by which the budget is constructed gives us, as I explained earlier, veto power over a greatly expanded budget. And I think it is fair to say the other members of the Commission would not wish to see, any more than we would, a dramatic expansion although we would like to see orderly growth. Projecting roughly a 10 percent increase over the next few years in the budget would just keep pace with rising costs and inflation.

Mr. FRASER. Ten percent a year would be a substantially higher increase than has taken place in the last 4 years with the exception perhaps of this year, when there was a sharper increase?

Mr. HUMMEL. That is correct.

Mr. FRASER. From 1969 to 1970, from 1970 to 1971, the increase was very modest, indeed.

Mr. HUMMEL. That is correct.

Mr. FRASER. I notice, Mr. Taylor, in your statement you said there had been rumblings about the United States dragging its feet. Have we been reluctant to make increases?

Mr. TAYLOR. The so-called metropolitan powers, as the islanders call us, the others appear to have more flexibility to make increases. We have our authority from Congress and it takes time to get the appropriations through. Other countries like Great Britain, Australia, and New Zealand are able to give more responsive answers. We have to say it depends on the will of our Congress as to what we can do.

Mr. FRASER. Are you saying the United States has been keeping a tight rein?

Mr. HUMMEL. We have been a real leveling influence.

Mr. FRASER. Mr. Derwinski.

Mr. DERWINSKI. Mr. Hummel, I notice your commentary on trying to establish English as a second language. Did you get any particular flak from the French when that decision was made?

Mr. HUMMEL. I should say assistance in teaching the French language is given in the areas where French is used.

Mr. DERWINSKI. In some of the areas where French is the second language?

Mr. HUMMEL. No, sir.

Mr. DERWINSKI. What was the—

Mr. HUMMEL. New Caledonia is the present headquarters of the South Pacific Commission.

Mr. DERWINSKI. And there, French is the second language?

Mr. HUMMEL. Yes.

Mr. TAYLOR. The primary language in New Caledonia is French with the native languages being second.

Mr. DERWINSKI. You made a number of references I want to check out. You have a staff of 70 people headed by a Secretary General. How is the Secretary General selected? I don't see anything in either statement about that.

Mr. HUMMEL. The Secretary General is elected and the present one, a national of Western Samoa, used to be Finance Minister. Perhaps Mr. Taylor can describe that more accurately than I.

Mr. TAYLOR. The members of the Commission may nominate whom-ever they choose for the position of Secretary General. In this instance the field was narrowed down to a candidate from Papua New Guinea and one from Western Samoa. In the election that took place, the candidate—both were outstanding men—the candidate from Western Samoa was the one selected.

Mr. DERWINSKI. Who votes on that?

Mr. TAYLOR. The member countries.

Mr. DERWINSKI. The two commissioners of each country?

Mr. TAYLOR. Yes.

Mr. DERWINSKI. You gentlemen?

Mr. TAYLOR. The senior commissioners vote on behalf of their respective countries on guidance and instructions from our governments.

Mr. FRASER. For this purpose the members are—

Mr. TAYLOR. For this purpose those who are members of the South Pacific Commission, so-called metropolitan powers, which now include such independent countries as Fiji.

Mr. FRASER. They now have a status comparable to ours?

Mr. TAYLOR. Yes; they are invited to come in as a participating member and contribute to the budget.

Mr. FRASER. Do the territories who are aided in these three areas—health, social development, and economic development—have a voice in the selection of the Secretary General?

Mr. TAYLOR. They have a voice to the extent our representatives from Guam or the Trust Territory or American Samoa, make their thoughts known to us as to who they think will be a real leader in the islands. Whenever possible, we try to listen to their recommendations because the whole purpose of the Commission is for them.

Mr. DERWINSKI. You mentioned the annual meeting of South Pacific Commission. You would be serving on that, wouldn't you?

Mr. TAYLOR. Actually, what has happened, sir, back not too many years ago, and very wisely so, we decided that we would give the islanders a greater voice in their own affairs. It used to be the Commission only would meet—the senior commissioners, commissioners and staff—and they would then run the program. The work program would be reviewed along with the budget, to see if the Secretary General and staff carried out a good, sound program, recommendations would be received, and then they would proceed forthwith with the proposed program and budget for the forthcoming year. They decided about 7 years ago to bring the islanders more into the picture and break the meeting into two parts. In the first part the representatives of the member governments would sit and listen, and the island delegates, including our own from the Trust Territory, American Samoa and Guam, would review what the Secretary General and his staff had done to assist their islands in the program, because they had more detailed knowledge living there than we do back here on the mainland. The same is true of the other countries.

Mr. DERWINSKI. On the point Mr. Fraser was making, I am sure he was concerned with what reaction we will get from other members of this subcommittee, or the full committee, when we come in with a \$400,000 request. The obvious question is, what controls will there be on a \$400,000 budget? What you are saying is the review of the budget is carried on by the islanders.

The islanders do not provide the budget. We in Congress provide the budget and we look to you to effectively exercise some restraint.

So if I were to put myself in the position of being antagonistic, how would you convince me, if I were a member insisting you get your \$250,000 and nothing else? How could you convince me this request is practical?

Mr. TAYLOR. The islanders receive guidance as to what the ballpark area is that we would consider. We sit in on the discussions, allow them to carry the discussions forth so they feel the discussions are theirs. But we are there as the brake. With our own delegation we caucus each morning prior to the meetings to thresh out all problems and to come to as close as possible a common understanding of what our U.S. position will be.

Mr. DERWINSKI. Do you have enough communication with the Australians and New Zealanders who are major contributors to the budget to see that a common—let's see, New Zealand contributes 16 percent, Australia 31 percent, so between the United States, Australia, and New Zealand you provide the majority of funds.

Do you have a way of consulting with them to see that the budget is practical?

Mr. TAYLOR. We work in close harmony with our counterparts in the other metropolitan powers. At the end of the conference recommendations are made by the conference to us and then the real binding portion of the meeting is in the hands of the Commissioners where we review what has been recommended, the priorities, like what they will do is, say, if the budget is so much, we would like the following, 1, 2, 3, 4, 5, and 6. If we get \$50,000 more, we would like 7, 8, 9, 10. They set the things they would like accomplished. The priorities are set so at whatever budget level goes in, the other items are cut out.

Mr. HUMMEL. I believe, if I might interject, I believe it might be a fair statement to say that the type of programs conducted are largely the result of a dialog that Mr. Taylor has been describing. The size of the budget is fixed by the Commissioners, each of whom has a veto power. The voting has to be unanimous. In other words, there is no possibility that we would be dragged into a budget that we have no control of or did not approve of.

Mr. DERWINSKI. You mentioned one project that intrigues me greatly, the United Nations development program designed to eradicate this rhinoceros beetle. You say no sure method of controlling or eradicating the beetle has been found but the results have been encouraging enough. That is almost a contradiction, so would you mind explaining the encouragement that you have received from your research?

Mr. HUMMEL. Yes, sir. Two lines of inquiry are being followed that we hope are going to lead to means of eradication of the rhinoceros beetle. One line of inquiry is the identification and production of scents that will attract this beetle so he can be more easily eradicated. Research is going on that has not been completed so there is no sure way to eradicate it.

The other line of inquiry is in terms of viruses that might be specific for the rhinoceros beetle and that might kill the beetle and other insects. This is also in research.

You are quite right, there is a seeming inconsistency, and perhaps I should have said some progress is being made, but the solution is not definitely in sight.

Mr. DERWINSKI. Are you and the Department still continuing in cooperation with this?

Mr. HUMMEL. Yes.

Mr. DERWINSKI. Thank you.

Mr. FRASER. Mr. Bingham.

Mr. BINGHAM. Thank you, Mr. Chairman.

I am sorry I was not here to hear the opening statements.

I would like to ask a little about the relationships of the operation of the SPC with the UNDP. I was familiar with the UNDP operation a few years ago, I know they have experts going out to the

islands and you mentioned two or three projects where there is active cooperation.

First of all, how do you make sure there is no duplication or overlapping.

Mr. TAYLOR. We work hand in glove with UNDP and Bill Hussey, who is running UNDP out there. A number of key people from that organization attend the annual SPC meetings and they have the opportunity not only to be there as observers but also to participate and to add what they may contribute to the overall meeting. Both organizations requiring funds as they do, we make absolutely certain—we try to get as much out of them as we possibly can to assist the SPC without our having to spend our funds. They try to assist us to the maximum extent they can. It is a very harmonious relationship and there is absolutely no duplication. We work jointly but don't duplicate.

Mr. BINGHAM. I notice you mention a large number of individual items in the SPC budget which are budgeted for \$5,000 or less. What can you do in this area for less than \$5,000? What sort of items?

Mr. HUMMEL. Seminars, sir. The sending of experts to look at particular problems and make recommendations, the holding of small regional meetings on particular problems. There is in fact a very long list of health services, seminars, training, that can be conducted.

I would like to emphasize, sir, that in every case possible the projects are constructed with the complete cooperation of the Pacific islanders involved, the territory involved, and there is frequently, or perhaps usually, a very large monetary input from the recipients of these services and technical experts so the very small sums you see in the Commission budget are only a portion of the total cost of the projects that are undertaken.

Sometimes UNDP also puts up funds, sometimes FAO, if they are applicable. But in nearly every case funds, facilities and services are supplied by the recipient area, by the local governments of the recipient area as its indication of interest and cooperation.

Mr. BINGHAM. Are most of your experts on permanent staff or are they pulled in for a particular assignment as in the case of the UNDP?

Mr. TAYLOR. Most of our experts are permanent staff.

Mr. HUMMEL. Of the permanent staff, only 71 of a staff of 104 total, only 71 are on the SPC budget, the remainder are contributed—services and salaries are contributed—by other organizations or area governments. For instance, UNDP has supplied full-time people to the Commission without cost.

Mr. BINGHAM. To the Commission?

Mr. HUMMEL. Yes.

Mr. BINGHAM. Possibly then those individuals, their services would be part of these items but would not be part of the \$5,000 budget?

Mr. TAYLOR. Right.

Mr. BINGHAM. Which would explain why that figure could be so low.

My impression is some years ago the South Pacific Commission was considered rather suspect by some of the members of the United Nations, Trusteeship, Council, and so forth, as an instrument of colonial powers, the administering authorities. Would you say that was no longer true?

Mr. HUMMEL. Three of the eight members of the Commission are now recently independent South Pacific entities, so if that charge was ever made before, the complexion of the South Pacific Commission has changed by Fiji, Nauru, and Samoa having become members on the Commission.

Mr. BINGHAM. Has Nauri now managed to get a delegate there?

Mr. TAYLOR. Nauru sends very able, very capable, and sometimes very attractive delegates. A few years ago the only female delegate was a very attractive girl, a college graduate.

Mr. BINGHAM. Has the Commission taken any interest in Nauru's disappearing resources?

Mr. TAYLOR. This is a problem primarily, I believe, between Australia and Nauru. Other places are envious of the per capita income of Nauru.

Mr. BINGHAM. But for only a few years?

Mr. TAYLOR. Yes.

Mr. BINGHAM. The per capita income is very high, but they have perhaps 30 years' expectation of phosphates?

Mr. TAYLOR. Yes.

Mr. BINGHAM. And when the phosphates are gone, they have nothing. It can't possibly continue.

That is all.

Mr. FRASER. Mr. Halpern.

Mr. HALPERN. Thank you, Mr. Chairman.

Mr. Hummel, why is it necessary to have separate bills for authorizations of this type? Should not the State Department seek appropriations and authorizations under the State Department appropriations?

Mr. HUMMEL. I would like to ask Mr. Cummins to address this question.

STATEMENT OF SIDNEY S. CUMMINS, BUDGET OFFICER, BUREAU OF INTERNATIONAL ORGANIZATION AFFAIRS, DEPARTMENT OF STATE

Mr. CUMMINS. My name is Sidney S. Cummins.

As you know, Congressman Halpern, this is the first year the State Department has had an authorization bill since I think the days of Thomas Jefferson, and it is rather a new experience for the State Department and the Congress. Up to this point, given the language of the appropriation bill itself, which requires that all appropriations be made pursuant to treaty convention, or specific act of Congress, we have had a series of convention, treaties and public laws authorizing U.S. contributions to each one of the organizations independently of each other.

A lot of these bills, particularly the public laws, as in the case of the South Pacific Commission, have specific limitations, either financial limitations or in some cases other kinds of limitations.

I would think that the State Department authorization bill as approved this year would include by reference all current authorizations that we have. I am not completely sure in the future whether Congress would be willing to accept a single authorization bill as against

a separate charter or separate public law for each of the organizations or not.

Mr. HALPERN. Thank you.

Mr. Ambassador your testimony on the South Pacific Commission indicates that the authorization for appropriations is needed because of the funding of new projects. Are these the projects mentioned in your testimony that are now part of the Commission's work? Or are there new projects, and if so, can you tell us the priority of the projects?

Mr. HUMMEL. That, frankly, is a difficult question to answer. The projects are reevaluated annually and it would be only guesswork for me to try and describe what additional projects would specifically be funded by a modest increase in funds.

But to address the first part of your question, the most urgent reason why we need relief from the present ceiling is because of a shortfall of \$13,000 which results from the reevaluation of currencies in 1971. The present authorization would not allow us to pay the amount we have, in fact, agreed to pay which was then computed in Australian dollars. In addition to the \$13,000 increase, we would like to have for our participation in the South Pacific's Commission sufficient flexibility to allow moderate increases over the next 4 or 5 years without having to come before this committee and other committees and request the small increases annually.

We do expect, because the organization is successful, and success breeds success, and that as the territories and countries that participate in the Commission get more confidence in the Commission—they already have high confidence—and as they make requests of it, it seems likely that along with inflationary aspects the budget might raise 5 or 10 percent a year. Therefore, we are asking for an increase in the ceiling that would take care of modest increases for some years to come.

Mr. HALPERN. Are the other countries increasing their contributions in the same proportion as the United States?

Mr. HUMMEL. The percentages are fixed—I don't know if you have a table before you, sir—our percentage is supposed to a fixed 20 percent, the Australians pay 31 percent, and so forth.

As we said earlier, the total size of the budget from which our 20 percent would be computed, is subject to veto by any one of the Commissioners.

Mr. HALPERN. Thank you.

Mr. FRASER. Just a couple of concluding questions.

What proportion of the population of the area embraced would represent the U.S. areas?

Mr. HUMMEL. That is 5.4 percent.

Mr. FRASER. That would be Micronesia and Guam.

Mr. HUMMEL. Yes, Micronesia, Guam, and Samoa for a total of over 200,000 people out of a grand total of 4 million people in the area.

Mr. FRASER. Would you submit for the record a rundown of the GNP's of the countries so that we can understand the percentage relationship?

Mr. HUMMEL. Yes, sir.

(The information follows:)

GROSS NATIONAL PRODUCTS OF MEMBER STATES

Australia (1971), US\$41.670 billion.
 Fiji (1971), US\$269.1 million.
 France (1971), US\$178.060 billion.
 Nauru (1966)*, \$25 million.
 New Zealand (1971), US\$6.652 billion.
 United Kingdom (1971), US\$144 billion.
 United States (1971), US\$1,046.8 billion.
 Western Samoa (1969)*, \$16.8 million.

*Latest figures available.

Mr. FRASER. Do you know the cost to the Federal Government for its direct administration to those three areas?

Mr. HUMMEL. The total U.S. input into the three territories we have mentioned is in excess of \$82 million.

Mr. FRASER. The principal U.S. input to these three territories, then, is the direct funding for supporting and administration, for which we pay 100 percent.

We pay 40 percent of the UNDP budget and 20 percent of the South Pacific Commission budget. There are other international organizations involved but I guess UNDP provides money for their activities so the SPC would represent the most economical way for us to participate of all the three I mentioned.

Mr. HUMMEL. I think that is true. The catalytic effects of this organization that deals across the board but on common problems and with a corps of experts that cannot be duplicated anywhere else and with very large inputs from the recipients for these special services, this kind of organization, it seems to me, is a general bargain in terms of effectiveness.

Mr. FRASER. Do all of the participating countries have some kind of responsibility in the area? Are there any that don't have any responsibilities?

Mr. HUMMEL. No, sir; all are directly involved.

Mr. FRASER. I ask these questions because of the possibility of drawing Japan in. I suppose the problem is they have no territory covered within the area within which the SPC works.

Mr. HUMMEL. That is correct, sir. I would think that in the long run it might change the character, perhaps in an undesirable way, it might change the character of the South Pacific Commission, even though different funding inputs could be derived from countries outside the area—West Germany, Japan, and others. Right now the organization is directed by persons directly concerned with the governments and the welfare of individuals in the area. To invite outside donors might change that character.

Mr. FRASER. Any further questions?

Thank you very much, gentlemen. This was a very helpful presentation.

I have a letter to Chairman Morgan from Edward Johnston, High Commissioner of the Trust Territory of the Pacific Islands. If there is no objection, we will have that letter included in the record at this point.

(The letter referred to follows:)

TRUST TERRITORY OF THE PACIFIC ISLANDS,
OFFICE OF THE HIGH COMMISSIONER,
Saipan, Mariana Islands, July 14, 1972.

HON. THOMAS E. MORGAN,
*Chairman, House Foreign Affairs Committee, U.S. House of Representatives,
Washington, D.C.*

DEAR MR. CHAIRMAN: We have learned that the House Foreign Affairs Committee has under consideration draft legislation to raise the Congressional ceiling on the annual United States contribution to the South Pacific Commission. As you may be aware, the United States administered Trust Territory of the Pacific Islands is a participating member of the South Pacific Commission. This membership has provided Micronesians with many opportunities to participate in Commission sponsored projects and programs from which great benefits have been derived. It has also made possible access to an international forum in which Micronesian leaders exchange ideas, share economic and social problems and solutions, and hopes and aspirations with other Pacific Islands leaders. In short, an increasingly viable South Pacific Commission means expansion of growth opportunities for peoples on the Pacific region, including Micronesia.

Over the years several scores of Micronesians have actively participated in the many diverse social/economic improvement programs offered by the Commission at minimal, or in some cases no cost, to the Trust Territory Administration. These participants have in turn shared their new-found knowledge and skills with their fellow citizens, effectively multiplying the beneficial effects in their local communities. The following information is offered in the hopes that a listing of representative South Pacific Commission projects in which Micronesians have participated will serve to assist the Foreign Affairs Committee in its deliberation over the pending draft legislation.

1. *Workshops, Training Courses, Seminars*

- (a) Training Course in Vital Statistics Methods.
- (b) Advanced Marine Mechanics.
- (c) Home Economics Training Course for Community Work.
- (e) Workshop on Curriculum Development and Educational Materials.

2. *Area Visits by Commission Program Staff*

- (a) Demographer.
- (b) Tourism Specialist.
- (c) Tropical Agriculturist.
- (d) Public Health Engineer.
- (e) Social Welfare Adviser.

3. *Regional Symposiums, Conferences*

- (a) Symposiums on Conservation of Nature—Reef and Lagoons.
- (b) Meeting, Fisheries Consultative Committee, South Pacific Islands Fisheries Development Agency.
- (c) Conference of Directors of Health Services.
- (d) Pacific Region Food Institute Conference.
- (e) Asia Institute for Economic Development and Planning.

It should be noted that, while these projects and programs are very worthy as end products, the opportunities for cultural interchange inherent in the process cannot help but enhance human understanding and goodwill among Pacific Islands neighbors.

The Trust Territory of the Pacific Islands Administration strongly endorses the draft legislation now before the Committee. The continued support of the South Pacific Commission by the United States helps to promote the fulfillment of aims and objectives of the United Nations Trusteeship Agreement entrusted to the United States in its administration of the Trust Territory of the Pacific Islands.

Sincerely yours,

EDWARD E. JOHNSTON,
High Commissioner.

MR. FRASER. We will now take up our second and final bill today, which is House Joint Resolution 1257, relating to the U.S. participation in the International Agency for Research on Cancer.

Our witness is Dr. Frank J. Rauscher, Director of the National Cancer Institute.

**STATEMENT OF FRANK J. RAUSCHER, JR., PH. D., DIRECTOR
NATIONAL CANCER INSTITUTE, NATIONAL INSTITUTES OF
HEALTH**

Dr. RAUSCHER. May I introduce Dr. Gregory O'Connor, Dr. Paul Erlich, Mr. Edward Noziglia, Bureau of International Organization Affairs, Department of State, and Mr. Sidney Cummins, Budget Officer.

Mr. Chairman, I am Frank Rauscher, Director of the National Cancer Institute of the national cancer program which was recently introduced by the Congress, a program which is not only important in this country, but which is becoming more and more international, and it is to those points that I would like to address my remarks today.

I have a prepared statement which I would like entered in the Record at this point with your permission. I will read some and paraphrase the rest.

(The statement referred to follows:)

**STATEMENT OF FRANK J. RAUSCHER, JR., PH.D., DIRECTOR, NATIONAL CANCER
INSTITUTE ON INTERNATIONAL AGENCY FOR RESEARCH ON CANCER**

Mr. Chairman, and members of the committee, I appreciate the opportunity to testify in support of H.J. Res. 1257, a bill introduced by the chairman, Mr. Fraser, on July 17. This bill embodies a legislative proposal submitted by the Department of State to the Congress on May 3, which would authorize full participation by the United States in the International Agency for Research on Cancer.

BACKGROUND

In 1965, on the initiative of the French Government the 18th World Health Assembly established the International Agency for Research on Cancer (IARC) within the framework of the World Health Organization. The statute of the Agency states:

The objective of the International Agency for Research on Cancer shall be to promote international collaboration in cancer research. The Agency shall serve as a means through which Participating States and the World Health Organization, in liaison with the International Union Against Cancer and other interested international organizations, may cooperate in the stimulation and support of all phases of research related to the problem of cancer.

In addition, the Agency is empowered to develop its own research programs, including those laboratory studies necessary for the implementation of its field projects.

The IARC is an autonomous body within WHO, with its own Governing Council and budget. The Governing Council is composed of one representative of each participating state and the Director-General of WHO. The present participating states are Australia, Belgium, France, the Federal Republic of Germany, Italy, the Netherlands, Japan, the United Kingdom, the United States, and the U.S.S.R.

The Agency (1) plans, promotes, and develops research on the causation, treatment and prevention of cancer; (2) collects and dis-

seminates information on the epidemiology of cancer research and on the causes and prevention of cancer; (3) provides for the education and training of personnel in cancer research through the provision of fellowships, special training awards, courses and seminars; (4) carries out special projects such as pilot demonstration for cancer prevention.

A scientific council is responsible for evaluating the activities of the Agency and advising the Director and Governing Council on scientific policy and programs. It is composed of 12 scientists selected by the Governing Council on the basis of their technical competence in cancer research and allied fields and irrespective of geographic representation.

The basic budget is financed by assessments on participating states. A major proportion (70 percent beginning in 1973) is assessed equally among the participating states. The remainder of the budget is divided into units and is paid by participating states as shown on next page.

Group 1—(The U.S. and the U.S.S.R.), eight units.

Group 2—(Federal Republic of Germany, France, Japan, and the United Kingdom), four units.

Group 3—(Italy), two units.

Group 4—(Australia, Belgium, and the Netherlands), one unit.

In fiscal year 1972 the United States provided \$336,789 (through the Department of State) as its annual assessed contribution.

The Governing Council may also accept grants or special contributions from any private organization or government. In fiscal year 1972 the United States (through DHEW) contributed \$921,735 for special projects (discussed later in this paper).

The statutes of the Agency entered into force in 1965 with the United States as one of the original members. Up to now the annual contribution has been funded under the authority of the Foreign Assistance Act. The Agency has now been operational long enough for a determination that continued U.S. participation is beneficial to the U.S. national program of cancer research. The proposed legislation would provide continuing authorization for the U.S. contribution to be financed in the State Department Appropriation Act.

CURRENT

The National Cancer Institute is excited about work now being conducted by and planned with the IARC. We recommend strongly that the IARC continue to receive this Nation's support for studies which hopefully will contribute to the control of cancer for peoples of all countries. In view of the President's commitment to an increased initiative of \$100 million for cancer, continuation of collaborative studies with the IARC becomes even more critical. I want to emphasize the implication of the word "collaborative." While the Agency has and needs to have a major proportion of autonomous management and scientific responsibility, many of its projects are intimately coordinated by NCI with the overall national cancer effort. Investigators in laboratories of the IARC and within the United States work compatibly together toward the efficient and effective attainment of specific goals. As you know, NCI has very stringent guidelines to

ensure that recipients of U.S. funds have high motivation for relevance, need and priority of any project toward cancer control in people. There are no problems now, nor are they anticipated with IARC.

The potential for an international organization doing basic research on cancer is obvious. It is clear that such an agency could both correlate work being done elsewhere and more importantly undertake basic field studies in other countries which could not be done unilaterally. The international organization has the mechanism as well as the status to obtain data not otherwise available. It can also serve as the catalyst to stimulate efforts—through the exchange of information and through the sponsorship of scientific seminars.

GENERAL ADVANTAGES (SCIENTIFIC)

There is excellent evidence that more than 85 percent of man's cancers are extrinsic. This means that it is not man's inherent fate to develop cancer simply because he is a vertebrate. Rather, he develops cancer because of exposure to some carcinogenic insult or his life patterns are such that they predispose him to susceptibility to environmental carcinogens. This is important because it strongly suggests that one ought to be able to identify these carcinogens and thereby (1) modify the environment in part by removing these carcinogens or (2) modify the host so that he is less sensitive to the traumatic influences of these environmental insults. Much of the information that establishes this principle has come from studies of migrant populations and of studies of populations throughout the world known to be exposed to factors, products, patterns and their combinations known to be carcinogenic in laboratory animals. The IARC in particular has been instrumental in recording and exploring the comparative effects of such things as viruses, chemicals, and sociologic patterns of life in different geographic areas of the world. Such studies directly with man are of increasing importance because of increasingly obvious difficulties in extrapolating data from animals to man. A multinational organization can be of great importance in helping to identify the specific environmental insults which cause specific cancers and in gaining acceptance of controls to avoid them.

SPECIFIC EXAMPLES

Burkitt's Lymphoma: This tumor occurs predominantly in children of equatorial Africa but is also seen in the United States and in other western countries. There is good evidence that a herpes-type virus (EBV) is a causative factor of this cancer. Because EBV has also been shown to be the major if not sole cause of infectious mononucleosis in this country and because more recent data show association with Hodgkins disease and chronic myeloid leukemia of patients in the United States, we feel that studies on high risk African populations aimed toward the prevention and control of this disease are highly warranted. It will be of tremendous conceptual importance to prove that any virus is positively related to a particular human neoplasm; and of practical importance because such studies have high probability

of leading to the development and use of a preventive vaccine for Burkitt's Lymphoma as well as other diseases.

Nasopharyngeal Carcinoma: This is the other major cancer for which good data are available to implicate EBV as a causative factor. This tumor occurs at an incidence of approximately 3 per 100,000 in the United States but at nearly 100 per 100,000 at peak risk ages of some Chinese in Southeast Asia. The IARC with NCI collaborative support is continuing sero-epidemiologic and other studies to pin down this association. As with Burkitt's Lymphoma in Africa, this study in Hong Kong, Singapore, and other areas involves the prospective bleeding of more than 50,000 normal individuals. It should be emphasized that this tumor is one of the highest incidence cancers of mainland and migrant Chinese, particularly of the southern provinces.

Liver Cancer: Liver cancer is increasing in frequency and therefore in importance within the United States. In parts of Mozambique, however, the frequency of primary carcinoma of the liver in the 25-45 age group is 500 times that within the United States. There are two very exciting research leads into the etiology (causation) of liver cancer. Aflatoxins are chemical substances secreted by certain fungi which contaminate cereal, peanuts, and crops of this type widely used in Africa and Southeast Asia, as well as in the United States. These toxins are known to be potent inducers of liver cancers in animal systems. Second, the "Australia antigen," an apparent virus widely believed to be the primary cause of serum hepatitis, is also known to be related to a high percentage of people developing liver cancer. The IARC will conduct epidemiologic studies to evaluate the apparent associations of aflatoxins and the Australia antigen to liver carcinoma in these countries. Such investigations may well lead to the development of better means for food preservation, to other means for the prevention of human exposure, and to still other means for disease prevention, including possible vaccines. Because of the high incidence, such studies can best and most quickly be carried out in countries such as Kenya, Senegal, Uganda, and Tanzania, where the local governments have expressed considerable interest in helping through an international organization. For example, in the Ivory Coast, the government has made available a team to bleed 20,000 adults over a period of 2 years at 4-month intervals.

Esophageal Cancer: Cancer of the esophagus in Iran has been shown to vary by a factor of 80 over a distance of only 200 kilometers. The etiological factors have not been determined but the IARC is providing help through the Public Health Institute of Iran to investigate this problem. Iran is providing the necessary manpower, buildings, and teams to help make this study a success and is providing the demographic basis upon which a complete investigation of the population at risk can be made. They will contribute at least \$30,000 per year for this project. This certainly indicates favorable reception given to the IARC at the local level for the development of means to control a cancer which is also increasing in frequency in the United States and Western Europe.

Other Cancers: In certain parts of Africa and Asia cancers of the colon, rectum, prostate, breast and uterus are rare, whereas in other parts of these countries (and in the United States) the incidences of

these cancers are much higher. It is important to note that the increasing risk of the latter geographic areas seem to have occurred relatively recently. These phenomena offer excellent opportunities to identify and evaluate the effects of changing sociologic patterns and environmental factors on the development of various cancers in people of different ethnic and geographic backgrounds. Since western societies, such as that in the United States are becoming more and more homogenous, it will be far more difficult to determine the etiologic factors involved especially if they're multi-factorial in nature. Accordingly, the IARC in collaboration with the NCI and with institutes from other countries is investigating the possibility of conducting comparative cultural and nutritional studies in these developing nations to determine the possible role of food additives, pesticides, and other factors in the induction of these cancers. The importance of proceeding with these studies as soon as possible is further emphasized by the rapidity with which sociologic changes are taking place in these areas. For example, it is reliably reported that the incidence of colon cancer has increased threefold in Singapore during the last decade. Demographic studies with this population should provide major clues as to why colon cancer is also increasing in the United States.

In summary, continued U.S. support of and NCI collaboration with the IARC for studies of the type indicated above is a major means whereby the United States can implement the desire of the President and the Congress on behalf of the American people to control cancer. Many of these studies can best and most quickly be done in those areas of the world where the incidences of various cancers are much higher than in the United States. International demographic studies to determine why cancer rates and frequencies vary so widely among different ethnic groups and geographic sites will contribute to our ability to prevent cancer in this country as well as throughout the world.

I appreciate the opportunity to testify in support of House Joint Resolution 1257, a bill introduced by the Chairman, Mr. Fraser, on July 17. This bill embodies a legislative proposal submitted by the Department of State to the Congress on May 3, which would authorize full participation by the United States in the International Agency for Research on Cancer.

In 1965, on the initiative of the French Government the 18th World Health Assembly established the International Agency for Research on Cancer (IARC) within the framework of the World Health Organization. The statute of the Agency states:

The objective of the International Agency for Research on Cancer shall be to promote international collaboration in cancer research. The Agency shall serve as a means through which Participating States and the World Health Organization, or WHO, in liaison with the International Union Against Cancer and other interested international organizations, may cooperate in the stimulation and support of all phases of research related to the problem of cancer.

In addition, the Agency is empowered to develop its own research programs, including those laboratory studies necessary for the implementation of its field projects.

The IARC is an autonomous body within the WHO, with its own Governing Council and budget. The Governing Council is composed of one representative of each participating state and the Director-General of WHO. The present participating states are Australia, Belgium,

France, the Federal Republic of Germany, Italy, the Netherlands, Japan, the United Kingdom, the United States, and the Soviet Union.

The Agency (1) plans, promotes, and develops research on the causation, treatment, and prevention of cancer; (2) collects and disseminates information on the epidemiology of cancer research and on the causes and prevention of cancer; (3) provides for the education and training of personnel in cancer research through the provision of fellowships, special training awards, courses and seminars; (4) carries out special projects such as pilot demonstrations for cancer prevention.

A scientific council is responsible for evaluating the activities of the Agency and advising the Director and Governing Council on scientific policy and programs. It is composed of 12 scientists selected by the Governing Council on the basis of their technical competence in cancer research and allied fields and irrespective of geographic representation.

The basic budget is financed by assessments on participating states. A major proportion—70 percent beginning in 1973—is assessed equally among the participating states. The remainder of the budget is divided into units and is paid by participating states as shown on the next page.

Group 1, the United States and the Soviet Union, eight units.

Mr. HALPERN. I was looking at this, somewhere else you say 70 percent of the basic budget is financed by assessments.

Now, these units, these should total up somehow to 30. We pay 8 percent—eight units of 30?

Dr. RAUSCHER. The units total up to 70 percent of their total budget. The rest of the budget is assessed unequally; am I correct?

Mr. FRASER. That isn't what your statement says. Your statement says 70 percent is assessed equally. That sounds as though you take 12, or whatever the number of participating states is, and divide that number into 70 percent of the budget.

Dr. RAUSCHER. You are correct. Let me try to clarify my statement. Seventy percent refers to the fact that until 1973 each of the participating countries paid \$150,000 a year which totaled \$1.350 million. The remainder is divided unequally. In order to reduce the percentage share of the United States, we indicated a change to provide that each member pay an equal share of the first 70 percent of the budget, that is, more than \$150,000.

Mr. FRASER. The Netherlands, United States, and Japan, all pay \$150,000. Do all members pay \$150,000?

Dr. RAUSCHER. Yes; that is true through 1972. Then there are additional contributions.

Mr. FRASER. Based on the unit system?

Dr. RAUSCHER. That is right.

Mr. HALPERN. What would a unit translate into in thousands of dollars?

Dr. RAUSCHER. In 1972, one unit is approximately \$23,350. Thirty percent is prorated on a unit basis and as the budget increases each unit is worth more but, as divided up, these units are indicated as somewhat proportional to the gross national product.

Mr. HALPERN. What is the U.S. and the U.S.S.R. share?

Dr. RAUSCHER. For 1972, they will each pay \$150,000 plus eight units at approximately \$23,350 a unit.

Mr. HALPERN. That gets to the \$336,000 in your net line, I see.

Dr. RAUSCHER. Group 2, the Federal Republic of Germany, France, Japan, and the United Kingdom, four units. Italy, two units. Australia, Belgium, and the Netherlands, one unit.

In calendar year 1972 the United States will provide \$336,789 from the Department of State for assistance appropriations as its annual assessed contribution. In calendar year 1973 the first 70 percent of the budget will be divided equally among all 12 members. This will equal more than \$150,000 apiece. The remaining 30 percent of the budget will be divided into 37 units and the United States and U.S.S.R. will pay eight units; the other members proportionately less according to the unit system I have described. Our percentage will be reduced.

Mr. FRASER. Is that voluntary money?

Dr. RAUSCHER. That is voluntary money.

Mr. FRASER. It comes through the Foreign Assistance Act?

Dr. RAUSCHER. Right.

Mr. FRASER. To which item would that be allocated?

Mr. CUMMINS. The line item that is called the World Health Organization, medical research program, which has been a line item for many years in the Foreign Assistance Appropriation Act.

Mr. FRASER. From our perspective would we consider it a part of the WHO line item?

Mr. CUMMINS. No, sir; the U.S. contribution to the World Health Organization budget is financed from "contributions to international organizations" and is appropriated directly to the State Department.

Mr. FRASER. Part of it goes here and part to other activities as well, or is this the only beneficiary of that item?

Mr. CUMMINS. This is the only item covered under that particular heading.

Dr. RAUSCHER. The Governing Council may also accept grants or special contributions from any private organization or government. In fiscal year 1972 the United States through DHEW contributed \$921,735 for special projects. This is discussed later on.

The statutes of the Agency entered into force in 1965 with the United States as one of the original members. Up to now the annual contribution has been funded under the authority of the Foreign Assistance Act. The Agency has now been operational long enough for a determination that continued U.S. participation is beneficial to the U.S. national program of cancer research. The proposed legislation would provide continuing authorization for the U.S. contribution to be financed in the State Department Appropriation Act.

As to what is being done currently, the National Cancer Institute is excited about work now being conducted by and planned with the IARC. We recommend strongly that the IARC continue to receive this Nation's support for studies which hopefully will contribute to the control of cancer for people of all countries. In view of the President's recent commitment and that of the Congress to an increased initiative of \$100 million for cancer, continuation of collaborative studies with the IARC becomes even more critical. I want to emphasize the implication of the word "collaborative." While the Agency has and needs to have a major proportion of autonomous management and scientific responsibility, many of its projects are intimately coordinated by NCI with the overall national cancer effort. Investigators in labora-

tories of the IARC and within the United States work compatibly together toward the efficient and effective attainment of very specific goals. As you know, NCI has very stringent guidelines to insure that recipients of the U.S. funds have high motivation for relevance, need, and priority of any project toward cancer control in people. There are no problems now, nor are they anticipated with this Agency.

The potential for an international organization doing basic research on cancer is obvious. It is clear that such an agency could both correlate work being done elsewhere and more importantly undertake basic field studies in other countries which could not be done unilaterally. The international organization has the mechanism as well as the status to obtain data not otherwise available. It can also serve as the catalyst to stimulate efforts—through the exchange of information and through the sponsorship of scientific seminars.

Now, if I may I will take a few minutes to paraphrase what is in the rest of the statement in order to make some important points.

In terms of cancer research, we feel it exceedingly important that we be allowed to collaborate specifically with this agency to study high risk population groups as they occur in many parts of the world. As an example, in this country the incidence of leukemia is on the order of four to five per hundred thousand. In other areas of the world it can go to eight or more. Another example concerns carcinomas which occur in the back of the pharynx. It occurs in this country at an incidence of about one to two per hundred thousand. In Hong Kong or Singapore it goes to a peak incidence of from 60 to 70 per hundred thousand. This is telescoped into a relatively short period of time in man's age. By studying the high incidence populations we can get clues as to what causes it much more quickly, determine how to prevent this and test that preventive more quickly to the data coming out of such studies will be important not only to controlling cancer in those people but, in my judgment, as important to the people of the United States in preventing this and other cancers.

One other major point; we are able to say that up to 85 percent of man's cancer are extrinsic in nature. The major concept as recently as 10 to 15 years ago was that our genetic background predisposed us to the kinds of cancer we might develop. The newer information means that you and I as men do not inherit cancer simply because we are people, it means something we do, something we are exposed to causes these cancers.

Why is this important? It means that if we can identify these factors, we can then determine what causes them and develop means to prevent them.

Cancer prevention, particularly in the United States, with certain kinds of cancers is not new. We have been doing this, or have known how to do it for many years. We know that of the 1,000 different chemicals known to cause cancer in animals, about 22 of these cause cancer in people. By more sophisticated or more intelligent or more limited use of radio diagnostic techniques, acute lymphosydic leukemia in children is going down.

By the modification of or decreased tobacco usage we are already seeing a plateauing of the incidence of lung cancer. We know that things like asbestos—if I worked in an asbestos factory or mined it or applied

it to these buildings—my risk to lung cancer would be higher than normal if I were not properly protected.

By identifying these things, we can take steps to control and actually prevent these cancers.

Again, the importance of why IARC is necessary. By studying high rates of population, we can do these things more quickly. We are working with the IARC studying populations in Iran and in Africa where within a prescribed geographic area—something like 20 kilometers—the incidence of esophageal cancer is much higher than “normal.” Over there it is much higher than here. When you move outside the area, even though the people are of the same genetic background, the incidence plummets. We are asking the IARC to go in and see what those people do or are supposed to and what their neighbors 20 kilometers away are not supposed to. It is this kind of thing I have detailed in the record which has not only high hope but which has already proven successful and it is the kind of thing we come back home and plug right into our medical research in our country.

In summary, continued U.S. support of an NCI collaboration with the IARC for studies of the type indicated above is a major means whereby the United States can implement the desire of the President and the Congress on behalf of the American people to control cancer.

Many of these studies can best and most quickly be done in those areas of the world where the incidences of various cancers are much higher than in the United States. International demographic studies to determine why cancer rates and frequencies vary so widely among different ethnic groups and geographic sites will contribute to our ability to prevent cancer in this country as well as throughout the world.

Thank you, Mr. Chairman.

Mr. FRASER. Thank you very much.

Let me see if I can first pin down the part of the support which is being made available from the United States to this Agency as covered by this bill, or would be covered.

In the earlier part of your statement you referred to the two segments, the 70 percent and the 30 percent of the budget which is financed by assessments.

Dr. RAUSCHER. Yes, sir.

Mr. FRASER. Established by the governing body of this Agency. Is that what we are asking now be transferred to an open-ended authorization in the State Department budget?

Dr. RAUSCHER. We are asking in this fiscal year for a transfer from the State Department of \$312,352 to the Agency.

Mr. FRASER. But we are not dealing with the additional contribution made to the Department of HEW in this bill?

Dr. RAUSCHER. That is correct.

Mr. FRASER. You would propose that continued contributions be made through that route and we are not dealing with that even though you put it in the statement.

Dr. RAUSCHER. That is right. I wanted you to have a picture of the total U.S. contribution.

Mr. FRASER. So that what we would be doing is transferring to the State Department authorization to provide sums currently in the

neighborhood of \$350,000, and undoubtedly that will increase as the work of these expand.

Dr. RAUSCHER. It would be the official U.S. contribution. At the present time the IARC policy is to allow about a 5-percent increase as voted by the member states per year. Anything over, they would hope to accrue in one or two ways, either by new members—Japan just joined—or perhaps additional contributions such as the National Cancer Institute of HEW makes.

Mr. FRASER. The \$300,000 is currently under the Foreign Assistance Act as a voluntary payment despite the fact you characterize this as an assessment act.

Mr. CUMMINS. I think you hit a difficult area. It is true that \$312,000 was contained in the fiscal 1972 appropriation for foreign aid to cover the calendar year 1971 payment to the International Agency for Research on Cancer.

The characterization of the payment as voluntary rather than assessed, I think relates more to the manner in which the Congress authorized the appropriation to meet the payment than to the way the IARC has established its assessments on members. The fact is that there is not, as we are requesting now, a specific authorization in terms of a separate act of Congress. We have to rely on the general annual or biannual authority as it appears in the foreign aid bill.

Each year you have the problem of not only obtaining an appropriation but also obtaining an authorization. It is that situation which we are trying to correct by having a specific public law which would then enable us, as I mentioned to Congressman Halpern on the item we had before this, to meet the qualification of being authorized by a specific act of Congress; and thus have permanent authorization rather than annual authorization.

Mr. HALPERN. Perhaps I am getting far removed, Doctor, from your professional expertise. Part of the problem, I think our committee felt was that we had lost a relationship to some of these programs because they had open-end authorizations and in turn when you have an open-end authorization some agency or department with a specific program winds up at the mercy of one of the appropriations subcommittees.

One of the arguments that has always impressed me was that if the authorizing committee gives you a fair review and then does a good job of authorizing, then you can better argue the case before the Appropriations Subcommittee which may not have the same psychological life-and-death control that is exercised before.

But we are getting into some terminology applications that the chairman put his finger on that don't coincide with the way we use these terms.

Mr. FRASER. There is no statutory authorization. Let me put it differently. There is nothing that has been enacted by Congress that relates currently to the IARC?

Mr. CUMMINS. That is correct. The authorization is merely the general authorization for voluntary contributions to international organizations which is contained in the foreign aid bill.

Mr. FRASER. The next question is, when we characterize this as "assessments" they would not, would they under existing law, be manda-

tory assessments as we otherwise think of them; for example, for the assessed contribution to the U.N.?

Mr. CUMMINS. That is not true of the IARC, but certainly it is true of our situation. If there was no foreign aid bill, there would be no appropriation where this particular item could comfortably be included.

Mr. FRASER. We would not be in violation of a legally binding international agreement then; would we?

Mr. CUMMINS. That is right, because Congress has not approved a specific authorization.

Mr. FRASER. You use the terminology, "The annual assessed contribution through the Department of State." This is the annual assessment by the IARC in which we voluntarily have participated since 1965. As far as the IARC is concerned, this is an annual assessment?

Mr. CUMMINS. That is correct.

Mr. FRASER. If we, in Congress, failed to pass the necessary legislation—even though you might say, that since Congress didn't authorize or appropriate—you don't have the money, at that point the United States would be in default at least as far as the IARC is concerned.

Mr. CUMMINS. That is right.

Mr. FRASER. So it is not so much voluntary; it will be legal assessment if we wish to continue our participation.

Mr. CUMMINS. Yes, I would accept that, in the sense that it is the manner in which the Congress provides the funds and authorizations that makes the distinction between "voluntary" and "assessed."

Mr. FRASER. For example, in the case of the International Labor Organization, where we fail to appropriate the full amount, it has been said we are in violation of an international authorization. That would not be true here?

Mr. CUMMINS. That is correct, because Congress has not specifically authorized this particular item.

Mr. FRASER. But on the record of the IARC we would be shown as a delinquent member?

Mr. CUMMINS. That is right.

Mr. FRASER. I am not sure what an international obligation does for anybody because if we don't appropriate, we don't appropriate.

Mr. CUMMINS. We are hoping Congress will appropriate.

Dr. RAUSCHER. This is one part I wanted to correct in my statement. I did cross out the word "assess" but your point is well taken.

Mr. FRASER. You are saying if we authorize this there is some arrangement under which there can be a 5-percent annual expansion but, if it goes beyond that, what happens?

Dr. RAUSCHER. If it goes beyond that, they hope to increase anything above that by new states, such as Japan, who is just in.

Second, by additional contributions from participating countries. HEW provided \$900,000 in fiscal year 1972, for special studies.

Mr. FRASER. Is this a policy guideline established within the governing council?

Dr. RAUSCHER. That's right, which I am just told was done in 1969, is valid for 5 years.

Mr. FRASER. They have laid down this policy for 5 years, as a working guideline, so they will accept that kind of budget expansion, 5

percent. But if they are seeking budgets in excess of that, will they look to other ways of financing, as you indicated, with new members or other forms of payments?

Dr. RAUSCHER. That's right.

Mr. FRASER. That is sort of a gentlemen's understanding?

Dr. RAUSCHER. I don't think so. I think it is more firm than that. It is a governing council resolution.

Mr. FRASER. They have laid down that as a working policy for 5 years?

Dr. RAUSCHER. That's right.

Mr. FRASER. One final question. If we pass this bill, it would seem to provide an open-ended, continuing authorization which would appear not to bring it within the annual State Department appropriation.

Mr. CUMMINS. Passage of this bill would bring it into the State Department appropriation structure.

Mr. FRASER. We have gotten ourselves into reviewing the authorization.

Mr. CUMMINS. I believe there was another paragraph which did provide that over and above the ceiling for international organizations and conferences, subsequent legislation would automatically be covered.

Mr. FRASER. So if we enacted this into law, when the Department of State presents its bill for authorization, they would include this in it and show it—

Mr. CUMMINS. As one of the 40-odd international organizations.

Mr. FRASER. So in a way we would be annually setting authorization ceilings?

Mr. CUMMINS. If the bill which was passed and just signed by the President is a precedent for the future, yes, there will be a ceiling in each of the annual State Department authorization acts.

Mr. FRASER. On the face of it, this would seem to provide a separate continuing authority. I don't expect this is a matter of real consequence.

Mr. CUMMINS. As you mentioned earlier, the United Nations, UNESCO, all have separate authorizations, yet all have been brought within the ceiling in the State Department authorization act.

Mr. FRASER. If we wanted to get out from under that, we would probably have to write a special exemption?

Mr. CUMMINS. That is right.

Mr. FRASER. One other question. In the discussions with the Atomic Energy Commission I remember asking if they had done what I call a microanalysis in the incidence of cancer and radiation. At the time they had not. This was stimulated in part by the question as to whether some nuclear testing had increased the incidence of cancer. Are you familiar with that?

Dr. RAUSCHER. Yes.

Mr. FRASER. My question now is one of curiosity. Has there been done through the IARC or in the National Cancer Institute, or somewhere, some of that kind of research?

Dr. RAUSCHER. I think this is a good example of other international arrangements that we have. As you know, we have been going through the AEC with the Atomic Casualty Agency in Hiroshima for years.

We have an ongoing study at NCI which follows up occupational hazards in people exposed to potential carcinogens under occupational circumstances.

Mr. FRASER. I really don't think it is relevant to this bill. Dr. Sterngras, a radiation physicist, made some allegations which were controversial, but I read there had been other studies which confirmed his findings.

Dr. RAUSCHER. That's right.

Perhaps Dr. O'Connor could respond to that point.

STATEMENT OF DR. GREGORY O'CONNOR, NATIONAL CANCER INSTITUTE

Dr. O'CONNOR. There is not a specific answer to your question, but one of the major activities of this Agency in collaboration with the association of the Cancer Institute is to actually continue to monitor cancer incidence in five continents. This is what the publication is called and this is constantly being re-edited and upgraded.

This actually constitutes a type of monitor of changing patterns of cancer in different areas. It is from data that come out of this kind of monitoring. Then special investigations are made and, if something suggests a radiation hazard or a change in a specific type of pattern over time has made itself apparent, this would be investigated.

Mr. HALPERN. As a layman I have a little problem with some of the language you are using. Doctor, in your prepared statement you referred to continuation of collaborative studies within the IARC, then you go on shortly thereafter and speak about the potential for doing basic research.

Would you explain to me in layman terms if that is possible, how a collaborative study then leads on to the research and, hopefully, it does for cure?

Dr. RAUSCHER. Let me see if I can give a specific example. One of the problems and opportunities we have is to try to determine what chemicals are causing cancer in various populations throughout the world. In order to do that, the IARC has set up a unit or team approach to this kind of thing. They have investigators skilled at determining whether they are exposed or what they are exposed to.

Second, they have a team appointed to that group to determine if viruses are responsible. That takes a great deal of training and a different background.

A third team will develop means to assay what chemicals might be in that environment. They have about as good a team in these three areas on one problem, if you will, as many institutions in this country and other places abroad.

One other problem we have is that in order to determine to the satisfaction of most scientists that one particular chemical is carcinogenic, it takes about 200 mice and 200 hamsters, of both sexes. You hold them for 2 years, treat them almost daily and try to determine if they have tumors. If they are not gross you have to look inside.

The cost is about \$50,000 per test. We are trying to determine less expensive ways to do this.

If it causes cancer in a mouse, we must then determine if it causes cancer in a man. That is the point of this research.

Mr. HALPERN. Again, showing my lack of technical knowledge, you gave us this one example of parts of Mozambique where there was discovered a frequency of cancer of the liver 500 times that of the U.S. rate?

Dr. RAUSCHER. Yes.

Mr. HALPERN. You then go in there and try to determine from all the chemicals, et cetera, that people come in touch with, what might cause that?

Dr. RAUSCHER. Yes.

Mr. HALPERN. Is the IARC equipped if, for example, you discovered an area in Australia where the primary rate of liver cancer was 500 less than that of the United States, could you then go in and look for a positive reason why cancer isn't developing?

What you are doing is giving examples of where you find the abnormal cancer and you are looking for what causes it. What about the positive side of finding a nonexistent situation and hoping to find a clue of why it doesn't exist there?

Dr. RAUSCHER. This is a profound question. Yes; we are doing these studies through the IARC. Let me expand on this for a moment.

We have two major clues for liver cancer; one is a mold on peanuts, cereals or other similar products. There is a chemical in the mold which will induce cancer in turkeys, fish and other animals. Since man is susceptible to hepatomas, obviously we want to determine whether aflatoxin.

These and other efforts were generated through the IARC for studies of hepatitis in possible relation to hepatoma. I had hepatitis as a child. We couldn't isolate any virus then, but now a virus has been isolated that probably causes hepatitis. It seems on the basis of what IARC is doing in certain high-incident areas, that residents may be exposed to both the virus and the chemical, and thus have a higher risk to liver cancers.

What we do is ask whether if they have both, what is their risk and incidence of hepatoma. In order to answer this, you have to go to another population that has one factor, the other, or none, and then determine the incidence of disease. If these people have a lower incidence of hepatoma, most scientists would accept this as evidence toward a cause and effect relationship.

Mr. FRASER. Mr. Bingham.

Mr. BINGHAM. Thank you, Mr. Chairman.

I am curious as to why this IARC was not set up as a part of WHO?

Dr. RAUSCHER. Dr. O'Connor, would you comment on that?

Dr. O'CONNOR. I think the WHO organization, the organization itself is allowed to establish other groups which can carry out active research. I think this is really it in a nutshell. The organization itself is supposed to stimulate and coordinate research. In this field which was not considered to be very high priority by developing countries, it was thought best to establish a separate agency to conduct research.

Mr. BINGHAM. We have a joint cancer research program with the Soviet Union, do we?

Dr. RAUSCHER. Yes.

Mr. BINGHAM. Any relationship between that and IARC?

Dr. RAUSCHER. In the sense that both states are members of the IARC governing council. Both Dr. O'Connor and I were in Lyon,

headquarters of the IARC at which time President Pompidou dedicated the facilities the French Government donated. At that time the Soviets sent a rather large delegation and we discussed at a good time—because the President had just signed the agreements in Moscow—how we could implement the U.S.S.R.-U.S. agreement.

There was nothing firm, but it was a beginning kind of conversation.

Mr. BINGHAM. Do we have joint bilateral programs with other countries?

Dr. RAUSCHER. We have agreements with Japan as an example. I believe there is one with Australia and several other more informal working relationships with France, with England, and so forth. These may become more formalized, perhaps not in the sense of deliberate funding, but very shortly after the publicity adhering to the congressional intent and the executive intent to make cancer a priority program in this country, the director's office at the Cancer Institute and the President himself got all kinds of pledges of support from the prime ministers of other countries.

I look to this as being a forthcoming possibility.

Mr. BINGHAM. Do you see expansion of the IARC down the road?

Dr. RAUSCHER. It is an interesting question. I think they are underfunded at the present time for what they can do in their pivotal position, for global activities.

Greg, do you have anything to add?

Dr. O'CONNOR. I think it is a unique organization, as Dr. Raucher pointed out. This type of research, looking for environmental factors that relate to cancer incidence, is really important and it can be done nationally, but an international organization really has tremendous possibilities.

Mr. BINGHAM. I am impressed with the work going on. I think some of these statements of fact here are really very startling. I would presume some significant conclusions could be developed from them.

Dr. RAUSCHER. Yes; I think so.

Mr. BINGHAM. I want to compliment you on an excellent presentation.

Mr. FRASER. Are there any other international research activities that would be comparable to this that have a formal institutional setting?

Dr. RAUSCHER. Not to my knowledge.

In terms of bench research and field activities, I don't think so.

Dr. O'CONNOR. The other major international cancer organization is the International Union Against Cancer which is a voluntary organization.

Mr. BINGHAM. What?

Dr. O'CONNOR. It is a voluntary organization. It has been in existence a number of years and antedated the WHO program and the IARC by a number of years. It has considerable prestige and fortunately this was anticipated that the IARC and the International Union complement each other as one being governmental and the other voluntary.

It works very well. They cooperate and collaborate on projects that are appropriate.

Mr. FRASER. What are the physical facilities now operated by the IARC and where are they located?

Dr. RAUSCHER. They are located in Lyon, an hour south of Paris. They have just completed their building, donated by the French Government. We have contributed to the equipping of it and its 14 stories.

Mr. FRASER. A very substantial building?

Dr. RAUSCHER. Yes; I believe 14 stories.

Mr. FRASER. Where were they working prior to construction of the building?

Dr. RAUSCHER. In rented space from the government and the city government of Lyon. They also have some of their people in different satellite laboratories in Singapore, Hong Kong, and Africa. They will continue to do that, Mr. Chairman, but they will now have an excellent home headquarters.

Mr. FRASER. I think it would be useful if you would provide for the record a sort of comparative budget for the past 4 to 6 years so we can get some sense of the growth and budget.

Dr. RAUSCHER. I will be pleased to do so.

(The information follows:)

U.S. CONTRIBUTION TO IARC 1965 THROUGH 1972

Calendar year:	U.S. contribution	Total budget
1965.....	\$75,000	\$525,000
1966.....	150,000	1,150,000
1967.....	150,000	1,300,000
1968.....	150,000	1,350,000
1969.....	150,000	1,350,000
1970.....	150,000	1,500,000
1971.....	312,352	2,190,000
1972.....	336,789	¹ 2,120,500

¹ The governing council approved an additional amount of \$179,000 "to be effective if and when a new participating state is assessed at least that amount in 1972." Japan became a member May 12, 1972.

Mr. FRASER. Thank you very much. The subcommittee stands adjourned.

(Whereupon, at 4:20 p.m. the subcommittee adjourned, to reconvene at the call of the Chair.)



