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# COAST GUARD FIELD ACTIVITY

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## HEARINGS

BEFORE THE

SUBCOMMITTEE ON COAST GUARD, COAST AND  
HYDROGRAPHIC SURVEY, AND NAVIGATION

OF THE

COMMITTEE ON  
MERCHANT MARINE AND FISHERIES  
HOUSE OF REPRESENTATIVES

NINETY-SECOND CONGRESS

SECOND SESSION

ON

Coast Guard Auxiliary Small Boat Problems

AUGUST 25, 1972

Staten Island, N.Y., Coast Guard Problems

SEPTEMBER 28, 1972

MV *Tamano* Oil Spill

OCTOBER 5, 1972

New England Fishery Problems

OCTOBER 6, 7, 1972

**Serial No. 92-36**

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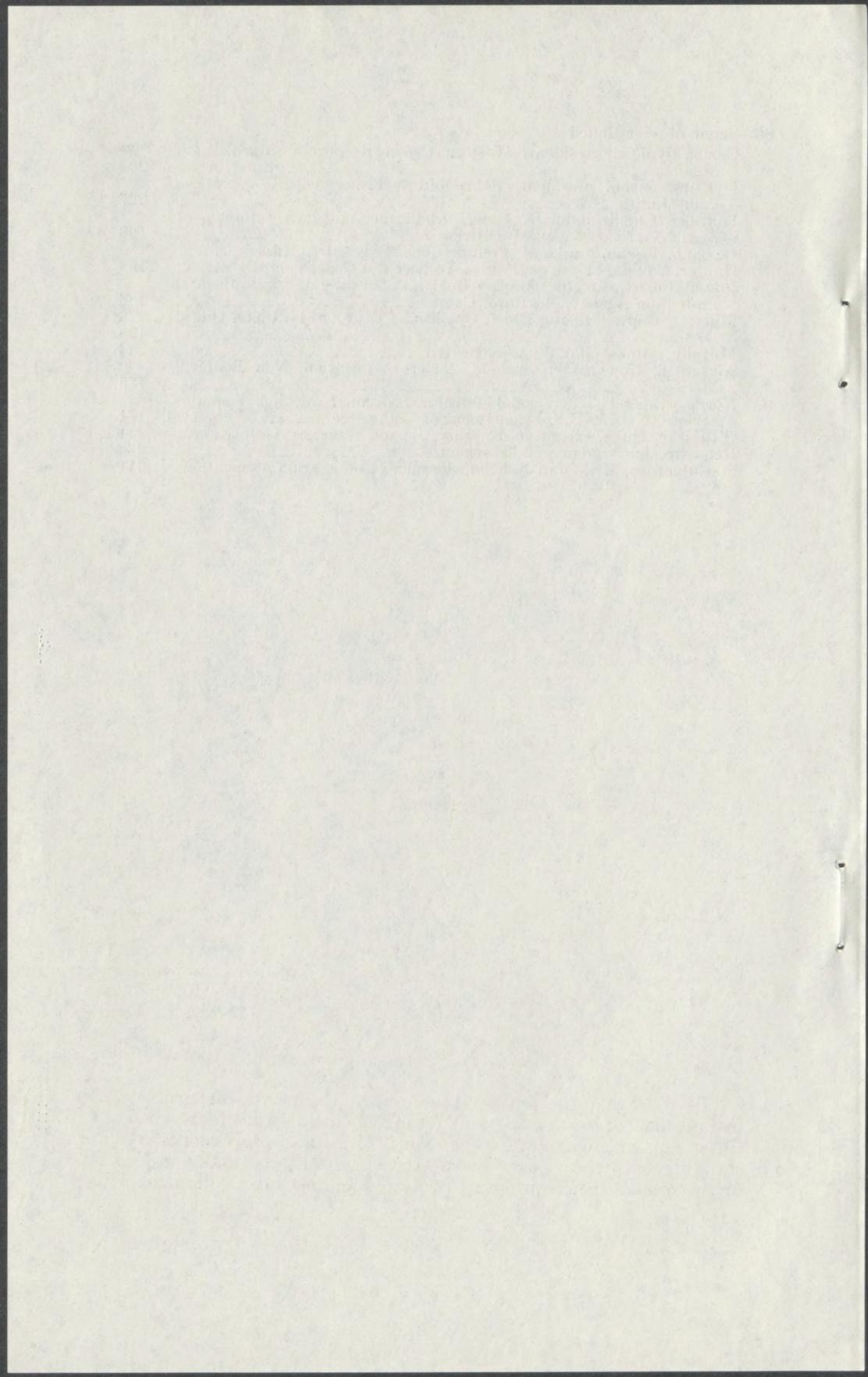
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## COAST GUARD FIELD ACTIVITY

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### Coast Guard Auxiliary Small Boat Problems

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FRIDAY, AUGUST 25, 1972

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON MERCHANT MARINE AND FISHERIES,  
SUBCOMMITTEE ON COAST GUARD,  
COAST AND GEODETIC SURVEY, AND NAVIGATION,  
*West Islip, N.Y.*

The subcommittee met at 10 a.m., pursuant to notice, in the Babylon Yacht Club, West Islip, N.Y., Hon. Frank M. Clark (chairman of the subcommittee) presiding.

Mr. CLARK. This hearing will please come to order. I am Congressman Clark from Pennsylvania and the chairman of the Subcommittee on Coast Guard, Coast and Geodetic Survey, and Navigation of the Committee on Merchant Marine and Fisheries.

Again, we are meeting here today in Congressman Grover's district to discuss some Coast Guard Auxiliary problems, and to gather testimony in general on the relationship of the Coast Guard Auxiliary and the Coast Guard with respect to small boating in the local Long Island waters.

As many of you know, the Coast Guard Subcommittee of the House Merchant Marine and Fisheries Committee worked very hard on the Small Boat Safety Act of 1971, which was signed by the President on August 10, 1971, and is designated Public Law 92-75. In fact, my subcommittee held hearings on the recreational boat bill several years ago here in Congressman Grover's district.

This small boat safety legislation is the most comprehensive piece of legislation dealing with recreational boating that has ever been passed. In view of the tremendous growth in recreational boating we are in hopes that the witnesses today will comment on the impact of the growth of the boating population, on the work of the Coast Guard Auxiliary, and the Coast Guard itself. We also hope that the witnesses will address themselves to the problems involved in the so-called Good Samaritan provision. There is such a Good Samaritan provision in the Boat Safety Act of 1971.

We hope that the witnesses will want to discuss the problem of insurability of equipment and liability which may attach when the Coast Guard Auxiliary is operating. It is the congressional understanding that the Coast Guard Auxiliary must be under orders in order to have their equipment protected against loss or damage. This

situation seems to have some elements of unfairness and not to be completely equitable. It is our hopes that some witnesses will comment on this problem.

As many of you know, one of the main features of the Boat Safety Act of 1971, is the establishment of State boating safety programs with funding by the Federal Government for these programs. As far as we know, there is no statutory tie-in to bring the Coast Guard Auxiliary in on these State safety and training programs. It would be desirable if the witnesses could comment on this situation, and perhaps offer some constructive proposals to bring the Coast Guard Auxiliary in under these State boating safety programs.

It is also our understanding that the Civilian Air Patrol, CAP, does some work with respect to recreational boating. We would be interested in finding out the extent of coordination between the CAP and the Coast Guard Auxiliary. For example, do they operate on the same radio band, what is the degree of cooperation in the event of disasters, and does the CAP and especially the Coast Guard have sufficient equipment. On this latter point, we are especially desirous of receiving testimony with respect to the status of Coast Guard Auxiliary equipment, equipment requirements, and how the equipment can better be used. In addition, what could the Coast Guard do to improve the equipment of the Coast Guard Auxiliary.

I think everyone here understands that Mr. Grover and I represent a committee of the House of Representatives which is part of the legislative branch of the Federal Government. However, I hope everyone here realizes that we know that there are other jurisdictions operating in these local waters. For example, there are the bay constables, the State conservation authorities, the Suffolk County Marine Division of the Suffolk County Police Department, the Coast Guard, and the Coast Guard Auxiliary. I want to state for the record that we appreciate that all the organizations which I have just mentioned have jurisdiction in the local waters and are doing an excellent job along with the dual mission of the Coast Guard.

Before moving on to our witnesses, I would like to say what a great pleasure it is for me to be here today in the congressional district of Jim Grover. As you all know, Jim was elected to the Congress in the 88th Congress and has been reelected ever since. I have the great pleasure of serving with Congressman Grover not only on the House Merchant Marine and Fisheries Committee, but also on the Public Works Committee, and he is one of the mainstays in each of these great congressional committees. Jim is looked up to by his colleagues in these committees as an excellent Congressman, a fine lawyer, and a legislator of great ability and judgment. I know Jim does as fine a job for his constituency as he does in the Halls of Congress. I am positive that Congressman Grover will continue to be reelected by his constituency because of his fine job for them, for the Congress, and for the Nation. I am most sincere when I say that the country needs men like Jim Grover in the Congress.

Before proceeding, I wonder if Congressman Grover would like to make a statement for the record.

MR. GROVER. Thank you very much, Frank. That's very flattering, but these people know me better than that.

MR. CLARK. Also for the record, I would like to point out that I am a Democrat, and I have been in Congress for 18 years, and I think by

now you and I know each other well enough to know that I really meant everything that I have said.

Mr. GROVER. I know you do, Frank. Someday I hope to visit your congressional district in Pennsylvania to tell your constituents, what I am sure they already know, of your outstanding work for them and your country as a Member of Congress.

Mr. CLARK. Our first witness today will be Capt. Harold Parker, Chief Director of Auxiliary, U.S. Coast Guard.

Captain Parker, you may proceed.

**STATEMENT OF CAPT. HAROLD W. PARKER, CHIEF DIRECTOR OF AUXILIARY, U.S. COAST GUARD HEADQUARTERS, WASHINGTON, D.C.**

Captain PARKER. Chairman Clark and Congressman Grover, I consider it an honor and a privilege to be called before you today and present to you a statement in support of the Coast Guard and the Coast Guard Auxiliary.

Although I have only been assigned the duty of Chief Director of the Auxiliary in Washington since May 1 of this year, I am totally enthused about the Coast Guard's boating safety program that has been initiated to support that excellent piece of legislation we now know as the Federal Boat Safety Act of 1971. I am especially proud of the expanded role the Auxiliary will play in helping the Coast Guard carry out their congressional mandate.

In my statement I hope to address to your satisfaction those subjects you asked to be discussed in your opening statements. As Chief Director, stationed in Washington, my knowledge of the problems, growth, and accomplishments of the auxiliariests working in and around Long Island waters is not so detailed as the 3d Coast Guard District Director. Captain Lipuseck, who is scheduled to testify later. I therefore will restrict my statement content to the overall Auxiliary.

The U.S. Coast Guard Auxiliary as it is called today was created by an act of Congress on February 19, 1941, to assist the Coast Guard in promoting safety on the water. Still the only boating organization in the country so authorized, the Auxiliary today has more than 1,100 flotillas in 49 States; Puerto Rico, the Virgin Islands, Pago-Pago in American Samoa, and a membership of over 35,000 men and women. The Auxiliary is a volunteer, nonmilitary organization which retains a close affiliation with the Coast Guard but remains strictly civil in nature. Although there is an authorized uniform, it is optional for each member. Any U.S. citizen, 17 years of age or older, is eligible to join the Auxiliary. The only other requirement is that he own at least a 25 percent interest in a boat, aircraft, or radio station, or have a special talent or skill that would be useful in the boating safety field. Although the Auxiliary participates in various activities, the three basic programs of the Auxiliary are public education, courtesy motorboat examinations, and operations.

One of the great services of the organization is its public education program. A boatman has the choice of five different Auxiliary courses, each designed to meet the needs of a particular segment of the boating population.

The hunter-fisherman course is presented in one lesson and is approximately 2 hours in length. Subjects covered include the types of

boats for outdoorsmen, trailer and cartop boating, boat motors, principles of maneuvering, knots, rules of the road, weather, aids to navigation, regulations, and recommended safety equipment.

The outboard motorboat handling course is intended to present the novice outboard skipper with the basic knowledge required for the safe operation of his boat. It is a one-lesson course and lasts 2 to 3 hours. Subjects covered are boat construction and terminology, life-saving devices, overloading, legal requirements, seamanship, rules of the road, aids to navigation, recommended equipment, and boat handling.

The safe boating course is presented in three lessons, normally 1 day per week for a 3-week period. Each lesson is approximately 2 hours in length. It covers basically the same material as the one-lesson course, but in more depth. Auxiliary instructors often rely on this course for beach and summer resort areas where vacationers operate boats for a relatively short period of time.

The two newest courses offered by the auxiliary are principles of safe sailing, and boating safety and seamanship, both of which were added in the fall of 1971. The principles of the safe sailing course is designed to meet the increasing demand for sailing instruction. This seven-lesson course covers sailing terminology, principles of sailing, basic sailboat handling, lines and knots, and method of handling emergency situations.

The boating safety and seamanship course lasts 12 weeks usually with one 2-hour class each week. Subjects covered are navigation, rules of the road, charts and compasses, boating laws, marine engines, sail-boating, marlin-spike seamanship, radiotelephone, weather, maneuvering, and safe motorboat operation.

In addition to these regular courses, the auxiliary provides a special one-lesson course in boating safety for schools, churches, or other non-profit organizations upon request. All public education courses are taught by qualified auxiliary instructors who have had years of experience on the water and are well acquainted with the subjects they are teaching. All of the above courses are tuition free, the only cost to the public is for the text and course materials which they may keep and a small registration fee in some cases.

To keep pace with the growing need for education as the boating public steadily increases, the auxiliary's public education program is continuously being reassessed and expanded. Our newest course is first aid for the boatman, written with the cooperation of the American Red Cross. With the growing likelihood of State licensing in the not-too-distant future, public education courses may well take on new significance as criteria for State licensure.

The second basic program of the auxiliary, courtesy motorboat examinations, are provided as a free public service and are performed only on the request of the boatowner. The annual "Seal of Safety" decal indicates that at the time of the examination, the boat not only met Federal regulations, but also auxiliary requirements that go considerably further. The examination is, in effect, a private educational program involving a valuable exchange of boating safety information. The examinations are conducted by specially designated auxiliaries who have been trained as courtesy examiners.

The auxiliary also helps us in our enlisted recruiting efforts and our efforts to get young men to go to the Coast Guard Academy.

Each year the auxiliary's operational activities help thousands of recreational boatmen who find themselves in trouble. Members cooperate with the Coast Guard and safe boating officials, often at the risk of their own lives, to augment their forces for search-and-rescue missions, safety patrols, regatta patrols, and support missions.

Annually, when the President of the United States proclaims National Safe Boating Week, the Coast Guard Auxiliary is one of 21 organizations to be represented on the National Safe Boating Week Committee. As members of that committee, auxiliaries organize promotional programs and provide public relations materials and displays. During National Safe Boating Week, which falls during the week of the Fourth of July, auxiliaries are especially active in the performance of courtesy motorboat examinations and safe-boating demonstrations.

Mr. Chairman, you mentioned the tremendous growth of recreational boating and asked for a report on the impact this has had on the auxiliary. I have prepared for your record a year-by-year listing of the significant statistics relating to auxiliary growth. These statistics go back to 1956 and carry through 1971, the last complete year.

Mr. CLARK. That will be made a part of the record.

Captain PARKER. I will not burden this committee with a recitation of the columns of figures, but I will read the totals as they stood at the end of 1956 and then at the end of 1971.

(The figures follow:)

#### AUXILIARY STATISTICS

	Membership	Instructors	Courtesy examiners
1956	12,860	115	2,239
1957	14,010	450	2,765
1958	16,125	920	3,692
1959	18,500	1,525	4,581
1960	19,720	2,215	5,465
1961	20,830	2,835	6,165
1962	21,540	3,665	7,131
1963	22,275	4,345	7,820
1964	22,725	5,275	8,190
1965	22,520	5,611	8,201
1966	22,997	5,947	8,167
1967	23,721	6,184	7,990
1968	24,899	6,464	8,010
1969	27,243	5,567	9,395
1970	30,221	5,641	9,495
1971	32,308	6,481	10,479

	Facilities	Assists	Regattas	CME's
1956	7,260	2,041	360	35,521
1957	7,935	2,100	263	53,855
1958	9,700	2,381	620	80,212
1959	11,510	2,646	573	94,353
1960	12,410	3,525	890	109,537
1961	13,200	4,331	1,305	126,201
1962	13,920	5,738	1,764	134,170
1963	14,640	6,017	2,474	151,059
1964	14,521	5,741	2,704	164,756
1965	14,419	6,877	3,668	171,918
1966	14,318	6,917	5,025	163,028
1967	15,040	7,234	4,540	163,252
1968	15,253	8,938	4,563	165,870
1969	15,831	9,715	4,065	192,011
1970	16,124	11,862	4,731	221,678
1971	15,224	12,940	3,933	260,378

Captain PARKER. It is a good thing the auxiliary is growing. Our recreational boat population is estimated at 7.3 million. We estimate that there are 17.35 million operators and 45.8 million boaters, including passengers, waterskiers, fishermen, and anyone who goes out in the water.

The other day I came across an article in my files. It was reporting what a Coast Guard district commander stationed in New York said in a speech to a U.S. power squadron meeting in New York City in 1938. He told them there were 300,000 pleasure boats in the United States at that time, and to impress them, he pointed out that there were 30,000 in the New York district alone. I only relate this story to point out the tremendous increase we have experienced in boating.

I was asked to comment on section 16(b) of Public Law 92-75, the Good Samaritan provision. I can only say that since I have been chief director, no instances necessitating using this provision by auxiliaries have arisen, and I have heard of none since passage on August 10, 1971. Upon return to my office, I shall check this statement against the files and if incorrect, I shall so notify your counsel for the record.

Relating to your concern about auxiliaries coverage and liability, auxiliary boats, equipment, and members are covered for loss, damage, injury, or liability while acting under official Coast Guard orders. Title 14, United States Code, sections 830 and 832 provide for this.

It would seem to have been the intent of the Congress not to provide coverage while auxiliaries are performing duties such as instructor duties or courtesy motorboat examination duties when such duties are not performed under orders or directed by competent Coast Guard authority. Further, there is no specific provision covering auxiliaries when traveling to patrol duty and again when traveling home. He is already covered by law when he is injured or dies while performing a duty assigned.

The Coast Guard paid out over \$59,000 in damage claims in fiscal year 1971, and we do honor our obligations to our auxiliaries who work so hard for us, but the law is clear and only corrective legislation can change the provision to pay claims only to those members actually on orders. Since I was relieved as chief director, I too recognized the inequity and intend to move to request this legislation. There is an officer on my staff working on that problem at this time.

Public Law 92-75 provides for the Secretary of Transportation to make available, upon request from a State, the services of members of the Coast Guard Auxiliary to assist the States in their boating safety programs. We have received requests from a number of States, at least 28, and assistance in the form of auxiliary safety patrols on sole State waters have been provided. The orders for these patrols were funded out of Coast Guard appropriations. It is felt that as the State boating authorities become more familiar with the auxiliary and its potential, they will expand their requests. To this end, we talk to the associations of State boat law administrators at each opportunity and keep them advised of what is available. There was such a meeting in Iowa earlier this week, and the National Commodore of the auxiliary was in attendance.

I believe the only recreational boating work done by the CAP is in the search-and-rescue field. The coordination between them and the auxiliary is not so close as it could be. They recognize this and we recognize this. To improve this situation and to try to provide for

what could be a viable joint search-and-rescue force, I have made an appointment to visit CAP Headquarters at Maxwell Air Force Base, Ala., in October in company with the Auxiliary National Commodore and explore our possibilities. Both Colonel McLaughlin, Civil Air Patrol officer, and myself have high hopes for the outcome of this meeting, and we feel this joint effort has laid dormant too long.

The Coast Guard auxiliary is the most cost-effective resource we have to promote boating safety. To do the job they do with our regular personnel would mean our manning level would be prohibitive. To hire private firms to do the job the auxiliary did in fiscal year 1972 would have cost an estimated \$83,232,000. This figure is a total of cost data for each program and was obtained from independent management consulting firms.

The Coast Guard supports the auxiliary by providing personnel to administer the program. We have 45 officers, 17 enlisted men, and 35 civilians assigned directly to auxiliary duties.

In support of their vessel examination program, the Coast Guard buys the decals as well as posters and brochures, and furnishes them to the auxiliary.

To support the public education classes they hold, we buy from appropriated funds the 35-mm. slides, movies, projectors, and advertising material.

To provide for a better trained auxiliary in order that they may do a better job for the Coast Guard in boating safety, we provide training films, manuals, overhead transparencies, projectors, instruction guides, audio tapes, and tape recorders.

To support the operational patrols performed by the auxiliary, we reimburse them for their fuel, oil, and water used while on patrol, and we cover their losses or damages sustained in conjunction with their orders.

This then concludes my statement.

Mr. CLARK. Thank you very much, Captain Parker.

Captain PARKER. It has been my pleasure to appear before you, sir.

Mr. CLARK. I would like to welcome the Babylon Yacht Club commodore, Robert Pasch. The committee thanks you very, very much for the use of your facilities and I would like to say that as far as I am concerned we couldn't have picked a better day for it. The breeze coming in is just lovely.

Commodore PASCH. It is not often a yacht club has the pleasure of having such distinguished guests. We are always looking for ways to enlarge our scope a little. You have no idea how this sort of thing pleases us. I hope you will feel welcome to have a little fun while you are here. We have a swimming pool and tennis courts. Lunch is being served by our women's committee. I have often observed that the yacht club could not function without a women's committee. Thank you.

Mr. CLARK. Captain Parker, I would like to ask you a couple of questions, and maybe Congressman Grover and counsel would like to as well.

What is the difference between the Coast Guard auxiliary and the Coast Guard Reserve? I am asking this question for the record. Is there any relationship between the two?

Captain PARKER. The Coast Guard auxiliary has been separated from the Coast Guard Reserve and is the civilian branch of the Coast

Guard. The Coast Guard Reserves are a military force and are eligible for call-up to active duty.

Mr. CLARK. To what extent have State boating safety programs been undertaken under the Small Boat Act?

Captain PARKER. As the States request patrols on their sole State waters, Coast Guard auxiliary directors write orders for the auxiliary to go to these lakes and patrol them.

Mr. GROVER. Captain, you mentioned that auxiliariasts are covered when they are on an assigned patrol if they are killed or injured. What is the nature of the benefit structure in the event of the loss of a man?

Captain PARKER. That is in title 14, United States Code, section 832, Injury or Death in Line of Duty:

"When any member of the auxiliary is physically injured or dies as a result of physical injury incurred while performing any specific duty to which he has been assigned by competent Coast Guard authority, such member or his beneficiary shall be entitled to the same benefits provided for temporary members of the Reserve who suffer physical injury or death resulting from physical injury incurred incident to service. Members of the auxiliary who incur physical injury or contract sickness or disease while performing any specific duty to which they have been assigned by competent Coast Guard authority shall be entitled to the same hospital treatment afforded officers and enlisted men of the Coast Guard."

Mr. GROVER. You mentioned that there is no portal-to-portal coverage. In order words, enroute to your assigned duty there is no coverage. When a man takes a boat out and he has got an assignment near the inlet, how do you determine when he has reached his assigned area, assuming there is a very severe storm here on the bay and that he is in peril or there is a risk as soon as he comes out from one of the canals to go to the assigned area? How do you determine when he has reached his assigned area? What is the cutoff of the Government's liability?

Captain PARKER. When the member leaves his home and is driving down to the dock to get to his facilities, it appears that there is no coverage for him at that point. When he actually gets in his boat, even though he has not yet arrived at the patrol area, he is covered from the time he gets in the boat and leaves to the time he returns to his home port.

Mr. GROVER. Then, when we have had some very severe September storms, when we have had live wires down and falling trees, he is not covered when running that gauntlet?

Captain PARKER. That is how I interpret it, sir.

Mr. GROVER. One other point, Mr. Chairman. Do you think it would be possible—I don't know if we would incorporate it in this record—to have the Captain report back to the committee at least by letter with a rundown on the meeting with the CAP this October after the meeting?

Mr. CLARK. There shouldn't be any objection. I don't hear any, so it is so ordered.

Captain PARKER. This meeting with the CAP was tentatively set up for July around the 1st of May when I first met Colonel McLaughlin. With breaking into the new job, I have not been able to get away. It has been in the mill for about 3 or 4 months. It certainly is overdue, sir.

Mr. CORRADO. Captain, as I understand, probably next year you will present a legislative package on the alteration of the auxiliary's coverage. In other words, next year probably you will have a bill for us to introduce and to hold hearings on concerning this coverage problem?

Captain PARKER. I have one of my young officers on the staff looking into the total picture of Coast Guard liability. He is not deep into it yet, but he works fast. Working with the legal division of Coast Guard Headquarters, who would have to present this legislation themselves, I would hope to get it in this year.

Mr. CORRADO. It would be too late really for this Congress. We would look for it from the Coast Guard for the 93d Congress.

Mr. CLARK. Thank you very much, Captain, and I am sure that this meeting is going to be very fruitful. I feel that we do need some legislation and it is going to help the auxiliary in this regard. We certainly will do something when we get back, in order to rectify some of the inequities our bills may have had in the past.

Our next witness is Captain Lipuscek. He is director of auxiliary in the third northern area.

Captain, you may proceed with your statement.

#### STATEMENT OF CAPT. JOHN LIPUSCEK, DIRECTOR OF AUXILIARY FOR THE THIRD NORTHERN AREA

Captain LIPUSCEK. Mr. Chairman and Congressman Grover, it is also a pleasure for me to appear before this committee and testify on the role and missions of the U.S. Coast Guard Auxiliary.

In the late 1930's it became apparent the number of motorboats was growing with astonishing speed. The Coast Guard, as the agency charged by Congress with maintaining pleasure craft safety standards, reported a corresponding increase in requests for assistance from recreational boatmen. The Coast Guard determined that the majority of assistance calls resulted from a lack of basic seamanship, or, equally serious, ignorance of the law. Heavier fines, however, and increased rescue facilities could not correct those situations.

Admiral Russell Waesche, then Commandant of the Coast Guard, understood this problem and reacted to suggestions from U.S. yachtsmen by supporting a congressional bill improving law enforcement on a voluntary basis. On June 23, 1939, Congress created the Coast Guard Reserve—parent to the Auxiliary—with these stated aims:

(a) To promote safety and to effect rescues on and over the high seas and on navigable waters.

(b) To promote efficiency in the operation of motorboats and yachts.

(c) To foster a wider knowledge of, and better compliance with, the laws, rules, and regulations governing the operation of motorboats and yachts, and

(d) To facilitate other operations of the Coast Guard.

The original Reserve Act was revised by Congress on February 19, 1941, when the Coast Guard Auxiliary and Reserve Act was passed. This bill created a new fully military Reserve and renamed the original Reserve the "Coast Guard Auxiliary."

The Auxiliary is specifically declared by statute to be a nonmilitary organization, and the law clearly indicates that membership in the

Auxiliary shall not in itself have any of the attributes of inactive or active military status. This together with the definition of the purposes of the Auxiliary indicates that the Auxiliary's role is entirely within the sphere of the Coast Guard's civil functions and does not extend to the military responsibilities of the service.

The Auxiliary should be viewed primarily as a means of arousing the interest of boat men in the Coast Guard's maritime safety program to the extent that they will place themselves and their facilities in support of these programs by enrolling in the Auxiliary.

To indicate clearly the nonmilitary status of the Auxiliary, the uniform authorized for the Auxiliary was to be sufficiently distinctive so as not to be confused with the uniform of the Coast Guard and Coast Guard Reserve. Officers of the Auxiliary are not designated by military ranks.

Title 14 U.S.C. section 823 provides that the Auxiliary shall be composed of U.S. citizens who are owners of motorboats, yachts, aircraft, and radio stations, or "who by reason of their special training or experience are deemed by the Commandant to be qualified for membership in the Auxiliary." That statement reflects the distinction which exists out of necessity between the preventive and remedial activities of the Coast Guard.

On the preventive side, it is believed that the Coast Guard could better promote safety in the operation of small boats if it could bring into a volunteer, civilian organization persons interested in the safe operation of motorboats and yachts. It has long been recognized that education was the key to achieving this goal. This District offers a 12-lesson boating safety and seamanship course, seven-lesson principles of safe sailing, and three- and one-lesson education courses. We have enrolled over 19,000 persons in courses so far this year. In 1971 there were over 22,000 and in 1970 over 21,000 enrollees.

Another preventive measure is the courtesy motorboat examination program. As of this month, qualified examiners have completed over 32,613 examinations this year, compared with the 62,000 last year, and 50,000 in 1970.

In order to assist the Coast Guard in the performance of remedial activities in the safety field, that is, rescue work and rendering various forms of aid to distressed persons, the amendments to section 3 of the Coast Guard Auxiliary and Reserve Act of 1941 would permit the utilization of privately owned aircraft and radio stations on a basis similar to that now existing with reference to motorboats and yachts.

The Auxiliary has participated in 310 assistance cases on the water this year. There were over 1,900 assists performed last year and over 2,000 in 1970. Nineteen lives have been saved this year, 25 in 1971, and 29 in 1970. The value of property saved has not been compiled so far this year, but over \$17 million was saved in 1971, and over \$12 million in 1970. Interesting operation statistics obtained from Group Sandy Hook reveal that over 1,000 official orders were issued and 11,576 man-hours were expended by auxiliarians during 1971. The equivalent boat-hour cost was \$2 and man-hour cost was \$0.457.

There are other programs supported by the Auxiliary; namely, the academy introduction mission (AIM) and Auxiliary air patrols. Historically, 18 percent of the entering class in the U.S. Coast Guard Academy comes from the States in the Third Coast Guard District.

This year 25 percent of the entering class will come from the third district, and officers have traced the increased percentage to the AIM program. Auxiliaries have flown pollution patrols each weekend over the Long Island Sound and the Hudson River from Memorial Day to Labor Day.

The basic organizational unit of the Auxiliary is the flotilla, which is composed of 10 or more vessels, aircrafts, or radio facilities. A facility is a privately owned motorboat, yacht, aircraft, or fixed radio station.

The division is the next unit in the Auxiliary organization consisting of five or more flotillas located within the same geographical area.

The Auxiliary district, as a unit in the organization of the Auxiliary, corresponds to the Coast Guard district which is composed of all divisions of that given area.

The Third Coast Guard Auxiliary District is comprised of 21 divisions and 150 flotillas. Membership at the end of this year will exceed 5,000 persons.

One of the few ways the Coast Guard has of rewarding the Auxiliary is to heap praise on them for their voluntary, sometimes heroic, and always dedicated service to the recreational boating public. The Auxiliary, particularly Division I, has done a great job for the Coast Guard in this area. However, any organization is only as good as the people within it, and I would therefore like to mention some of those deserving recognition:

Edward Nadler, commodore, Third Coast Guard District;  
 John Zappia, captain, division I;  
 Hans Fredericks, vice captain, Division I;  
 Paul Steinberg, flotilla commander 1-1;  
 Edward Ketcham, vice commander, flotilla 1-1; and  
 Ray Udriis, flotilla 1-5.

Some of the significant contributions made by division I during 1971 include:

4,051 courtesy motorboat examinations;  
 1,025 education course enrollees;  
 180 assistance cases on the water;  
 Four lives saved;  
 \$1,622,120 worth of property saved; and  
 658 patrols.

Flotilla 1, the most outstanding flotilla of Division I, has consistently earned the Director's honor roll plaque and has been selected as the most helpful flotilla by Group Commander, Rockaway.

Annual statistics indicate how many lives are lost and the number of persons injured resulting from boating accidents. The information not available is the number of accidents prevented, the lives saved, and injuries averted through public education courses, and the courtesy motorboat examinations performed each year.

That's the end of my statement, Chairman Clark.

Mr. CLARK. Thank you very much, Captain.

Jim, do you have any questions?

Mr. GROVER. I would like to make a comment, Mr. Chairman. Knowing the fine men that are in this area in the Auxiliary, it is not surprising that Flotilla I receives the honor every year. We kind of expect that here on the Great South Bay, but we are very pleased to hear that.

Mr. CLARK. Are there any questions to Captain Lipuseck?

(No response.)

Captain LIPUSECK. If I may, I would like to introduce Commodore Edward Nadler of the 3d Coast Guard District.

Commodore NADLER. Good morning, sir.

Mr. CLARK. Good morning, Commodore. We are very happy to have you with us.

We now have Edward Nadler, District Commodore of the 3d Northern Area.

You may proceed, Commodore Nadler.

#### STATEMENT OF COMMODORE EDWARD NADLER, 3D COAST GUARD DISTRICT, THIRD NORTHERN AREA

Commodore NADLER. Chairman Clark and Congressman Grover, I'm now most grateful for the interest of the House Merchant Marine and Fisheries Committee. To this end, I have appointed a special committee to focus upon the areas of greatest concern to the Coast Guard Auxiliary, and, obviously, the boating public. This committee will be known as the Congressional Hearing Committee of the U.S. Coast Guard Auxiliary, 3d District, Northern Area. I have selected Paul Steinberg, Flotilla Commander 1-1, as Chairman. His cocommittee members are Edward Ketcham, Vice-Commander Flotilla 1-1; Ray Udris, Flotilla Commander 1-5; and Hans Fredricks, Vice-Captain, Division I. The gentlemen I have mentioned are all under the direction of John Zappia, Division Captain.

I would like to introduce Commander Steinberg, who I feel is more qualified than I to take over at this point.

Mr. CLARK. We are very happy to have you with us, Paul.

Commander STEINBERG. Thank you for having us. We appreciate your interest.

Mr. CLARK. You may proceed, Commander Steinberg.

#### STATEMENT OF COMMANDER PAUL STEINBERG, FLOTILLA COMMANDER 1-1

Commander STEINBERG. Mr. Chairman and Congressman Grover, Captain Lipuseck has presented an excellent picture of the total scope of the Auxiliary; its inception, growth, and areas of primary activity, with specific reference to statistics compiled by its active members demonstrating its continuous value to the Coast Guard and the public.

No organization can grow and remain productive unless it dedicates itself to continuous improvement. In this respect, the U.S. Coast Guard Auxiliary is similar to other organizations. However, the similarity ends here. Permit us to focus on three primary topics:

Special advantages the Auxiliary offers to the regular Coast Guard, the Government, and the public; key areas for rapid growth and constant ongoing improvement; and areas where we feel that the House Merchant Marine and Fisheries Committee can be of major assistance to the Coast Guard Auxiliary and the public.

This document which I submit for the record is called "Auxiliary Vessel Facility Characteristics Report and Offer of Use." For the layman, the word, "Facility," refers to an individual's privately owned and equipped boat which meets special qualifications in performance,

maintenance, and equipment which is offered for use free of charge by the owner to the Coast Guard for the public benefit. With the facility, including special equipment, goes a trained auxiliaryist as captain, a trained crew, special and unique knowledge of local waters and hazards therein, and free volunteer manpower for activities such as search-and-rescue, beach evacuations, general patrol, regatta patrol, as you see here today, hurricane and similar emergencies, and chart corrections. (The chart follows:)

DEPARTMENT OF TRANSPORTATION U. S. COAST GUARD CG-2746 (Rev. 3-67)		AUXILIARY VESSEL FACILITY CHARACTERISTICS REPORT AND OFFER OF USE			
INSTRUCTIONS					TYPE OF REPORT (Check)
1. This form will be completed by each vessel facility owner and presented to his Flotilla Commander. This need only be done once, but a form must be on file with the Director of Auxiliary covering the facility on record before the facility is officially classed as such. Resubmission is only necessary when major changes in vessel characteristics occur.					<input type="checkbox"/> ORIGINAL
2. Sections I and II will be filled out completely by the owner.					<input type="checkbox"/> REVISED
3. The owner may make one copy for his file, if desired. If the facility is offered for use for over 72 hours, the form MUST be submitted in triplicate. The Flotilla Commander will forward the original to the Director of Auxiliary after completing the First Endorsement on the reverse side.					FOR (Year)
4. This form may be filled out with pen and ink.					
SECTION I - OWNERSHIP DATA (Please Print)					
1. NAME OF OWNER		2. FLOTTILLA NO.	3. DIVISION NO.	4. AUXILIARY NO.	
5. ADDRESS (Street, city, state, Zip Code)			6. DISTRICT NO.	7. PERCENTAGE OF OWNERSHIP	
8. NAME AND ADDRESS OF CO-OWNER (Include Zip Code)			9. NAME AND ADDRESS OF SECOND CO-OWNER (Include Zip Code)		
SECTION II - VESSEL CHARACTERISTICS DATA (Please Print)					
1. NAME OF VESSEL		2. VESSEL NO.		3. TONNAGE	4. YEAR BUILT
5. DOCKED AT (Location)			6. MANUFACTURER		7. DESIGN TYPE
8. USE (Check)		9. REGISTERED BY (Check)		10. VALUE (Dollars Only)	
<input type="checkbox"/> A. PLEASURE		<input type="checkbox"/> A. DOCUMENTATION		<input type="checkbox"/> A. HULL	
<input type="checkbox"/> B. COMMERCIAL		<input type="checkbox"/> B. CERTIFICATE OF NUMBER		<input type="checkbox"/> B. EQUIPMENT	
				<input type="checkbox"/> C. MACHINERY	
11. ENGINE MANUFACTURER					
16. HULL					
<input type="checkbox"/> A. TRIN SCREW		<input type="checkbox"/> C. OUT/BOARD		<input type="checkbox"/> E. IN/OUT BOARD	
<input type="checkbox"/> B. SINGLE SCREW		<input type="checkbox"/> D. IN/BOARD		<input type="checkbox"/> F. WOOD	
<input type="checkbox"/> F. TYPE ENG.		<input type="checkbox"/> G. HORSEPOWER		<input type="checkbox"/> H. TYPE FUEL	
<input type="checkbox"/> I. TYPE CONT.		<input type="checkbox"/> J. YR. INST.		<input type="checkbox"/> K. OPEN CONSTRUCTION	
<input type="checkbox"/> L. TYPE ENG.		<input type="checkbox"/> M. HORSEPOWER		<input type="checkbox"/> N. CLOSED CONSTRUCTION	
<input type="checkbox"/> O. TYPE FUEL		<input type="checkbox"/> P. YR. INST.		<input type="checkbox"/> Q. LENGTH	
<input type="checkbox"/> R. TYPE CONT.		<input type="checkbox"/> S. YR. INST.		<input type="checkbox"/> T. DEAM	
<input type="checkbox"/> U. TYPE ENG.		<input type="checkbox"/> V. HORSEPOWER		<input type="checkbox"/> W. DRAFT	
<input type="checkbox"/> X. TYPE FUEL		<input type="checkbox"/> Y. YR. INST.		<input type="checkbox"/> Z. METAL	
<input type="checkbox"/> AA. TYPE CONT.		<input type="checkbox"/> AB. YR. INST.		<input type="checkbox"/> AC. FIBERGLASS	
19. ACCOMMODATIONS (Check or Check and Complete)					
<input type="checkbox"/> A. YES		<input type="checkbox"/> C. NO. OF BUNKS		<input type="checkbox"/> D. NO. OF HEADS	
<input type="checkbox"/> B. NO		<input type="checkbox"/> E. PERMANENT		<input type="checkbox"/> F. YES	
<input type="checkbox"/> G. YES		<input type="checkbox"/> H. NO		<input type="checkbox"/> I. NO	
<input type="checkbox"/> J. NO		<input type="checkbox"/> K. YES		<input type="checkbox"/> L. NO	
12. TANK CAPACITY (In Gallons)					
A. WATER		B. FUEL		C. OTHER (Specify)	
13. SPEED		A. KNOTS		B. GALLONS FUEL USED PER HOUR	
<input type="checkbox"/> (1) ECONOMICAL		<input type="checkbox"/> (2) CRUISING		<input type="checkbox"/> (3) MAXIMUM	
14. AUXILIARY GENERATOR (If Installed)					
A. OUTPUT CAPACITY/ (in K.W.)		B. FUEL TYPE		C. DATE INSTALLED	
15. BATTERY SYSTEM		16. HEATING/AIR CONDITIONER		22. NAVIGATIONAL DEVICES (Check and Complete)	
<input type="checkbox"/> A. BY		<input type="checkbox"/> B. GENERATOR		<input type="checkbox"/> A. DEPTH FINDER	
<input type="checkbox"/> C. 12V		<input type="checkbox"/> D. ALTERNATOR		<input type="checkbox"/> B. DIR. FINDER	
<input type="checkbox"/> E. YES		<input type="checkbox"/> F. NO		<input type="checkbox"/> C. AUTO. PILOT	
<input type="checkbox"/> G. NO		<input type="checkbox"/> H. YES		<input type="checkbox"/> D. COMPASS	
<input type="checkbox"/> I. YES		<input type="checkbox"/> J. NO		<input type="checkbox"/> E. RADAR	
<input type="checkbox"/> K. NO		<input type="checkbox"/> L. YES		<input type="checkbox"/> F. LORAN	
<input type="checkbox"/> M. NO		<input type="checkbox"/> N. YES		<input type="checkbox"/> G. OTHER (Specify)	
<input type="checkbox"/> O. NO		<input type="checkbox"/> P. YES		22. LIFEBOATS AND LIFERAFTS (Describe)	
<input type="checkbox"/> Q. NO		<input type="checkbox"/> R. YES			
<input type="checkbox"/> S. NO		<input type="checkbox"/> T. YES			
<input type="checkbox"/> U. NO		<input type="checkbox"/> V. YES			
<input type="checkbox"/> W. NO		<input type="checkbox"/> X. YES			
<input type="checkbox"/> Y. NO		<input type="checkbox"/> Z. YES			
<input type="checkbox"/> AA. NO		<input type="checkbox"/> AB. YES			
<input type="checkbox"/> AC. NO		<input type="checkbox"/> AD. YES			
<input type="checkbox"/> AE. NO		<input type="checkbox"/> AF. YES			
<input type="checkbox"/> AG. NO		<input type="checkbox"/> AH. YES			
<input type="checkbox"/> AI. NO		<input type="checkbox"/> AJ. YES			
<input type="checkbox"/> AK. NO		<input type="checkbox"/> AL. YES			
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<input type="checkbox"/> AO. NO		<input type="checkbox"/> AP. YES			
<input type="checkbox"/> AQ. NO		<input type="checkbox"/> AR. YES			
<input type="checkbox"/> AS. NO		<input type="checkbox"/> AT. YES			
<input type="checkbox"/> AU. NO		<input type="checkbox"/> AV. YES			
<input type="checkbox"/> AW. NO		<input type="checkbox"/> AX. YES			
<input type="checkbox"/> AY. NO		<input type="checkbox"/> AZ. YES			
<input type="checkbox"/> BA. NO		<input type="checkbox"/> BB. YES			
<input type="checkbox"/> BC. NO		<input type="checkbox"/> BD. YES			
<input type="checkbox"/> BE. NO		<input type="checkbox"/> BF. YES			
<input type="checkbox"/> BG. NO		<input type="checkbox"/> BH. YES			
<input type="checkbox"/> BI. NO		<input type="checkbox"/> BJ. YES			
<input type="checkbox"/> BK. NO		<input type="checkbox"/> BL. YES			
<input type="checkbox"/> BM. NO		<input type="checkbox"/> BN. YES			
<input type="checkbox"/> BO. NO		<input type="checkbox"/> BP. YES			
<input type="checkbox"/> BQ. NO		<input type="checkbox"/> BR. YES			
<input type="checkbox"/> BS. NO		<input type="checkbox"/> BT. YES			
<input type="checkbox"/> BU. NO		<input type="checkbox"/> BV. YES			
<input type="checkbox"/> BW. NO		<input type="checkbox"/> BX. YES			
<input type="checkbox"/> BY. NO		<input type="checkbox"/> BZ. YES			
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<input type="checkbox"/> CI. NO		<input type="checkbox"/> CJ. YES			
<input type="checkbox"/> CK. NO		<input type="checkbox"/> CL. YES			
<input type="checkbox"/> CM. NO		<input type="checkbox"/> CN. YES			
<input type="checkbox"/> CO. NO		<input type="checkbox"/> CP. YES			
<input type="checkbox"/> CQ. NO		<input type="checkbox"/> CR. YES			
<input type="checkbox"/> CS. NO		<input type="checkbox"/> CT. YES			
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<input type="checkbox"/> CW. NO		<input type="checkbox"/> CX. YES			
<input type="checkbox"/> CY. NO		<input type="checkbox"/> CZ. YES			
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<input type="checkbox"/> FK. NO		<input type="checkbox"/> FL. YES			
<input type="checkbox"/> FM. NO		<input type="checkbox"/> FN. YES			
<input type="checkbox"/> FO. NO		<input type="checkbox"/> FP. YES			
<input type="checkbox"/> FQ. NO		<input type="checkbox"/> FR. YES			
<input type="checkbox"/> FS. NO		<input type="checkbox"/> FT. YES			
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<input type="checkbox"/> FW. NO		<input type="checkbox"/> FX. YES			
<input type="checkbox"/> FY. NO		<input type="checkbox"/> FZ. YES			
<input type="checkbox"/> GA. NO		<input type="checkbox"/> GB. YES			
<input type="checkbox"/> GC. NO		<input type="checkbox"/> GD. YES			
<input type="checkbox"/> GE. NO		<input type="checkbox"/> GF. YES			
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<input type="checkbox"/> HY. NO		<input type="checkbox"/> HZ. YES			
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<input type="checkbox"/> IC. NO		<input type="checkbox"/> ID. YES			
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<input type="checkbox"/> II. NO		<input type="checkbox"/> IJ. YES			
<input type="checkbox"/> IK. NO		<input type="checkbox"/> IL. YES			
<input type="checkbox"/> IM. NO		<input type="checkbox"/> IN. YES			
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<input type="checkbox"/> IQ. NO		<input type="checkbox"/> IR. YES			
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Reverse of CG-2746 (Rev. 3-67)

SECTION III - OFFER OF USE			
<p>INSTRUCTIONS. Before completing this section, the facility owner should be thoroughly familiar with implications of offering a facility for use by the Coast Guard. These are explained in the Auxiliary Manual, CG-305. Facilities may be offered for use in two categories: USE UNDER 72 HOURS, or USE FOR OVER 72 HOURS. In each of these cases this form is processed differently:</p> <p>a. DURATION UNDER 72 HOURS: Check the form as applicable and sign. Forward the original to the Director of Auxiliary via the Flotilla Commander. A copy may be retained by the owner if desired.</p> <p>b. DURATION OVER 72 HOURS: In this case, prepare the form in triplicate. Forward all three copies to the Director of Auxiliary via the Flotilla Commander. If the Coast Guard accepts the facility for such use, Section V will be completed by the Coast Guard and a CGA number assigned. The district will retain the original and one copy will be furnished to the Commandant (OA) and to the owner.</p>			
DURATION OF USE		DURATION OF OFFER	
UNDER 72 HOURS		UNTIL WITHDRAWN	NONE
OVER 72 HOURS		FROM PRESENT DATE TO	NOTED BELOW
LIMITATIONS			
TYPE OF USE		OTHER (Specify below)	
REGATTA PATROL	SEARCH AND RESCUE		
SAFETY PATROL	FLOOD AND HURRICANE		
SECTION IV - STATEMENT (Owner check and sign)			
<input type="checkbox"/> The above facility is hereby offered for use, and under the conditions above specified in accordance with the provisions of applicable law and regulations at the time the facility is accepted, used, and released.			
<input type="checkbox"/> The above facility is NOT offered for use.			
NAME(S) OF OWNER(S)		FLOTILLA	DIVISION
SIGNATURE(S) OF OWNER(S)		DISTRICT	
		DATE	
FLOTILLA COMMANDER'S ENDORSEMENT			
To: Director of Auxiliary, _____ CG District			
From: Flotilla Commander, Flotilla _____			
1. The above report has been checked, and is considered to be correctly filled out in accordance with instructions.			
DATE FORWARDED TO DIRECTOR	SIGNATURE OF FLOTILLA COMMANDER		
SECTION V - ACCEPTANCE FOR OVER 72 HOURS (District Office use)			
ENDORSEMENT 1	PLACE	DATE	
The tender of the above facility and equipment is acknowledged with appreciation and the facility is hereby assigned number CGA _____ and accepted on behalf of the United States Coast Guard with reservation of the rights of the owner(s) and the Coast Guard to arrive at fair and equitable valuations thereof.			
ACCEPTING OFFICER (Name and Grade)			
ENDORSEMENT 2	PLACE	DATE	
Reviewed and Approved, _____			
COMMANDER, _____ COAST GUARD DISTRICT			
SECTION VI - RECORD OF COAST GUARD USE FOR OVER 72 HOURS AND RETURN TO OWNER(S) (District Office use)			
RECEIPT BY COAST GUARD			
DATE	PLACE	PURPOSE	SIGNATURE AND TITLE OF CG OFFICER
RETURN TO OWNER(S)			
DATE	PLACE	DAMAGE OR LOSS OF EQUIPMENT	SIGNATURE(S) OF OWNER(S)

Commander STEINBERG. With the tremendous increase in recreational boating, the role of the U.S. Coast Guard Auxiliary is becoming even more acute. We need more men, more boats, more equipment, stepped up training programs, and improved training programs. Let's briefly take a look at the basic type of training which is mandatory for each new Auxiliary member to undergo before being classified as basically qualified as a regular auxiliaryist and permitted to participate as a qualified member with the understanding that the auxiliaryist will offer his vessel for use. First is basic seamanship.

Then comes piloting and basic search-and-rescue procedures. For example, on the wall over there you see what we call a grid chart which covers the grid area from Howell Point in Lindenhurst to Howell Point in Bellport. As noted, this particular chart is divided into approximate nautical square miles, following the longitude and latitude demarcations. It enables us to have a common link with the regular Coast Guard at the station, the Marine Police, and the Civil Air Patrol because all of these different organizations utilize the same charts. This chart also can pinpoint very easily areas in the bay without having to necessarily have an acute knowledge of some of the colloquial references to geographical locations. This chart came about through a joint effort between Auxiliary members and the regular Coast Guard. The chart has been named after one of the regular Coast Guard lieutenants, and we call it the "Aliff" Grid. Without the help of Lieutenant Aliff and Lieutenant Daniels, of Fire Island, this type of cooperation and the resulting chart would never have been available.

In addition to basic search-and-rescue procedures, we cover basic radio procedures related to Coast Guard operations. There is, of course, also advanced training in all of the above and other pertinent subjects.

The public education courses described by Captain Lipusek together with the courtesy motorboat examination program highlights a few of the special advantages the Auxiliary offers to the Coast Guard and public. Our Auxiliary committee recognizes these areas as those requiring the most attention to maintain constant growth and improvement.

We have touched upon special advantages and areas for rapid growth and ongoing improvement, but what about some of the stumbling blocks, and where specifically can we request assistance from the Merchant Marine and Fisheries Committee?

It should be stated, however, that with the caliber of men as exemplified by those here today, even without special help, the Auxiliary will continue to strive to aid the Coast Guard and the public in making our waterways safe and secure. With more help, particularly from the Merchant Marine and Fisheries Committee, we can do even a better job.

Now briefly, let's look at some typical situations involving basic incentive problems as well as the need for equipment.

An instructor teaching the New York State boating safety course has the protection of having himself and the students covered by insurance while instructing. An auxiliariest while instructing the public in boating safety has no such protection. When he is teaching in an area other than a public institution for learning where basic insurance coverage is often available, he is on his own. We respectfully enlist the aid of the Merchant Marine and Fisheries Committee in this regard. There has been a tremendous effort to develop new boating courses. New slides and texts are currently being used. However, in many areas the Auxiliary either has to borrow slides or motion picture equipment, or go without. The films solely due to shortages in budgets are often antiquated, poorly done, often relate to entirely different boating environments than where they are shown, and are in short supply. Visual aids are very few and also in short supply, not because of the lack of desire and the attempt to make these available, but primarily

due to shortages in budgets. Most flotillas make their own, and we need help there.

In reference to operations, there is a growing concern on the part of active auxiliaries as to potential liabilities involved in rescue work. Much of the subject generally relates to what is referred to as the Good Samaritan Act. Our experience as auxiliaries in speaking to attorneys who often are also auxiliaries is that if we talk to six different lawyers, this often results in six different opinions as to the merits of this legislation.

I think it is important at this time to delineate the three types of patrols an auxiliary makes. The first is under official orders. This occurs when through the local Coast Guard station an auxiliary and his facility are placed under orders, and therefore they are covered as Captain Parker has very clearly indicated. Many of the patrols, however, fall into the other two categories. These are voluntary flotilla patrols scheduled by the flotilla operations officer and voluntary individual patrols scheduled by the individual Coast Guard auxiliary members. Under these conditions he has no such coverage of any type. It is not unusual for an auxiliary on a voluntary patrol making an assist, saving in some cases lives and in most cases valuable equipment, to experience some damage to his own craft. Still on his own, as is the case on voluntary patrols, if he has expensive hull insurance he puts in a claim. On occasion he soon finds his insurance underwriter has tossed him out due to excessive claims. This very auxiliary may have saved that particular company thousands of dollars directly due to his activity as an auxiliary. While under Coast Guard orders, an auxiliary's risks in this respect are nullified. Keep in mind, if you will, the figures that Captain Lipusek had indicated, 45 cents per man-hour. This is a pretty good bargain.

A dewatering pump can save a life, very true. If there is a way for the Merchant Marine and Fisheries Committee to investigate and search out Government equipment applicable to auxiliary activities which could be given or loaned to auxiliaries, there are hundreds of flotillas in need of such material.

As previously mentioned, an effort is underway to expand the auxiliary air arm. Here in central Long Island many joint search-and-rescue and basic safety patrols have been successfully conducted between the Civil Air Patrol and the Coast Guard auxiliary. This is perhaps unique to this particular area due primarily to the nature of the waterways that we must guard. The difficulty in communicating between aircraft and surface vessels could be relieved if frequencies could be made available which both organizations could utilize. Perhaps the Merchant Marine and Fisheries Committee could investigate this area.

Outside we have brought over today for your inspection some auxiliary facilities. At this time, Vice Commander Edward Ketcham, flotilla 11, will pass on some very pertinent remarks concerning the auxiliary patrol boat on display outside.

Mr. CLARK. Thank you very much for your fine statement. We have been doing some writing here, putting down your suggestions, and I know that we are going to be using some of them.

Mr. GROVER, do you have any questions?

Mr. GROVER. Yes; Mr. Chairman.

This good samaritan law disturbs me a little bit if the language of the liability exemption is predicated on your acting in this matter as an ordinary, reasonable, and prudent man would have acted under the same or similar circumstances. Having been a lifeguard over at Cedar Beach in my younger days, I know how it can pick up and get nasty and even today could be dangerous. It seems to me that an ordinary, prudent man would not put his boat in the water under some circumstances, so that risks have to be taken if lives are to be saved in some circumstances. It would discourage you from using your boat and risking your life under a given circumstance where the ordinary, reasonable, and prudent man is going to stay on the shore.

I am glad that you have stressed this point, and perhaps Captain Parker in reviewing this can come up with some language. I think, Mr. Chairman, we should tie it in with such action as we would normally expect of a regular Coast Guardsman in the line of duty because these gentlemen are subjected to the same circumstances, and they have adequate expertise to take care of themselves under perilous circumstances.

Mr. CORRADO. Is there any record of anybody operating as a Coast Guard auxiliary person out of your waters here and having been sued for doing so?

Captain PARKER. I know of no one, sir. But coming to mind is a case where a Coast Guard auxiliary went to the assistance of someone—I can't even remember what State it occurred in or the name of his insurance company—and damaged his boat while not being under orders. He was not eligible for repair under title 14 of the Coast Guard, and his insurance company cancelled his insurance. The Coast Guard's chief counsel went to bat for him, and we have the letter in the file to the insurance company, and the person was reinstated. I am fairly sure this was before the Federal Boat and Safety Act of 1971, but this can occur. The question occurs to me, sir, that it says here, "Shall not be held liable for any civil damages." I wonder what happens when your insurance company cancels your insurance. It certainly is a real risk, and that could occur not only in the case of a Coast Guard auxiliary, but Mr. John Q. Public who goes to the assistance of someone. He could get his insurance cancelled.

Mr. GROVER. Mr. Chairman, we had a similar problem in the State legislature with the Good Samaritan law, generally with regard to medically trained personnel on the scene of an accident. I don't know the present status of that law, but at one time a doctor or nurse or someone with expertise in treating people was apprehensive because we didn't have a Good Samaritan law and he could be held to the highest degree of liability by someone who possibly didn't have just cause to hold him for that. But this is still an area which troubles me, and I think we should get a good look at it through Captain Parker's office.

Mr. CORRADO. Over the few years that we worked on this bill, we struggled with this provision for a lot of these reasons just mentioned. We finally ended up with that ordinary, reasonable, and prudent man language, because it was boiler plate legal language. I am not suggesting that it cannot be improved upon or changed. But the idea was to try to protect these people, and this is what we thought at

the time would be the best thing. I think your suggestion of holding them to the degree of the Coast Guardsman is probably better.

Mr. GROVER. This is applicable to the ordinary, prudent man out in the boat who is not a Coast Guard auxiliary, but this law still applies to the Coast Guard auxiliary, so that we may have to make a special specification under those circumstances.

Mr. CLARK. Thank you very much, gentlemen.

Vice Commander Ketcham, we are glad to have you with us this morning. Will you please give your name and address for the record.

**STATEMENT OF EDWARD KETCHAM, VICE COMMANDER, FLOTILLA  
11, U. S. COAST GUARD AUXILIARY**

Vice Commander KETCHAM. Thank you, Mr. Chairman and Congressman Grover.

Gentlemen, to conclude this committee's presentation, I refer to the term mentioned earlier—operations. Operations simply means getting things done out on the water. Getting things done out on the water requires properly found vessels handled by trained and motivated personnel.

Out in front of the club we have moored four auxiliary vessels. We invite everyone present to look them over after this hearing adjourns. They are representative as to size, large or small, and per Auxiliary requirements for operational facilities are equipped substantially better than Federal or State law requires. They are skippered by personnel versed in Coast Guard practices, and when under orders, are a true extension of the Coast Guard. These vessels are radio-equipped and under proper conditions are qualified to utilize Coast Guard radio frequencies and in every sense be a bonafide link in Coast Guard communications. Three of these vessels are credited with saving lives. One, a 17-foot outboard has completed 42 assists this summer of which 18 involved passing a towline. Seventy-two people were aided in the process and the property protected is estimated at \$186 million. The cost to the Government was less than \$50.

Another, the 38-foot *Omega* is credited with 45 assists this year so far, helping 179 people, actually towing 34 boats, and with property value estimated at over \$700,000. Cost to the Government is zero.

Gentlemen, it is obvious that the extent of these activities relate directly to skipper motivation, and I stress the word, "Motivation," in capital letters.

The Congress of the United States created the U. S. Coast Guard Auxiliary. This committee believes that the Congress can enhance the usefulness of the Auxiliary by providing the means of better motivating the volunteers that make up this nonvolunteer organization.

Thank you.

Mr. CLARK. Thank you very much for your statement.

Mr. GROVER, do you have any questions?

Mr. GROVER. I have just one thing I would like to point out. It is not really relevant to what Commander Ketcham said, but I should have suggested it when Captain Parker and Commander Steinberg completed their discussions.

I wonder, Mr. Chairman, would it be possible or could you look into the current regulation or applicable law to see whether we could have

the Coast Guard do an inventory at Curtis Bay and other large Coast Guard stations of any surplus or excess material or equipment of whatever kind they have and have that inventory submitted to Captain Parker. Captain Parker could in turn get it out to the various regions on whatever priority basis they would establish to use that equipment. If there is no such regulation or law, we will get a regulation or some legislation, but we would need that inventory to see whether it is feasible to have such an arrangement.

Captain PARKER. There is no inventory, I'm sure, sir, made available to the Coast Guard Auxiliary, but there is authorization.

Mr. GROVER. Mr. Chairman, I think it might be, in order if we could suggest to the Commandant that such an inventory should be made available. This material and equipment is gathering dust when it could be going out and saving lives.

Mr. CLARK. And along with it, those that need it should make their requests to headquarters.

Mr. GROVER. They won't know what to request if they don't know what's there. Once the inventory is made, they could make requests when the priority is established.

Mr. CLARK. I know we have representatives of the Suffolk County Police present today. At this time, if any of them or any other groups or anyone here attending wants to submit statements for the record, this record will be kept open for the next 10 days. Of course, if there is anyone desirous of speaking at this time, we will be very happy to listen to him.

Mr. YOUNG. My name is Ray Young. I am vice commodore of the Long Island Yacht Club in Babylon. We have a membership of 230, with approximately 125 to 150 registered yachts from small crafts to very, very large, expensive boats. I think it is appropriate to mention what the Auxiliary means to us as a yacht club. We have approximately 70 children between the ages of 8 and 11 or 12 taking sailing instructions daily. We also have a very active power fleet—by active, I mean taking cruises and socializing—and a very active sailing regatta group. The total amount of our yachts do include over 40 sailing auxiliaries and approximately 51 design sailboats. Speaking for our race chairman, we are very grateful to the Auxiliary and it's an insurance policy for us. We know that at any time that we have a regatta or we have children on the water, that they are there and they are there until the last boat comes back in.

Thank you, Mr. Chairman, and Congressman Grover.

Mr. CLARK. Thank you very much, sir.

Do we have anyone else?

Mr. POUCEL. My name is Donald Poucel. I am the president of the Babylon Tuna Club. Unfortunately, I haven't had the time to prepare a statement like the other gentlemen here, but I do have some questions and suggestions I would like to make.

First, I would like to know what is the jurisdiction of the Coast Guard as far as our ocean and our bay is concerned? Where do you draw the line? Where does the Coast Guard give up and where do the Suffolk County police take over? Will somebody please answer.

Mr. GROVER. I am under the impression, Mr. Poucel, that the Coast Guard has jurisdiction over all the navigable waters of the country

which includes right up the creek until you can't get under the little bridge. Of course, they are enforcing in the main Federal statutes and Federal boating safety regulations. I can't speak for the Suffolk County police, but they are enforcing in the main the local and county and State statutes. There may be some dual jurisdiction in certain types of violations.

Mr. CLARK. There are areas where the local police and the Coast Guard exercise concurrent jurisdiction.

Mr. POUCEL. If you will look out here to your right out where those clam boats are, there is an abandoned electric light cable about 4 inches in diameter. A 25-foot brandnew boat came through there the other day, maybe 3 weeks ago, a month ago. He got tangled up. Apparently this thing came up in a big loop, it was a deep V in this cable. It happened around 10:30 in the morning. The Coast Guard came over there and after an hour or an hour and a half abandoned the people there, left them there still tied up in this cable. Then, the Suffolk police came in. I know about this because I was involved in it since my son eventually went out there and did the job for them. The Suffolk police went out there and stayed with them for a couple of hours. Then, they abandoned them. Why should we leave people out there stranded? These fellows were stranded. They were brandnew to boating for one thing. They were black for another. They had no idea where they were outside of the fact that they were headed for the Babylon dock where they have a space down there. Why didn't the Coast Guard cut through the cable so they could be towed in? My son cut the cable. He couldn't do it with a pair of cutters. I mean with the big cutters used by the telephone company which I was able to get. They had to hacksaw it. That cable is still there. People are still getting tangled up in it. We had an in-shore contest last Sunday and one of our boats hit the same cable. Who do I turn to to ask that something be done about it?

Mr. CLARK. I think we will discuss this with the Coast Guard after this meeting and with the police, and we will see what arrangement could be made.

Mr. POUCEL. Thank you. May I go on?

Mr. CLARK. Yes. Please.

Mr. POUCEL. The other thing—the other day, maybe it's 2 weeks ago now, a very unfortunate accident happened up here by the bridge. A 30-foot Pacemaker apparently loaded with children and people, I think there were four adults, four or five children, including a boy of 17, apparently standing against the bow rail, and for some reason, I don't know, probably somebody else's wake, the boat bounced. The boy went overboard, was hit by the propeller, and died. I also know that the Coast Guard does have a new law prohibiting the hanging of feet and whatnot over a boat under power or under sail, whatever it happens to be. Now, nobody seems to pay any attention to this. You know and I know too that there are boats out there with one or two life preservers aboard and seven or eight kids on board, too. We know that the Coast Guard laws are not being followed. I would like to make this suggestion. You have got a big Auxiliary, you have got a wonderful outfit. Why not get the Auxiliary to do a little bit of patrolling, take down some numbers and names, and eventually come up with a citation for the safety of the children aboard the boats of the people involved. If anything like what happened to the Pacemaker ever happened to me, it would break my heart. I would be through with the

water and probably forget about ever going on the water again. I think that the Coast Guard Auxiliary in their daily rounds, if you want to call it that, or their patrolling, could do a big job for the small boat sailor if they would take down numbers and names, give them to their squadron leaders and eventually come up with a citation that would cost these people some money. Then, maybe, we would get a little bit of safety on the water.

If there are any other people here who have suggestions, I would like to have them submit their statements for the record.

We will now adjourn the meeting for the inspection of the Auxiliary equipment.

(The following information was supplied for inclusion in the record:)

NARRASKETUCK YACHT CLUB,  
*Amityville, Long Island, N.Y., September 4, 1972.*

COMMITTEE ON MERCHANT MARINE AND FISHERIES,  
*U.S. House of Representatives, Room 1334, Longworth House Office Building,  
Washington, D.C.*

(Attention of Hon. James R. Grover).

DEAR SIR: In accordance with our conversation at the Babylon, L.I., Yacht Club on August 25, 1972 upon the occasion of the hearings conducted by the Coast Guard Subcommittee, the following testimony is offered on behalf of the Narrasketuck Yacht Club of Amityville, New York.

Being an organization devoted exclusively to the promotion of sailing activities, primarily (but not exclusively) local, our interface with Coast Guard and Coast Guard Auxiliary operations is substantially negligible. However, we are deeply concerned with problems in the area of safety and, in this respect, we are alarmed by what we consider to have become a clear, present, and increasing danger within the past two or three years.

We will be most happy to provide any assistance to your Committee which in our relatively restricted waters (see enclosed copy of the applicable Nautical Chart)<sup>1</sup>. These craft seems to be operated primarily by very young people and in a borderline state of control (hulls continuously leaping clear of the water—bouncing, yawing, sliding on turns). The operators of sailboats and other slow speed boats would have no chance at all of taking adequate evasive action when required, and a collision at the speeds involved would almost certainly be very serious in human as well as property terms. It seems to be only a matter of time until a real tragedy occurs.

We urge your attention to this problem, with the criteria for control being the density of the boat population and the size of the navigable water areas involved.

We will be most happy to provide any assistance to your Committee which may be within our capabilities.

Very truly yours,

HERBERT M. BUERGER,  
(For the Board of Governors,  
Narrasketuck Yacht Club).

REMARKS BY LT. DANIELS ON INSPECTION TOUR OF FIRE ISLAND COAST GUARD STATION

The Station and its family housing, which is located close by, was completed and commissioned in the Fall of 1969. The Stations' missions consist of search and rescue, recreational boating safety and aids to navigation and light stations. With this the Station has assigned the following boats to complete its mission:

- 46' Busl Boat (Buoy Tender).
- 44' MLB Boat (lifesaving vessel which can go to sea in all conditions).
- 40' utility boat—wooden.
- 30' UTM (Utility medium size—plastic).
- 14' SKL—plastic—(Boston Whaler).
- 12' SKL—plastic—(Boston Whaler).

<sup>1</sup> Chart was placed in subcommittee files.

During search and rescue all of the above mentioned vessels are utilized with the exception of the 46' buoy boat. The area of responsibility in regard to search and rescue covers approximately 40 square miles, of which 20 miles are in the Great South Bay, commencing on the westward boundary at Howells Point to an eastward boundary of Howells Point. Approximately 20 miles remaining are in the ocean site. The Station has a complement of 36 men and at the present time there are 31 men attached. Under search and rescue for calendar year 1971 this unit responded to 652 cases, totalling 1,264 manhours. Persons on board in the above mentioned cases were 1,831. Lives saved during this period were 48. In the Suffolk County area for the calendar year 1970, which were the latest statistics available, records indicate there are 64,020 boats registered and at the same time the State of New York had 390,106 boats registered.

Under recreational boating safety—In every case that the unit responded to, the vessel in distress was boarded and checked for safety equipment on board. In addition all vessels noted with a violation are boarded.

Aids to Navigation—there are 111 aids that this unit is responsible for maintaining on an annual basis. Of these there are 43 lighted aids; 60 un-lighted, meaning nuns and cans; 11 shore aids, 3 jetty lights; 2 fog signals, and 1 lighthouse—the Fire Island Lighthouse which also has a radio beacon. In addition there is an excess of 200 private aids to be inspected annually, plus five bridges. During the winter season the 43 lighted aids have to be removed due to ice conditions and replaced with ice buoys. The Stations' area of responsibility for aids to navigation commences at Buoy #30 in the East Channel off of Nicholls Bay and extends westward to East Rockaway Inlet—this covers 3 inlets—Fire Island Inlet, Jones Inlet and East Rockaway Inlet.

A tour was made of the station in its entirety including a tour of the Stations garage and the boathouse during which each ones functions were explained. In addition it was explained that there are 13 family houses located next to the Station which are occupied by men attached to the Fire Island Coast Guard Station or personnel attached to Group Rockaway as the situation demands.

In addition there are two families living in the family housing unit at the Fire Island lighthouse which is located approximately 2 miles east of the Fire Island Station.

That concluded the tour.

(The hearing was adjourned at 11:10 a.m.)

## COAST GUARD FIELD ACTIVITY

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### Staten Island, N.Y., Coast Guard Problems

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THURSDAY, SEPTEMBER 28, 1972

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON MERCHANT MARINE AND FISHERIES,  
SUBCOMMITTEE ON COAST GUARD,  
COAST AND GEODETIC SURVEY, AND NAVIGATION,  
*Staten Island, N.Y.*

The Subcommittee on Coast Guard, Coast and Geodetic Survey, and Navigation, convened, pursuant to notice, at 2 p.m., in the Richmond Borough Hall, room 220, Staten Island, N.Y., Hon. Frank M. Clark (chairman of the subcommittee) presiding.

Mr. CLARK. The meeting will please come to order.

These hearings here today in Staten Island have been called under my chairmanship of the Coast Guard Subcommittee of the Committee on Merchant Marine and Fisheries, U.S. House of Representatives, in order to obtain some information regarding the east coast major Coast Guard bases, and the St. George, Staten Island base, in particular.

In this connection, I would hope during the course of these hearings that we might get into the record the following types of information:

A brief review of the major east coast Coast Guard bases and operations which have an influence on the New York area bases;

The current operational, logistical, and administrative support measures of, and the facilities available at the St. George and Governor's Island Coast Guard bases, repair and maintenance to be emphasized;

Short- and long-range plans for the utilization of these bases;

Funding expenses; and

What options are available concerning the activities of the Coast Guard and other governmental agencies in the east coast area which might be taken over by the St. George base, so as to better utilize its facilities—and advantages and disadvantages, and the estimated costs associated with these trade-off options.

In short, we are attempting to ascertain the future of the St. George base.

Before hearing the witnesses, I would like to make it clear that I am up here in Staten Island chairing these important hearings at the request of my good friend, Congressman Jack Murphy. These hearings today, of course, are being held with the full consent and permission of the chairman of the House Committee on Merchant Marine

and Fisheries. As you all know, Jack Murphy was elected to the Congress in the 88th Congress and has been reelected ever since. I have had the great pleasure of serving with Jack on the Merchant Marine Committee these many years and I can attest to the fact that he is a mainstay not only on our committee, but also on the House Interstate and Foreign Commerce Committee, where he also serves.

I can tell you that Jack is looked up to by his colleagues in these committees as an excellent Congressman and legislator of great ability and judgment. I know that Jack does as fine a job for his constituents as he does in the Halls of Congress. I would like to commend my able colleague in Congress, Jack Murphy, for his initiative in having these hearings held here today in Staten Island concerning the future of the St. George Coast Guard Base. This is one more example of his outstanding service on this committee, where he has been constantly attentive to the merchant marine, environmental and Coast Guard issues as they relate to the New York area. I am convinced that Congressman Murphy will be reelected by his constituency because of the fine job he has done over the years for his district, for the Congress, and for the Nation. I am most sincere when I say that the country needs more men like Jack Murphy in Congress and it is a pleasure to be here today in Staten Island with him as these hearings begin.

We will now hear from our first witness, but first of all, Jack Murphy.

Mr. MURPHY. Thank you, Mr. Chairman; that was certainly a very flattering statement. You forgot one thing, and that is that we both served on the Public Works Committee together back in the early days of the 88th and 89th Congress.

I want to welcome Congressman Clark to Staten Island. Congressman Clark has been here before when he chaired the small boat safety hearings 2 years ago, not just at our community college, but also down in the Great Kills Yacht Basin. He has a very deep interest not just in the Coast Guard, but also as the reigning Democrat on the Rivers and Harbors Committee of the House Public Works Committee, and we are fortunate that that bill was just reported from the committee yesterday and will come to the Congress next week. It has a tremendous impact on this port and on this city and on navigation in general.

Congressman Clark's expertise is in the area of Coast Guard and, of course, in the area of navigation on rivers and harbors of this country and areas throughout the world that the Coast Guard functions. You must realize that we are not just charged with the responsibility for safety here in the United States, but on a worldwide basis. Congressman Clark is so well schooled in these areas on a worldwide basis. We are privileged to have him here on Staten Island.

We met with the borough president earlier and we are happy that he has come here to undertake an independent study of Coast Guard installations on our east coast. Of course, no study of that nature would be profitable unless we started in probably the finest and best deep water port in the world and the finest and best deep water Coast Guard facility, which is the St. George base.

I want to point out that the Coast Guard presently is in the process of disposing of the St. George base, and I feel there are good and sufficient reasons why this process should be stopped. For one thing, the Coast Guard's operation of Governor's Island, the Coast Guard was

fortunate in receiving Governor's Island from the Federal Government. Governor's Island historically was the headquarters of the 1st U.S. Army. That headquarters for budgetary reasons was consolidated at Fort Meade with the 2d Army. The Army has experienced difficulty in administering to States in New England, New York, and New Jersey from a headquarters that far away. But the Coast Guard by law had first choice on military property disposal because it is a uniform service, even though it was part of the Treasury Department. Now, the Coast Guard by virtue of a congressional act, is part of the Department of Transportation, but is a uniform service and therefore has title and is using Governor's Island.

To make it appropriate for Coast Guard activity, additional construction was necessary to accommodate many Coast Guard ships. The Coast Guard rightfully is trying to consolidate its operations at Governor's Island. It moved in from New London and other areas of the country, Coast Guard training and responsibility, schools and expanded housing.

We will present figures as to the increased population of Governor's Island vis-a-vis its peak Army population. We will present evidence to show that Governor's Island has reached the saturation point from the point of view of civilian and Coast Guard personnel.

In fact the Coast Guard now is thinking of changing some of its long-range plans so that some of its activities will leave this city and this area and go to other locations. I feel we have the needed future space right here at St. George. The Coast Guard admits this is one option available, rather than selling this valuable facility.

In addition, there are available half a dozen alternative plans, all with great merit, for the continued use of St. George by the Coast Guard and the Federal Government. I intend to do everything I can to see that the sale of this facility is stopped and that a program of enlarging activities is begun. I participated with the Coast Guard and the commandant of this district in an effort to expand this space 6 years ago. I personally convened meetings with the real estate entities that owned the property adjoining St. George Coast Guard Base so that the Coast Guard could purchase additional properties at St. George to expand. The price of property, through, I guess, speculative problems here in the development of the island, obviated the Coast Guard's purchasing additional space and having a much larger space at St. George than they now have.

This is some of the history of the involvement with the St. George base. But St. George has the potential to be the most active deep water maintenance and repair facility on the east coast, not only for the Coast Guard, but for other governmental maritime agencies.

The purpose of these meetings is to explore how better to meet these ends. I want to thank Congressman Clark for coming here. It is much easier and more convenient to hold these hearings elsewhere, but due to the press of business on the floor of the House and added complications of an election year, despite those problems of very difficult consideration in Washington and Pennsylvania and New York and throughout the country, Frank Clark has seen fit to devote this time to come to Staten Island and chair these hearings. I am grateful to him, as I know the people of Staten Island and the people of New York are.

Mr. CLARK. Thank you very much, Jack.

I came up here because I am concerned because you are concerned. I know that there isn't anybody in the Congress that is a harder working Congressman for his district than you are, as I stated before. But I do want, as I have done in the past when I came up here, to get the facts, and then perhaps when we get back to Congress, if necessary, we might be able to and we might just put some stipulation in some kind of legislation that will stop any sale of this at the present time. I think the facts will show, from what I have read, that we should do this. I am a Congressman who believes that when different agencies have property, they certainly shouldn't get rid of it. And I agree with you in your statement and I do believe that the facts will warrant our coming up here and getting the facts so that we can go back and do some good legislating to see that these good stations and good bases all over the country will not be sold.

Now I would like to call on Captain Siemens, who has a statement at this time, representing the U.S. Coast Guard.

#### STATEMENT OF CAPT. ABE H. SIEMENS, U.S. COAST GUARD

Captain SIEMENS. Congressman Murphy, Congressman Clark, I thank you for the invitation to appear before your committee and appreciate the opportunity to present the Coast Guard's views with respect to the St. George and Governor's Island Coast Guard bases. I am the commanding officer of Coast Guard base, New York, located on Governor's Island, N.Y., having assumed command on June 30, 1972. I am representing Rear Adm. B. F. Engel, the commander, eastern area and the commander, 3d Coast Guard District, whose headquarters are also located on Governor's Island, N.Y. I should like to present a brief review of the major Coast Guard activities on the east coast whose operations have an influence on the New York area. The Coast Guard's worldwide operations are organized into 12 geographical districts, with our local operations and functions being limited to the 3d Coast Guard District. The boundaries of the 3d Coast Guard District extend from Watch Hill, R.I., to Montauk Point, and thence to seaward down to the Delaware-Maryland border and thence to seaward, including all of the navigable waters which open into the sea within these boundaries. The 3d Coast Guard District is the largest in the Coast Guard, in terms of personnel and facilities, although its geographical area is less than some other districts. Our small-boat operations have been organized into a number of group commands, which are responsible for carrying out the Coast Guard functions of search and rescue and pollution control activities within their respective group areas. The major groups in this district, with their respective subunits are as follows:

Coast Guard group, Long Island Sound—located at New Haven, Conn.; New Haven Station, New London Station, Eatons Neck Station, Fishers Island Station.

Coast Guard group Shinnecock—located at Shinnecock, Long Island: Shinnecock Station; Moriches Station; Montauk Station.

Coast Guard group Rockaway—located at Fort Tilden, N.Y.: Rockaway Station; Fire Island Station; Atlantic Beach Station; Short Beach Station.

Coast Guard Group, Sandy Hook—located at Sandy Hook, N.J.: Sandy Hook Station; Shark River Station; Manasquan Station.

Coast Guard Group, Atlantic City—located at Atlantic City, N.J.: Atlantic City Station; Beach Haven Station; Barnegat Station; Great Egg Station.

Coast Guard group, Cape May—located at Cape May, N.J.: Air Station, Cape May; Cape May Station; Indian River Inlet Station; Townsend Inlet Station; Roosevelt Inlet Sub Station; Fortesque Sub Station.

Coast Guard Group New York—located at Governor's Island, N.Y.: New York Station; Fort Totten Station.

The above listed groups provide command and control for their respective subunits, while the Rescue Coordination Center of the 3d Coast Guard District exercises command and control over the group commands. The major functions of the group commands are search and rescue on a round-the-clock basis, with collateral duties which include aids-to-navigation and law enforcement (pollution control) activities. The floating facilities available to the group commands include the following: 10 WPB patrol boats, varying in length from 82 to 95 feet; 32 UT utility boats, varying in length from 30 to 44 feet; eight buoy boats, of 46-foot length. The above listed boats receive minor maintenance and repair at their respective duty stations, but are scheduled for most heavy hull and machinery overhaul and repair work at Coast Guard Base, New York. Dry dockings for 82- and 95-foot WPS's are presently done at commercial yards, however future plans for Base New York include a marine railway to permit drydocking of these vessels.

The 3d Coast Guard District is subdivided into four captain-of-the-port areas, with offices located at Albany, N.Y., New London, Conn., New York, N.Y., and Philadelphia, Pa. The COTP Offices are primarily responsible for law enforcement activities, mostly involved with water pollution control activities. They utilize the 30- to 40-foot UT boats under their control for enforcing the Water Quality Act and other Federal statutes when they are not engaged in search and rescue missions. Small boats assigned to COTP Offices receive their heavy maintenance, overhaul, and repair at the Coast Guard Base, Governor's Island, N.Y.

There are three medium endurance cutters (WMEC) in the 3d District, the CGC *Vigorous* at New London, Conn.; the CGC *Alert*, at Cape May, N.J., and the CGC *Tamaroa* at Governor's Island, N.Y.; and six high endurance cutters (WHEC) as follows: CGC *Spencer*, CGC *Dallas*, CGC *Morgenthau*, and CGC *Gallatin*, all located at Governor's Island, New York; and the CGC *Owasco*, and the CGC *Evergreen* at New London, Conn. All of these larger vessels, ranging in length from 210 to 378 feet, receive major maintenance support from Coast Guard Base, New York as may be scheduled by the commander, 3d Coast Guard District. An example of such support was the recent removal and replacement of a large gas turbine propulsion engine from the CGC *Gallatin* at Coast Guard Base, New York. All major repairs are accomplished here except for routine biannual overhaul and dry locking at Coast Guard Yard, Curtis Bay, Md.

Our aids-to-navigation vessels are located as follows: CGC *Firebush* and CGC *Red Beech* at Governor's Island, N.Y.; CGC *Lilac*, at Gloucester City, N.J.; the CGC *Redwood*, at New London, Conn.; the CGC *Sassafras*, at Cape May, N.J. All of these vessels, ranging in length from 157 feet to 180 feet, receive their major maintenance support from Coast Guard Base, New York.

All of the floating aids-to-navigation in the 3d Coast Guard District are brought to the Coast Guard Base, New York for overhaul and repair. These buoy overhaul and repair functions were previously located at Coast Guard Base, New London, Conn.; Coast Guard Base, St. George, Staten Island; and Coast Guard Base, Gloucester, N.J. Consolidation of these functions at Coast Guard Base, New York has resulted in economies of scale with resultant savings.

This base, now referred to as the St. George Annex of Base, New York, was essentially vacated when the Coast Guard consolidated many of its operational and logistical activities on Governor's Island, following receipt of this installation on June 30, 1966. An organized Reserve Training Center serving approximately 250 reserve officers and men for weekly meetings was operated here until May 1972, when activities were closed at St. George and shifted to Governor's Island. The commander, 3d Coast Guard District declared the St. George Annex as excess to our needs in a Board of Survey action, which was forwarded to the Commandant of the Coast Guard on September 12, 1972. The property consists of 4.7 acres of land, including 33 industrial buildings, three piers, and connecting roadways, walks, and utility systems. A plot plan of the property is enclosed herewith as attachment No. 1.

Many of the functions presently performed by the Industrial Division of Base, New York were carried out at Base St. George prior to the move to Governor's Island. The St. George facility has been used as a site for winter storage of buoys, and for the manufacture of concrete sinkers for buoys. These functions will be shifted to other locations when the property is no longer under Coast Guard control. A liquor locker, which is an extension of the Governor's Island Officers Mess (nonappropriated fund activity), has been maintained at St. George for the benefit of Coast Guard and retired personnel living on Staten Island. This activity will be phased out in the near future. The major activity at the St. George Annex is that of the Sandy Hook Pilots Association, which occupies a portion of building 19, and utilizes dock space for their pilot boats. The Sandy Hook Pilots Association pays the Coast Guard a rental fee of \$2,412 per year, which accrues to the general fund, in addition to assuming the cost of electricity, estimated at \$7,732 per year, and the cost of one 8-hour shift of guard service, at \$10,964 per year. The Coast Guard's costs for the St. George facility for the current fiscal year are estimated to be \$32,758, of which \$2,100 is for water and sewage, \$8,000 is for fuel oil, \$730 for debris removal, and \$21,928 is for security guard services for two 8-hour shifts.

Negotiations are presently in progress with the Sandy Hook Pilots Association relative to their assuming a greater portion of the security guard services. One of the intangible benefits of the St. George facility in its present unutilized state is the provision of parking space for our military and civilian employees who live on Staten Island, and who commute to Governor's Island. These vehicles, all with Coast Guard

stickers, are parked on the St. George facility when the employees come to work, via the Staten Island ferry, and are removed at the close of the working day. This also has the effect of reducing the backlog of cars waiting to get on the Governor's Island ferry during the commuting rush hours, both morning and evening. The Board of Education, of New York City, utilizes a very small space in one of the buildings at St. George, and dock space for which they pay a rental fees of \$182 per year. The Coast Guard has no future plans for the St. George facility, except for its disposal through the General Services Administration. The Coast Guard acquired the St. George facility in 1814, at a cost of \$16,000. Its estimated market value is \$10 million. The Real Property Assessment Division of the City of New York values the land at \$775,000 and the total value for tax purposes, although fully exempt, is \$1,515,000. The buildings are all considered to be structurally sound, but in need of inside and outside refurbishing prior to re-occupancy by any tenant.

A sketch of the various buildings at St. George, together with their most recent Coast Guard usage, is enclosed herewith as attachment No. 2. The Coast Guard does intend to retain the two residences occupying 1.1 acres which are immediately adjacent to the St. George facility.

The acquisition of Governor's Island by the Coast Guard on June 30, 1966 presented us with a first in big base operations. The concept was for a base command to provide administrative, operational, and logistical support to a number of tenant commands. Coast Guard Base, New York, thus became the host, or landlord to a number of tenant commands. These commands, and their former locations prior to consolidation, are as follows:

Headquarters for the commander, eastern area, New York City;

Headquarters of the commander, 3d Coast Guard District, New York City;

Coast Guard Training Center, Groton, Conn.;

Coast Guard Group, New York, Battery Park;

Captain-of-the-port, New York, Battery Park;

CGC *Spencer*, St. George;

CGC *Dallas*, CGC *Gallatin* and CGC *Morgenthau*, new vessels which replaced older vessels assigned in the New York area, St. George;

Coast Guard Base, New York, St. George.

A comprehensive study conducted prior to 1966 showed that it was to the Coast Guard's advantage to consolidate many of its activities on the Governor's Island site, and coincident with this consolidation, to vacate certain properties then in use. The major properties to be vacated included the site of the Coast Guard Training Center, at Groton, Conn., and the Coast Guard Base, St. George. A major benefit to the Coast Guard in acquiring the Governor's Island property was the availability of family housing, which up until this time was all but unknown in the Coast Guard, although quite common in the larger military services. Although there were initial growing pains in adapting to the large base concept of operations, all of the Governor's Island commands and activities have now shaken down to a smooth working relationship. The initial problems of overcrowding and congestion have been relieved through the construction of additional waterfront

facilities, apartment housing, new barracks, and a new dining hall. While the Army complement on Governor's Island never went much above 3,000 personnel, the Coast Guard currently has a daytime population of 6,000 personnel on the island. The difference between the Army and the Coast Guard's utilization of Governor's Island was largely responsible for the initial growing pains. A plot plan of Governor's Island is enclosed herewith as attachment No. 3. Construction which the Coast Guard funded is circled on the plot plan of attachment No. 3.

The major thrust of Base New York's activities are the administrative and logistic support of tenant commands, in addition to providing community services to the island population in our family housing. The base operates a round-the-clock ferryboat service to provide convenient access and egress from the island. This service is at 15-minute intervals during working hours, and at half-hour intervals after working hours. Food service and berthing facilities are provided for all enlisted personnel, except those assigned to our larger ships. A Coast Guard student population of 1,000 personnel in the training center is not uncommon, and these men are the primary users of our new dining hall. The comptroller division of the base provides for supply support of all tenant commands, as well as other district units. It also provides a clothing locker for outfitting enlisted personnel, as well as a Servmart Section, for supermarket-style shopping for low cost general supplies for military units. A commissary store is also operated for the benefit of the Coast Guard cutters homeported at Governor's Island, and for approximately 3,000 patrons per week who depend on this facility for their family shopping.

The Base Public Works Division provides maintenance and repair of all of the real property on Governor's Island, including both office buildings, shops, and family housing. In addition, Public Works operates a motor pool which provides for the vehicular needs of all tenant commands. Heavy equipment and special purpose vehicles are also maintained for specialized purposes. The industrial division is essentially composed of the work force which previously worked at Base St. George. With an annual budget of \$1.869 million, this work force provides for routine and heavy maintenance which may be required on our larger ships, for the overhaul and repair of buoys, and the overhaul and repair of our utility boats, including plastic boats. The diesel engine powerplants for our utility boats are also overhauled by the industrial division, which now numbers 118 men. The medical division provides for the medical and dental care of all military personnel, and emergency care for civilian employees and dependents. The NAF activities Division supervises all of the non-appropriated fund activities on Governor's Island for the benefit of all military personnel. These activities include the exchange, a cafeteria, a service station, an officers open mess, a CPO open mess, a bowling center, a package store, and officer and enlisted guest houses. The administrative division provides for the printing requirements of all commands, provides administration of 688 family housing units, and a variety of special services, which include the library, the White Hats Club, a theater, golf course, swimming pool, gymnasium, and liaison with the USO.

Short range plans for Coast Guard Base, St. George, are to dispose of the property. There are no long range plans for this base as a Coast Guard facility. The two housing units, however, will be retained.

Short range plans for Coast Guard Base, New York, are to provide for replacement of substandard buildings occupied by bachelor officers and student officers attending SAR School on Governor's Island, and the replacement of guest housing facilities. Construction of a logistics building is planned to consolidate the widely scattered and inefficient shops of the Public Works Division. Our long range plans recognize the fact that the Governor's Island property cannot absorb much in the way of growth, and that an island population of 6,500 is reaching the saturation stage. It is contemplated that if operating commands are to grow in response to new missions or requirements which may be established by the Department of Transportation, or the Commandant of the Coast Guard, a gradual shift of training schools would take place from Governor's Island to other locations. The Coast Guard envisions a long term stay on the Governor's Island location, primarily because of the many advantages which this site has provided us. Our ability to provide family housing for most of our military personnel, in a crime-free environment, now makes New York duty a choice assignment for our personnel, versus one to be shunned.

Coast Guard Base, New York, has a fiscal year 1973 budget of approximately \$9,800,000 which provides for all supplies and materials in support of tenant commands, maintenance and repair of plant property, wages, and salaries for approximately 265 Wage Board personnel, 89 classified employees, 319 military personnel, and such major improvements as may be designated by the Commander, Third Coast Guard District. When added to the Industrial Division budget of 1,869,000, this amounts to a fiscal year 1973 total of \$11,669,000 for all base New York activities which utilize appropriated funds. In order to remain within our budget for the previous fiscal year, it was necessary to curtail our ferryboat services to Governor's Island on weekends from a two-boat operation to a one-boat operation, and to reduce our civilian employment. The effect of recent wage increases, utility cost increases, and other inflationary costs have more than offset the year-to-year budget increase.

The Coast Guard options for St. George Base are as follows:

1. Dispose of property—This is the Commandant's decision, which the Commander, Third Coast Guard District is in the process of implementing.

2. Retain for future requirements—The decision to vacate St. George was based on the inability to justify its retention based on current Coast Guard requirements. It is possible that future requirements could develop which would make the St. George facility highly desirable to the Coast Guard. Some of the possible future developments are:

- (a) National security requirements, or wartime conditions which dictate a large increase of Coast Guard activities in New York Harbor.

- (b) Overcrowding on Governor's Island, which might make it necessary to move the Industrial Division and related work off of Governor's Island.

- (c) Requirement for harbor advisory radar systems. Such systems are in the development stage, and one such system is now operational in San Francisco Harbor. A waterfront location would be necessary for such a system.

(d) Successful development, through Coast Guard R. & D. efforts, of pollution control equipment and hardware, such as floating booms for control of oil spills, oil recovery systems, and portable oil storage containers. A waterfront location for stockpiling of such equipment would be necessary, together with mooring facilities for vessels to deploy such equipment.

Other options for St. George Base are:

1. Retain for Federal agency usage—The U.S. Navy might be interested in the facility if water depth could be increased to permit mooring of all but the largest type of Navy vessels. The National Oceanographic and Atmospheric Agency (NOAA) might be interested in the site for use by NOAA vessels, some of which have utilized St. George dock facilities in the past.

2. Retain as Coast Guard property, but lease to commercial activities—The scarcity of choice waterfront facilities in a highly developed port like New York, and the likelihood of future Federal requirements, make this an option worthy of consideration.

My summary and conclusions are: After consideration of all of the options listed above, the Coast Guard elected to dispose of the St. George Base facility. Action toward this end was initiated by the Commander, Third Coast Guard District on September 12, 1972, when the Board of Survey decision to dispose of the property was forwarded to the Commandant. The major reasons for this decision are the lack of current Coast Guard requirements for this facility, the high cost of maintaining the facility in an unused capacity, and the lack of near-term future requirements for the base. The high costs of refurbishing the buildings and shops at St. George prior to a productive reuse of the facility militated against the retention of the base for possible future requirements.

I shall be happy to answer any questions which members of the committee may have on this subject.

Mr. CLARK. Thank you very much, Captain.

Mr. MURPHY. Thank you for your statement. It was very comprehensive.

You command the Coast Guard Base at Governor's Island?

Captain SIEMENS. Yes, sir.

Mr. MURPHY. Who commands the district?

Captain SIEMENS. Admiral Engel.

Mr. MURPHY. Where is he today?

Captain SIEMENS. He is on the west coast for a district commanders conference.

Mr. MURPHY. On page 8, you say the Industrial Division on Governor's Island is essentially composed of the work force which previously worked at Base St. George?

Captain SIEMENS. Yes, sir.

Mr. MURPHY. Has Governor's Island taken over all of the employees who were previously on St. George?

Captain SIEMENS. To the best of my knowledge, I believe—this is Charles Paul. He is assistant legal officer and head of the legal staff.

Mr. PAUL. Essentially, yes.

Mr. MURPHY. It is my belief that most of the employees who formerly worked here now work at Governor's Island. There has been some attrition, but there have been no layoffs.

When does the workday start for a person in that industrial division?

Captain SIEMENS. Our working hours are from 8 o'clock to 4:30. We have a slight difficulty with our ferry service from time to time and consequently employees are not always at the base at 8 o'clock.

Mr. MURPHY. What difficulties do you have with your ferry?

Captain SIEMENS. Occasional—our ferries now carry 35 cars apiece. They run at 15-minute intervals. If we have more than 35 cars, the remainder will have to wait for the next ferry.

Mr. MURPHY. When does the man's workday start? Does it start when he gets at the Manhattan side of the ferry?

Mr. PAUL. Yes.

Mr. MURPHY. A man starts to work when he is waiting on the ferry with everybody on the other side. What time does his workday end?

Captain SIEMENS. 4:30, on the Governor's Island side.

Mr. MURPHY. I would like to point out to the chairman that we shift an industrial activity from a base. We now permit a man to park his car on the Coast Guard base, take one ferryboat to Manhattan, start his workday not even on the Coast Guard base, but waiting on a ferryboat line for space for him to get on, and then to take the ferryboat over, regardless of the time, and here we have the facade of the Coast Guard telling us that this base isn't necessary and that the cost of keeping this base open is \$21,928. If they ever did a cost study on the loss of productivity of people waiting on ferry lines and moving the activity out of here and also providing them with free parking, I would like to see the in-depth backup part of that study. That was the problem the Army had when McNamara said we are going to close Governor's Island for the Army because we don't want to have people unproductive during the period of their workday.

Second, they start to work on the other side of the ferry, sitting around twiddling their thumbs, and that's the name of the game. Whereas they went to work on the St. George Base and they started work when they got there and the taxpayer got a day's work for a day's pay.

Captain, you indicated at several points in your statement long-range plans to handle the expected overflow from Governor's Island, and your statement was an excellent statement, and I will submit facts for the record as to the utilization by the previous tenant of Governor's Island. You have about doubled the population of Governor's Island. You have increased the productivity of it. Of course, Governor's Island has a certain historic nature and we won't go into that at this time, but in the Coast Guard Committee and the Merchant Marine Committee as we passed on the authorizations over the last 6 years, I voted for the millions of dollars of additional piers and facilities for the Coast Guard base here for good and sufficient reasons. But at the same time, in each of those hearings I questioned the Coast Guard as to the utilization of the St. George Base. And the response from the Assistant Secretary of the Treasury and Transportation was that St. George Base was necessary, was going to be utilized.

Then we hear from you that you are going to shift activities off Governor's Island after we have gone through the whole planning phase and preparation phase to build facilities there and we now have the Coast Guard moving off Governor's Island.

Captain SIEMENS. May I say that the major growth is expected to be in the training school, enlisted trainees. We have comfortable facilities for about 1,000 students. When our training requirements get above 1,000, the additional training school would be moved off the island. Right now there are no plans to move the industrial facility off the island.

Mr. MURPHY. Do you have any complaints from the residents of Governor's Island because of the sandblasting and other activities that the industrial group does on the island?

Captain SIEMENS. I have not received any complaints in my short time as commanding officer.

Mr. MURPHY. How long have you been there?

Captain SIEMENS. June 30, 1972.

Mr. MURPHY. How many complaints do you think I have gotten?

Captain SIEMENS. I don't know.

Mr. MURPHY. I have gotten 10 complaints from elevators and sandblasting and many other activities. When you build family quarters at Governor's Island, probably outside of Staten Island, the most desirable residential facility in New York, a crime-free area, a controlled environment, and you put an industrial base with obnoxious activities of sandblasting right in people's back yards—why do you do that?

Captain SIEMENS. That was part of the justification, I believe, at the time that Governor's Island was acquired, the Coast Guard had agreed to give up Groten and St. George, as I understood, as part of the purchase price for the island. That is my understanding.

Mr. MURPHY. Whom did they make this agreement with?

Captain SIEMENS. I believe that was done at the time, perhaps at departmental level, at the time that Governor's Island was acquired.

Mr. MURPHY. Who is making the deal for Governor's Island that says that you have to put certain things in certain places in order to get something?

Captain SIEMENS. I believe that the study that was done at that time was a fairly thorough study before the move was made and was primarily on the cost reduction of many small units by consolidating one where you have a more efficient operation. I think that was the major justification at the time, plus the family housing was a very big deal for us.

Mr. MURPHY. Who OK'd the deal?

Captain SIEMENS. I would say the Commandant, the Secretary, the Congress.

Mr. MURPHY. I spoke to the Commandant and the admiral of this district and there was no deal. I went through the property disposal hearings, I went to the chairman of the property disposal hearing and there was no deal, and I brought it up to the admiral and asked, "Was the deal that St. George has to be closed in order for the Coast Guard to get Governor's Island?" I said the Coast Guard was getting Governor's Island, and we and the Congress approved it because it was a tremendous acquisition, of getting a basic base with the ability to put your families.

Captain SIEMENS. I may be in error on that subject, Congressman Murphy, because it is just a feeling I have. It may strictly have been

a result of the cost studies which, as the years went by, which confirmed that as a good move.

Mr. CLARK. Someone would have had to make that decision and this is what we are here for. Who made the decision? Have you any idea? Was it recommended by the Commandant of the Coast Guard? Was it recommended by the Secretary, or was it recommended by GSA?

Captain SIEMENS. I believe, Mr. Chairman, that when the money was appropriated for the construction of the new industrial facility on Governor's Island that that was an understanding at that time when that money was appropriated that this would come from St. George to Governor's Island.

Mr. CLARK. In other words, there would be a trade made, is that what you are trying to say?

Captain SIEMENS. I may be in error. That is my feeling, but I may be in error. I do know the money was appropriated for the construction of a new industrial plant which was presently taken care of here.

Mr. CLARK. You understand you are not under third degree examination. We are just trying to get the basis for the Coast Guard making this decision and why. Of course, you had an excellent statement and I won't say much about it except that it was an excellent statement for the Coast Guard's position. But we, as Congressmen, and we, as taxpayers, must look at it from different angles. So we want to know the basis you gave—you gave us some basis—

Captain SIEMENS. I believe that if the Commandant had a requirement for which he could justify the St. George Base, that this disposal action wouldn't have been taken. But in looking over where our boats are taken care of right now, there is no current requirement for the base. I think coupled with that is the fact that it would take some heavy amount of money to put it into a first-class working base again.

Mr. CLARK. Of course, we spend a lot of money to make Governors Island a good operation, and so the same way, if we had taken half of what we had at Governors Island to make this more operational, then perhaps there would be another argument. Robbing Peter to pay Paul really isn't the answer, I don't believe.

Mr. MURPHY. It seems to me to be a little fiscal integrity involved. This is an excellent statement and I agree with many of the underlying principles of the statement. But I totally disagree with the fact that it cost you \$21,000.98 to keep this base open and you want to consolidate your budget on Governors Island, and that is about, to me, the justification for closing the St. George base. I would like to see why you are not planning to move activities from Governors Island that are about to be moved to the St. George base.

Captain SIEMENS. That was discussed as a possibility. It is agreed that the industrial activity on Governors Island isn't the best thing to have in that type of climate, there is no question about that. We have, however, constructed a very nice facility there, and you will be on a tour there tomorrow and you can see that. It is a much more efficient layout of shops than we had here. I might add that the buildings here at St. George were built any time after 1818 and they are not very well laid out. I think they are structurally sound, they will take a hurricane, but the way they built them then is not conducive to productivity efficiency.

In addition to that, I think the estimate I heard for putting the base into fairly good condition is on the order of \$4½ million in refurbishing.

Mr. MURPHY. On page 7, you say a comprehensive study conducted prior to 1966, showed that it was to the Coast Guard's advantage to consolidate many of its activities on the Governors Island side, and coincidental with this consolidation, to vacate certain properties then in use, including St. George. Who conducted that study?

Captain SIEMENS. I would say the Chief of Staff's Office at Coast Guard Headquarters would have been heavily involved. The Chief of Staff at that time might have been Admiral Trimble.

Mr. MURPHY. Is that study available to this committee?

Captain SIEMENS. I believe it would be at Coast Guard Headquarters. I don't believe it is available here.

Mr. MURPHY. I would ask unanimous consent that we get that study so we can analyze some of the rationale at that time.

Captain SIEMENS. I may be in error on this St. George. I know that training center at Groten was definitely a part of the understanding. I am uncertain as to whether St. George was also part of that understanding.

Mr. MURPHY. Groten was, and the Secretary testified that Groten was, but St. George was never mentioned.

Captain SIEMENS. Then I must be in error on that statement.

Mr. MURPHY. But you are not in error because I heard talk of this, and when I specifically questioned these officials, they denied it, but the talk was around.

On page 3, you refer to enforcing the Water Quality Act and other Federal statutes. For the committee, would you review what enforcement actions you have taken under the Water Quality Act—how many and where, and so forth?

Captain SIEMENS. The captain of the port, Captain Kesler on Governor's Island, he is captain of the port and he is also the group commander. He has 40-foot boats working for him and they patrol the harbor, looking for evidence of oil spills. They site vessels or waterfront facilities which may be polluting the waters. They get evidence, and the district commander has authority to invoke penalties on the agency or the person responsible for this, and I believe Mr. Paul might have some data as to how many of these we have had.

Mr. PAUL. We have on the average of three a week.

Mr. CLARK. How many boats are involved?

Captain SIEMENS. I believe Captain Kesler has maybe a dozen boats doubling on water pollution activities and search and rescue. And our air station at Brooklyn at Floyd Bennett Field does have daily harbor flights. If they spot something, they will notify Captain Kesler and he will dispatch a boat.

Mr. CLARK. I have been on some of those boats and they have done a terrific job there. I can only fault them on closing the base, you can't fault them on the job they are doing there.

Mr. MURPHY. You mentioned in your statement a relationship with NOAA and that NOAA vessels have called and docked and utilized the facilities here at this base in St. George. Why didn't they go to Governor's Island?

Captain SIEMENS. When all of our ships are in Governor's Island the docks are pretty fully utilized. When ships are at sea, then we

have space available. I don't know which NOAA ship was involved, but I have heard that ships have been in there.

Mr. MURPHY. I have been in there. When all of your ships are in Governor's Island, there is no room for anything because, just reading from your statement, the number of deepwater ships, they will fill up all of those piers, plus.

Captain SIEMENS. When all of our major cutters are in, all of our dock space is taken.

Mr. MURPHY. Then it is not adequate. You put ships down here, too.

Captain SIEMENS. When the ice comes in the upper rivers, our buoy tenders pick up the buoys and bring them to St. George and stow them for the winter. We call it winter storage. Those are the ships that are probably in and out.

Mr. MURPHY. How many buoys do you service?

Captain SIEMENS. I know that we have about 40,000 buoys in the Coast Guard, and we have maybe 10 percent of them here. We might have 4,000.

Mr. MURPHY. You have eight boats to do that?

Captain SIEMENS. No, sir; the buoy tenders in the district number about five.

Mr. MURPHY. For 4,000 buoys?

Captain SIEMENS. Some of these, the Coast Guard is converting some buoys to fixed structures. We also leave the buoys out for longer periods of time. We found that the lights can stay longer, so we service them less frequently.

Mr. MURPHY. How many buoys do you have shoreside? 5 percent?

Captain SIEMENS. What do you mean, shoreside?

Mr. MURPHY. They are not all in the water. You have some in reserve.

Captain SIEMENS. Yes, sir, we have—right now we have gone from about a 2-year overhaul cycle to a 5-year cycle, so we need fewer buoys.

Mr. MURPHY. How many do you keep shoreside?

Captain SIEMENS. At Governor's Island we might have—there is a variety of sizes. We might have 50 or so at Governor's Island.

Mr. MURPHY. About an acre of buoys?

Captain SIEMENS. Yes, sir.

Mr. MURPHY. Did you develop that buoy that replaced the boat down in Delaware Bay?

Captain SIEMENS. Yes, sir.

Mr. MURPHY. What about Ambrose?

Captain SIEMENS. Ambrose is too big and too potent as a first-class aid. We wouldn't replace that.

Mr. MURPHY. How about Barnegat?

Captain SIEMENS. Barnegat—that is a lightship now, or—

Mr. PAUL. It has a large buoy now.

Mr. MURPHY. That is all the questions I have for the Coast Guard.

Mr. CLARK. Thank you very much, Captain, you are a very good witness.

Mr. MURPHY. Thank you, we appreciate your testimony.

Mr. CLARK. Our next witness is Lester Earl, president of the New Jersey Sandy Hook Pilots Association. Lester, if you will come before the subcommittee, please.

Mr. MURPHY. Will Mr. Keating join him at the witness stand?

Mr. CLARK. You may sit down and you may read your statement for the record, and after that we will ask you a few questions, and we do appreciate your coming, and you, too, Mr. Keating.

**STATEMENT OF LESTER T. EARL, PRESIDENT, NEW JERSEY SANDY HOOK PILOTS ASSOCIATION**

Mr. EARL. Chairman Clark and Congressman Murphy, I appreciate this opportunity to appear before you and express our thanks for your interest in this matter of the U.S. Coast Guard base at St. George, Staten Island.

The facilities we have developed at this base serve the maritime industry and give complete information on commerce that passes in and out of this great port.

We are, at the present time, in the process of installing a radar to monitor the anchorage off Staten Island and other anchorages in the upper and lower bay.

In the interests of safety and ecology on the navigable waters of this port our continuous surveillance on a 24-hour-a-day basis, both electronically and visually, is without precedent.

Our position in this base area is unique because at any time we have our launches available to pilots to meet all emergency conditions and in the anchorages if there is reported danger of collision between vessels. We are not dependent on commercial launches for these emergencies.

This location provides us with minimum time to dispatch pilots to serve the port.

It must be kept in mind that the prime available area for this or any other safety harbor programs is shrinking, as you are all well aware of what is happening in lower Manhattan.

A vacant house is not a good house for obvious reasons.

In closing I would like to say we all know the great demand for safety and ecology in our ports with the signing into law by the President of the Ports and Waterways Safety Act.

It is our opinion that this base area will prove invaluable to all parties concerned and abandonment of this property at this time would create an impossible search at a later date for such a facility.

Thank you.

Mr. CLARK. Thank you very much, sir.

And Mr. Keating, do you have a statement you would like to make at this time?

**STATEMENT OF CORNELIUS J. KEATING, FINANCE CHAIRMAN,  
— NEW YORK SANDY HOOK PILOTS ASSOCIATION**

Mr. KEATING. Chairman Clark and Congressman Murphy, I would like to thank you for the opportunity to air the views of the New York Sandy Hook pilots regarding the U.S. Coast Guard base at St. George, Staten Island.

The Sandy Hook pilots have been renting pier and upland space on Staten Island for as long as our records go back, that is prior to our incorporation in 1898. We have been involved with various agencies, both private and government, during this time. As part of the U.S. Coast Guard in World War II we utilized the facilities

at pier 18, Staten Island. After the war, we moved to pier 11, Staten Island. Since November 1968, we have been renting part of the facilities at the Coast Guard base, St. George, Staten Island.

Permit me to call to your attention some of the advantages to the Port of New York and the residents in the surrounding area where we were permitted to remain in this location. The tremendously increased size of ships traversing this port and anchoring off Staten Island have proportionality increased the hazards, for obvious reasons. We have men call 24 hours a day, many of whom live on Staten Island, ready at a moment's notice to answer the call in the event of emergency. A glance at the territory the Sandy Hook pilots must cover, extending from Perth Amboy to Port Newark, to Yonkers, to Hellgate, to Sandy Hook and to Ambrose Tower will show that this area at St. George is geographically centralized for the needs of this great port. The transportation facilities for getting men to the base are also advantageous. We are able to send men to sea or to the various piers with alacrity day and night.

We are presently utilizing part of the old lamp shop for our accounting and dispatching departments, as well as the pilot apprentices' educational room and our repair shop. Our boats use the south pier and a small part of the basin.

Our pilots associations are currently installing a radar antenna on top of one of the buildings as part of the "Harbor Radar Control" experiment. We employ many Staten Island residents in our accounting, dispatching, steward, and engineering departments. Our organization patronizes local banks and business establishments.

As a vital part of the mechanism to move all types of vessels safely in and out of the Port of New York, the New York Sandy Hook Pilots strongly urge those responsible to permit us to remain in this location. Our association is interested in remunerating the U.S. Government in a fair and equitable amount to insure our future use of this facility.

We appreciate your consideration of our views.

Mr. CLARK. Thank you very much. We do appreciate both of you coming, and I think perhaps Mr. Murphy has a few questions that he wants to ask you.

Mr. MURPHY. How long have you been leasing the facilities at St. George?

Mr. KEATING. Since November 1968.

Mr. MURPHY. What type of craft have you there?

Mr. KEATING. We have two large vessels, about 200 feet. One is always on station. We have another 200-footer in reserve that would be at the base. One of them would always be at the base, plus a 90-footer and four 50-foot vessels we use in boarding inbound and outbound.

Mr. MURPHY. Every ship that goes in and out of the city of New York is boarded by your people?

Mr. KEATING. Every licensed ship. Every member holds both State and Federal licenses for this whole area.

Mr. MURPHY. Are you a tax-free entity?

Mr. KEATING. No, sir.

Mr. MURPHY. In other words, if you own real estate, you would pay taxes on that real estate?

Mr. KEATING. Yes, sir.

Mr. MURPHY. As far as safety is concerned, with larger ships in this port, the question of the ease of location, the geographical location of the St. George Base, could you address yourself to the safety function that you perform, and also that the Coast Guard performs in the Port of New York and the significance of the location of St. George in those safety functions.

Mr. KEATING. The ships are getting much larger, the anchorage is the same size. I am talking about Staten Island anchorage. We have the problem with the turning circle of the ships increasing with their size. We very often have ships with dangerous cargo swinging toward each other, and very often we will get a call in an emergency to get a pilot to move the ships apart that are already touching.

We have the equipment and St. George is certainly the best location.

In addition, the events of storms and ships dragging anchorage, we will send a man to meet that ship and get it to a safe berth or safe anchorage. In the event, we have also had instances where there has been fire at a pier and some sort of emergency, and we have dispatched out men in a motorboat to that pier and gotten the ship away.

I would say that would be the best location, right in St. George. If we had to use St. George as a center and draw a circle, we would just about hit it in the middle of all the piers in the Port of New York.

Mr. EARL. I would like to add that if you draw the connection between Coast Guard and our organization, that as a central geographical location of any programs of pollution and ecology, that is a central location for either Coast Guard or pilot business. We have found this is a real vital central area.

Mr. MURPHY. As representing the pilots responsible for movement of ships, would you say that loss of St. George base would affect ship safety in the Port of New York?

Mr. KEATING. Yes, sir.

Mr. MURPHY. It would cause danger to maritime traffic?

Mr. KEATING. Yes, sir.

Mr. MURPHY. I have no other questions.

Mr. CLARK. Thank you both, gentlemen, for appearing this afternoon. We do appreciate your statements.

Mr. EARL. With reference to the financial, we have reached some agreement with the Coast Guard.

Mr. CLARK. I would appreciate it, if there is no objection, if you would put it in the record.

Mr. EARL. They have given the figures, and we have agreed verbally, and it will be drawn up, that we will assume some more of the security cost.

Mr. MURPHY. You assume one-third of the security costs?

Mr. EARL. We will assume two-thirds now.

Mr. KEATING. May I say one more thing. We took over the large shop building and it was not in top condition. We put paneling in, we put 220 electric in and we put the air conditioning in, central air conditioning for the floor that we use. So we have put in quite a few improvements.

Mr. CLARK. Are there any other witnesses to appear before this committee this afternoon?

If not, the meeting is adjourned.

(The meeting was adjourned at 3:30 p.m.)

## COAST GUARD FIELD ACTIVITY

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### MV "Tamano" Oil Spill

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THURSDAY, OCTOBER 5, 1972

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON MERCHANT MARINE AND FISHERIES,  
SUBCOMMITTEE ON COAST GUARD,  
COAST AND GEODETIC SURVEY, AND NAVIGATION,  
*Portland, Maine.*

The Committee on Merchant Marine and Fisheries convened, pursuant to notice, at 10:20 a.m., in the main court room of the U.S. Courthouse, 156 Federal Street, Portland, Maine, Hon. Frank M. Clark presiding.

Mr. CLARK. The meeting will please come to order. These hearings here today in Portland, Maine, have been called under my chairmanship of the Subcommittee on Coast Guard of the Committee on Merchant Marine and Fisheries of the U.S. House of Representatives in order to obtain the fullest possible information regarding certain aspects of the spill of approximately 100,000 gallons of No. 6 fuel oil which occurred in Casco Bay during the night of July 22-23, 1972.

While it is not the purpose of these hearings, nor is it within the jurisdiction of this committee, to establish the legal responsibility for damages resulting from the spill, we will be concerned with details of the spill itself insofar as such information will assist us in preventing similar accidents in the future.

We would also hope that these hearings will bring forth some information with respect to techniques and procedures for combating oil spills once they occur.

I would also like to point out that it is the hope of this subcommittee that testimony received here will help show us how such tragic marine accidents may be prevented from happening.

It is quite obvious that such accidents can cause all kinds of damage to our estuarine areas and ecological systems and our precious wildlife.

In this connection, we recognize that accidents will always remain a possibility in a port handling large quantities of oil. However, as I mentioned before, these hearings will also be concerned with those steps which were taken and measures which might be taken in the future to minimize the damage resulting from a large oil spill.

Our subcommittee and the full Merchant Marine Committee take great pride in the fact that in the 92d Congress, which is about to conclude, we saw enacted into law the Bridge-to-Bridge Radiotelephone Act and the Landmark Port and Waterways Safety Act. These two important pieces of marine safety legislation should contribute

in large measure to the prevention of collisions and other marine accidents which result in harmful spills.

I would like to state most emphatically that these hearings in no way assume that oil tanker operations in Casco Bay are an environmental risk which must be continually undertaken. Not only will we be interested in proposals which minimize the chance of any further oil spills, but we will also be most concerned with testimony which sets out in detail the long-range environmental consequences of this oil spill and resultant damages to the fragile marine ecology of the marine estuarine and coastal areas.

In this manner the citizens of Maine and the members of this committee and the Congress will be in a position, a better position, to judge contending arguments regarding energy needs and environmental hazards.

At the outset of these hearings, I would like to point out that I am up here in the great city of Portland chairing these important hearings at the request of Congressman Kyros.

These hearings, of course, are held with the full permission of the chairman of the Merchant Marine and Fisheries Committee.

I would like to commend my colleague in the Congress, Peter Kyros, for his initiative in having these hearings held in Portland. Throughout his outstanding service on this committee, Representative Kyros has been constantly attentive to the merchant marine issues as they relate to the long and outstanding marine traditions of the State of Maine.

And he has been especially concerned about the economic problems which have beset the Maine shellfish industry in the recent months, beginning with the oil spill which we will be discussing today.

As a result of his service on this committee, the Congressman represents a strong legislative interest and influence reflecting Maine's maritime interests, and it is a pleasure to have Congressman Kyros with me here today as these hearings begin.

Peter, do you have some opening remarks that you would like to say at this time?

Mr. KYROS. Thank you very much, Mr. Chairman. First of all, I would like to welcome you and the other members of the committee to Maine. And I know that this is a particularly busy time for Congress, so you are very kind to come here.

I am gratified that the Merchant Marine and Fisheries Committee, of which I am a member, authorized you to hold hearings here concerning the Portland oil spill, because I don't think this oil spill should ever be allowed to slip out of memory and history. I think this oil spill remains very much a concern, as you will see, Mr. Chairman, to the residents of Long Island and the other precious islands of Casco Bay.

In fact, the oil spill remains very much a concern to every Maine resident who makes his living by harvesting our ocean or who is dependent upon our coastal tourism as part of his or her livelihood.

And, finally, just as you stated yourself, the oil spill remains a concern of every Maine citizen who loves the fragile beauty of our coast.

And yet, ominously, the effects of this oil spill are still with us. The most visible signs of disaster are the sands of our beaches, and the rocks, which are yet tarnished with oil.

However, the effects on our marine ecology, as you noted, are even more lasting and more sinister.

Recently, the committee sent me to visit the Woods Hole Oceanographic Institute. I spoke with scientists who studied the long-range effects of an oil spill which occurred in nearby Buzzards Bay several years ago.

This spill was carefully studied and its effects monitored over a long period of time. The effects of oil upon the ocean bottom were devastating, as bottom life was destroyed. The polluted sediment was freed to spread to areas far beyond the area covered by the surface pollution, and pollution-resistant organisms drove out the natural bottom plants.

So today, Mr. Chairman, as we explore the nature of this oil spill, which occurred in Casco Bay, we must be aware, I think, of one signal fact: Life is fragile and our environmental system cannot tolerate continued accidents of this kind. Thank you.

Mr. CLARK. Thank you very much for that splendid statement. And I want to congratulate you and your staff for having this hearing up here today.

And No. 2, is the fact that we have so many citizens from this great State of Maine that are interested enough to take their time to be here this morning for this hearing.

Mr. KYROS. You weren't so happy last night when that heavy fog came in.

Mr. CLARK. No; we didn't get into Portland as we wanted to. We did a little driving and got here in time so that we could have a good sleep.

I do appreciate being here this morning. And our first witness will be Commander Simonds, the officer in charge of marine inspection, U.S. Coast Guard, Portland.

If you will please take the witness stand and you may proceed at your own convenience.

**STATEMENT OF COMDR. RICHARD K. SIMONDS, COMMANDING OFFICER, U.S. COAST GUARD MARINE INSPECTION OFFICE, PORTLAND, MAINE**

Commander SIMONDS. Thank you, sir. Gentlemen, I am Comdr. Richard K. Simonds, commanding officer of the U.S. Coast Guard Marine Inspection Office, Portland, Maine.

I investigated the grounding of the motor vessel *Tamano* which occurred on July 22, 1972, in the vicinity of Soldier Ledge, Hussey Sound, Casco Bay, Maine.

The report of investigation has been completed and has been made a part of your report.

(The report was placed in the files of the subcommittee.)

Commander SIMONDS. Because of the voluminous length of the report, I will summarize its contents at this time.

The *Tamano* is an 810-foot 47,000-gross-ton tanker with living quarters and navigating bridge located aft. The tanker arrived at the vicinity of the Portland light vessel on the evening of July 21, 1972, loaded with approximately 500,000 barrels of No. 6 fuel oil.

The pilot boarded the vessel at approximately 2330 on July 21, 1972. And the vessel got underway to proceed to an anchorage area in Portland Harbor.

En route to the anchorage the vessel would transit a channel known as Hussey Sound Channel. The passage was more or less uneventful until the vessel was committed to Hussey Sound Channel.

When the ship was in the channel and approaching the area of Soldier Ledge, the vessel hit Soldier Ledge buoy and moments later struck a glancing blow on Soldier Ledge.

The *Tamano* suffered hull damage at the turn of the bilge between frames 91 and 92 in the way of No. 1 starboard wing tank. And, as a result, commenced losing cargo to the sea.

Gentlemen, this essentially summarizes my report and concludes my statement.

Mr. CLARK. Thank you very much, Commander. Mr. Kyros, have you some questions to ask?

Mr. KYROS. No questions.

Mr. CLARK. Thank you very much, sir. Our next witness will be Capt. Donald J. McCann, U.S. Coast Guard, captain of the Port of Portland.

Captain, you may proceed as you wish.

**STATEMENT OF CAPT. DONALD J. McCANN, U.S. COAST GUARD,  
CAPTAIN OF THE PORT, PORTLAND, MAINE**

Captain McCANN. Mr. Chairman, Mr. Kyros, ladies and gentlemen, my present duties include assignment as captain of the port, Portland, Maine.

The regional contingency plan predesignates me as on-scene coordinator for oil spills, southern Maine. As on-scene coordinator I have been, and am, intimately involved in all aspects of this bill.

The following testimony is submitted to show what happened, actions taken, and recommendations to minimize damage resulting from major spills in this or any other port.

In accordance with the national contingency plan a formal detailed report will be submitted to Coast Guard Headquarters upon completion of cleanup activity connected with this spill.

The next paragraph basically covers the characteristics of the *Tamano*, which Commander Simonds has gone over.

At approximately 0120 eastern daylight time, July 22, 1972, while inbound, *Tamano* struck a glancing blow to Soldier Ledge which is located in Hussey Sound. This ledge is marked by a lighted buoy and the ledge itself lies in 40 feet of water at mean low water. All navigational aids were operating properly and on station. Super tankers transit this sound en route on approved anchorage for discharge of oil by barges. This anchorage is located 2,600 yards north of Long Island, Casco Bay.

No particular problems have been encountered by the Portland Pilot's Association in transiting this sound. It is ironical that this particular passage of *Tamano* was the initial passage of any vessel after the establishment of two new buoys off the entrance to the sound. These additional buoys had been requested by the Pilot's Association to assist them in making their approach to the sound itself. Maximum

draft of vessels transiting the sound has been limited by the Pilot's Association to 55 feet and the maximum draft to date of any vessel through the sound is 53 feet.

The time of striking the ledge has been determined by an investigation conducted by U.S. Coast Guard Marine Inspection Office, Portland, Maine. The grounding itself was not discovered until the *Tamano* anchored at 0200, at which time the pilot boat noted oil escaping from underneath the hull. The pilot promptly notified Sea Coast Ocean Services, a local cleanup contractor, that booms were needed on scene immediately. This was approximately 0230 or 0215.

The contractor promptly responded, assembled boom and barges and proceeded to the *Tamano*, a distance of approximately 5 miles from the mainland. By 0530 the *Tamano* was partially boomed from bow to midships. The Coast Guard was notified by pilots at 0243 and my personnel were on scene at 0400. The initial call was to the contractors and I feel the pilot's action in this matter was entirely correct.

Booming of vessel is of paramount importance and speed is essential. I myself was notified at 0430 and reported to the Coast Guard base of 0500. The initial report indicated approximately 40,000 gallons had been lost. A major spill in coastal waters is considered one over 100,000 gallons, but in view of the area involved, I classified the spill as major and initiated necessary action to notify concerned Federal, State and local agencies in accordance with national and regional contingency plan.

I specifically requested the Coast Guard Atlantic Strike Force from Commander Eastern Area and Environmental Protection Agency representatives from Boston as soon as possible. These personnel reported July 22.

I requested a Coast Guard helicopter for aerial surveillance and made two overflights that date, one at 0815 and one at 1600. My initial flight indicated oil throughout the island area and oil streaks off Cape Elizabeth. Upon my return from the initial flight, I felt additional booming was required and directed the ship to be completely boomed. This was accomplished by 0930, July 22.

My final flight on July 22 showed the oil for the major part contained within the booms and the situation appeared to be under control and within the capabilities of the local contractor. However, on July 23 the situation had radically changed.

In my opinion, the oil trapped beneath the hull of *Tamano* was carried beneath the boom due to current and tidal action and was escaping to the surface a considerable distance beyond the boom to the extent that additional booms and skimmers were required.

Further, the situation had deteriorated to the extent it was beyond the capabilities of local contractor, not from lack of expertise, but lack of sufficient equipment.

On this date, the 23d of July, after the above evaluation, I requested two additional contractors from Boston area to proceed to scene as soon as possible. I notified both Texaco Inc. and Ships agents of my actions. The agents were most cooperative but desired to clear the cost of this maneuver with the owners.

At this time Texaco representative stated Texaco would absorb costs on a temporary basis, but that this action in no way indicated their liability for the spill and damages resulting therefrom. A meet-

ing was held with all interested parties, including all contractors, that date, July 23, and a general plan of attack laid out. Inasmuch as oil contained within the boom continued to slowly escape, every effort was made to remove this primary source of the problem.

Meanwhile, oil on the water, exclusive of that contained within the booms, was being paravaned. Beach crews both on mainland and island areas continued with clean up of debris and oil as it came ashore.

Ultimate range of contamination on the mainland was a total of approximately 46 miles, from Falmouth, Maine, to York, Maine, and 18 islands in Casco Bay were affected. The diver's report as of July 22 indicated all damage was restricted to No. 1 starboard wing tank, a gash of approximately 20 feet by 8 inches near the turn of the bilge. This tank contained approximately 12,000 barrels of fuel. The *Tamano* had commenced transferring contents of this tank to other tanks. Additional independent pumps were called for to expedite this process. Meanwhile, the oil within the boom surrounding the *Tamano* was being removed by means of skimmers.

Of particular interest is the fact that best available estimate is that approximately 100,000 gallons of oil escaped. Of this amount approximately 70,000 gallons of good oil was recovered. The fact that only 30,000 gallons of oil escaped is directly attributable to the initial prompt action of local contractors in booming *Tamano*.

Cargo in damaged tank was removed by July 25. Off-loading operations were permitted once the oil trapped within the booms had been removed. Final date of discharge of all cargo was August 3, 1972, and permission for *Tamano* sailing for drydocking was granted on August 4, 1972.

Upon the initial grounding of *Tamano*, passage through Hussey Sound had been restricted to all shipping pending a complete sweep of the area by the U.S. Army Corps of Engineers. This action was deemed necessary to insure that there were no uncharted obstructions within the sound itself.

The corps completed their sweep on August 2, 1972, and no uncharted obstructions were discovered. Texaco Inc. requested owners assume responsibilities of cleanup activities on August 11, 1972, and the owners readily agreed. I should state we found Texaco Inc. most cooperative and helpful in all respects during the time she was involved.

One of the major problems encountered was in locating a suitable disposal site for the oil-soaked debris. Hay had been distributed on the waters in the areas affected on July 22, not only because of its absorbing qualities but also because of its characteristic of acting as a herding agent of oil. Once utilized, however, this hay must be removed from the water and beach as it comes ashore.

In addition, seaweed and eel grass which is damaged must be removed. Debris both on mainland and islands was stockpiled for transportation to a disposal site. Despite the fact that numerous emergency dump sites are noted in the State contingency plan, it was found that it was not possible to use these sites basically because of potential damage to those areas with a high-water table as well as concern of local populace in areas desired to be utilized.

Debris continued to pile up and no approved disposal site was available. One site was finally located at Gray, Maine, approximately

27 miles from Portland and this site was properly prepared to meet all State and Federal environmental requirements by Texaco Inc. at considerable expense. This site was approved for use on August 3, 1972.

The magnitude of the task of cleanup in this particular area was complicated by necessary logistics involved in the transportation of men and equipment to island areas as well as transportation via barge of debris back to mainland for shipment to disposal site.

At the present time all islands have been cleaned insofar as practical with the exception of Long Island. This island was hit the hardest by oil and her western beach has been damaged to the extent the only known solution is physical removal of approximately 2,300 feet of the beach to a depth of 6 inches. This beach removal is presently underway and it is anticipated that final cleanup will be completed on or about October 14, 1972.

The final ecological effects this spill has had on the environment will not be known for some time. Vast Inc., an oceanographic research firm, is under contract to the Federal Environmental Protection Agency to assess ecological damage. Their report will not be completed for at least 6 months. The State of Maine Department of Sea and Shore Fisheries is also assessing ecological damage resulting from this spill.

As of this time and date I feel, with the exception of experience all hands have gained and certain additional equipment the local contractor has procured, that basically the Port of Portland, Maine, is no better prepared today to handle a major spill than we were on July 22, 1972. Additional booms, skimmers, vacuum trucks, et cetera, are badly needed.

It is clearly spelled out in the Water Quality Control Act of 1970 that the Federal Government take necessary action to insure that cleanup is promptly initiated. Consequently, in the event of a future major spill, I would again be forced to supplement our local contractor's equipment with additional equipment from out of State.

I will continue to work closely with the Portland Harbor Pollution Abatement Committee. This committee is composed of members of the oil industry as well as Mr. Langlois of Maine Port Authority. They have been successful in obtaining a limited amount of equipment and are endeavoring to obtain additional equipment.

My official report on this spill will be submitted via Commander, First Coast Guard District, to Coast Guard Headquarters upon completion of cleanup.

Included within my recommendations will be the following:

(a) Each major port take necessary action to insure an approved disposal site is within close proximity to the port. This will not only involve moneys but will also involve a public relations task with the populace in the area concerned to clearly assure citizens that disposal site is properly prepared and will constitute no danger to the environment.

(b) Additional equipment be stockpiled at Portland. A related funding plan for this additional equipment be developed by proper authority.

(c) All vessels engaging in oil transfer operations be boomed immediately upon mooring or anchoring and prior to any actual transfer of cargo.

(d) Consideration be given to requirements for double bottoms as well as double walls for tank vessels. The value of a double bottom can readily be seen from this particular incident. Inasmuch as it is apparent that the *Tamano* barely grazed Soldier Ledge, I am confident no spillage would have occurred if she had been double bottomed.

(e) Carriage by tankers of additional independent pumps to supplement ships pumps.

(f) In connection with recommendation (e) consideration be given to requirement of a void or "slop" tank to receive contents of a ruptured tank. A tanker with a full cargo would be forced to wait for lighters to arrive if she has no space to transfer oil from the ruptured tank.

(g) Feasibility of physical removal of Soldier Ledge be explored.

That concludes my testimony, Mr. Chairman.

Mr. CLARK. Thank you very much, Captain. I have a few questions and a couple of them will be submitted for the record.

I would like to ask you, who owns the *Tamano*?

Captain McCANN. The *Tamano* is owned by Wilh Wilhemsen of Oslo, Norway.

Mr. CLARK. And what company contracted for the oil?

Captain McCANN. Texaco, Inc.

Mr. CLARK. Has the spill been cleaned up?

Captain McCANN. It will be completed approximately 10 days from today, Mr. Chairman.

Mr. CLARK. Did the company pay for the cleanup?

Captain McCANN. The company, as I mentioned in my testimony, Texaco, Inc., were the charterers. The *Tamano* was on a time charter, a 10-year time charter, to head the vessel on a 10-year time charter.

And when I sent for the equipment to come up, I contacted both the agents and Texaco, and it was a three-way conversation. And I requested who would pick up the tab for this equipment.

And the agents wished to clear it with the owners. And, at this time, Texaco said they would pick up the cleanup on a temporary basis, which they did, until August 11, 1972, at which time the ship picked up the tab for the cleanup.

There have been a couple of controversies since then as regards who is picking up the tab.

Mr. CLARK. When you asked the people for the equipment for the cleanup so that it wouldn't spill over into other areas, did you get this within a short time and where did you get it?

Captain McCANN. We got it from Boston. It was up the following day.

Mr. CLARK. And was this under Coast Guard direction?

Captain McCANN. Well, actually, yes, I would say. We called for it and Texaco said they would pick up the tab when it did show up, pick up the bill for all equipment.

Mr. CLARK. In your mind—and I am not putting you on the spot—in your mind, would you say that in the east coast area, in the east coast section and also the southern section of the United States, and the west section, do we have enough equipment? How many areas would you feel we should have this kind of protection, so that when something like this happens we can get immediately to the spillage area?

Captain McCANN. You are kind of getting me into policy. I would like to see it in every major port, Mr. Chairman. But as regards the funding for this business, that is beyond my level.

We have got other ports in this area that I am concerned with. I am concerned with Portsmouth and Searsport. Even if we have the material stockpiled here at Portland, and we have a spill up at Searsport which would again affect the State of Maine, I am going to lose time running the equipment from here to Searsport.

Basically, the ideal situation is to have this in every major port. But it is a question of dollars and cents. Are we going to go into every major port and do this? I am not sure, sir.

Mr. CLARK. I understand. But how long did it take you to get your equipment from Boston?

Captain McCANN. Oh, probably, all of it, a couple of days, sir. It has to be trucked up and we had a breakdown of one truck coming up with air-activated pumps from New Jersey.

And she showed up 2 days late. There is quite a considerable time delay. We should not have to be in a position where we have to wait 1 day to get the equipment. The equipment should be ready to go right now.

Mr. CLARK. Don't you think really it should be ready to be put on an airplane and brought into the area as fast as possible?

Captain McCANN. That would be ideal, I suppose, but, again, you run into conditions of weather, as you yourself noted, yesterday you were delayed coming in by plane. I would myself think it should be right here physically at the port, because time is what you need and there are a number of things that break down in any logistics maneuver. And if we have it right here at the port—Portland is much better off than depending on any logistics maneuver.

Mr. CLARK. Well, you have done a wonderful job on your statement. Congressman Kyros and I have, along with some other Congressmen in the Merchant Marine Committee, and especially in the Subcommittee of the Coast Guard, recommended time and time again that we not only have the equipment, as far as making sure the spillage doesn't spill out into other areas and cause more damage, but we also have asked that we have some more airplanes in order to get them there as fast as possible.

And, of course, the biggest problem is logistical. And where are we going to put this equipment so it is at the most advantageous spot in this country?

Of course, we fortunately had some at Boston to help you in this situation. We have got some in the South, in the Gulf, and we also have them on the west coast. But that is it.

But I do agree with you, we are spending millions and millions of dollars in trying to help in this situation, such as you have had up here, and at the same time we are not sending enough because we need the equipment. You can't do the job without the equipment.

Captain McCANN. In no way, sir.

Mr. CLARK. And I do appreciate your coming here, sir. And you did an excellent job.

And now, Mr. Kyros, do you have any questions?

Mr. KYROS. Yes, thank you, Mr. Chairman. Captain McCann, the national contingency plan, of which you are aware, calls for the storage of cleanup equipment in various areas; is that right?

□ Captain McCANN. I don't believe so, no, sir; that it specifically says it will be stockpiled. It indicates in the plan that it will be stockpiled in certain areas, but it is rather vague along these lines. There is nothing specific in that.

Mr. KYROS. At the moment, Portland, which, by the way, is the No. 2 oil port on the east coast, must more or less rely on Boston.

Captain McCANN. Yes; we have to rely on Boston, on private contractors, not on any Coast Guard equipment—we have none except approximately 2,000 feet of boom down at base Boston.

Mr. KYROS. As you point out in your testimony, since July 22, when this accident occurred and the oil spill resulted, there hasn't been an additional foot of boom added to this particular area; is that correct?

Captain McCANN. No; I did indicate, Mr. Congressman, that our contractors picked up a few additional feet, maybe 2,000 or 3,000 feet of boom. But as regards anything being stockpiled by the National Government, no. The answer is "No," sir.

Mr. KYROS. I listened to some of your recommendations. What about a possible recommendation that a tanker of the size of the *Taman* should not try to negotiate Hussey Sound at night and rather wait for the tides in the morning?

Captain McCANN. Well, I wouldn't quite agree with that, sir. Under certain conditions, coming in at night, you can come in just as well, if not better, at night with a vessel. The fact that it is darkness doesn't necessarily indicate that you have more danger there.

The whole thing would boil down to visibility. And I am sure none of our pilots would bring in a vessel through Hussey Sound if the visibility were restricted.

So basically I would say night or day, provided the visibility was right, would be immaterial.

Mr. KYROS. What about the possibility of the Department of Transportation using the Port of Portland as one of the model ports, and installing the new radar guidance systems—do you favor this?

Captain McCANN. I, myself, feel that with the number of ships we have up here, Congressman, we don't have that many vessels up here, frankly. It is a big oil port, but basically coming in through Portland pipeline.

We have, say, approximately 100 vessels a month. Certainly, it is a good thing to have, but as regards our requirement, or necessary—in my opinion, the answer would be "No."

But that is my opinion. She is being studied. Portland is one of the ports that will be considered for radar.

But one of the things I feel that would help in this area is a transponder for that Portland light vessel. And it had nothing to do with this particular spill, so I didn't mention it.

But, since you ask the question and bring up this type of thing, as regards additional safeguards, this transponder is a device, an electronics device, on the lightship's radar. When you have a number of vessels coming around the lightship, the inbound vessels can pick out which one is the lightship from this response from their radar that is being generated by the Portland light vessel, which is a good help to the vessels coming inbound—and we had up here on a temporary basis for, oh, several months, and the pilots and all, shipmasters, thought it was fine and we liked it and we wrote a report to

that effect to the district. And it probably will be put on the light vessel.

Mr. KYROS. If we had had more equipment immediately available to you the very evening you were alerted to the oil spill, would there have been any way to contain more oil so that less of it would have ended up on our beaches?

Captain McCANN. Yes, sir. Well, one of my recommendations is, I put in there, that vessels be boomed immediately upon anchoring, which would mean that the contractor would be out there with the boom on the scene.

So if she anchors at 2 o'clock and you don't have a—boomed until 5:30, you have approximately a 3-hour period here in which oil is escaping.

So I do feel that the major oil escape from the time she struck the ledge at 1:20 until 5:30, when she was partially boomed—the rest to a certain extent was, no doubt, coming from underneath the boom—but the major portion had already escaped.

Mr. KYROS. Because she is so large and has such a heavy load, that might be another argument for her coming in during daylight hours. She would be more apt to see.

Captain McCANN. Possibly, yes, sir.

Mr. KYROS. Did you have any shortage of your own personnel in handling this large an oil spill?

Captain McCANN. Yes. We are authorized three men in the port office and one officer, and we had two or three additional men who were thrown in there to supplement it, but in this particular deal we needed people to monitor the cleanup and check the areas concerned.

And we did have additional personnel come in from Com East area and from the first district.

Mr. KYROS. Well, I saw what you were doing and I certainly want to commend you and your men for what I think was a superb performance. I am personally very proud of you.

Thank you, Captain McCann.

Mr. CLARK. Thank you very much, Captain.

Captain McCANN. Thank you, sir.

Mr. CLARK. Our next witness will be Mr. Carl Eidam—sorry if I pronounced this wrong. He is investigating officer, U.S. Environmental Protection Agency.

Sir, for the record, if you will, will you tell us who is with you, and he may also sit up there at the table.

You may proceed.

**STATEMENT OF CARL EIDAM, OCEANOGRAPHER, OIL AND HAZARDOUS MATERIALS SECTION, U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION I, ACCOMPANIED BY GEORGE CIAMPA, ESQ., U.S. ENVIRONMENTAL PROTECTION AGENCY**

Mr. EIDAM. Mr. Chairman, this is George Ciampa, who is an attorney with our Agency. Mr. Ciampa has been involved with the spill and he does have some knowledge of some of the aspects of it.

Mr. Chairman, my name is Carl Eidam and I am an oceanographer for the Oil and Hazardous Materials Section of the U.S. Environmental Protection Agency, region I.

Sir, the Environmental Protection Agency is pleased to participate in this hearing regarding the oil spill caused by the Norwegian tanker *Tamano* at Portland, Maine, on July 22, 1972. As the Coast Guard was the Federal Government's on-scene coordinator during the spill, we would like to defer comment on the details of the spill to that Agency and confine our remarks to the following areas:

- (1) The role of EPA during coastal or offshore spills.
- (2) EPA's activities during the spill caused by the *Tamano*.
- (3) Effects of the *Tamano* oil spill on the marine environment.

The role of the Environmental Protection Agency during coastal oil spill incidents is to serve as a technical adviser to the Coast Guard On-Scene Coordinator. In this capacity, it is our function to advise the Coast Guard on clean-up techniques which will minimize further damage to the marine environment and to determine what damage has been caused by the spill. This role is specified in section 202.8 of the national oil and hazardous substances pollution contingency plan as follows:

Through the resources of the Office of Water Programs, EPA will provide technical expertise to the NRT and the RRT's relative to environmental pollution control techniques including assessment of damages and environmental restoration.

With that as a background, let me discuss our Agency's activities during the oil spill originating from the Norwegian flag vessel, *Tamano*.

Our Agency was notified of the spill by the Coast Guard at approximately 6 a.m. on July 22, 1972. After subsequent notification of other EPA personnel, I proceeded to Portland, Maine, and met with Capt. Donald McCann of the U.S. Coast Guard, On-Scene Coordinator, who detailed the status of the incident. Following these discussions, the EPA Regional Spill Emergency Team (ReSET) was activated and proceeded en route to the scene. This team is composed of scientists and technicians whose functions include surveying areas affected by an oil spill to determine immediate environmental effects of such contamination. Their observations are detailed later on in my testimony.

At the same time, our agency began advising the On-Scene Coordinator on possible methods of removing the spilled oil from the water and the availability of clean-up contractors in the New England area.

On that same evening, EPA and Coast Guard personnel boarded the *Tamano* to assess the situation at that time and to sample the contents of the holed tank.

During the following week, our personnel accompanied the Coast Guard on daily helicopter overflights of the area affected by the spill to determine (a) where oil still remained on the water and to what extent, and (b) areas where oil was coming ashore. Observations made during these overflights in conjunction with shoreline surveys being made by EPA and Coast Guard personnel were used as a basis to determine what areas required immediate attention.

On July 25, 1972, VAST, Inc., a private oceanographic research firm, was contracted by EPA and began conducting damage assessment surveys of the affected area. The present status of their observations will be detailed in their testimony.

By August 1, 1972, essentially all of the spilled oil had been either removed from the water or was onshore. At this time, shoreline surveys

were again initiated by EPA personnel to determine what areas would require permanent cleanup, and what methods of cleanup would cause the least amount of additional environmental damage.

Generally, we were dealing with two types of shoreline areas: (1) rocky, intertidal, and (2) cobble, gravel, or sand beaches.

Written recommendations on cleanup were developed as a result of these surveys and presented to the On-Scene Coordinator on August 17, 1972. Although recommended cleanup varied according to the area in question and the extent of contamination, all recommendations es- for use of the above method included:

A. Rocky shorelines:

1. Remove all free oil.
2. Remove all oil-soaked debris.
3. Cut all oil-contaminated seaweed and remove.
4. Remove oil from rocks in selected areas of public access or possible high esthetic value utilizing high pressure water jets. Conditions for use of the above method included:

(a) Work to be performed by isolating areas of no greater than 100-foot long.

(b) Area to be boomed and suitable sorbent material placed in boom.

(c) Work to be performed during tidal stage which will minimize contamination of previously unaffected areas.

(d) Water spray to be directed so as to minimize spraying oil and water on unaffected areas. If necessary, suitable shielding should be fabricated to protect surrounding areas.

(e) All oil and sorbent to be removed from boomed area and boom adjusted as tidal stage changes.

B. Beach areas:

1. Remove all oil-soaked debris.
2. Remove all oil pavements from the beach.
3. Remove all oil-contaminated sand. Conditions for the above operations included:

(a) Depth of cut into sand should be controlled to only remove contaminated portion.

(b) Contaminated material should be replaced with a compatible grade of clean material or, if feasible, the contaminated material should be incinerated and replaced.

(c) A qualified soils engineer should determine if replacement material is necessary and should be in direct charge of selection, installation, and contouring of new material to minimize erosion.

These recommendations were forwarded to representatives of the ship's owners by the On-Scene Coordinator on August 18, 1972.

By August 24, 1972, Western Beach on Long Island, an area heavily contaminated by the spill, began leaching oil back into the water due to the warm weather of the previous days.

Because I considered this to be a distinct additional threat to the environment, I recommended to the On-Scene Coordinator that removal operations on the beach be initiated immediately. The On-Scene Coordinator relayed this information to the ship's owners' representatives with the alternative that if they did not take action to initiate removal of the sand within 24 hours, he—the On-Scene Coordinator—

would take such action. On the following day, the ship's representatives sought to obtain a restraining order against the Government in Federal district court to prevent the Government from taking such action. Although the judge did not grant the restraining order, he did give the ship's representatives 9 days to develop a satisfactory alternative to sand removal as a means of cleaning the beach.

During this time, an experiment was tried on the beach by the ship's representatives, utilizing sorbent material, which was furrowed into the sand on low tide and then removed during high tide. The experiment gave unsatisfactory results and, thus, removal of this beach sand is presently being undertaken by the Federal Government. Recommendations on disposal of the contaminated material were forwarded to the On-Scene Coordinator and coordinated with the Maine Department of Environmental Protection.

It should be noted that the development of both cleanup and disposal recommendations were coordinated with the Maine Department of Sea and Shore Fisheries and the Maine Department of Environmental Protection. Both of these agencies provided us with invaluable assistance during this incident.

The effects of oil on the marine environment are both immediate and lasting. Immediate effects are most times obvious; the staining of shorelines, beaches, boat hulls and piers, resulting in intertidal ecological damage and losses associated with shoreline and waterborne activities.

As a result of the *Tamano* spill, some immediate effects are as follows:

1. Miles of shoreline, consisting of rocky areas, sand, gravel, and cobble beaches, were oil stained, rendering them useless for recreational activities. Some life forms associated with the intertidal zone were damaged either by smothering or the toxic effects of the oil. Large beds of *Fucus*, an intertidal seaweed, harvested commercially in the area, were coated and either died or had to be removed. Other intertidal organisms, such as barnacles and periwinkles which form an important part of the marine food web, were killed or damaged by the spill.

2. Large numbers of recreational boats, numbering in the hundreds, were oil stained and had to be cleaned, resulting in a recreational loss at the height of the summer season.

3. Other water-associated facilities, such as lobster trap buoys, and boat mooring lines and buoys, were oil stained and required attention.

4. Commercial shellfish beds, which were previously open to harvesting, had to be closed as a result of the spill.

The economic effect of these closures is still being determined; however, it appears that it will run into the millions of dollars.

Because of the potential for lasting or insidious effects resulting from an oil spill, the Environmental Protection Agency has contracted with private firms across the country to evaluate the effects of such spills on the environment. Vast, Inc., is an oceanographic research firm currently conducting studies to determine some of the effects of the *Tamano* oil spill. They will amplify on their observations during their testimony.

I must point out, however, that oftentimes the full environmental impact of an oil spill cannot be determined for months or even years after the spill. For this reason, all observations must be qualified by the fact that they are based on the present time and conditions may change in the next months.

Thank you.

MR. CLARK. Thank you very much. You did an excellent job and I want to congratulate you on the job you have done. Sometimes some of us get disgusted with the EPA, but, as far as I am concerned, in the area of ecological warfare that you have, you are doing a good job. Some of the other areas I question.

But this is one area that I think you really needed and I do congratulate you on it.

Mr. KYROS?

MR. KYROS. Just a few questions, Mr. Chairman. Mr. Eidam, in part of your testimony, you said that on Western Beach on Long Island you found oil leaching back into the water, and the owners sought a restraining order against your taking off the entire beach and charging that back to them.

I don't understand that since the restraining order did not take effect, why you didn't proceed directly and do that.

MR. EIDAM. Do you want to answer that?

MR. CIAMPA. Perhaps I can answer that for you, Mr. Kyros. Again, I am an attorney with EPA. I was involved with that piece of litigation.

The day following the day on which the on-scene coordinator asked the owners to begin the cleanup, to undertake a commitment to begin the cleanup, or to notify him that they wouldn't do it, they brought an action and asked for a restraining order.

At the hearing right here in this courtroom on that motion for a temporary restraining order, the court really imposed upon the Government to accept a continuance for a number of days. And the alternative to that would have been the issuance of an order.

So the Government represented that it would be willing to continue the case for, I think it was, 8 or 9 days, under those circumstances.

And the agreement was that during that time the Government would not begin to clean the beach, but that it would bring in additional people to look at the beach and to make independent assessments of whether Mr. Eidam's recommendations were proper.

And the other party, the shipowners, agreed that day would undertake, with the help of their consultants, to come up with an alternative suggested method of cleanup.

MR. KYROS. Well, the beach, as I remember it, was kind of a gravel beach. You showed me an oil penetration to several inches there. I just don't see what other way there is to take the oil out of it.

What other alternatives are there that are rational, that are possible?

MR. EIDAM. Sir, at the present time we don't know of any alternatives.

MR. KYROS. That is why I wondered why we had to wait. Now, in regard to something else that you say here in your statement—you say that by August 1, 1972, essentially all of the spilled oil had been either removed from the water or was onshore.

MR. EIDAM. Yes, sir.

MR. KYROS. Well, oil was probably also in the water, right? Isn't No. 6 fuel oil soluble in water? Don't the hydrocarbons remain?

MR. EIDAM. Yes, sir; a small percentage. What I was referring to was visible oil, sir.

Mr. KYROS. Now, did some of it go to the bottom?

Mr. EIDAM. That is possible, especially during storm conditions where you might get sedimentation. In other words, stirring up of sediments on which oil would adhere.

Mr. KYROS. Now, with the finer fuels like the benzenes and the gasolines, you can get real destruction at the sediment level.

Do you get this kind of effect with No. 6?

Mr. EIDAM. It is possible, sir, although I would suspect that the subtidal effects of No. 6 would be more of a sublethal effect, especially the ones that were incorporated into the sediments.

Mr. KYROS. Sublethal effect?

Mr. EIDAM. Right. In other words, you wouldn't get the massive obvious kill, except if you get an amount such as in the intertidal zone where you are actually smothering organisms.

But the percentage of toxic fractions in No. 6 fuel oil is lower than that in No. 2 fuel oil. But there are toxics present in it.

Mr. KYROS. Is it my understanding from what is now happening that you feel there will be a substantial cleanup of the entire spill, the entire visible spill as we know it, without taking into consideration the long-range marine biological effects at this time. But will all the rocks on Long Island and the beaches, be cleaned up?

Mr. EIDAM. Yes; the beaches will be. The rocks will be in certain areas. Rock cleaning—there is a judgement you have to make. The present methods of cleaning rocks do cause some additional damage.

I mean, any time you further disturb an environment, no matter what you do, you are going to cause some damage. What you have to weigh is the alternative of not cleaning at all with cleaning.

We feel that in certain areas where you have heavy contamination, the alternative of not cleaning it poses a greater environmental threat, especially over the long run, than cleaning it.

Mr. CLARK. Sir, were you satisfied with the coordination between the Coast Guard and EPA during the cleanup of this spill?

Mr. EIDAM. Yes, sir, 100 percent.

Mr. CLARK. Well, thank you very much. You were an excellent witness. I do appreciate both of you being here.

Our next witness is Dr. Barbara Welsh, Ph. D. project director of VAST, Inc., investigators of EPA.

I just had to give you the doctor's degree. Anyone that can study and get a Ph. D. deserves the honor, too.

Mrs. WELSH. Well, I have to correct that. It is just a bit premature. My Ph. D. is due in January from the Graduate School of Oceanography at the University of Rhode Island.

Mr. CLARK. Well, congratulations.

#### STATEMENT OF BARBARA WELSH, SENIOR MARINE BIOLOGIST, VAST, INC.

Mrs. WELSH. Chairman Clark, Representative Kyros, and Representative Hathaway, ladies and gentlemen, I am Barbara Welsh, and I am the senior marine biologist for Vast, Inc.

Vast, Inc., is an oceanographic research and environmental consulting firm with offices in Maine, Connecticut, and St. Croix, U.S. Virgin Islands. We are the quick-reaction task force contractor to the

EPA for investigation of the ecological impact of oil spills in regions I and II. As such, we have a field team ready for immediate deployment to any area within these regions.

Our task for the EPA is primarily to survey the gross effects of the oil on the biota of the area on a relatively short-term basis of 3½ months, so that, first, an evaluation can be made of immediate damage and the need for further investigation and, second, the general patterns of dispersal and the extent of damage from oil spilled in the coastal zones may be determined.

Mr. Kyros has asked us to address ourselves to three questions: first, the long-range environmental consequences of this spill and the resulting damage to the fragile marine ecology of Maine; second, the steps which were taken and might be taken in the future to minimize damage resulting from a major spill; and, third, to obtain information helpful to prevent future oil spills.

In answer to the first question I would like to emphasize VAST's responsibility as defined by EPA is confined to a short-term survey and is in no way meant to be a research program for long-term effects. Thus, our comments here today must necessarily be extrapolations from our short-term investigations.

Our field program is designed to detect the physiologic effects of oil on the individual organisms and also the ecological effects on the habitat. We are concerned with the smothering in the intertidal zone beneath the heaviest oil deposits. In the intertidal and subtidal zones we are concerned with toxic effects both acute and chronic. We are also concerned with ecological effects of rendering the habitat unfit by (1) the alteration of the predator/prey balance, (2) by loss or contamination of food supply, or (3) through loss of recruitment of new individuals. These problems are difficult to detect over short-term periods, but when trends are indicated we then recommend that further work be done.

In our field program in Casco Bay we have concentrated on the intertidal communities where the smothering effect is the greatest and where, since oil is collected and held, the toxic effects are presumably greatest; also where a source area is established for the chronic leaching of oil. We have also included a subtidal lobster ground which is potentially vulnerable to accumulation of hydrocarbons in the sediments and incorporation into the human food chain.

Our approach is to correlate population density and species diversity with quantitative analysis of the content of the spilled oil in the sediments and in the organisms through techniques of gas chromatography. Unfortunately, there is a lack of baseline data for areas where these spills occur.

We also attempt to use indicator organisms of suspected or known high sensitivity to the presence of oil, such as amphipods, sea urchins, and most marine animals in the very young stages.

With regard to what should be done for long-term effects, we would make the following recommendations:

(1) Since the present program is designed only to assess immediate impact, we recommend that a continuing investigation be set up to monitor the habitat for at least one annual cycle to determine whether recruitment and resettlement occur or whether the species-diversity drops.

(2) We would recommend that chronic hydrocarbon pollution studies be carried out for the Portland area, particularly with regard to the lobsters and shellfish.

These studies should monitor the levels of background pollution in the sediments and the animals to detect unsuspected increases in concentrations of hydrocarbons which could pose a serious health problem if they should accumulate in the clams and lobsters.

(3) As an aid to future impact investigations, we would further recommend that baseline data of hydrocarbon levels be obtained for Maine waters where industrial traffic presents a high probability for future spills.

There is still a need for basic research into the effects of No. 6 fuel oil on living organisms. The high molecular weight compounds present are suspected of being carcinogenic, and the aromatic envelope, while it is not supposed to be as acutely toxic as the components of the No. 2 fuel oil, is suspected of being poisonous nevertheless. Moreover, the No. 6 contains a small percentage of the No. 2 aromatics. Further questions have been raised over long-term genetic effects and interference with the ectocrine response systems upon which mating and settlement of organisms depend.

In answer to the second question on steps to minimize damage, we were requested by the EPA to inspect the beach and rock areas on Long Island. Our report to them included the following recommendations:

For the beach, we recommend the removal of the oil-soaked sand on Long Island because it presents a potential hazard to the biota through:

(a) the leaching oil to the water column for transport to new areas including black duck, eider, cormorant, osprey, and gull feeding grounds, and intertidal mussel and clam beds.

(b) the erosion of soil-soaked sands to the benthic communities directly offshore and subsequent transport to new areas. Of special concern here are (1) contamination of lobsters with sublethal doses of substances potentially harmful to consumers but undetectable by smell or taste, (2) entry and concentration of substances into aquatic food web, and (3) degradation of the substrate as a settling area for new larvae and lethal to young marine stages.

For the rocks,

1. The lipophylic nature of the mucopolysaccharide substances in the fucoid algae apparently enhances their absorption of oil which is then leached back into the water column.

2. It is recommended that these algae be completely removed in heavily soaked areas and cut back in moderately contaminated areas, leaving the holdfasts for regrowth.

3. It is recommended that the harvested algae be completely removed from the area rather than left in piles above the tide line where leaching will continue in rainy weather, and storms will wash it back into the water.

Of utmost importance is that cleaning operations be started immediately before the affected areas spread the contamination to new locations. With regard to this, up-to-date equipment centers should be established near our major ports with equipment ready for instant deployment to the scene of the spill.

In regard to the third question of prevention of oil spills, we would defer to the engineers, the legislators and the enforcement officials who are better qualified to address this question.

Mr. CLARK. Thank you very much, Mrs. Welsh. A very good statement.

Mr. KYROS, have you any questions?

Mr. KYROS. Just a couple, Mr. Chairman. The first one is, what does the word "benthic" mean—on page 4.

Mrs. WELSH. The benthic communities refer to the communities in the mud bottom, in the mud or sand bottom.

Mr. KYROS. In the mud or sand bottom. Are hydrocarbons degradable by micro-organisms in water naturally?

Mrs. WELSH. Yes, sir, they are degradable. Some are more degradable than others.

Mr. KYROS. Well, what about No. 6 fuel oil?

Mrs. WELSH. No. 6 fuel oil contains a mixture of three types of hydrocarbons. It has some long straight-chain hydrocarbons which can be worked on by the bacteria. It also has some branch-chained hydrocarbons which are more difficult for the bacteria to operate on, because the enzyme system cannot take care of the branch in the chain. These remain longer. It also contains an aromatic portion which is degraded only very slowly and is the portion with which ecologists are most concerned.

Mr. KYROS. Because it is the killing portion to all the micro-organisms that are alive in the sea; is that right?

Mrs. WELSH. The aromatics in No. 2 fuel oil are highly toxic. We have not got enough information on the aromatics in No. 6.

Mr. KYROS. Did you read Max Bloomer's study on Buzzard Bay?

Mrs. WELSH. Yes, sir. He studied No. 2.

Mr. KYROS. No. 2. Now, you say this type of oil does its damage by smothering in the intertidal zone.

Mrs. WELSH. Yes.

Mrs. KYROS. Tell us what happens there precisely.

Mrs. WELSH. This comes ashore, as you know, in a very thick mess, and as it covers the organisms in the intertidal zone it forms a complete blanket over them so that they are unable to get oxygen or to break through for their feeding. Many of the organisms are dependent upon tiny cilia to feed.

Mr. KYROS. So pelagic fish wouldn't go there because there is nothing left to feed; is that right? This is due you say later on to the alteration of the predator/prey balance. Once you kill off these organisms, other organisms that normally live there won't return, but other living organisms will thrive there, like the sea worm for example.

Mrs. WELSH. In that particular statement I was more concerned about the weakening of certain organisms, like bivalves or barnacles, so that regular invertebrate predators could come in and easily consume them.

Mr. KYROS. All right, what is the effect of No. 6 on our lobsters?

Mrs. WELSH. I don't think that that is known. I think that the feared effect is that the No. 6 will accumulate in the lobsters and accumulate in the meat itself. And we are studying this by gas chromatographic method to see if the No. 6 has been absorbed into the meat of the lobsters.

Mr. KYROS. To see if any hydrocarbons from the No. 6 are identifiable in the lobsters.

Mrs. WELSH. That is true; yes, sir.

Mr. KYROS. What about clams and shellfish?

Mrs. WELSH. We are also studying the clams and shellfish. We do not have the results yet of the gas chromatographic analysis.

Mr. KYROS. What was the effect of this oil spill on birds? Did you gather any data on that?

Mrs. WELSH. We did make a visit to the rookeries and we found some dead oiled birds in the rookeries. It was a small percentage compared to the number of birds that were there.

Mr. KYROS. Cormorants, sea gulls, what?

Mrs. WELSH. There were a few black ducks, eiders, and gulls.

Mr. KYROS. Well, I certainly agree with you that we ought to make a continuing investigation of this for the long range, and I think your testimony is most enlightening to the committee.

Thank you, Mr. Chairman.

Mr. CLARK. Thank you very much for coming and giving us your fine statement.

Our next witness or witnesses will be Edward Langlois, chairman of the Portland Harbor Pollution Abatement Committee, and Capt. Joseph Cremo, member of the Portland Harbor Pollution Abatement Committee, officially representing the city of Portland.

Gentlemen, we do appreciate both of you coming this morning. And, for the record, when each of you speaks, give your name and who you represent so that it will be in the record as such.

**STATEMENT OF EDWARD LANGLOIS, PRESIDENT, PORTLAND HARBOR POLLUTION ABATEMENT COMMITTEE, INC., ACCOMPANIED BY CAPT. JOSEPH CREMO**

Mr. LANGLOIS. Thank you, Mr. Chairman. Mr. Chairman, Congressman Kyros, my name is Edward Langlois. I am president of the Portland Harbor Pollution Abatement Committee, Inc.

The Portland Harbor Pollution Abatement Committee was founded in 1966 and incorporated in 1968. The purpose of this committee, as stated in article III of our bylaws, is:

To promote and foster the abatement of pollution in all forms including, but not limited to, the discharge of petroleum products and other waste material into the waters of Portland Harbor and Casco Bay; to this end, to foster cooperation among the oil terminal operators and other businesses interested in and which use the waterfronts of the Cities of Portland and South Portland; to encourage the participation in this program of the State of Maine and the U.S. Government, and all instrumentalities thereof, and particularly of the cities and towns bordering on the waters of Portland Harbor and Casco Bay, or which border on rivers discharging into said waters.

We are a citizens group. Among the members of the committee are representatives of the petroleum industry in this area, U.S. Coast Guard Captain of the Port, representatives from the fire departments and city councils of Portland and South Portland, steamship agents, Maine Port Authority (now the Bureau of Waterways of the Maine Department of Transportation), Greater Portland Chamber of Commerce and civic and business leaders.

I appear before this committee today primarily to provide you with information and literature on our program to promote and foster abatement of oil pollution in this harbor. To assist you in your mission, we think it essential that this committee be aware of the preventive action taken by local citizens in the interest of protecting our environment from danger and damage from potential oil spills.

We recognize the problems that resulted in the damage to Portland Harbor as a result of the recently casualty to the vessel *Tamano*.

It is our intention to review our programs, to determine our strengths and weaknesses and to work toward improving capability in the harbor to respond more effectively to the prevention of oil spills and to the containment, removal and disposal of spills.

During the years of our program, we worked toward establishing a procedure to report and respond to a spill through effective communications and published and distributed an information booklet on oil spills in 1969.

And I have a copy which I would like to leave you so you can take it back to your committee.

We wrote the first contingency plan for statewide use: "Oil and Hazardous Materials Contingency Plan for Prevention, Containment, and Cleanup for the State of Maine."

This was followed by a contingency plan written by the Environmental Improvement Commission of the State of Maine: "State of Maine Environmental Improvement Commission State Oil Contingency Plan."

We have maintained an inventory of equipment, materials, and services available to respond to a spill. I am going to leave with you a copy of our inventory of September 28, 1970, and an up-to-date inventory dated September 1972.

(The documents mentioned above have been placed in the subcommittee files.)

We felt that the use of a helicopter in patrolling an oil spill and tracking it was essential, and so we constructed the first helicopter pad to be used exclusively for tracking and reporting oil at the Maine State pier in Portland.

We found that it was quite difficult to determine the best way to bring boom to the spill. And we investigated and researched this project and finally designed and built a catamaran especially for the storage and availability of moving containment boom to the scene.

We have prepared special charts of the harbor and coast of Maine designating critical locations of clam flats, lobster cars, beaches, where immediate response would be necessary, and we also have incorporated a grid to be used in tracking the oil from the helicopter to the vessel.

We work very closely in cooperation with the two local firms who deal with responding to spills, Seacoast Ocean Services and Golten Ship Repair.

Yes, we are concerned and disturbed about the damage to our coastal area as the result of the *Tamano* incident. We will not be able to evaluate the cause of the accident or the full effectiveness of the oil containment and cleanup effort until final reports are in. We face the fact, however, that despite removal of about 80 percent of the spilled oil from the water, most of the other 20 percent reached and

contaminated the shorelines and marred floating equipment in the bay.

We are dedicated to improving our own effectiveness and in working with others, private enterprise and at the local, State, and Federal Government agencies.

Our committee has played an active role in our local radar advisory safety committee in the following areas:

Establishment of sea lanes into our Maine coast.

We have invited the Coast Guard to set up a radar advisory traffic control system for Portland Harbor.

We provided valuable information during the setting of the guidelines and systems to provide bridge-to-bridge communications.

And we strongly supported the Ports and Waterways Safety Act of 1971-72.

We believe greater emphasis must be placed on training exercises and this will receive considerable attention in the future.

You might be interested in a proposal conceived by local citizens suggesting the establishment of an International Training Center in Portland, Maine, to train personnel to prevent oil spills and to respond to oil-spill recovery.

This 14-page booklet suggests that a study be made at a cost of \$30,000 to determine the feasibility of this proposal. Our committee has not been involved with this proposal, but it is hoped that you and your committee will review this report for possible funding through the Federal Government.

In closing, I would like to add that the Water Quality Act of 1970, and the recently enacted Ports and Waterways Safety Act have placed great responsibility on the U.S. Coast Guard for development of regulations and other measures to improve the safety of our ports and waterways and reduce oil spills and damages therefrom.

We urge Congress to appropriate the necessary funds to staff the Coast Guard adequately and to install, purchase, or provide facilities which the Coast Guard finds essential to carrying out their mission.

And, Mr. Chairman, I would like to add one more point if I may. We, again, as a citizens group, did not participate in the decisions regarding the *Tamano* spill. We only respond in that way when there is a mystery spill.

But I want to publicly compliment all of the people in this area and those who came in from outside of the area to participate in the decisions on this spill, particularly I want to go on record with my high praise for the efforts of Capt. Donald McCann, captain of this port. He did an outstanding job. He was most helpful in keeping me and our committee informed. And I just can't say enough for this gentleman.

And I would also like to compliment Mr. Paul Silva of the Environmental Improvement Commission who works with our office, and worked with our office in helping us provide our plans.

Gentlemen, that is my statement.

Mr. CLARK. Thank you very much. That was a fine statement and I am glad that you gave those nice words of praise to the Coast Guard, since I am the chairman of the Coast Guard Subcommittee and I am very proud of them, too. They are a great group of people and they really have their heart set in this area, the oil spillage area, right now.

And they have given us and our committee a lot of help in trying to do something in the way of preventing the spillage from continuing once it happens in a disaster such as you have had here.

I have two short questions that I would like to ask you. Do you know what the draft of the *Tamano* was when it was loaded when she struck the ledge?

Mr. LANGLOIS. It is in the report. I would have to search my records to get it out for you. But Capt. Franville Smith of the Portland Pilots is on next and perhaps he will have that available.

Mr. CLARK. What is the maximum draft needed to come in through this area?

Mr. LANGLOIS. We provide 45 feet into Portland Harbor. This is a program that was funded by the Army Corps of Engineers. And so we are classified as a 45-foot port.

Mr. CLARK. Mr. KYROS.

Mr. KYROS. Thank you, Mr. Chairman. Was any of the gear from the Portland Harbor Pollution Abatement Committee used?

Mr. LANGLOIS. No. The only physical gear that we have is the catamaran and 1,500 feet of boom. This was taken to the scene immediately and was there to be used. We admit that this particular boom is outmoded. It is used and has been very effective in small spills at the site of the vessel.

But in this particular incident it was a standby boom.

Mr. KYROS. You don't have any skimmers or absorbent materials or similar equipment, do you?

Mr. LANGLOIS. We do not. We as a committee, in founding the committee and working with local interests, determined that it would be in the best interests of this port to have private enterprise, and we have encouraged, helped, and assisted private enterprise to provide this equipment for the port.

Mr. KYROS. Yes, but they don't necessarily have to carry it on hand. It is not a paying proposition for them.

Mr. LANGLOIS. We naturally are concerned that the local cleanup group have the availability and capability of having equipment. And when we work with them we find out what might be lacking.

Mr. KYROS. Right at the moment in our own port of Portland we don't have the necessary equipment to take care of an oil spill ourselves, and especially not a major oil spill. Anything over 100,000 gallons.

Mr. LANGLOIS. This is designated as a major oil spill, anything over 100,000 gallons.

Mr. KYROS. Anything over 40,000 gallons.

Mr. LANGLOIS. I think the official designation is anything over 100,000.

Mr. KYROS. I understand that, but we don't have enough, to even take care of lesser amounts. We just don't have the equipment in the port.

Mr. CLARK. What Mr. Kyros really means is that we don't have—you don't have the equipment to take care of anything over 40,000 gallons.

Mr. LANGLOIS. This is the area that is receiving the attention now, what is needed for providing—the point you are raising right now.

Mr. KYROS. Where are we going to get the funds to provide the equipment?

Mr. LANGLOIS. I am not sure the Coast Guard is prepared to fund this at the national level. We have raised over \$30,000 here in our port to provide and fund our program. And this money must be found some way. Perhaps as a result of this hearing you will be able to come up with recommendations that might be helpful not only to us but to the 90 other ports in the country that are now servicing tankers.

Mr. KYROS. The State of Maine Legislature, itself, had passed the Oil Conveyance Law. Is that correct?

Mr. LANGLOIS. Yes.

Mr. KYROS. Which would provide equipment.

Mr. LANGLOIS. I believe that the plan, which I am sure will be discussed this afternoon by Mr. Adams, was to raise funds to provide manpower and equipment.

Mr. KYROS. Right. Thank you very much.

Mr. CLARK. Thank you very much. We do appreciate your coming.

Our next witness is Capt. Joseph Cremo. Captain?

Mr. CREMO. I am Fire Chief Joseph Cremo, city of Portland. I am a member of the Portland Harbor Pollution Abatement Committee. I am here representing the city of Portland.

Actually, there is very little that I can present to this committee. Although our involvement—although Portland was much interested in the spill and its effects, our participation was really minimal.

At 0850, Saturday, July 22, we did receive a call from the Coast Guard informing our fire alarm headquarters that there had been a spill, there was oil in the Hussey Sound area, a relatively large spill.

And, during the course of the day, our fireboat did make two trips to the island and did report oil on the waters.

Other than this, we did receive periodic reports from the Coast Guard office informing us of progress that was being made. Other than this, we did not really become involved.

Mr. CLARK. Thank you very much, sir.

Mr. KYROS. Thank you very much, Chief.

Mr. CLARK. Thank you both gentleman for coming. Our next witness is Capt. Franville Smith, Portland Pilots.

Captain, we do appreciate your coming. I know your association very well and they are doing a tremendous job all over in every area that I have ever been associated with them.

And we do appreciate your coming and we will appreciate your remarks this morning.

#### STATEMENT OF CAPT. GRANVILLE SMITH, PORTLAND PILOTS, INC.

Captain SMITH. Thank you very much, Mr. Chairman. My name is Capt. Granville I. Smith. I am a member of the Portland Pilots, Inc., Portland, Maine. And I am addressing my remarks particularly towards recommendations for future avoidance of marine casualty. My report will read as follows:

In answer to your request for recommendations relative to the safe transportation and transfer of bulk commodities in this area, we offer the following comments which we feel will be applicable in any area where these commodities are being transferred, or are to be transferred.

We are all fully aware that Portland Harbor is firmly established as one of the Nation's leading seaports with the capability of accommodating the heavy tonnage vessels which are proven to be the most economical means of transporting the bulk cargos upon which we are entirely dependent.

Portland Harbor has a main ship channel cleared to 45 feet at mean low water, and it has considerably more natural depth existent in the immediate vicinity. To protect and promulgate this capability, and to provide the safety margins required by the constantly increasing size of vessels, we feel that a primary requisite is the removal of hazards that are close to the traffic routes. This will include the necessary blasting and removal or sweeping off of ledge, and conventional dredging and removal of sedimentary bottoms.

To avoid the appearance of oversimplifying this proposal, we must consider some of the procedures involved to complete such a project. The need having been established, the general procedure is to obtain surveys, hold public hearings, research the economic feasibility and, finally, analyze the reports for final recommendations. This having been accomplished, the final stage is congressional approval and funding before the work actually commences. This can cover a period of several years and, unfortunately, the project is often inadequate even before completion.

We fully appreciate the fact that this research procedure and congressional approval is entirely necessary but look hopefully toward a reduction in the time span which is presently required.

In summary of the above recommendations, we strongly urge consideration of the necessary blasting and dredging which will appreciably reduce the chances of marine casualty.

Major oil spills are generally the result of collision, hull rupture, or contact with submerged objects. These are obviously the most difficult and costly to contain and remove. Minor spills, resulting from other causes, are relatively easy to contain and remove. The advancement of radar and communications systems have appreciably reduced the risk of collisions and groundings, and advances are continuously being made in the sophistication of these systems.

Recently, a vessel routing system has been adopted for the approaches to Portland Harbor. This was accomplished through the joint effort of Federal, State, and local interests. We are continuing in our efforts to provide an efficient communications system for the port, and the development of a vessel traffic system (VTS) is under consideration. Programs of this nature are underway or already operational in other ports of this Nation. We feel that based on our cargo throughput in Portland, we will qualify for inclusion in the same.

To complement a vessel traffic system, designated VTS, which includes communication systems and routing procedure, harbor advisory radar systems have been installed in some of the major waterways of the world. This system provides shore-based radar information to the navigator which is useful when used in conjunction with his own shipborne radar.

These systems have proved to be extremely successful in some areas, and basic recommendations for same have been made for this port. The development of this project is recommended, and we assure you that our fullest cooperation will be given.

In summary of the above comments, we emphasize the following: Portland Harbor has an excellent offshore approach pattern, and the natural depth of water conducive to heavy tonnage requirements. With the removal of those hazards near our inshore routing pattern, coupled with the utilization of new equipment and systems being developed for the safety of navigation, we are thoroughly convinced that traffic movements can be conducted with both safety and dispatch.

Thank you.

Mr. CLARK. Thank you very much, Captain Smith, an excellent statement. Mr. Kyros.

Mr. KYROS. Just a couple of questions, Mr. Chairman. What time was the *Tamano* going to offload on the 22d, do you know?

Captain SMITH. I don't know, Mr. Kyros, exactly what time barge capability was arranged for. I can certainly find that out.

Mr. KYROS. Well, some people have indicated to me that she wasn't really scheduled to do anything until noontime the next day.

So, again, I wonder why a pilot would bring her in the night before at that kind of tide.

Captain SMITH. Well, generally speaking, to avoid having the ship, say, anchor at Portland light vessel or cruise all night, our pilots do board on arrival.

Mr. KYROS. Was she coming from Venezuela?

Captain SMITH. I believe, or Trinidad.

Mr. KYROS. They could have told the *Tamano* to be here at a certain time. She would have been advised of that. She could have set her course and speed accordingly.

Captain SMITH. Yes, she could have reduced ETA to arrive at any designated time.

Mr. KYROS. Now, the Coast Guard says it was a pilot error. I don't know if you heard the testimony this morning.

Captain SMITH. Yes, I did.

Mr. KYROS. The Coast Guard reported that it was a pilot's error. Are the pilots that we have here, certified pilots, certified by the State of Maine?

Captain SMITH. Yes, sir. And the Federal Government.

Mr. KYROS. And the Federal Government. The only thing I saw in your statement, Captain Smith, to preclude this kind of disaster is, (1), you would like to take Soldier Ledge further down in Hussey Sound and excavate it more; (2) you want like a vessel traffic system; and (3) a harbor advisory radar system.

Captain SMITH. Yes. We will be pleased to work toward that objective. I have seen these, Mr. Kyros, in Grave's-End in England, and we have a pilot now in Europe at the tanker shiphandling school at Grenoble, which we have all attended.

And he is going to make a study of any of that capability in the areas where he is traveling and bring back recommendations.

Mr. KYROS. I am sorry, I didn't mean to cut you off. Is the harbor advisory radar system helpful in the kind of pinpoint casualty that occurred by glancing off a ledge, or is it really more for an area like San Francisco Bay, where you have massive ship traffic in fog and you have got to keep each ship in its course?

Captain SMITH. Right. More so, Mr. Kyros, in your last-mentioned statement. That does not take the place of eyeball navigation.

Mr. KYROS. Well, you know, the Department of Transportation is not giving us a harbor advisory radar system and they are not being bad about it—they are just saying we don't yet rise to that standard.

Would an HAR system have prevented the striking of the ledge that occurred that night?

Captain SMITH. I don't believe so.

Mr. KYROS. I shouldn't have asked you that question, then. You are not much help to us in getting an HAR system.

Captain SMITH. Let me clarify that statement by your previous statement which you asked me, will this take the place of pinpoint navigation.

Any sophisticated advancement in the navigation system is going to be most helpful, but no one can say that it could avoid anything. I definitely will concur, it would be most helpful along with sonobuoys, transponders, and any of the other sophistications in navigations.

Mr. KYROS. Perhaps I didn't phrase my question as precisely as I would have desired, and that is, namely, if an HAR system had been present plus the pilot, naturally, on the *Tamano*, would then there have been less likelihood of striking the ledge?

In short, would the HAR system have been helpful to the pilot?

Captain SMITH. Yes; the radar system would have been helpful to the pilot. I misinterpreted the original intent of your—

Mr. CLARK. Thank you very much, we have got that in the record now.

Captain SMITH. I am not saying it would have completely avoided it, I would make that perfectly clear, but it would be helpful, obviously.

Mr. KYROS. Incidentally, how could a pilot, a Portland pilot, make that kind of error in Hussey Sound? There is enough water there, enough room there, to go through.

Captain SMITH. Yes; there is a 900-foot channel, there is a 45° swing radius—I wasn't aboard the vessel, Mr. Kyros.

Mr. KYROS. Is there a possibility there was a tide running that night and caught the tanker?

Captain SMITH. A tide does play a factor in your transit of Hussey Sound; yes.

Mr. KYROS. The *Tamano* had been to Portland, Maine, frequently?

Captain SMITH. Yes.

Mr. KYROS. And it brought in the same kind of capacity and load with Portland pilots before?

Captain SMITH. That is correct.

Mr. KYROS. Thank you very much.

Mr. CLARK. Thank you very much, sir.

Captain SMITH. You are welcome.

Mr. CLARK. Our next witness is Mr. Lee Perry, regional biologist, Maine Department of Inland Fish and Game.

Lee, we are very happy to have you with us this morning and I am sure your statement will add a lot to this hearing this morning.

**STATEMENT OF LEE PERRY, REGIONAL GAME BIOLOGIST, MAINE  
DEPARTMENT OF INLAND FISHERIES AND GAME**

Mr. PERRY. Thank you, Chairman Clark, Congressman Kyros. My name is Lee Perry, I am regional game biologist with the Maine Department of Inland Fisheries and Game.

On behalf of Commissioner Maynard Marsh and the Maine Department of Inland Fisheries and Game, I would like to extend our sincere appreciation for this opportunity to appear and testify before this subcommittee.

The role of the Maine Department of Inland Fisheries and Game during the *Tamano* oil spill was (1) to monitor the observable effects of the oil on the waterfowl and wildlife in Casco Bay and the coast west of Portland, and (2) to coordinate with the Maine Audubon Society a procedure for collecting and processing waterfowl affected by the spill.

In order to outline the waterfowl problems associated with oil spills and the specific effects of the *Tamano* spill, it will be necessary to discuss:

- (1) The seasonal behavior patterns of the various species of waterfowl which frequent Casco Bay;
- (2) The direct and indirect effects of oil on waterfowl;
- (3) The observed effects of the *Tamano* spill;
- (4) Changes necessary in the present contingency plan to protect the waterfowl resource.

Casco Bay is important both as a summer breeding area and a winter feeding and resting area for waterfowl. During the summer months the American eider is the only abundant nesting species of duck in Casco Bay. The State of Maine is the only State in the United States with a breeding eider duck population. Nesting populations are believed to occur on Upper Green, Inner and Outer Green, Bangs, Stockman, Sand, Crow, West Brown Cow, Jewell, and Ram Islands. Casco Bay is considered to be the most southerly point of the eider nesting range. This species has been increasing along the entire Maine coast and it is estimated that the present spring population is in excess of 20,000 breeding pairs.

The breeding season runs from late April to early June. The incubation period lasts approximately 28 days, and young eiders are on the water from mid-June to early August. While the female is involved with the incubation of the eggs, the drakes gather into flocks by themselves and proceed to moult their breeding plumage. This moult or change of feathers involves the loss and replacement of all body, tail, and wing feathers. The entire process takes about 1 month. The flightless season generally occurs during the last week of July and the month of August. After this moult the drab body and tail feathers are again replaced with the winter breeding plumage. The male eider is in a state of constant moult from early summer through early fall. The female also undergoes a complete moult during the same period as the male, which is preceded by a late-winter, early-spring moult of body and tail feathers.

Herring gulls, black-backed gulls, and double-crested cormorants are also abundant and found nesting on most of the uninhabited islands.

As winter approaches, eiders from the more northerly portions of the nesting range start their southerly migration. Many pass the Maine coast on their way further south while in excess of 10,500 eiders winter in the bays along the Maine coast.

The most important species in the Atlantic flyway and also the most numerous species of waterfowl wintering in Casco Bay is the black

duck. An estimated 75 percent of the continental black duck population, or approximately 259,000 ducks in 1971, is located in the Atlantic flyway with the remaining 25 percent in the Mississippi flyway. This population has shown a decline of approximately 9 percent between 1970 and 1971 and has been declining for the past 10 years. As a result legal bag limits and hunting seasons have been adjusted to reduce annual harvests. Annual winter inventories during the past 5 years indicate that as high as 30 percent of Maine's wintering population is found in Casco Bay.

During the winter months these ducks are dependent upon the tidal flats and coastal salt marshes for food. Of the 60,000 acres of tidal flats on the Maine coast, 8,200 acres, 14 percent of the total wintering habitat is located in Casco Bay. Mollusks, crustaceans, and various marine worms are important food items.

The most observable effect in any oil spill is the direct mortality of waterfowl.

Waterfowl covered with oil lose buoyancy as well as insulation. Exposed to these elements and unable to swim waterfowl depending on the sea and shoal areas for food and protection are greatly hampered.

Hartung (1967) reported that energy metabolism of oiled ducks increased in response to reduced thermal insulation. Hawkes (1961) reported that oiled ducks spent considerable time preening at the expense of feeding. Hartung and Hunt (1966) found that ingestion of diesel and motor lubricating oil by black ducks and mallards caused pneumonia, irritation of the gastrointestinal system, livers and kidney disorders and destruction of the nervous system.

Hartung (1965) found that mallard ducks temporarily ceased laying after ingesting oil. Eggs oiled after contact with affected hens failed to hatch even though incubation continued.

Oil spills occurring during the nesting period of eiders and other island-nesting water-oriented birds could have very severe effects on local populations. As spring is the time of the year annual mortalities from predation, hunting and disease are replaced, any mortality of adults or unsuccessful nesting would reduce the populations below normal levels. The effect of spring spills would be especially detrimental to birds who lay few eggs and whose potential for rebuilding would be low.

Oil may also affect the food chain by killing adult and larval forms of mollusks, crustaceans, and worms which serve as winter food as well as killing vegetation in the intertidal areas which serve as cover for these smaller organisms and food supplies for some species of waterfowl.

We will next go on with the observed effects of the *Tamano* spill.

On Monday, July 24, a survey was made of Casco Bay by myself and Richard Anderson, Maine Audobon Society. A plan for the pickup and cleaning of affected waterfowl was formed. This project will be discussed by Richard Anderson in later testimony.

On Tuesday, July 25, Texaco supplied a launch and skiff to be used by us in an on-the-ground appraisal of the immediate effects of the spill on waterfowl and wildlife. Sandy Eldridge, Maine Fisheries and Game, Chris Ayers, Audobon, and myself conducted a thorough foot search of Ram Island, Ram Island ledge, Outer Green, Junk of Pork and Inner Green Islands. Bill Peppard, game division, and Dick

Varney, warden pilot, flew Casco Bay and the western Maine coast to determine the seaward spread of the oil slick.

On Thursday, another inspection was made by the same three and representatives of Texaco. On Friday, checks were made by Eldridge, Maine Department of Inland Fisheries and Game, of beaches to the south of Casco Bay to view the extent of damage there. On Monday, July 31, another helicopter search was made of Casco Bay to check for additional mortality and/or any new oil deposits.

As a result of the first helicopter survey it became evident that the majority of the spilled oil had landed on portions of Long, Cushing, Peaks, Great Diamond, Cow, and Cliff Islands. Sections of these islands' intertidal zones were severely blackened. The eider islands had been spared with the exception of Ram, Inner and Outer Green Islands. Adult and immature eiders with varying degrees of oil exposure were noted on these islands. Although there were numbers of gulls and cormorants on each of these islands, little oil was noted on these species.

An estimated 1,500 eiders were present outside the Green Island shoals. Between July 24 and 31, 42 waterfowl were picked up and delivered to the Audobon Society.

Thirty-four were eider duck, three scoters, numerous gulls, one guillemot, one tern, three loons and one cormorant. Ten dead eiders and one harbor seal were discovered with the majority of mortalities occurring late in the week.

Eiders picked up were in some stage of moult; primaries had not replaced blood quills in many of the adult females. The majority of birds observed offshore were moulting as evidenced by their response to approach by the helicopter. Young ducks were partially or fully feathered with the exception of flight feathers. Oil affected birds in different areas, some were completely soaked and others only on the breast. Because of weather conditions and stage of moult I feel that the losses from exposure may be lessened. Many young gulls and cormorants were still on the islands at the time of the spill. Adults were noticed travelling between the inner harbor and the offshore islands. Arnette (1971) reported that greatest mortalities occurred among grebes, followed by ducks and scoters, with gulls and cormorants least affected during the San Francisco spill. The fact that gulls and cormorants feed inside the harbor where little oil landed is probably the reason so few were affected there and here. Eiders affected by the oil apparently were in the water at the time they were affected as the amounts of oil on the islands is small. I would suspect that these birds were probably inside the Green Island shoals and the Hussey Sound passage at the time of the spill or shortly thereafter.

The tide and light northerly wind apparently were responsible for the location of the beached oil in Portland harbor. The incoming tide pushed oil as far north as Falmouth Foreside then retreated through Hussey Sound past Ram Island and Outer Green with some landing on the Cape Elizabeth shores. With a stiff southerly or southwesterly wind much of this oil could have landed on the more northerly eider islands. Weather during the week was ideal, hampered only by occasional fog and showers. The sea was calm and we had no problems visiting the offshore islands in the small skiff. This greatly

aided the speed and time required for the cleanup; however, it is interesting to note that the cleanup, even under ideal condition, is still going on.

The numbers and species of waterfowl affected could have been much greater had this spill occurred during the fall migration or wintering period or under different weather conditions. The problem of the effects of the oil on the vegetation and marine organisms used for winter foods is yet to be determined. Quantities of oil were not observed on kelp and mussel beds on the islands nor in the salt marshes in or west of Casco Bay. It is not known, however, how much residue exists on the flats inside the harbor, nor the effects this spill will have on winter food supplies.

The extent to which any species of waterfowl or wildlife will be directly affected by any oil spill will depend on the size of the spill and its distribution as well as the habits, numbers, and distribution of the species affected. First and foremost, however, oil must be spilled to cause damage. Any future legislation should be aimed at safer transportation methods and the prevention of oil spills.

Unfortunately, human error and accidents will probably always be with us. In order to protect the waterfowl resource of Casco Bay and reduce the damage done to it by oil spills we recommend:

1. That the Maine Department of Inland Fish and Game be included as one of the responsible agencies in the Portland Harbor oil and hazardous materials contingency plan and be contacted immediately following any major oil spill.

2. That a study of tidal movements be undertaken to provide insight into the movement and expected destination of spills occurring in different anchorages around the harbor as a basis for boom placement.

3. That all nesting and feeding areas be mapped and a plan of action developed which would insure the installation of booms or other devices to protect these areas both in Casco Bay and along the coast where oil might reach.

4. That provisions be made for driving the birds from endangered areas and less emphasis be placed on bird cleaning and rehabilitation using current methods.

Thank you very much.

Mr. CLARK. Thank you very much for your fine statement. Mr. Kyros.

Mr. KYROS. Thank you, Mr. Chairman. Mr. Perry, I don't notice in your testimony that you picked up any birds covered with oil and cleaned them and then set them free. Did you do that?

Mr. PERRY. This has been done. As I mentioned, Dick Anderson will be covering this in his testimony later this afternoon.

Mr. KYROS. Dick Anderson. He taught me all I know about birds. What about the harbor seal? You said that 10 dead eiders and one harbor seal were discovered.

What was wrong with the harbor seal? Was it covered with oil?

Mr. PERRY. It was completely covered with oil from the neck down; yes, sir. It was a young seal. It was in quite bad shape. This apparently was the only one that we know of that was actually killed by the spill.

Mr. KYROS. You say in your recommendations No. 2, that study of tides be undertaken to provide insight into the movement and expected

destination of spills occurring in different anchorages around the harbor as a basis for boom placement.

The booms are placed around the ship.

Mr. PERRY. Yes; they are placed around the ship to prevent loss of oil, but we feel, in the case of a spill such as this booming the ship prevents further loss but does not protect areas from oil spilled prior to booming. For example, if a spill occurred coming into the harbor, and the tide and currents were such that oil would land in Back Cove booms should be placed to prevent oil from going into this area.

Mr. KYROS. You would want adequate booming equipment, then, to prevent it from getting into Back Bay. This is beyond just booming the ship, is that right?

Mr. PERRY. Right.

Mr. KYROS. Finally, you say that provision be made for driving the birds from endangered areas, this I don't quite understand.

Mr. PERRY. Here, again, using Back Cove as an example, if oil were on its way in there and we knew that oil was going to reach there before a boom or any kind of preventive device could be installed, provisions should be made to get these birds out before oil arrived there.

This deserves quite a bit of study. I know there have been recommendations of this type made both by the Fish and Wildlife Service and other people that work with oil spills, but to the best of my knowledge it hasn't been used.

Mr. KYROS. Because attempting bird rescue and cleaning and rehabilitation is a very tough business any way, right?

Mr. PERRY. Right, as Dick Anderson will point out it is costly and inefficient. On this spill, there were many factors, primarily weather and season which allowed this to be done in quite a timely manner and allowed these birds to be released to the wild in quite a short time.

Mr. KYROS. Well, thank you very much.

Mr. CLARK. Thank you very much. Our next witness is Mr. Wayne Cobb, coastal resources director of the Maine Natural Resources Council.

Wayne, we are very glad to have you with us today. You may proceed.

#### STATEMENT OF WAYNE COBB, COASTAL RESOURCES CONSULTANT FOR THE NATURAL RESOURCES COUNCIL OF MAINE

Mr. COBB. I am Wayne Cobb, coastal resources consultant for the Natural Resources Council of Maine, which has its headquarters at 20 Willow Street, Augusta, Maine. The Natural Resources Council is the principal citizens' environmental organization in Maine. It is nonprofit nongovernmental, and devotes its entire efforts to encouraging the appropriate use and preservation of Maine's natural resources. The council has over 2,500 individual members and nearly 100 affiliated organizations throughout the State, representing approximately 15,000 people. It is the State of Maine affiliate of the National Wildlife Federation and a cooperator with many other national environmental organizations.

First, I would like to relate some scattered observations I have made in the 2½ months since the oil spill. On August 1, I traveled in a

small boat to the site at which the *Tamano* was anchored. Pumping operations were underway to remove oil that was still held within the boom which surrounded the ship. Around most of the ship, the boom was in direct contact with the hull. It seemed to me that the rocking of the ship would cause the boom to be lifted out of the water and allowed oil to escape. I then noticed that the boom was draped over the anchor chain, leaving an opening of between 5 and 10 feet in height through which oil could have easily escaped. Throughout the anchorage area and around Long Island, I could see oily hay. This would indicate that hay, spread on beaches to absorb the oil, had not been promptly raked above the high water mark and was swept into the bay on the advancing tide. I observed thousands of yards of the most badly hit shoreline, and the only cleanup effort I witnessed was being undertaken by a small group of volunteers, mostly children and teenagers, apparently without any official guidance.

At the Coast Guard pier in south Portland I watched a crew cleaning out a skimmer which had been used in an attempt to separate oil from water near the anchored ship. The skimmer, which had been brought in from Massachusetts, was hopelessly clogged with seaweed. A representative from the firm which developed the skimmer speculated that seaweed-harvesting machines might be better suited to the task.

Weather at the time of the spill and during most of the early cleanup period was excellent, presumably ideal for oil cleanup.

Around August 11 the tempo of the cleanup effort changed noticeably. There appeared to be a significant reduction in manpower and equipment on about this date, and I can only speculate that funds which had been available shortly after the spill were by then in short supply.

Removal of oil sand from island beaches did not begin until 8 weeks after the spill. During those 8 weeks, oil could be seen leaching out into the bay with every tide.

Throughout the 11 weeks now elapsed since the accident, information about the spill or about the cleanup efforts has been hard to come by. As coastal consultant for the State's largest environmental organization, I have been approached by many citizens who are anxious to know what happened. To find out, I have been in touch with most of the official agencies involved. The official U.S. Coast Guard Inspection report was not available to the public until about September 25, 2 months after the spill. This report shed some light on the events surrounding the accident itself, but did not concern itself with the cleanup efforts. The report of the Department of Environmental Protection was supposed to provide public information on the cleanup, but it was suddenly classified in order not to jeopardize the State's court suit. The commander of the south Portland Coast Guard base is preparing a report on the cleanup. When I visited the commander recently, he told me not to expect to see the report before early 1973. Then I called Texaco to find out if they will be issuing a report to the public. A Texaco spokesman said I was welcome to write a letter requesting a copy of the Texaco report. He could not say such a report would be available, but if it was, they would be glad to send me one.

The public will probably not know exactly what happened in connection with this oil spill for many months, or even years. Now, 11

weeks after the *Tamano* spill there is absolutely no assurance that an oil spill occurring tomorrow would be handled any differently. But we must start today to take action to prevent such a disaster from happening again.

The Federal Water Quality Improvement Act of 1970 provides for a national contingency plan for removal of oil from navigable waters in cases of emergency. Under the plan, a strike force is to be dispatched to any spill site where State or local efforts are deemed inadequate. The strike force would have the manpower and equipment to completely take over coordination of the cleanup. I feel that adequate coordination was lacking in this case. On behalf of the Natural Resources Council, I urge the subcommittee to support a strengthening of the strike force concept, to the point where real coordination can be provided in the future, where State and local authorities fail.

Additionally, the Natural Resources Council urges Federal support for the preparation of an oil contingency plan by the Maine Department of Environmental Protection. Such a plan would include the stockpiling of equipment necessary to control large spills, means of transporting this equipment to all possible spill sites, and detailed procedures to be followed.

The *Tamano* disaster has served to highlight the tremendous uncertainties of transporting oil over water. Much more information must be made available before the State of Maine can commit itself to any expansion of its petroleum industry. We are told that oil resources will be depleted within the next few decades; but the adverse effect of oil on the environment could be much longer lasting. Until significantly more is known about the problem and particularly about the July 22 spill in Casco Bay, we urge a complete moratorium on any expansion of oil facilities in Maine.

Mr. CLARK. Thank you very much, Mr. Cobb. Mr. Kyros?

Mr. KYROS. You make some statements here which are just too overdrawn, Mr. Cobb, although in principle I agree with everything you said.

You made the statement, for example, that material was classified, that information was withheld from you. I received all the information I possibly could want from everyone, involved—the Coast Guard, the Federal officials. I couldn't get information from Texaco because they had a lawsuit on their hands nor could I get it from the *Tamano*.

Mr. COBB. That is the problem. Everybody has lawsuits on their hands.

Mr. KYROS. You should understand that. And I understand that. But the Federal Government, the Coast Guard, and the Environmental Protection Agency did everything they could and they moved efficiently and coordinated well. VAST was hired along with the Cianchette Bros., and other contractors to do the cleanup work.

But I agree with you. There was hay around and there were efforts at times that look disorganized. However, now you say that you would urge a complete moratorium on any expansion of oil facilities in the entire State of Maine.

But you are talking to the wrong body, as you may already understand. I am sure that neither the chairman, nor I, nor this committee can say to the State of Maine that no oil tanks can be installed or request additional requirements.

I know this is a public forum and you should state that here, of course. But we are not in a position to carry that request out.

Now, second, you say that the national contingency plan, which I have here and have looked through carefully, provides for having the equipment and a strike force to go out with the equipment. Well, there is just not enough funding to carry out such a plan. That is the key today.

The Port of Portland just doesn't have all the equipment necessary. I don't know where you or I are going to get the funds needed to obtain this equipment.

Mr. COBB. Well, I am urging support for beefing up of that plan, wherever it may come from.

Mr. KYROS. I think that is well merited. Now, you also say the Natural Resources Council urges Federal support for the preparation of an oil contingency plan by the Maine Department of Environmental Protection.

What do you mean by that?

Mr. COBB. Well, I think the concern here is that the coordination of oil-spill cleanup be put in the hands of people who are familiar with the local area and familiar with the people in that area.

We feel strongly that if coordination can be controlled by the State as opposed to the Federal Government, it should be.

And if the State fails and local authorities fail then, under the contingency plan, the Federal Government would step in.

Mr. KYROS. You want the national contingency plan prepared.

Mr. COBB. We want it as a last resort.

Mr. KYROS. All right, then, you want a local plan, too.

Mr. COBB. Correct.

Mr. KYROS. Well, again, it is up to our State to determine whether we will have the resources and the experts on hand for this kind of local plan.

Now, you notice that it was out-of-State experts that came in and stated what had to be done to a gravel beach when oil spillage had occurred. You and I don't automatically know. These specialists have dealt with oil spills before and they are unique.

So I can see a cooperative effort is needed here between the State and Federal Government. I don't think that this is a problem.

Mr. COBB. I think a distinction there could be made where you call in experts for longer range planning, longer range schemes, such as cleaning up a beach.

But I think the immediate reaction to a disaster like this has to be from local authorities, because they are the ones who are familiar with all the complications of the area itself.

Mr. KYROS. Right. And you also said that the official Coast Guard inspection report was not available to the public until about September 25, 2 months after the spill.

Actually, from what I saw around here, the Coast Guard was so tied up with the few personnel it had and the material available to it that they were just working day and night to keep things going.

Mr. COBB. Well, I can understand that. I just want to make very clear that the dilemma that we private citizens find ourselves in in trying to determine what really happened.

And this is an ongoing thing.

Mr. KYROS. All you had to do was contact me.

Mr. CLARK. Most important was to read the newspaper, I would imagine.

Mr. COBB. I am afraid that wasn't a very good source, sir.

Mr. CLARK. If you want to have a moratorium on your oil, why, you are going to have to do one thing. You are going to have to get some other kind of fuel.

And I will recommend western Pennsylvania coal to you to be shipped up here.

Thank you very much.

Meeting adjourned until 1:30 this afternoon.

(Whereupon at 12:20 p.m. the hearing was recessed to reconvene at 1:30 p.m., the same day.)

#### AFTERNOON SESSION

Mr. CLARK. The subcommittee will resume its hearing. This afternoon the first witness will be introduced by Congressman Kyros. And we are very fortunate and very happy to have this gentleman here with us this afternoon. Mr. Kyros.

Mr. KYROS. Thank you, Mr. Chairman. The next witness will be His Excellency, the Governor of the State of Maine, Kenneth Curtis.

We are very proud to have him. We know that in the coast line particularly, in matters of oil and the marine resources, the Governor of the State of Maine has made, we think, significant steps which are notable throughout the Nation.

So it is with great pleasure, Mr. Chairman, and great honor, that I introduce to you now our next witness, the Honorable Kenneth M. Curtis.

Mr. CLARK. Governor, we are very happy to have you with us. Mr. Hathaway, have you anything?

Mr. HATHAWAY. Mr. Chairman, I want to thank you for giving me this opportunity to sit in on the hearing. As you will recall, I used to be a member of the Merchant Marine and Fisheries Committee until I was transferred to the Appropriations Committee.

I, of course, still have an abiding interest in the work of your committee, and particularly I am interested in the matter that is before us today. And I would like to join with you and Congressman Kyros in welcoming our Governor, Ken Curtis.

Mr. CLARK. You may proceed, Governor.

#### STATEMENT OF HON. KENNETH M. CURTIS, GOVERNOR, STATE OF MAINE, ACCOMPANIED BY PETER BRADFORD

Governor CURTIS. Thank you very much, Congressman Clark, Congressman Kyros, and Congressman Hathaway. I want to thank you very much for the opportunity to be with you. And I will try to be brief and say to you that I am glad to be able to appear before this subcommittee this afternoon.

First of all, I will say that Congressman Kyros needs no welcome to Maine. His efforts in the area of marine resources and environmental protection are well known and, I might add, deeply appreciated here.

Also we could say the same for Congressman Hathaway who has consistently over the past 8 years demonstrated a similar concern for Maine's coastal resources, although his own district doesn't encompass as much of the coast as Congressman Kyros'.

And I particularly want to extend a welcome to you, Congressman Clark, and to express my sincere appreciation and the appreciation of the people of Maine for your interest in the problems of this area, and also for your interest in other areas, like the Maine Maritime Academy and other special interests that you have been so kind to us on.

In discussing the *Tamano* spill which you are here investigating, I would like to divide my testimony into three parts. The first part will be a brief description of the spill itself and of the State's efforts to cope with it. The second part will involve a discussion of the present status of Maine's State law and general capability regarding oil spills. The third part will consist of some general observations on the relationship between Maine and national efforts in the energy and oil handling areas.

Several of the other witnesses testifying before this committee, such as Commissioner Spencer Apollonio of the Department of Sea and Shore Fisheries, Commissioner William Adams of the Board of Environmental Protection, and Capt. Donald McCann of the Coast Guard will, of course, be better able to answer specialized questions and to provide detailed information when they testify.

Of course, as you know, the *Tamano* spill itself began sometime during the night of Friday, July 21. The tanker apparently struck a ledge or buoy in Hussey Sound while coming into Portland Harbor with a cargo of heavy industrial fuel oil owned by Texaco and ultimately destined for burning at Central Maine Power Co.'s Cousins Island plant. The spill continued all of Saturday, July 22, and part of Sunday, July 23.

Now, estimates as to the total amount of oil lost vary, but the spill would appear to be in the vicinity of 100,000 gallons which would mean that more oil was lost during this spill than in all the spills in accidents of this type involving tankers in U.S. waters during the year 1970. In short, we all can agree that it was a very large spill.

Without seeking to fix any specific blame, I think it is fair to say that the ship, the receiving company and the relevant Federal, State and local agencies were simply not prepared to cope with a spill of this size. I think there is a specific reason for the State's unpreparedness which I will discuss in a minute.

Despite the fact that weather conditions were almost ideal, very little of the oil was immediately contained or recovered. Adequate containment material, skimming devices, and other equipment simply were not available in Portland Harbor despite the fact that it is the third largest oil port on the U.S. east coast.

And I don't think anyone can say for certain that the spill could have been completely contained if all the necessary equipment and personnel had been immediately available, but it is certainly fair to say that the damages would have been less. Because the oil was able to spread without significant impediment for approximately 48 hours, it certainly reached clam flats, ports, and areas of shore front which immediate containment might have protected. Consequently, cleanup operations have consisted largely of efforts to remove the oil from areas and objects on which it eventually came to rest.

Now, I assume that other witnesses will testify as to the remedial actions which are being undertaken by the Federal Government, by the local agencies, and by the industry. But with regard to State government I must first indicate that Maine undertook to prepare for just such a spill by passing our oil handling law in 1970. That law, of which I am submitting a detailed summary for the record, imposed a transfer fee of one-half cent per barrel on oil transferred between ship and shore in Maine waters. The funds collected, up to a ceiling of \$4 million, were to have been used to hire personnel, purchase the necessary equipment, and do the research to prevent or cleanup oil spills or to compensate third parties, such as fishermen, who were damaged by spillage.

In May of 1970, on the day the law became effective, 10 major oil companies and the Portland Pipeline Corp., filed suit challenging its constitutionality. The court enjoined the operation of the key provisions of the law and required that the transfer payments be held in an escrow fund pending the outcome of the litigation. Despite the fact that this case required no trial, oral arguments were not held before the State supreme court until 2 years later, in May of 1972. And the court has not yet handed down its decision.

As a result of this long delay, Maine's oil handling law, which received nationwide attention and which attempts to do no more than assure that the oil industry in Maine will pay its own way, has never become effective and Maine is no better protected today than we were in 1970 or, for that matter, in July of 1972.

While I do not criticize the oil industry for seeking to get a clear declaration of its constitutional rights in court, I cannot help observing that this suit has been subject to extraordinary delays and the cost of that delay has been made more concrete by this spill. Specifically, because the State did not have the funds, the equipment, or the personnel necessary to cope with this spill, the department of environmental protection was put in a position in which the most it could offer was general cooperation and the use of its very limited manpower and material. Both the department of environmental protection and the department of sea and shore fisheries kept constant surveillance over the spill but neither department was in a position to significantly accelerate the cleanup.

We expect a decision shortly from the Maine Supreme Court regarding the constitutionality of our oil handling law. We strongly hope that the decision will be favorable but I would like to make clear that if the courts should find any part of the law to be unconstitutional, we are prepared to revise the law to achieve the equal degree of protection within the framework laid out by the supreme court's decision.

Both the department of environmental protection and the department of sea and shore fisheries are continuing their monitoring activities to assure that the spill is completely cleaned up and to assure that the public health is adequately safeguarded against any contamination of Casco Bay shellfish. In addition, the State has filed a substantial lawsuit based on the damages to our marine resources to recover both our costs resulting from the spill and to reimburse the damages to private citizens.

With regard to Federal interest in the spill, and specifically with regard to legislation which might emerge from this committee's in-

vestigation, I would like to close by suggesting four areas which seem to me to be relevant.

First, the basic Federal law with regard to oil spill cleanup is now Senator Muskie's Water Quality Act of 1970. We believe that that legislation clearly allows State governments to enact oil spill legislation more stringent than the Federal law itself. We recognize that the Federal Government has a concern for uniform maritime commercial regulation, but we feel that Senator Muskie's legislation wisely allows States which may have an especially strong interest in marine resources to make sure that those resources are adequately protected. I would urge your subcommittee to make sure that Federal laws and treaties relating to oil spill legislation and control continue this pattern of permitting more stringent State controls until such time as the Federal Government is itself willing to pass legislation which not only provides for penalties and cleanup, but also assures that innocent third parties, such as fishermen or waterfront homeowners, are quickly able to recover any damages caused to them by an oil spill.

Second, as you are aware, Maine has had before it the prospect of extensive oil development for several years now. One of the suggestions which this prospect has led to is that tanker traffic in busy ports be controlled with the same care as air traffic at busy airports. I understand that a demonstration program of this type is now underway in San Francisco Bay. If that demonstration is successful I would hope that the Federal Government would be prepared to insist on similar measures in other high-volume oil ports.

Third, as offshore oil development and increased tanker traffic appear probable, it is absolutely essential that the offshore boundary between the United States and Canada be settled. Not only is the ownership of valuable fishing and mining rights involved, but an oil spill in waterways of unsettled ownership and jurisdiction would be a legal nightmare for everyone concerned. Any help that you can give us in conveying the urgency of this situation to the State Department would be deeply appreciated.

Fourth, various Federal programs, such as the several deepwater port investigations, consideration now being given to national energy policy, revision of the oil import quota system, and the prospect of offshore oil drilling in the New England area all raise substantial and largely unevaluated environmental questions. There is apparently little doubt that, in the next 10 years at least, oil traffic in the New England region will increase substantially.

As the Federal Government attempts to decide which type of increases are most acceptable, we in Maine would like to think that consumer interest and environmental interest will be considered ahead of the industry interest which has, in past, dominated Federal oil policy.

In an attempt to help to define Maine's perspective on these problems, I appointed a task force last winter to review the entire question of heavy industrial development on the Maine coast. That task force has now completed its work and I would like to offer a copy of its report to this subcommittee.

Its primary recommendation is that heavy industrial development be encouraged in only two zones on the coast and that deepwater oil port development for now be confined to the Portland area. Legislation to implement the report's recommendations is now being prepared for submission to the 1973 State legislative session.

In addition, Maine is conducting an extensive review of the State's energy situation through a New England regional commission grant to the public affairs research center at Bowdoin College. That review should be completed early in 1973.

In conclusion, I would just want to say that I welcome your subcommittee's inquiry into the *Tamano* spill and hope that your report points toward ways in which we can avoid recurrences of this type of damage at ports not only in Maine but elsewhere in the United States.

Thank you for the chance to share these thoughts with you.

Mr. CLARK. Thank you very much, Governor. That was an excellent statement. I want to congratulate you for it. I would like to ask you one question.

Would you favor the concept of an offshore port for the unloading of oil and other bulk commodities?

Governor CURTIS. I think we have got to look to some type of imaginative solution of that nature to solve the energy problem that exists in our country.

As you know, particularly in a State like Maine, thoughts of an oil port become very emotional, but the fact of the matter is we still highly depend on the use of petroleum products to run our society.

And until such time as we find a substitute, it seems to me that we have to explore other ways and better ways of handling these products. And the offshore terminal could be one of those ways.

Mr. CLARK. Mr. KYROS.

Mr. KYROS. Thank you, Mr. Chairman. Governor, thank you for that most enlightening statement. It is very helpful to the committee and I think the Maine law is probably a landmark law.

Are there other States contiguous to the ocean that have such laws, to your knowledge?

Governor CURTIS. No, nothing as extensive as this that I know of. In fact, many States have taken a great interest in this piece of legislation. And I think, when the Supreme Court hands down its decision, this will prompt other States to try to do something to incorporate some of the features that we have in this bill.

Mr. KYROS. If your oil conveyance law had been in effect, do you think with the fund you discussed that you would have had equipment, skimmers and booms, available in the Portland area to clean up the spill more swiftly?

Governor CURTIS. I am sure we would have. And, if my figures are correct, we have some \$3 million in escrow at the present time. Some of that money could have been utilized to purchase equipment to have available in the port.

Also, I believe, we could spend somewhere up to around \$100,000 a year in research in this area. But I think one of the big things that would have happened—and I have no criticism at all of the U.S. Coast Guard, which I think did an excellent job—there was a little bit of a delay at the time the spill occurred, because, you know, being a lawyer myself, no one likes to move in if it is going to indicate any liability on their part. But we are not really concerned at the outset who is liable. If the State had had the equipment and the fund, we would have moved in instantly and started the cleanup operation and worried later about who was responsible and who should compensate us for the costs and damages.

I think this would be one of the biggest factors involved in our law. Mr. KYROS. Now, if you could set up such a protection fund and you find it constitutional, is the cost ultimately borne by what, the consumer of the oil? Is that the idea?

Governor CURTIS. Basically, we have a \$4 million fund, and we have an emergency bond issue which provides another \$4 million for us. Now, after we are all done with the cleanup and our research projects and things of this nature, then we would seek compensation from that company to restore our fund. The law provides absolute liability; that is, once we know who spilled the oil, we don't need to prove negligence.

Another good feature of the bill is that for the so-called mystery spill, if you never can prove liability, you still have the money available to effect the cleanup and to compensate fishermen and other third parties who might find it very difficult to bring suit against an unknown company and try to recover damages.

So there would be some attrition in the fund, but basically, at a major spill, we would hope that we would be able to recover most of the money we spent from the company that was negligent.

Mr. KYROS. Now, you also spoke of the inevitable increased tanker traffic off our coast. Does that mean, for example, that Portland should have a VTS system, a vessel traffic system?

You know we have applied and have made various efforts to the Department of Transportation to obtain it, but currently we haven't reached the level of priority to obtain it.

Do you think we should have one?

Governor CURTIS. Very definitely. I think that any harbor the size of Portland, with its dependence on marine resources, ought to have every possible available safety device to protect us against this type of spill.

And you mentioned that traffic would be increasing, and we know this is the case. And I could give one example in point. This spill occurred from a tanker delivering oil to the central Maine power company plant at Cousins Island, and, as you know, they have announced they hope to greatly increase their capacity with a new plant on that same island, which means there is going to be more oil coming in, just in this one specific industry.

Mr. KYROS. Governor, you also said that you felt the Federal Government exhibited some unpreparedness, or did I understand you to say that? The National Contingency Plan is set up to have the gear ready to contain and clean up an oil spill, but it just wasn't there as fast as we wanted.

What should be done in regard to that?

Governor CURTIS. I guess in the case of so many things plans are great, but if you don't have the funds to implement them they are sort of useless. When you have an accident of this type, where there was a spill apparently as the tanker approached the harbor, you need the equipment right there, you need the booming and the skimming equipment right there to bring out, and you don't want to wait till it is brought up from Boston or Providence or some other port. It should be right on hand—and that takes money.

Mr. KYROS. Currently, without the coastal protection law, the oil conveyance law, the State hasn't sufficient funds to set up contingency equipment at various ports on the seashore.

Governor CURTIS. For all practical purposes, until we have this law effective, the State really has nothing.

Mr. KYROS. One more question, Governor. I know you stayed in close touch with the Coast Guard and the other people that were coordinating the containment and cleaning of the oil spill. What was your observation of the efficiency and ability of the Coast Guard?

Governor CURTIS. I thought they were on the spot at the time of the spill and were doing everything they possibly could with the resources that they had to help us.

I know that it was around 6:30 or 7 o'clock in the morning of the spill that I met with Captain McCann at the Portland airport when we were both prepared to fly over the area to see what was happening and what could be done.

And he established immediate liaison with all the State agencies. And, again, I think that Captain McCann could have done twice the job if he had twice the resources at his command to do it.

I don't think any fault lies with the Coast Guard.

Mr. KYROS. One last question, Governor. The officer in charge here, the Coast Guard officer, hired Vast, Inc., and had Environmental Protection Agency personnel advising him as to the nature and quality of cleaning up the State, but the State doesn't belong to them, it belongs to us, the people of the State of Maine.

What input do we have in determining whether a beach should be replaced, birds should be cleaned and sent back, or what should happen to the sediment of a certain area?

Governor CURTIS. Well, the basic input that we presently have, which is not adequate, is through our departments that are concerned—through the Department of Sea and Shore Fisheries who are really the ultimate judge as to whether or not a beach is polluted with oil to the point that it is dangerous to shellfish.

And we have the capability of testing. I suspect the public can contact our agencies with complaints. But, again, we need the funds available to the State so that we are not totally dependent on someone else to try to do the right thing.

If our State agencies feel the citizens do have a legitimate gripe, then we ought to have the funds to go ahead and correct it. Or tell him that he doesn't have the problem that he thinks he does.

Now we are totally dependent on trying to get someone else from outside the State government to answer the citizen's complaint, and that is not good enough.

Mr. KYROS. Thank you very much, Governor. Thank you, Mr. Chairman.

Mr. CLARK. Mr. Hathaway?

Mr. HATHAWAY. Thank you, Mr. Chairman. Governor, it is a pleasure to have you here and I enjoyed hearing your statement.

In the event that the oil handling law is held unconstitutional, what other contingency plans to fund such an operation for clean up do you have?

Governor CURTIS. Well, we hope, if the court decision finds the bill unconstitutional, will spell out in what areas it is unconstitutional. And, as Governor, I would be prepared to call immediately a special

session of the legislature to correct that law so that we can put it into effect.

We have no intention of abandoning this concept, if there are provisions of it that happen to be unconstitutional. We don't think the concept is so sound that we will keep calling the legislature back into session until we get a constitutional bill.

Mr. HATHAWAY. Do you think there is any danger of the courts saying that the States simply cannot tax at all for this purpose because of the nature of the commerce, that is, interstate commerce?

Governor CURTIS. No, we don't think so. I think Peter Bradford is going to be here soon. He is one of the major drafters of this piece of legislation. Oh, he is here now.

But we think the fact that we put a limit—it is not a tax, a forever-type of tax—there is a ceiling.

Mr. HATHAWAY. \$4 million.

Governor CURTIS. \$4 million. We are not out to tax the oil companies. We are only out to create a fund. We think there is a big distinction here between the constitutionality of the law and whether or not we are just imposing half-a-cent-a-barrel tax forever or whether or not we were trying to create a research fund, a special-purpose fund, which we argue is designed not to damage the oil companies, to unfairly tax them, but to provide for the safety of the court.

And, Peter, you can give them all the constitutional legislation language that says you have a right to provide that safety under the Constitution.

Mr. BRADFORD. Well, I think you have covered the water, unless Congressman Hathaway wants to pursue it further. That certainly is the basic theory that underlies the legislation as it is now.

Governor CURTIS. Excuse me, I would introduce Peter Bradford who is a member of the public utilities commission and was a member of my staff when the legislation was drafted.

Mr. HATHAWAY. I presume, too, that you would be getting additional research data from the EPA, would you not, fed into this organization that would use the \$4 million?

Governor CURTIS. Absolutely. I think we set aside about \$100,000 a year for research. And we would hope to coordinate this very much with all the other agencies, trying to develop the best techniques that we can.

Mr. HATHAWAY. Although I would add, from my observation it appears that the EPA has not come up with any new technological means to clean up spills, even though we had one just a couple of years ago on the west coast. And the state of the art seems to be very far behind.

Governor CURTIS. That is why we want the fund, Congressman, in all due respect—EPA, we would just as soon not wait for them. We would like to go ahead and see what we can do on our own.

Mr. HATHAWAY. Good, Thank you, Mr. Chairman.

Mr. CLARK. Thank you, Governor.

Governor CURTIS. Thank you very much. Mr. Bradford will be available if he can be of any help to the committee while we are here.

(The attachment to Governor Curtis' statement follows herewith:)

SUMMARY OF MAINE OIL HANDLING LAW<sup>1</sup>2. *The substantive provisions of the act*a. *Prohibition of oil discharges and licensing*

The plan of the substantive provisions of the Act is fairly simple. Section 543 of the Act is a flat prohibition on the discharge by anyone of oil or petroleum products into or upon coastal waters and lands adjoining the seacoast of the State or any waters that drain into the coastal waters of the State. The statute seeks to make this prohibition effective by focusing upon oil terminal facilities. These are facilities where oil is handled commercially at the seacoast with attendant risk of spills and that attract into the State's water the oil-carrying vessels (most of them under common ownership or control with the terminals), that bring with them the constant risk of accidental discharge of the product in their holds. Regulatory control is centered in the Environmental Improvement Commission. 38 Me. Rev. Stat. Ann. §§ 544, 546, 549, 550.<sup>2</sup>

Oil terminal facilities must obtain licenses to operate from the Commission. § 545. An annual license is issued and renewed upon indication that the licensee has carried out and is carrying out federal and State plans for the control of oil pollution and the abatement of oil spills. The Commission is given the power to adopt rules and regulations necessary to carry out the purposes of the statute and to enforce such rules and regulations, which have the force and effect of law. § 546. The Commission has in fact adopted regulations covering the circumstances and conditions under which transfers of oil may be made, the reporting and cleaning up of spills, safety measures that must be taken and other matters relating to oil transfers and spills. (Pl. Br., App. B.) In addition, the Commission is authorized to investigate possible violations of rules, regulations, orders and licenses it issues and to proceed to a determination of alleged violations, after notice and opportunity for hearing, and to issue orders, judicially enforceable, to remedy any violation found. §§ 550, 451.2. There is an ultimate sanction, for violation of the Act and Commission rules, regulations and orders, of a fine of between \$100 and \$5,000 for each day's violation. § 550.

Section 548 imposes upon persons discharging oil into or upon Maine waters in violation of Section 543 the duty of removing the discharge to the satisfaction of the Commission. The Commission, however, is empowered to effect a clean-up if the person responsible fails to do so and in the case of spills whose source cannot be traced. Costs of any such clean-up, whether by a private person or by the Commission, are to be paid out of the Maine Coastal Protection Fund in the first instance, and the Fund is to be reimbursed in accordance with the terms of the Act.

b. *The Coastal Protection Fund*

The sections of the statute that create the Coastal Protection Fund and provide for expenditures from it and reimbursements of it, Sections 551 and 552, are the critical sections of the Coastal Conveyance Act so far as the questions raised in this litigation are concerned. Without regard to the litigation, moreover, they are the most important provisions of the legislation. Governor Curtis listed the establishment of the Fund as one of two cardinal features of the bill, the other being the centering of control in the Environmental Improvement Commission. (Ex. J, R. 120.)

Section 551 creates the Fund and defines its uses. The Fund is a nonlapsing, or permanent, revolving fund limited to \$4 million.<sup>3</sup> The initial funding to that level is effected by the imposition of a fee of half a cent for each transfer of a barrel of oil in Maine waters. To put the amount of the fee in perspective, a half a cent a barrel represents less than two-tenths of one percent of the value of crude oil as it arrives in Maine. (See Ex. P-7, R. 83.)

The fee is paid by oil terminal facility operators, § 551.4. The fee relates to each over-water *transfer* and not to each barrel of oil brought into the State (*e.g.*, by truck) because the Legislature regarded the risk against which the Fund

<sup>1</sup> Because of the pending litigation involving this statute, this summary is no more than a copy of the summary in the State's brief in that litigation.

<sup>2</sup> For convenience, the sections of the Act will be cited hereafter without mention of Title 38 of Revised Statutes, in which they are found.

<sup>3</sup> By § 547 the Governor is empowered to declare an emergency when a disaster or catastrophe arising from the discharge of oil "exists or appears imminent." By Ch. 23 of the 1969 Private and Special Laws, enacted at the same time as the Coastal Conveyance Act \$4 million of bonds are authorized to be issued to be used to pay oil spill clean-up expenses and damage claims if the Governor finds, pursuant to § 547, that an oil pollution disaster or catastrophe exists or appears imminent.

protects as occasioned by over-water transfers of oil.<sup>4</sup> When the Fund reaches \$4 million, the fee will drop to the level necessary to meet continuing administrative expenses and costs of research into the causes and effects of oil spills and methods of controlling and removing oil pollution of the waters and the development of control and clean-up methods.<sup>5</sup> *Ibid.* The EIC is directed to include in its periodic reports to the Legislature specific recommendations for "a license fee formula to reflect individual licensee experience." § 554

In fact, from the time the statute became effective on May 9, 1970, until February 29, 1972, \$1,835,296 had been paid into escrow by plaintiff and by the oil company plaintiffs in the companion case, No. 710, in lieu of the ½-cent a barrel transfer fees owing by them. By order of the Superior Court, exaction of the fee has been stayed as to them, provided that license fees otherwise payable are placed in escrow. In addition, nearly \$200,000 has been paid into the Fund by oil terminal facility operators that have chosen not to litigate the constitutionality of the Act.

Up to \$100,000 can be allocated from the Fund by the Legislature each year for research and development, and the expenses of the Commission associated with its administration of the Coastal Conveyance Act are chargeable to the Fund. §§ 551.1, .5. Among other things, the Commission is authorized to maintain employees and equipment at Maine ports as needed to carry out its responsibilities under the Act. § 549.

For the rest, in its true revolving aspect, the Fund is to be used for paying, initially, the costs of cleaning up oil spills, as provided in Section 548, and for compensating residents of the seacoast and others for damages suffered as a result of oil spills. § 551.5. The Act contemplates, however, that the Fund will bear the burden of such clean-up costs and damages only temporarily; it prescribes specific procedures under which the State may seek out the person who caused the spill and require him to reimburse the Fund for all costs (with certain exceptions).

*c. Procedures for recovering certain expenditures made out of the Fund and for handling third-party damage claims*

In its provisions establishing procedures, both administrative and judicial, by which persons injured by oil spills are compensated and persons who cause oil spills may be required to reimburse the Fund for expenses sustained by it in connection with such spills, the Coastal Conveyance Act is, for the most part, perfectly clear in its meaning. In certain areas of technical detail, however, there is room for argument as to what the Legislature meant and hence for interpretation. In the following discussion we have tried to employ common sense and an appreciation of ordinary concepts of fairness, in accordance with the directive of the Act itself that it be "liberally construed" to effect its purposes, § 557, in order to provide such interpretations as are necessary to fill the relatively rare interstices in the statute.

Since the suggested interpretations represent the considered judgment of the Environmental Improvement Commission and the Attorney General, they also reflect the positions that these State officials—the persons responsible for the administration and enforcement of the Act—propose to take in performing their functions in the future. While the interpretations suggested herein are obviously not binding upon this Court, we trust that they will be useful to the Court in evaluating the constitutionality of the Act.

(1) *Clean-up costs*

It is convenient, in explaining the procedures contemplated by the Act, to begin with a simple case uncomplicated by injury to third parties. Suppose, then, an oil spill—a discharge prohibited by Section 543—which the EIC brings under control before it harms anyone and which is cleaned up at a cost to the Fund of \$20,000. There are three categories of persons who might cause such a spill: (1) a licensee, (2) a vessel destined for or leaving a licensee's terminal, and (3) a non-licensee shore facility or a vessel unrelated to a licensee. Taking the third category first, the Act provides simply for a request by the Commission for reimbursement of the full \$20,000 of the Fund's costs, § 551.6, and for a possible

<sup>4</sup> Though the point is not significant insofar as plaintiff's operations are concerned, the Court should understand that the concept of relating the fee to each transfer means that, if oil is brought into Maine by water, unloaded, loaded for trans-shipment by water and then unloaded again at another Maine port, three ½-cent fees would be due.

<sup>5</sup> In addition, the fee at its permanent, lower level will include a small incremental amount to cover other unreimbursed charges to the fund. (See p. 99, n. 2, *infra*.)

waiver by the Commission of reimbursement, upon petition of the person of whom reimbursement has been requested, if the Commission finds that the spill was the result of an act of war, an act of government or an act of God, § 551.7. If there is no waiver, and if the Commission's administrative request is not honored within 30 days, the matter is turned over to the Attorney General for collection. § 551.6.C. The Attorney General would proceed by way of a lawsuit, in which, in order to collect for the Fund, he would have to prove the defendant's responsibility for the spill according to whatever common-law or admiralty standard the Court might determine to be applicable in the particular case.

The case of a licensee is slightly different. In the first place, if a licensee promptly reports a spill, then, in recognition of its part in creating the Fund by payment of the oil transfer fee, it is forgiven the first \$15,000 expended from the Fund. § 551.6.B. The licensee is free to petition for waiver, on the grounds stated above, of the reimbursement of the remaining \$5,000 for which it may be liable. Again, failing voluntary reimbursement upon demand, the matter is turned over to the Attorney General for collection. In the case of a licensee a specific section of the Act governs liability for reimbursement, and it provides that a licensee is absolutely liable. "[I]t shall not be necessary for the State to plead or prove negligence in any form or manner on the part of the licensee. . . ." § 552.2.

Finally, there is the case of a spill caused by a vessel destined for or leaving a licensee's terminal facilities. The section of the Act just quoted, Section 552, recognizes a special relationship between a licensee and such vessels. On the basis of this relationship, Section 552.1 makes a licensee "liable for all acts and omissions" of such vessels, and Section 552.2, after stating (in the passage quoted in the preceding paragraph) that the State need not prove a licensee's negligence in a reimbursement suit, says affirmatively that "the State need only plead and prove the fact of the prohibited discharge or other polluting condition and that it occurred at facilities under control of the licensee or was attributable to carriers or others for whom the licensee is responsible as provided in this subchapter."<sup>6</sup>

As we shall explain, the licensee's vicarious liability is contingent, intended to be invoked only when a vessel's owner cannot or will not pay. Thus, the vessel (*i.e.*, its owner or charterer) will be looked to for reimbursement. In the case of such a vessel, *i.e.*, a vessel destined for or leaving a licensee's terminal, the course of reimbursement proceedings under Section 551 is to be much the same as in the case of the licensee. Such a vessel shares its licensee's entitlement to have the Fund bear the first \$15,000 of expense if it promptly reports the spill it caused.<sup>7</sup> It is entitled to petition for waiver, and it is subject to suit by the Attorney General if reimbursement is not waived and if it declines to make reimbursement of the costs (\$20,000 or \$5,000 depending on whether the spill was promptly reported) for which it and not the Fund is responsible. Such a suit would be in admiralty or at common law, as appropriate to the circumstances, and the issues respecting fault and other matters would be those defined by admiralty or common-law doctrines. It is only if the Attorney General's suit against the vessel does not lead to recovery on behalf of the Fund that the Attorney General would invoke the licensee's vicarious liability.

Plaintiff's brief makes much of this vicarious liability. Most of its concern is misplaced. Although Section 552 does impose, in the terms quoted, vicarious liability upon a licensee for vessels for whose presence in Maine waters it is responsible, the limited purpose of the vicarious liability provisions was made very clear by Representative Richardson, the principal legislative sponsor of the Act. He said, "the only time that the vicarious liability would come into play would be in the event that the party causing the spill was financially irresponsible . . . [and] did not possess the financial capacity to respond in damages . . ." 1970 Me. Legis. Rec., House, Feb. 3, 1970, p. 685. In other words, the vicarious liability provision was intended to impose upon the licensee—a permanent shore installation that would always be amenable to suit—a limited kind of residual or secondary liability to protect the State in the event that a vessel that caused a spill while traveling to or from the licensee's terminal could not be found or could

<sup>6</sup> The only "others" for which licensee is made responsible are its servants and agents, § 552.1; plaintiff makes no complaint against the explicit statement of what would be the law in any event under ordinary respondeat superior principles. (See Pl. Br. 173.)

<sup>7</sup> Section 551.6.B provides that "[i]n the case of a licensee promptly reporting a discharge" only those costs that exceed \$15,000 are to be reimbursed. The term "licensee" is properly construed, we believe, to include vessels for which the licensee is ultimately responsible. Otherwise the possibility of anomalies in the administration of the statute would be introduced.

not pay the environmental costs attributable to that vessel. It is the intention of the Attorney General in any reimbursement suit against a tanker vessel to name as a co-defendant the licensee that is ultimately responsible for the vessel's conduct and to seek payment from that licensee only if the vessel fails to pay a judgment against it.

Plaintiff's brief also makes much of the fact that in a suit based on a licensee's contingent vicarious liability, as in a suit based upon its own conduct, a licensee's liability would be absolute. This raises the theoretical possibility that a spill-causing vessel might successfully interpose a defense (based on lack of fault) that would not be available to the licensee and that the licensee would be held liable anyway even though no fault on anyone's part was involved. The possibility is remote in the extreme, for two reasons. First, the experts in this field find it hard to "imagine a circumstance where a discharge of oil would occur without some degree of negligence". S. Rep. No. 91-351, 91st Cong., 1st Sess. 5 (1969). Secondly, if the vessel were able to prove that no negligence or other basis for liability under admiralty law was involved, the probabilities are that the Commission in its discretion would waive reimbursement on the ground that the spill had results from an "act of God" or was otherwise within the tenor of Section 551.7.

### (2) *Third-party damage claims*

Suppose now that shore-front property owners (for example) sustained damages as a result of a spill. The injured property owner is given a remedy by Sections 551.2 and .3 against the Fund, which is stated to be exclusive, § 551.2.D. That is, it is exclusive of any remedial rights the property owner might have had under State law to proceed against the person causing the spill.<sup>8</sup>

Under Section 551.2 the property owner (and anyone else harmed by the spill) must file their damage claims against the Fund within six months, and the initial administrative approach to such claims is for the Commission to attempt to bring about a tripartite agreement (between the claimants, the Commission and the person causing the spill) as to the amount of damages sustained by each claimant. If an agreement is reached as to any claimant, the agreed amount is simply paid to the claimant from the Fund. If the three entities cannot agree on the amount of the damages suffered, the matter goes to arbitration pursuant to Section 551.2.B.

The procedures governing arbitration are stated in Section 551.3. Arbitration is by a board of three members, of whom one is chosen "by the person determined in the first instance by the Commission to have caused the discharge."

The second member is chosen by the Commission, rather than by the claimant or claimants,<sup>9</sup> and the third is a neutral chairman selected by the two nominee arbitrators. If the latter cannot agree upon the third arbitrator (or if either party in the first instance fails to select its arbitrator), the American Arbitration Association makes the selection. §§ 551.3, .3.B. An arbitration board determines only whether a claimant was injured by the spill and, if so, in what amount. A board has no power to determine liability whether resting on fault or on responsibility without fault. Section 551.3.F. is specific that a person thought by the Commission to be responsible for a spill can participate in an arbitration by selecting an arbitrator without thereby admitting its liability. Hearings of arbitration boards are directed to be informal, although boards have the power to administer oaths and to compel the attendance of witnesses and the production of documents. They are not required to follow all the judicial rules of evidence. § 551.3.D.

Although under general principles of law arbitration awards are subject to judicial review only on the most limited of grounds and the utmost in leeway is allowed to the arbitrators, Domke, *The Law and Practice of Commercial Arbitration* 312-15 (1968); *Bernhardt v. Polygraphic Co.*, 350 U.S. 198, 203 n.4 (1956), a Coastal Conveyance Act arbitration board's determination of the amount of damages sustained by a third-party claimant is subject to review in the Superior Court "as to matters relating to abuse of discretion by the board," § 551.3, a phrase well understood in the law of judicial review to give the reviewing court the power to correct any injustice (pp. 72-73, *infra*). When such an administrative determination has become final, the amount determined

<sup>8</sup> The extent to which a third party suffering damages may be held to the State remedies that the Legislature intended to make exclusive is discussed at pp. 204-07, *infra*.

<sup>9</sup> Since all third-party claims arising from a single spill are to be heard by a single arbitration board, § 551.3.C. the provision for appointment of an arbitrator by the Commission avoids the problem of multiple claimants trying to agree on a single arbitrator.

by the board is paid from the Fund, and the claimant's rights under State law thereby come to an end.

An arbitration board's determination that a third party claimant has been injured in a specified amount is stated to be final subject to judicial review. This means that the claimant has no further remedies under State law and that the person who was thought to have caused the discharge, if he participated or had the opportunity to participate in the arbitration proceedings, is bound by the board's determination of the *amount of damages*. He is free, however, to contest his responsibility and liability for the discharge in any subsequent proceeding.

After the Fund has paid out money to third-party claimants with respect to a particular oil spill (either after a tripartite agreement or after an arbitration determination has become final), the Commission will then resort to the judicial reimbursement procedures already described at pages 33-36, *supra*. It will make demand upon the person who is thought to have caused the spill, asking that he reimburse the Fund for the money paid out to the third party, and, if the request is declined, the Funds claims with respect to such claimants will be enforced (together with claims for clean-up costs incurred by the Fund) in a lawsuit brought by the Attorney General. If a defendant in such a suit is bound (as described above) by an administrative determination of third-party damages made in an arbitration proceeding to which he was a party, he could not reopen the question of the proper amount of such third-party damages, although he would be free to litigate the amount of the clean-up costs attributable to him, which are not subject to arbitration. In the unusual event that collection were sought from a licensee in connection with a vessel-caused spill, the licensee, which would not have had the opportunity to participate in the arbitration of the damages issue, would be entitled to litigate the question of the amount of third-party damages as well as clean-up costs in any reimbursement suit.

In the ordinary course, then, the Fund will be reimbursed for all of the clean-up and third-party damage costs it incurs except (1) costs associated with mystery spills or spills for which it is otherwise impossible to assign responsibility, (2) the first \$15,000 of clean-up or third-party damage award expense in the case of a licensee (or a vessel related to a licensee) that promptly reported the offending spill and (3) costs associated with a spill of which reimbursement is waived pursuant to Section 551.7.

Mr. CLARK. Thank you very much. Our next witness is Mr. William Adams, Maine Department of Environmental Protection.

#### STATEMENT OF WILLIAM R. ADAMS, JR., COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. ADAMS. Mr. Chairman, Mr. Kyros, Mr. Hathaway, my name is William R. Adams, Jr., commissioner of the Maine Department of Environmental Protection.

On July 22, 1972, the Norwegian tanker, *Tamano*, after being anchored in Casco Bay was observed to be leaking No. 6 fuel oil from her forward section. The cause of the rupture in the vessel's tank has been investigated by the U.S. Coast Guard, and this report is available to the committee.

This unfortunate accident, the spill, and the chain of events that followed are a matter of record and will be covered in detail in subsequent reports by this department as well as reports prepared by other governmental agencies. It would be tragic if the experience of this accident did not result in an improved oil spill prevention and management capability not only for the State of Maine but for the Nation.

It is not the intention of this testimony to criticize the actions or lack of action of the parties involved, since nothing constructive can be gained from negative criticism; nor is it the intention of this department to place the onus on any person or agency.

The purpose of this testimony is to avoid if possible the recurrence of another unfortunate incident, define the posture and interactions of the agencies involved, point out the need for the procurement of equipment, and, in general, to provide the basis for a working plan which can be implemented and which, hopefully, will preclude or at least minimize the aftermath and effects of future oil spills in Maine waters.

Oil spills are not new to the State of Maine. Reported spills in Casco Bay alone totaled 66 in 1971, and the *Tamano* incident was the 41st reported spill in Casco Bay in 1972. A spill of the magnitude of this incident did, however, create new problems for Maine as far as containment and recovery of the oil was concerned. The capability for properly managing a spill of any significant size did not exist on July 22, 1972, and, unfortunately, does not exist today.

First, let us look at the Federal role in this incident. The Federal Water Quality Act of 1970 gives the Federal Establishment broad powers in the event of a marine disaster. It provides, among other things, that the Coast Guard "coordinate and direct all public and private efforts aimed at the removal or elimination of an oil spill." The act also required the preparation of a national contingency plan.

Within hours of the first report of the spill, the captain of the port, according to the national contingency plan, declared himself as on-scene coordinator. The Federal law and subsequent regulations specifically provide for this action; and after designation as an on-scene coordinator, the following occur:

1. The entire local Coast Guard establishment, including men, boats, and communication systems, are available for deployment.
2. Other Coast Guard units, including aircraft and specially trained teams from as far as the west coast, are available.
3. All Federal agencies, including the Environmental Protection Agency, are obligated to participate.
4. The National Response Center and specially trained national response teams provided by the national contingency plan are called.
5. Federal funds become available.

Yet, in spite of all of these resources, the spill, in the judgment of many, was not adequately contained or removed.

Now, let us look at the State's role in this situation. The State legislature recognized the dangers and problems of the movement of oil over the State's waters when it passed the Oil Discharge and Pollution Control Law in early 1970. The legislature in stating the purposes of that act declared:

That the transfer of oil, petroleum products and their byproducts between vessels and vessels and onshore facilities and vessels within the jurisdiction of the State and State waters is a hazardous undertaking; that spills, discharges, and escape of oil, petroleum products and their byproducts occurring as a result of procedures involved in the transfer and storage of such products pose threats of great danger and damage to the marine, estuarine and adjacent terrestrial environment of the State \* \* \*

Governor Curtis has outlined this law to you and the legal action brought by the oil industry. These actions have denied the Department of Environmental Protection use of funds totaling over \$3 million to prepare for just such an emergency. Instead, the State is limping along attempting to provide oil spill protection with one full-time employee and two employees furnished to us by the Emergency Em-

ployment Act. The State also had prepared a contingency plan, but when the State forces and contingency plan were added to the Federal forces and contingency plan there still was not the capability to properly control this spill.

Third, let us look at the oil industry's role. The vessel was flying the Norwegian flag and was chartered by the Texaco Oil Co. The crew of the vessel had no capability for spill containment and the Texaco Co., in recognition of their responsibility, immediately dispatched a person from Boston. The company engaged the services of a local contractor and, I assume, instituted some contingency plan of its own, but still the oil spill continued.

What, then, should have been done and still needs to be done to insure that there will not be a recurrence of this situation? The answer in my judgment is a simple one. There must be provided funds to purchase and store sufficient equipment and funds to employ and train adequate manpower to swing into action immediately with sufficient force to cope with a spill.

Now, let us look at the preparations the Federal Government, the State government and the industry have undertaken. First, on the Federal level, there is, as I previously indicated, an established national contingency plan. This plan, in its present form, is not and will not be effective in coping with a spill similar to the one we are discussing. It has real value in a continuing incident such as Santa Barbara and in the final stages of cleanup and restoration of an area, but the plan does not provide for the immediate response of equipment and men necessary to cope with a spill in Casco Bay. The plan envisions a national response center, national response teams as well as regional response centers and teams. These teams in themselves cannot contain or remove oil from the water of Casco Bay. I do not know of any purchase or stockpile on the Federal level of oil spill equipment or training of field supervisors and laborers to man the equipment necessary.

Now, let us look at the State's effort. As I pointed out earlier, the State of Maine has been legally and financially emasculated by the pending litigation on the State's Oil Conveyance Act. Because of the lack of funds, what was intended to be a strong, well-equipped organization, is now an organization with one State employee and two individuals employed through the Emergency Employment Act, and equipped with a single boat.

The State has recognized from the very outset that their existing capabilities were insufficient to cope with a spill of even a medium size. So as not to be accused of making this observation in hindsight, I would like to point out that in June, I requested approval from the Board of Environmental Protection to purchase 3,000 feet of containment boom with savings from the Department's meager budget. At that meeting, it was specifically stated that there was insufficient equipment available to cope with more than a minor occurrence. The Board of Environmental Protection approved that request and the boom was purchased, but unfortunately this boom had not been delivered at the time of the *Tamano* incident.

The State also developed a contingency plan, but this plan, like the national plan, simply establishes procedures and information useful

in the event of a spill. It could not provide the materials necessary to contain and remove any oil from the water because the Coastal Conveyance Fund was being held in escrow.

Next, let us look at the efforts of the oil companies. First, it would seem that these companies should have been able to recognize the fact that existing containment and removal devices in Casco Bay were completely inadequate to cope with more than a minor spill. It is incredible to me that these oil companies have seen fit to prohibit the State from utilizing funds collected from license fees to prepare for a spill, yet these same companies have not been willing to provide funds to purchase the necessary equipment or training to cope with more than a small spill. The collective purchase of a few feet of boom and a false belief that it would not happen here was enough to salve their conscience. The oil companies, through their collective efforts, furnished the funds to buy boom for the Portland Harbor Pollution Abatement Committee. Ye the boom owned by this committee was insufficient in length to completely encircle the damaged vessel.

As for contingency plans, I would assume that some segments of the industry have such plans, but, as in the case with the Federal and State plans, it is more than evident that these plans did not provide for necessary equipment.

In summary, we have national, State and perhaps industry contingency plans, but to successfully manage an oil spill much more than planning is necessary. At the risk of being trite, an organization for the prevention and/or the containment and cleanup of spills can be compared to a fire department. Communities construct expensive facilities, purchase equipment, and employ and train men to cope with a fire which all hope will never occur. Oil spills, like fires, require men and equipment to provide an immediate response. In both situations, time is critical. My point is that we need plans, but in addition to plans we desperately need equipment and trained personnel to man the equipment.

In view of past performance, I have recommended to the Board of Environmental Protection that they support requests for funds so that several ideas, programs and concepts can be further studied and developed into a realistic contingency and action plan for the State of Maine. The recommendations include five categories.

These categories and their parts are :

#### I. VESSEL SAFETY

- A. Impose more stringent regulations on State pilots.
- B. Request a complete underwater survey and removal of underwater obstructions by the Corps of Engineers.
- C. Request additional navigational aid from U.S. Coast Guard including :
  1. Lighted buoys.
  2. Radar control facilities.
  3. Bridge-to-bridge voice communication systems.
  4. Creation of sea lanes.
  5. Improved weather forecasting.

## II. TERMINAL SAFETY

- A. Review terminal regulations.
- B. Require containment boom for all transfers (including vessel-to-vessel transfers).
- C. Require formal training and certification of terminal personnel.

## III. SPILL DETECTION

- A. Increase State and Federal inspection personnel.
- B. Install remote monitoring systems.
- C. Provide air surveillance.
- D. Improve reporting systems.

## IV. SPILL CONTAINMENT AND REMOVAL

- A. Contingency plans.
  - 1. Improve and expand national, regional, and local plans.
  - 2. Improve, expand, and increase State input to the Federal contingency plan.
  - 3. Require preparation of contingency plans by the oil industry.
- B. Procurement and strategic storage by government and private agencies of:
  - 1. Boom.
  - 2. Absorbents.
  - 3. Pumps.
  - 4. Skimming equipment.
  - 5. Boats.
  - 6. Communication equipment.
- C. Establishment of control centers.
- D. Award contracts to deliver the following within a predetermined time:
  - 1. Additional boom, absorbents, and skimming equipment.
  - 2. Work boats and barges.
  - 3. Heavy construction equipment.
  - 4. Trained supervisors.
  - 5. Skilled laborers.
  - 6. Aircraft.
  - 7. Photographic coverage.

## V. MISCELLANEOUS

- A. Institute training programs.
- B. Conduct onsite drills.
- C. Increase research both public and private.
- D. Establish biological reconnaissance teams.
- E. Locate disposal sites.

It is our suggestion that the appropriate Federal agencies meet with the Department of Environmental Protection to review the lessons so clearly learned in Casco Bay. I would hope that we could also discuss the items I have just mentioned to insure that we have developed every means possible to prevent a spill or that we have developed the capability of managing any that might occur.

The big lesson from the Tamano spill is that plans must be supported with equipment and trained personnel ready to respond im-

mediately. As we all know, equipment and training are expensive. The Board of Environmental Protection is studying these needs with the intention of seeking State appropriations and additional laws to provide for positive protection until the courts determine the fate of the coastal conveyance fund. It would be our hope that Federal authorities would do the same and provide funds toward the establishment of a realistic containment and cleanup capability in Portland Harbor.

In closing, let me remind you that the 20-foot gash in the side of the Tamano, had it been further aft, could have ruptured two tanks and then 200,000 gallons of oil would have been spilled, with the potential of twice the damage. I would also point out that the weather conditions during the cleanup phases of the operation were considered excellent and, as you know, this type of weather cannot always be expected along the coast of Maine.

I expect that some time during this hearing you are going to hear some testimony that will give you an indication of the cost of this cleanup. I suggest that it is unfortunate that these funds had to be expended to undertake expensive and controversial cleanup operations when a similar amount of money invested in a fire department, if you will, would have prevented a portion of the devastation. I urge this committee to carefully review the present posture of the Federal Government in regard to oil spills and to carry the existing program beyond the planning stage to one of implementation, including the purchase of equipment and training of cleanup personnel.

Thank you for your interest and the invitation to appear before you. I am looking forward to working with you and the appropriate Federal agencies to provide the type of protection the residents of the Casco Bay area and the State of Maine so critically need.

Thank you.

Mr. CLARK. Thank you very much, Mr. Adams. I would just like to point out to you one little area that you and many others have pointed out—and I don't know if I am misconstruing what is being said or not—but I would like to point out one facet of what has been said and that is, No. 1, the pollution bill was signed in 1970.

And some of the testimony, I think, is complaining of the fact that there was some inefficiency on the part of some people in not doing their job or not doing it quickly enough.

And I wanted to point out to you that out of 100,000 gallons of this oil, 70,000 of it was collected. And that is not doing such a bad job. The idea after the first day, when the spill grew larger and larger, they had to go and get extra equipment from Massachusetts, which they did immediately, and did get extra help to perform the duties that were necessary.

And I am just pointing this out so that the interested people in the audience would understand that I think that a terrific job was done in making sure that the spillage didn't go any farther than it did. This is a lot different than some of the others that I have held hearings on in San Francisco or in the California area or the Miami area or the Houston area in the gulf.

I don't want to make a speech about it, but I think the Coast Guard has done an excellent job in getting the spillage in a containment area where they could get 70,000 gallons of this out of 100,000 in the Long

Island area, which is not only Long Island but the little islands in the surrounding area.

Mr. ADAMS. Yes, Mr. Chairman. My intention was not to criticize the Coast Guard. My criticism was that the Coast Guard did not have the proper equipment to work with, and that certainly was not the responsibility of the people stationed here in Portland.

Mr. CLARK. No; it wasn't the responsibility of the Coast Guard. They can only use what Congress gives them.

Mr. ADAMS. I understand.

Mr. CLARK. Mr. KYROS.

Mr. KYROS. Thank you, Mr. Chairman. In several parts of your testimony you note sections which I think should be taken up more fully. On page 6 you recommend that there should be imposed more stringent regulations on State pilots. Are you going to prepare legislation for the State legislature for the coming year? What is the more stringent regulation you are going to impose on State pilots?

Mr. ADAMS. Yes; we intend to go to the legislature with some bills that hopefully will preclude this type of occurrence. As for specific regulations for the State pilots, I am not in a position at this moment to state them.

But my recommendation was that we study all of these concepts. In other words, let's look at this situation and see if additional regulations are needed.

Mr. KYROS. All right. Again on page 6 you talk about a complete underwater survey and removal of underwater obstructions by the Corps of Engineers.

Am I to assume that you want to begin to dredge Soldier Ledge so that there will be a greater depth of water in that channel at that point?

Mr. ADAMS. Roughly, yes. What I am saying is that at one time there was a question as to how the hole in the hull of the *Tamano* was caused. There has been testimony here earlier today that there are obstacles close to the channels that are being used.

And really what we are saying is, let's make that channel in that harbor just as safe as we possibly can.

Mr. KYROS. That just means taking it down further, for larger tankers.

Mr. ADAMS. Not necessarily. I wasn't advocating that. Perhaps widening it.

Mr. KYROS. Widening the channel?

Mr. ADAMS. Yes.

Mr. KYROS. That means taking Soldier Ledge down.

Mr. ADAMS. Yes, Soldier Ledge, yes. I thought you meant the entire channel.

Mr. KYROS. The next item is bridge-to-bridge voice communication. Congress has passed just such a law requiring that on ships.

Then you mention the creation of sealanes. Are you talking about the creation of a VTS system here?

Mr. ADAMS. Yes; established lanes at the mouth of the harbor where vessels come and go.

Mr. KYROS. It seems to me that you feel somehow that at the Federal level enough hasn't been done. You believe the State is stymied or held up by its oil conveyance law. But you feel that the Federal Government should implement the national contingency plan by having more response teams available in more cities.

Mr. ADAMS. Yes. I feel that on all levels, State and Federal, there has got to be the equipment necessary to cope with this spill.

Mr. KYROS. Yes; I think everybody is in agreement with that. I think that is just a problem of money, don't you?

Mr. ADAMS. Yes; I do.

Mr. KYROS. We are going to have oil tankers coming in so it is important to have the necessary cleanup equipment at our port.

Mr. ADAMS. Exactly.

Mr. KYROS. I know you didn't intend any criticism of the Coast Guard, because they really moved as fast as they could with what they had available to them, men and equipment.

Mr. ADAMS. Well, the thrust of my testimony was that the equipment wasn't there.

Mr. KYROS. I am afraid it is not going to be available too soon either, the way things are going. Thank you very much.

Mr. CLARK. Thank you very much, Mr. Adams.

Mr. ADAMS. Thank you.

Mr. CLARK. Our next witness is Robert Dow, director of marine research, department of sea and shore fisheries. It is very nice to have you with us today.

**STATEMENT OF ROBERT L. DOW, MARINE RESEARCH DIRECTOR,  
DEPARTMENT OF SEA AND SHORE FISHERIES, MAINE**

Mr. Dow. Thank you, Mr. Chairman, Congressman Kyros. The title of my comments is "Some Biological Effects of Oil Spills on Soft Shell Clams."

Different oil fractions appear to have somewhat varying deleterious effects on shellfish, but all oil spills are highly destructive to these resources whether they occur in Casco Bay or in Penobscot Bay. Since our studies of the long-term effects of oil contamination on softshell clams have, until recently, been largely concentrated on growing areas in and near Penobscot Bay, I shall limit my comments on oil pollution to this region of the Maine coast rather than to the Portland area.

Penobscot Bay, like Casco Bay, has a long history of being a major shellfish-producing area. For many years there has also been great local interest, particularly in Searsport and Stockton Springs, in making better use of clam resources. From the late 1940's to 1958, the department of sea and shore fisheries worked with the joint conservation committees of the two towns to conserve and improve the shellfish-growing areas. These efforts were successful and the Searsport-Stockton Springs area was one of the consistently most productive areas of the Maine coast.

On June 28, 1966, the remaining shellfish-growing areas in Searsport and Stockton Springs were closed because of bacterial pollution, largely from the Penobscot River. Between August 1 and August 19, 1966, an inventory survey of the soft-shell clam population in upper Penobscot Bay was carried out under the direction of the Northeast Shellfish Sanitation Research Center of the U.S. Public Health Service, assisted by the Department and the Federal Water Pollution Control Administration. The result of this survey estimated the standing crop of soft-shell clams in Searsport to be 20,800 bushels, with a community value ranging from \$402,400 to \$1,123,200, depending upon use.

Mr. KYROS. What do you mean by "community value"?

Mr. Dow. Well, this would be the processing of the resource after it has been produced by the diggers. This may mean shucking clams for use as fryers, grading them for use as steamers, or in some instances they might be used in chowders or for canning purposes, clam cakes and other products.

Of this total—that is, of the 20,000 bushels—16,400 bushels were estimated to occupy Long Cove and the west shore of Sears Island.

It is of interest that legally much of this area has a relatively high water quality classification. In fact, Stockton Harbor east of the bar which joins Sears Island to the mainland and forms the east shore of Long Cove is either SA, the highest classification, or SB-1, the second highest, and the remaining area in the two towns is SB-2, the third highest classification, or higher. It is evident that the presence of any oil in such waters is a violation of the legal classification.

Before the 1966 bacterial closure, there were 99 licensed diggers in the two towns, who produced approximately 20,000 bushels of clams annually. After the 1966 closure, the number of licensed diggers in the two towns declined to 53, indicating the immediate economic effects of the closure.

On March 16, 1971, an oil spill in Long Cove, Searsport, Maine, was discovered by Coastal Warden Irving Parsons, who reported the fact to the Coast Guard, the Environmental Improvement Commission, and the Department of Sea and Shore Fisheries. The oil was identified by laboratory analysis as JP4 mixed with No. 2 fuel oil.

In reporting his first observations of Long Cove on March 16, 1971, Coastal Warden Parsons stated:

About half of the cove was covered with an oil slick and oil stains were visible on the ice in the head of the cove and along the ice wall on the west side of the cove.

On March 22 a survey was made of the area by the Department. I would digress to say that we had research and enforcement personnel out before the 22d, but this was a little more detailed survey. In Long Cove at that time market-size clams occupying approximately one-third of an acre had been killed by the oil. The survey team reported that fuel oil was discharging into the tidal waters of Long Cove by two routes, culverts and a ditch. Oil continued to drain into the cove until at least late June 1971.

Mr. KYROS. How did that happen? Why did it continue to drain?

Mr. Dow. We are not entirely certain why, but apparently there were underground pipes which had ruptured and the ground adjacent to the culverts and the ditch apparently was saturated with oil. And this apparently was the source of the continued seepage.

Clam populations throughout coastal Maine have generally been increasing since the end of the high temperature years in 1958. For example, total clam production in Maine, an indicator of relative abundance, in 1958 was 1.6 million pounds of shucked meats; in 1970 it was 5.3 million pounds. Between 1966 and 1971, clams increased 77 percent in abundance.

The clam population of the Long Cove-Sears Island area was re-surveyed after the March 16 spill, when it was estimated that the standing crop of clams had been approximately 23,000 bushels prior to the spill, compared to 16,400 bushels in 1966. The 42 percent increase in Long Cove appears to have been much less than the statewide average.

Repeated surveys of the area in terms of damage to the soft clam population and other associated species have been carried on since the spill. Two types of surveys have been made; one to determine the extent of the area contaminated by the spill and the other to monitor progress of mortalities and oil penetration of the sediments in the most contaminated areas. Cooperative institutions and agencies working with the Department in this study are: Woods Hole Oceanographic Institution, TRIGOM, Bowdoin College, and the National Marine Water Quality Laboratory of EPA.

By March 29 nearly 30 percent of the clams in Long Cove, occupying 10 acres and representing a minimum of 3,000 bushels, had been killed.

Based on March 30, 1971, survey by the U.S. Environmental Protection Agency, a summary of damage observed was furnished the Department of Sea and Shore Fisheries and included the following:

As a result of the spill, the entire Long Cove was closed to shellfishing and a sampling program initiated by the Maine Department of Sea and Shore Fisheries to assess the effects of the oil discharge on the shellfish resource.

The long-term marine resource damage which this particular spill has caused is expected to be of a much greater magnitude than the present figures indicate. All of the clams sampled in Long Cove have been found in a distressed condition, and it appears that the entire shellfish population of this area will be killed.

Surveys during the summer of 1971 indicated continuing clam mortalities which amounted to an estimated loss of 5,400 bushels.

I would again like to digress to say that my forecast shortly after the first survey had been that the entire population would be dead within a matter of weeks. I was in error on that, although the mortalities, as you will see from my subsequent statement, are continuing.

In August 1972 a resurvey was made of Long Cove and the western shore of Sears Island. The average survival of clams was estimated to be 85 bushels per acre in the 124-acre growing area. This means that the estimated standing crop of 23,000 bushels prior to the March 1971 oil spill had been reduced by August 1972 to a surviving population of 10,500 bushels and that the 5,400 bushel mortality through July 1971 had increased by 7,200 bushels to a cumulative mortality of 12,600 bushels, of which 2,700 bushels consisted of clams of recent (within 2 to 3 weeks) mortality. Of the 124-acre area, only 61 acres in July 1971 and 49.6 acres in 1972 contained clam concentrations of commercial importance.

During the August 1972 clam population inventory, oil was found in 23 percent of the 130 intertidal sample plots; at subtidal stations when bottom sediments were disturbed globules of oil rose to the water surface and formed slicks.

Clam samples from Long Cove have been histopathologically analyzed by the National Marine Water Quality Laboratory of the U.S. Environmental Protection Agency. These results indicate that 8 percent of the clams on both sides of Long Cove have developed malignant tumors. The samples collected during the summer of 1971 had developed gonadal tumors primarily, but since that time, both gills and connective tissue have also become involved. Control samples collected in an area which has not been exposed to oil contamination had no tumors.

I have one other comment to add. Of the 27 samples which we collected for histopathological analyses, 14 of them contained clams with tumors and the percentage in each ranged from 2 to 27 percent.

Between 1966 and 1972 clams have virtually doubled in value, primarily as a result of the damage to Chesapeake Bay clam populations by Hurricane Agnes. This increase means that the loss of the resource in Long Cove, Searsport, represents a community loss ranging from \$800,000 to \$2.5 million, again depending upon use. Since it requires 5 to 6 years to produce a crop of clams in this area, the loss will continue to be an annual loss. The sublethal but long-term effects of an oil spill indicate the possibility of many years before Long Cove is again suitable for the production of food for human consumption.

(The attachments to Mr. Dow's statement follow :)

## SUMMARY

Long Cove Searsport 1972 soft clam (*Mya arenaria*) survey

Number of samples : 409

Total growing area : 124 acres

Average population : 85 bu/a

Total estimated clam population : 10,540 bu.

Area of commercial importance : 49.6 acres

Average population : 197 bu/a

Total population of commercial importance : 9,771 bu.

Total population of noncommercial importance : 769 bu.

Area of noncommercial importance : 74.4 acres

Average population in noncommercial area : 10.3 bu/a

Average volume of recently dead clams : 22 bu/a

Total volume of recently dead clams : 2,728 bu.

Total mortality since July 1971 survey : 7,192 bu.

Total mortality since March 16, 1971 : 12,592 bu.

Population in 1966 : 16,359 bushels

Harvested for cleansing plant :

	Bushels
1968 -----	1,664
1969 -----	820
1970 -----	800
January to March 16, 1971 -----	216

Total ----- 3,500

Estimated total population prior to March 16, 1971 : 23,123 bu.

The increase in the standing crop between the 1966 and 1971 surveys can be attributed to decreased harvesting because of bacterial pollution closures on a permanent basis and a normal population increase associated with the decrease in green crab abundance as a result of a declining sea temperature cycle.

TABLE 1.—LONG COVE CLAM SAMPLES, INCIDENCE OF OIL-RELATED TUMORS

Station No.	Number of tumors				Total tumors	Total clams examined	Percent with tumors
	July 1971	August 1971	January 1972	August 1972			
1-----	4				4	15	27
		12			12	200	6
			1		1	50	2
1A-----		1			1	46	2
			4		4	50	8
1B-----		4			4	47	8
			8		8	47	17
1C-----		10			10	50	20
			9		9	51	18
2-----	1				1	14	7
		3			3	100	3
			1		1	49	2
4-----						28	21
5-----		1			1	47	2
Total-----	5	31	23	6	65	794	8
Controls-----	0	0				204	0

Mr. KYROS. Now, Mr. Dow, you are talking about histopathologically—in other words, taking slices and making studies microscopically of clams and you are telling us that they have tumors.

Are you saying that there is a development, a carcinogenic development, being incorporated into the food chain because of the effect of No. 2 fuel oil on shellfish?

Mr. Dow. We assume from the coincidence of these tumors and the presence of the oil, and the nonpresence of tumors in areas where there has been no oil contamination, that the tumors are caused by carcinogenic substances in the oil.

We don't know—I don't think anyone knows what the situation is, as far as the suitability of these clams for human consumption. But I am sure that we cannot recommend their use for human food or any other type of food.

Mr. KYROS. Of course, now, this is No. 2 fuel oil, also JP kerosene-type jet fuel, which meant that it wasn't the No. 6 that was spilled in Casco Bay. As I understand it, No. 2 has a much higher toxicity as an oil product to marine life than No. 6, is that correct?

Mr. Dow. I really don't know. I think it has probably a more instantaneous effect, but the long-term sublethal effects may not be much different.

Mr. KYROS. Do they differ in their ability as hydrocarbons to be absorbed by microorganisms in the sea?

Mr. Dow. I am not familiar enough with that to be able to answer it definitely.

Mr. KYROS. Do you foresee aftereffects for the clam beds in Long Cove? When is their recovery going to occur?

Mr. Dow. Well, my last comment was, the sublethal but long-term effects of an oil spill indicate the possibility of many years before Long Cove is again suitable for the production of food for human consumption.

I would like to add one other comment. We have one other area that we have been monitoring, less frequently but over a much longer period of time.

This was a crude oil spill of November, 1963, which in part went ashore on Friendship, Long Island, an isolated area, much of it went into a lobster pound there. And in the more protected portions of this pound, where there is less water erosion capability, we have observed oil in the sediments and on the surface of the sediments. We have collected samples, which are still in the laboratory, and we do not have a reading on them yet.

Mr. KYROS. Has the Department of Sea and Shore Fisheries made any study yet of the effects of the oil spill on Casco Bay or are you waiting for the EPA and its contract with Vast, Inc., to give you the result?

Mr. Dow. We are in the process of doing studies there; yes.

Mr. KYROS. You are doing a study?

Mr. Dow. Yes.

Mr. KYROS. Have there been any effects on the lobsters?

Mr. Dow. I would prefer not to comment on that, Congressman, on advice of counsel, because of the Department of Sea and Shore Fisheries being the object of the proposed litigation.

Mr. KYROS. So you have nothing to say to me as far as your Department is concerned about this?

Mr. Dow. No; I think that the testimony that I offered shows a very serious effect of oil on shellfish. I have selected one species out of many that are affected.

Mr. KYROS. Of No. 2 fuel oil on clam beds?

Mr. Dow. Yes.

Mr. KYROS. In other words, on the sediment. It kills almost everything around it, coats the clams, asphyxiates them; is that right?

Mr. Dow. That is apparently the means by which they die.

Mr. KYROS. All right, thank you very much. The next witness this afternoon is Mr. Richard Anderson, director of the Maine Audubon Society.

Welcome to the committee, Mr. Anderson. Your testimony is so short, I would recommend that you read it. Sometimes, if testimony is longer, as the afternoon gets along, witnesses might wish to paraphrase their testimony. But we will make their entire testimony part of the record.

We are delighted to have you, Mr. Anderson. Please proceed.

#### STATEMENT OF RICHARD B. ANDERSON, DIRECTOR, MAINE AUDUBON SOCIETY

Mr. ANDERSON. Thank you, Congressman Kyros. I will limit my remarks to the oiled-bird problem, but will preface them by saying that I am in complete agreement with Lee Perry, game biologist for the fish and game department and his comments on the oiled-bird problem, and Mr. Wayne Cobb, coastal consultant for the Natural Resources Council of Maine.

One of the most obvious results of any oil spill is the oiling of waterfowl in the spill area. The Tamano oil spill of July 22-23, was no exception. I will attempt to recount the events beginning on the morning of Monday, July 23, 1972.

Early Monday morning, the Audubon Society began receiving numerous calls from concerned private citizens in the Casco Bay area, asking what should be done with oiled birds. Since we were not prepared to handle the situation, we consulted with officials of the fish and game department and Texaco, Inc., in an attempt to plan a course of action. It was jointly decided that—

1. The Maine Audubon Society would serve as a collection center for oiled birds;

2. The Audubon Society would employ a person on a temporary basis to manage the collection process; and

3. Oiled birds collected would not be cleaned locally but would be transported to Dr. Philip Stanton in Upton, Mass., where they would be cleaned by him.

Mr. KYROS. Why couldn't we use some mineral water, cornmeal, and rags ourselves to clean the birds?

Mr. ANDERSON. It was felt generally by the three people that discussed this that Stanton was a recognized expert in cleaning birds, had already done considerable research for the American Petroleum Institute, and had done research on some new kinds of cleaning solvents.

Texaco agreed to pay direct costs incurred during the collection, transportation, and cleaning of these birds. Permission was then re-

quested and granted by Commissioner Marsh of the Maine Department of Inland Fisheries and Game to act as a collection center, and from the Fish and Wildlife Service to transport waterfowl to Massachusetts for cleaning. After obtaining the necessary approvals, a news release was issued urging people not to individually clean birds but to bring them to the Maine Audubon Society for subsequent transportation to Massachusetts. (A legal problem arose since it is illegal for persons to catch, have in their possession, or transport protected species of wild birds at times other than open season on these birds; thus, catching and transporting them to the Audubon Society is technically a violation of Federal law.)

During the week following the oil spill, 48 birds were delivered to the Audubon Society office, including 26 eider ducks, two white-winged scoters, three loons, one common tern, one common scoter, numerous herring gulls, and one guillemot. Twenty of these ducks were transported to Dr. Stanton for cleaning. Ten of these eiders survived, a survival rate of 50 percent. Since this survival rate is extremely high, allow me to point out some of the reasons.

All birds that were heavily oiled were not transported, they were destroyed here in Portland, due to the fact that in Stanton's opinion he would not be able to deal successfully with birds that were extremely heavily oiled. It was also felt that it was unjustified to attempt to clean herring gulls due to their tremendous abundance in Casco Bay. And due to the difficulties of cleaning and feeding loons, it was felt that they stood a better chance of survival if attempts were not made to confine them and clean them. Dr. Stanton commented to me that in his opinion eider ducks were by far the easiest species to clean and the easiest to adapt to captivity. He was able to feed most of them within several hours after he received them.

About 1 week after the oil spill occurred, the fish and game department, the Maine Audubon Society, and Texaco conferred and reached a joint decision to issue another news release urging that people cease picking up oiled birds. This was done because it seemed reasonable to believe that birds having survived in an oiled condition for 7 or 8 days could probably survive on their own until the time that they moulted and freed themselves of the oil. I might mention, as Mr. Perry said, these birds were in the process of moulting at the time of the oil spill.

As you might expect, the costs of this operation were extremely high, amounting to a total of somewhere in the vicinity of \$800 to \$1,000, a cost breakdown of \$80 to \$100 per surviving bird.

In summation, it is my opinion that except where extenuating circumstances exist and where particularly valuable birds are affected, attempting to clean oiled waterfowl after an oil spill is a futile, unrewarding, and unjustified operation. I think extremely high costs, lack of effective methods, and poor results make this a logical conclusion.

A more productive approach would be to identify the major feeding and resting areas of ducks in Casco Bay and make some efforts to protect these areas during an oil spill emergency. A seasonal priority list of the more important species of birds inhabiting Casco Bay should also be developed. For example, is it ever justified to clean herring gulls when nesting populations of this species number in the thousands in Casco Bay? Whereas, black ducks would constitute an entirely different situation. Emphasis should be placed on developing

priority lists and determining feeding and resting areas now so that they will be readily available in the event of another emergency situation.

One final point, who is in charge of the bird problems at the time of an oil spill emergency? Some State or Federal agency should be specifically designated to make all decisions concerning waterfowl, thus eliminating the confusion that occurred during the *Tamano* oil spill.

I would like to thank this committee for giving the Maine Audubon Society the opportunity to present the foregoing testimony.

Mr. KYROS. Well, now, Dick, it is a nice thing for us to have the booms up to protect the ducks already in the water, but you can't always assume that. You have got to assume, if there is an oil spill, that we ought to have a contingency plan ready for the birds through our Fish and Wildlife people and coordinate their efforts with citizens who are interested in birds, like your own Maine Audubon Society.

I don't foresee the day coming soon—within the next few years—when we are going to be able to boom off certain areas and say if an oil spill occurs, it is not going to go toward those birds.

Mr. ANDERSON. Well, Lee pointed out some of the obvious opportunities, and that is the Back Cove area, where, if we have identified the fact that Back Cove is an important area and has a lot of ducks in it—for example, if oil was spilled near the mouth of Back Cove and was proceeding into the cove, I think there is something that we could do if we plan ahead of time.

That is probably the most important area in the whole Bay.

Mr. KYROS. But the Back Cove area was not affected in this case. It seems to me that we would have to worry about having some kind of plan for rescuing the birds in case of a spill.

And, as you pointed out, this costs money. And I notice that after the San Francisco oil spill, it cost a considerable sum of money to clean those birds with mineral oil and corn meal.

Mr. ANDERSON. It just seems to me that there may be better ways. We are talking about \$80, \$100—we might be better off if we are going to spend that much money using it in a somewhat more constructive manner, for example, like using it to protect nesting habitat, since we know we are going to get very low survivability anyway. We might as well spend the money on something significant. And also the time. I think, regardless of whether you get paid for the time or not, it is still a considerable time-consuming operation.

Mr. KYROS. Of all those birds—the cormorant, the sea gull—which one can best survive with the oil around it?

Mr. ANDERSON. Well, probably gulls. Gulls aren't swimming generally in the water.

Mr. KYROS. Thank you very much. It is nice to see you again. Your testimony is most helpful to the committee.

Our next witness will be Mr. Kenneth Cianchette, director of the Cianbro Corp.

Mr. Cianchette, welcome to the committee. It is a pleasure to have you here, sir.

STATEMENT OF KENNETH CIANCHETTE, TREASURER,  
CIANBRO CORP.

Mr. CIANCHETTE. Thank you, Congressman Kyros. I have a brief statement. I am Kenneth Cianchette. I am treasurer of the Cianbro Corp., a construction company in the area. It engages in various types of construction, including marine-type construction.

Our company was asked to supply men and equipment to assist in containing and cleaning up the oil spill in Casco Bay which occurred on July 22-23, 1972. At all times we were performing under instructions and directions from either Texaco, Inc., or Coastal Services.

I will confine my remarks to a brief description of the type of services we were asked to perform.

We were called on Saturday shortly after noon on July 22 by Texaco, Inc., and asked to attend a meeting at 2 p.m. at the Portland Pilot's Association. We did so and received instructions from Texaco to haul the boom from the Texaco dock in South Portland and install it around the ship *Tamano* in Casco Bay.

We began mobilizing men and equipment on Saturday afternoon and had started moving the boom by midafternoon.

Sunday morning we had two divers locate and examine the hole in the *Tamano*. In addition, we had men cleaning beaches in South Portland, and had barges hauling air compressors and pumps out to the *Tamano*. At Sunday midnight we ceased working for Texaco and began working for Coastal Services who, in turn, we believe, was employed by the Cost Guard.

During the next 2 weeks we were engaged in loading oil, hay, and seaweed from beaches into trucks with a clam shell crane. The trucks were placed on our barges and ferried back and forth to the mainland as necessary to be dumped. In addition, we had tanks mounted on barges and used these to store and transfer oil which we pumped up from behind the containment boom around the *Tamano*. We manned pumps owned by Coastal Services.

During this period we also used our barges and tugs to haul hay and material to the islands to be used to absorb the oil on the beaches. After the *Tamano* left port we picked up the boom and offloaded it to be cleaned and repaired as necessary.

All in all we had a total of 4,342 man-hours involved in the project, and the equipment we provided lists as follows: one tugboat, one workboat, four barges, five cranes, three compressors, two generators, two pumps, two trucks, and one welder.

We ended our efforts on August 18, 1972.

Mr. KYROS. Let me just ask you some general questions, because apparently you were contracted to help to cleanup the oil. You had no other responsibility except working for other people during the cleanup.

Mr. CIANCHETTE. Yes, sir.

Mr. KYROS. Did your company, Mr. Cianchette, have any other prior marine experience in cleaning up oil spills?

Mr. CIANCHETTE. Well, we do some work for Portland Pipeline. In some places we have had some experience at this; yes.

Mr. KYROS. There was some testimony here earlier this morning that the way in which the boom was placed around the *Tamano*, her hawser, her mooring lines, left some open spots where the oil was escaping. Is that correct?

Mr. CIANCHETTE. Well, I think that one of the problems was that the boom was perhaps not adequate for the job. The boom was a light-duty boom. Perhaps it wasn't a heavy-duty boom as they should have had for the ocean.

Mr. KYROS. In other words, you took a Texaco boom that was available? One which you were told to use?

Mr. CIANCHETTE. Yes; that is the boom that they normally use in the inner harbor there around a ship. And the water was quite calm at that time. But there were problems, such as powerboats that were cruising by sightseeing—they caused waves that did cause some spilling.

I think there was perhaps not sufficient pumping equipment available, so the oil perhaps was overflowing the boom.

Mr. KYROS. So you need a larger, heavier boom?

Mr. CIANCHETTE. Yes.

Mr. KYROS. Such a boom would go to greater depths in the water and rise above it further.

Mr. CIANCHETTE. It would be much more effective. They have such a boom at the Portland Pipeline that they use. They had to keep that in service around the ships unloading.

Mr. KYROS. How long did it take to boom the ship, do you remember, beginning with the removal of the boom from the dock of Texaco? Do you remember that?

Mr. CIANCHETTE. I wouldn't know exactly. It wasn't long after that. I don't know; it would take maybe half or three-quarters of an hour.

Mr. KYROS. Now, once you boomed, you were pumping from the surface, running lines down to the surface of the water and sucking up the oil and running it through what—a separator, oil and water?

Mr. CIANCHETTE. They used special pumps that are powered with an air motor rather than gasoline power or diesel power pumps, because of the fire hazard. Air power pumps don't create any sparks or fire hazard.

Mr. KYROS. And you try to draw up all the oil contained within the boom?

Mr. CIANCHETTE. Right.

Mr. KYROS. Now, there was some oil contained under the flat bottom of the tanker, is that right?

Mr. CIANCHETTE. Yes; I believe there was.

Mr. KYROS. Was there any attempt to get that out?

Mr. CIANCHETTE. I don't know of any. As far as I know it came out when the vessel was moved.

Mr. KYROS. The vessel finally moved, I understand, and another several thousand gallons of oil surfaced.

Mr. CIANCHETTE. There was some under it that came out when it moved, right.

Mr. KYROS. Besides your work around the ship, you did work on the beaches by putting hay on them in an attempt to absorb the oil.

Mr. CIANCHETTE. Only initially we did a little of that, then it was taken over by someone else. And we didn't continue that, only in the beginning.

Mr. KYROS. In your opinion, is there sufficient equipment located at a point of sufficient proximity to meet the kind of disaster that occurred in the *Tamano* case?

Mr. CIANCHETTE. No. I would have to say there isn't. Special equipment, such as booms and pumps, is not sufficient.

Mr. KYROS. And trained personnel?

Mr. CIANCHETTE. Well, that, I think, is a lesser problem than the equipment.

Mr. KYROS. Your men are somewhat more trained now, is that right?

Mr. CIANCHETTE. Yes. It isn't really that complex, as far as the training. It is a matter of having the equipment and getting it there on time.

Mr. KYROS. Thank you very much, Mr. Cianchette. We appreciate your taking time out to come and testify before the committee.

Our next witness will be Mr. Robert Madsen, president of Seacoast Ocean Services. Mr. Madsen, welcome to the committee.

Mr. ERLER. Congressman Kyros, my name is John Paul Erler. I am the attorney for Seacoast Ocean Services. Mr. Madsen is not able to be here this afternoon.

Mr. KYROS. Please proceed.

#### STATEMENT OF JOHN P. ERLER, ESQ., SEACOAST OCEAN SERVICES

Mr. ERLER. Seacoast Ocean Services is right now involved in a major cleanup project as a direct result of the *Tamano* oil spill. That would be in the western beach of Long Island. And that utilizes most of his waking hours and a good bit of his sleeping hours, or those hours that he should be asleep.

Seacoast Ocean Services was notified of the oil spill at approximately 2:30 a.m. on July 22 by Portland Pilots Association via Sentinel Answering Service. At that time we were requested to immediately furnish oil containment boom to be delivered and deployed at the Hussey Sound anchorage.

Mr. David V. Wasgatt, who is president of the company, and Mr. Madsen went to our offices at Custom House Wharf. Once there Mr. Wasgatt went by speedboat to the Hussey Sound anchorage to investigate the size and nature of the spill. Mr. Madsen began calling employees, preparing equipment and commence loading boom on our barge. Mr. Wasgatt arrived at the vessel at approximately 2:50 a.m. and reported by radio at approximately 3 a.m. that he found a large quantity of oil on the starboard side of the vessel anchored in the Sound. Mr. Wasgatt requested a full barge of boom and magnets necessary for attachment of the boom ends to the vessel's hull.

At approximately 3:30 a.m. the barge and towboat left Custom House Wharf with 1,200 feet of 3-foot containment oil boom. The barge arrived at the *Tamano* at approximately 4:10 a.m. at which time deployment of the boom began. Thereafter we began paravanning. Paravanning is the procedure for collecting free floating oil using 300 feet of boom, each end of which is secured to a workboat. The starboard side of the vessel was paravanned first, where the largest quantity of the oil was spotted. Paravanning continued around the bow and down the port side of the vessel. Thereafter it was discovered that oil again began to appear on the surface of the water on the starboard side,

toward the starboard bow of the vessel, which indicated the probable location of the oil leak.

Once the location of the oil leak was determined, the vessel was boomed from midships on the starboard side around the bow to the port side. This initial booming was completed at approximately 5:30 a.m. in the morning of July 22. After this initial deployment, the barge was returned to Portland to pick up additional boom and returned to the vessel. At daylight, Seacoast Ocean Services obtained a helicopter from Maine Helicopter and with Mr. Madsen aboard proceeded to the spill area for the purpose of assessing the magnitude of the spill and located affected areas in order to establish a priority of cleanup operation. At about the same time Seacoast Ocean Services sent its diver to investigate the hull damage. At that time he was unable to determine the precise location and extent of damage because of the tremendous quantity of oil which was in a thick layer entrapped under the hull.

As a result of the observations made from the helicopter, Seacoast Ocean Services began paravanning free-floating oil in the vicinity of Cow Island and near the western tip of Long Island. The *Tamano* was completely boomed at that time in compliance with the Coast Guard request. After the vessel was completely boomed, Seacoast Ocean Services began the operation of removing oil from the boom. They continued to paravane trouble spots as they were discovered from the helicopter. Removal of oil from the boom and paravanning continued throughout the day of July 22 and by that evening it was believed that the oil immediately around the vessel was sufficiently contained. Removal of the oil from the boomed area continued throughout the night.

During the day of the 22d, Seacoast Ocean Services requested from the vessel's agents additional boom, since all of the boom presently in the possession of Seacoast Ocean Services had already been deployed. At daylight on Sunday, July 23, Mr. Madsen again made helicopter observations and it became obvious from those observations that a substantial amount of additional oil had escaped from the *Tamano* and was now in the Hussey Sound area. Since Seacoast had deployed all of its boom, it borrowed an additional 1,000 feet of 3-foot boom from the Portland Pipe Line where it was stored for use by their own vessels. During the daylight hours of July 23, we continued the paravanning operations and oil removal from inside the boom. By this time all of the equipment that Seacoast Ocean Services had in the Portland area in their possession was being utilized.

At approximately 4 p.m. Sunday, the 23d, a meeting was held in Captain McCann's office at which time representatives from Texaco informed Seacoast Ocean Services that they had employed the services of Coastal Services, which is also an oil-pollution cleanup company of Massachusetts, and that they would be the prime contractor as of midnight that night. Thereafter, Seacoast Ocean Services performed its work as a subcontractor of Coastal Services until August 11. As of midnight August 11, Seacoast Ocean Services was again appointed prime contractor for the spill. Since that time, it has continued to clean up the contaminated areas as directed by the owners of the vessel and by the U.S. Coast Guard. This operation has included the water washing of contaminated rocks, the cutting and removal of contaminated

seaweed and eel grass, and now the removal of the oil-contaminated sand from the western beach of Long Island.

Seacoast Ocean Services began its operations in the Portland area in February 1971, and since it commenced operation, it has attempted to stockpile and have available sufficient equipment necessary for the containment and cleanup of a major oil spill. Its initial attempts focused on attempting to obtain retainer type contracts with those interested in the oil spill problem. Under the terms of these agreements, retainers would be paid to Seacoast Ocean Services in order to enable it to purchase the necessary emergency equipment.

Without these types of contracts, it would be unable to maintain sufficient equipment and trained personnel. Oil spills obviously occur on an irregular basis; major spills fortunately occur quite infrequently. Since the initial cost of purchasing sufficient equipment to handle major oil spills is so great, such cost cannot alone be financed through the charges assessed for the use of such equipment.

Seacoast Ocean Services continues to recommend that equipment be stockpiled in the Portland area for the purpose of containment and cleanup of major oil spills. This equipment should be purchased and maintained consistently; that is, all boom should be interchangeable so that lengths can be established without the problem of mismatched connectors. This is also true of hoses and related equipment. Seacoast Ocean Services continues to propose agreements between itself and interested customers as a method of obtaining and stockpiling sufficient equipment to meet the problems posed by a major oil spill. These agreements would enable Seacoast Ocean Services to purchase and maintain large stockpiles of emergency equipment. Payment for the cost of such equipment would result from a rental charge to the customer on a yearly basis. Such rental charges would insure that the customer had the equipment need and that the equipment would be available. Additional charges would be made to Seacoast Ocean Services to the customer in case of an oil spill in which the equipment was actually used.

Mr. KYROS. Well, that scheme of operation sounds quite sensible to me. I know that it is possible to have enough equipment on hand and not find ourselves in a situation like we are now in. However, your company, Seacoast, could get these payments, I suppose, from people who do bring oil into this port and receive it.

So thank you very much, Mr. Erler, and we appreciate your testimony, sir.

(The following was supplied for the record:)

Re M. V. Tamano Oil Spill—July 22, 1972.

To: Peter N. Kyros, Member, Coast Guard Sub-Committee of the House Merchant Marine and Fishery Committee.

From: Robert A. Madsen, President, Seacoast Ocean Services.

Date: October 4, 1972.

In accordance with your letter addressed to me, the following is a report of the activities of Seacoast Ocean Services as they relate to the oil spill occurring on July 22, 1972 from the M. V. Tamano. Also included are some recommended future procedures.

Seacoast Ocean Services was notified of the oil spill at approximately 2:30 a.m. on July 22 by Portland Pilots Association via Sentinel Answering Service. At that time we were requested to immediately furnish oil containment boom to be delivered and deployed at the Hussey Sound anchorage.

Mr. David V. Wasgatt, who is President of the company, and Mr. Madsen went to our offices at Custom House Wharf. Once there Mr. Wasgatt went by speedboat to the Hussey Sound anchorage to investigate the size and nature of the spill. Mr. Madsen began calling employees, preparing equipment, and commenced loading boom on our barge. Mr. Wasgatt arrived at the vessel at approximately 2:50 a.m. and reported by radio at approximately 3:00 a.m. that he found a large quantity of oil on the starboard side of the vessel anchored in the sound. Mr. Wasgatt requested a full barge of boom and magnets necessary for attachment of the boom ends to the vessel's hull.

At approximately 3:30 a.m. the barge and towboat left Custom House Wharf with 1,200 feet of 3 foot containment oil boom. The barge arrived at the Tamano at approximately 4:10 a.m. at which time deployment of the boom began. Thereafter we began paravanning. Paravanning is the procedure for collecting free floating oil using 300 feet of boom, each end of which is secured to a workboat. The starboard side of the vessel was paravanned first. Paravanning continued around the bow and down the port side of the vessel. Thereafter oil began to appear on the surface of the water on the starboard side of the vessel indicating the location of the oil leak.

Once the location of the oil leak was determined, the vessel was boomed from mid-ships on the starboard side around the bow to the port side. This initial booming was completed at approximately 5:30 a.m. in the morning of July 22. After this initial deployment, the barge was returned to Portland to pick up additional boom and returned to the vessel. At daylight Seacoast Ocean Services obtained a helicopter from Maine Helicopter and with Mr. Madsen aboard proceeded to the spill area for the purpose of assessing the magnitude of the spill and located affected areas in order to establish a priority of cleanup operation. At about the same time Seacoast Ocean Services sent its diver to investigate the hull damage. He was unable to determine the precise location and extent of damage because of the tremendous quantity of oil which was on a thick layer trapped under the hull.

As a result of the observations made from the helicopter, Seacoast Ocean Services began paravanning free floating oil in the vicinity of Cow Island and near the western tip of Long Island. The Tamano was completely boomed at that time in compliance with Coast Guard request. After the vessel was completely boomed, Seacoast Ocean Services began the operation of removing oil from the boom. They continued to paravane trouble spots as they were discovered from the helicopter. Removal of oil from the boom and paravanning continued throughout the day of July 22 and by that evening it was believed that the oil immediately around the vessel was sufficiently contained. Removal of the oil from the boomed area continued throughout the night.

During the day of the 22nd, SOS requested from the vessel's agents additional boom since all of our boom supply presently in the possession of SOS had been already deployed. At daylight on Sunday, July 23, Mr. Madsen again made helicopter observations and it became obvious from those observations that a substantial amount of additional oil had escaped from the Tamano and was now in the Hussey Sound area. Since Seacoast had deployed all its boom, it borrowed an additional 1,000 feet of 3-foot boom from the Portland Pipe Line when it was stored for us—by their own vessels. During the daylight hours of July 23, we continued the paravanning operations and oil removal from inside the boom. By this time all of the equipment that SOS had in the Portland area was being utilized.

At approximately 4:00 p.m. Sunday, the 23d, a meeting was held in Captain McCann's office at which time representatives from Texaco informed SOS that Coastal Services, a Massachusetts company, would be the prime contractor as of midnight July 23. Thereafter Seacoast Ocean Services performed its work as a subcontractor of Coastal Services until the 11th of August. As of midnight August 11, Seacoast Ocean Services was again appointed prime contractor for the spill. Since that time, it has continued to clean up the contaminated areas as directed by the owners of the vessel and by the U.S. Coast Guard. This operation has included the water washing of contaminated rocks, the cutting and removal of contaminated seaweed and eel grass, and now the removal of the oil-contaminated sand from the Western Beach of Long Island.

Seacoast Ocean Services began its operations in the Portland area in February 1971. Since it commenced operation, it has attempted to stockpile and have available sufficient equipment necessary for the containment and cleanup of a major oil spill. Its initial attempts focused on attempting to obtain retainer type contracts with those interested in the oil spill problem. Under the terms of these

agreements retainers would be paid to SOS in order to enable it to purchase the necessary emergency equipment. Without these types of contracts, it would be unable to maintain sufficient equipment and trained personnel. Oil spills obviously occur on an irregular basis, major spills, fortunately, occur infrequently. Since the initial cost of purchasing sufficient equipment to handle major oil spills is so great, such cost cannot alone be financed through the charges assessed for the use of such equipment.

Seacoast Ocean Services continues to recommend that equipment be stockpiled in the Portland area for the purpose of containment and cleanup of a major oil spill. This equipment should be purchased and maintained consistently, that is, all boom should be interchangeable so that long lengths can be established without the problem of mismatched connectors. This is also true of hoses and related equipment. SOS continues to propose agreements between itself and interested customers as a method of obtaining and stockpiling sufficient equipment to meet the problems posed by a major oil spill. These agreements would enable SOS to purchase and maintain large stockpiles of emergency equipment. Payment for the cost of such equipment would result from a rental charge to the customer on a yearly basis. Such rental charges would insure that the customer had the equipment needed and the equipment would be available. Additional charges would be made by Seacoast Ocean Services to the customer in case of an oil spill in which the equipment was actually used.

Mr. KYROS. Our next witness is Mr. Harold Hackett, chairman of Citizens Who Care, Inc. Mr. Hackett, welcome to the committee.

#### STATEMENT OF HAROLD E. HACKETT, PRESIDENT, CITIZENS WHO CARE, INC.

Mr. HACKETT. Gentlemen, I am Harold E. Hackett. I am assistant professor of biology at Bates College, and I am president of Citizens Who Care, Inc. Citizens Who Care is an environmentalist organization of more than 2,000 contributing members who live on the islands and shores of Casco Bay.

Citizens Who Care has as one project a policy of opposition to the expansion of oil facilities beyond the present well-established Portland Harbor zone. We consider the use of the Hussey Sound passage and offloading area by tankers of increasing size and with increasing frequency to be an undesirable expansion.

Mr. KYROS. An undesirable intrusion?

Mr. HACKETT. Expansion. Thus addressing ourselves to the problem of prevention of oil spills in the Hussey Sound in the future, Citizens Who Care suggest that the oil operation of the type that resulted in the *Tamano* spill be moved from Hussey Sound into Portland Harbor for the following reasons:

1. Our organization, which has been in existence for almost 5 years, feels that oil spillage is inevitable along the passage of tankers and in oilports. Oil industries must be placed together in as small an area as possible. Thus, the Texaco offloading operations should be moved into Portland Harbor.

2. Portland Harbor has a chronic oil pollution problem. The Hussey Sound does not. In spite of the fact that the *Tamano* spill was spectacular in size, it is the continuous addition of smaller amounts of oil and their gradual accumulation that is of far greater significance to the long-term stability of the Casco Bay ecosystem.

In 1969, Citizens Who Care completed a map showing the chronic oil pollution zone of Casco Bay. The study used as visual indicators of chronic oil pollution the presence of persistent asphaltic residues in the upper littoral zone. (Enclosed with these comments is a map

demonstrating that.) In general, the study indicates that only Portland Harbor is chronically polluted. Continued use of the Hussey will bring about a chronic problem there.

3. All oil operations should be boomed. Our organization feels that the winds and tides of the Hussey area do not make booming feasible. However, adequate booming is now being demonstrated in Portland Harbor. Further, vessels leaking quantities of oil should be required to move into position where adequate booming can be rigged. Such an area should be designated in Portland Harbor.

4. The waters of the Hussey are SB-2. A water classification more compatible with oil interests is the SC classification of Portland Harbor.

5. The Hussey is beyond that area ordinarily supervised by the Coast Guard and other interested parties. Portland Harbor is not.

6. The deeper waters of the Hussey are an invitation to use larger vessels, but entry requires an almost Z-shaped passage. This is increasingly dangerous. In contrast, the passage into Portland Harbor is fairly straight.

7. The business of oil handling is not compatible with the existing uses of the Hussey Sound area. There uses are fishing and recreation. Citizens Who Care has consistently presented the thesis that a biological buffer zone is necessary between oil operations and a fishery. Parameters have yet to be worked out but obviously are dependent upon the sphere of influence of the oil industry as based upon their spillage. Portland Harbor is already part of that oil sphere.

8. Some of the oil offloaded in the Hussey is not used in the Portland area; some is not used in Maine. The Texaco offloading should be confined to products used in the vicinity. The only significant reason for using Hussey Sound is to supply the Cousins Island powerplant. But barging to the plant could just as easily be accomplished from a limited offloading area in Portland Harbor.

Citizens Who Care feels that the use of offloading techniques is becoming increasingly important to the oil industry and that the *Tamano* incident is just one symptom of a growing problem associated with offloadings that do not take place in the usual port areas. We urge that these operations be moved into the present oil pollution zone of Portland Harbor and that they be made to conform to the limitations imposed by this alternate site. Thank you.

Mr. KYROS. Now, you say the Hussey Sound is beyond that area normally supervised by the Coast Guard and other interested parties. You mean relatively—they supervise it but they don't get out there as often?

Mr. HACKETT. That is right. We had some correspondence with the Coast Guard in the fall of 1971, expressing our concern over the lack of supervision over oil transfers there. They replied that they did not have the funds or the personnel to supervise such procedures.

Mr. KYROS. You say also that Portland Harbor has visual indicators of chronic oil pollution?

Mr. HACKETT. That is correct.

Mr. KYROS. And it has the presence of persistent hydrocarbons and asphalt residues. There is no question about that. It also has other massive pollution, right, because of the sewage that goes into it?

Mr. HACKETT. That is correct.

Mr. KYROS. Would putting a tanker there and offloading it not pose even greater damage to the city and to the population at large?

Mr. HACKETT. It may. But we feel that is better than spreading contamination well beyond the area of contamination that exists today.

Mr. KYROS. That is, limit it to Portland Harbor?

Mr. HACKETT. Yes. That is the area of chronic pollution today, and we should not expand from that area.

Mr. KYROS. Are you saying that Portland is already polluted and nothing can make it any worse, so we might as well bring the tankers in there? You don't mean that, do you?

Mr. HACKETT. I mean that bringing it in here they will perhaps be subject to far greater controls that are imposed, using the regular harbor entrance—those same sorts of controls that are used to regulate all oil traffic in Portland Harbor.

Mr. KYROS. Thank you for your testimony. It is very helpful to the committee.

Our next witness is Mr. Cyrus Hamlin, president of Ocean Research, Inc. Welcome to the committee, Mr. Hamlin. It is a pleasure to see you here.

Mr. HAMLIN. Thank you, Mr. Kyros. Part of my testimony will be read from the written; part will be extemporaneous.

#### STATEMENT OF CYRUS HAMLIN, NA, OCEAN RESEARCH CORP., KENNEBUNK, MAINE

Mr. HAMLIN. My name is Cyrus Hamlin, and my residence is Kennebunk, Maine, a town on the coast 25 miles south of Portland. I have been a professional naval architect since the late 1930's. In more recent years, I have broadened my interests to include other marine activities. Among these have been participation in a study, carried out for a major U.S. oil company, of the causes and cures of tankers stranding. More recently, I was retained as an expert witness at hearings into the acceptability of establishing an oil refinery at Searsport on the Penobscot River.

I would like to make the point, first of all, that I am not against shipping, whether it is tankers or others, along the Maine coast. We are a maritime State and we should expect to take full advantage of our coastal environment.

The thrust of my testimony is in the prevention of the type of spill that we recently had, rather than in the cure. I think the dollars can be much more effectively spent in preventing this type of thing than in the efforts to correct it, although the cleanup operations would certainly form a backup element of any harbor system.

I would also point out that the *Tamano* spill, although large, is not as large as it could be. There does exist the possibility that there could be a *Torrey Canyon* type of spill in this area.

Mr. KYROS. Heaven forbid.

Mr. HAMLIN. Right. But I think if one treated this statistically, the possibility does exist. One of the major elements in this whole situation is in the change of tanker characteristics since World War II.

After World War II, a 15,000- or 20,000-ton tanker was considered sizable. Now the tankers run up over 400,000 tons, which means a dis-

placement of about half a million tons when they are loaded. The tankers that use Portland Harbor run, I think, 100,000 tons or better.

More important than that perhaps is the fact that the horsepower per ton of displacement of tankers has been steadily dropping. The 20,000-ton tanker would have perhaps 1 or 2 horsepower per ton. The 400,000-ton tanker would have one-tenth of a horsepower per ton.

Now, we might put this in perspective by considering a small powerboat, a 10-ton powerboat, 40 feet long with 200 horsepower, that is 20 horsepower per ton. Now, this horsepower is used not only to control the direction of the vessel by the action of the slipstream on the rudder, but also when the propeller is reversed to stop the tanker, so it can be seen that not only are the tankers getting bigger but their relative ability to stop and to maneuver is becoming that much less effective. This, I think, outlines the problems that we have to face. And I think it is analogous to the aircraft problem that the Governor mentioned. And I think the analogy is one that might be pursued in this present situation.

There are differences. We have large, heavy, slow units in tankers, whereas planes are relatively fast and considerably lighter. Nevertheless, the aircraft industry has had a lot of experience in traffic control and in regulations of the type that I believe are essential for halting those spills.

The basic element in any such system, and the one which will cause the greatest change, is that the control must be from the shore. No longer will we be able to rely upon the humans on the bridge to be in absolute control of where and when a vessel goes.

This doesn't diminish them in any way, but humans do make mistakes, and I think the record shows that tanker strandings, tanker accidents, are, in the last analysis, the result of human error.

Some of the steps possible for Portland which weren't included in my written testimony, because I really hadn't thought them out and I don't know that these are really very carefully thought out, but they might be worth entering into the testimony.

First of all, of course, is to establish shore control, a shore control center which might include radar. It certainly would include voice control with all large vessels. And with that control center, it would be used for continuous monitoring of large vessel movements.

And I say large vessel because there is no point in monitoring 70-foot trawlers and that type of vessel.

Mr. KYROS. This is similar to the VTS we were talking about earlier, the vessel traffic system?

Mr. HAMLIN. That is right. But it must be controlled from the shore rather than from the vessels. Further, there should be, as in aircraft practice, the establishment of limits of environmental conditions under which vessels cannot come in. And in the *Tamano* incident, it might have been, for instance, the height of the tide.

There could be established preconditions under which these vessels could or could not operate.

Another step that is analogous to the aircraft experience is that of a certification of the vessels which use Portland Harbor. I believe that most tankers are well designed and carefully designed, but I am not

sure that they are designed so much for preventing the type of accident that occurred here, or the turning the wrong valve at the wrong time, that type of thing, which does contribute to the spills.

Mr. KYROS. What do you want? Double bottoms, greater maneuverability, which tankers seem to lack because of their great bulk and less horsepower? What is it that you want?

Mr. HAMLIN. I think that this would depend—well, I wouldn't want to say specifically right now, but my own thoughts would be, first of all, that it had the proper instrumentation, that the valving and pumping procedures were such that it would be impossible for one person to make the mistake that would dump oil, that there be backup systems, the experience of the crews, that type of thing.

Lastly, of course, there should be a refinement of the present cleanup procedures to avoid the various delays and confusions which surrounded this present one. And I would like to say here that Portland is in the forefront of pollution control, oil pollution control. I think we all recognize the Maine Port Authority—

Mr. KYROS. We are in the forefront of pollution control?

Mr. HAMLIN. In the studies; yes. The Maine Port Authority has written a definitive textbook on oil pollution. I think it is rather ironic in the face of that that the problems were so extreme in connection with the *Tamano* spill.

But I think they estimate now the final cleanup by October 15, 3 months after the accident.

Mr. KYROS. First of all, it was the Coast Guard's duty anyway. The Coast Guard took the responsibility, not the Maine Port Authority, no matter what the Maine Port Authority wrote, no matter how highly I think of them. And, second, I thought I had been quite clear here today that there just wasn't the necessary equipment there at the time. There was some initially, but not enough, as they began cleaning up, to contain all the oil, and that is why we had the problem we had with Long Island and the other islands.

Mr. HAMLIN. I would certainly agree with that, and I think that is the type of thing that must be taken care of. One of those questions is that of jurisdiction. Who will have the jurisdiction?

My own feeling is that the most effective approach would be to have the Maine Port Authority design and operate a system for Portland Harbor, and have this done with the advice and consent of the Coast Guard.

Mr. KYROS. I think that would be excellent. The Coast Guard isn't going to do the actual work. They are going to get somebody to do the work. They are supervisors, saying this has to be done, that has to be done. They take charge, as you know, in the case of an oil spill, under the law.

Mr. HAMLIN. Yes. My concern with the law, as I understand it, is that a blanket set of regulations would be set up under which this would be done, which might suit Bayonne but not Portland, it might suit Portland but not Searsport.

Mr. KYROS. You can see in this case just how much discretion the Coast Guard had. They could recruit any contractor they wanted to do the work. All they want to do is clean the oil up and not pin the liability on someone else. Their concern was to do the job.

But, in any event, I think that what you just suggested is a very fine idea; namely, the Maine Port Authority should not only have a contingency plan but also the necessary equipment, and then if the Coast Guard sees a spill they can just say go ahead and clean it up and it will be charged to whomever caused the spill.

Mr. HAMLIN. From this escrow fund.

Mr. KYROS. That is our problem. How are we going to get the money to allow the Maine Port Authority the funds needed to carry out cleanup plans?

Mr. HAMLIN. Yes. The matter of jurisdiction is one of the problems which must be met within any constructive measures.

Two others are the matter of financing, which we have just discussed, and another one, which may or may not be momentous, but I suspect it may be troublesome, and that is the objection of the masters of vessels acting through their employers against any abrogation of their authority in bringing the vessel in. I think that can be responded to successfully, but I think it could be a thorn.

Mr. KYROS. Who would we take that up with? The Coast Guard has got all kinds of port safety laws. We have passed all kinds of laws now about port safety and the Coast Guard has enormous control about what comes into a port.

Mr. HAMLIN. Yes.

Mr. KYROS. And they have great discretion.

Mr. HAMLIN. I am speaking now of the removal of some control from the bridge to the shore. I believe there would be objection on that score.

And the degree to which you would have control would vary with the activity in the harbor, too.

Mr. KYROS. Right. Thank you very much for your testimony. As always, it is very enlightening and I am sure it will be very helpful to the committee, and I am going to make it a point to read through the last part which you summarized.

Thank you very much.

Mr. HAMLIN. Thank you.

(The following material was submitted for inclusion in the record:)

STATEMENT BY CYRUS HAMLIN, N.A., OCEAN RESEARCH CORP., KENNEBUNK, MAINE

Mr. Chairman and members of the subcommittee, my name is Cyrus Hamlin and my residence is Kennebunk, Maine, a town on the coast 25 miles south of Portland. I have been a professional naval architect since the late 1930's. In more recent years I have broadened my interests to include other marine activities. Among these have been participation in a study, carried out for a major U.S. oil company, of the causes and cures of tanker stranding. More recently, I was retained as an expert witness at hearings into the acceptability of establishing an oil refinery at Searsport on the Penobscot River.

The aim of society should be to prevent oil spills, not only learn how to clean them up afterward. The low accident rate in commercial aviation operations is evidence that man can to a large degree curtail major aviation accidents. Surely

there seems no reason why this same level of performance cannot be expected of the tanker and oil handling industries.

Although there are other sources of oil spills than ships, it is to the tankers and their control that I shall address myself. As noted in Appendix I of this testimony, there has been, since World War II, almost a twenty-fold increase in tanker size, resulting in more than a doubling of the linear dimensions of the vessels—length, beam, depth. Consequently the ungainliness of the vessels is greater, the lead time necessary for maneuvering is longer, and the area required for ordinary vessel movements is larger. While the mass of the vessels has increased twenty times, the horsepower installed to drive the vessels has increased only about four times. A vessel's power contributes a good deal to its turning moment (the propeller slip stream acts on the rudder to force the stern in the desired direction) and to its stopping effectiveness (by reversing the propeller). From the above facts, it can be seen that the problems associated with the safe handling of the present generation of tankers are much more momentous than they were 25 years ago.

When I was a youngster living on Long Island, New York, we often would spend a Sunday at one of the airfields in the area. Occasionally there were dramatic events such as an air circus or the departure of one of the early adventurers—Lindbergh, Byrd, Chamberlain—but generally there was just a good deal of flying activity.

Compare these relaxed activities, carried on without benefit of radios or any kind of ground control, with present metropolitan airport operations. Now a plane's schedule is affected by conditions thousands of miles away, and the position, course, speed and altitude of the planes are rigorously controlled—from the ground.

And here we come to the crux of the matter. At some period in the past, the control of planes in the vicinity of an airport passed from the pilot of 1927 to the ground control center of 1972. It is now time for this transferral of control to be imposed on the large tanker fleet. No longer can the control of these vessels in restricted waters be left solely with the master.

It is recognized that it may take a significant period of time to bring about fully this type of reform. However, a significant start could be made, at least on an experimental basis, in a matter of months. Appendix II is a proposal for regulations applicable to a busy port; the suggested procedures are tentative and would undoubtedly be revised in practice, yet they do illustrate the feasibility of the type of control which is becoming increasingly necessary.

There are three problems which must be resolved before implementation of shore control of harbor traffic can begin.

1. The objections which may be expected from ship masters to this slight abrogation of their authority and freedom of action. This will very likely be expressed most effectively through their companies, rather than directly. The masters must be shown that their loss of sovereignty is small, and will be well outweighed by the advantages of such a control system.

2. The legalistic basis for the authority to set up and operate a shore control system must be firmly established and clearly delineated. It may be that existing legislation places adequate power in the hands of the Coast Guard; it may be wise, however, for the Port Authorities to occupy a prominent position in the design and operation of the control system.

3. A method of financing (a) the experimental work required to perfect the system and its associated facilities and (b) the operation of the system once it is set up must be arranged. The experimental work should in all fairness be financed by the Federal Government. Once the system is operating, however, it might best be supported through a small levy on the cargoes handled by the Port. A levy of 1¢ per barrel of oil entering Portland, for instance, would contribute about \$1.7 million per year.

I see no reason why a control system such as proposed in Appendix II cannot be established in the port of Portland, on a scale commensurate with the activity of the port. It is my hope that out of these hearings will come the positive steps which will make such a system reality.

## APPENDIX I

SOME REMARKS ON THE PROBLEMS OF LARGE TANKERS IN RESTRICTED WATERS  
(Cyrus Hamlin, N.A., Ocean Research Corp., Kennebunk, Maine, March 21, 1971)

As a naval architect I have given considerable thought to the effects of the increasing size of tankers on their operating characteristics. This general concern was given focus by my participation in a study financed by a major oil company into the causes and cures of tanker strandings. This included a trip from New York to Aruba aboard a 50,000 DWT tanker.

Immediately after World War II, a tanker of 15,000 deadweight tons was considered sizable. These vessels were fitted with about  $\frac{1}{2}$  horsepower per ton of displacement, horsepower upon which they depended to a major degree for stopping and maneuvering. Those of you familiar with small boats may wish to compare this with the 10 or so HP per ton one might find in a normal power boat of 40' LOA.

As the size of tankers increased rapidly, following World War II and the closing of the Suez Canal, it was not found necessary to increase the installed horsepower proportionately in order to assure profitable operation. Accordingly, horsepower per ton of displacement has decreased from about 3/10 for a 50,000 DWT tanker, to 2/10 for 100,000 tonners, and is now about 1/10 for 300,000 DWT vessels.

The following remarks I shall address to some of the problems involved in bringing large tankers, from 50,000 tons upwards, into restricted waters, with particular reference to emergency situations.

There has been relatively little study made of the handling characteristics of large tankers. A search of my library resulted in very little useful data except in "Principles of Naval Architecture," an authoritative volume published by the Society of Naval Architects and Marine Engineers, originally in 1939 and most recently revised in 1967. Most of the information presented below is from that source.

Our concern here is not with the normal approach, in which all circumstances of weather, traffic, personnel capabilities, and ship readiness, bring to a successful conclusion in the entrance and mooring of the vessel.

Rather, we must think in terms of the unusual, the unexpected emergency, brought about perhaps by peculiar environmental conditions, by mechanical failure of some kind on the subject vessel or another nearby, or by human oversight or misjudgement. Human error, incidentally, is a major or primary causative factor in virtually all cases of stranding or collision.

In the instance of a pending collision with either a moving or still object, evasive maneuvering is the preferred action. However, in restricted water in which the ship is large relative to the channel and the layout of obstacles, suitable evasive action from one hazard might well have the effect of placing the vessel in jeopardy from other hazards. Also, an adequate maneuvering speed for the vessel (12 knots has been established as a harbor speed by at least one technical group) may be excessive from the standpoint of other safety considerations, such as stopping distances.

Figure I (Figures I and II are both taken from "Principles of Naval Architecture") shows the stopping patterns for two 31,400 ton tankers, 600' long and travelling at about 12 knots. The randomness of the patterns stems from complex force relationships from the propeller, hull, and rudder, and from wind and current. The distance required to stop, measured along the curved paths, averages out about 10 ship lengths, and the stopping point may fall within an envelope extending about six lengths out to each side of the original course and about nine lengths along it.

If we apply these values to a 1200' tanker (a procedure sufficiently accurate for estimating purposes) we will have an envelope extending about 1.2 miles out on each side of the course and about 1.7 miles along it. During virtually the entire stopping maneuver directional control of the vessel will be totally lacking.

Coasting to a stop with the propeller stopped, perhaps as the result of failure of the propulsion system or its controls, requires a great deal more space. Figure II gives the distance, in ship lengths along the paths travelled, a 400' vessel will require to slow down to 2 knots. Our 1200' tanker, travelling at 12 knots, would coast about  $3\frac{1}{2}$  miles while slowing down to 2 knots. For much of this distance directional control would be lacking.

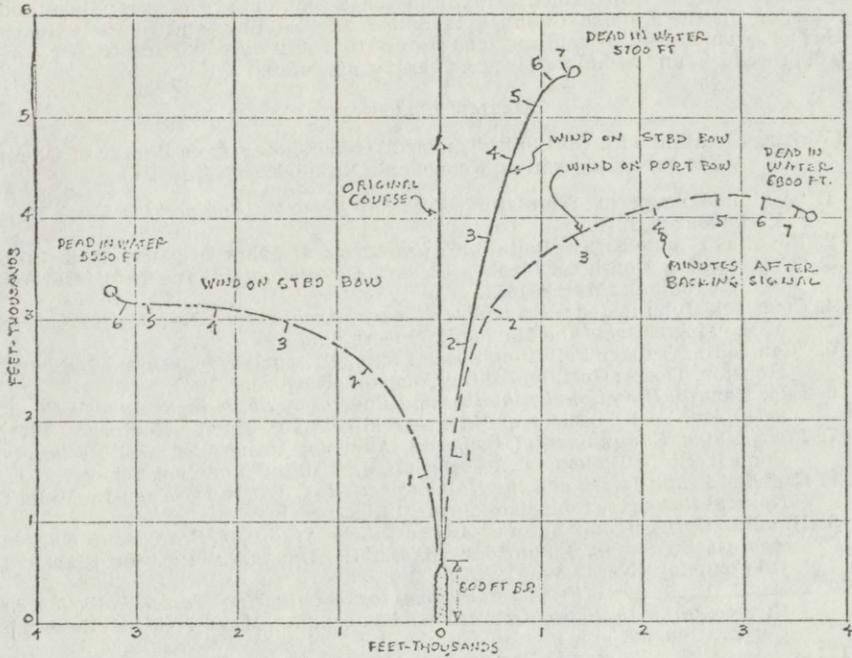


Figure I. Stopping tracks for two 31,400 ton tankers.

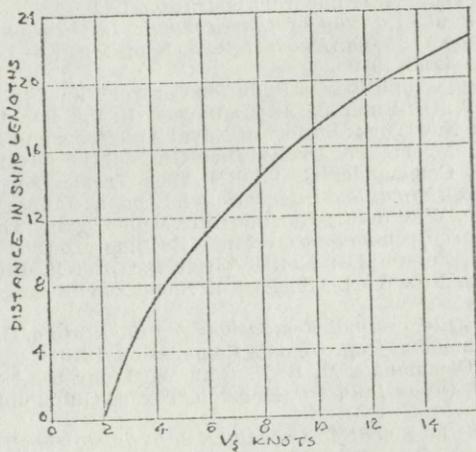


Figure II. Distance travelled in coasting to 2 knots, calculated from model tests.

The physics of ship maneuvering, and the recent history of strandings and collisions in the English Channel, in San Francisco Bay, and in New Haven Harbor, would seem to void any guarantees that any now existing harbor control procedures and techniques is proof against disasters.

## PARTIAL BIBLIOGRAPHY

(Writings Dealing with Oil Spills, Tanker Accidents, etc. (from library of Ocean Research Corporation, Kennebunk, Maine, March 1, 1972))

1. "A Ship Maneuvering Simulator", *Maritime Reporter/Engineering News*. New York: March, 1970.
2. Boynton, Bonnie F. "Oil Pollution", *Undercurrents*. New Orleans: April, 1970.
3. "Catastrophic Month for Tanker Fleets", *Oceanology International*. Beverly Shores, Indiana: March, 1971.
4. Comstock, John P. (ed). *Principles of Naval Architecture*. New York: Society of Naval Architects and Marine Engineers, 1967.
5. "Controlling Tanker Pollution, Special Report", reprint from *Ocean Industry*. Houston, Texas: Gulf Publishing Company, November, 1967.
6. Eda, Harnzo. *Directional Stability and Control of Ships in Restricted Channels*. New York: Society of Naval Architects and Marine Engineers, 1971.
7. *First Maine Environmental Congress*. Augusta, Maine: Natural Resources Council, State Biologists' Association, and Maine Audubon Society, 1969.
8. Graham, Frank Jr. *Oil and the Maine Coast—Is it Worth It?* Augusta, Maine: Natural Resources Council of Maine, 1970.
9. Hamlin, Cyrus (contributor). *A Feasibility Study of Procedural Guards Against Stranding*. Cambridge, Mass.: Bio-Dynamics, Inc. for Standard Oil Company (New Jersey), 1970.
10. ----- *A Proposed System for Eliminating Vessel Pollution in Connection with Shore Operations*. Kennebunk, Maine: Ocean Research Corporation, nd.
11. ----- *Some Remarks on the Problems of Large Tankers in Restricted Waters*. Kennebunk, Maine: Ocean Research Corporation, 1971.
12. *Information Booklet on Oil Spills*. Portland, Maine: Portland Harbor Pollution Abatement Committee, Inc., 1968.
13. Jaeger, H. E.; Jourdain, M. "The Braking of Large Ships", *Maritime Reporter/Engineering News*. New York: October, 1968.
14. Landsburg, A. C. *Computer Simulation of Straight Line Ship Stopping*. Washington, D.C.: Maritime Administration, 1969.
15. Mlotok, Paul. *A Study of the Economic Implications of the Refinery Proposed for Tiverton, Rhode Island*. Kingston, Rhode Island: University of Rhode Island, 1970.
16. "The New Technology of Pollution Control", *World Ports*. May, 1970.
17. Nichols, W. O.; Rubin, M. L.; Danielson, R. V. *Some Aspects of Large Tanker Design*. New York: Society of Naval Architects and Marine Engineers, 1960.
18. "Oil Spill Report," *The Orange Disc*. Gulf Oil Corporation, nd.
19. Parmiter, Commander G. V., RN. "Sea Traffic Control is Vital in British Ports", *Safety at Sea International*. London: January/February, 1968.
20. Perkinson, William J.; Burton, Bill; Mills, Dean. "The Chesapeake at Bay", *Baltimore Evening Sun* (reprint). Baltimore, nd.
21. Porricelli, Joseph D.; Keith, Virgil E.; Storch, Richard L. *Tankers and Ecology*. New York: Society of Naval Architects and Marine Engineers, 1971.
22. *Proposed Oil Terminal Regulations for the State of Maine*. Augusta, Maine: Environmental Improvement Commission, 1970.
23. Ranken, Commander M. B. F. "Can We Delay the Next Major Tanker Disaster?", *Ocean Industry*. Houston, Texas: Gulf Publishing Company, June, 1971.
24. *Report of the Scientific Coordination Team to the Head of the Task Force Operation Oil (Clean-Up of the ARROW Oil Spill in Chedabucto Bay)*, Vols. I and II. Dartmouth, Nova Scotia: Atlantic Oceanographic Laboratory, 1970.
25. Roberts, Keith. *Machaisport: Oil and the Maine Coast*. Augusta, Maine: Sierra Club, 1969.
26. Russo, Vito L.; Turner, Harlan Jr.; Wood, Frank W. *Submarine Tankers*. New York: Society of Naval Architects and Marine Engineers, 1960.

27. Shearhouse, Chris. "Jacques-Yves Cousteau—An Interview", *Undercurrents*. New Orleans: May, 1970.
28. *Student Projects on the Oxidation by Marine Bacteria of Aromatic Compounds Found in Oil*. Cambridge, Mass.: Massachusetts Institute of Technology, 1971.
29. Subcommittee on Air and Water Pollution of the Committee on Public Works, United States Senate. *The Relationship of Economic Development to Environmental Quality*. Machaisport, Maine: Committee on Public Works, 1970.
30. Watson, J. A.; Smith, J. P.; Ehrsam, L. C.; Parker, R. H.; Blanton, W. G.; Solomon, D. E.; Blanton, C. J. *Biological Assessment of Diesel Spill in the Vicinity of Anacortes, Washington, May, 1971*. Dallas, Texas: Texas Instruments, Inc., for the Environmental Protection Agency, 1971.

## APPENDIX II

## A PROPOSED SYSTEM FOR ELIMINATING VESSEL POLLUTION IN CONNECTION WITH SHORE OPERATIONS

(Cyrus Hamlin, N.A. Ocean Research Corporation, Kennebunk, Maine)

## PREAMBLE

The goal of these proposed rules and regulations is to insure 100% freedom of the Port area from pollution resulting from oil spills, waste disposal of any kind, air pollution, fire, or from any other cause resulting from the movement and operations of vessel. A control system such as that outlined below should reasonably be expected to achieve this goal.

## I

Vessels would be required to be certified by the Port Governing Body before being permitted to use the Port. Certification would be based upon:

- (a) The satisfactory training and/or experience of Master and Chief Officer, including an orientation study of the Port approaches and area.
- (b) Certification of the vessel, based on age, society classification, fail-safe valving, etc.
- (c) The previous accident record of the vessel and officers.
- (d) Adequate shipboard safeguard equipment would be required as specified by the Port Governing Body.

## II

Vessels will be under shore control within a Control Radius of (100) miles of the Port. They must remain (12) miles outside of territorial waters base-line until within the Control Radius. See Figure 1. The level of control will be roughly analogous to airport traffic control. The following regulations and procedures are typical of those which would prevail:

(a) There would be three classifications of areas, based upon the degree of potential hazards involved. These would be:

- i. Control Area—(100) N.M. radius from port.
- ii. Critical Area—(12) N.M. radius from port.
- iii. Danger Area—Port and near environs.

(b) Before entering Control Area, vessel must advise Shore Control of its position. Vessel will then be advised of its future movements. A Pilot will be placed aboard soon after entering the Control Area.

(c) Critical Area: A channel will be buoyed through this area; no vessel will be permitted outside of the buoyed area. Only one vessel at a time will be in motion within the Critical and Danger Areas ("In motion" being any state other than made fast to the unloading facility.) Pilot will be in continuous voice communication with Shore Control. Vessel will be continuously monitored by radar. Each vessel speed will be established according to size and pattern of her "stopping zone". See Figure II.

(d) Danger Area: Vessel will be under same type of regulation as for Critical Area, but more stringent. It may be required that tugs be made fast to the vessel.

(e) Bridge procedures will be established by regulation and enforced by the Pilot. These regulations will cover:

- i. The minimum and maximum personnel permitted on bridge in each of the three areas.
  - ii. The navigation and operating instruments will be in operation and manned.
  - iii. Plotting procedures.
  - iiii. Log-keeping procedures.
- (f) Pilots must be rigorously screened and trained. Only a pilot will be authorized to override Shore Control's orders, and then only in an emergency situation.
- (g) As precisely as possible, weather conditions will be defined which will be cause for cancellation of a vessel's entrance or departure. The stringency of these regulations may be increased (but not decreased) in any given situation at the discretion of Shore Control.
- (h) Departure procedures will be essentially the same as entrance procedures.

### III

In addition to the vessel control procedures in the above section, specific backup safeguard measures will be required, as follows:

- (a) Upon entering the Critical Area, and until she leaves, except when not under way, each vessel will be accompanied by sufficient tugs to forestall a disaster resulting from any engine, control, or personnel failure aboard the vessel. The number of tugs will depend upon their horsepower and the size of the tanker. A tentative ratio might be 1000 tug HP for each 25,000 tons of vessel displacement. (The ratio may be increased in the Danger Area.)
- (b) Each tug will be equipped with suitable fire-fighting equipment, oil spill barriers, and high displacement pumps for removing spilled material.
- (c) Immediately upon the vessel's being moored to the unloading facilities, an oil spill barrier will be floated, completely enclosing the vessel. This barrier (part of which may be permanent) must include the facility itself and be of such a capacity as to hold a massive oil spill (the capacity based on deadweight tonnage of vessel). Surface sucking pumps will be installed to remove oil into an emergency storage pit on shore.

### IV

A levy will be made upon each unit of cargo entering or leaving the Port. The levy will be used for the following purposes:

- (a) To carry on the operations of the Port.
- (b) To amortize the cost of governmentally installed facilities for the handling of ships and cargo and for the protection of the Port.
- (c) To establish a sinking fund for:
  - i. Replacement of obsolete components and addition of further components as deemed necessary and desirable.
  - ii. Coping with any emergencies not covered by these rules and regulations.

### V

Regardless of levies, taxes, etc., any spill for whatever reasons will carry a fine and/or a prison term based upon vessel size, spill size, degree of culpability, and damage caused. In addition the certification of the vessel to use the Port will be suspended for a period of time not less than six months.

Mr. KYROS. At this time, I am going to have to take some witnesses out of order. I am told here in a note that the Long Island residents must testify before 4:15 because they must catch their boat back to Long Island.

So I think at this time the committee will call all the Long Island Civic Association members. That is Mrs. Mary A. Ross, president, Mr. Robert Hickok, member, Mrs. Charlotte Gibbens, Mrs. Elsa Di-Millo, Mr. Donald McVane.

Now, if you would come forward, we will get your testimony right now.

Mrs. Ross. Mr. McVane won't get back here till after 4. He was going to say all the things I was going to but I didn't, because he is much more knowledgeable than I am.

Mr. KYROS. Just like a woman. You are always telling me what he is going to say; right?

Welcome, ladies, to the committee. Just proceed with your testimony.

**STATEMENT OF MARY A. ROSS, PRESIDENT, LONG ISLAND CIVIC ASSOCIATION, ACCOMPANIED BY ELSA DIMILLO, MEMBER**

Mrs. Ross. I have a statement. I had a lot of questions, since I have been listening. First, I would like to read this letter from the civic association.

"In line with the letter sent to Governor Curtis, Senators Smith and Muskie, Representatives Kyros and Hathaway, following the *Tamano* disaster, we, the Long Island Civic Association, go on record as opposing offloading in Hussey Sound and any oil development in Casco Bay."

That is from the civic association. And I forgot to say who I was.

Mr. KYROS. You are Mrs. Mary A. Ross.

Mrs. Ross. Right. I am a resident of Long Island. And until the oil companies have something to depend on besides the so-called containment booms, we should have no more oil development in Casco Bay along the Maine coast.

I witnessed the horror of the big oil spill on July 22, 1972. And we could only stand helpless as the black gooey stinking mess slowly moved onto our beaches.

We can pass all the safety measures and stringent control measures man can envision, but what good are they if the equipment isn't workable. In a July 1972 oil letter published by the Massachusetts Audubon Society, Mrs. Lewis Seidenberg, president of GOO in Santa Barbara, writes "The Coast Guard recently tested the latest much-touted oil containment boom and pickup equipment in the Santa Barbara Channel. While it was effective in flat seas, it not only could not contain the oil in the high seas, but broke up as well."

We had the same experience in Casco Bay when the *Tamano* sailed. The boom not only broke up but we were left with another oil spill of 6,000 gallons.

But even if the boom were workable, what good is it? There isn't enough boom available, as was the case on the 22d.

There comes a time when equipment is workable, any oil port should be forced to own this equipment in sufficient quantity to take care of all emergencies.

As for removing the oil from the water in and around the beach area, straw still is being used as the latest in modern technology.

That is the end of my written statement.

Mr. KYROS. Mrs. Ross, do you live on Long Island?

Mrs. Ross. Yes; I do.

Mr. KYROS. How is the cleanup progressing, as far as you are concerned?

Mrs. Ross. Do you really want to know?

Mr. KYROS. I am just asking you. Of course, I want to know.

Mrs. Ross. Well, as far as I am concerned, there is one beach they are working on—they call it the West End Beach. But I live on the opposite side of the island, and to my knowledge nobody has ever been on that side of the island. I do not have a sand beach so-called, but I have the beach grass—and the tide was extremely high when the oil came ashore and it came up into all this grass.

Mr. KYROS. You live on the seaside?

Mrs. Ross. Yes; I do.

Mr. KYROS. But that side wasn't hit as hard, at least that is what I am told. I went around Long Island—I can't remember every single part of it—when the oil spill occurred.

But I thought that side wasn't hit as hard with oil.

Mrs. Ross. No; it wasn't hit as hard.

Mr. KYROS. Are they planning to clean your part?

Mrs. Ross. I do not know. I haven't seen anyone over there to inspect it.

Mr. KYROS. We can find out for you though.

Mrs. Ross. And then on the West End Beach on the island, where they are working, going east on the island, there is still a lot of beach that they haven't cleaned.

Of course, I haven't talked to the Coast Guard. And nobody seems to know if they are going to, that is, the residents don't know.

Mr. KYROS. Well, I think that is something we will have to watch very, very carefully, and we should listen to people like yourself who live there and see the island and know much more about it than anybody else.

We are not going anywhere. We will be right here and we will certainly talk to the Coast Guard. They have been very reasonable in discussing things.

Mrs. Ross. Yes; I talk with them quite often on the island, but I haven't asked them any of these questions.

Mr. KYROS. I think what they are trying to do is get those areas where the oil was leaching out into the water. They wanted to get that as fast as they could.

Mrs. Ross. If they could have got it the same day—now, some people cleaned their own little beaches and they got them that next day, and they didn't have to take all the sand off. Have you looked at it in the last few days?

Mr. KYROS. Looked where?

Mrs. Ross. At the West End Beach where they are removing the sand.

Mr. KYROS. I have had no opportunity to go there.

Mrs. Ross. It is a tragedy.

Mr. KYROS. Aren't they going to dump loads of sand back in there?

Mrs. Ross. I don't know.

Mr. KYROS. My understanding is that they are going to try to make the beach exactly like it was before.

Mrs. Ross. I hope so.

Mr. KYROS. Is that all your testimony?

Mrs. Ross. I would like to ask another question.

Mr. KYROS. You are going to ask me a question.

Mrs. Ross. Could I ask a question that went into the testimony?

Mr. KYROS. Certainly. But why ask me? I am not an expert witness.

Mrs. Ross. I don't mean you as a witness, but you listened to the testimony. I wasn't sure what he was saying.

Captain Smith of the Pilots Association—I think he is still here—he stated that for one reason or another the *Tamano* could not be anchored outside, it couldn't stay outside.

Do you remember why? I couldn't get all of his testimony.

Mr. KYROS. I had his testimony here earlier. Here is the question I asked him. Why didn't they bring the *Tamano* in during the daytime? And he said it had appeared there at night. And I said, that, they could have set the course and speed from Venezuela so she would arrive here in the daytime.

But that was left inconclusively. He didn't say that the ship couldn't—

Mrs. Ross. No; but where I live—I live where I face the lightship. And there are several tankers anchored out there most every night waiting to come in.

Another thing, it was mean low tide when the tanker came in that night. There is not very much water at Soldier Ledge.

Thank you very much for listening to me.

Mr. KYROS. Thank you, Mrs. Ross. Mrs. DiMillo, why don't you go ahead.

Mrs. DiMILLO. Gentlemen, I am Elsa DiMillo and I am a summer resident of Long Island. Our cottage is located on West Point overlooking Hussey Sound.

What does this oil spill mean to me? It means that we have been denied the peaceful visual beauty and enjoyment of our property. It means that our entire shorefront is covered with thick gooey oil. No one has ever attempted to clean it up. No one knows how to clean it up. The shoreline is a combination of rocks and sand and raking or scraping would be impossible.

The beach immediately adjoining our property is the one being scraped to a depth of 6 inches. An ecology expert, Carl Cobitt, U.R.S. Research Co. of San Mateo, Calif., has been employed by the U.S. Coast Guard to supervise the cleanup of this oil-contaminated beach.

He directed the cleanup of the massive 820,000-gallon oil spill in San Francisco Bay in January of 1971. Cobitt said: This oil-soaked beach of Long Island is, "The worst saturated beach I have ever seen anywhere."

This also means that our power boat, which was moored in front of the cottage, was covered with thick gooey oil. The water was likewise very oily all summer. Our rowboat became covered with oil, the oars were dripping with it and the lines of the boat black and sticky.

Mr. KYROS. Did you get compensated by an insurance company for that?

Mrs. DiMILLO. We are involved in a class-action suit.

Mr. KYROS. I mean for the boat.

Mrs. DiMILLO. No.

Mrs. KYROS. I thought they paid instantly.

Mrs. DiMILLO. We have not applied for that, because we are active in the class action.

Mr. KYROS. Just last night I had dinner with someone whose boat was covered with oil, the lines were covered with oil—they replaced the lines, they cleaned the boat and they paid the bill.

Mrs. DiMILLO. As I understand, they allow \$2.50 per foot for clean-up, which would cost a minimum of \$7.50, people found, so it wasn't a very satisfactory arrangement. We did not apply.

In attempting to use this recreational equipment, hands, legs, clothing and the boat interior became saturated with oil. Obviously the pleasure of using our boat was completely gone after July 22, 1972.

It means that the odor of oil emanating from the shore every time the tide was low—it emanated from the shore every time the tide was low—and it was especially suffocating and nauseating when the hot sun poured down on the mess.

Worst of all, it means the total loss of marine life. And we wonder how many years will pass before the wounds of man's carelessness will be healed.

What compensation is there for the aggravation that we on the island have suffered?

I was asked to give testimony regarding what it is like to be a summer resident. So mine is confined to that.

What can be done to prevent future spills? First, off-loading of oil in the Hussey Sound must cease. It is impossible to contain an oil spill in rough water. This is testimony that Texaco gave us when they came to the island this summer. They said absolutely impossible—and we have this on record—to contain a spill when the water is rough and the current is more than 5 knots, which it is practically all the time.

Furthermore, the quality of the water in this area was SB-2 therefore not suitable at all for an off-loading site.

Second, I feel that we do not need all this tanker traffic. Maine's needs should be handled first within the inner harbor. After that, Montreal's demands can be met.

Mr. KYROS. Of course, in this case, this oil was for Cousins Island.

Mrs. DiMILLO. In that case, I think it should be a smaller tanker coming directly to the Cousins Island dock, and not allowed offloading in rough waters.

Third, no oil handling should take place outside of the inner harbor. I have just answered that part.

Casco Bay is one of the most beautiful unspoiled gems left in the United States, and it is our duty to keep it this way for future generations to enjoy.

Thank you very much.

Mr. KYROS. Thank you, Mrs. DiMillo. Thank you for your testimony. The next witness is Mrs. Millinger.

Mrs. MILLINGER. May I read Mrs. Gibbens' letter? She had to leave because of ill health.

Mrs. KYROS. Certainly.

#### STATEMENT OF RUTH MILLINGER, CHEBEAGUE ISLAND, MAINE

Mrs. MILLINGER. I am Ruth Millinger from Chebeague Island and we have a great deal of oil up there which hasn't been cleared up at all, and that map over there doesn't even show where it needs to be cleaned up.

But I will read Mrs. Gibbens' letter in the first person:

My name is Charlotte Gibbens. My husband, Derek, and I live at Hussey in Long Island. We own 9 acres bordering the sea with over 1,400 feet of rocky shorefront. We have both had scientific college educations and for 7 years prior

to moving to Maine I was in charge of the environmental source files for the Conservation Services Center, the Massachusetts Audubon Society, Lincoln, Mass.

Following the Tamano spill, July 22, oil did not reach our shores until about 4 days later, when we first noticed oiled straw and globs of black oil on our rocks and seaweed. From then on I have examined every 2 or 3 days the several kinds of gastropods abundant on our rocks. They all immediately went into a state of narcosis, losing their reflexes. When I touched them they fell off. To this day only one has recovered, the one that feeds on barnacles.

Those that feed on other marine life have either died or are still in a state of narcosis.

Since mid-August we have found in the marshes and on our shores many dead gulls with no visible sign of injury or oil. The numbers represent at least 1000 percent increase over the ones found at this place since our observations began 6 years ago.

These gulls died before the red tide appeared. Can this, too, be the result of oil in the food chain?

Because of these unseen yet far-reaching and long-term effects on our marine ecosystems, we are opposed to any further oil traffic outside of Portland Harbor, which would involve Hussey Sound and Casco Bay.

Mr. KYROS. You are Mrs. ?

Mrs. MILLINGER. I am Mrs. Ruth Millinger of Chebeague Island, which is the next island beyond Long Island.

Mr. KYROS. Thank you very much, Mrs. Millinger.

Mr. David Fink, director of the Research Institute of the Gulf of Maine, Portland, Maine.

Mr. Fink, welcome to the committee. It is a pleasure, of course, always to have you here.

Mr. FINK. Congressman, thank you very much for the invitation. I must say, thank you for your official actions on behalf of our young research institute in the past 4 years. They are deeply appreciated.

#### STATEMENT OF DAVID R. FINK, JR., PRESIDENT, THE RESEARCH INSTITUTE OF THE GULF OF MAINE, PORTLAND, MAINE

Mr. FINK. Expert witnesses have brought to the subcommittee much useful information and many recommendations concerning prevention and cleanup of oil spills in the Gulf of Maine. My purpose is to make the case, very briefly, for a new kind of attack on the longer term problems involved.

The issue lies in the fact that ocean transport of hazardous materials involves a number of subsystems which are nowhere examined and treated as a whole. There are considerations of harbor and wharf adequacy, ship design, navigational technology, weather, international and interstate law, environmental protection, and economic well-being. These elements are identified easily by the Government agencies regularly involved in particular incidents such as gave rise to this hearing—the Corps of Engineers, the Coast Guard, the Environmental Protection Agency, the State department of sea and shore fisheries, the bureau of waterways, and the environmental protection department. Along with the private sector elements—producer, shipowner, pilot, and marketer—all these have their own interests and jurisdictions, working together in crisis, then drifting naturally back into their individual concerns.

With no illusions that any one center could, or should, tie together all these elements into a single unit, my great hope is that Maine could conceive an analytical, predictive, and design center where problems

of dangerous ocean transport could be attacked with single-minded purpose.

Let me digress to say that what I have in mind is a focus for many of the technical ideas presented here today, and a unit to discover better techniques in the future.

Nowhere is there a more appropriate place for such a center, from the standpoint of need and resources. Here, particularly in Greater Portland, there is a fine but grossly underutilized harbor; a "fleet of opportunity"—perhaps 900 tankers per year to serve as practical test vehicles; challenging climate, weather, and sea conditions; a university law school and a marine technical school; a Maine tradition of excellent ship design and construction; a developing coastal science park as a site; and a coastal environment worth saving. Where better to examine the cost/benefit trade-offs of offshore harbors and terminals; or to design and test a sophisticated semiautomated harbor navigational safety system; or to carry on the long-term R. & D. necessary for the host of supporting instruments and systems?

In particular regard to oil spills, a center for the control of dangerous substances transported by sea would, in close cooperation, of course, with legally responsible agencies, continuously monitor traffic, sea, and atmospheric conditions, availability of boom and cleanup equipment, and would "red flag" deficiencies and dangerous conditions. The control strategy to deal with the probability of spills, the actual occurrence of spills and cleanup requirements vary continuously. Existing authorities cannot possibly keep abreast of all the conditions which bear on the problem of oil spill prediction and control. To be effective, an optimum coastal strategy must include computer interfacing for quick access to all the relevant information.

The center would not only be a service to existing authorities for dealing optimally with oil spills and for deploying equipment where needed before the spills actually occur, but the center would also research, by computer simulation, the conditions which bring about oil spills. These simulation techniques would have a considerable value in illuminating deficiencies and conditions which lead to spills and damage to the environment. This information could be important toward correcting these deficiencies without first experiencing the results of a major disaster.

In my view, this subcommittee could do nothing more valuable toward solving the really fundamental problems of which this spill is merely a symptom than to consider how such a center could serve as a national focus for these concerns. Piecemeal, after-the-fact, crisis-oriented reactions will no longer do, as you are recognizing with your approach to this hearing. So, why not some congressional initiative, some congressional imagination, some congressional leadership? The vehicles for Federal involvement exist, especially in such agencies as NSF and NOAA, so far as research is concerned. Funding should be just as multifaceted and innovative as the concept itself, but what we need is a continuing expression of the people's sense of urgency, and the provision of incentives to draw industrial and State government participation. This, it seems to me, the Congress can and should provide.

Mr. KYROS. That was certainly a most thoughtful and sophisticated look at this problem. Would you see a center here? The center would

be here where we would study the parameters of the vessels coming in and out. This center could decide whether we should have a radar or vessel tracking system, what kind of boom, or skimmers, and so forth.

Mr. FINK. That would be the R. & D., the development of technology for the future. In addition to that, I think there would be operational day-to-day activities that such a center could carry out in cooperation with the Coast Guard, obviously, and other responsible agencies, in order to deal with the realities of today, while at the same time researching the solutions for tomorrow.

Mr. KYROS. What about the national contingency plan? Do you know how that is set up and is broken down?

Mr. FINK. Yes; generally. This would obviously need to be related to that and could serve as the northern New England aspect of that, I would think.

Mr. KYROS. Well, thank you very, very much. It is always a pleasure to see you before the committee.

Mr. FINK. Thank you.

Mr. KYROS. Our next witness is Mrs. Sharen Lawrence, League of Women Voters of Maine. Mrs. Lawrence?

Mrs. Lawrence, welcome to the committee, and I am glad to see that you had the patience to wait here today to testify.

#### STATEMENT OF SHAREN LAWRENCE, LEAGUE OF WOMEN VOTERS, MAINE

Mrs. LAWRENCE. I am Sharen Lawrence, representing the League of Women Voters of Maine. For many years the League of Women Voters has supported the concept of multiple use of our resources. High on Maine's list of resources is Maine's extensive coasts, complete with lovely islands, deepwater harbors, and one of the most productive fishing areas in the world, the Gulf of Maine. Although today we are looking specifically at oil in Casco Bay, oil coming into Portland Harbor affects the future of the entire Maine coast.

We raise the question, "Is the oil industry compatible with the concept of multiple use of the Maine Coast?" To answer this question, I offer biological evidence concerning the effects of the inevitable oil spills. The evidence is pertinent somewhat to the recreation industry and primarily to the fishing industry.

Although hard, appropriate statistics are difficult to find, let us keep in mind that the recreation industry represents about \$800 million in valuation of recreational property, provides approximately 21,000 jobs with a payroll of \$27 million annually. The potential for tourism growth is well documented elsewhere.

The fishing industry represents \$160 million—and I have heard as high as \$640 million—brought into the State, employs nearly 6,000 persons, and pays \$50.2 million in salaries. Although the fishing industry seems to be slowly deteriorating, especially here in Casco Bay, it could become the top industry. The value of these industries must be weighed against an industry using a nonrenewable resource, possibly lasting only 30 to 40 more years.

I think we need to look in terms of long-range planning at this point.

Sources of information on the biological effects of oil spills, especially the long-range effects, are very scarce. The original conclusions from

some studies, such as on the Torrey Canyon or Santa Barbara oil spills, are questionable since the analysis seems to be mainly visual rather than chemical. The presence or absence of dead organisms was related to the presence of oil pollution as seen in surface film on water, rocks or sand. The presence of healthy looking fish in areas where oil contamination had been previously seen, without regard to the migratory habits of fish, led to the conclusion that the oil spill contamination had dissipated. The conclusions were not based on chemical analysis for the presence of the constituents of oil (these various hydrocarbons) in the water, the sediment, or within the organisms.

The most thorough, long-term study was made by Blumer and his associates at Woods Hole Oceanographic Institute. He studied the effects of the oil spill at West Falmouth, Mass., of approximately 600 tons of No. 2 fuel oil on September 16, 1969. The immediate effect of direct oil contamination was a vast killing of almost all species. In depths of 10 feet, 95 percent of the fish, shellfish, worms, crabs, lobsters, and many other crustaceans and invertebrates were dead; the remaining were dying. Heavily polluted tidal areas showed almost no survivors. In sediments, dead snails, clams and other small crustaceans were found. The contamination was immediate and throughout the depth of the water, 42 feet in this case.

And he has said subsequent to this report that he believes the crude oil would have similar effects, although his particular study was on the No. 2 fuel.

Mr. KYROS. I saw him about 2 or 3 weeks ago down at Woods Hole, Dr. Blumer and also a Mr. Sands, I believe. Their statements were incredible. But I believed they referred to No. 2 fuel oil. They didn't think No. 6 had that same toxicity to the sediment.

But, in any event, oil does tremendous harm. They showed how the organisms died the minute that this fuel oil hit them on the bottom.

So you are absolutely right about this.

Mrs. LAWRENCE. The spreading of the oil contamination is caused by the solubility in water of some of the toxic components of oil and the sinking of particles of oil, both of which are increased by turbulence in the water. Once the oil is distributed, it is able to enter the food chain. Entrance into the food chain, and the stability of the hydrocarbons present in both fuel oil and crude oil, raise the more critical question of the long-term effects of oil spills.

For several months after the West Falmouth spill, the amount of hydrocarbons in sediments rose although there was little visible evidence of the spill. Furthermore, the contamination spread to many areas not originally affected by the spill. Even 2 years later the sediment content of hydrocarbons was abnormally high. Degradation, which occurs naturally through bacterial action, was slower than would have been expected from laboratory experiments. Oil found below the surface of the sediment showed little deterioration.

Some of these hydrocarbons found in both No. 2 and the crude oil are carcinogens.

Mr. KYROS. So you also believe that we take a risk of entering carcinogens into the food chain?

Mrs. LAWRENCE. Yes, I do. And I don't seem to see any long-term studies on Casco Bay on the possibility of the food being contaminated. I think that is a possibility. We don't know the answer.

And we ought to find an answer.

Mr. KYROS. Just take Portland Harbor, for example, imagine how polluted Portland Harbor is and what lives at the base of Portland Harbor. I imagine you are absolutely right. We should make a long-range study.

As one of those suggestions made today, we will see if we can't get a long-range study to follow up this oil spill. This might be a vehicle to make such a study.

Mrs. LAWRENCE. Once the harmful hydrocarbons enter into the internal environment of an animal, degradation occurs even more slowly, if it occurs at all. The 1970 shellfish crop from the West Falmouth area was as heavily contaminated as the 1969 crop. Oysters from the area placed in clean water for 6 months retained the toxic components of oil without change in quantity or quality, even though the oily taste disappeared.

Let me summarize. The effect on wildlife is an immediate and quite thorough killing. The contamination not only lasts for years but spreads to areas and to organisms higher in the food chain not originally exposed to the spill. Once contaminated, the shellfish are unable to clean themselves. The presence of toxic hydrocarbons cannot be detected by taste.

The long-range accumulating effects of oil contamination are probably more dangerous to man and marine animals than the immediate and obviously traumatic aftermath of an oil spill. A man won't eat a dead fish. Unfortunately he might eat one with relish if there is no oily taste, unmindful of the hidden presence of harmful, possibly carcinogenic hydrocarbons. Will not the tourist, the Maine public, and the fisherman come to regard the red tide as less disastrous than the black tide which probably is more damaging to the economy and possibly more dangerous to health? The League of Women Voters finds inadequate the present means of oil handling. We cannot accept expansion of the oil industry when it jeopardizes the fishing and recreational industries which will benefit generations to come.

Thank you.

Mr. KYROS. Thank you very much, Mrs. Lawrence. I appreciate your testimony. It will be helpful to the committee.

Our next witness will be Mr. Russell Edwards and Mr. Ted Rand, Casco Bay Island Development Association.

Gentlemen, welcome to the committee. If you have prepared statements, you can give them for the record, or you may just proceed to testify.

#### STATEMENT OF RUSSELL EDWARDS, CASCO BAY ISLAND DEVELOPMENT ASSOCIATION, ACCOMPANIED BY TED RAND

Mr. EDWARDS. Congressman Kyros, my name is Russell Edwards. I am president of the Casco Bay Island Development Association.

I don't have a prepared statement. Maybe it is just as well, because most of what we wanted to say has been said and we don't have to bore you with it over again.

We would like to address ourselves to the last two items in your definition of the scope, that is, provisions to prevent future such occurrences, and benefits and risks of oil-handling on the Maine coast.

I think it has become fairly obvious from the testimony that you have heard so far that there is only one way to prevent future occurrences in the Hussey, and that is to eliminate offloading of tankers in the Hussey.

The weather conditions and present technological advances are just not up to the task of containing oil spills in that area, and until they are it should no longer be permitted.

And we have urged you personally in a letter, and to other members of our congressional delegation, the adoption of the VTS navigational system. In the case of the Tamano, it is quite possible the accident would never have happened had this system been in operation.

And, finally, as far as to the benefits and risks of oil handling, if I can confine my remarks to this particular instance, the benefits at best were marginal. Certainly there were better ways of doing it, such as using a smaller vessel and not using the transfer.

The risk is quite obvious. It is a very frustrating thing to see huge tankers in and out of your port constantly and to go on knowing that you are paying the highest, one of the highest fuel rates in the Nation.

Mr. KYROS. Well, we have fought against oil quota restrictions, and have attempted to get rid of them over and over again. So let's not bring that point up with the tankers.

Mr. EDWARDS. Essentially, that is the scope of my part of the testimony. Ted does have a suggestion.

Mr. KYROS. Russ, in other words, you feel that tankers should not offload in Hussey Sound, that is a dangerous area?

Mr. EDWARDS. We are opposed to it with the present technology.

Mr. KYROS. Mr. Rand, you are a bona fide lobsterman. It is nice to see you here. I want to ask you a question before you start testifying.

Did any of this oil affect our lobsters from this spill?

Mr. RAND. At this time, I don't know that it affected them. Those that were stored in floating cars were affected, those on the surface. Well, you have to ask the marine biologists whether this year's release of eggs came at the time when they were destroyed on the surface of It will take 5, 6 or 7 years before we will know from the commercial standpoint if this year's crop was destroyed.

Mr. KYROS. Go ahead, Ted. I didn't mean to cut off your testimony. I just wanted to ask you that question about lobsters.

Mr. RAND. My name is Theodore Rand. I am a member of the Casco Bay Island Development Association. And there were three points. I am talking to the third point that we should mention at this hearing.

We feel that the responsible body for the administration of the port, presently the captain of the port and the Coast Guard, this should be revised. It seems now that the captain of the port has many other duties, the captain of the port and the Coast Guard. We feel that it should be restructured so that his sole duty is the responsibility for the port.

And he should have a board of advisers or representatives to assist him in this operation. There should be some representation of all users of the bay. In addition to the commercial vessel users, there are also the—owners, commercial fishermen and recreational users.

Mr. KYROS. Some representation where?

Mr. RAND. On the board subordinate to the captain of the port. And have it a formally structured body. It should include the duties of the

present Board of Harbor Commissioners, which presently has responsibility for dredging and structures, and much statutory power has never been clearly defined. I would like to see this clearly defined, the limits clearly defined. And the captain of the port who had that as his sole duty and the possibility of input from all users of the port.

Often now you hear from those others than the commercial vessel interests. You hear them only when they are in a critical mood after they feel they have been injured or have been injured by oil spills and what not.

They don't have an opportunity, a formal opportunity, to present constructive help in the running of the port, and certainly there are things to be gained from the other users.

Mr. KYROS. Where do you live, Ted?

Mr. RAND. Little Diamond Island.

Mr. KYROS. Did you get oil up at Little Diamond?

Mr. RAND. We got it worst from the second spill than we did from the first.

Mr. KYROS. The last 10,000.

Mr. RAND. Just the way the weather conditions happened to be at the time of the spill.

Mr. KYROS. But the first time Little Diamond was not hit that hard.

Mr. RAND. Not as hard, certainly, as Long Island.

Mr. KYROS. All right, gentlemen, thank you very much for your testimony and thank you also for your patience in waiting all day long.

Our next witness will be Mr. L. Robert Porteous, candidate for U.S. Congress. Mr. Porteous, welcome to the committee.

Mr. PORTEOUS. Thank you, Mr. Chairman.

Mr. KYROS. I also want to thank you for being so patient to wait all day long.

Mr. PORTEOUS. I appreciate that you have had many people to testify, and it has all been very interesting.

#### STATEMENT OF L. ROBERT PORTEOUS, CANDIDATE FOR U.S. CONGRESS

Mr. PORTEOUS. Mr. Chairman, I greatly appreciate the opportunity to speak today before this distinguished committee. My statement deals not so much with the deals of the recent *Tamano* oil spill as with proposals to minimize the effect of possible future spills. These proposals are adapted to Casco Bay, but apply with equal force wherever off-loading operations are carried on.

We must take every step possible to prevent future spills. Research, strong standards for marine construction, and strict regulation of off-loading operations are unquestionable necessities. But no matter how strong our preventive efforts, some oil spills will still occur, and we can do much to insure that local officials will be better prepared to deal rapidly and effectively with these crises when they arise. The successful safety operations of the Portland Pipeline Corp. suggest two courses of action:

(a) We should require the presence of a trained skeleton cleanup crew whenever any offloading operations are in process.

(b) We should require that an adequate supply of booms—and, I might add, heavy-duty booms—and other necessary equipment, be ready for immediate deployment at all offloading sites.

Having crews and equipment actually present during the offloading operation can save precious hours when catastrophes occur. Not only can the cleanup crews take immediate action, but seamen on the ships involved will receive the proper advice on how to act quickly to minimize the effect of any accident. Preventive action taken in the first hours after any mishap will determine how extensive the spill and its resulting ecological damage will be.

Looking specifically at the geography of Casco Bay, there are also a number of logistical changes that can greatly improve the safety of our offloading operation. Rather than conducting the actual loading in the middle of Hussey Sound, where effects of a mishap are inevitably catastrophic, I propose construction of a special docking facility along the shore of Long Island in the King resource area. Perhaps it would be similar to a floating drydock.

Mr. KYROS. Do you think we ought to ask the citizens of Long Island first?

Mr. PORTEOUS. I would imagine that before any construction like that was undertaken, they would have to be asked; yes, sir.

Mr. KYROS. They might not want to take that risk, Mr. Porteous. I don't know.

Mr. PORTEOUS. With the type of arrangement that I have in mind, there would be no risk, whereas in my prepared statement it says "off" the shore of Long Island, I am proposing a pontoon or floating drydock type of arrangement in which the ship would be completely surrounded both on the shore side, offshore, and even underneath.

Mr. KYROS. Underneath the ship?

Mr. PORTEOUS. Yes, such as a floating drydock that bulwarks at both the southwest and northeast ends be constructed so that the tidal flows would be minimized. And if you remember, much of the testimony today has indicated that because the leak from the ship was some 40 feet below the waterline, that this oil leaked out underneath the booms and that they were of little use due to the tidal flow, which has a very heavy flow in the middle of Hussey Sound.

Going back to my text, a barrier should be constructed parallel to the shoreline, enabling tankers to moor between the barrier and the shore during offloading operations. In the event of a hull rupture of the *Tamano* type, the stricken vessel could be quickly placed in the protected zone.

In other words, if a ship was coming in through Hussey Sound, hit Soldier Ledge or a buoy or whatever, it could be immediately taken to such a protective area, with the result that the oil spill would be minimized.

With the natural barrier of the island on one side and the artificial barrier on the other, the scope of any oil spill and its zone of ecological destruction could be sharply constricted, cleanup operations would be simplified, and the danger of tides and currents carrying the oil out to sea would be largely minimized. For a reasonable cost, the entire logistical operation could be redesigned to provide maximum safety.

I would, third, suggest that Congress consider assisting the establishment of regional schools in the prevention, containment, and clean-up of oil spills in various localities where the heaviest oil traffic is centered. And, of course, Portland, Maine, is the second on the Atlantic coast.

The presence of these regional schools can help to insure the availability of an adequate number of fully trained crewmen to implement the safety programs described above. They would give harbor pilots and other marine personnel the opportunity to receive basic courses in oil-spill prevention and control, so they could sharpen their safety skills, and gain a greater knowledge of how to react in emergencies. South Portland or Portland would be ideal places to establish such a school.

There is much room on our waterfront as you know from your trips along the waterfront. And I, in my little Boston whaler along the waterfront, have seen that there are many, many places that could be used for such a school.

The lesson in all of this is contingency planning. If, while working to avoid oil spills, we work equally hard to improve our procedures for dealing with those spills when they occur, we can make great advances in insuring the safety of our shore areas from the type of oil destruction seen far too often here in Maine.

Thank you, Mr. Chairman.

Mr. KYROS. Thank you very much. Thank you again for being so patient in waiting to testify.

Our next witnesses will be Mr. Tom Thomsen and Mr. W. E. Hutton, Class Action Steering Committee.

Are those gentlemen present? Well, Mr. Dodge—Mr. Richard Dodge, Jr., president, Dodge Weed Co., South Portland.

#### STATEMENT OF RICHARD DODGE, JR., PRESIDENT, DODGE WEED CO., SOUTH PORTLAND, MAINE

Mr. DODGE. Representative Kyros and members of the congressional Merchant Marine and Fisheries Committee.

Mr. KYROS. Welcome to the committee, Mr. Dodge.

Mr. DODGE. It is a pleasure. You have heard from the goliaths of industry and government and now my presentation is specifically concerned with marine algae and its representative of the Davids of Casco Bay, the small independent fisherman or harvestors of native marine products of commerce. I am not here with intent to slew all the oil goliaths, only to emphasize the necessity of their being good neighbors and keeping their chosen commercial product, oil, safely contained. All of us Davids are absolutely dependent upon the natural marine environment unencumbered by oil.

Aside from being a David, my name is Richard Dodge, Jr., of South Portland. Together with my dad we have harvested marine algae 25 years. Although we have harvested much Irish sea moss (*Chondrus crispus*), our main product has been the several species of rockweeds with the dominant rockweed being knotted wrack (*Ascophyllum nodosum*). These rockweeds, which are brown algae, grow between the tide zones and as all like forms therein are extremely susceptible to the damaging effect of oil spills.

The huge oil spill that occurred the night of July 22-23, 1972, has and is now causing both immediate and long-range damage to the marine algae resources of Casco Bay. The area with the greatest detrimental effect of this spill includes all the ledges and shorelines between mainland Portland and Chebeague Island. In this area I have produced on a sustained annual production about 500 tons of rockweed. Today the rockweed is unmarketable. The total tonnage in this area is probably approximately between 2,000 to 2,500 tons; that is, until the so-called cleanup crews went to work.

Mr. KYROS. What is the rockweed used for, Mr. Dodge?

Mr. DODGE. I will explain that shortly. It is used for packing lobsters. It is used for clam bakes.

As I say, there is a little less rockweed available than there was. This July spill has placed me in the dubious position of having to purchase petroleum products to go farther and farther away from petroleum-contaminated seaweed in search of a clean marketable product.

Rockweed's marketability derives from its use by lobster dealers as a packaging material for shipping lobsters. It is also used in the preparation of old-fashioned clam and lobster bakes. In this latter use corn on the cob, clams, lobsters, and other foods are actually cooked in the steam of heated rockweed. Hence, you can readily understand that we must have a zero tolerance for oil in our rockweed product. At this point it appears that this unmarketability will continue for several months to come in the mildly contaminated areas. In the severely contaminated areas, the effect will last for several years.

The effect of oil-coated seaweed goes far beyond these economic considerations. Marine algae bed may be quite accurately compared to forest lands. Forests provide both food and shelter for a wide variety of life forms, such as animals, birds, insects, worms, and you name it. So also marine algae beds provide food and shelter for a wide variety of marine life, such as mollusks, gastropods, crustacea, fish, worms, copopods, echinoderms, fungus bacteria, diatoms, and a host of other life forms important in the marine food chain. Heavy concentrations of oil, such as occurred in this spill, simply covers everything and mats it together. Rockweed matted together does not have its normal flexibility to resist wave and current action and is physically torn loose.

Mr. KYROS. I thought it was simply seaweed. Whenever there is oil, it has always broken loose from the rocks. Is that why it mats together?

Mr. DODGE. It mats together. It will just glue together like a pancake. Once adrift it is no longer a shelter or food for its associated life forms. The marine life in the seaweed beds not torn loose may be affected in a variety of ways from simply smothered to chemically poisoned to only absorbing petroleum products into their systems and thence into the food chain. Little if anything seems to be known about the accumulative long-term oil absorption.

And I would recommend that this needs to be studied.

Several species of fucus were harmed at the time of this spill as they were in periods of fruitation. To the extent that the spawn or seed were present at the time of the spill, it is safe to assume their existence terminated with the introduction of petroleum into their environment as their existence at this point is little more than a microscope egg and sperm-like forms. Because of this, future plant densities will be less.

Published reports from Woods Hole have been mentioned indicating that not all oil stays on the surface. It goes to the bottom. And some of this oil that goes to the bottom—and probably at lot of No. 6 oil, too—can affect seaweed on the bottom.

Now, irish moss and a number of other marine algae are also reproducing at the time of this spill. And their future densities will probably be less because of the spill.

Now, if the detrimental effects of the oil itself were not enough for the algae beds to contend with, even worse, I suggest, was the action of the so-called cleanup crews. From my vantage point, the approach of the cleanup operation was basically a cosmetic undertaking; namely, to make things look nice and pleasant. The procedure adopted to “cleanup” heavily contaminated seaweed beds was to totally destroy the beds. On Cow Island, in particular, this is indeed what took place. Along the northwesterly side of the island the rockweed was removed, barged to Portland, trucked inland, then burned.

It is my understanding that the crews had instruction to cut the weed 6 inches above the holdfasts. Published reports with accompanying photos presented at the Second International Seaweed Symposium indicated *Ascophylum* cut at the 18-inch level will within a few months loosen and fall off the rocks, leaving the area barren. From extensive commercial experience in both Scotland and Norway, the recommended harvesting technique is not to cut but to pull the longer and larger plants thus allowing the smaller plants light and room to grow in. This is strikingly similar to selective cutting practices of forest management.

The net effect of the cleaning up of rockweed by denuding the area is that commercial-length *Ascophylum* will not be available for a minimum of 5 years and probably more. The reasons for this is that rockweed is a slow-growing plant. It is a biennial, that is, it takes 2 years from seed to a mature plant capable of reproduction. To reach commercial length, it takes 4 to 5 years. It should be noted tagged plants have been observed to reach the age of 18 years.

Reproduction of *Ascophylum* takes place once a year and in this area this occurs in the latter part of May and the first of June. So, if we assume that there is a good set of new rockweed next year, which is by no means a certainty, then we can look forward to commercially harvestable lengths of rockweed 4 to 5 years hence.

Now, what actually happens is that *Ascophylum* is not the first algae to repopulate a denuded area. Frequently, faster-growing though smaller *Fucus* varieties repopulate the area first. And further favoring their repopulation is the fact that they are annuals and several of them fruit or reproduce around the year. These types of rockweed are not favored by the trade.

It may be possible—from the point of view of knotted wrack alone it would have been better off if it had not been cleaned up. The overall picture dictates some form of cleaning, thoughly hopefully in the future not denuding, in order to prevent the continuous leaching away of oil from the contaminated beds. I suppose I should be grateful for little things and be content the decision was not made to remove entire seaweed ledges as the decision was made to remove an entire beach on Long Island.

The other procedure used in cleaning up, namely, the use of hot water to melt the oil, allowing it to dribble down the rocks to be

picked up with absorbents at the lowest point, also does not seem to be in the best interest of marine algae, particularly microscopic forms. The normal temperature range of *Ascophyllum nodosum* is from 30 degrees Fahrenheit to 50 degrees Fahrenheit. Above 70 degrees it is reported to go into a heat rigor. The hot-water treatment subjects the intertidal zone to temperatures of 110 degrees to 140 degrees. Perhaps the temporary nature of this renders little harm, but there is room for concern.

I am suggesting, Mr. Kyros, that the presence of oil and the clumsy cleanup procedures are inherently incompatible with productive marine algae growth. In Maine we have the highest tidal range of the entire U.S. eastern coastline, and consequently the greatest concentration of brown algae and other intertidal life forms.

It seems to me illogical to encourage expansion of oil-handling facilities on the Maine coast, and specifically Casco Bay. Indeed, the Maine Legislature in the preamble to the coastal conveyance bill discussed by Governor Curtis declared the highest and best use of our coastline is in the harvesting of our native marine products of commerce.

In conclusion, I hope the future activities of your committee enhances the best and highest use of our coast, the ongoing harvest of our renewable marine resources.

Mr. KYROS. I certainly wish to commend you, Mr. Dodge, for an illuminating statement. I had not realized how serious, how was, the oil-caused damage, and how serious it was to a man like yourself.

Mr. DODGE. The testimony has been presented, you know—it seems to me the bottom of the line, we will cut the weed and we will save—we will spend \$100 to save a bird but we have not cleaned that weed.

Now, what that means to me is that I had to go beyond Chebague Island to find fresh seaweed. And there is nothing this side of it.

And next winter I will have to be going down 15 miles in 0 degree temperatures to hunt for good weed. And that is a bad scene.

Mr. KYROS. That certainly is an impressive fact that I don't think had come out in the testimony at all. We appreciate your testimony, Mr. Dodge, thank you very much.

The next witness will be Mr. Erwin Novack, assistant professor of geology, University of Maine.

Welcome to the committee, Mr. Novack.

#### STATEMENT OF IRWIN NOVAK, ASSISTANT PROFESSOR OF GEOLOGY, UNIVERSITY OF MAINE AT PORTLAND-GORHAM

Mr. NOVAK. I apologize for not having a written statement, but it seems that I made a mistake of having written to you too soon, and somehow my correspondence was lost and I wasn't informed that you were required—

Mr. KYROS. That is perfectly all right. Just proceed with your testimony.

Mr. NOVAK. I wish to address myself specifically to point No. 3 of the scope of the hearings, that is, on environmental effects of the oil spill.

I am particularly concerned about the possibility of beach erosion on West Sand Beach, Long Island, as a result of the cleanup operation. Contrary to what you said before, I have been told that there are no

plans to replenish the beach after 6 inches are removed from the top surface.

Mr. KYROS. I only wanted to give the impression of what I have been told.

Mr. NOVAK. Well, the paper did report that the 6 inches would be removed and that 5,000 cubic yards of sediment would be returned.

Mr. KYROS. That was my understanding.

Mr. NOVAK. I spoke to Captain McCann and he said that the Corps of Engineers had stated it was not necessary to replace the top 6 inches, because storm waves would not affect West Sand beach. I agree with that. However, you have heard many statements about the swiftness of the currents in that region of Hussey Sound, and storm waves may not be responsible for erosion but the tidal currents, at high tides could, I have seen evidence of material moved on and off that beach already.

About 5,000 cubic yards of material would be sufficient to replenish the beach. The beach is approximately a half mile long. As much as 80-to-100-foot wide has been affected by oil over the length of the beach. The oil is constantly lifted up by the tides in one place and dropped someplace else. The exact amount of material needed to replenish the beach is irrelevant, since there are no plans to replace removed beach sand.

So I would say, just to summarize my brief statement, that I agree that the procedure for cleaning up West Sand beach must be removal of the sand. There is no other way of cleaning it.

I am very dismayed, at present, about the plan not to replace it, although we don't know for sure if in fact erosion will take place.

And, lastly, I am concerned that there is no plan to monitor the future possibility of erosion.

Thank you very much.

Mr. KYROS. Thank you very much, Mr. Novak. Our next witness is Mr. Walter D. McLean, Sr., former deputy harbor master, Portland. I understand you wish to make a short statement, Walter.

Welcome to the committee.

#### STATEMENT OF WALTER D. McLEAN, SR., FORMER DEPUTY HARBOR MASTER, PORTLAND, MAINE

Mr. McLEAN. Representative Kyros, I am Walter D. McLean, 73, Bonnybank Terrace, South Portland. And while I have no written statement or anything—it is just to express my personal opinion in regard to this oil spill in Hussey Sound—and I do think it could have been avoided, that the ship should never have come into the harbor at all at night, especially where these buoys had just been laid out.

They should have had more daytime study of the location of the buoys, so they would have been more familiarized with them.

And I claim it is poor judgment on the part of the pilot and the captain of the ship for bringing that ship in there and striking the ledge.

Of course, I mention the captain, because the captain is always in command of his ship, although he picks up a pilot and takes him on—the pilot is just an advisery man to guide him into a port that he is acquainted with.

And in this instance it could have been avoided if the ship stayed out overnight.

The Coast Guard did a tremendous job in cleaning up—this I grant. But there are other things that should be considered. And that is, these foreign ships are too long, too wide, for Hussey Sound, and when they come in there to make that turn, it's God bless me if I make it. And that is just about the size of it.

They do not have the swing. And for a man to bring a ship in 800-feet long on an on an outgoing tide, he is gambling. And that is just what happened that night, in my opinion.

And I don't think that he used very good judgment.

I also think that these foreign ships that are carrying the oil in here should come under U.S. Coast Guard inspection. They should be made to.

This ship should never have left Portland Harbor and gone to France. Actually it should have been put into a U.S. drydock so that the U.S. Coast Guard inspectors could have found out what was going on underwater when she was pulled out.

Mr. KYROS. Well, the U.S. Coast Guard already has the power to deny permission for a ship to come into a port.

Mr. McLEAN. They do, but they also the next day, or couple of days, let a ship that had sprung a leak come into port. Now, that might have been an emergency, I don't know. I am not going to criticize the Coast Guard for that, there is a reason for it.

But they have certain aspects of inspection that they don't have to go through under the U.S. Government inspection board. Therefore, if they did have to, they would be more careful in navigating our coastlines and coming into our harbors under foreign flags. This is where the mistake is made.

Another thing, U.S. tankers who are owned by U.S. people flying foreign flags should be made to come under American flags so as to be under the jurisdiction of the Coast Guard.

Mr. KYROS. This is another subject, though. It is not the subject of these hearings, Walter.

Mr. McLEAN. I am trying to lay out to you why these things are happening—because they are escaping Coast Guard inspection and jurisdiction. Now, this case down here in Portland Harbor we all know could have been prevented. We have had all kinds of comments today of how we spend money for this, spend money for that, to avoid it the next time, and do this, do that and do the other thing.

If the U.S. Government would just look into foreign shipping carrying these cargoes, they could be prevented by increasing and enforcing more laws. This is my point.

Now, your harbor commissioners have a lot to do with this harbor as well. We have a harbor master who patrols the harbor. He has the say of these ships anchorages of the harbor, which very people know about. The deputy harbor master also is responsible and has duties to perform on these ships. This was not mentioned.

Now, they come under the protection of the U.S. Engineers, and they have their laws and rules and regulations, and nothing has been said here today about them at all, about what happened or what part they took in this.

Mr. KYROS. Who was that, Walter?

Mr. McLEAN. The harbor commissioners.

Mr. KYROS. They were discussed here. We had Mr. Langlois here earlier this morning and he discussed this subject.

Mr. McLEAN. I heard Mr. Langlois, but he gave me the impression that he didn't want them, that his opinion was more or less to a different board or something. That is the impression he gave me—I might be wrong. That is the opinion he gave me, that he was more interested in a new board instead of the harbor commission.

Now, this harbor commissioners is a very important board in this harbor. It has a lot of weight and a lot of bearing, because the harbor master himself has full control of a dead ship. It is up to him to see that it is watched and taken care of; if they need a crew to go down, to secure a ship that the anchor is dragging, or running free, he has got to get out in the middle of the night and get a crew and get them aboard that ship and take care of it. These are some of the things that are part of his duty.

I hope I haven't gone too far. And I thank you very much.

Mr. KYROS. Have you finished your statement?

Mr. McLEAN. The last thing I have to say is, I think the U.S. Government should look more into Casco Bay and Portland Harbor on these rules, by removing the ledge.

Mr. KYROS. You think we ought to take the ledge down?

Mr. McLEAN. If you are going to have these big tankers come in, yes, Soldier's Ledge should be removed. Otherwise, they should not be allowed to navigate through there until this is done, or use smaller tankers.

And I do not like the offshore unloading proposition either. That is another dangerous hazard.

Mr. KYROS. You don't like what?

Mr. McLEAN. Unloading offshore.

Mr. KYROS. On Long Island?

Mr. McLEAN. Long Island, yes. Anywhere along the coast. This is a very, very dangerous business. I sailed on tankers. I know what I am talking about.

Mr. KYROS. Thank you very much for your testimony, and we appreciate your waiting here all day to testify. Thank you, Walter.

Our next witness is Mr. John McVane. He is a resident of Long Island. I think Mr. McVane is a lobster fisherman.

Welcome to the committee, Mr. McVane.

#### STATEMENT OF JOHN McVANE

Mr. McVANE. Thank you, sir. I am a nervous lobster fisherman. Let's see if we can start at the beginning. Well, let me start a long time ago.

We have heard for years about oil booms, what they could do for oil spills. We have heard the Pollution Abatement Committee, they could do wonders.

Let me tell you they did nothing. When the chips were down—one more thing. I heard Mr. Porteous say if we had been prepared, there wouldn't have been any problems. Well, we were prepared when the tanker left, she was here 3 weeks—if we weren't prepared then, we would never be. They had oil booms galore, they had boats, they

had helicopters, they had anything they wanted, I guess. And it was a shambles. It was complete and utter chaos.

I read in the paper the next day—excuse me, I heard on the news the next day that they were vacuuming up the last of the oil. Do you know what they were doing at the time? I haven't been here all day so I don't know what you have heard.

Mr. KYROS. Lots of things.

Mr. McVANE. I imagine you have heard oil booms galore. Do you know what Mr. Webster says a boom is? He says it is a loud noise. Well, that is about right.

Mr. KYROS. These booms, I saw them. I saw them around the *Tamano*. I don't know how effective they were, but they were there.

Mr. McVANE. Go to the day the ship left. It was a Friday morning, I believe, and right after daylight we noticed a lot of commotion—we were lobstering right nearby. And I think there were 13 boats, pollution control boats of varying kinds. And the wind breezed up a little bit, not very hard—you have probably got exact figures, I would say 15, 16 miles an hour, not that much.

And within half an hour it looked like the Battle of Dunkirk. There were boats sinking, there were boats going adrift, there were oil booms everywhere you wanted to look.

I never did finish what I started to say. The next day, when they were supposedly vacuuming up the oil, they were picking up pieces of boom with a crane off the rocks. That is what they were doing. They were trying to salvage whatever they could.

I am sure that everyone tried hard, but it is just more than anyone can do, despite what people say.

I guess that is really all I have to say.

Mr. KYROS. You are a lobsterman?

Mr. McVANE. Yes, sir.

Mr. KYROS. You lobster every day? The price of lobster is terrible now, is it?

Mr. McVANE. They dropped 25 cents in about a week right after this oil spill.

Mr. KYROS. That is due to the red tide.

Mr. McVANE. A little on the red tide, but more on the oil.

Mr. KYROS. Did that spill from the *Tamano* affect your lobster business? Did it cause you any loss?

Mr. McVANE. Oh, yes. We had some lobsters we had to throw away. They had oil on them. What could you do?

Mr. KYROS. How did the oil get on them?

Mr. McVANE. In the lobster cars, the floating cars. We were hauling traps, and we were dodging the patches of oil. And if you happened to miss, you got a little oil in your lobsters, you threw them overboard. Hopefully they would wash off. But oil is insidious. You just don't know where it is. It will show up on the top of a cookpot. There is no real way of knowing just what happened. We had oil all over everything. We had oil all over ourselves, our boats, our houses. Everything we touched was covered with oil. You know what it would be like.

I guess that is all I have to say.

Mr. KYROS. We appreciate your testimony here today. And there has been considerable discussion today about the oil, on ways to try to control spills and to prevent them from happening again.

So, it has been quite a complete hearing. And you will probably have a chance some day, I hope, to read the whole thing, if you can bear it, if you can stand it.

Mr. McVANE. I don't envy you your job, sir.

Mr. KYROS. Thank you very much, Mr. McVane.

Mr. McVANE. Oh, I forgot to mention—that is my little daughter, that is my baby.

Mr. KYROS. She is a cute girl.

Mr. McVANE. I have heard people that wanted to blow up Soldier Ledge. We have had blowing ledges and we have had digging channels and we have had it. We have had mud dumped on us from Portland Harbor since I was around.

Mr. KYROS. Is the ledge a refuge for fish and lobsters?

Mr. McVANE. Yes, sir; it is.

Mr. KYROS. So it should not be touched for fishing reasons and ecologic reasons?

Mr. McVANE. You can't really say that. If it was for the good of the whole country, sure, blast the ledge. But it is for the good of a few temporarily, you know—next time it is going to be another ledge a little further out, a little further in. You have dug out Portland Harbor here 10 times, four times in 10 years, something like that.

It is always, now we are going to have it made. So the fishermen down there end up getting mud dumped on them. Somehow the mud doesn't end up Portland way, it always comes down our way.

There is a lot of things that we could say.

Thank you, sir.

Mr. KYROS. Thank you, Mr. McVane. Thank you for your testimony.

Our next witness will be Mrs. Mary Rose Starr. She is from Portland, Maine, and she has asked to testify.

Welcome to the committee, Mrs. Starr.

#### STATEMENT OF MRS. MARY ROSE STARR

Mrs. STARR. Thank you so much. I promise not to keep you too long.

Mr. KYROS. That is all right. Go right ahead as long as you want to.

Mrs. STARR. I know everyone is hungry for their steaks smothered in mushroom sauce.

I would like to make a few statements and perhaps ask a few questions, if I may.

Mr. KYROS. Are you going to ask questions? Of whom?

Mrs. STARR. Well, I think they are questions that you may be able to answer, because my first impression on looking at this agenda, when I came in here this morning, was that there was a great lack in the fact that the pilot of that ship was not included.

A report, I think, at least, should have been included in this hearing.

Mr. KYROS. I want to assure you that the pilot of the ship is a subject of litigation and he could never come into this committee to testify. That is No. 1.

And, secondly, the American Pilots Association was here, Captain and Granville Smith spoke for the pilots.

But it would be wrong to ask, I think, the pilot, who is claimed to have been negligent in this instance, to come and testify before us. That is an unfair imposition to put on that man. What could he say?

Mrs. STARR. He could make a report of how he felt.

Mr. KYROS. Mrs. Starr, the Coast Guard has already reported. They reported there was an error by the pilot and the ship struck the ledge.

Mrs. STARR. I did ask Mr. Langlois—I asked him whether or not this gentleman that was pilot of the ship was with them very long, and he said he was with them 4 years and he was in his middle 30's.

Mr. KYROS. He is with the Portland Pilots—yes, he is an experienced pilot.

Mrs. STARR. And I wondered had he been familiar with this particular Hussey Sound, had he been through this area.

Mr. KYROS. Hundreds of times. But I don't know all these things of my own knowledge, Mrs. Starr—I am not an expert. We could ask the Coast Guard, they could tell us. But, you see, we are not trying the question of the pilot here.

Mrs. STARR. Another thing that seems lacking—well, a report could have been read by the captain, couldn't it have?

Mr. KYROS. The captain is in Norway. We have the Coast Guard that gave us a long report as to precisely what happened.

Mrs. STARR. Yes, I see this. But these individuals were directly involved. These other people were after the incident happened—the Coast Guard was brought into it. Just like yourself, if you are in an accident, you are involved, no one else—you know more about what has happened.

Mr. KYROS. I am just suggesting to you that the Coast Guard has told us how the accident happened—the pilot made an error and they struck the ledge, he took the boat too close to starboard. Somebody can dispute that, and I am sure the pilot himself can dispute that, but that is what the Coast Guard said.

And, as far as I am concerned, for purposes of this hearing, we assume that to be true. We should discuss the oil spill, containing the oil spill and what we are going to do to prevent future oil spills.

Mrs. STARR. I feel this is a great void, not having some sort of report from the individuals that were directly involved. I would like to make this statement.

Mr. KYROS. Well, we could call the gentleman in Norway who is the skipper of the ship.

Mrs. STARR. A report by him could have been read at this hearing as part of the record.

Mr. KYROS. Mrs. Starr, he is in litigation with the U.S. Government. He will have nothing to do with us. There are lawsuits.

Mrs. STARR. Another thing—I would like to make a statement in regard to these oil tankers that do come into our port here—I am a native of Portland and very much in love with Maine, as many people are. And I am in touch with a great many people here in Maine that constantly call me. And they were very much depressed and shocked by this oil treatment, the fact that we don't get the proper news in regard to what is happening to the cleanup. It seems that we don't hear what we should. Things are slipped under the counter, so to speak.

And it is too bad, because Maine people love their ocean. I know my summer was cut short because of the oil spill, because when we went in swimming—not only myself but many, many thousands of other people—our feet were covered with oil.

Now, this is a very sad state of affairs in the very height of the summer. And, as I say, our summer this year was cut very short. And it is a shame. It shouldn't happen.

And if we cannot handle this type of oil spill, whether it is this large and, as you mentioned earlier this morning, even at a lower level we cannot handle these oil spills, we should not be having these tankers come in here. You should have these tankers go where they can be handled.

Now, I would like to ask, is it in Boston that they can handle an oil spill to this degree or lesser degrees of oil spill?

Mr. KYROS. That is a very good question. I know oil tankers go into Boston to supply all kinds of fuels. But, Mrs. Starr, you must have a minimum of tankers to come in to give us our oil requirements. We can't bring them overland or by rail, because you just couldn't carry that volume of oil. There is always some small minimum needed, and there always will be some risk that you and I have to worry about.

Mrs. STARR. There is no dispute that we do need fuel oil after all. It is cold up here in Maine. But the point is, since we can't handle it, couldn't we have it pumped in from Boston, something like this?

This is a very serious thing. It could happen again.

Mr. KYROS. Boston might say why should we take the risk of bringing your oil into our city?

Mrs. STARR. They would like the business, wouldn't they? Economically, they would be very intrigued with it.

Mr. KYROS. That is a thought, I agree with you.

Mrs. STARR. I think that is practically all I had to mention. Thank you very much. I appreciate the time to talk.

Mr. KYROS. I don't want to cut you off if you have something else to say.

Mrs. STARR. No, I think that was all. Thank you so much.

Mr. KYROS. Thank you, Mrs. Starr, so much. And, having concluded all the witnesses in the hearing, I declare the hearing adjourned.

(The following material was supplied for inclusion in the printed record:)

OCTOBER 5, 1972.

Congressman PETER KYROS,

*Members of the U.S. Congressional Merchant Marine and Fisheries Committee.*

GENTLEMEN: The recent oil spill, which occurred in Hussey Sound on July 22, 1972 should be conclusive evidence that modern technology, the oil industry, the Federal Government, or any of its agencies does not have the "know-how" to deal effectively with oil spills. It will be years before these waters will again attain the water quality level of July 21, 1972.

We have seen oil booms break up, we have seen Texaco endeavor to clean up, and we can still observe almost superhuman efforts by the Coast Guard, but Long Island continues with horrible scars left by the Tamano. An expert, Mr. Foget, brought in from San Francisco because he had worked on the Santa Barbara disaster, said the Long Island beach was the worst oil soaked beach he had seen. Mr. Foget is still here almost 11 weeks later and they are now removing sand from the beach. It has been reported that it is safe to remove (6) inches from the beach without danger of erosion. However, anyone who has observed this cleaning operation knows that far more than (6) inches is being removed. Will this be replaced?

I would urge the members of this panel to take a trip to Long Island at low tide and personally evaluate the damage you have heard so much about. Walk along the beach and stand a few feet from the blackened rocks. See for yourselves.

The ineffectiveness of booms was very aptly demonstrated after this particular spills when it broke up completely the day the Tamano left port and spilled an

additional several hundred gallons of oil. While the results were like rubbing salt into an open wound it was no great surprise because we had been told that a boom will not work in rough waters or fast currents such as we have so often in Hussey Sound. Who told us this? Two representatives of the Texaco Corporation who addressed the residents of Long Island a few days after the spill, and they tried to tell us we should resign ourselves to the inevitable oil spills.

We have heard much about modern technology and just weeks before July 22, we heard Mr. E. Langlois, Chairman of the Portland Pollution Abatement Committee, state they could handle any spill in the Bay. The cleanup that is still going on proves that it is impossible to be prepared to handle an oil spill effectively. Mr. Langlois also stated to the Army Corps of Engineers that Portland has been looked to for their knowhow in containing oil spills and that he had gone to Louisiana as a consultant. Where was our knowhow for this disaster?

I am enclosing, for the record, a letter attesting to the fact that Portland is not a safe deep water port. It would seem that someone was wrong then in allowing these huge off-loading tankers to enter Hussey Sound.

I am also submitting, for the record, a copy of a cover story about Whiddy Island, Bantry Bay, which appeared in the September issue of the Irish "This Week". Whiddy Island is the same size as Long Island, the parallels are really frightening, but I hope it is not too late to reverse the trend.

I am also enclosing a reprint from Nor' by East telling about the intended use for Long Island's installation before it was put up for public bid.

Sincerely,

MARY L. NORTON,  
*Secretary, Citizens Who Care.*

(Committee note. The attachments to this letter have been placed in the files of the subcommittee.)

#### SIERRA CLUB, MAINE REGIONAL GROUP

The Maine Regional Group of the Sierra Club has consistently opposed the development of oil handling and manufacturing facilities on the Maine coast. It has been our contention, shared by many other environmentally concerned organizations and individuals, that the petroleum industry inherently presents an unacceptable hazard.

The Tamano spill, casting oil on Casco Bay shores, might seem to render warnings superfluous. Oil has been spilled, beaches and rocks fouled, life forms destroyed, and fortunes in funds expended in so-far uncompleted efforts to clean up the visible residue. The dissolved petroleum fractions and that large portion of oil carried to the bottom on particular matter cannot be removed—they are out of sight, perhaps out of mind, but will not be out of the sea for a long time to come. The techniques for controlling and removing oil spills have proven, once again, to be as inefficient as the assurances of industry against spills are unreliable. Human error and cupidity and the capriciousness of wind and sea will always be with us.

Nonetheless, a warning is warranted. The Tamano spill was but a small sample of the inevitable disaster we will see if supertankers are brought to Maine. The loss of tourist industry, the destruction of marine life and the despoilation of the beauty of our seacoast cannot be readily quantified in advance, but we can perhaps better judge the extent of what we gamble now than we could before the Tamano. We hope the lesson has been learned at the relatively small price now being paid. Maine cannot afford the oil industry.

(Whereupon at 5:15 p.m., the hearing adjourned.)

## COAST GUARD FIELD ACTIVITY

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### New England Fishery Problems

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FRIDAY, OCTOBER 6, 1972

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON MERCHANT MARINE AND FISHERIES,  
SUBCOMMITTEE ON COAST GUARD,  
COAST AND GEODETIC SURVEY, AND NAVIGATION,  
*Stonington, Conn.*

The subcommittee met at 10 a.m., pursuant to notice, at the Holy Ghost Society Hall, Stonington, Conn., Hon. Frank M. Clark (chairman) presiding.

Mr. CLARK. The meeting will please come to order. We have scheduled hearings today in Stonington, Conn., and possibly tomorrow, if necessary. These hearings will be under my chairmanship of the Coast Guard Subcommittee of the Committee on Merchant Marine and Fisheries of the U.S. House of Representatives.

The basic general purpose of these hearings is to gather information from local interests with respect to the damage to the lobster and fish industries by Communist bloc fishing vessels which fish in our contiguous waters. I would like it to be understood that even though the hearing is held in Stonington, it should not be thought of parochially as a Connecticut hearing. Indeed, it is intended to encompass the whole range of this problem as it relates to the lobster and fish industries in Maine, Massachusetts, Rhode Island, and Connecticut. In fact, my friend and colleague, Bob Tiernan, from Rhode Island, is here this morning along with Congressman Steele. Both are able members of the House Merchant Marine and Fisheries Committee.

As we all know, for years, large and small fishing boats have been departing from New England coastal towns just like Stonington for what have always been the richest fishing grounds in the world. Lobsters, as well as fish species such as haddock, cod, flounder, mackerel, and perch, were always available in such abundance that we took them for granted, fully believing that these seafood supplies were inexhaustible. In fact, these ocean resources have produced an important industry in New England for over 200 years. Unfortunately, we have witnessed a tragic reversal in this industry, and in less than a decade the situation has changed dramatically. From 1952 through 1960, the U.S. catch from New England waters averaged over 700 million pounds. And 99 percent of the total catch came from these New England fishing areas. By 1969, Soviet fishing fleets were taking out over

800 million pounds, or 50 percent of the total catch from New England waters. At the same time, the U.S. catch declined to about 418 million pounds, or 25 percent of the area's harvest.

As we all know, these Communist bloc fishing fleets are the most modern vessels with the latest up-to-date equipment that is available. In contrast, our U.S. fishing vessels and equipment have been gradually deteriorating to the point where it is dangerously noncompetitive.

In addition, I understand our fishing fleet is troubled by other matters, such as the replacement of personnel. In other words, the traditional U.S. fisherman seems to be dying out.

In addition to the dangerous impact of the Communist bloc fishing fleet on our own fishing industry, I am also of the opinion that we should be greatly concerned over the national security aspects of this Communist fleet. It is well known that their fishing vessels are frequently equipped with the latest in complex and sophisticated electronic gear and that they, in fact, monitor and spy on much of our ocean vessel commerce and activity.

It has become increasingly and painfully evident that without extensive management of certain species and without some control over the depredations of the Communist bloc fishing fleet, the effects of these foreign fishing fleets will eventually put many New England fishermen out of business. Indeed, the presence of these foreign vessels off our shores is forcing the United States to import over a billion dollars' worth of fishery products each year. This situation, of course, deprives the American fishing industry of profits which should belong to our fishermen.

Apparently the proper regulation of these New England waters by international agreement is being thwarted by many foreign countries. This may well be the ultimate method of control, but it does appear that Congress should attempt to make certain that the Coast Guard is enforcing our existing laws and providing the best protection possible until governing international treaties become a reality. We would hope that the testimony today would give some insight as to the degree of Coast Guard protection afforded our fishing industry in these waters.

Is the Coast Guard, in fact, protecting this industry?

Does it respond to the industry's calls in a positive fashion, and quickly enough?

Does the Coast Guard patrol the 12-mile zone in order to prevent foreign fishing in this contiguous water zone?

Can the Coast Guard check frequently on foreign vessels for illegal catches and stolen equipment?

These are some of the questions we would like to have discussed and hopefully answered at these hearings.

At the outset, I would like to point out that I am up here in the New England area holding these important hearings at the request of Congressman Tiernan and Congressman Steele, and that such hearings could only be held with the full consent and permission of the chairman of the House Merchant Marine and Fisheries Committee. I would like to take this opportunity to commend my able colleagues in Congress, Mr. Steele and Mr. Tiernan, for their abiding interest in this industry and its problems and for their initiative in providing that these hearings should be held up here in the New England area,

and I would like to say that Bob Tiernan wrote to me back in May and told the chairman of the full committee that we really did have a problem up here and, of course, then when Mr. Steele asked me to come up and the two of them got together, we were able to have this hearing here today.

I would like to point out that Congressman Steele and Congressman Tiernan are hard-working, energetic, and ever-present members of the House Committee on Merchant Marine and Fisheries, and I am indeed happy to be up here chairing these hearings at their request. Maybe they will come down and help me campaign in mine later on.

I think I should say that these two able colleagues have been constantly attentive to the merchant marine, fisheries, and environmental issues as they relate to the long and outstanding marine and fishery traditions of the New England area. As a result of their service on the Merchant Marine Committee, Congressman Tiernan and Congressman Steele reflect a strong legislative influence representing the New England area's marine and fishery interests and it is a pleasure to have these two able colleagues with me here today to participate in these crucial hearings.

And now I will ask Mr. Bob Tiernan if he has a few remarks to make at this time.

MR. TIERNAN. Thank you, Mr. Chairman. I just want to concur in the remarks of the chairman. I certainly appreciate the chairman taking time from his busy schedule to hear the testimony of some of our people who have been very seriously affected by the foreign fleet, particularly with regard to the lobster industry. I look forward to hearing testimony of the witnesses we are going to have today. Thank you.

MR. CLARK. Thank you.

MR. STEELE.

MR. STEELE. Mr. Chairman and Congressman Tiernan, I want to welcome you both to Connecticut. We are glad to have you here. Bob Tiernan is a good neighbor and friend of Connecticut as well as a very able representative of the State of Rhode Island, and Chairman Clark has certainly distinguished himself as the chairman of the Coast Guard Subcommittee of the Merchant Marine and Fisheries Committee. We are very pleased to have you here at these very important hearings.

We are keenly aware that because of the activity of foreign fishing fleets off the coast of New England, the entire New England fishing industry is increasingly threatened with extinction and an ecological disaster in the northwest Atlantic is also threatened. Our purpose is to meet these twin problems head on and I hope we can begin to do that with these hearings here this morning.

We are very pleased to have everybody here and we are looking forward to our witnesses.

MR. CLARK. I am very pleased, too. We have so many citizens in this area that have seen fit to come up here and to listen to the witnesses, and I am sure I along with my colleagues are very happy to see so many interested people.

Our first witness today is Russell T. Norris, regional director, northeast region, National Marine Fisheries Service, in Rockport, Mass. If you will come to the witness stand, sir, you may proceed as you wish.

STATEMENT OF RUSSELL T. NORRIS, REGIONAL DIRECTOR, NATIONAL MARINE FISHERIES SERVICE, NOAA, U.S. DEPARTMENT OF COMMERCE

Mr. NORRIS. Mr. Chairman, members of the committee, guests. As the chairman said, my name is Russell T. Norris. I am the regional director of the National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce. It is a pleasure to be here today to discuss the fishery resources of the northwest Atlantic and the activities of the foreign fleets which affect these fisheries.

I think this beautiful little New England town is an appropriate place to hold such a hearing. This port, together with other small towns in eastern Connecticut, has had a long and exciting history in the annals of the sea. Forty-two years ago, in 1930, 70 million pounds of fish and shellfish were landed in New London County. Today, this year, last year, only one-tenth of that amount was landed in the entire State of Connecticut. Now, back in 1930, haddock contributed heavily to the catch in this area, 43 million pounds being landed in this county—43 million pounds. This year—last year and this year, only about 13 million pounds will be landed in the entire New England area. These figures illustrate in a simplistic manner what has happened to our fishing resources.

Until 1960, Georges Bank, one of the world's richest fishing grounds located just off our shores, and other northwest Atlantic banks were fished almost exclusively by U.S. vessels. The major exception was the influx of Canadian vessels which caught scallops on Georges Bank and have taken an increasing amount of that shellfish.

Three developments have taken place over the past 10 to 12 years which cause deep concern for northwest Atlantic fishery resources of interest to the United States and about the capability of U.S. fishermen to continue to share in the harvest of these resources. First, the growth in world population and the accompanying increased need for protein has created new demands on our fish and shellfish products. Second, foreign nations have accelerated oceanographic research and resource assessment which has provided knowledge of the oceans, enabling their fishermen to locate and exploit stocks of fish that were previously unknown. Third, new technologies and innovations, usually subsidized heavily by foreign governments, have made possible the harvest of these resources. These developments have resulted in direct competition between our coastal fishermen and the distant water fleets of other nations, sometimes with catastrophic effects. This situation is further compounded by the following conditions: (1) The high level of utilization of fishery products in the United States has been achieved through a steady growth of imports both for human food and industrial purposes; (2) it is increasingly apparent that the growing demand for fishery products in this country will not be met through imports without substantial increases in prices; (3) fishing intensity on many of our major fish and shellfish stocks has reached levels beyond those which would assure continued high levels of landings; and (4) the harvesting segment of the New England fishing industry is being severely hampered as a result of resource problems, with resulting

serious impact on the economy of many coastal areas dependent upon fishing.

Now, prior to and during these developments, the United States has become a party to both multilateral and bilateral agreements with other fishing nations. Over two decades ago, the International Commission for the Northwest Atlantic Fisheries which we call ICNAF was established to investigate, protect and conserve the fisheries of the Northwest Atlantic Ocean in order to make possible maintenance of a maximum sustained catch. The Commission, which now has 15 member nations, may recommend conservation measures such as open and closed seasons, closed spawning areas, size limits, prohibition of certain types of fishing gear, overall catch limits, and most recently, they received authority to recommend national catch quotas.

The mesh regulations for cod and haddock went into effect under ICNAF in 1953. These contributed to the conservation of the stocks for several years during a stable fishery. The regulations failed in 1965, however, with the dramatic increase in fishing pressure. Recently, ICNAF has been severely criticized by the fishing industry with some justification, but with the establishment of a system for national allocation of the catch quota, the Commission would seem to have a somewhat better chance to succeed. At least, ICNAF is the best tool which we have at the present time.

In addition to its participation in ICNAF, the United States has for several years been party to bilateral agreements with U.S.S.R. and Poland in the mid-Atlantic area. These agreements afford protection to several species of fish which have been heavily exploited by the Soviets and Poles north, west, and south of Block Island.

The Congress of the United States has taken several actions to protect U.S. fishermen through legislation. Public Law 88-308 enacted in 1964 prohibited the taking of any fish by foreign fishermen in waters of the 3-mile territorial sea. Subsequently, Congress in 1966 enacted Public Law 89-658 which established a 9-mile contiguous fishing zone extending from the territorial sea. Protection for U.S. fishermen similar to that provided in the territorial sea is provided in this contiguous zone. Beyond 12 miles, Congress in Public Law 88-308 placed prohibitions on the taking by foreign nations of creatures of the U.S. Continental Shelf. Free swimming fish above the shelf are not covered by this act. Then in 1970, the fine for violating restrictions on foreign fishing activities in the territorial sea and the contiguous zone was increased from \$10,000 to \$100,000.

These conventions, agreements, and legislation place enforcement responsibility on the U.S. Coast Guard and the National Marine Fisheries Service. Dockside inspections of trawl nets and landings to assure that proper mesh sizes are being used and that vessels are holding appropriate licenses are carried out by the Fisheries Service. Inspections of both domestic and foreign fishing vessels at sea are conducted in cooperation with the Coast Guard. Adequate vessel support from the Coast Guard is essential to a successful enforcement program at sea.

Surveillance of foreign fishing activity is also carried out in close cooperation with the Coast Guard. Aircraft with overwater capabilities and long-range endurance are required. Following each flight a

detailed report is filed by the fisheries management which gives names and location of all foreign vessels observed.

In 1961 when the large Soviet exploratory fleet appeared on Georges Bank, they seemed to be interested in sea herring, which has a high acceptance as a food fish in Europe. The fishery for herring began that year and has continued until the present time. The exploitation of silver hake, whiting, by the Soviets began the following year with red hake and mackerel becoming part of the components of the catch in later years.

The Soviet fleet increased rapidly in numbers in the 1960's, but it was not until 1965 that vessels from Poland appeared off our coast. West German vessels appeared in 1967 to be followed by those of East Germany, Spain, Rumania, Bulgaria, Japan, and several others.

Prior to 1965, foreign fleets were off our shores only about 6 months during the year, while today trawlers from several nations can be found almost any day of the year. About 800 different foreign vessels of all types annually fish the high seas off the U.S. east coast from the southern tip of Nova Scotia to Cape Hatteras. Depending on the season, between 200 and 300 vessels can be found at one time operating at distances from 12 to 150 miles offshore.

Several years of exploration and research by the Soviets and others have provided information that allows systematic deployment of the foreign fleets into areas of major fish concentrations. These may be off the Virginia Capes in the winter and on Georges Bank during the summer and fall.

Principal fish species sought by most countries have not changed significantly over the years. Herring, the hakes, mackerel, those species occurring in greatest concentrations have always comprised a large percentage of the catch.

However, nearly every species of importance on the Continental Shelf has been found in their catches. There are also some specialized fisheries such as the Spanish codfish fisheries and Japanese squid fisheries. These are usually of a seasonal nature.

Several species of major importance to the New England markets have been affected greatly by foreign fisheries, and I refer especially to haddock and yellowtail flounder. A third species of importance to the fishermen in the Chesapeake Bay area is worthy of mention.

Stock of haddock off New England and southern Nova Scotia supported a U.S. fishery of prime importance since the late 1920's. The haddock population off New England on Georges Bank was of particular importance. From 1935 to 1964, about 30 years, the annual catch taken entirely by U.S. fishermen was from 30,000 to 60,000 metric tons. By 1961, biological studies indicated that the maximum sustainable yield was about 50,000 metric tons, which was very near the actual catches at that time.

By 1963, production and survival of young fish were extremely good. This very abundant year-class entered the exploited phase in the second half of 1965. The high abundance attracted the Soviet fleet, and over a period of 18 months, the Soviets took 180,000 metric tons of haddock. Let me repeat. The annual catch averaged about 50,000 tons a year in the previous 30 years. The Soviets took 180,000 metric tons in 18 months in 1965 and 1966. A significant part of this catch consisted of fish smaller than those taken by the trawls constructed of regulation

4½-inch mesh. Thus, the U.S. fishery which did not start significant exploitation of this year-class until 1966 did not benefit greatly from an increase in catch rate.

By 1964, Canada had also increased its fishery on Georges Bank for haddock. So, 1964 to 1966, the fishing mortality had doubled. The year-class production from 1965 to the present has been very poor. The combination of heavy fishing and poor recruitment caused the stock to decline by 1969 to 25 percent of the level that produced 50,000-ton sustained yield. In 1969, the catch was—unrestricted fishing—was only 25,000 metric tons. An international quota was established to limit total catches in 1970 and 1971 at 12,000 metric tons, and this has been further reduced to 6,000 tons in 1972, and the same quota will be in effect in 1973: 6,000 tons. Even this limited catch is greater than current production, so no improvement in stock density is expected for several years at least.

The stock of yellowtail flounder off New England have supported the U.S. fishery since the late 1930's. It has been of increasing importance since the late 1950's. From 1961 to 1969, the U.S. catch ranged from 25,000 to 50,000 tons. Prior to 1969, the foreign catch was small, almost insignificant. However, in that year, foreign catch, essentially Soviet, was 20,000 metric tons. This caused the resulting effort to be double what the stock could probably support. Strong 1966 and 1967 year-classes have been followed by lesser ones. The increased catch in 1969 would be expected to have reduced the stock size. In our recent survey cruises by our research vessels, this may be the case.

In another instance, the Soviet fleet took river herring just off the Virginia Capes, causing great concern to that domestic fishery. Now, some corrective action has been taken in all three of these instances. Quotas have been established under ICNAF for haddock and yellowtail flounder; and through a bilateral agreement with the Soviets, the river herring catch is restricted to 4,000 tons annually.

Now, to come back to our surveillance activities for a moment. How good is our surveillance? Certainly it is not perfect. Usually our fisheries management agents are able to identify quite accurately the composition of the foreign catch, but there are some serious problems which we must cope with. One, of course, is the weather. Many flights are hampered and sometimes are aborted because of fog and other inclement conditions. Another problem which has been embarrassing on occasion is the tendency for flatfish such as flounder to become obscured on the decks of foreign vessels. In 1969, when the Soviets took large quantities of flounder, our agents were unable to observe these fish aboard these vessel. We have also had some difficulty in distinguishing such closely related species as sea herring, river herring, and menhaden. Despite these shortcomings, the information obtained from these flights has been quite useful.

The success of surveillance activities is dependent to a considerable degree on the U.S. Coast Guard. Our fishery agents make the observations, but only through the capability and cooperation of the Coast Guard is this activity possible.

Since 1961, the Coast Guard has been scheduling one, two, and sometimes three flights a week and the cost of these flights is entirely borne by Coast Guard appropriations. The Fisheries Service has only limited funding for this activity. Flying time has increased annually from

about 100 hours in 1961 to nearly a thousand hours in 1971. As additional coverage has been required in 1972, we have resorted to charter flights to cover areas where Coast Guard aircraft could not be made available.

During the period that the majority of foreign vessels are operating north and east of Long Island, flights originate from the Coast Guard facilities at Otis Air Force Base on Cape Cod. When the fleets are operating in the mid-Atlantic area south to Cape Fear, N.C., weekly flights are made from the Coast Guard facilities at Elizabeth City, N.C.

In addition to recording names and numbers of all vessels observed, species of fish on deck and types of fishing gear are recorded. Photographs are taken routinely and you see some of them around the room today and these have been particularly helpful in identifying some fish species.

Surveillance reports serve many useful purposes. The Fisheries Service scientists find the reports valuable in their assessment of fishing effort and the species distribution of the catch. The information gathered is also indicative as to whether the spirit of ICNAF and the bilateral agreements is being met.

During recent months several significant observations have resulted from surveillance activities. First, every European nation except East and West Germany has increased its total fishing effort off our coast. Second, the catch of herring in both the mid-Atlantic and on Georges Bank appears to be the smallest we have observed in 10 years. Third, the East Germans have conducted intensive fishing operations in the same area off North Carolina where the Soviet river herring fishery took place in 1970. Fourth, there was a noticeable drop in Soviet fishing effort in the area south of Nantucket where large amounts of yellowtail flounder were taken in 1969. And not to be left out of these observations in recent months the fact that it appears to us, foreign fleets have generally avoided the areas used by the U.S. lobster pot fishermen where the gear conflicts with foreign vessels were so serious in the earlier months.

Looking to the future, it is most difficult to forecast events this winter in the mid-Atlantic and on Georges Bank next summer. The effort expended will depend on such things as the availability of herring and other schooling fishes, the effectiveness of ICNAF quotas on herring, cod, the hakes, and yellowtail flounder, and the world protein situation.

Scientists of our Fisheries Service have urged the control of total fishing effort in the ICNAF convention area for a number of years. In 1967, ICNAF established a Standing Committee on Regulatory Measures which considers the practical aspects of supplementing mesh regulations with controls on fishing intensity. At that time, when the concern over resource survival was not the paramount issue it is today, attention was focused primarily on wasteful fishing effort arising from national competition for limited fish stocks. The key issue was a sharing of resources between coastal and distant water fleets.

Since the national quota system of allocating resources appeared to be the answer to both conservation and resource allocation problems, ICNAF evolved in this direction culminating in recommendations at its 1972 Annual Meeting for National Quotas on 14 Separate Fish Stocks, which become effective in January of next year.

Now, however, the critical issue has become survival of fish stocks at levels capable of supporting viable U.S. fisheries. The increasing levels of foreign fishing effort noted even after ICNAF action in June of this year appear to reflect a reckless and irresponsible attitude toward conservation on the part of foreign nations. This raises a serious question as to the efficacy of catch quota management since uncontrolled amounts of regulated species may be taken after quota closures through incidental catches. In addition, unregulated species will continue to be taken without restriction. Therefore, direct controls on total fishing effort now appear necessary.

In closing, let me say that we in the Fisheries Service will continue to carry out, as we have in the past, in close cooperation with the Coast Guard, our assigned responsibilities to the best of our ability. In doing this, we will continue to be mindful of our obligation to do everything possible to conserve the fishery resources for future generations.

Mr. Chairman, I have with me a Mr. Charles Philbrook, in charge of our program, and Dr. Brown from our Woods Hole Research Laboratory, and we are prepared to answer questions from the committee. We do have a few slides, sir, which we would like to show if you permit us at some appropriate time. We also have to do this. Would you prefer to have the slides now?

Mr. CLARK. I think we will ask you some questions and if you want to bring the other two gentlemen with you to sit with us, we would appreciate having them, and, as they answer the questions, we would like to have them, for the record, give their name and their title.

Mr. NORRIS, do you think U.S. jurisdiction over fishing should be extended beyond the present 12-mile limit, and, if so, how far should our jurisdiction be extended?

Mr. NORRIS. Mr. Chairman, that is a question that has been asked many, many times and it is a most difficult one to answer. As you no doubt know at the present time, our Government is deeply involved in negotiations for the forthcoming Sea Conference in Geneva. It has been our position rather than extending jurisdiction to 200 miles over at the edge of the Continental Shelf or what have you, that another approach might be better for all the fishing industry throughout the country. There are some differences in opinion around the United States as to whether extended jurisdiction is the answer.

Mr. CLARK. What suggestion do you have to improve our surveillance activities?

Mr. NORRIS. We, in the Fisheries Service, of course, only play a part of this. We are depending on the Coast Guard and we have increased our staff somewhat. In fact, we almost doubled our enforcement and surveillance staff in the last 2, 3 years, and we now have agents available for most flights. I think one of the things that would be most important would be for the capabilities of the Coast Guard to be improved. I don't want to imply we are not getting excellent cooperation because we are.

Mr. CLARK. Mr. Tiernan.

Mr. TIERNAN. Thank you, Mr. Chairman. With regard to the response to the chairman's first question on the extension of the 12-mile limit, you say there is a division of opinion in the country. Where is that division? Not in the fishing industry?

Mr. NORRIS. Yes, there is some division in the fishing industry.

Mr. TIERNAN. Where in the industry?

Mr. NORRIS. In New England and in Alaska, in the Pacific Northwest; the feeling is generally among the fishing industry that there should be extended jurisdiction. There is considerable feeling in the California area with the tuna fleets fishing off North and South America that extended jurisdiction here, say, the 200 miles, would lead to similar action in other Nations and take away their—their resources.

Mr. TIERNAN. How about extending it to the Continental Shelf on the east coast and making some kind of determination on the west coast? What is your position on that and what is Dr. White's position?

Mr. NORRIS. Our position on the entire fishery's jurisdiction matter is, we have taken the attitude that we will await negotiations and I think your position with that position. We have the species approach.

Mr. TIERNAN. One other question, if I may. Have you received the moneys that you requested for this surveillance or has it been less than what you requested—

Mr. NORRIS. In the past—

Mr. TIERNAN (continuing). Or do you totally rely on the Coast Guard for that part of it?

Mr. NORRIS. The amount of funds that we put in the surveillance activities is, of course, much less than the Coast Guard does. It costs a great deal of money to operate vessels and aircraft. Our investment is largely in salaries and expenses of our fishery management agents and we have in the past 2, 3 years received requests which we asked for.

Mr. TIERNAN. Well, I gather from your testimony that you would like to have more surveillance if possible, is that correct?

Mr. NORRIS. I think it would be appropriate, yes.

Mr. TIERNAN. Thank you very much.

Mr. CLARK. Mr. Steele.

Mr. STEELE. Thank you. Mr. Norris, following up on that question, more surveillance, you say the Coast Guard flights now average 1,000 hours in 1971 versus 100 hours in 1961. Is that in a month or in a year?

Mr. NORRIS. No; that's annually.

Mr. STEELE. That's annually?

Mr. NORRIS. Annually.

Mr. STEELE. What would you say a reasonable amount of hours would be? What ideally would you want to increase aerial surveillance to?

Mr. NORRIS. This is a very difficult question to answer, Congressman Steele, because we don't know the activities of foreign fleets that far in advance. It all depends on dispersal, where they are at some times of the year; some years, they are altogether different.

Mr. STEELE. Let's take this year, for example.

Mr. NORRIS. I would—the figure, 1,000 hours, I gave you is a little high. I think it was nearer 800 hours, was it not, last year?

Mr. STEELE. How much would it have to be increased to really make a difference?

Mr. NORRIS. This is an extremely difficult thing to say. I don't think we can—we feel a need for greater surveillance at the present time but do we need 200 hours? Do we need 300 hours? I don't think we can say, but certainly any increased availability of aircraft and vessels

would be helpful. As we bring more species of fish under management as we are doing now, we have greater need for both enforcement and surveillance. You understand, these are two different activities.

Mr. STEELE. Could you explain to the committee exactly the kind of fishing that is being done by the foreign fleets, what pulse fishing is specifically?

Mr. NORRIS. I would be glad to. What foreign nations have done—we might as well take the Soviets as an example because they were the ones that have been here first and they were the ones in largest numbers—they came here, as you see from some of the slides we hope we can show—in 1961 with several hundred vessels, up to 800 vessels and did exploratory work and they weren't catching many fish at that time but they were locating the resources and they know as much or more of our resources off our coast than we do. After they located these resources and had the information they needed, then they brought in large numbers of vessels, factory-based ships, with smaller trawlers and the several different types of vessels which you will see on these slides and brought them in large numbers into the area and fished the area down considerably. As an example, the stock of herring, sea herring, which were not heavily utilized by our country were in great numbers on Georges Bank. They spawn on Georges Bank. They might get down the coast as far as North Carolina and there were millions and millions of tons of this fish. We now estimate that this tremendous resource is probably 10 or 15 percent of what it was 10 years ago and this is done by this pulse fishing, as you call it, by bringing a large number of vessels in, placing them on a particular resource, follow the resource down the coast from Cape Hatteras in the winter, then on up in the spring.

Mr. STEELE. They literally go after that species until it is commercially uneconomical to fish for it anymore.

Mr. NORRIS. What has actually happened on some of our species—I don't think they are trying to do that because, actually, they want to see the resource perpetuated. They need the protein very badly but that is what's happening on a number of species.

Mr. STEELE. Thank you.

Mr. CLARK. Mr. Tiernan has another question.

Mr. TIERNAN. Now, the position of Dr. White with regard to the lobster—not including that on the list of 1958—has that changed at all?

Mr. NORRIS. The number of species have been named. They are creatures of the Continental Shelf. There is considerable interest, great interest, in the industry to have the lobster declared a creature of the Continental Shelf which would give it a certain degree of protection. The industry people have written to Dr. White and this is now being considered by him, actually being considered, and I would expect a decision to be made on this in the not too distant future, but I can't predict exactly when.

Mr. TIERNAN. The previous question was responded to by saying we are going to wait. Would it be made before the conference?

Mr. NORRIS. I would so. When I say, "We will wait until the conference," I was referring to jurisdiction, not creatures of the shelf. I would think the decision would be a long time before the Geneva conference.

Mr. TIERNAN. Thank you.

Mr. CLARK. Mr. Norris, how long is this film?

Mr. NORRIS. We have about 25 slides and it would take, oh, 10 or 15 minutes, something like that. I would like to just describe a few.

Mr. CLARK. We are going to be running behind.

Mr. NORRIS. If you like, we can show them some other time.

Mr. CLARK. We expect to be here tomorrow morning and perhaps we could schedule you back here tomorrow morning for that one period of showing of film at that time if it's all right with the committee.

Mr. NORRIS. I would be happy to do that, sir.

Mr. CLARK. We do appreciate your coming if it's not too inconvenient.

Mr. TIERNAN. Do you have to go back to Boston?

Mr. NORRIS. I am going to stay here tonight.

Mr. CLARK. Thank you very much. Our next witness is Joseph Gaziano, president of the Prelude Corp., Westport, Mass.

We are glad to have you here. You have appeared before our committee in Washington. I am glad to see you here today. I am sure we are going to get some good information from you.

#### STATEMENT OF JOSEPH GAZIANO, PRESIDENT, PRELUDE CORP., WESTPORT, MASS.

Mr. GAZIANO. Thank you very much, Mr. Chairman. Members of the committee, ladies and gentlemen, members of the press. I'd like to comment first on our company's rather unusual name, "Prelude." The dictionary defines prelude as an introductory performance or action preparing for the principal or a more important matter. And, in fact, that's just how the founders of the Prelude Corp. regarded their activities a few years ago when the company was founded. However, recent events have given this choice of names rather ominous overtones. Since I left the defense business for a peaceful and serene life in Westport, I've begun to ponder if this is the prelude, then what's next.

Speaking as a member of the fishing industry reminds me some of the story of the young man going on his first camping trip who was warned by his father to be conscious of snakebite and should he be snakebitten that he should make an incision in the wound and suck out the poison immediately. The child was a bright child. He looked at the father and he said, "Dad, what do I do if I sit on the snake?" He says, "My son, you are going to find out who your real friends are."

When the company was organized in 1966, Bill Whipple, a divinity student at Boston University, had started lobstering as a means of paying his tuition and as luck would have it, he chose Westport. Before long, Bill had discovered that at certain times of the year, he could catch significant quantities of lobsters away from the traditional resource harvested by lobstermen for years. He had the vision that he was onto something big and Prelude Corp. had its beginning.

The company has come a long way in the past few years. We now have four 100-foot, semiautomated, refrigerated vessels fishing a new and plentiful untapped resource until recently which scientists in the Government assure us is separate from traditional lobsters harvested for years in New England. Prelude hopes to harvest lobsters year round efficiently enough to achieve substantial volumes at a steady

rate. This year, for example, we are operating at about 40 percent of the volume of the total Maine lobster industry.

Aside from our success at fishing, I am sure, and you have already mentioned, the ecological disaster which is occurring off the east coast of the United States. The rush toward this disaster began in 1961 when a Soviet armada peaked at 460 ships in 1965 began saturation fishing the traditional and very productive grounds off New England. This area known as Georges Bank was the most abundant known fishery resource in the world and in 1965 the Soviets alone took approximately a billion pounds of fish out of these waters. This catch was composed of a number of species caught—cod and haddock—and as a result of this overfishing, we have now an almost totally depleted resource. The level of this total catch maintained itself until 1968 and as the foreign vessels absorbed more and more of the resource, the catch, of course, began to decline. One by one they have picked off haddock, cod, yellowtail, herring, scallops, and who knows what's next? In 1972 there are still in excess of 314 fishing vessels in the Georges Bank area. However, the catch in 1971 has fallen to the lowest field in its 10-year history.

I think of significant interest to this committee is what happens to this fish. Does it go back to these nations to feed their starving people as mentioned by Mr. Norris? I am afraid not. A good deal of this fish is shipped back into the United States for our domestic market.

Let me cite some examples. First a quote from a recent national publication: "W. R. Grace is proud to announce that through its SeaPak Division, it has signed an agreement with the Rumanian Government guaranteeing a market for the entire output of Rumania's new fleet of factory ships."

Two, the Russian negotiators in their discussions with us last year at Westport told us that a portion of their fish was coming back into the United States via Halifax, Nova Scotia, imported by Continental Seafood of New York City, and, in fact, Mr. Norris and I aboard the *Robert I. D.* drank Russian vodka with a Canadian label.

Recently, WBZ, Channel 4, Boston, published a documentary which showed Polish trawlers unloading fish at the free ports of Mischlon and San Pierre, French possessions in the Canadian Maritimes and then being rebranded a Canadian product and shipped via the "Blue Peter" Canadian line into Gorton's of Gloucester.

And last but not least, the one dearest to our heart is the lovely Japanese company called Taijo who did in excess of \$200,000 worth of damage to Prelude Corp. in January, ships most of the fish caught, many millions of dollars of its seafood products into the United States via a network of branch offices in the United States. In 9 months of legal action, the Taijo Co. has yet to even respond to Prelude, and so far the penalty for their actions has been a \$600 charge for posting a \$300,000 bond so their ship could be released from attachment.

In effect, gentlemen, these vessels are not fishing for fish at all. They are fishing for dollars. They are catching, destroying the resources off our banks and bringing home American dollars. The American fisherman, of course, feels this equation unfair at best. He must compete with Government-owned and Government-subsidized fishing enterprises at sea and then compete with the same subsidized fishing prod-

uct in the U.S. market. God help the Government if such a condition were ever imposed on the farmers.

Prelude was unlucky enough to bring this problem to international attention over our conflict with the Soviet fishing trawlers off the east coast last year, then again when we seized the Soviet trawler, the *Solmas* in San Francisco harbor, and finally when we settled the dispute in direct negotiations with representatives of the Soviet Government with Prelude in November.

The discussions of foreign trawler activity here today is quite timely for on Saturday and Sunday, September 30 and October 1, last week, Prelude suffered extensive gear losses, this time at the hands of two French trawlers, the *Cap Fagnet* and the *Fort Baudoin*. The final damages as a result of these French trawlers could exceed \$50,000. Their excuse, of course, was that they were new in this fishing area and were unaware of any lobster pot activity, a most interesting comment since on September 30, both the Prelude vessel *Mars* and the Coast Guard cutter *Unimac* had given the *Fagnet* all of the lobster pot areas, and the Coast Guard cutter *Unimac* reported that she overheard the *Fagnet* convey this information to her sister ship the *Baudoin*. Twenty hours later, the *Baudoin* came back into our lobster pot field and did considerable damage and did not leave the area until boarded by both the Coast Guard cutter and the captain of the Prelude vessel *Mars*.

In discussion with the French captain, the captain of the Prelude vessel *Mars* was told that they were fishing for squid. However, they were catching more lobsters than squid. They left the area on the second boarding by the U.S. Coast Guard.

In the past 2 years, Prelude has suffered damage from foreign trawlers under the flag of the U.S.S.R., Poland, East Germany, Canada, France, Spain, Portugal, and Japan, totaling more than \$750,000 in lost gear and income.

During our conflicts, it was a difficult task to get any action from the U.S. Government. We received much advice but little support. I am sure there is nothing unusual about this plight but since then I have attended many meetings with the State Department officials and officials of other branches of the Government over the terrible position of the U.S. fisheries, and as is obvious to me that few members of our Government are even interested in the problem. Most alarming, however, to me is that they offer little encouragement other than that somehow we have to learn to live and compromise with these vast foreign fishing fleets off our shore.

In the meantime: one, a great and plentiful fishing resource is being destroyed; two, the American fishing industry is in a bad financial situation; unemployment in the industry continues to rise and fewer and fewer young people are interested in fishing as a way of life; three, our fishing vessels are being seized off foreign shores while foreign fishing vessels continue to harvest off ours; and I might point out that the U.S. Government in 1971 paid \$3 million in compensation to the tuna people in fines and loss of income for being seized off Ecuador; four, new resources attract foreign fishing vessels to our shores to deplete new resources as they have in the old such as lobsters; five, our American fishermen continue to receive harassment from foreign fishing fleets.

With all of this, little in the way of positive action is being taken. I don't think this lack of positive action stems from ineptitude but from a lack of a national fisheries policy. I feel that our entire heritage will be lost unless the U.S. Government forms a policy and makes a commitment to the preservation of our fishing resource and fishing industry.

What does the lack of a national fisheries policy mean to the average American citizen? Dr. Frederic Stare, a renowned nutritionist and head of Harvard's Department of Nutrition, stresses that we in the United States are in the midst of a coronary epidemic and that the American diet must include more fish to stem this epidemic.

Let us suppose then that medical researchers determine in the coming years that we must eat certain quantities of fish each day for us to stay healthy. Where will the fish come from. Once this resource has been destroyed by the foreign fleets, it will not return. Are we so wise in 1972 to abandon a resource that may be critically needed in 1982? Our wisdom and foresight in the past gives me little confidence that this traditional and natural food supply won't be abandoned.

Unfortunately, in my opinion, a disease has permeated our country in the last decade; somehow, we have adopted the policy that all our problems must be solved by compromise and compromise means the choosing of a lesser of evils. Rape is better than murder, and, of course, robbery is better than rape.

The United States must constantly surrender what is rightfully hers to obtain something where we have no business. In all of this, we have destroyed our willpower and what is certainly more harmful, eroded confidence in our Government. I, unfortunately, share some of the lack of confidence, but, like most Americans, fervently want to regain the spirit and confidence that made America a great Nation, a respected Nation. I cannot believe that it is in a democracy's interest to ignore injustices and evils for the penalty for such a policy to lose respect throughout the world.

Nations respect the character of the United States or any other government when it has the fortitude to protect itself, its people, and its resources. The cost of such unwillingness to protect the country's great resource and her fishermen can be measured both in lost catch and respect. I can personally assure you, after many hours of negotiations with foreign fishing interests that they are bewildered with the United States. They are bewildered with our lack of action to protect its fishermen and its resources, and I guarantee you they intend to take full advantage of this situation.

There are remedies to this current situation; For example, we can declare lobster a creature of the Continental Shelf and thus preserve this resource from overexploitation by foreign vessels; 2, we can stop imports from countries that don't respect the U.S. fishermen's rights off their own coast; 3, if the United States cannot protect its fishermen from molestation by foreign fishing boats, it should compensate the U.S. fishermen for their losses; they do to the tuna people; and, 4, which I feel is most important, we can extend our fishing jurisdiction to the edge of the Continental Shelf before this great resource is totally destroyed and we leave a barren sea as a legacy to our children.

Gentlemen, it is up to Congress to put the United States back as a leader in world fisheries where she rightfully belongs.

Thank you very much.

Mr. CLARK. Thank you very much, Joe, for a splendid statement. I would like to ask you one question. Are your vessels constructed with any Federal subsidy funds?

Mr. GAZIANO. One vessel was constructed with the Federal subsidy before we bought it; that is the *Patterson Marie*. We have no other vessel that was either constructed with Federal subsidies; we did have a mortgage insurer's loan on the *Wily Fox*. It was so complicated to maintain and so expensive and the interest rate was higher than we can do from the commercial bank that we borrowed from the Government and paid off the money to a commercial bank.

Mr. CLARK. Thank you. Mr. Tiernan.

Mr. TIERNAN. What about your insurance on the vessels, do you have any?

Mr. GAZIANO. Insurance on our vessels right now is \$1,400 per man and \$1,000 deductible on each accident. The reason it's that way is, of course, there is one insurance pool and that's the Lloyds of London. American insurance companies refuse to write P and I insurance so it's a noncompetitive situation and it continues to go out of sight.

Mr. TIERNAN. Is this an area where the Government can help you with some type of reinsurance pool?

Mr. GAZIANO. I think it's an area where the Government can take almost immediate action. A reinsurance pool is obviously the answer. I've talked to a number of insurance companies who are more than willing to write low cost, effective P and I insurance; can somehow or another have someone pick up the reinsurance for the large abnormal claim.

Mr. TIERNAN. What about the increase in Coast Guard surveillance, have you noticed any increase? We had testimony already from an increase of 100 hours to 1,000 hours annually in flight surveillance.

Mr. GAZIANO. We have no complaints with the Coast Guard's action. Yet, we never have any foreign trawler problem with the Coast Guard in the area. As our captains say, when the big white fellow arrives, everybody is a good boy. However, they can't be everywhere at once. I think the only complaint that I have about it—

Mr. TIERNAN. Excuse me. That didn't happen last week?

Mr. GAZIANO. Once the Coast Guard arrived, the French behaved themselves. Now, the one complaint I have is the news dispatches or press releases from the Coast Guard always say the French or the Russians or the Poles were very cooperative. I daresay if we had a 3-inch gun on the bow of our fishing vessels, they might be cooperative with us.

[“Hear. Hear.” Heard from the audience.]

Mr. GAZIANO. We don't think they are that cooperative. We feel that's a judgment question that the Coast Guard should be making.

Mr. TIERNAN. Well, let me get back. Isn't it true that the Coast Guard has been more or less making their presence in the last year more conspicuous? Is that a fair statement or not?

Mr. GAZIANO. I think they have learned to handle the situation a lot better. However, when they are in the area and when, as they say, show the flag, we have no difficulty. The problem is, of course, that the lobster ground is extended some and therefore it's very difficult for them to be all places at once, but there is no question about it, an over-

flight or a cutter in the area does minimize the problem, in fact, it eliminates it completely.

Mr. TIERNAN. What is the prime species that you fish?

Mr. GAZIANO. We fish for lobsters and that's it.

Mr. TIERNAN. That's it. If, in fact, Dr. White was to include this on the list, would that afford you additional protection?

Mr. GAZIANO. Well, I think what it would do, I don't think it would afford us any additional protection in loss of gear. I think what it would afford us is the fact that if large factory trawlers such as the French or the East Germans or the Russians or the Japanese fish for this resource, it won't be many years before it is gone as well as haddock and scallops.

Mr. TIERNAN. Would that be an administrative action; that wouldn't need any action by the Congress; it would be an action by Dr. White?

Mr. GAZIANO. From what I understand, it requires nothing more than a signature from Dr. White and it's done. I have been corresponding with NOAA and the Secretary of Commerce and the White House on this problem for well over a year, and I always hear the same thing: Within a few months, it will be done.

Mr. TIERNAN. I would assume you also support Senator Kennedy's amendment with regard to equipment and gear?

Mr. GAZIANO. I not only support it, I don't see why there is any argument. They do it for the tuna industry. Why not do it for the east coast? Why are we second-class citizens?

Mr. TIERNAN. Thank you very much, Mr. Gaziano.

Mr. CLARK. Mr. Steele.

Mr. STEELE. Mr. Gaziano, I want to congratulate you on an excellent statement. I am interested in knowing what you can tell us about the Russian landings of lobster in the Indian Ocean and their plans or potential plans for doing the same thing in the North Atlantic.

Mr. GAZIANO. That's interesting. We had Mr. Babioff who was president of the Russian fishing fleet supposedly. He is the No. 1 man, and we also had an observer from the National Marine Fisheries Service who sat in my home one night and heard Mr. Babioff say, "Why aren't your lobsters a creature of the shelf?" And I said, "Because we haven't declared it such." and he said, "It should be." He said, "If it was in Russia, we'd do it. We have no intentions of fishing your lobsters because in our opinion, it's a creature of the shelf."

Now, Mr. Oberlinski, who was a government employee, reported that back to the government service, and I know Mr. Norris knows that's what was reported. The Russians don't understand why we haven't created it a creature of the shelf. Now, if you are bottom fishing for squid in a lobster area, you are going to catch lobsters. The Japanese captain told us in New York when we seized his vessel that in 1970, 1969, they landed approximately 2 million pounds of lobster tail in Bermuda; so they are just breaking the tails and throwing the claws and body overboard. Now, you know there is absolutely no reason why we can't declare it a creature of the shelf—just not. It is biologically dependent on the shelf for its existence. It does not swim off the shelf—no reason for it.

Mr. STEELE. ICNAF presently has a proposal for granting coastal States preference in traditional fisheries. However, even ICNAF's most optimistic, enthusiastic supporters admit truly effective manage-

ment is years away even if we are to push forward as rapidly as they think practical and possible. Do you share the view that this is simply not a big enough basket to put all our eggs in at the present time?

Mr. GAZIANO. Well, I look at it from two points of view: One, we don't have time to have a long, drawn-out ambassadorial negotiation—

Mr. STEELE. How much time do we have?

Mr. GAZIANO. In my opinion, I think it's 2 or 3 years and it won't matter any more. I now hear rumors that the Law of the Sea Conference won't even take place in 1973, the rumors I hear from the delegates from the State Department. The other thing is ICNAF has traditionally established quotas on our fished-out species. You have a 16-member nation social club. You are not going to establish firm, hard management with 16 members of a committee who are all protecting their own parochial interest.

The other thing I want to point out is that traditionally in the United States if you look at our industry if it functions in a capitalistic fashion—and I know that's a bad word—that a resource will not be overexploited normally because as too many people enter the industry, the bottom—the less efficient operators continually drop out and the financial funds that flow into the industry dry up; so, as with profit as a motivation, you've got to conserve the resource. But if you introduce a thousand ships out there who are not interested in profit motivation but only catching as much as they can, the equation goes to hell very quickly.

Mr. STEELE. Thank you.

Mr. CLARK. Mr. Tiernan.

Mr. TIERNAN. Yes. Thank, Mr. Chairman. How many vessels would you say fish the areas where you fish for lobsters?

Mr. GAZIANO. Well, the statistics I have is that is somewhere between—well, in the summertime this year I think there were a peak of about 48 vessels; in the wintertime, it will be down below 10. Most of the lobster fishermen fishing the offshore lobster are using smaller boats, and they don't stay all winter long.

Mr. TIERNAN. Do you fish at all in the Bahamas?

Mr. GAZIANO. No.

Mr. TIERNAN. Is the fact that we have 160 vessels fishing the Bahamas—an approximately \$3 million industry—have anything to do with Dr. White's failure to include this on the species list?

Mr. GAZIANO. I can only quote Ambassador Korinski: "If we decree a creature of the northern lobster a creature of the shelf, it will help the cray industry." You are talking about a \$150-million northern lobster industry, and you are going to sacrifice that to protect a \$3 million industry. Now, I learned the difference in those economics in the third grade.

Mr. TIERNAN. It is my understanding from NOAA that a major consideration is that the Bahama Government may declare them to be.

Mr. GAZIANO. Let's take a look at that. It either is a creature of the shelf or it isn't. The second thing I would like to point out is that the argument last year was that it would help the shrimp industry of South America. Well, Ambassador Korinski has now negotiated license agreement with the South American nations so that we can take out

shrimp out of their 200-mile territorial waters which we don't recognize and the U.S. Government is paying the licensing fee so that the shrimpers can fish in waters that we say are high seas. I do not understand the logic of it. I must be obtuse.

Mr. TIERNAN. Again, I want to join with my colleague, Mr. Steele, in thanking you for the testimony. You have been very helpful personally to me in the testimony you have given today.

Mr. GAZIANO. Thank you very much.

Mr. CLARK. Thank you. Our next witness is Robert Berg, offshore dragger from Mystic, Conn. Is Robert Berg here?

**STATEMENT OF ROBERT BERG, OFFSHORE DRAGGER,  
MYSTIC, CONN.**

Mr. BERG. As far as we are concerned, we fish right out of here in Stonington.

Mr. CLARK. Let's have it quiet, please.

Mr. BERG. There have been a lot of changes, of course, through the years as far as vessels, equipment, and amount of fish you catch. One of the problems, of course, now is the vessels are getting old, the replacement value is too high, so that as you use a boat, that's not being replaced.

At one time in Stonington, we had—I think they had 40 some boats. Now it's down to 11. In the last couple of months, we lost one more vessel. We are going down.

We did have a trucking outfit. We used to truck most of our fleet daily and it shut down so that we couldn't have enough fish to ship and a trucker couldn't make enough on it because we wasn't having that; so it cut down once a week, twice a week. In the last year, it cut down, he said, until he can't truck any more fish because he can't make a go of it; so we, in turn, start fishing offshore catching yellowtail because the fish that we were catching in mostly Long Island Sound; we used to go right off Watch Hill here; could get a net out and you could fish there for the day and you could do fairly good; caught codfish in the winter and flounder; then it got so up to this last year, you just couldn't make it. You towed 2 hours and you get 200, 300 pounds, if you got that.

The biggest problem, I think, is the fact that the fish that migrate take all their fish in Long Island Sound. They come with the seasons and they go with the seasons. The codfish go offshore for cooler water in the summer and so did the flounder, another species of white and porgies moved in.

Up to, oh, I would say 20 years ago or 15 years ago, these fish more or less were left alone because we had enough fish in the sound so that we had to stay around here which in turn would let them go offshore and be left alone and they have a chance to rebuild their supply. By the next season when they come back, we fish them hard again for the season and we can do very good that way; then, of course, with the Russians showing up, it got so that you had 100 seen year around. They were catching them in the summer; we were catching them in the winter; in the other species it was just the opposite.

So it's getting down to a point now where we needed four men; now you only need three men because you don't have fish to catch. The

only thing is handling equipment. It reaches a point where you got to have enough men to handle the equipment, but as far as the fish goes, the price over the years hasn't changed that much because the middleman cost is going up and we are getting caught on the other end the same as the farmer or anybody.

It wasn't until this, oh, last year that we got more or less of a guarantee from a fish dealer of 10 cents; before that it was 7 cents, 6 cents. Whatever he wanted to pay, he was more or less the only guy that was buying it so that you are caught because you got a perishable goods. In other words, he says if you are going to take a nickel you either have to take a nickel or you have to dump it. When you catch them in this area, everybody catches them. They catch them down East. So when it comes in the market like New Bedford, you might have a million pounds. When they can't handle that many fish, the price drops; whereas, before it may be 30 cents, you may get 10 cents if you are lucky.

Over the period of years, it's getting so it's less and less fish. Right after the war, during the war, there was a lot of vessels built. You caught a lot of fish. My father used to catch—oh, in 9 months he caught a million pounds of yellowtails. They were caught at night. They pitchfork them below and ice them and take them to New York.

Now, it's a thing of the past. We was doing a good job catching them myself over a period, I would say, over a period of 30 years.

Mr. TIERNAN. Mr. Chairman, could I ask a question? Mr. Berg, does your father own a vessel?

Mr. BERG. Him and I both own it.

Mr. TIERNAN. You both own it?

Mr. BERG. It's a family—

Mr. TIERNAN. How old is the vessel?

Mr. BERG. She was built in 1946.

Mr. TIERNAN. 1946. Do you have insurance on it?

Mr. BERG. Yes, we have some insurance. You can never cover them full for replacement value because the cost would be too high. You take—say you insure it for \$30,000. Well, to replace that same vessel, it would cost you one hundred fifty so you really don't gain that much because the difference between that, you know, is \$120,000. If I had to do it, I would just—just quit because of the fact—

Mr. TIERNAN. Who makes up the crew? Does your father go out?

Mr. BERG. He does in the summer when it's nice weather but not winter.

Mr. TIERNAN. Just you and your brother?

Mr. BERG. No, I have a lobsterman. He goes with me because it gives him something to do and it offsets his income.

Mr. TIERNAN. He switches off in the summertime?

Mr. BERG. That's right. It works out very good for him.

Mr. TIERNAN. Do you have any personal insurance, liability insurance? If you or your brother got injured on the vessel, do you have any insurance to cover you for that?

Mr. BERG. The insurance I don't think covers the vessel owner. It covers the crew. It's P and I and I think it's \$600 a man if you get it; it varies.

Mr. TIERNAN. You keep a record of your catches, how much you take?

Mr. BERG. Yes; we more or less keep it. It's kept with the book-keeper how much you get each week, how much you get each month.

Mr. TIERNAN. Has your catch been falling off?

Mr. BERG. Well, up to last winter I fished mostly in the sound because you get maybe 4 days out of the week that it's good weather you can fish.

Mr. TIERNAN. You personally have no specific complaints with regard to any interference by the foreign fleet, but you feel the large number of foreign vessels in the area depletes the stock and the recycling of these fish; is that correct?

Mr. BERG. Well, last week was the first incident we had with a couple Russian trawlers out there. They were in our area.

Mr. TIERNAN. They were in your area?

Mr. BERG. They were inside 10 miles. What they do is, they sneak in early in the morning just before daylight and they make a couple swings around the 10-mile area; then come daylight, they move off 12 to 15 miles.

Mr. TIERNAN. Is the Coast Guard involved at that time?

Mr. BERG. Well, the day before I did see the Coast Guard cutter go through there but they wait until they leave. Unless they stay there right on the ground all the time, they can't really catch them.

Mr. TIERNAN. Did you report that in any way from your vessel at that time?

Mr. BERG. It wouldn't do much good. By the time anybody got there, they would have been outside.

Mr. TIERNAN. Did you make any report when you got into port?

Mr. BERG. No.

Mr. TIERNAN. You didn't make any report at all?

Mr. BERG. No; there is no—really no point in it.

Mr. TIERNAN. Do you have any contact with any U.S. fishery people?

Mr. BERG. No; other than where we take fish out of Newport there is—I really—I forget his name but he comes from Woods Hole and he takes down the amount of fish you catch in the area.

Mr. TIERNAN. Where do you land your catches?

Mr. BERG. Newport; all ours goes Newport. There is no fish fished out of Stonington.

Mr. TIERNAN. Thank you very much, Mr. Chairman.

Mr. CLARK. Mr. Steele.

Mr. STEELE. Captain Berg, will the fishing industry die in Connecticut if you don't have some protection from the foreign fleets?

Mr. BERG. Well, it's dying now. I mean, as I said, we had 40 vessels at one point. Now we are down to 11. Most of these are old vessels. Ours is the newest vessel built in 1946. Once a boat gets 25, 30 years old, it has about had it.

Mr. STEELE. How many more years would you give the fishing industry in Connecticut if something isn't done?

Mr. BERG. Connecticut—well, I'd say maybe 10 years. We couldn't hold on if nothing is done. It's just a matter if you can catch enough fish to meet your expenses, make a living. Now, everything is—you get a mechanic to work on the engine. He gets \$19 an hour. Shipyards want between \$10 and \$12 an hour; so, more or less all this work we have to learn to do ourselves. You have to be your own repairman,

your own mechanic. You paint everything but the bottom because that you go into shipyard because you could save money. Instead of paying them \$10 an hour, you could say home a day or two and do it yourself and make money. It's cutting your expenses down. This is the only way we can offset it.

Mr. STEELE. Is your income from fishing dropping each year?

Mr. BERG. Well, it hasn't. This year it was pretty good because of the fact we left the sound and went offshore because there is not enough out Fishers Island Sound now. In fact, the boats now are in. They say there is not enough to go out there. You fish all day for 300 pounds. If you get 10 or 12 cents, don't even pay for your fuel and your ice, plus your insurance.

So that, you know, it's getting so that at the current rate, I'd say 10 years. With us just fishing the way we was doing, it might of lasted maybe 25 years. With Russians here, why, they increased it that much because of the fact they are fishing year round and we are fishing year round. The fish are getting no rest; that's all. You can't have a hunting season year round because there won't be nothing on it.

Mr. STEELE. Thank you.

Mr. TIERNAN. Mr. Berg, do you avail yourself of any of the services from the University of Rhode Island?

Mr. BERG. I have been down there to their——

Mr. TIERNAN. Fishermen's forums.

Mr. BERG. Yes; I have been down there the last two times. I think I missed the last time.

Mr. TIERNAN. Are these helpful to you?

Mr. BERG. Well, they are interested and they are in some aspects with lobsters. We don't do anything with lobsters.

Mr. TIERNAN. How about your nets and your trawls?

Mr. BERG. The trawls itself is more or less—we more or less—I think the fishermen themselves, they experiment. You try different things to increase. You use more electronic gear. You use, you know, anything you got more or less will increase the catch. You use more horsepower; you throw a bigger net to cover more ground. It's a matter you are getting to a point now it's so you cannot really go much further. You cut it down, you know.

Mr. TIERNAN. How much have you invested in your equipment?

Mr. BERG. Well, it's hard to say as far as equipment. We put a new engine in about 6 years ago.

Mr. TIERNAN. I mean fishing gear.

Mr. BERG. Well, we make about two nets a year. We don't lose them so much now because it's nylon. You more or less tear them. You rip them up but you mend them up. They are fixable. We have average one or two new nets; then we use the old ones for trying more or less new grounds, places that haven't been fished; so that if you do lose them, they are old but they are not that good.

Mr. TIERNAN. Thank you very much.

Mr. CLARK. Thank you very much. Our next witness is John Crossman, Jr., vice president, Cape Lobster, Inc., South Harwick, Mass. You may proceed.

STATEMENT OF JOHN CROSSMAN, JR., VICE PRESIDENT, CAPE  
LOBSTER, INC., SOUTH HARWICK, MASS.

Mr. CROSSMAN. Well, I don't know what I am supposed to say. I was supposed to get a special delivery letter giving me a format. We just arrived. We were a little bit late.

Mr. CLARK. If you will kindly give us a little background of yourself or your industry, then we'll ask you questions.

Mr. CROSSMAN. Well, I am a lobster fisherman and have been for 26 years and I am the skipper of the *Norris B*. We have a corporation owned by five members. We are in the wholesale-retail business, the lobsters, and we have two boats and the *Norris B*, and we were pretty badly shaken up by the foreign fishing activities the latter part of April, May, most of June, and we lost a lot of gear. If I am not mistaken, I believe we lost through the collective amount of destruction that was caused somewhere around \$85,000 worth of gear.

Mr. CLARK. John, would you speak up just a little louder? They can't hear you in the back, and if the audience would just refrain from talking we will be able to hear him much better—this is our last witness morning.

Mr. CROSSMAN. I wish—I wish I could be more helpful. I could be more helpful if I knew how to answer.

Mr. CLARK. Mr. Tiernan, do you have some questions?

Mr. TIERNAN. Mr. Crossman, you have two vessels owned by the corporation; is that correct?

Mr. CROSSMAN. That is correct.

Mr. TIERNAN. Five owners?

Mr. CROSSMAN. Yes.

Mr. TIERNAN. And you all work the boats, or are there some who don't?

Mr. CROSSMAN. No; there is only two of us that work the boats. Captain Griffin, Bob Griffin, and myself handle the fishing end of it and the other three gentlemen of the corporation are in the buying and selling end of it.

Mr. TIERNAN. I see. You are just a lobsterman now, lobster fishing?

Mr. CROSSMAN. Right. I go trawling jack, haddock, codfishing later on when the lobster is through.

Mr. TIERNAN. I see. And how long have you been a lobsterman?

Mr. CROSSMAN. Twenty-five years.

Mr. TIERNAN. Where do you go? How far out do you go?

Mr. CROSSMAN. We are fishing on the Continental Shelf. I have been fishing on the east side of Ladonia Canyon since April and we are still there and I am planning on trying to stay for a couple more months.

Mr. TIERNAN. You say in April, May, and June of this year, you had some difficulty with the foreign fleets. Could you give us some specific examples of what kind of difficulty you had?

Mr. CROSSMAN. Well, yes. The collective amount of gear that has been lost from the seven boats fishing in the harbor where we are from has been in excess of \$85,000; just the gear itself, never mind the protection of the lobster.

Mr. TIERNAN. How did you lose this gear? Could you give the committee some examples of how you lost the gear?

Mr. CROSSMAN. Well, apparently foreign—the foreign vessels have a quota to meet and they tow their gear right through you. First I would like to establish one fact that we have our coordinates religiously sent to Boston through Lt. Joseph Field who is—that's his function to get all these loran coordinates together—broadcast them for the foreign fleet in an effort to keep them out of the gear.

Mr. TIERNAN. You are outside the 12 miles?

Mr. CROSSMAN. Oh, yes; we are 150 miles.

Mr. TIERNAN. One hundred fifty miles out?

Mr. CROSSMAN. Right. And these loran coordinates called in when the gear is set in an effort to keep the foreign fleet out; there was a spell in May when they were obviously towing to the bottom—not just mid-water trawling but they were towing for blue hake and the blue hake are a ground fish; therefore, they were towing along the bottom and destroying a lot of lobster gear. It wasn't just the, you know, the bottom to surface buoy lines that they were tearing up, it was everything, the trawl itself and the gear itself.

Mr. TIERNAN. What efforts have you made to recover these? Have you found them?

Mr. CROSSMAN. Yes; we have filed affidavits to the effect that we lost the gear.

Mr. TIERNAN. Have you heard anything further?

Mr. CROSSMAN. No.

Mr. TIERNAN. Have you had any claims before that were paid by the U.S. Government?

Mr. CROSSMAN. Never.

Mr. TIERNAN. You never have. Is this the first time that you have experienced losses?

Mr. CROSSMAN. This is my first crack at this offshore lobstering.

Mr. TIERNAN. How about any of the other seven boats that are there with you?

Mr. CROSSMAN. They all filed affidavits to the effect that they lost gear.

Mr. TIERNAN. Have any of them had any losses prior to April, May, June that you know of?

Mr. CROSSMAN. Yes.

Mr. TIERNAN. Do you know of any having received compensation from the U.S. Government?

Mr. CROSSMAN. The only thing that I read about—I haven't met the gentleman—I believe he is in the room, Mr. Gaziano.

Mr. TIERNAN. But I mean from your group—you say there are seven boats where you go out from.

Mr. CROSSMAN. No.

Mr. TIERNAN. No. All right.

Mr. CLARK. Does your insurance cover any of that lobster gear?

Mr. CROSSMAN. None whatsoever, sir.

Mr. CLARK. You spoke just briefly about loran. Are you talking about loran of the Coast Guard?

Mr. CROSSMAN. No; our own loran coordinates where the gear is set. I didn't mean to confuse you on that. I meant that the U.S. Coast Guard monitors these loran figures that are given to them in an effort

to keep them and they broadcast these loran coordinates over the air four times every 24 hours.

Mr. CLARK. Mr. Steele.

Mr. STEELE. I just have one question. Are you satisfied with the responsiveness and the help you are receiving from the Coast Guard?

Mr. CROSSMAN. Very much so. We are tickled to death. They are in demand, of course, and they don't have boats enough, really. I remember I put in a call to an admiral one night. We were in really pretty dire straits down there at one point and I was actually connected with an admiral which took me aback and he asked me if there was any special thing I would like to have done, were there any loran coordinates I would like to have him broadcast to the cutter, and I told him "Yes," there were and he was very kind and did so. I think that at that particular point we were being harassed severely.

Mr. STEELE. One of the problems is communication though; isn't it—

Mr. CROSSMAN. Yes; it is.

Mr. STEELE. And the urgency of communication? In that respect, would a code system to report foreign intrusions help get information to the Coast Guard? Would it help get a response faster?

Mr. CROSSMAN. I am not quite sure I understand the question.

Mr. STEELE. Well, could a code system for more rapid communication be feasible and helpful—talking about getting on the phone with an admiral—that's a hard way to do it.

Mr. CROSSMAN. Yes; but it works.

[Laughter.]

Mr. STEELE. Maybe we ought to have more admirals in the Coast Guard. Perhaps a faster system using a code, for example, would be helpful. I don't know; that's my question.

Mr. CROSSMAN. It may be. I am not familiar enough with it.

Mr. CLARK. Mr. Tiernan has another question.

Mr. TIERNAN. Mr. Crossman, you mentioned this damage was done to your gear. Did you, at any time, actually see a foreign vessel go through the areas where you set your pots?

Mr. CROSSMAN. Yes, sir.

Mr. TIERNAN. What flag was it flying?

Mr. CROSSMAN. This, I couldn't be sure of. I know it was one of the Communist bloc countries. You see, we are having a little difficulty in distinguishing the difference between a Polish ship, Russian ship, East German ship. This was in the period when we had a lot of fog at this time and I was hauling gear on the north end of Ladonia Canyon—I don't know—about 90 fathom of water, and it was the next string, the very northern string in that area, and I was made fast to the bottom hauling the gear, and I—it was thick enough so that you couldn't see very far, but I saw this dark shadow steam directly on a perpendicular course to mine, went right across the string of gear, took it with them, the whole works, both ends, the 15 pots.

Mr. TIERNAN. You weren't on the line?

Mr. CROSSMAN. I was on the trawler directly adjacent to it just to the southern end of it. I was made fast to the bottom. There was nothing I could do.

Mr. TIERNAN. Did it also take the last—

Mr. CROSSMAN. Took the last—whole trawl, the whole 15 traps, both ends, and the buoys too.

Mr. TIERNAN. That was when, April, May, June sometime?

Mr. CROSSMAN. I would say that was in—I couldn't corroborate this exactly but let's say it was the second week of June.

Mr. TIERNAN. When you come into port, you make out some kind of an affidavit with regard to that?

Mr. CROSSMAN. We did.

Mr. TIERNAN. You give that to the Coast Guard?

Mr. CROSSMAN. These are on file with Lt. Joseph Field, Boston.

Mr. TIERNAN. Once these vessels put the nets down, make the run, there is not much they can do if they are in the area where you already put your traps out; is that correct?

Mr. CROSSMAN. We are fishing in an area approximately 15 nautical miles deep from the 50-fathom curve to the 100-fathom curve. This is not so. The whole length of the vessel where I happen to be, it is approximately that distance and it's a bell or just a strip of boom. When the temperature is proper for these fish that they are after to be in that strip, they disregard the fact that we are there. They just go. Now, they can keep clear of us through just a little bit of effort.

Mr. TIERNAN. Would their equipment pick up the fact that you have your traps set down?

Mr. CROSSMAN. Yes—clearly marked with radar—good ones—we can pick them up; so can they.

Mr. TIERNAN. How high off the surface are they?

Mr. CROSSMAN. About 7 feet from the surface to the radar.

Mr. TIERNAN. These are standard types?

Mr. CROSSMAN. I would say so.

Mr. TIERNAN. And what are the buoys; what color are they?

Mr. CROSSMAN. Well, they are red. They are a red plastic balloon affair with a large bamboo pole tied onto that in tandem with a radar reflector, a flag.

Mr. TIERNAN. Other than probably moving the foreign fleets from the Continental Shelf or to the 100-mile limit, would you have any other specific suggestions that might be helpful to you in the way of legislation? Do you handle the insurance on your vessels or is that handled by one of the other partners? They seem to be the businessmen.

Mr. CROSSMAN. They are.

Mr. TIERNAN. You are the fisherman?

Mr. CROSSMAN. Right.

Mr. TIERNAN. You are the one that goes out and catches.

Mr. CROSSMAN. Right.

Mr. TIERNAN. You don't know much about the insurance. How many men do you have to your vessel?

Mr. CROSSMAN. Three.

Mr. TIERNAN. You have three?

Mr. CROSSMAN. Three or four; sometimes, quite often four.

Mr. TIERNAN. So they are employees and you have to have some kind of insurance to cover them for personal injury?

Mr. CROSSMAN. We do; yes.

Mr. TIERNAN. Have you had any personal injury on your vessel?

Mr. CROSSMAN. No; we are very fortunate.

Mr. TIERNAN. That is not so with a lot of fishermen.

Mr. CROSSMAN. I understand that's true.

Mr. TIERNAN. Thank you very much. I have no further questions.

Mr. CLARK. Thank you very much. And now, Mr. Norris, we do have a few additional minutes. We would like to have you run through your film as fast as you can.

#### CONTINUING STATEMENT OF RUSSELL T. NORRIS

Mr. NORRIS. Thank you very much. Can we darken the room?

Mr. CLARK. For the next 10 or 15 minutes.

Mr. NORRIS. This first chart is simply to show we are talking about the ICNAF area. The blue line is the ICNAF area. This is Block Island here [indicating] and anything west and south of Block Island is outside the area of regulation.

Now, these three areas here are closed during the spring of the year during the spawning season to fishing haddock and cod, so forth. This is a closed area for the hakes during January, February, and March. These areas shown down here are the bilateral agreement areas.

We have a series of three slides here showing concentration of foreign fleets in 1961. Here is Cape Cod; Georges Bank here, 1965—is that focused?—and in 1971. This is just Big Bay down here, Cape Hatteras. I am sorry about the chart. It doesn't show up very well. This will give you the expansion in the 10-year period. This is the same chart that's on the wall—you can examine it on the wall a little later—what it shows over a period of 10 or 11 years. Follow the red band, the U.S.S.R.; the green, Poland; the brown, East Germany; and the orange, West Germany; and the blue, other.

You see, I mentioned in my talk during 1962 there was a large number of exploratory vessels here but they didn't catch very big, this dotted line being the foreign catch during the year period. Their catch went up. Here is 1965, 1966. We took all the haddock since; been going up at this point.

Now, this is in thousands of metric tons, this line read directly over there. The other is in numbers of vessels. This would be 900 vessels; this would be 600,000-metric tons. You use the same chart.

This simply shows in the last 3 years the total number of foreign vessels off the east coast, green being 1970, the blue, 1971, and the orange, 1972, as far as we go over here to August.

We are talking here in terms about 250 vessels during this time of year. That's over the entire east coast from Nova Scotia down to Hatteras.

This is a table showing the distribution seasonally throughout the last 3 years: mid-Atlantic, the Northwest Atlantic. You see, during the winter months: January, February, March, big concentration down in the mid-Atlantic and not as many vessels on Georges Bank. They start to move away and come up to the North Atlantic area, here again, the red being U.S.S.R. and the green, Poland.

This is a photograph taken by one of our agents on Georges Bank showing a concentration of vessels, largely Soviet vessels; another shot showing similar scene. This is a medium-sized trawler, Soviet

type trawler about 125-foot long. It shows a load of herring on a Soviet side trawler. This is a refrigerated Soviet trawler of a larger vessel. This is a freezer stern trawler, Soviet fleet stern trawler about 280-foot long. This is a factory stern trawler; Soviet again. There are two types of these. We'll show another type in a minute, a more modern vessel.

This is a load of red hake, one of the Soviet vessels. This is a newer type, so-called "Atlantic class" of factory stern trawlers. This is the factory based ship. This is 550-foot long, Soviet; another view with two trawlers alongside. This is the deck. You see the fish in the pens here; barrels here. They used to transport these fish from the trawler back to the base ship. This is a Polish stern trawler. This is an East German side trawler. This is a Bulgarian Atlantic class factory stern trawler; just the same class as the Soviet; same type of vessel as that. This is a West German stern trawler. They say that huge mid-water trawler is capable of taking as much as 50 tons of herring in one trawl. This is a Japanese stern trawler; and a Cuban Atlantic class factory stern trawler.

Now, this is an inspection team, Coast Guard team, interviewing the fishermen on the deck looking over the catch. We have international inspection on these vessels.

This is a closeup of the catch. You see, it's larger; butterfish with a few red hake, silver hake, one, two flounders, and a skate here, but largely small butterfish. This is a large Soviet stern trawler; that concludes the slides. Thank you.

Mr. CLARK. Thank you very much. Now, if you wouldn't mind taking the witness stand again, I think, perhaps the Congressmen have a few extra questions they might ask you. You have been here listening to some of the other witnesses. I'll start by asking Mr. Tiernan to ask you a couple questions.

Mr. TIERNAN. Mr. Norris, is your concern great with regard to the future of the fishing industries in New England as some of the other witnesses previously testified?

Mr. NORRIS. Yes; it is.

Mr. TIERNAN. What are your predictions with regards the industry itself?

Mr. NORRIS. I am somewhat optimistic about the progress that has been made in ICNAF during the last year or two with the establishment of the authority to have national catch quotas. I admit it is very late in some species but to me it's a good sign. It's one—it's a tool we haven't had before and I think it's encouraging that we now have that. We have a better handle on regulations of the resources than we had before.

Mr. TIERNAN. Another point: Since we are now apparently purchasing permits from some of the countries in South America to allow our tunafish fleet to fish in their waters, why do we hesitate not to extend at least the Continental Shelf, our jurisdiction, as they have done?

Mr. NORRIS. The only way I can answer that Councilman Tiernan, the U.S. Government has taken a position looking toward the forthcoming Law of the Sea Conference which, incidentally, in response to a comment that was made, we do expect it to be held in 1973. We have taken this position. It does not include jurisdiction and it happens to be an administration position at this time.

Mr. TIERNAN. So even though we do have a conference, it doesn't seem we are going to get any relief out of that, do you think?

Mr. NORRIS. I am optimistic that we will if we are able to have our views prevail.

Mr. TIERNAN. What does that optimism mean to these men who have to go out and work if in fact it isn't substantiated by the conference?

Mr. NORRIS. It's a very serious matter and we certainly hope things work out. We are very much concerned about the situation.

Mr. TIERNAN. The present policy of the U.S. Government for national security reason is that we will not extend the limits, isn't that correct?

Mr. NORRIS. I did not say it was for national security reasons. I suppose that's one of the considerations.

Mr. TIERNAN. What other considerations would there be?

Mr. NORRIS. There is not complete unanimity among the fishing industry.

Mr. TIERNAN. How about within the U.S. Government? How about between your agency and, say, the State Department? Are you unanimous about those feelings?

Mr. NORRIS. In certain parts of the country as I mentioned in my previous testimony, certainly it would be advantageous to have some extension; in other parts, it would not.

Mr. TIERNAN. The point is that we seem to be able to handle the problem with regard to the tuna fishing fleet by purchasing the permits to have them go into those areas. Why couldn't we do the same for the help of the Northeast area? This is a critical situation now. It's not something that may happen; it's an actual critical situation that may be even more potent than what we had from the tunafish.

Mr. NORRIS. I don't think I fully understand your reference to the tuna fleet.

Mr. TIERNAN. My understanding is that the State Department is purchasing permits to allow the fleets to fish within the 200-mile limits that has been imposed by some of the South American Governments.

Mr. NORRIS. I think you are referring to the shrimp fishery off Brazil.

Mr. TIERNAN. All right; that, for instance. Are they doing that? First of all, let's establish whether they are doing that.

Mr. NORRIS. There is an arrangement there which I am not completely familiar with.

Mr. TIERNAN. Some type of arrangement where this is done; it seems to me since we have been able to make that type of arrangement for the shrimp fleet, why should we not now protect our lobster fishermen and our other commercial fishermen here in the Northeast area by extending the limit and make these foreign vessels obtain a permit from our Government and maybe you can set up a fund to use those permit fees to pay for gear losses and other losses that the industry is suffering.

Mr. NORRIS. I don't think I can comment on the position of the State Department on this.

Mr. TIERNAN. How about with regard to your agency? You are the regional director for this area. Are you vigorously supporting efforts for this industry?

Mr. NORRIS. Certainly am.

Mr. TIERNAN. How?

Mr. NORRIS. The Sea Conference and the preparation for that; this is our position and this is where our activities—

Mr. TIERNAN. Well, I think one of the witnesses testified—I know Dr. White has stated to me the main reason for its not putting the lobster on the list is the fact we are concerned about the Bahamas, the Government of the Bahamas saying they are going to put theirs on the list and therefore affect the 160 American vessels that fish in that area for approximately a \$2 million industry.

Mr. NORRIS. I am sure this is a consideration.

Mr. TIERNAN. That's what I am saying; it seems to me we ought to concern ourselves with the fact we had strong testimony here today with regard to lobsters. What have you done along that line? Have you made it clear to Dr. White, as I have tried to and other members of the committee, that we think that they should? I don't see any reason for them waiting until some time in the future.

Mr. NORRIS. We certainly have taken a very active role in this, and I cannot predict when Dr. White will make this decision.

Mr. TIERNAN. Now, you say the increase—the Coast Guard has increased their time annually from 100 hours of flight time to—

Mr. NORRIS. To about 800 or 900.

Mr. TIERNAN. Have they acquired additional aircraft for this?

Mr. NORRIS. I am not sure I can answer that question. I am sure Commander Fournier will be able to.

Mr. TIERNAN. I have no further questions. Thank you, sir.

Mr. CLARK. Just 1 moment. Mr. Steele.

Mr. STEELE. Yes. Mr. Norris, one of the things I think we have established here this morning is there is pretty general agreement we've got perhaps 2 more years to take some action or the situation is going to degenerate to the point where we can't reclaim it. Now, I understand your position and I understand the fact that you keep coming back to the Law of the Sea Conference, but we had Ambassador Korinski before our committee within the last 10 days and under considerable pressure on this subject. I was one of those who pressed him. He acknowledged that it's very unlikely you are going to get anything done in the Law of the Sea Conference in 1973. As a matter of fact, as I recall, his exact words, he said, "We are going to lay the groundwork and maybe we can get an agreement in 1974." Well, 1974 takes us 2 years off, and by the end of 1974, we are going to be at the end of our rope. I just don't see how we can possibly sit here and wait for something to happen in the Law of the Sea Conference. Here is where I get back to the line of questioning that we have been following as far as the establishing of a permit system and temporarily extending our fisheries jurisdiction. Is there another alternative other than these two if we are going to do anything in the next 2 years?

Mr. NORRIS. Well, in the first place, Congressman Steele, I do not agree that the fishing industry is going to be gone in 2 years. As I said before, we have some encouraging developments in ICNAF. True, it is not good enough. I am still very much concerned as all the fishing industry people are, but with the species under regulations on 14 stocks of fish now under regulation I feel we have a better handle on it than we had before, and I think this is encouraging; and as far as I can see, these are the tools we have to work with at the moment.

Mr. STEELE. It's encouraging perhaps, but it's only hoped, it's not anything definite, and it seems to me that we are betting survival of our fishing industry on the possibility that there will be an agreement, despite the fact that there is no definite prospect of an agreement even in 1974. Now, in the meantime is there anything we can do jointly with Canada? Would there be any kind of mutual approach that we and Canada—who perhaps is more inclined to cooperate with us at this time—could take in the next 6 months? Would that be an opening toward greater international cooperation and control; and if so, what might you suggest?

Mr. NORRIS. We have had a number of talks with Canada on this subject. I say "we." I haven't been personally involved. They are interested in the same things we are. It seems to me that avenue is being explored by the State Department people at the moment.

Mr. STEELE. This is one of the things that bothers me. Are we to continue to rely on the State Department and its good wishes, its good will, and its eagerness to explore the problem? When are we going to have some concrete action? Are we going to wait for 2 years for concrete action? I think that's one of the things that we have to determine.

Mr. CLARK. Thank you very much. We really didn't want you to be back here for cross-examination, but I think the questions propounded and your answers are what we need for our record here.

The meeting will adjourn until 1:45 this afternoon, and for anyone in the audience, I want all of you to know after we finish the regular list of witnesses, we will then have questions addressed to us from the floor by anyone who wants to ask any questions.

After a luncheon recess, the committee reconvened at 1:50 p.m.

Mr. CLARK. Our first witness today is Howard W. Nickerson. Mr. Nickerson is with the Seafood Dealers Association of New Bedford, New Bedford, Mass. You may proceed.

#### **STATEMENT OF HOWARD W. NICKERSON, SEAFOOD DEALERS ASSOCIATION, NEW BEDFORD, MASS.**

Mr. NICKERSON. Thank you, Mr. Chairman. I would perhaps be a little unusual today in which I will not be as militant as I ordinarily am in my prepared speech. However, I am going to read some material, newspaper articles, and a poster, that we have developed which may be of interest to your particular hearing.

Mr. CLARK. If there are no objections, they will be part of the record.

Mr. NICKERSON. If you wish any of these further, I'll see that you receive them. Preparation for the proposed 1973 Law of the Sea Convention have been underway throughout 1971 and early 1972. During the three formal preparatory sessions conducted during that period, many nations expressed preliminary views on possible solutions to fishery jurisdiction problems.

The most recent U.S. Government statement of fisheries, March 20, 1972, stressed the necessity of approaching a fishery jurisdiction agreement on a species basis. It was pointed out that coastal, anadromous, and highly migratory oceanic species types have different management needs, and, therefore, different jurisdiction needs.

I personally support the species approach at this time. The association believes that the U.S. Government should strive for a treaty that

will provide the coastal States complete management responsibility and preferential fishing rights for all species that spend their lives in waters adjacent to the coastal States; provide to the coastal State complete management responsibility and fishing rights for anadromous species spawned in coastal State inland waters; provide management responsibility for migratory oceanic stocks to international organizations; provide international mechanisms to enable access to underutilized coastal species; and, provide an international mechanism to establish criteria for effective management programs and review performance by nations with management responsibilities.

The Seafood Dealers Association insists that the U.S. Government recognize the critical impact of the Law of the Sea deliberations on a vital industry; that it consider a favorable treaty to be a matter of uppermost priority.

The Seafood Dealers Association further commends the U.S. Government for its apparent willingness during the spring of 1972 preparatory session to develop dialog between industry representatives and Government policymakers. The association urges continuation and expansion of this policy that have industry people involved in all decisions.

The Seafood Dealers Association urges that the U.S. Government consider alternative courses of action in the event of delay, failure or postponement of the proposed 1973 conference. It reminds the Government of the disastrous impact on the resources if the jurisdiction question is not settled quickly. Alternative courses of action on a regional, bilateral or even unilateral basis must be readied for rapid implementation in the event the Law of the Sea Conference is delayed or fails.

The association urges immediate interim action in those areas where adequate scientific management or effective enforcement does not exist and where unrestricted fishing by foreign fleets is damaging the U.S. coastal species resources. Our association urges that this interim action initially consist of a formal U.S. Government request that a moratorium be self-imposed by their own coastal species fisheries upon which U.S. domestic fishermen have long depended.

In the event that requests for moratoriums do not obtain satisfactory responses, we urge affirmative consideration to unilateral declaration of extended fisheries management jurisdictional over coastal and anadromous species threatened with depletion or serious damage. The declaration should be dependent upon the necessary scientific statistics to provide the information needed to manage the fisheries in question to the levels of maximum sustainable yield and would assume the right to assign priority or exclusive catch allocations to the coastal fishermen dependent upon the stocks for their livelihood. Allocations to foreign fleets could be determined through bilateral negotiations if at all feasible.

For the participating members of this hearing, I have perhaps a peculiar set of questions to ask. They are not applicable to conservation to the maximum sustainable yield, but they are more important to the taxpayer and to the voter.

Most of our New England seaports are in depressed areas with high unemployment, large percentages of minority groups as well as large groups of newly arrived immigrants with all the problems that beset

them as well as low educational level for our citizens, particularly our young people and yet not necessarily of their own making.

Let us take a look at the seaport of New Bedford for comparison purposes at this time. New Bedford for many years has ranked first in dollar value landings for the Atlantic coast and second or third in dollar landing valuation for the whole United States in the domestic seafood picture.

Because of the foreign invasion off our shores now that there is very little fish available to the American fisherman, what do we say to 1,200 fishermen, 175 boatowners and another 900 people employed in the processing plants to say nothing of those totally or partially employed in allied industry dependent on the domestic fishery on'y.

The domestic fishing industry in New Bedford alone was conservatively worth \$60 million to our port annually. Thirty-one cents out of each and every economic dollar comes from our waterfront fisheries. The dealers paid to fishermen and boatowners \$20 million annually until 1970 when it decreased to \$19,426,000. In 1971 the valuation went down to \$16,288,000, a decrease in payments to the fishermen and boatowners of \$3,138,000.

Can we say to these people and this industry that you must cease your fishing because of improper laws and enforcement procedures there is no fish for you to catch because we in the United States allow the foreign nations to catch all the products available even beyond the level of maximum sustainable yield.

I would like to take a few minutes to discuss what I sincerely believe is our responsibility as it regards the question of extended territorial rights, coastal States rights and protection of the fisheries whether they be commercial or sport fishing.

I strongly believe it is our responsibility to come up with a new set of laws to protect the rights of the coastal States to regulate and manage the fishery resources off its shores; yes, perhaps even regardless of how many miles offshore they breed, live, and are eventually caught by American fishermen.

I must endorse and support the theory that everything out to the Continental Shelf belongs to the coastal States that those waters and shores border on because of the King James Charter granted on the 3d of November in the 18th year of his reign to the New England States in their infancy so many years ago.

International attorneys, our own Federal Government and most of its employees, however, do not favor or approve of this theory. Therefore, gentlemen, I must implore you, the Congress, to protect the fisheries and the rights of the coastal States and their fishermen and boatowners with a new set of laws acceptable to the world, but more important perhaps acceptable to our own U.S. State Department and the executive branch of our Federal Government.

I thank you for your patience for solving our problems.

Mr. CLARK. Thank you very much.

Mr. NICKERSON. Mr. Chairman, I have a couple of written statements in the back that are too long to read relative to the 200-mile limit.

Mr. CLARK. As I said, they will be part of the record if there are no objections.

Mr. NICKERSON. I thank you kindly; then, if you have any questions, I would answer them. I have some posters that I will leave. If anybody

in Stonington wants some more, if they send them, send me a card, I'll send them to them and they are very simple; says the reason the price of seafood is out of sight is because they are catching everything in sight; and then we have a picture of the various Soviet vessels, their size and number of crew.

Mr. CLARK. Mr. Nickerson, you talked about alternatives of the Law of the Sea Conference. Does that give a satisfactory result? What would you suggest as alternatives?

Mr. NICKERSON. I think the first alternative is to see if the foreign nations would take a voluntary moratorium on fishing in the Atlantic and the Pacific; if they don't, then I think it's up to Congress to develop some type of extended fisheries limit probably under the basis of an economic area and this way maybe the State Department will accept it.

Mr. CLARK. Are you speaking then in terms of subsidy?

Mr. NICKERSON. No, not necessarily; not unless a subsidy would be paid or a price support would be paid to the fishermen and boatowner if for some reason or other the dealer was not making a sufficient amount of money. I do not think we need a subsidy at this time.

Mr. CLARK. Mr. Tiernan.

Mr. TIERNAN. Thank you, Mr. Chairman. In what capacity do you serve?

Mr. NICKERSON. I represent—I represent 12 firms who purchase and process seafood that's landed in the Port of New Bedford.

Mr. TIERNAN. And you have your own company?

Mr. NICKERSON. I have been a commercial fisherman from 1936 to 1958, and then I think I was a little blessed because I left the boat and I became the head of a fishermen's union for about 6 years and then in future years, later, I went to management. I represent them as their representative.

Mr. TIERNAN. What union were you with?

Mr. NICKERSON. I was with the New Bedford Fishermen's Union and the Seafarers International Union of North America.

Mr. TIERNAN. Now, these figures that you give up until 1969, was that—I don't have a copy of it.

Mr. NICKERSON. Yes; for about 10 years, we have averaged payments to the fisherman and boatowner of \$20 million.

Mr. TIERNAN. Twenty million. And then they fell off in 1970 to \$19,421,000?

Mr. NICKERSON. Correct; \$3,138,000 in 1 year, and this—

Mr. TIERNAN. From 1970 to 1971?

Mr. NICKERSON. Correct, for lack of produce mainly.

Mr. TIERNAN. What do you deal with in seafood? What type of seafood do you deal in?

Mr. NICKERSON. We buy the ground fish—haddock, cod, flounders, and yellowtail which is our principal crop and sea scallops.

Mr. TIERNAN. You don't deal with lobsters at all?

Mr. NICKERSON. No, I do not. My people don't deal in lobsters.

Mr. TIERNAN. You said in your statement if for any reason the Law of the Sea Conference is postponed—maybe I'm wrong but your impression seemed to be that it is going to be postponed.

Mr. NICKERSON. I would be awfully surprised if the Law of the Sea did anything before the next 2 or 3 years. I would be very surprised if

it was not postponed next year and if the Law of the Sea was effective, I don't think anything would happen to protect the New England fishermen for at least 5 to 8 years.

Mr. TIERNAN. What do you think the Conference could do?

Mr. NICKERSON. I think other nations are going to force the State Department to increase our territorial limits.

Mr. TIERNAN. Do you favor a plan of permits for foreign vessels to fish in our waters if we do extend, say, to the Continental Shelf?

Mr. NICKERSON. I think it would have to go further than that. I think we would have to regulate the species that they would catch. In other words, I think the biggest thing is the Soviet policy and East Germans have a tendency to say that they are fishing for herring, mackerel, and other species; if they are fishing for those species, then I don't think they should use bottom tending nets which will pick up the cod, the haddock and the yellowtail flounder and the lobsters. I think they should be forced to use a midwater trawl which will only utilize one-half the ocean depth, whatever it is. I think it's a fallacy that some of our Government people continually say, "Well, yes, they are using midwater trawls catching herring and mackerel." There is no midwater trawl when you consider it 8 inches off the bottom.

Mr. TIERNAN. In your capacity, do you have a central location? Do you have more than one location where the fish is purchased?

Mr. NICKERSON. I represent 12 processers who have 12 businesses, yes.

Mr. TIERNAN. Twelve separate processers? Would they buy co-operatively or do they buy individually?

Mr. NICKERSON. No, no, highly competitive.

Mr. TIERNAN. Highly competitive?

Mr. NICKERSON. I think it is the only true competition that we have. I think there are other fishermen that don't agree. I really believe it's the truest competitive auction there is today in the fishermen's union.

Mr. TIERNAN. Do you buy fish other than that that is landed in New Bedford?

Mr. NICKERSON. We buy a tremendous amount of products from Rhode Island over the road by truck. We used to get quite a lot of—probably 20 Stonington, Conn., vessels and probably 20 Point Judith vessels used to come to our port before they were able to do better in their own port. Yes, we do buy, I would say, about \$3 or \$4 million over the road from Newport, R.I.

Mr. TIERNAN. From Rhode Island, Newport; where else?

Mr. NICKERSON. Newport.

Mr. TIERNAN. Just Newport?

Mr. NICKERSON. Mostly; once in a while, Point Judith.

Mr. TIERNAN. What type of product did you buy from Newport?

Mr. NICKERSON. Yellowtail flounder principally, but cod and haddock.

Mr. TIERNAN. When landing in New Bedford, is there a restriction on the size of yellowtail?

Mr. NICKERSON. Yes. There is a State law; no yellowtails under one-half pound.

Mr. TIERNAN. How about in Rhode Island?

Mr. NICKERSON. I do not think so.

Mr. TIERNAN. You don't think so. There has been some criticism of our own conservation practices by our fishing fleet. What do you have to say about that, if anything?

Mr. NICKERSON. I think it's a very difficult subject because when I was with the fishermen's union, we had a fairly good conservation program where we were not landing any fish under three-quarters of a pound of yellowtail flounders which is our principal crop; then, when we organized the Seafood Dealers Association 4 years ago, we refused to buy any fish under three-quarters and were paying mostly for 1 pound thinking this would help develop conservation but it's rather ridiculous to the American fisherman to be conserving the resource for the Soviet, the Pole, the East German; so, it's not too practical.

Mr. TIERNAN. So that the argument that we are not conserving the species applies to us also.

Mr. NICKERSON. To a minor degree because I think the average fisherman would not want to bring home fish under three-quarters of a pound and he is getting a quality price of perhaps 14 cents a pound, whereas, the Pole, the Soviet, East German doesn't have a place to sell his product; so, what does he do with his product that's smaller than we are catching? He probably uses it for fertilizer, fish meal or something else; whereas, if the product was left in the water, in another year or two, the fishermen of Stonington, Rhode Island, and Massachusetts would have a very good crop because it increases so much in size. When we say they don't have conservation, it's true because they are using a small mesh net to catch herring and that's what they should be restricted to.

Mr. TIERNAN. The gist of your statement was though if the request for a moratorium is denied—

Mr. NICKERSON. Yes.

Mr. TIERNAN (continuing). That we should move unilaterally?

Mr. NICKERSON. Then we should try, but I think we would—I think we made a declaration in Washington a couple weeks ago. We had a meeting of somewhere between 30 or 40 fishery people around the country including tuna and shrimp and we told the tuna fleet that if the Law of the Sea does not look practical, then we would have to go to you, the Congress, and ask for an extended fisheries limitation.

Mr. TIERNAN. Are there any other areas other than those that you have testified to that might be helpful to the committee such as insurance of the boatowners? Is this one of the problems they are having?

Mr. NICKERSON. The insurance is the biggest problem that a boatowner has and we would like to think that one of these days our Government would take so much of the risk out. In other words, let the fisherman pay the first \$50,000 perhaps and the Government take over; that you might consider it as a sort of a subsidy program. When you see all the farmer gets, this would be a mere pittance. I think the boatowners should have help with this insurance problem.

Mr. TIERNAN. Thank you very much.

Mr. CLARK. Mr. Steele.

Mr. STEELE. Mr. Nickerson, you cited foreign fleets as a reason why seafood prices are out of sight.

Mr. NICKERSON. Correct.

Mr. STEELE. Can you give the committee some example of how sea-food prices are out of sight? Let's take haddock, let's take herring, whatever you buy and give us an idea what the price is today versus 10 years ago, versus 5 years ago, versus 1 year ago.

Mr. NICKERSON. I think there are two problems here. The first one is that the consumer and particularly the buyer for the supermarket thinks fishery prices are out of sight. I personally believe that fishery prices are only coming into their own. I think percentage-wise, we are getting what we should get. I think for too many years an American fish was considered a poor man's dinner and it shouldn't be. You know, the surgeon general tells you don't smoke cigarettes and he spends a fortune telling you this, but here fish is the best thing that you can eat and nobody—you know, everybody complains about the price; so, representing the dealers, what we are worried about is that we are paying more money for the product today but we don't have the volume. Our business was predicated on large volume and small profit. I would like to see us paying the same type of prices to the fisherman but I would like to have a lot more product to sell and the main reason the product is as high as it is—let's take scallops, for example. Scallops the other day—sea scallops—\$2.65 a pound; in 1958, we started a consumer advertising program because scallops were about 35 cents a pound. Now, scallops has to be a gourmet situation. We think it's worth it but it's very difficult.

Mr. STEELE. Sea scallops were 35 cents a pound in 1968; today they are \$2.65 a pound?

Mr. NICKERSON. 1958.

Mr. STEELE. I beg your pardon.

Mr. NICKERSON. In 1958.

Mr. STEELE. 1958, 35 cents a pound; 1972, they are \$2.65 a pound today; what about other species?

Mr. NICKERSON. Well, you take yellowtail flounder. Yellowtail flounder was always underpriced, I think, because there were too many times in the year we bought it at 5 cents a pound. Now, we are very happy to pay 15 to 25.

Mr. STEELE. How much of this is attributable to foreign fishing fleets?

Mr. NICKERSON. Well—

Mr. STEELE. You kind of blurred the issue, I think. You point out it's about time the fisherman got what he deserved; at the same time, you are obviously deeply concerned—

Mr. NICKERSON. I am afraid, yes, I am afraid.

Mr. STEELE. Of the elimination of the species or at least that the continuing overfishing is also making it harder to catch the amount of fish you want to catch.

Mr. NICKERSON. I think you are asking me two different questions. I think we are reaching a consumer resistance situation because the price of the seafood in the market is too high. I think the fisherman himself would rather land more fish for a lesser price and be assured of a more stable price. Our price fluctuates too much; maybe today we would pay 20 cents for the fish in New Bedford as an average price; next week we might pay 30 cents; a week later, we might pay 15 because of the resistance. It's unfair. I think if we had a lot more product available, we could maintain a more stable price. We are

reaching a situation now where the consumer has to decide, "Do I buy seafood or do I buy hamburger?" for instance, and we are getting a lot of consumer resistance, but we are paying this because the fishermen and the boatowners are taking a lot more man-hours to catch a hell of a lot less fish because the Soviets and the Germans have taken what's there.

Mr. STEELE. Would you say the Soviet fleets and the foreign fishing fleets are directly responsible for higher fish prices in the United States today?

Mr. NICKERSON. I would say they are directly higher. The higher price is directly responsible only because of scarcity of product, yes, absolutely.

Mr. STEELE. Could you give me an example, for example, of sea scallops today at \$2.65 a pound? I don't know what to measure that against; 1958 is a long time ago.

Mr. NICKERSON. You can't blame the Soviets for that; that's the Canadians and U.S. fishermen—

Mr. STEELE. Canadians and U.S. fishermen?

Mr. NICKERSON. Because of lack of conservation.

Mr. STEELE. Can we get a concrete example of that?

Mr. NICKERSON. We'll take haddock. Haddock normally, before the foreign fleets were here, was selling probably on an average on an annual basis of 15 cents a pound. Today I'll be very happy to pay 45 any day in the week if I could get it.

Mr. STEELE. You would say that the price is up two times again, three times again, because of the foreign fishing fleets?

Mr. NICKERSON. In 1965 the Soviets cleaned out almost all the haddock on the Atlantic seaboard.

Mr. STEELE. In 1965 haddock was 15 cents a pound; today, 1972, it's 45 cents a pound.

Mr. NICKERSON. I'd say in 1965 the Soviets cleaned out almost all the haddock on the Atlantic seaboard in one fell swoop. There isn't any haddock today.

Mr. STEELE. So, it's hitting the American consumer in his pocketbook, in other words?

Mr. NICKERSON. Yes; it is.

Mr. STEELE. You know, you mentioned the size of the mesh nets. We haven't really gone into this, sir. Can you explain to the committee exactly what the law is on size of mesh nets today and whether or not that law is being observed?

Mr. NICKERSON. I think that your Government people will tell you that the Soviets and the other nationalities are using the legal size of nets for the product that they are catching which supposedly is herring, so they would be using about the size of the net in the lobster pot in front of you or smaller. This is what they use for catching herring and mackerel. But they are not fishing; they are putting that net on the bottom and catching everything that comes into it—

Mr. STEELE. I see.

Mr. NICKERSON. That's why your fishermen don't have any fish today.

Mr. STEELE. What can we do about that?

Mr. NICKERSON. You take the net right in front of me. We use a net with a mesh at least an inch and a quarter larger than the squares you see there.

Mr. STEELE. Than the squares the Russians are using?

Mr. NICKERSON. Yes.

Mr. STEELE. Do you have examples of the actual net that the Russians are using?

Mr. NICKERSON. Sure. We catch them. We pick them up every now and then. We even pick them up with the liner and cord end. In other words, the mesh and the cord would be about that size. They get a little greedier because they need to make a little oil and fertilizer. They will put smaller nets inside.

Mr. STEELE. When you see that, don't you want to lodge a complaint?

Mr. NICKERSON. There isn't a complaint because ICNAF controls the mesh size offshore. It is legal because they are only supposed to catch haddock, yellowtail flounder, and codfish as incidental, but they catch as much incidentals as we catch all the year.

Mr. STEELE. Do we have any example of those nets here?

Mr. NICKERSON. No; but I am sure a lot of people in Stonington can provide you; if they can't, I will send you some.

Mr. STEELE. There is one other thing about the herring. What is the situation today off the New England coast versus the North Sea, et cetera, as far as herring is concerned? I have heard different conflicting stories on it.

Mr. NICKERSON. I think the problem here is—and I am particularly concerned about the sport fishermen. We used to have a lot of herring roe in spawn on the Atlantic—in the Atlantic rather. We don't have it much more because we are catching all the herring in sight; not us, of course—the Soviets, the Poles, and the Germans—but I think the biggest thing that happens here is that the game fish that the sport fisherman wants so badly, they follow the herring; also, the haddock and the cod. They want the herring spawn and roe. There is not as much herring on Georges Bank as much as a year ago.

I think the reason you have seen so many boats this year is, I think, the Poles, the Soviets, and the Germans have quotas that they have to catch, and because they are spending more man-hours to catch less fish as we are, they are throwing more boats into the breach thinking perhaps our Congress will come up with something to chase them away and I think they are making a genuine effort to sweep the ocean this year, last year, and next year.

Mr. STEELE. Thank you.

Mr. CLARK. Thank you very much.

Mr. NICKERSON. I will leave the posters here if anybody wants; if they want any, they can drop me a line.

Mr. CLARK. Our next witness is Robert Jones, Connecticut Environmental Protection Agency, Director Marine Region, Hartford, Conn.

**STATEMENT OF ROBERT JONES, DIRECTOR, MARINE REGION,  
CONNECTICUT ENVIRONMENTAL PROTECTION AGENCY, HART-  
FORD, CONN.**

Mr. JONES. Thank you, Mr. Chairman, members of the committee. I am director, marine region, for the Connecticut Environmental Protection Agency, and I have the statement from our commissioner of environmental protection, Dan W. Lufkin.

The Connecticut Department of Environmental Protection is charged with the protection and management of the marine fisheries

resources of Connecticut. Although Connecticut does not have a boundary on the contiguous zone, its residents do have access to the high seas and have historically harvested fish in the sea in significant quantities. Along with these fishermen from other Atlantic coast States, our residents have witnessed a great decline in commercial fisheries for a variety of reasons. Significant among these is competition from the foreign fleets. From the peak years in the early 1930's, landings in Connecticut of important commercial species such as cod, haddock, and flounder, have fallen to disastrous lows in the 1970's. For example, Connecticut landings of haddock have fallen from 48 million pounds in 1930 to 50,000 pounds in 1950 and finally to basically zero in 1970.

Biological examination shows overfishing to be a major cause of population declines which, in turn, causes the harvesting of these species to become uneconomical for our fishermen. It seems apparent from recent negotiations that international agreement cannot stop the continued depletion of these stocks and unilateral action may be necessary in order to save this resource from total collapse.

Also of concern to Connecticut's fishermen is the potentially disastrous pressure being placed upon the American lobster. The fate of the inshore lobster population is now in doubt in the Gulf of Maine and this resource is probably in jeopardy in other portions of the lobsters' range including Long Island Sound. The Coastal States, in cooperation with the National Marine Fisheries Service, are now attempting to devise and implement a management plan to save the lobster industry in these areas.

It is apparent that with the present rate of growth the offshore lobster fishery must be regulated to save it from similar economic and biological collapse. Adequate and effective regulations and management of this offshore fishery can only come when ownership of this resource rests with the United States. We, therefore, recommend that this ownership be accomplished by declaring the American lobster a creature of the Continental Shelf.

A discussion of high seas fisheries problems would not be complete without mention of the Atlantic salmon and other intensively managed anadromous species. During a greater portion of their life cycle, these fish are vulnerable to high seas exploitation by foreign fishermen from nations which do not contribute to their propagation or management.

Connecticut is presently involved in an ambitious program to restore Atlantic salmon to the Connecticut River basin. This cooperative effort will be costly to the residents of the Connecticut River basin States and may be dependent on the protection of juvenile salmon while they are away from our shores. Every effort must be made to control, if not eliminate, the indiscriminate exploitation of these fish on the high seas. In addition, Canadian authorities are to be commended for their ongoing efforts to reduce the commercial harvest of salmon from netting along their shores and estuarial areas.

Other valuable sport and commercial anadromous species may also be endangered by an expanding offshore fishery. Although the magnitude of the catch is uncertain, recent returns from foreign fishermen of tags implanted in American shad in the Connecticut River indicate a substantial catch of this species being taken during their migration in the North Atlantic.

The answers to these and other problems are undoubtedly difficult but essential to the viability of our commercial fishery and to the future of our fishery resources. We, therefore, urge active enforcement of existing regulations, enactment of additional regulations, and, if necessary, sanctions and strong negotiation within the framework of present international treaty organizations in order to protect invaluable resources and the natural balance. Dan. W. Lufkin, Commissioner.

Mr. CLARK. Thank you very much.

Mr. TIERNAN. I have no questions.

Mr. CLARK. Mr. Steele.

Mr. STEELE. Yes. I've got one question, Mr. Chairman. Mr. Jones, Arthur W. Brownell, who is the Commissioner of the Massachusetts Department of Natural Resources, recently made the following statement. He said, "It is evident that some form of management of New England's offshore waters is imperative; to achieve this as soon as possible, the Department of Natural Resources recommends that the Congress of the United States pass emergency legislation temporarily extending fisheries jurisdiction over these waters. Extending fisheries jurisdiction would not involve any territorial extension of 100, 200 miles offshore. It is realized such an approach would only invite reciprocal territorial extension on the part of other nations closing off areas such as the Mediterranean and yielding a little more than equalization of the disadvantaged plus hard feelings. Extended fisheries jurisdiction, however, would enable the United States to exert effective management over the area." I wonder how the Connecticut department feels about this recommendation.

Mr. JONES. Mr. Steele, I think first I must say I can't comment for the Commissioner in this regard of course. It would be my own personal feelings and I should also point out that our organization, our agency, is somewhat less than a year old at this time in its present state. We are presently involved in trying to expand our marine interests with an expanded staff and have had relatively little time to become deeply involved in these things; so this becomes very difficult for us, for me, to address myself to you at this point in time.

Mr. STEELE. We are discussing offshore fishing. What about inshore fishing? There have been a number of questions from people in the audience during the break about fishing in Long Island Sound itself. What do you see the future of fishing in Long Island Sound to be?

Mr. JONES. From a commercial-sport standpoint?

Mr. STEELE. From a commercial point of view, yes.

Mr. JONES. I think one of the points made earlier by one of our commercial fishermen is well taken in that the industry is obviously being phased out for a number of reasons. Certainly, a portion of this reason is the fact that fishing has become uneconomical for a variety of reasons and particularly from the decline of population of fish which makes the actual effort uneconomical. Of course, there is considerable competition with the sport fishermen, and this further tends to complicate the economic viability of the commercial harvest.

Mr. STEELE. Thank you.

Mr. CLARK. Thank you, sir.

Our next witness is Dick Allen and Ernie Abbott, Atlantic Offshore Fish & Lobster Association. For the record, please state your name.

STATEMENT OF RICHARD ALLEN, EXECUTIVE SECRETARY,  
ATLANTIC OFFSHORE FISH AND LOBSTER ASSOCIATION

Mr. ALLEN. My name is Richard Allen. I am the executive secretary of the Atlantic Offshore Fish & Lobster Association.

Gentlemen, I would like to thank you for giving those of us concerned with the east coast fishing industry the opportunity to present our problems to you. I would hope that this hearing is the beginning of a new congressional effort to serve the vital interest of the United States in maintaining a viable fishing industry.

Since many of the specific problems of the area have been dealt with by previous witnesses, I hope to offer some background on the basic causes of the problems and possible remedies to them.

As we have seen, the fishing effort after World War II was expanded considerably since many of the traditional grounds that the Europeans have fished on were already overfished. This has brought us many of the problems that we face in the Northwest Atlantic today.

The United States, after the war, however, made no effort to increase its posture as a fishing nation. It is evident from the content of the Truman proclamation of 1945 that the problems of resource depletion which plague us today were not unexpected, even at that early date. Little effective action was taken, however, to prevent the destructive exploitation envisioned by the Truman proclamation.

Again, in 1958, international law provided the nations of the world with an acceptable procedure for taking action to protect their coastal fisheries. The United States, however, faced with the outright destruction of many of its resources, has never seen fit to make use of article 7 of the Geneva Convention on fishing and conservation of the living resources of the high seas.

In fact, no effective action has been taken to control the burgeoning foreign fishing effort which has severely depleted the stocks of fish which supported the east coast fishing industry. We are now at a point where our own scientists tell us, and I quote, "The harvest of fish seems now to be beyond the total potential sustainable production and yet demand and fishing fleets are increasing." I would like to emphasize that the total production cannot sustain the effort that is being put into the fishery now. The limit was reached in 1965. The effort that's been introduced after that is all excess effort; yet our statesmen and our legislators have so far been unable to deal with this situation. The American fisherman has lost all faith in the power of the Federal Government to protect his interests.

As I traveled around and talked to the fishermen on the docks. I really get a deep feeling of disappointment when I hear the fishermen just completely at their wits' end as to how to control the situation. At this time, matters are further complicated by the current negotiations on the new Law of the Sea Convention which will include fisheries jurisdiction. It appears that Mr. Nickerson pointed out coastal fisheries will receive some protection as a result of these negotiations, but not in time to avert the emergency that now faces the east coast of the United States.

For these reasons, it is imperative that the United States now move ahead rapidly on all fronts which can lead to a sharp reduction in foreign fishing effort on overexploited coastal fisheries. There are many

ways that this can be accomplished, and I think in most of these things, they are comparable to what Mr. Nickerson has suggested.

The United States can assert its rights as a coastal nation and demand that the other member nations of ICNAF, the International Commission for the Northwest Atlantic Fisheries, respect its rights to secure an adequate harvest from the area through proper conservation and allocation measures, including a limitation on total foreign fishing effort.

In the face of the continued failure of ICNAF to provide proper management, the United States can take action to manage its coastal fisheries in accord with its current international position on fisheries jurisdiction.

We believe that the species approach that has been put forth by the United States is a workable approach. The problem is that it can't be implemented through international measures in time to help us. We feel that it can be implemented by the United States and help to solve our problems.

The United States must make it clear that no claims to traditional fishing will be considered for foreign effort which was introduced after the stock had reached their maximum sustainable yield. Since all nations have had the responsibility to fish with due regard for conservation, fishing effort exerted without such regard cannot be considered legitimate.

Certain species, such as the northern lobster, can be brought under exclusive U.S. control within the framework of existing authorities such as the Truman proclamation and the Geneva Convention.

In regard to the threats of the lobster resource and possible Soviet-French interest in the resource, I point out that the blue sheet, the Market News Report, has an article on Soviet spying lobster fishery in the Indian Ocean.

Now, it seems to me if they are interested in the big lobster fishery in the Indian Ocean, there is no reason why they wouldn't be interested in our own lobster resources in our own coast.

The appearance of these French trawlers in the area—I understand that the market for lobsters in France is quite strong. If they come across our lobster resources, I think it would be worthwhile for them to take the lobsters home with them as well as the squid that they are purported to be fishing for.

I would like to point out that contrary to characterizations of the U.S. fishing industry as a fragmented group which I admit it has been in the past, that representatives of all the major segments of the U.S. fishing industry meeting as the National Fisheries Policy Conference endorsed such measures as I have described above to protect coastal fisheries. I believe it is now the responsibility of the U.S. Government to see that these measures are carried out.

In addition to the general measures for dealing with the basic problem which I have outlined above, I would like to touch on some specific areas of immediate concern to our association.

As we have seen in the past few years, the foreign fleets off our shores have no regard for our resources, our fishing vessels, or our fishing gear. Rigorous enforcement of the existing rules and regulations is needed to correct this situation. An effective enforcement capability will become increasingly important as U.S. control over coastal fisheries is broadened.

The Coast Guard must take the lead in developing such a system. We have a problem now that the fishermen have lost faith in the power of the Federal Government to deal with the situation so they often don't take the time and the effort to cooperate as they probably should with the Coast Guard in reporting many of these things because they feel it will do no good. We heard that before today. They also feel that they are being enforced to a large extent while the foreign fleets have no enforcement; so when you talk about conservation with the U.S. fishermen, they say, "Why should we conserve if the other fleets are going to get it?" It doesn't make any sense. This is the problem with the common property resource. It makes no sense for our fishermen to not catch the fish today if they are going to be scooped up by the foreigners the next day.

The damage caused to U.S. fishing vessels and gear has been a primary concern of our association since its formation. Due to the international complexities involved in recovering claims for such damage, the Federal Government should take steps both to prevent this damage and to compensate U.S. fishermen for the losses they sustain.

These are some of the issues which Congress and individual legislators must deal with to show the working fisherman that the American system of government can be responsive to his needs. I would hope that this hearing is a strong start in that direction. Thank you.

Mr. CLARK. Dick, I would like to ask you two questions. Have you been satisfied with the performance of the Coast Guard with respect to this problem?

Mr. ALLEN. We have been satisfied with the cooperation that the Coast Guard has given us, but we feel that something more has to be done. There has to be more vessels. We have to develop the communication system that we can get the reports to them without the foreign vessels knowing that we are reporting it—things that we run into—our fishermen will be out; they will see a violation. There will be bad nights. The Coast Guard's capability for flights is limited at night so they—the fisherman feels if he does try to report a violation, the foreign boats will first monitor his communication so they can leave the area; if he is the only American boat there, they may take him as they got out. They may run right over him and no one will hear from him again and he knows that the Coast Guard can't respond at night so there is no sense in bothering reporting; so if we could increase some of these capabilities, it would be a big help.

Mr. CLARK. How many members do you have in your association?

Mr. ALLEN. Right now—

Mr. CLARK. Would you describe the makeup of your membership?

Mr. ALLEN. Yes. We've got 42 members right now. We are a relatively new association formed last spring and we have different categories of membership. We have an associate member category which Mr. Abbott falls into for the dealers—dealers, suppliers, and that kind of thing. Our active voting membership is comprised first of offshore fishermen and, second, of inshore fishermen who feel that our aims will serve many of their interests also and I think as we carry on our efforts, we have seen quite a response both from fishermen and the Government agencies involved.

Mr. CLARK. Mr. Tiernan.

Mr. TIERNAN. Thank you, Mr. Chairman, Mr. Allen. Are we going to have Mr. Abbott?

Mr. CLARK. Yes.

Mr. TIERNAN. You are a fisherman yourself?

Mr. ALLEN. Yes, I am.

Mr. TIERNAN. The two points that you make for immediate steps to be taken, one really requires executive action by either the Coast Guard or other Government agencies? You say "enforcement"; do you think there should be stronger enforcement?

Mr. ALLEN. Right.

Mr. TIERNAN. There is a distinction here. In other words, we can put the laws on the book but if they are not enforced, if there isn't some capacity to carry out that law, it is not going to do much good, is it?

Mr. ALLEN. Correct.

Mr. TIERNAN. The other point is with regard to equipment and gear, it is the same or similar means that are presently being provided for claims by the State Department; is that correct?

Mr. ALLEN. Right.

Mr. TIERNAN. Do you know of any of the losses that have been or any members of your association that have sustained losses that have been compensated?

Mr. ALLEN. No.

Mr. TIERNAN. Do you know of any members that have had losses and filed claims?

Mr. ALLEN. Actually, filing claims, I don't think very many have got to that stage because they are in the same situation where they feel it is not worth the time and effort, the complexities involved. They would rather be out fishing, trying to make up their loss on the ground than they would sitting back at a desk getting the evidence which is difficult to come by and actually processing a claim. We are working in that direction trying to get legal assistance to do that type of thing but as yet, nothing has been done in that area.

Mr. TIERNAN. Even if we were to pass the Kennedy amendment, there would have to be a mechanism set up for filing of claims and verification of those claims in order to safeguard the taxpayers' dollars so that eventually the fisherman would still have to go through this redtape more or less to obtain the funds; wouldn't he?

Mr. ALLEN. Yes; but, hopefully, if the Government was faced with the prospect of having to pay out this money, they would set up a procedure that would make this a little more simple and make sure the Coast Guard try to get more definite evidence and that type of thing.

Mr. TIERNAN. If we could eliminate the foreign fleets from the areas where our coastal fishermen are fishing today, we would not need to have legislation for equipment and gears, would we?

Mr. ALLEN. I would say that would be correct.

Mr. TIERNAN. So that again, we get to the crux of the matter, it seems to me we have within the framework of the present, authority to go ahead without additional legislation. What we are really doing is trying to make up for obvious lack of enforcement. Also, I think the policy that we maintained because of the Defense Department and State Department's refusal to recognize the extension of our coastal areas resulted in the fact, as long as they are not going to do that, we as

representatives of the people affected are going to try to get legislation through. Once we try to do that, whatever administration it is, whether it's Republican administration or Democratic administration, they are going to have to be faced with the State Department's position in opposition to it and the Defense Department's position in opposition to it so we are taking on the Defense Department in that type of a situation. You see the problem there.

Mr. ALLEN. Can I respond to that?

Mr. TIERNAN. Sure, go ahead.

Mr. ALLEN. This is one thing that I see the species approach and the unified industry support for it is overcoming. The species approach does not have to conflict with Defense Department interests or State Department interests. It accomplishes the same goals as it is now written as a 200-mile limit would but rather than saying we take control of everything within 200 miles, we just say we take control of everything that's out there except tuna and the tuna people are happy with this. The shrimp people have faced up to the fact that they've got to accept it and we are all behind it.

Now, the problem is whether this will implement in time and, as I see it, one of the interim measures that we can take is to implement the species approach unilaterally and there should be no reason for the Defense or the State to rebut this.

Mr. TIERNAN. To go back to my original question, there is no need for legislation to do that though?

Mr. ALLEN. To implement the species approach—I believe there would be.

Mr. TIERNAN. I think that you will find on the basis of the conference of 1958 certainly wide opinion. We could do that right now.

Mr. ALLEN. We could take certain measures under that that have never been considered certainly.

Mr. TIERNAN. Thank you.

Mr. CLARK. Mr. Steele.

Mr. STEELE. Yes. Does Mr. Abbott have a separate presentation?

Mr. ABBOTT. Yes.

Mr. STEELE. You do?

Mr. ABBOTT. Yes.

Mr. STEELE. Mr. Allen, the Canadians have faced not a dissimilar problem to us and they are responding to it by beginning to close some of their fishing waters; is that not correct?

Mr. ALLEN. Yes, I believe.

Mr. STEELE. Can you explain exactly what they are doing and why we couldn't do some of the things they are doing?

Mr. ALLEN. I am not too familiar with these specific actions of the Canadians. I am aware that they started drawing straight baselines in some areas as a means to measuring their territorial sea and their fisheries zones; rather than taking the low watermark along the entire coast, they will go from a point to a point and measure out from there, so where you might have a deep indentation in the coast normally foreign boats could come into, they will draw a line across it and measure out from there and say, "This is now our waters." and we have had some conflicts with them in different areas where U.S. fishermen have been used to fish.

Mr. STEELE. How far out might they draw that line?

Mr. ALLEN. I think this would depend on a specific situation.

Mr. STEELE. This summer, for example, what is the farthest out they have drawn a line?

Mr. ALLEN. In fisheries, I am not aware of how much area they have closed off. They have enforced an Arctic pollution zone in the same manner—50 miles, I believe; that was unilateral action taken on their part.

Mr. STEELE. Now, just so that I fully understand you, there are a number of options that have been suggested here today. One is simply to rely on the Law of the Sea Conference; another is the voluntary moratorium approach; another is to temporarily extend our fisheries jurisdiction; another is the permit system—some of these could be worked together obviously—another is grant coastal States preference in traditional fisheries, but permit other nations certain rights to utilize some of the stock; and then, finally, one that isn't really an alternative, but another suggestion has been to increase the Coast Guard's capability. There has been very little criticism here of the Coast Guard's response; some have felt the Coast Guard doesn't have enough equipment or manpower to do the job, but I wonder where you would place these various approaches and what you yourself rate as the two most important approaches that the United States attempt to take in the next 6 to 12 months. What is essential in the next 6 to 12 months?

Mr. ALLEN. On the overall problem of resource protection, I would say that the reduction of effort on the ground is the primary concern. The means of reducing the effort can either be voluntarily by the foreign nations; the United States can, as Mr. Nickerson said, request the foreign nations cut back their effort. I have made the suggestion that it be to at least pre-1965 levels before we went over the peak of maximum sustainable yield. I don't have much hope for that approach. I think we have to rely on unilateral action and the type of unilateral action which I see and I think what Mr. Nickerson supported and in which we have the support of the rest of the industry is an implementation of the species approach; and, second, specifically on the lobsters, I think as we try to manage the lobster and try to control U.S. fishermen, we are going to run into the same problem or they are going to say, "Well, what good does it do to control us and limit our catches if the foreigners can take the lobsters?" I think we have to get control over the lobster resource either by declaring it a creature of the shelf or possibly using the Truman proclamation because so far it is a fishery that has been developed exclusively by U.S. fishermen, and if it is at its full utilization, it should be helped at that point for the U.S. fishermen and this would fall under the provisions of the Truman proclamation if our Government was willing to carry on with those measures.

Mr. STEELE. Thank you.

Mr. CLARK. Thank you very much, Dick. Ernie, give us some of your sage advice.

#### STATEMENT OF ERNEST G. ABBOTT, LOBSTER DEALER

Mr. ABBOTT. I am Ernest G. Abbott. I am a lobster dealer.

I started with a fishing boat—feel very close to the entire fishing industry. May I suggest that all I can speak of is lobsters, the true americanus homarus, the true American lobster, from the Magdalens

to Virginia. I think definitely, I say this with no reservation, we are going to have an offshore lobster industry which is essential to the inshore fishermen. Without the offshore fishermen, we cannot sustain our production and our marketing during the off months when our inshore fishermen do not fish; therefore, the offshore habitat, the inshore habitat, are a great part of the economy of the marketing of the lobster.

First of all, I suggest with all due respect that it be international including the Canadian Government which is the maritimes from the Magdalens to the Virginias. Everywhere in the North Atlantic where the true americanus homarus is caught, our Federal Government should control the size, the catch, the closed seasons and the protection of the egg-bearing lobster. This can't be any longer a half—I shouldn't use the word—a half measure.

We have the State of Rhode Island, the beautiful little Rhody who has three and a sixteenth measure. I have seven trawlers from North Carolina, Pamlico Bay, fishing for me 3 years. We practically started the jumbo lobster business in this area. If they landed at my docks in Noank, they were seized by the conservation officers for illegal lobster because all the other basic areas in the lobster industry are three and three-sixteenths. First of all, let's clean up our own house, lobstermen. Let's have one standard measure from the Magdalens to Virginia.

Virginia, now they can take a 2-inch lobster. They can take an egg-bearing lobster. They can take anything; yet, our fishermen, if they land at my docks, there is a question, a legal question, with a calibration of three-sixteenths. The conservation men harass us. These men need protection.

I am surprised that the environmental lads who talked here today talked about the lobster in the sound. For over 150 years, Noank has been one of the greatest producing areas of the lobster in the entire world. Two Macks from Boston, two Macks from New York used to pick up from Wilbourn and the various buyers in this area; that's why I built the first lobster pound in New England with circulating salt water tanks. Sixty fathoms is the greatest place for lobster production. They can talk all they want about Maine, with due respect, but Connecticut produces tremendous quantities of lobsters.

What we need is the Federal Government to come in in combination with the efforts of the States and set an international law which will protect the crustaceans right to the shelf, and if you want to allow these foreign vessels to fish the lobsters, make them live under the same rules my boats have to live under. You can't expect these men to throw over short lobsters and the Japanese and the Ruskies right next to them hauling them up.

A VOICE. And the Rhode Islanders.

Mr. ABBOTT. Right. Several of my trawlers would have a half a bag of shells and they were not the full lobster. The body and the claws were discarded. The tails were kept to go back into Russia and probably sent back here through Holland. Please, I beg you, this is crucial! These men have fought all their lives. They have never asked the Government for a thing. This is one time you can open the door for them.

I say put an extension to the gulf to the shelf. Protect our fishermen. Do something for them and get Canada to come in on this international agreement.

The maritimes, the great producers, they produce about 43 percent of all the lobsters in the country. We need them too. Get them to come in with us from the Magdalens to Virginia. Make one standard law whether it be an American fisherman or a Russian or a Japanese and if they don't want to live up to our rules, then push them off beyond the shelf and again, let our Coast Guard patrol planes patrol the zones.

You heard Captain Berg this morning tell you he goes out at sunrise and the Russian trawlers are moving off the zones that they are supposed to be restricted. They are supposed to be prevented from fishing there. We don't have the equipment out there. You need vessels. You need planes.

We spend millions of dollars everywhere else in the world. It's about time we took care of our own people. Thank you. (Applause.)

Mr. CLARK. Thank you very much, Ernie. Mr. Tiernan, do you have a question?

Mr. TIERNAN. Mr. Abbott, you indicated that you were a fisherman before you went into the wholesale lobster business, is that correct?

Mr. ABBOTT. I started with a 27-foot boat, the *Fishhook*, right.

Mr. TIERNAN. What kind of fishing do you do?

Mr. ABBOTT. Lobster fishing.

Mr. TIERNAN. Lobster fish in the sound?

Mr. ABBOTT. In the sound around Noank, Long Point where I do have a little bit of knowledge about the fishing.

Mr. TIERNAN. Now, this past year what has been your experience with landings of lobsters? Have you had a plentiful supply of lobsters?

Mr. ABBOTT. My plant has not been without lobsters in the past 15 years.

Mr. TIERNAN. And these all produced by lobstermen from in around this area of Stonington?

Mr. ABBOTT. We have about 28 local boats, what we call day boats or inshore boats. I worked very closely with the Stonington co-op with their their offshore trawlers. Many of the trawlers formerly fished for me in the old days. We worked in this area from inshore to 150 miles offshore with the trawlers.

Mr. TIERNAN. Now, the point you raised about the conservation officers harassing the boatmen that bring in the lobsters because they might be smaller than  $3\frac{3}{16}$ , is that correct?

Mr. ABBOTT. It isn't a question of their being smaller than  $3\frac{3}{16}$ . Our conservation officers insist that you force back, measure over the back of the lobster to the point where he hangs in the measure. If you want to go to calibration, one one-thousandth, I say go after the short lobster operators. My fishermen are working very hard to obliterate this type of thing. They know what it means to them. We can't control all of it.

Mr. TIERNAN. Is that the State law in Connecticut?

Mr. ABBOTT. Right;  $\frac{3}{16}$ .

Mr. TIERNAN. The conservation officer has to enforce that law which is given to them by the State of Connecticut.

Mr. ABBOTT. Very definitely, but there is nothing in the law that says that the lobster has to hang in the measure; it says  $3\frac{3}{16}$  and I have fishermen who were machinists who have calibrated measures who will

argue in court over there on these things. In other words, there has to be a line of discretion for every law, sir.

Mr. TIERNAN. Well, do the conservation officers charge these men with the violation of the standard or what?

Mr. ABBOTT. Definitely, they will.

Mr. TIERNAN. And then they go to court?

Mr. ABBOTT. I have put over \$10,000 worth of lobsters over in 30 years, egg-bearing lobsters which hatch off in my tanks, and so forth.

Mr. TIERNAN. Now, I am not speaking about egg-bearing lobsters; I am speaking about undersize.

Mr. ABBOTT. If we find undersize—we handle thousands and thousands of pounds of lobsters. It's very difficult. You could lay seven lobsters on the table here and you would lose your life betting what was a short. We cannot check every single lobster. We depend on our fishermen.

Now, if it gets by them and it's in my tanks, I am responsible for it, sir.

Mr. TIERNAN. Well, there is no other way they can enforce it?

Mr. ABBOTT. I think they could use a little bit of discretion.

Mr. TIERNAN. Well, you know that's always a difficult thing.

Mr. ABBOTT. I realize that, sir.

Mr. TIERNAN. The enforcement officer has to enforce it.

Mr. ABBOTT. Righto. The State of Connecticut formerly made a tag.

Mr. TIERNAN. Let me ask you this. Does the State of Connecticut have a law with regard to egg-bearing lobsters?

Mr. ABBOTT. Yes, indeed.

Mr. TIERNAN. And so for the State of Rhode Island?

Mr. ABBOTT. Definitely.

Mr. TIERNAN. Why does the State of Connecticut require  $3\frac{3}{16}$  while the State of Rhode Island requires  $3\frac{1}{16}$ ?

Mr. ABBOTT. Because about 10 years ago, we found the  $3\frac{1}{16}$  lobster which weighs approximately  $\frac{7}{8}$  of a pound did not make a good plate lobster. It also glutted the market because these are the  $4\frac{1}{2}$ - to 5-year-old lobsters and they come in in tremendous quantities in proportion and so all the dealers and all the people involved in the lobster industry which includes the entire maritime provinces, Maine, Massachusetts, New York, and Connecticut, agree that  $3\frac{3}{16}$  was more economical; perhaps also gave the female another year to reproduce for potential thousands of baby fry.

Mr. TIERNAN. You are familiar with Dr. Saler at the University of Rhode Island?

Mr. ABBOTT. No; I am not, sir.

Mr. TIERNAN. Well, there certainly has not been any effort to change the Rhode Island law as being a bad conservation effort; has there?

Mr. ABBOTT. It isn't a bad conservation effort, Congressman. At this point here let me just say from this point; my vessels are fishing on the ledge off of Cox's. They can pick up \$100 worth of lobsters a day but they are my boats; so if they land at my place, they are illegal. They can't set up two buyers so therefore what are they going to do? There is a tendency toward creating a short market lobster potential.

Mr. TIERNAN. I am well aware of the difference between the regulations but we have had testimony from Dr. Saler substantiating the fact

that the  $3\frac{1}{16}$  is the conservation measure that meets the standards that he thinks are necessary.

Mr. ABBOTT. For productive potential?

Mr. TIERNAN. Yes.

Mr. ABBOTT. Definitely, but now you come to an economic point.

Mr. TIERNAN. We really shouldn't spend that much time on the matter.

Mr. ABBOTT. I think this is one of the most important points.

Mr. TIERNAN. Let me ask you, Mr. Abbott. How many lobsters—do you keep a record of how many lobsters you took in this year and sold and how many last year? Has it been going up or going down, the number of lobsters you purchased and sold?

Mr. ABBOTT. May I go back just a trifle?

Mr. TIERNAN. Sure.

Mr. ABBOTT. When I started 30 years ago, Durwood fishermen—Durwood, Maine was one of my high line fishermen—landed three thousand pounds in three ties 1 day.

Mr. TIERNAN. Three thousand pounds?

Mr. ABBOTT. This 1 day, one fisherman—he was a highliner. It peaked off down gradually until finally we had seven buyers in Maine and seven buyers in the Canadian Provinces, Prince Edward Island, and Nova Scotia. In the past 15 years, the sound has come back to a point where we don't buy one single lobster outside of the State of Connecticut except with the exception of trawlers landing in Point Judith.

Mr. TIERNAN. That doesn't answer my question. I said how many lobsters did you buy in the year 1971?

Mr. ABBOTT. We go by poundage.

Mr. TIERNAN. How many pounds did you buy?

Mr. ABBOTT. I'd say roughly in 1971, we probably bought about 500,000 pounds.

Mr. TIERNAN. Five hundred thousand pounds? How about 1970?

Mr. ABBOTT. My figures almost remain constant.

Mr. TIERNAN. Since when?

Mr. ABBOTT. Past 15 years.

Mr. TIERNAN. For 15 years, you've maintained that same level?

Mr. ABBOTT. Pretty close.

Mr. TIERNAN. And you say there has been no shortage?

Mr. ABBOTT. Not in my plant, sir.

Mr. TIERNAN. Wasn't it true though this year the price of lobster went up because it was so difficult for the lobstermen to go out in the winter, the waters were much colder than had been experienced in previous years?

Mr. ABBOTT. I'll agree that the offshore trap boats and trawlers were getting poor catches probably during the height of the season but they are now landing some very fancy catches—5,000, 7,000.

Mr. TIERNAN. Now, but the point is, you rely not on the offshore lobstermen.

Mr. ABBOTT. Oh, definitely.

Mr. TIERNAN. Oh, you do?

Mr. ABBOTT. Oh, definitely.

Mr. TIERNAN. Didn't they have difficulty in getting the lobsters during the last year, or did they not? Maybe I've been misinformed.

Mr. ABBOTT. Well, the catch was unseasonable, I would say this. We are getting a heavy production now where usually you would of obtained it in June and July perhaps; in August, the offshore fish is no good anyway because they are all soft shells.

Mr. TIERNAN. How would you compare your own business with that of the gentleman that testified this morning, Mr. Gaziano?

Mr. ABBOTT. Well, he is a big entrepreneur; I am just a little fellow. [Laughter.]

Mr. TIERNAN. What relation—

Mr. ABBOTT. I have been in the business 30 years; Joe has been in it too. If he can stay 30 years, he is a good man, OK?

Mr. TIERNAN. That kind of evaded my question. [Laughter.]

He testified before our committee in Washington for the reasons the price of lobster was up because it was difficult for the fleet, the fishermen to go out and get them because of the severe winter; also, because the waters in the ocean were colder than usual and the lobsters were digging in a little bit more and moving about less. Do you have any experience with that, any comment about that?

Mr. ABBOTT. I'll let Joe's statements stand.

Mr. TIERNAN. OK. Thank you. No further questions.

Mr. CLARK. Mr. Steele.

Mr. STEELE. Thank you. First of all, I should have mentioned earlier to Mr. Allen—I'll mention to both of you, Mr. Allen and Mr. Abbott—it was the initiative of your new association that is in large measure responsible for these hearings here today and I want to congratulate you on your initiative and on your new organization. Certainly you have our best wishes for success in your important undertaking.

Now, I am left somewhat uncertain by this testimony as to precisely what the impact and the effect of the increased foreign offshore finishing is and has been since 1965 on the New England lobster industry. What precisely has it been?

Mr. ABBOTT. They have hurt our offshore lobstering tremendously. Now, naturally they don't have any effect on the inshore lobster because they are not in here and the inshore lobster in my firm belief is a separate habitat from the offshore fish, but I do say this, when I had the trawlers returning, they were harassed. They would be on a range and two big vessels, gigantic vessels, would just make them move off of their ranges. They just kept coming. You heard stories told here from Berg; you heard stories from Gaziano; you heard stories from these men telling you how these vessels—we have rowboats in comparison. They have yachts and we have rowboats; so they have hurt our offshore fishing industry from the lobster point of view because they have caught—we have no idea how many they have caught.

Mr. STEELE. But you are receiving lobsters caught offshore—

Mr. ABBOTT. Definitely.

Mr. STEELE (continuing). And your purchase, the catch delivered to you, has been essentially the same for the last 15 years. What's happening? Is it harder to catch them so the price is going up? Is that where the variable factor is in the price?

Mr. ABBOTT. No. I think, Congressman, that you have to realize that in the past 10 years, I mean, gear has risen in cost, boats have risen, men won't go to work any more like the old days. They want to make

money also. They see people ashore getting \$7, \$8 an hour. They fish hard so therefore they demand a higher price for their fish and the affluent society we now have—the truck driver drives into my plant, picks up 30 pounds of lobster and thinks nothing of it. He is making good money. It is an affluent society. People eating lobsters today that never ate them before; so we have a tremendous demand on the market and it's a source of supply and demand. Therefore, the supply hasn't been able to catch up with the demand and the prices have gone up to the fishermen and accordingly to the market.

Mr. STEELE. Are the Russians taking lobsters now in quantity, and, if so, how do they take them?

Mr. ABBOTT. Well, it's awfully hard for us to prove this because we don't board their vessels and we don't know what they are doing. We do know that they are dumping over tons and tons of shells which are hauled up by a trawl; therefore, they must be catching them. They must be taking them aboard and they must be breaking the tails and throwing them overboard. We can't board the vessels; our fishermen can't.

Mr. STEELE. Yes it's very difficult to measure exactly what the impact of this on our lobster industry has been. We suspect though it's significant, is that fair?

Mr. ABBOTT. If they are catching the fish out there, Bob, they are catching the lobsters in the particular grounds that they are catching.

Mr. STEELE. I know your Association is interested in setting up a code system so that the Coast Guard can more easily respond to calls. Could you explain what kind of system this would be and how it would work?

Mr. ABBOTT. I don't know whether a channel could be arranged or not; perhaps we could have a channel for the Coast Guard, one district for all vessels. You can use a southern channel like I used to use with my southern boats. They had southern channels which no other vessels in this area has. I don't see why they couldn't have a channel whereby district one intelligence could communicate to our vessels by the keys for this particular channel. Naturally, it could be very easily broken, something like that as far as the foreign fleet is concerned, but it might help. I would like to see flights over our zones. I would like to see vessels offshore that are patrolling these zones or maybe I am a little bit too rough. Of course, I am an old tiger, you know that.

Mr. STEELE. Thank you, Mr. Chairman.

Mr. CLARK. I would like to ask one question, Ernie. Who in the Federal Government would be taking care of this lobster regulation? Wouldn't this require a brandnew Federal bureaucracy?

Mr. ABBOTT. I don't think so, sir. I think your particular committee which—who have responded to our plea; I don't see why you couldn't bring out some sort of an agreement, a unilateral agreement. It would be a bilateral agreement with Canada involved. I don't see why the Fishery Committee can't handle it, sir. We don't need any separate organization. All we need is enforcement and a little bit of—[Shaking fist.]

Mr. CLARK. For the record, I want to make sure you weren't speaking of a regulation, an international regulation.

Mr. ABBOTT. Oh, no. I just spoke of that because of Canada, because Canada is very much interested in this lobster setup as well as we are.

Mr. CLARK. Thank you both very much.

Mr. ABBOTT. Before I leave, may I thank you three, Congressmen and the chairman, for responding to our appeal.

Mr. CLARK. Thank you.

Mr. ABBOTT. I would like to thank you also, and I was wondering if I could include in the record a couple of publications from our association. I don't want to take the time to read them.

Mr. CLARK. If there are no objections.

Mr. ABBOTT. Thank you.

Mr. CLARK. Our next witness is Commander Fournier. Commander, you may proceed.

**STATEMENT OF COMDR. JOHN H. FOURNIER, CHIEF OF THE INTELLIGENCE AND LAW ENFORCEMENT BRANCH, FIRST COAST GUARD DISTRICT; ACCOMPANIED BY COMMANDER FLOYD HUNTER, LEGAL OFFICER, AND CAPTAIN WILLIAM MURPHY**

Commander FOURNIER. Mr. Chairman, members of the committee, and guests, I am Comdr. John H. Fournier, Chief of the Intelligence and Law Enforcement Branch of the 1st Coast Guard District. The Coast Guard is most appreciative of this opportunity to assist your investigation into the problems created by the presence of the foreign fishing fleet off New England.

During the past 2 years, the Coast Guard has made several large changes in the application of its resources to better accommodate our fishing industry. As mentioned earlier by Mr. Norris, the number of flight hours has drastically increased which reflects an increasing input from the Coast Guard. This additional time represents not only a higher density of surveillance, but also surveillance of new situations such as the offshore lobster fishery. Subject to search and rescue needs and weather conditions, we are now scheduling three flights a week dedicated solely to fisheries surveillance, one flight a week along the coastline from Maine to Virginia which provides coverage of the contiguous fisheries zone and two additional flights a week for surveillance of abstinence and closed areas when fishing is prohibited. Having available this more frequent and extensive aerial surveillance has contributed substantially to the redirection of the efforts of our surface units.

Since May of 1971, Rear Adm. R. W. Goehring, commander of the 1st Coast Guard District, has required the maintenance of two cutters on patrol in the offshore lobster fishery area to the maximum extent possible. Accomplishing this has required the regular scheduling of cutters from the entire Atlantic seaboard under the coordination of the commander, Coast Guard Atlantic area.

The reserve training cutter *Unimak* has been employed in this effort as well as the cutter *Mendota* which was newly recommissioned as a result of recent congressional action. We are frank to admit this redeployment has been made easier by the lack of pressure on the contiguous zone. Should the fishing pattern change to increase the potential for contiguous zone intrusion, we are prepared to meet this threat by making greater use of our smaller cutters than we had preferred to in the past.

During the past year, the following ICNAP member nations have become participating partners in the boarding and inspection pro-

gram: France, Federal Republic of Germany, Japan, Norway, Poland, Portugal, Spain, Rumania Russia and the United Kingdom.

Both Coast Guard and National Marine Fisheries Service officers who have been specifically designated can board fishing vessels of these participating nations when they are in the ICNAF area. Except for Russia, Poland, and Rumania which presently limit the extent of on-board inspection, the boarding officers may inspect the gear, catch, log book, and vessel documentation of a vessel so boarded. Should any American fishing gear be seen on a foreign vessel, we not only feel it is proper to request its return but we have done so on at least one occasion. A vessel of a nonparticipating nation can only be boarded at the pleasure of its master so long as he is outside our territorial waters and not in violation of the contiguous fisheries zone, we cannot board.

In conjunction with the National Marine Fisheries Service, we have been conducting boardings and inspections commensurate with the needs of the offshore lobster fishery and the restrictions of search and rescue and the weather. Since the summer of 1971, the following vessels have been boarded and inspected under the ICNAF scheme: Russian, 43; Polish, eight; Federal Republic of Germany, two; Japanese, four; Spanish, one; and the United States, 14. Four Coast Guard cutters are now designated ICNAF inspection vessels and we are planning to qualify four more.

During the past 3 years we have recorded nine violations of the contiguous fisheries zone. I have a summary of these incidents and would be happy to furnish copies to the committee, if you so desire.

The conduct of the fishing conference in London, 1967, produced a set of standards with regard to the policing of fishing. Among other proposed regulations is one which discusses the primacy of fixed fishing gear. The problem of conflict between fixed and mobile fishing gear has become of importance since the commencement of the offshore lobster fishery.

In an attempt to develop some type of accommodation between these two modes of operation which would permit their continuation without conflict, Read Admiral Goehring, commander of the 1st Coast Guard District, has sponsored two industry meetings. The first in October of 1971 called together those industry members involved with the offshore lobster fishery. Products of these meetings were a set of guidelines for the conduct of the lobster fishery and a much better protection for the scope of the fishery for the responsible Government agency.

The second in July of this year called together both U.S. lobstermen and trawlermen in which it was unanimously agreed that a serious problem of conflict existed and some resolution must be found. As a result, a joint group of trawlermen and lobstermen under the chairmanship of Mr. William G. Gordon, the deputy regional director of the northeast region, National Marine Fisheries Service, this group is presently working on a development of some type of separation scheme which will permit both types of fishing to continue side by side but separated to prevent possible conflict. It is our hope that any scheme so developed can be used as a model in negotiations with foreign fleets to achieve their recognition and compliance with the scheme.

In addition, the Coast Guard and National Marine Fisheries Serv-

ice have conducted meetings with the commanders of the Soviet and Polish fishing fleets at sea to discuss problems involving fixed and mobile fishing gear.

This concludes my formal statement. I am accompanied by Capt. William Murphy, chief of the Operations Division and Comdr. Floyd Hunter, district legal officer, both of the 1st Coast Guard District. We will be happy to respond to any questions you may have.

Mr. TIERNAN. Thank you very much, Commander; in the absence of Mr. Clark, chairman, who had to step out for a minute, I want to thank you for your statement. Do you have any questions, Mr. Steele?

Mr. STEELE. Commander, we have heard a couple of references to the desirability of better communication with the Coast Guard—the importance of being able to get the message through more quickly and more securely. Mr. Abbott spoke about the desirability of a code system. Do you have any comments or thoughts on how communications could be improved or, indeed, if it's necessary to improve them?

Commander FOURNIER. Yes, sir. We have discussed this problem with Mr. Abbott. It was originally a subject that came up at the July conference we had with industry and subsequently initiated the letter to us. We worked up and I brought with me a proposal for his examination which would permit communication with the present channels and equipment that both the fishermen and the Coast Guard have. We feel it would be a good idea to consider this first before getting into a system which would require separate equipment or channels approval for operating under the channels.

Mr. STEELE. With respect to new equipment, the Coast Guard now is involved in two new marine traffic control systems, one of which is in Houston Harbor.

(Discussion off the record.)

Mr. STEELE. I know you are studying the need for such a system in New York Harbor, and now Long Island Sound which we are very pleased about here, of course. Is any of this new equipment applicable to the problem we are talking about now, monitoring foreign vessels, for example?

Commander FOURNIER. I am not that familiar with the capability of the equipment. If you are referring to the monitoring of the movements of the foreign vessels 30 or 40 miles offshore further there would be some question in my mind.

Commander HUNTER. I could comment on that, I would think. I am not directly familiar with the equipment or plan, whether they are in operation in San Francisco, but I would suspect that they are fairly limited in range and more directly concerned with accuracy of position in order to prevent collision within the harbor, and what we would be talking about here would be very extensive coverage of offshore areas.

Mr. STEELE. How many square miles do you cover now? What does it come to in square miles? Do you have that? Does that have to be figured out?

Commander HUNTER. I don't think we have a square mileage figure on that.

Commander FOURNIER. We have a square mile figure on the lobster gear area, fixed gear area, and at the outset in May or summer of 1971, the area in which fixed gear was set and being reported was about

500 square miles; in February of 1972, this could climb to about 1,800 square miles, and this past summer, it was up around 3,500 square miles, and the chart that I just gave you, the circular—well, the clear areas enclosed and then have an alphabetical letter and number in them or the areas where fixed gear has been reported to us and presently located, this area now comprises—we don't have an exact measure on this, but I would say this represents probably around 2,500, 3,000 square miles.

Mr. STEELE. Of all the different nations that are operating—Spain to Russia to Poland to Japan—which nations are the least cooperative? Which nations do we have the most trouble with?

Commander FOURNIER. Well—

Mr. STEELE. I don't mean just—obviously if there are three times as many Russian ships than there are Japanese, the ratio of 3 to 1 would be expected, I suppose, but is any nation more difficult to deal with for us? Does any one nation commit more violations than others?

Commander FOURNIER. Well, there are really two parts to your question: which nations are involved in the largest number of violations? The Soviets; but once again, they have the largest number of ships. We never looked at it on a per ship basis. However, the ones that are the most difficult to deal with are the East Germans.

Mr. STEELE. They are the most difficult to deal with?

Commander FOURNIER. Yes, sir.

Mr. STEELE. Why? How?

Commander FOURNIER. Well, we have no formal or official channels of communication; in the transmission of the advisory that goes out daily on the fixed fishing areas, it's directed to the various foreign nationality vessels and we have worked out definite arrangements, informal though they are, but they are definite with the Soviets and with the Poles. We also transmit to the other vessels, lead vessels, of the other nations when they advise us they have an inspector on board, national inspector or something like that, we contact those vessels and pass the information to them; sometimes we are successful in passing it to the East Germans and sometimes we are not. We know that the East Germans are out there. We know a particular vessel is there. We have his call sign and we try to call and we get no response.

Mr. STEELE. What do you do then?

Commander FOURNIER. The only thing we can say is, we have not been able to pass the advisory on that particular day to that nationality.

Mr. STEELE. Would the Coast Guard suggest any enforcement measures in addition to those that are currently in effect? Do you have any suggestions? Is there any way you could do your job more effectively?

Commander FOURNIER. Well, as I pointed out in the statement, the thing that the district has been attempting to achieve is the development of a scheme of separation between the two modes of operation, fixed and mobile, and we feel that if there was such a scheme that it would make the use of the resources much more efficient. We could better utilize our vessels and planes and that also secondary benefit or perhaps a more primary one in long range would be if we had such a scheme we could approach the foreign nations, the foreign fleet, and say, "It works for us; we would expect it to work for you."

Mr. STEELE. Have you made such a proposal?

Commander FOURNIER. In our conference of July, we presented to the industry about seven arbitrary schemes, separation schemes, for their consideration just as an opener and the committee chaired by Mr. Gordon is presently trying to work out a specific scheme which is acceptable to both the trawlermen and the lobstermen.

Mr. STEELE. I understand the Coast Guard flights were 100 hours in 1961, 1,000 hours in 1971 per year. How effective is 1,000 hours? If we are to be more effective and to have substantially increased impact in providing better surveillance and better response, what would that figure have to be up to? Is there a point where it takes such quantum leaps that it's simply impractical? How much would we benefit for example, by doubling the number of hours or increasing the number to 3,000? How much difference would it make and how do you measure it? Three flights a week doesn't seem to me to be very many flights.

Commander FOURNIER. Well, I don't feel that I can respond any differently than Mr. Norris did to your first question. It's extremely difficult to say how much surveillance you need. The first thing you have to define is the scope of the results you are trying to achieve. The thing that I can say—you said three flights a week is not very much; at times you are right; in fact, quite frequently because of the mobility of the foreign fleet.

The chartlet that you are looking at, the location of the foreign fleet which is the shaded circles is a result of the surveillance flight on the 3d of September. Overnight the picture can change appreciably.

This chartlet we developed and utilized within the district office for planning in the deployment of our resources with respect to the offshore lobster fishery and the main use of it is that we want to see what the shift of the foreign fleet is and when it shifts down into the fixed gear areas, we know that it's necessary to have our patrol cutters in that area because there is a greater risk of conflict developing; so that the more frequent surveillance from that standpoint, at least, on a daily basis perhaps would be quite, quite desirable.

Mr. STEELE. This committee would be very well advised to consider asking the Coast Guard for increased aerial surveillance then.

Commander HUNTER. I would say certainly the more surveillance there was, the more likelihood there would be that we would be able to detect, possibly anticipate gear conflicts out there.

Mr. STEELE. It would be money well spent, in other words.

Commander HUNTER. In my judgment, it would.

Mr. STEELE. Thank you.

Mr. TIERNAN. Thank you. Thank you, Mr. Chairman. You heard testimony this morning with regard to a recent incident between, I think, the French vessel *Faquet*—

Commander FOURNIER. Yes, sir.

Mr. TIERNAN (continuing). And one *Fort Baudin*; that took place what date?

Commander FOURNIER. Saturday and Sunday.

Mr. TIERNAN. Saturday and Sunday. What happened? Can you tell us?

Commander FOURNIER. The last aerial surveillance we had before that weekend was on the 28th, as I recall, and it showed one French vessel up on the northern portion of Georges Bank; that's the first

time that the surveillance flight had turned up a French vessel on Georges Bank or below Georges Bank, and on Saturday when the conflict occurred and the two French vessels ran through *Mars'* gear, that was the first knowledge we had of any French vessels in that area. They indicated upon boarding that they had no knowledge of the lobster fishery, and, as Mr. Gaziano indicated, they passed the information to the French vessels and our cutter had also communicated with them, *Unimac*, and passed the information to them, and they steamed out of the area on Saturday, but then on Sunday, one vessel came back into the area again, and a second cutter, the *Unimac*, was detached on a search and rescue call, and the second cutter that we had in the area, the *Tamaro*, came over and boarded the French fishing vessel, boarded both of them again and again; gave them the information on the fixer gear; gave them the locations of the fixed gear areas, and this time the French vessels left the area, I believe it was to the northeast, and departed completely.

MR. TIERNAN. During that time when you undertake a boarding, is there any effort made to photograph the vessel?

Commander FOURNIER. Not regularly; no, sir.

MR. TIERNAN. Well, what if you see lobsters?

Commander FOURNIER. Yes, sir; right; if there was something suspect or something that looked of interest, we would; all of our cutters and aircraft are equipped with cameras.

MR. TIERNAN. Are equipped to do that?

Commander FOURNIER. Yes, sir.

MR. TIERNAN. When you take those pictures, if a party—if, say, the *Mars* requested those photographs, would they be made available to them?

Commander FOURNIER. Certainly, and we have in the past on quite a few occasions when the fishermen who had suffered losses were working up claims to submit, they came to us, and, of course, we made available to them all information that we had in our files, all foreign traffic and any photographs we had.

MR. TIERNAN. Do you know of any case where there was information where the Coast Guard either had traffic information or any other information that was not made available to a boat involved in an incident?

Commander FOURNIER. Not to my knowledge.

MR. TIERNAN. How long have you been in the district?

Commander FOURNIER. A little over a year and a half now.

MR. TIERNAN. Do you think that we should attempt to increase the surveillance in that area? We have, as a result of the congressional inquiries, pressure more or less to get greater surveillance; in fact, the Coast Guard put two new planes, recalled two inactive planes, didn't they?

Commander FOURNIER. There were two additional aircraft that were reactivated recently; yes, sir.

MR. TIERNAN. Right. Where are they stationed?

Commander FOURNIER. At the Coast Guard air station on Cape Cod.

MR. TIERNAN. Both of them?

Commander FOURNIER. Yes, sir.

Mr. TIERNAN. One is strictly for surveillance and the other is rescue, or are they both surveillance?

Commander FOURNIER. They have multimissions, all of them have multimissions, the same as the helicopters.

Mr. TIERNAN. Well, you have been present today and you certainly are aware of the fact that most of the criticism has been that there has been need for additional enforcement. Do you think the Coast Guard can do any more enforcement than they are doing now?

Commander FOURNIER. With the——

Mr. TIERNAN. At present.

Commander FOURNIER. With the resources that we presently have?

Mr. TIERNAN. Yes.

Commander FOURNIER. They are pretty fully applied right now. In order to maintain one vessel on any station, it requires that you have three vessels if you want to maintain one vessel there 24 hours a day around the year. You have to have two additional vessels to back it up, and we have for the type of vessels we have been using, endurance cutters, we have three in the district, and the other vessel that we have been maintaining to the patrol area; in order to maintain that second one, the vessel resources have been coming from the other districts on the east coast.

Mr. TIERNAN. The statement of the National Marine Fisheries Service in June 1972 relates an incident involving an East German vessel, and the U.S. dragger was sunk. Are you aware of that incident?

Commander FOURNIER. By the *Brandenburg*; yes, sir.

Mr. TIERNAN. Did you have to dispatch a Coast Guard cutter to the rescue?

Commander FOURNIER. Yes, sir.

Mr. TIERNAN. There was no loss of life?

Commander FOURNIER. No, there was not.

Mr. TIERNAN. The vessel was sunk though?

Commander FOURNIER. Yes, sir; four persons on board; they were originally taken aboard the *Brandenburg*. When our cutter arrived on the scene, they were transferred. We had aircraft on the scene and dropped pumps. The master of, I believe it was, the *Rosanne Maria* went back aboard and attempted to dewater her and save her but conditions were such he could not.

Mr. TIERNAN. Commander, one last question; if, in fact, either the administration was to establish, say, a limit to the Continental Shelf or 200-mile limit, or the Congress was to enact such legislation, would the Coast Guard be in a position today to undertake steps to enforce that?

Commander FOURNIER. With the extent of the industry involvement that there is right now and the enforcement responsibility that we presently have, we would not be any different or any better off than we are at this moment.

Mr. TIERNAN. But the point is, you wouldn't be capable of enforcing that with your present status and equipment, would you or wouldn't you?

Commander FOURNIER. Excuse me.

Captain MURPHY. May I respond to that?

Mr. TIERNAN. Yes. Captain Murphy, is it?

Captain MURPHY. Yes. I think this is something that the Coast Guard headquarters and the commandant would have to address because he would have control over these other forces throughout the rest of the Atlantic area that we don't, and he would have to make a decision as to whether or not he would give us additional forces from New York, Norfolk, from Miami or where else.

Mr. CLARK. We are going to be holding oversight hearings between now and the first of January, and at that time I know this committee will, at the oversight hearing, be recommending that we do ask for more equipment in this area. There just isn't any reason for the Coast Guard not to have what is needed and have it made available for them so that this business of running through people's nets just doesn't happen any more. I think it's about time we do something like that.

Now, we will have our authorization bill which will be started in January and at that time we will also make recommendation to get some new equipment up here as fast as we possibly can.

Mr. TIERNAN. Mr. Chairman, could I ask one other question which came to mind as a result of your question? The Weather Bureau uses satellites quite extensively. Do you have any present use of satellites either military or other governmental agencies?

Commander FOURNIER. No, we don't. We have investigated that possibility.

Mr. TIERNAN. Could you use satellites for surveillance?

Commander FOURNIER. Well, I don't know. I can't answer the question in much detail because I am not that familiar with the capability of a satellite. An example would be the surveillance.

Mr. TIERNAN. Doesn't the Coast Guard assist the Weather Bureau in tracking hurricanes, for example? Do you assist them at all, the Weather Bureau?

Commander FOURNIER. Yes, we do. We carry weathermen aboard the Coast Guard cutters on weather stations and in tracking hurricanes, it would be as a result of the surface observation.

Mr. TIERNAN. I see. Your input is either visual observation by men on stations—

Commander FOURNIER. Yes, sir.

Mr. TIERNAN (continuing). Or instrument?

Commander FOURNIER. Right.

Commander HUNTER. I am Commander Hunter. I am here as a legal officer. I formerly commanded a medium endurance cutter on fishery patrol in Alaska and we do look at satellite photography there that was used particularly to detect the position of the ice edge and found that it was not of any assistance in fishery surveillance. If you did detect an object which you suspect was a ship, you couldn't tell anything about what kind of a ship or where it was heading or anything else that was particularly germane.

Mr. TIERNAN. Where was that information? What type of satellite were you using?

Commander HUNTER. I couldn't speak to specifics of the satellite. I was presented with the photography and we attempted to interpret it. I do know it was the satellite that the then Oceanographic Office was using in their ice predictions in the Bering Sea.

Mr. TIERNAN. Thank you.

Mr. CLARK. Mr. Steele.

Mr. STEELE. I had one further question. It was mentioned by the chairman in his opening remarks. He mentioned the role of the Soviet bloc ships in conducting espionage against the United States. Do you have any comments on the role of Soviet vessels as far as spying with electronic equipment on the United States? To what extent is the Coast Guard aware of or involved in this matter?

Commander FOURNIER. We do operate under instructions in the event that any of our cutters or other units come across suspicious vessels. We have instructions of what we are to do.

I guess I can respond to your question by saying far and away the majority of the fishing vessels on the grounds are solely fishing vessels. Their purpose, primary and probably only purpose, is fishing.

Mr. STEELE. Do we assume, however, gear for espionage purposes is being used at the present time by Soviet bloc ships.

Commander FOURNIER. I would say the fact that we still have an instruction outstanding means yes.

Mr. STEELE. That's our basic working assumption at this time?

Commander FOURNIER. Right.

Mr. CLARK. You will admit that they are highly sophisticated fishing vessels?

Commander FOURNIER. Yes, sir; in their general experience, right.

Mr. CLARK. Captain Murphy.

Captain MURPHY. I would like to clarify something; perhaps you did get the picture clearly and I missed it. We do have three fixed-wing aircraft employed in this district. All three of them are essentially totally devoted to this and in so doing, we are able to get more out of them. Normally, an aircraft that would be available for search and rescue doesn't generate flying time because of the need to have it standing by, but for this particular aircraft, we devoted them only totally to this job; therefore, we are able to get an additional 100, and in 1 year close to 300 additional hours from the flying machine itself.

Mr. CLARK. Thank you very much, Commander. We didn't want to put you on the spot in any way, but we do want to see that you do the job that you are supposed to do and if you don't have the equipment then we will try to get it for you. Thank you very much.

Commander FOURNIER. Thank you, sir. The Coast Guard will certainly appreciate that.

[Recess.]

Mr. CLARK. The meeting will please come to order. Our next witness is James Champlin, Point Judith Fishermen's Cooperative Association, Galilee Road, Point Judith, R.I. Mr. Champlin?

[No answer.]

Mr. CLARK. Is Walter Curtis here?

Mr. CURTIS. I am here.

Mr. CLARK. Will you come on up, please, to the witness table. Walter Curtis, president, Western Ocean Resources, Marblehead, Mass.

#### STATEMENT OF WALTER CURTIS, PRESIDENT, WESTERN OCEAN RESOURCES, MARBLEHEAD, MASS.

Mr. CURTIS. This really isn't my bag. I am a fisherman by trade; I guess an executive. You got to be after a while.

Gentlemen, I have here some claims. There is two. One has to do with the Russian incident and one has to do with the Japanese inci-

dent; in the case of the Japanese, it was the first claim that we know of that was ever filed in the Atlantic Ocean. It was done very informally, and finally with a hell of a lot of arm-twisting, we got a settlement; with the Russian claim, I think we better forget it. We'll never get that. I say that only to the effect the claim was started out around \$15,000; whittled down by the State Department to about five and I spent 10 trying to collect it and they don't want to process it so I think I will scrap that one.

Now, in coming here, I could of prepared a long statement and feeling that I was going to be at the very end of the list, everybody would have, you know, done it all, why hear it all again; on the other hand, I have taken just three or four notes as I have gone along. I would like to answer questions if it would make it easier for me to present what I have for you fellows because I feel I have been in the industry over 25 years. I think I qualify to speak with a little bit of authority and background.

No, one, the company that I have, we employ 25 people. We basically are working out of the Gloucester area. We make landings in different areas, different States, depending on where we wish to fish at any particular time of the year; in the winter, we are more inclined to fish in the New York site because it is easier for us to get back and forth with our 75-foot boat.

Now, this 25 people that are in the Gloucester area that we employ, an area that has a very high unemployment rate; as a matter of fact, it's approximately 18 percent in Gloucester and this has been caused largely because the industry there was based on fish caught on Georges Banks and has been nearly wiped out by the foreign competition.

I am in the lobster business. This is my entire business. I have been in the fishing and lobster business all my life, and being in the lobster business, this is what I would further speak to, the lobster business. They associated with a fishing business in its entirety and today to work in the offshore lobster business, a vessel will go a quarter of a million dollars or more; to raise this kind of capital, you know, you don't carry it around in your back pocket. You got to go to a financial institution to get this kind of money and the first thing they say is, "Well, how are you doing with the Russians?" Well, that's a hell of a start because, you know, you ask them, you say, "Look, we want to put \$50,000; we can get this going but we need a corporation. We need a mortgage on these vessels." They say, "What makes you think you can pay for it?" So we start out with that as a basis.

To try to make this a business that can come forward, that can produce what it's capable of doing, and there is very, very many estimates as to what it could be, but it would seem conservatively the offshore lobster industry can be as large and productive as the entire inshore industry is at the present time which is, by the way, is the largest fishing industry in the whole Atlantic coast. To do this, we do need help. We do need protection. We do need some—a more modernistic approach by our Government toward the fishing industry.

All we want is the same thing that the oil people get. You damn well won't let anybody come over and put in any oil wells down in Georges Banks and take that, but you will let them come over and take our fish and take our lobster, a renewable resource that for years will be able to sustain this area and this is allowed to be depleted by the foreign industry.

This claim with the Japanese, when that came forward 2 years ago, it took 8 hours to get a Coast Guard plane to fly. Why? Because they weren't prepared to do this sort of thing. Nobody knew anything about this sort of thing. It took 8 hours for me to get them to fly. It took 20 minutes for Senator Brooks to get them to fly.

Today, if I place a call to Boston, that cutter will be on its way, I'll guarantee, within 30 minutes. They are ready; they are going; they do a hell of a job with what they got, the resources they got. It's been a big improvement, but when Captain Hunter moves, he has to because they don't have the equipment to adequately patrol the area. When he moves, the boys come back in again and that's where we have our troubles; that's where the big heartaches come.

Just let me look here. Oh, I had in one of my notes, I had also taken this notation from the blue sheet which was on the spiny lobster. It states of a fleet of five vessels run by the Soviets in the Indian Ocean that have taken spiny lobsters, spiny lobsters basically acts as the americanus homarus and that shows that they are perfectly capable of taking the lobster here, and the very bottom of this thing, it says that the Soviets don't consume spiny lobsters domestically. The entire catch goes for export and is an excellent hard currency earner. I think that tells you where the hell they are going to go. [Laughter.]

Mr. CURTIS. Now, we bring forward to you people the idea to push for the lobster to be a creature of the shelf. Somebody one time saw a lobster flip its tail and come off the bottom and go 20 feet and land back and they said, "Hell, he swims; he is not a creature of the shelf." That's been our heartache ever since, but I tell you, I can jump. I get 3 feet off but I'll come back down again; that lobster is a creature of the shelf just as surely as I am a creature of the land. He must sustain himself on the bottom. There is no earthly way that he can go through the water and sustain himself in animated suspension like a fish can; it can't be done.

These little things that we ask for are not so small in reality. The fisherman, by nature, has been an individual. He is not looking to be subsidized. He doesn't want to be subsidized. He wants a fair crack at making a living.

This company that I have, we want a fair crack at being able to compete under the capitalistic system.

Mr. TIERNAN. Mr. Chairman, can I ask the gentleman a question at this point?

Mr. CLARK. Yes.

Mr. TIERNAN. Mr. Curtis, could you help us by telling us how many tons of lobster you purchased in 1971?

Mr. CURTIS. We don't purchase; we are a producer.

Mr. TIERNAN. Oh, you produce?

Mr. CURTIS. Yes.

Mr. TIERNAN. How many tons of lobsters did you sell in 1971?

Mr. CURTIS. I would say that our catches would run per boat around 300,000.

Mr. TIERNAN. Per boat?

Mr. CURTIS. Yes. We have two boats. We had two boats since 1971 in the operation. We have two boats now, two other vessels partly completed, and four on the drawing boards; they are out to bid.

Mr. TIERNAN. And what about 1970?

Mr. CURTIS. 1970 was the first time—one boat was—

Mr. TIERNAN. Excuse me.

Mr. CURTIS. One vessel, 300,000 pounds in 1970.

Mr. TIERNAN. You had one vessel?

Mr. CURTIS. Yes. The offshore industry is relatively new.

Mr. TIERNAN. Yes. In 1970, you had one vessel and you produced 300,000 tons?

Mr. CURTIS. No; 300,000 pounds.

Mr. TIERNAN. 300,000 pounds?

Mr. CURTIS. Right. Yes, I am sorry. I wish they came by the ton.

Mr. TIERNAN. In 1971, you added another additional vessel?

Mr. CURTIS. Approximately twice the catch, yes.

Mr. TIERNAN. Twice?

Mr. CURTIS. Yes.

Mr. TIERNAN. What would be the price? You say three-quarters of a million for that second, for the new vessel?

Mr. CURTIS. The new vessel outfitted, no; about a half—a half a million dollars.

Mr. TIERNAN. Half a million?

Mr. CURTIS. I mean—I beg your pardon—a quarter of a million dollars; about \$250,000.

Mr. TIERNAN. Was there any Government program that you availed yourself with?

Mr. CURTIS. You got to be kidding. It isn't worth it. No, no; there is no way that it's worth it; no.

Mr. TIERNAN. I can ask the question for the record.

Mr. CURTIS. Yes; for the record, right; no.

Mr. TIERNAN. Would there be any suggestion that you might have for the committee with regard to any assistance that we could help in that area?

Mr. CURTIS. I notice you gentlemen were talking to the point about insurance. It's very difficult to maintain adequate insurance, to get adequate insurance which we must have, and, so, consequently, we must pay any price asked.

Mr. TIERNAN. How many members do you have on board?

Mr. CURTIS. One vessel has five; the other has six.

Mr. TIERNAN. So, the balance of your employees are—

Mr. CURTIS. Employed ashore in a manufacturing operation.

Mr. TIERNAN. Have you had any difficulty in your harvest?

Mr. CURTIS. To maintain our harvest, we had to increase our effort.

Mr. TIERNAN. When was that, this year?

Mr. CURTIS. Yes.

Mr. TIERNAN. Was that because of the weather or anything?

Mr. CURTIS. This would—this is only an educated guess as to what it might be. You see, if I would relate the offshore industry as to the inshore industry each year, it can be very different. There can be a large volume of lobster produced in August, September, and so on; so, we can't tell whether this year is the norm or whether it's actually a reduction in the catch.

Mr. TIERNAN. Last winter could you give me the reason why the price of lobster went so high and today it's low?

Mr. CURTIS. I don't mean to be sarcastic but it's supply and demand and there wasn't any product.

Mr. TIERNAN. Why wasn't these any product? They were there, weren't they? The lobsters were there.

Mr. CURTIS. Yes, but, well, I say yes; I would of liked to have caught a lot more of them. They can be there and you may not catch them because of the—just the natural time of the year. A lobster can—will just sit alongside a trap and hide in a hole and you can drag until you are blue in the face. He will be in the hole. When he is hungry, he will come out. Because of extremely hard weather, because of the fact that there didn't appear to be—you know, it's the weather; in the winter-time, traditionally lobster prices will go up around Christmas time, slack a little after the first of the year, then continue to go up until April, then it will come down.

Mr. TIERNAN. Mr. Curtis, then 1970, you had one vessel?

Mr. CURTIS. Yes.

Mr. TIERNAN. And how long had you been operating with the one vessel?

Mr. CURTIS. That was—that was a new vessel at that time.

Mr. TIERNAN. That was a new vessel?

Mr. CURTIS. Yes. This is a new company. I have always been in the business, but this is a new company.

Mr. TIERNAN. What were you in before?

Mr. CURTIS. The lobster business; inshore.

Mr. TIERNAN. Inshore?

Mr. CURTIS. Yes.

Mr. TIERNAN. Now you have gone to the offshore?

Mr. CURTIS. Yes.

Mr. TIERNAN. Because of what?

Mr. CURTIS. I like to eat.

Mr. TIERNAN. You like to eat?

Mr. CURTIS. I don't make enough money fishing inshore.

Mr. TIERNAN. You can't make enough money fishing inshore?

Mr. CURTIS. Right.

Mr. TIERNAN. Were you just strictly in the lobster?

Mr. CURTIS. I was in the lobster and fish.

Mr. TIERNAN. You had to give up the fish so you went to the offshore lobstering?

Mr. CURTIS. Right. The lobster industry, in my opinion, offshore shows the biggest life for the New England area, but it can be wiped out just like the haddock, the redfish, the whiting, the butterfish. It's really in your hands. I mean, we can mess around with it all we want to but unless we can get the politicians to work with us—

Mr. TIERNAN. Mr. Curtis, to get back to your point though because the lobster was capable of jumping 4- 5-foot high to a distance of up to 50 feet, that's the reason why Dr. White has not declared, put this lobster on the list, isn't that so?

Mr. CURTIS. I understand what you are saying, yes, that's right.

Mr. TIERNAN. Dr. White could declare that one of the species?

Mr. CURTIS. Well, I am in great favor of blackmail at times, and I believe if the congressional people decide Dr. White or anyone else doesn't receive moneys for their budgets and their plans that they are inclined to move more on a practical basis.

Mr. TIERNAN. Very well spoken.

Mr. CLARK. Mr. Steele.

Mr. STEELE. I would just like to ask you, Mr. Curtis, the same question I asked Mr. Abbott. Can you give us any good indication of the extent to which the foreign offshore fleets have damaged the U.S. lobster industry? One of the reasons you had to go offshore because of the increasing take of lobsters offshore by foreign vessels?

Mr. CURTIS. No, no, that isn't the reason we went offshore. We went offshore, or I went offshore mainly because the inshore industry is—is very highly utilized. Anybody will hazard a guess; I will say 90 to 95 percent of the available catch is being caught at this present time. The offshore industry is—it's like an untapped resource. Right at this time, it's like the great gold mines, old mining days; everybody gets a pan and goes. You know, there are not too many miners that are going to make money. In those days, I believe, it was a dance hall girl and bar-room operators that did it. Here it might be the people selling rope and gear, I am not sure, but unless—unless this industry is brought under some reasonable management, then it will be wiped out like all the other things.

Now, as far as the foreign fleet goes, we have no accurate way of knowing. You heard of the Coast Guard going aboard the vessels and I suppose you remember hearing about the exception. They can look aboard the vessels with certain exceptions. Well, these exceptions are the Communist bloc nations. You can't go below decks to make any kind of inspections whatsoever. We have no way of knowing how many lobsters are landed. We do know that there are lobsters landed; we do know that there were lobsters landed in Bermuda. I believe there was a million pounds of tail. We do know that there are lobsters landed and I can't tell you the islands but it's the French islands off of Canada where they have established quite a fishing base. These lobsters are frozen tails and they are reexported to the United States; but to get accurate figures, that I couldn't give you accurate figures in now way, but here is a perfect example of their capabilities.

We know personally that the Japs have experimented with traps on this coast. We know personally that the Cubans have experimented with traps on this coast but we have no idea of showing what the results were.

Mr. STEELE. We are really not—we are in a more fortunate position than we were with haddock or herring. We are worried to stop it from happening.

Mr. CURTIS. That's right; that's why we are all here today to try to keep it from being raped. I think Joe said it right when he said, "Rape isn't as bad as murder." Take your choice.

Mr. CLARK. Thank you very much.

Mr. CURTIS. You are welcome.

Mr. CLARK. Is Mr. James Champlin in here now, Point Judith Fishermen's Cooperative Association, Galilee Road, Point Judith, R.I.

**STATEMENT OF JAMES CHAMPLIN, POINT JUDITH FISHERMEN'S COOPERATION ASSOCIATION, POINT JUDITH, R.I., ACCOMPANIED BY MR. STASIUKIEWICZ**

Mr. CHAMPLIN. My name is Jim Champlin. I am here representing the Point Judith Fishermen's Cooperative. We have some 50 member boats. We buy and sell from some 70 boats. We have 119 members; 175

fishermen are involved in the boats. We have some \$4 million estimated invested in boats. I would guess that it would probably be higher; \$6 million in gross sales and perhaps \$18 to \$20 million in related industry in the area of Point Judith.

I have some figures compiled by a general manager on the fish in the area. I am primarily involved in the lobster in the area myself; from 1969 to 1972, our production on edible fish has declined over 3 million pounds which would involve over half a million dollars loss to the fishing fleet. This does not explain the total decline in production because our efficiency has greatly improved over these years because of the larger boats and the more sophisticated electronic equipment with larger nets. The stated increase in effort is somewhere between 25 and 30 percent. The industrial fish has declined around \$50,000 in the last year.

I have two statements from fishermen here that I would like to read in, very short statements; are very concerned about the conservation measures that we have. They wholeheartedly, I think, in most areas agree with them but they feel like they are only being enforced against our own people.

The fishing areas being violated by foreign boats—the 12-mile limits are being violated by foreign boats. They seem to be able to head for a much better control of this on the west coast than we do here on the east coast.

Mr. TIERNAN. When you say violation of fishing areas, you mean fishing areas within the 12 miles?

Mr. CHAMPLIN. Within 12 miles in the ICNAF areas; going on—let me read the statement first from the log of the trawler *Suzanne*: May 27, 1972: three stern trawlers 8 miles off of Nantucket; 14 fathoms; bearings are here; two were continuously inside limit and one stayed on 12-mile limit until 10 o'clock, in the morning and then they move out of the area apparently; the other statement from the other fishing boat—

Mr. TIERNAN. Was that statement given to the Coast Guard?

Mr. CHAMPLIN. I have no idea. I assume perhaps I can call on Mr. Stasiukiewicz to answer that. He has been involved in some of these.

Mr. TIERNAN. Is he here now?

Mr. CHAMPLIN. Yes.

Mr. STASIUKIEWICZ. I think on that one, the boat *Suzanne*, I think Mr. Westcott has signed an affidavit and I think Jack has taken it to Washington with him.

Mr. TIERNAN. Thank you.

Mr. CHAMPLIN. Here is the letter from the boat *Suzanne*:

I have been fishing out of Point Judith for slightly over thirty years. In this period I have experienced many changes both in catching methods and quantity of fish caught.

We have kept up with the world as far as electronic gear, type of equipment, et cetera, are concerned. Only the size of the vessel differs from the foreigner. The main reason for this is that we are adjacent to our markets and therefore do not need boats to stay at sea for weeks at a time. We are primarily fishing for dollars where the foreign vessels are fishing for food. By this, I mean we are in the business as a commercial fisherman to earn money to provide the necessities of life whereas the Russians and many other foreign nations are fishing off our shores only as a means of obtaining food to send back to the mother country.

In the last ten years, I have seen on several occasions a foreign fleet move in on an American fleet and literally deplete a body of fish in two or three days leaving absolutely nothing.

On one trip in February, 1965, we were catching six to seven thousand pounds of tile fish per two-hour tow all day. That evening, five Russians moved in and by morning of the next day there were fifteen Russians there. That afternoon twenty-seven Russians in total were fishing there and by nightfall, we were getting one thousand pounds per three-hour tow. The following day we fished from sunrise till dark and caught only fifteen hundred pounds of fish.

You must remember that this was 1965 and in the year 1972, there weren't five thousand pounds of tile fish landed in Point Judith for the entire year by the whole fleet.

The same has happened to many other species such as scup, butterfish, had-dock, hake, whiting, and now the supply of lobsters is fast disappearing. The foreign fleet works on each species until the supply is almost exhausted; then they switch to a different type.

We have international agreements with some of these countries such as Russia and Poland whereby they are supposed to stay out of certain areas at certain times of the year, but almost every report that you read in the winter on foreign ship surveillance, it says, "Some were reported fishing in the no fishing zone." Still nothing is done about it.

Last winter I saw two large foreign stern trawlers working twelve miles off Nantucket Island all day. As soon as it became dark, they moved in to nine miles and fished there all night. After having talked with another fisherman, I found that they were doing the same thing the previous night.

MR. CLARK. Pardon me. May I interrupt you? At that time when you saw them, did you then notify the Coast Guard?

MR. CHAMPLIN. No. This is a letter from the boat *Suzanne*. I am not sure of it. I don't think so in this case.

After having talked with another fisherman . . . We should have some means of communicating with the Coast Guard to report these incidents. This was done with the Navy during the war with great success.

I was rather young then but I do remember they had a system of reporting for the fishing boats that had girls' names across the top and men's names down the side and they covered—like each grid would be a 12-square-mile area that you could pick up and ask for like a news report on one of the Coast Guard channels and pick up and ask for a news report, daily market news or something like that; that would give them an indication that there was some violation in that area without actually saying it because I believe they do monitor out, you know, our frequencies.

We do feel from all reports that we have been able to gather that the foreign boats are fishing our lobsters to a greater extent than has been reported to us to the National Marine Fisheries Service.

MR. TIERNAN. Mr. Chairman, may I ask a question?

MR. CLARK. Yes.

MR. TIERNAN. What was the basis for that statement?

MR. CHAMPLIN. Well, the basis, the basis for—the basis for this is a per pot decline in production along the areas that our boats fish of about 50 percent per pot, per pot catch. Now, I'll read you some statistics—probably you have the copies there—but the other—there are several other incidents to indicate this. Like this morning Mr. Gaziano said a Japanese captain admitted to him that their fleet had landed somewhere in the neighborhood of 2 million pounds of tails. This would indicate to me that if you take a tail and you multiply it by three, you get the total production you landed; so that's 6 million pounds; that is probably the total production between Mr. Gaziano in

the Westport area to Point Judith which are probably three of the largest lobster ports outside of Boston and Maine; so it's a substantial landing in dollars. There was 50,000 pounds of American lobster tails unloaded in Gloucester as reported by the fishing vessel *Squam*. His indication was that they were brought to the French island of St. Pierre off the coast of Newfoundland and came in from either French or Russian ships—Russian or Polish ships, unloaded—

Mr. TIERNAN. When was that?

Mr. CHAMPLIN. They were unloaded in Gloucester about a week ago.

Mr. TIERNAN. Now, do you have a letter?

Mr. CHAMPLIN. No, I have no letter.

Mr. TIERNAN. Who reports that to you?

Mr. CHAMPLIN. This, I heard; this is hearsay, basically but what I am getting at is that we hearsay all these things. All these things are hearsay. I mean, I have none of the resources to go check these things.

Mr. TIERNAN. But doesn't—

Mr. CHAMPLIN. What one of my recommendations is that we should have some method of checking these things, following through, finding out if this is actually true.

Mr. TIERNAN. Didn't you talk to anybody at the National Resources Department at Point Judith?

Mr. CHAMPLIN. That's outside of the State.

Mr. TIERNAN. What?

Mr. CHAMPLIN. That's outside of the State.

Mr. TIERNAN. Was there any way of them getting in touch with the National Marine Fisheries Service?

Mr. CHAMPLIN. This is what—

Mr. TIERNAN. Could I ask you this?

Mr. CHAMPLIN. I don't feel—I don't have that much confidence in the National Marine Fisheries Service that they would report this if they did know it because they are controlled by the State Department. This is the way I feel about it.

Mr. TIERNAN. Excuse me. Let me ask you this. What is your capacity here? Are you a member of the association or are you the executive director?

Mr. CHAMPLIN. I am the manager of the lobster department.

Mr. TIERNAN. You are the manager of the lobster department. Have you made a complaint at all to the National Marine Fisheries Service?

Mr. CHAMPLIN. Not through formal channels; no.

Mr. TIERNAN. Well, informally did you make a complaint?

Mr. CHAMPLIN. Not really; no.

Mr. TIERNAN. No? Why do you say then you have no confidence in them if you have never made a complaint either formally or informally?

Mr. CHAMPLIN. Well, I think it has been done in past hearings. It just—it's just—just never gets anywhere.

Mr. TIERNAN. Well, it's hard for us and other members of the committee to run anything down if you say you haven't made a complaint and yet you have no confidence in them. If you had said to me that you made a—

Mr. CHAMPLIN. Why aren't they reporting these things in the landings?

Mr. TIERNAN. We can check. I mean, I asked you where you got that information. You said it happened a week ago. You say it's hearsay.

Mr. CHAMPLIN. It only came by word of mouth; that's why I say hearsay.

Mr. TIERNAN. The point I make even though it's hearsay if you make an inquiry of the regional office or make an inquiry of my office, we would be happy to check with them and find out if in fact it was a landing of that nature but we can't do it unless we are told. Bob Steele, Congressman Clark, we can't do anything unless we hear this complaint; that's the reason I am asking these questions.

Mr. CHAMPLIN. I didn't realize these resources were available to us.

Mr. TIERNAN. Oh, yes; they are available. You have to use them. Go ahead.

Mr. CHAMPLIN. I will in the future.

Mr. TIERNAN. OK. Good. I hope you do because if that's the situation, we want to find out how it's being done so maybe we can get some kind—first of all, get some enforcement; if it's not done and if they say they don't have the right to do it, then we should find out how we can do it.

Mr. CHAMPLIN. Right. OK. Well, perhaps what I said was—leads a little bit to the next point where I think it's been gone through several times today. Basically, the fisherman has lost confidence in the operating structure of the Fisheries Department and the Government. This is what it amounts to. I think it's up to us to get it back; just to—there is another area. When you consider the price of lobster tails to be in the area of \$3 to \$4 a pound out of the wholesale market—in the wholesale market, it is a very lucrative market like—like the blue sheet said: Up per pot production in Point Judith some 30 to 35 boats has declined 50 percent from last year to this year.

Now, I am sure there are other factors involved but I don't really know what they would be. When they stopped fishing in December of last year—basically, the weather gets so bad, our boats are rather small, they do curtail fishing. They were catching between 8 and 10 pounds per pot. When they started fishing again in the spring, they never came near that type of production again for the summer up until this date. We had—

Mr. TIERNAN. Let me ask you, Mr. Champlin, at this point: Have you had any conversations with anybody at the University of Rhode Island with regard to this fact?

Mr. CHAMPLIN. I believe so; yes.

Mr. TIERNAN. Did they have any idea what the factors are? The testimony that we heard before the committee indicates the lobsters were there; the hearing held in Washington that the lobsters were there; the scarcity was the fact that some of the vessels didn't get out there and when they did get out there, the fact that the water was much cooler than usually—

Mr. CHAMPLIN. You are talking about January.

Mr. TIERNAN. I am talking about January, February, and March.

Mr. CHAMPLIN. January, February, and March, right.

Mr. TIERNAN. Right.

Mr. CHAMPLIN. I am not talking about that. I am comparing our pot production, per pot, from what we were getting during the peak of the season last year from July to December with what we were getting from July to December this year; it is down almost 50 percent.

Mr. TIERNAN. The point is, we had presented to us at that time some factors that indicated why there was a falling off.

Mr. CHAMPLIN. Last year?

Mr. TIERNAN. Yes.

Mr. CHAMPLIN. The two boats that did stay pot fishing—these were the factors—no question.

Mr. TIERNAN. Now, we don't know, yet. You can't give us any information, any kind of indications of why the numbers of lobsters in the pot have fallen off. This is what we are concerned about. We want to know whether or not you, as the manager of the lobster division of the cooperative, contacted anyone at the University of Rhode Island or at the National Resources or the National Marine Fisheries Service to see what we can find out about it.

Mr. CHAMPLIN. Well, I think we heard testimony today to the extent that there are lobsters being taken by foreign vessels. They do move into our shoal water in the wintertime.

Mr. TIERNAN. We also heard testimony from Mr. Curtis that he's got a second boat; instead of 300,000 pounds of lobsters in 1970, in 1971, he took 600,000 pounds of lobsters.

Mr. CHAMPLIN. Mr. Curtis did not tell you he doubled his effort?

Mr. TIERNAN. Oh, yes; he did.

Mr. CHAMPLIN. Number of pots.

Mr. TIERNAN. Oh, yes; he said he doubled it. He put another boat in there.

Mr. CHAMPLIN. Talking about pots; I doubled the effort per pot per boat.

Mr. TIERNAN. Yes. I said you doubled the effort to get them. How many pounds did you take in in 1971?

Mr. CHAMPLIN. In 1971, we took in 1,456,000 pounds—

Mr. TIERNAN. What did you take in?

Mr. CHAMPLIN. With 15 boats.

Mr. TIERNAN. 1971, that was?

Mr. CHAMPLIN. Yes.

Mr. TIERNAN. How much?

Mr. CHAMPLIN. 1971—

Mr. TIERNAN. How much?

Mr. CHAMPLIN. 1,456,000 pounds.

Mr. TIERNAN. How many boats?

Mr. CHAMPLIN. Was 15 boats.

Mr. TIERNAN. Fifteen? How about 1970?

Mr. CHAMPLIN. 1970, we took in 958,000 with 10 boats; 1969, we took in 677,000 with five boats.

Mr. TIERNAN. So that in two—

Mr. CHAMPLIN. We averaged per boat—average from 1969—dropped from 113,000 to this year—I am estimating the next 2 months of this year in this figure because I couldn't—

Mr. TIERNAN. For 1972.

Mr. CHAMPLIN (continuing). For 1972—to 53,000 pounds per boat.

Mr. TIERNAN. What are you estimating for 1972 then? How much?

Mr. CHAMPLIN. Fifty-three thousand pounds per boat.

Mr. TIERNAN. What's the total for 1970?

Mr. CHAMPLIN. Oh, 1,667,000 pounds.

Mr. TIERNAN. One million six what?

Mr. CHAMPLIN. One hundred sixty-seven thousand.

Mr. TIERNAN. And how many vessels?

Mr. CHAMPLIN. Thirty.

Mr. TIERNAN. Thirty?

Mr. CHAMPLIN. Thirty to 35; I took the figure 30.

Mr. TIERNAN. What kind—you jumped from five in 1969 to 30 in 1972.

Mr. CHAMPLIN. Yes.

Mr. TIERNAN. What size were those—1969—those five?

Mr. CHAMPLIN. Sixty to 70 foot.

Mr. TIERNAN. And all these 30 all comparable?

Mr. CHAMPLIN. These 30 are comparable with the exception of—in size they are comparable with the exception that the cost would be less. They are probably not as valuable in construction in some cases, in most cases.

Mr. TIERNAN. With a jump from five to 30, are these 25 new vessels?

Mr. CHAMPLIN. Converted from fishing.

Mr. TIERNAN. To lobstering?

Mr. CHAMPLIN. To lobstering—and new vessels, yes; there were, I think, some 12 or 15 new boats came in this Point Judith this year for lobstering.

Mr. TIERNAN. Thank you.

Mr. CLARK. Mr. Steele, do you have any questions?

Mr. STEELE. No, I have no questions.

Mr. CLARK. Thank you very much, sir, for your testimony and your statement.

Mr. TIERNAN. I think he has something else.

Mr. CHAMPLIN. I just want to finish my statement. Well, you answered my one question. I think we should—I make a recommendation we investigate these resources that the foreigners are taking. I think it can be pinpointed more. I think we have the resources to do it if they would do it especially on lobsters. I think we should follow Mr. Abbott's suggestion and I believe there is a move to make the measure more uniform from State to State.

Mr. TIERNAN. Let me ask you this question. Since Rhode Island has a much smaller measure, what is the legal size for lobsters in America?

Mr. CHAMPLIN. Three and an eighth.

Mr. TIERNAN. Three and an eighth?

Mr. CHAMPLIN. Yes.

A VOICE. Three and a sixteenth.

Mr. CHAMPLIN. Three and a sixteenth.

Mr. TIERNAN. Three and a sixteenth?

Mr. CHAMPLIN. Yes.

Mr. TIERNAN. Would you be interested in supporting legislation in our State to increase it or do you think that the other States should come down to one-sixteenth?

Mr. CHAMPLIN. It puts me in a rather peculiar position.

Mr. TIERNAN. Oh, I see. Every once in a while we like to do that. You know, we are always put on the spot. [Laughter.]

Mr. CHAMPLIN. I say this much. I don't think it would hurt Point Judith fishermen more than a half a year.

Mr. TIERNAN. More than a half a year—what do you mean, making the shift?

Mr. CHAMPLIN. One haul; maybe two hauls.

Mr. TIERNAN. Maybe we ought to do it since Rhode Island is out of step; maybe we ought to make the suggestion and increase it.

A VOICE. Their suggestion.

Mr. CHAMPLIN. I was asked this question one time before and I did take a little poll amongst the fishermen that were selling and I came up with about 50 percent that would not be really concerned about it.

Mr. CLARK. Gentlemen, we have to get on with this hearing. We do appreciate your coming. I've got to call the next witness. Thank you very much, sir.

Dr. Brown.

**STATEMENT OF DR. BRADFORD BROWN, CHIEF, FISHERY MANAGEMENT BIOLOGY INVESTIGATION, NATIONAL MARINE FISHERIES SERVICE, NOAA, DEPARTMENT OF COMMERCE**

Dr. BROWN. Mr. Chairman, members of the committee and guests: I am Dr. Bradford Brown, chief of the Fishery Management Biology Investigation at the Northeast Fisheries Center Laboratories of the National Marine Fisheries Service, National Oceanographic and Atmospheric Administration of the Department of Commerce.

The Northeast Fisheries Center consists of a consortium of three labs, one at Boothbay, one at Woods Hole, Mass., and one at Narragansett, R.I. This laboratory conducts biological research concerning the status of the fish stocks in the offshore waters of the northwest Atlantic area and concentrates on the effects of fishing considering the total fishing effort on these resources.

I do not have a prepared statement but I would be very pleased to discuss and answer any questions concerning technical aspects of the biological resources in this area. Thank you.

Mr. CLARK. Thank you, Doctor.

Mr. TIERNAN. Doctor, since we have just had some testimony that there is not much confidence in your services, what do you have to say about that? [Laughter.]

Mr. TIERNAN. Put you right on the spot.

Dr. BROWN. Right. I think that I would like to restrict myself only to the confidence in the area of biological research and I feel that although there are some points at which we have general disagreements with the industry on our biological research, I think in general our level of confidence is quite good; where we tend to have problems in those areas where we have not been able to devote the time to the research necessary to provide the type of answers that industry would like to have us be able to provide them.

Mr. TIERNAN. More specifically with regard to lobsters, is that within the realm of your studies?

Dr. BROWN. Our center has conducted research on lobsters. Our research on lobsters has dealt primarily in the past with the problems of movements and migration of lobsters. We are just now beginning our effort in this area of trying to determine maximum sustainable yield remembering this is a very young fishery which is increasing

very fast and it takes—increases much faster than it's within our capability to conduct research necessary to arrive at sustainable yield levels on the offshore stocks.

Mr. TIERNAN: Would you consider Dr. Saler more informed and knowledgeable with regard to the lobster?

Dr. BROWN. Most certainly.

Mr. TIERNAN. Do you have any—maybe you could help us. Is there a relationship between the offshore lobster and inshore lobster in your opinion?

Dr. BROWN. Well, I don't think it's a matter of opinion. Let me just report the results of what our tagging studies have shown.

Mr. TIERNAN. Doctor, you might explain how you tag a lobster, that's important, because of the shell, how they shed each year.

Dr. BROWN. Well, I am afraid I can't give you the details on this. I wish Dr. Cooper, who conducted this work, were here. I have been involved with some of the analyses of looking at some of his tagging results but not in the particular tagging studies, but they have developed studies that have been successful in tagging lobsters. Generally, the initial effort was to show, determine the relationship between the first offshore development of the fishery which was out in the northern area and the inshore lobster fishery in the Gulf of Maine. The several results after several years tagging show in the Gulf of Maine area along the Maine coast that these lobsters don't have any significant interaction with the lobsters in the offshore areas. When we move farther south, most of the tagging was done in the area in which there was not a great deal of fishing in the offshore area; it was not terribly extensive, but what we do find there were large-scale migrations of the returns of lobsters which were able to move over great distances and be caught in the inshore areas that had been tagged in the offshore areas. It is not possible through the extent of this tagging for the area, essentially from Cape Code south to determine the extent of this intermixing. All we can report is that we do have some instances of tagged returns which show that lobsters move from the deep water canyon areas all the way into the inshore areas south of Cape Cod. North of Cape Cod, the separation seems quite clear.

Mr. TIERNAN. Dr. Saler's study around 1964-65 where he tagged lobsters were attained at Cuttyhunk and placed at the mouth of the Providence River, Narragansett Bay, those lobsters were found back at Cuttyhunk within a reasonably short time, weren't they?

Dr. BROWN. Yes. I read his paper; familiar.

Mr. TIERNAN. That seems to be a contradiction to what you are just saying, or is that different?

Dr. BROWN. No. I think that just shows that lobsters are capable of reasonable movement.

Mr. TIERNAN. His thesis was that lobsters would go back to where they had been taken from, is that so? In other words, the lobster was taken from Cuttyhunk—

Dr. BROWN. Right.

Mr. TIERNAN (continuing). And then tagged and put in the mouth of the headwaters of the Narragansett Bay—

Dr. BROWN. Right.

Mr. TIERNAN (continuing). Traveled from there all the way back from where they had been taken.

Dr. BROWN. Right.

Mr. TIERNAN. Now, you say there is great movement. Don't they seem to stay?

Dr. BROWN. Let me defend this, what I mean by this "great movement." We are not in a position to say there is a great movement in terms of number of lobsters. What is indicated is the distance that some of the individual lobsters have been recorded to move. I mean, hundreds of miles.

Mr. TIERNAN. Are you talking about lobster that's taken from position  $x$  and tagged—

Dr. BROWN. And released.

Mr. TIERNAN (continuing). And put in  $o$  and returned to  $x$ ?

Dr. BROWN. No. I am talking about lobsters that were tagged in position  $x$  on the deep waters of the Continental Shelf that were later recovered in waters considerably closer inshore.

Mr. TIERNAN. Does age have anything to do with it?

Dr. BROWN. Generally it is the older lobsters that were tagged and moved, but this sort of detail is just not available. There is the inter-movement. There is this movement.

Mr. TIERNAN. What about the lobsters inshore, do they move to the Outer Shelf?

Dr. BROWN. The tagging basically has been in the reverse area.

Mr. TIERNAN. Reverse. I have no further questions. Thank you.

Mr. CLARK. Mr. Steele.

Mr. STEELE. Yes. Is it the Fisheries Service that reports the amount of lobster or the amount of shellfish taken by foreign fishing fleets? I've heard different figures. Are the figures that I heard, do they originate from your service?

Dr. BROWN. The figures that we work with at our laboratory, foreign fishing effort and foreign fishing, are basically those figures that are reported through the international agencies, particularly in this case ICNAF for various countries have agreed between the United States to report their fishery statistics to them. We use these statistics that have been reported to these international agencies. There has been a great deal of effort over the past to within the ICNAF area to increase accurate reporting and put a great deal of pressure to increase accurate reporting in the finfish stocked areas. There has been very little attention paid to the very small amount of shellfishes that have been reported so this is basically the source of the reports. People may find that they read them in a report that emanated from a Fisheries Service publication, but the statistics themselves were those submitted by the various countries to international agencies such as ICNAF or the United Nations.

Mr. STEELE. Is there any reason why we should believe those figures that have been submitted? Can't we assume that they are grossly understated? Do you assume that?

Dr. BROWN. Without getting into the problem of lobster statistics which nobody has really clearly looked at, and is not all of the statistics that we have been able to work with, with the finfish that have been reported to ICNAF with a few, very few exceptions, when we have been interested and tried to do what we could to try to check out what was probable through the use of surveillance, radio reports, and so forth, the reporting of statistics in general appears to be

reasonably accurate. I don't wish to—as far as the lobster statistics which is essentially not reported, you see, so you are talking about basically a nonentity. Lobsters have been essentially most reported—whatever lobster was reported—remember, lobster is not within the ICNAF agreement, you see, other mollusks, that kind of category.

Mr. STEELE. How many shellfish were reported taken, let's say, in 1971? What is the figure?

Dr. BROWN. The figure for other shellfish—I may—total shellfish reported as other shellfish—I have it—basically, the total other shellfish reported turns out to be something like—by the Soviet Union—about 6,500,000—no—yes—metric tons—no—yes—let me be sure. I am reading the figures: the metric tons by the Soviet Union as leader, Japan, report other shellfish 4,612. The greatest indication is that most of these are squid, right, but the breakdown into what might be other is not there; because of the sales and other general information on fishing, it appears the bulk of what they were catching was squid.

Mr. STEELE. With the American fishermen up against the sophisticated Soviet and other fleets that are using pulse fishing methods, who is working for the American fisherman? Who is doing research? Who is developing finer mechanisms? Who is helping them? Who does he turn to? Where does he go for help? Does he go to you?

Dr. BROWN. Our particular area in terms of our research is essentially trying to develop levels of sustainable yield that can be removed. As it was brought out very clearly by Dick Allen, we have essentially passed that some time ago in terms of the overall picture. Our research on total effort dates back about in 1965. We had enough fishing effort to take finfish ignoring the shellfish area, certain stocks, but the regular ground fish, fisheries, the traditional ground fish, fisheries fished by bottom trawls had enough effort in 1965 if they take in everything and it was still overfishing back in 1965 on certain particular species that were being concentrated on.

Since that time, effort has continued to go up, and what we have been attempting to do is try to document what both sustainable yields of various species can stand so that we can make the recommendations to the various agencies that have responsibility for setting policies as to what are the levels that the stocks can sustain.

Mr. STEELE. Is there anybody helping the American fisherman update? Anybody helping the American fisherman develop new techniques, et cetera?

Dr. BROWN. Basically—

Mr. STEELE. Is there any agency, is there any department, is there any office within a department or an agency that's working on that problem?

Dr. BROWN. I think, perhaps, in terms of this, maybe it's a better question for Mr. Norris to answer about certain other aspects of the National Fisheries Service because in the past there have been certain aspects along this line where I think you will find some of the initial gear work and exploratory fishing work was done in the offshore lobster fishery, was done by a branch of the National Marine Fisheries Service because, basically, when we are dealing primarily with a resource that's, you know, over-exploited as we see it, our research is trying to say, "Look, this is the level that can be taken out; this is where we are, and this is step 1 in terms of our lobsters' priority."

Mr. STEELE. Let me ask just one final question. Haddock and herring have been particularly hard hit. What are the main species of fish that are most in danger at the present time, that are being most hard hit and for which you are most concerned over the next 2 years?

Dr. BROWN. Obviously, you hit the two that have been the most severely affected by what I would call overfishing, overfishing in the judgment that you have reduced them to the level that they are supported; much less haddock which harvested something like 50,000 tons, metric tons a year, is capable now of something less than 6,000 tons without reducing the stock even more.

We are also very much concerned about stock such as the yellowtail flounder which have been perhaps not so severely depleted but certainly stand severe restrictions particularly in being caught as an incidental species.

We are also concerned, we recommended and ICNAF has quotes on cod, a species not yet overfished but certainly being fished right at about the level, and there is certainly very little room for expansion, and we are very much concerned about a species such as this.

I mean, lobster is certainly receiving a great deal of interest, and our concern being when we can get some handle on what levels can be taken out prior to it being reached but here we have an extremely rapidly increasing fishery. It's very difficult to achieve this. Total effort is our real concern though.

Right now our real concern is to what sort of levels can we recommend, what sort of conversion factors so we can convert vessels to make a time recommendation to allow the total amount of fishing effort. Even if you regulate certain species, the incidental catch by vessels fishing for other species and the changes in the regional estimates that can take place by these removals essentially can serve to negate the effect of having regulations on select species if there is not some total control on the amount of effort being expended in these areas.

Mr. STEELE. Thank you.

Mr. TIERNAN. Doctor, expanding on Congressman Steele's question, is it my understanding that you don't have now the basis to say what is the sustainable yield for lobster?

Dr. BROWN. That is correct.

Mr. TIERNAN. When will we have that?

Dr. BROWN. It is very difficult to predict the results of creativity and research, but we hope that we will have at least a preliminary figure that will give us a reasonable guideline that will later be refined, of course, by late next spring.

Mr. TIERNAN. When you get that, what do you do with it?

Dr. BROWN. Well, our normal procedure when we are involved in this sort of work is to move back and forth particularly through the regional office which is our main contact with the industry in terms of discussing our findings, our biological findings, with the concerned members of industry; then, usually, the impetus for moving beyond that comes from the impetus of the industry and the other policy-makers, people involved in policy negotiation; so our real impact on this is to produce the research and then we will be providing the results of this to the lobster industry people and our administrators.

Mr. TIERNAN. What I am trying to determine is whether or not on the basis of that is their ability to restrict the number of lobsters taken. When you find it in these other areas, how do you effectively control the yield?

Dr. BROWN. Obviously, at present, there is no mechanism through which somebody could establish this for lobsters; for the fin fish, there is a mechanism through ICNAF where quotas can be set.

However, we are talking about haddock, sustainable yield of levels long before ICNAF was thinking in terms of quotas as far as the lobster is concerned; so from a scientific basis, we moved in terms of where our research shows us that raises the question about how these become interpreted, you know, put into play. We hopefully have to rely on this sort of effort that takes place. We need our administrators and other mechanisms to do this.

Mr. TIERNAN. There would be very serious consequences and grave concern to many of the people in this room today. We have to lobsters what could happen to some of our other fish stock, isn't that so?

Dr. BROWN. Yes, very much so.

Mr. TIERNAN. Thank you, Doctor.

Mr. CLARK. Thank you very much, Doctor. I am very glad that I called you back—you added a lot to this meeting this afternoon.

We have one more witness. He was here earlier. Mr. John Crossman, Jr.

Mr. CROSSMAN. Thank you very much, sir. Mr. Smith who came with me has some things that he would like to bring out, a collective thing that we have been—we have been affected by it, one of the things that has been extremely difficult; it's called—well, what we would call a sort of a—it's a safety hazard, really.

Where these tacks are every night whether the weather is, you know, thick weather or whether it's clear weather, we could say take a portion of these tacks about like this. You could put those tacks in a group down by No. 10 buoy, the Great South Channel and we have to steam down through this fleet of boats; that, in itself, constitutes a very dangerous situation. These boats are unmindful of any passing vessels—absolutely unmindful. We have been squeezed into a corner. I, personally, have been squeezed into a corner a couple—three times when it was just nip and tuck as to whether I was going to come out of it with the whole skin. It's like, I think, comparable to driving an automobile. You've got to try to think for the other fellow, and the only way you are going to come out with a whole skin is to definitely think for the other fellow because he just absolutely—he doesn't regard your presence on the ground at all.

Now, this is just one more reason why we are very adamant about the fact we would like to do something about getting them out of here if there is any possibility of doing so.

Mr. STEELE. Where would your own boats be now as they come home?

Mr. CROSSMAN. The canyon that they have been fishing in is covered here to the east of it but we go from this point to Howards Point.

Mr. STEELE. In other words, you've got to get through that traffic jam some way as you go home at night?

Mr. CROSSMAN. Yes.

Mr. STEELE. And these ships are how much bigger than yours, how many times?

Mr. CROSSMAN. We are 50-foot boats. These are in the neighborhood, as Mr. Norris explained, from 200 to 500 feet long, and they are just like that. Those tacks don't exaggerate the situation at all; as a matter of fact, they maybe are a little under.

Mr. STEELE. Have there been any casualties?

Mr. CROSSMAN. Not that I know of; there are a lot of collisions, a lot of loss of shipping.

Mr. STEELE. How many collisions have there been this year would you say?

Mr. SMITH. Hasn't been any collisions; if there is, it would go to the bottom.

Mr. STEELE. You just said there have been some collisions.

Mr. CROSSMAN. There have been, yes.

Mr. CLARK. This year?

Mr. CROSSMAN. This year? I don't think so that I know of.

Mr. STEELE. Anyway, it's a major hazard.

Mr. CROSSMAN. There was a Polish vessel ran down an American dragger.

Mr. STEELE. Was that early this spring or early this year?

Mr. CROSSMAN. I can't remember exactly when that was, I am sorry. I just thought I would bring this out as another very hazardous thing—

Mr. SMITH. That's every night; I think this is the point we are trying to make. When we take head count in the morning after a trip, you can always thank God if every guy is back. You don't worry about the weather. You figure on the weather. You worry whether or not he is going to get through Great South Channel. It looks just like the radar screen—every single boat—and that has been true all summer, which is an indication. I don't think it's been brought out clearly that 90 percent of what we might call the offenses of foreign boats occur at night. I think anybody in this room will back that up, including the Coast Guard. These fellows are right in this whole area, block the whole channel every night—moved out by day. Down here when they raped the Continental Shelf, it was by night.

Mr. STEELE. Was this East German offshore trawler—was that the *Steve Beando* case?

Mr. CROSSMAN. Gosh, I am not sure.

Mr. STEELE. Anyway, in other words, that's worse than going over the Gold Star Bridge trying to get home at night.

Mr. SMITH. This happened off the State of Washington this last month. Somebody sent to your committee the letter of a wife of a fisherman with just the same story. Every night they have to go through these vessels and out there according to this letter, several have just plain disappeared.

Mr. CROSSMAN. I'd just like to bring one more thing up. Of course, we can't control the weather. All we can do is keep our finger on it and monitor the weather reports, use good judgment, or as good judgment as we possibly can. Fishing that far offshore, you are bound to get hooked or caught in some kind of inclement weather one time or another. You can't always look out, but in real thick weather which it's like, of course, on the shelf itself where the water is warmer

outside the 50-fathom curve, we have little trouble with fog because the air temperature and the water temperature are the same; when you get up on high banks in the Georges and the weather gets cold, it's thick fog and blanket fog most of the time; that is the problem.

Mr. CLARK. Thank you very much, John. What I would like to do if there is a photographer here in the room, I would like to have a picture of that chart as it is right now, as it appeared when you brought it in today. Do you have something further to add?

Mr. CROSSMAN. We have one more thing we mentioned to Congressman Steele before. If there be time, we were wondering if perhaps that tape recording we brought—there was a—this radio person from the radio interviewed a bunch of lobster fishermen about—this was during the Pearl Harbor time we called it. We really got ruined early this spring by foreign, you know, vessels, and would there be time to play this so that you could hear it? If there is not, why—

Mr. CLARK. I think we are really playing on time now. We are already an hour late coming up for our next conference. We would like to have information put into the record here. I had told you earlier, John, we would put this in the record.

Mr. CROSSMAN. We thank you very much.

Mr. CLARK. Thank you, and thank you for coming back. Thank you, all of you, for being so patient today.

Some of the local fishermen came to me and we will be given some questions in the morning by them, and we are going to resume our sitting in the morning at 10:30. Before we close, I would just like to congratulate my two colleagues here, Mr. Tiernan and Mr. Steele, on their dedication to their districts, their States, and to the Nation. They are both excellent Representatives and you should all be very proud of both of them. I believe this meeting is one of the most truthful ones that I have ever attended. The witnesses are very knowledgeable and I do hope that this committee can act favorably with respect to this unfortunate situation the fishing industry is facing today.

The meeting is adjourned until tomorrow morning at 10:30.

(Whereupon, at 5 p.m., the committee adjourned until 10:30, October 7, 1972.)



## COAST GUARD FIELD ACTIVITY

### New England Fishery Problems

SATURDAY, OCTOBER 7, 1972

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON COAST GUARD, COAST AND  
GEODETIC SURVEY, AND NAVIGATION OF THE  
COMMITTEE ON MERCHANT MARINE AND FISHERIES,  
*Stonington, Conn.*

The subcommittee met at 10:45 a.m., pursuant to notice, at the Holy Ghost Society Hall, Stonington, Conn., Hon. Frank M. Clark (chairman of the subcommittee) presiding.

Mr. CLARK. The subcommittee will please come to order. Our first witness Saturday morning, October 7, is Mr. Jacob Dykstra, president, Point Judith Fishermen's Cooperative, Point Judith, R.I. Will you please come to the witness stand, please?

Mr. DYKSTRA. Thank you, sir.

Mr. CLARK. For the court stenographer, will you please give your full name and address?

#### STATEMENT OF JACOB DYKSTRA, PRESIDENT, POINT JUDITH FISHERMEN'S COOPERATIVE, POINT JUDITH, R.I.

Mr. DYKSTRA. Yes, sir. Thank you, Mr. Chairman. I certainly didn't expect to lead off here this morning. My name is Jacob J. Dykstra. I am president of the Point Judith Fishermen's Cooperative Association, Inc., Point Judith, R.I. I am at somewhat at a disadvantage. As you perhaps know, I was in Washington yesterday on the same problem of foreign fishing and unable to be here and hear the testimony that was given yesterday. I don't know how much was brought out about the activities of the Point Judith Fishermen's Cooperative.

We have about 135 members. We have around 40 vessels bringing fish and lobsters in Point Judith. We market these products at the co-op, have sales of approximately \$6 million a year there; so this is the kind of activity that we engage in.

I wish to apologize for not being here yesterday. The meeting in Washington was on bilateral negotiations which are going to be coming up again with the Russians and I felt it was necessary for me to be there.

I would prefer, Mr. Chairman, if I may, to be very brief. Since I had not expected to be here and had not expected to testify, I don't have a prepared statement. I would be happy to provide any infor-

mation I can for the record later on. I would prefer just at this time to state briefly what our problem is with foreign fishing and then to answer any questions that any of the members of the committee may have. Certainly foreign fishing is the most difficult problem that our fishermen in New England face today, and, in fact, that the coastal fishermen—

ANNOUNCER. For the last 10—

Mr. DYKSTRA (continuing). Of the United States face today.

Mr. CLARK. Well, no, wait a minute. We don't do that. I am sorry. We can't do that. If you want to do that now, how long is it going to take you?

ANNOUNCER. No more than 3 minutes.

Mr. CLARK. Okay. Go ahead. Discontinue because we can't hear two things at the same time. Go ahead.

ANNOUNCER. If you people can be talking to the gentleman just casually, I would appreciate it.

(Discussion off the record.)

Mr. CLARK. You may continue, Mr. Dykstra.

Mr. DYKSTRA. Thank you, Mr. Chairman. Well, I think that there are many fishing skippers, probably been here yesterday, and will be here to testify today that can give you a far better detailed report of what happens on the grounds than I would be able to and it would be repetitious for me to do so.

My involvement has been more with the overall picture of what foreign fishing is doing not only in New England but in the United States and in spite of a number of arrangements that we have in international waters, there has been a steady depletion of the stock of fish and had not prices advanced considerably in recent years, we would be in dire straits right now. The thing that I think really bothers the fishermen is that it seems that one resource after another gets more and more depleted and surely before too long we are going to be at the end of the road.

I have been involved in all of the arrangements that we have for control of foreign fishing around the shores of the United States. I have also been involved in the Law of the Sea meetings which have been going on in Geneva and in New York attempting to try to find some solutions for this problem for the U.S. fishermen.

As you probably have discovered already in the past testimony, it is an extremely knotty problem, very complex; involves not only the fisheries but many other aspects of use of the ocean and many other aspects of U.S. policy. I don't have any panacea for foreign fishing, for getting rid of foreign fishing. It's very easy to say, "Well, let's kick them out," and certainly this is what I would like to see done but it's a difficult thing to do and something which our Government apparently is not going to do in the foreseeable future, at least, not until we go through the exercise of attempting to write a new law of the sea.

So that I would say probably it's better, you know, to listen to the fishing skippers about what's going on out on the grounds and if you gentlemen have any questions to me about what the present arrangements are or what my view of the Law of the Sea Conference is, I would be happy to answer any questions of that type. Thank you, sir.

Mr. CLARK. You are in the fishing business, is that right, cooperative fishing business?

Mr. DYKSTRA. I myself am a working fisherman, when I get to go to sea, which is probably about half the time now, but I also am president of the Point Judith Fishermen's Cooperative and do this type of work representing the co-op with government and outside agencies.

Mr. CLARK. How many ships does this cooperative have under its jurisdiction?

Mr. DYKSTRA. We have about 35 vessels that are dragging, lobster pot fishing, anywhere from 50 feet up to 85 feet; then we have perhaps another 20 of the smaller inshore lobster vessels.

Mr. CLARK. Do you think the Law of the Sea Conference will solve this problem?

Mr. DYKSTRA. Sir, I think that if we could wait for the Law of the Sea Conference that it could solve the problem, yes. However, I am of the opinion that the Law of the Sea Conference is not going to be timely to solve the problems.

Mr. CLARK. Thank you very much, Mr. Steele.

Mr. STEELE. Mr. Dykstra, can you tell us about the meeting yesterday in Washington, precisely what was accomplished.

Mr. DYKSTRA. That's a very good question. I often wonder what is accomplished as we go about these meetings day by day and month by month attempting to find small ways to alleviate the problem of foreign fishing, but the meeting yesterday was called precisely to find out what industry thought about how the agreement was working and how it could be improved. In other words, the agreement that we have now says that the foreign fishermen will stay out of certain areas at certain times. They will refrain from fishing certain species that are overfished and various concessions that they have made in exchange for this, they are supposed to get some loading areas near to shore where they can off-load fish and port calls in some of our ports. Now, the difficulty with this type of arrangement is that it's more or less of a horse trade and we have very little to trade, and so we went there and they asked them in—

Mr. STEELE. You say "they."

Mr. DYKSTRA. The State Department conducts this meeting and the State Department—

Mr. STEELE. Who was at the meeting?

Mr. DYKSTRA. Who was at the meeting? Ambassador Donald McKiernan chaired the meeting. There were representatives there of the Department of Commerce, the National Fisheries Service; there were representatives there of the Coast Guard; there were representatives of industry from Virginia and from New Jersey and myself and we just went over whether we thought that the present arrangements were doing anything for you.

Mr. STEELE. Do you?

Mr. DYKSTRA. Yes, sir.

Mr. STEELE. You do think they are. What exactly are the present arrangements in practical terms accomplishing for us right now? How worse off would we be without the present arrangements?

Mr. DYKSTRA. This is something which is difficult to evaluate and different people have different opinions on it. There is an area which has come to be known as the "banana area" which is quite a large area offshore where some of the important species winter and the Russians have agreed to keep out of this area for a certain period of the year

from the 1st of January to the 15th of April when these species are wintering in this area and thereby keeping them from concentrating on them at the time when they are very vulnerable to them. We also have arrangements that they will not increase their level of fishing above the 1967 level for species of fish such as red hake, silver hake, scup, and have arrangements that they will have no direct fishery for flounders and scup; so that there are some of the species that are at least in theory protected by this. When it comes to the practical application of it, there are large difficulties involved because it's very difficult to enforce many of these provisions or to know whether the Russians are living up to them.

Mr. STEELE. How long have these provisions been in effect now?

Mr. DYKSTRA. Since 1967, I believe, or 1968; 1968, I believe it was when we made—

Mr. STEELE. You say it's hard to know how well they are being observed. Certainly the testimony yesterday throughout the day would indicate that no one is very happy with the way they are being observed. Do you put yourself in that category?

Mr. DYKSTRA. Yes, sir.

Mr. STEELE. We have a number of possible approaches to the problem outlined for us. I would be interested in knowing which of these you feel might be most appropriate. We had the voluntary moratorium, which is really partially what we have been doing since 1968 which you just described in certain areas in certain times of the year. We had the solution of temporarily extending our fishing jurisdiction or granting coastal States preference in their traditional fisheries and working with a permit system; also, we've talked about the need to increase the Coast Guard's capability, provide protection for our fishermen. You seem to be of the opinion that the Law of the Sea Conference is not timely; at best, it appears we can conclude that any kind of agreement is at least 1974 at the earliest. The kinds of meetings that are being held, such as in Washington, not having any concrete effect, what concretely would you suggest that the Congress of the U.S. Government do in the next 6 to 12 months?

Mr. DYKSTRA. If I knew something that could be done; I mean, we have been exploring every avenue possible; and if I knew something that could be done that I could recommend right here at this moment, I would.

Mr. STEELE. It's been since 1968 that we have been wondering. When are we going to come to some agreement on the approach that should be taken?

Mr. DYKSTRA. Well, let me—let me try to say it this way. Several of the suggestions that you say have been made all involve unilateral extension of U.S. jurisdiction. Regardless of how you put it, you put it in all sorts of terms like moratorium or one thing or another, but all of these are actually unilateral extensions of U.S. jurisdiction. It has been impossible for us to convince our Government this should be done, particularly at a time when an international approach to the problem is being taken. It's very difficult to try to get the Executive of the Government to take unilateral action; and if, indeed, unilateral action was taken by legislation or something like this, it's very problematical whether there would be any enforcement of it; in other words, send gunboats out to shoot up fishing vessels; so that the

things that you have mentioned here, certainly beefing up the Coast Guard is helpful, but, of course, the Coast Guard has to have something to enforce that's meaningful, and at the present time there is very little that they can do about that.

I would say that in the approaches that you talked about that there are really two elements: One is some sort of legislative approach; the other is some approach by the Executive.

Now, the approaches that the executive is using, at the moment working hard in ICNAF, the International Commission for the Northwest Atlantic Fisheries, working hard on the bilaterals, working on the Law of the Sea.

Now, all of these things, the executive feels is the best that they can do at the present time. They are not effective for us, but they say, "Well, we'll try harder; perhaps we can implement some of the provisions of the 1958 convention." The declaring the lobster a creature of the shelf is one thing that has been mentioned as being helpful to our fishermen, but all of these things are Band-Aids on a big problem and they are not actually getting to the root of the problem. The root of the problem is to get the foreign fishermen off of those stocks of fish that are being depleted and to get the U.S. fishermen catching them, and this is a very difficult problem.

Mr. STEELE. Well, do you and your associates and the cooperative support unilateral action by the United States at this point?

Mr. DYKSTRA. What we have done is supported what the fishermen of the United States have supported, so-called a species approach to the Law of the Sea; at the present time, we are sticking with that. However, in our frustration, we probably would support unilateral action, legislation for unilateral action, if we thought that it was feasible and would have a chance of passage.

Mr. STEELE. Thank you.

Mr. CLARK. Thank you very much, sir.

Our next witness is Hugh O'Rourke, executive secretary, Boston Fisheries Association; and the top of the morning to you, sir.

#### STATEMENT OF HUGH O'ROURKE, EXECUTIVE SECRETARY, BOSTON FISHERIES ASSOCIATION

Mr. O'ROURKE. Good morning, Mr. Chairman. I would say offhand that the fishing industry works together because I drove 100 miles here in driving rain, and I assure you those who had not experienced it don't want to experience it.

My name is Hugh F. O'Rourke, executive secretary, Boston Fisheries Association, a coordinator of the Massachusetts Seafood Council. I am a member of the U.S. State Department Ocean Affairs Advisories Commission and industrial advisory member of ICNAF; secretary of the New England Fisheries Steering Committee, and chairman of the New England Fisheries Task Force Committee.

I welcome the opportunity to appear before your committee to discuss the critical status of the New England fisheries. America's first industry is suffering severe economic hardship caused mainly by extensive foreign fishing off our coast which is so depleting the fishing stock of one of the most prolific fishing grounds in the world that the important species such as haddock and cod have been reduced to a

quota catch basis. Ten years ago, the total landings at the Boston Fish Pier were 110 million pounds, but for 1970 and 1971, total amounted to 32 million pounds. Obviously, this reduction means decline in employment, decline in the fishing fleet, and a general overall decline in the trades allied to fishing at the Boston Fish Pier.

I sort of welcome the opportunity of following Jacob Dykstra. I understand that you people have had hearings yesterday and I don't care to be redundant and repetitive. My approach is going to be a little bit different. My approach is going to be related to the overall effect as far as the economic situation is concerned with the industry.

I think we are well aware of what's taking place out in the ocean. I think one of the things that the general public is not aware of is how the industry is suffering and that, I believe, something should be done about getting some relief.

With the population growing, with the increased demand for seafood, it seems incongruous that the U.S. market approached \$1 billion worth of seafood in 1970 and 1971; and, by the way, they exported \$119 billion worth of seafood which shows a good balance as far as moneys are concerned. Approximately 70 percent of the fish consumed in the United States is imported. Our neighbor, Canada, exports 75 percent of her fish production to the U.S. market. Originally, the United States was a prime import customer but within the past few years, the situation is changed. Greater demands for seafood abroad has limited the export supply; if the supplies diminish, then the U.S. consumer will undoubtedly turn to the domestic industry for seafood. If our fishing fleet continues to shrink, if our Government does not sustain our fisheries, then we are headed for oblivion. The price of fish will spiral and the average housewife will be unable to purchase seafood. Why should the U.S. Government stand idly by and permit the industry to disappear from New England caused primarily by callous foreign fishing methods, particularly the Soviets? Fourteen nations fish off of our coast, each heavily subsidized by the respective governments. If these subsidies were withdrawn tomorrow, the foreign fishing fleet would disappear. Is it too much to ask that our hard-working fishermen be given the same privilege as their competitors?

Fish is one of the last bastions of free enterprise. Now, conditions are so bad that they must turn to the Federal Government for assistance; indeed, they are relatively in the same situation that the dust farmer was years ago who, through Federal aid, made extraordinary recovery.

On March 23, 1972, Congressman Tim O'Neil of Cambridge, a friend and a neighbor, arranged a meeting for representatives of the New England fishing industry with the New England congressional delegation offering us an opportunity to present our views on the basis of international, national, and regional basis.

Although the prospectus which I gave you this morning is rather lengthy, the problems submitted are brief, the solutions are also brief, and the solutions that we hope develop certainly could be accomplished. We requested that NOAA and the National Marine Fisheries Service review our presentation and advise what could be accomplished administratively and what required legislative action. May I request that you turn to page 6, 7, 8, 9, and 10 of the first part of the material I offered you there and very quickly by looking at these charts, you

can see what has happened to the fisheries. On page 6, you will note—this is the Soviet fishing concentration from April to December 1961; then in turn, you turn the page and notice the same situation from January 1 to December 31. You notice the growth of the activity; then you note here in 1970, the tremendous effort by the Soviets and now they are all the way down to Cape Hatteras and this obviously is what is affecting us.

Now, if you also look at page 9, you will note that the sketch there is drawn if the 200-mile jurisdiction was permitted; then, in turn, this would cover the areas the Soviets fish and would save our fisheries.

In our committee's estimation, action should be taken on making lobsters a creature of the shelf, the tariff and fishing gear should be reduced, the insurance cost should be lessened, and that the Government become a partner in revitalizing our industry.

I think that the tenor of the situation the past year has changed completely. Previously when we attended meetings in Washington or met with the State Department, with the National Marine Fisheries Service, then, they were listening to us but I don't think that they were fully aware in the full sense of the word of how critically we were positioned here in New England, and I would say within the past 6 months that the situation has changed.

At the National Fisheries Policy Congress in Washington last week, possible areas of legislative activity were discussed with 40 members of the U.S. fishing industry representing the Atlantic, the Pacific, and the gulf coast. The day following the fisheries conference, a meeting of the State Department Ocean Affairs Committee took place. Various recommended legislative articles were discussed and the one that received the greatest amount of attention is the statement of U.S. fisheries jurisdiction. I wish to make the statement part of the brief submitted today and would welcome the opportunity to read it into the record of today's proceedings.

Might I also add, Mr. Congressman, that the material that I offered you there, you will notice if you get the opportunity to read it—a member of your staff does—that it started as of March 23. There is response from NOAA and our response to them; in turn, a final response, my point being I think the nucleus of the whole thing is in the first presentation we made. May I read to you the statement on fisheries jurisdiction?

The National Fisheries Policy Conference endorses the United States draft articles proposed at the summer 1972 preparatory session of the Law of the Sea Conference in which a species approach to fisheries jurisdiction was affirmed.

The Fisheries Policy Conference urges the Government to continue to press for a successful conclusion to the Law of the Sea Conference as quickly as possible and to continue and increase its practice of coordination with industry in these proceedings.

Now, this, to me, is the most important part of the whole recommendation.

In view of the fact that many U.S. coastal fishery resources are being seriously damaged due to uncontrolled overfishing by foreign fleets, the National Fisheries Policy Conference urges the Government to take such steps as are necessary to protect these fishery resources pending conclusion of the Law of the Sea Conference.

These steps should include, but not be limited to full utilization of the 1958 Geneva Fisheries Convention, other conventions, bilateral agreements and multi-lateral agreements.

That is my presentation, and I certainly appreciate the opportunity of appearing before your committee.

Mr. CLARK. Thank you very much, Hugh. Mr. O'Rourke, what would be your answer if someone were to say to you, "Why should the Federal Government do all the things you suggest for fishing industry? Why do all of this for the fishing industry as against some other business?"

Mr. O'ROURKE. Well, I would like to respond to you in two ways. One is that obviously our provincial approach, namely, New England; I do believe if you read the U.S. Fisheries Report, 1971, the fisheries around the United States were in pretty good condition; coming back to New England, they are in a very bad way. I think this relates to how do you get back on your feet and from where can you finance your position if, basically, because the industry is in such an awkward situation that private financing is not there? You note that I said in my original part of the discourse that we are not unlike the farmer who was really bad off and was rescued, and I will say quite frankly that the fishing industry and the people I work with are not looking for a handout; they are looking for recovery. As Jacob Dykstra said a few moments ago, that if the fishing grounds were returned to us, it wouldn't be but a short time we would be back in business, but the situation is such that without supply the men in the business are bad off. Now, as far as making a comparison with another business is concerned, I don't know what to compare it with excepting the conditions are so poor that they do need Federal help.

Mr. CLARK. Let's say that the Federal Government would subsidize the building of a new shipping industry where you could go to the Federal Government and, say, get a loan for 1½ percent interest in order to build up your fishing industry. Would you be in favor of something like that so that you could be in real competition with the foreign flags that are coming in fishing off the 12-mile limit?

Mr. O'ROURKE. Well, in response, I would have to answer two ways. No. 1 is, obviously, you must get product. Having new boats is important but it's not basically the problem; the problem is supply. The other—

Mr. CLARK. The problem is the product?

Mr. O'ROURKE. Exactly, exactly, then boats, but by the same token, I do believe we are all creatures of habit. Much of the fish that we eat, we eat purely because we have done it traditionally and all I am saying is, it could well be that of the ocean, there are various species of fish which, through aid on the part of the Government which they are working on presently, possibly we could develop new markets which is indeed important; so there are various ways of approaching this thing particularly in an infant basis.

Mr. CLARK. Yesterday I had taken a picture of the 113 foreign fishing boats on Georges Bank September 6, 1972. Now, what would be wrong if we had a U.S. industry where we would have that dotted with U.S. fishing boats instead of foreign? What do you think would happen then?

Mr. O'ROURKE. Well, No. 1 is I don't think there is anything wrong with it. I think we would be back in business. I think it's a sad commentary that people who are willing to fish and rather interestingly, going back to this fact, our country purchases \$1 billion worth of fish.

Certainly, the business is there and I think—I would like to also emphasize the fact that with less import products, I do believe 3 to 5 years from now, we are going to be faced with the situation it will be impossible to buy fish which is indeed wrong particularly when you think of the fact that years ago Georges Banks used to supply 40 percent of the fish eaten in the United States and 12½ percent of the fish eaten in the world. It used to offer 3 billion pounds of fish a year and now it's no quota and they still keep coming back. I mean, this is what's wrong. I don't think this thing is involved. I think it's terribly simple; that the thing is, we must—the important part is, we must get supply and we can't get supply unless we are awakened by this situation off the coast.

Mr. CLARK. We have been hearing a lot of testimony from different groups, cooperatives, and business people that have boats and we asked them how many fishing boats they have and some of them have 30, some of them have 40, and I was wondering what would be wrong if the fishing industry in New England would all of a sudden get together and take all of their fishing boats down in that particular area and I am sure it could do it. You would encompass the whole area before the foreign fishing boats could come in. Now, what I am trying to get at for the record, what do you think would happen?

Mr. O'ROURKE. Well, again, I am going to answer you two ways. One is, I am not a fisherman to begin with and Jacob is far more able to respond to the question on the basis of boats, but what is told me is, whenever our fishing boats find a school of fish and they make other boats aware of it, within a very short time they are descended upon by 30 or 40 heavy trawlers from whatever foreign country they may be and they wipe out the resource. I would say if you had a convention of boats out there working, obviously there would be some competition, but I think the concern is that the methods and the equipment they have in the foreign countries is so much—I wouldn't say better than ours because that isn't a fair estimate, but so much larger than ours that their method—for instance, rather an interesting commentary—I have often said if they took their factory boats out of there and had to come to shore with their supplies, they would be using less fish, but bear in mind they are out there all the time and they are going 24 hours, and where we return to our shores which is our normal procedure with our fish, with our product, they are still fishing, and they are still loading their boats; so, it's an endless thing.

Mr. CLARK. This is what I was getting at when we first started the questioning. If you had the same type of fishing boats and equipment, then you would be able to really do a good business as far as competition is concerned, is that right?

Mr. O'ROURKE. It would be indeed helpful; it would be helpful.

Mr. CLARK. That's what I was trying to get from you. Mr. Steele.

Mr. STEELE. Mr. O'Rourke, I want to join in welcoming you here this morning especially driving those 100 miles in the rain.

The Canadians are closing fishing waters now. Will you explain to the committee precisely what the Canadians are doing and what their approach to the problem is at the present time?

Mr. O'ROURKE. I would hesitate to explain on the basis of an authoritative statement excepting that I would say offhand they are protecting their own grounds. They indeed have advantage over us

because of their waters; for instance, the Bay of Fundy which belongs to them, and so forth. As far as closing down their fishing grounds are concerned, obviously they are making every effort to protect their grounds so that there is fish available.

I think one of the things you have to bear in mind is—which is extremely important—that the maritime province relating to fishing is their main reason for existence. In other words, economically pointing out they live by fishing and in turn they, I think, are, I would say, as aware as we are, if not more aware of concerning protective measures; whereas, and I like to say this but I think it's partially true that in many instances our fishing activities in New England are treated as being incidental and I think this is proven. This is not responding directly to your question but this is proven by the fact that the methods by which the Canadian Government has subsidized the industry over the years; rather interesting when you analyze it. We get 75 percent of their production so it's extremely important for them to protect their waterways, and I think they do it quite zealously and they are to be complimented for doing it.

Mr. STEELE. How far out are they closing waters at the present time?

Mr. O'ROURKE. I am sorry, I can't respond to that question. I really don't know. I am just a member of this Commission. People who fish do know.

Mr. STEELE. Is it as far out as 100 miles?

Mr. O'ROURKE. I don't know.

Mr. STEELE. You don't know?

Mr. O'ROURKE. I don't know.

Mr. STEELE. Now, am I correct you are proposing that the 200-mile limit be established now by the United States—fishing limit, I am talking about.

Mr. O'ROURKE. Mr. Congressman, I am proposing that the U.S. Government enact legislation even on an interim basis that protects the coastal fisheries whether eventually the Law of the Sea sees fit to call it 200 miles or whether they call it coastal zone preference. In my estimation whatever form of legislation is taken on a bilateral basis or taken on the basis of the Law of the Sea Conference, I think it's absolutely necessary that some form of protection be exerted.

Mr. STEELE. What I am getting at, you said you would hope the United States would press for early conclusion of the Law of the Sea Conference. Now, it seems to be very clear that there is going to be no agreement until 1974 at the earliest, and then agreements have to be ratified; they have to be put into effect, enforced, mechanisms have to be set up. No one seems to be—most people don't seem to be willing to simply wait here, sit here and wait for the diplomats to negotiate this kind of agreement; so very practically speaking, we would like to know precisely what you are recommending now. Are we going to wait for the Law of the Sea Conference to develop this kind of agreement or do you recommend and advocate temporary action at the present time?

Mr. O'ROURKE. I certainly do recommend, advocate, temporary action. The form of the action obviously as we well realize would involve not alone New England fishermen—other fisheries. This is why they proceed slowly; nevertheless, I certainly advocate action that will

protect what we had left and possibly work toward rebuilding our areas so we'll have a supply.

Mr. STEELE. Well, the reason I mentioned the 200-mile limit is because you pointed out in your diagram that is what was to be required to really protect what we want to protect; so is that essentially what you are advocating, the 200-mile-limit fisheries?

Mr. ROURKE. Let me explain it this way, Mr. Congressman. No. 1, that was made up in March 23, spring. Things are changing very rapidly. Basically, one or the 200-mile limit on the fact that this was the only thing that was discussed at that time. Now, it's the species approach; now, it's the coastal zone approach; now, it's the approach on the basis of an interim form of legislation or method; so, therefore, whatever would be helpful to the industry—200 miles would be excellent to begin with. I mean, this is a good starting point, but if this was not realized due to complications—and I don't think we should bypass this whole situation, only lean on the 200 miles. This is my point.

Mr. STEELE. How long—we asked this of one other witness yesterday—how long can we wait for this kind of agreement before the process of destruction of the New England fishing industry as well as the process of destruction of various species gets to the point where we simply can't reclaim it? How many years do we have?

Mr. O'ROURKE. Let me put it this way. My estimation from the point of product we can't wait even as of yesterday. In other words, it's absolutely necessary that some action be taken to give the—

Mr. STEELE. As far as cod and haddock.

Mr. O'ROURKE. Well, as far as any kind of fish is concerned.

Mr. STEELE. Any type.

Mr. O'ROURKE. Bear in mind, if you will, that if the cod and haddock species have disappeared and the foreigners are still here, they are going to take other kinds of fish whether mackerel, whether hake; whatever happens, they are just fishing and therefore the fact—for instance, you note I mentioned lobsters, creatures of the shelf—it's the last viable resource we have and I believe, personally, that we should have the right to call it creatures of the shelf for fear that other countries will look upon that as a source and start taking it and then we'll have nothing left.

Mr. STEELE. Just to summarize, if I may, and I don't want to put words in your mouth, but, would it be fair to summarize your position: One, immediate extension of the fisheries limit; two, making lobsters creatures of the shelf; three, attempting to lower the cost of insurance; four, developing a governmental program so the Government does become a partner reviving the industry through things such as subsidies which Chairman Clerk mentioned; and then on an intermediate-to-longer-term basis working toward international agreement through the Law of the Sea Conference. Is that an accurate summary of your position?

Mr. O'ROURKE. Exactly, exactly.

Mr. STEELE. Good. Thank you very much.

Mr. O'ROURKE. You are welcome.

Mr. CLARK. Thank you very much. Yesterday I promised local fishermen that if they had some questions, this morning I would like to have them ask the questions. We do have a couple more witnesses but

I thought since we do have a little time before the next witness has to go on that it would be a good time to propound these questions.

While the gentlemen are getting their cameras ready for the next witness, I would like to ask that after Mr. Chafee, Governor Chafee, speaks if I could have a panel consisting of Dykstra, O'Rourke, and Norris in front of these cameras. Would you all be willing to do this? And the witnesses from the audience then would propound their questions to the chairman and to the panel at the same time. This is a little extraordinary but this is an extraordinary industry as far as I am concerned.

#### STATEMENT OF JOE RENDEIRO, COMMERCIAL FISHERMAN

Mr. RENDEIRO. Mr. Chairman, my name is Joe Rendeiro.

Mr. CLARK. All right. Go ahead.

Mr. RENDEIRO. I am a commercial fisherman as of now. I have been in the dragging end of the business and I am now self-employed in the lobster end of this business and to tell you about the damage that has been done in our coast would be just repetitious. I think personally nothing short of running the foreign governments off our coast will help us, absolutely nothing. Now, I have been to meetings before in different places: Rhode Island, Massachusetts, New Bedford, everywhere and the problems are always the same. We sit here and talk about them forever and nobody ever does anything about it.

Mr. CLARK. May I interrupt you? This is the first congressional hearing that has ever been held in New England on this subject.

Mr. RENDEIRO. Right, I understand this.

Mr. CLARK. I think you understand the Congress is well aware of the problems up here but we are trying to get from you people that do all of this work with your hands and your brain—

Mr. RENDEIRO. Very good.

Mr. CLARK (continuing). And equipment, to give us a story that is necessary for us to try to help you. Continue.

Mr. RENDEIRO. Yesterday and so far today all we heard talk about is the offshore lobster fishery and the offshore fishing fishery, but there are a lot of us inshore men, small businessmen, that are being hurt drastically by this. Nobody has so far taken an interest in us on the State level or the Federal level.

We believe that the 200-mile limit should be put into effect and I think we are all 10 years too late on that. As far as the lobster business is concerned, we advocate a standard measure on lobsters. Now, right now, there is a standard measure with the exception of one State and that's Rhode Island. Rhode Island is completely out of pace. They have been that way for quite a few years.

We also believe that strict inspections should be placed on these lobster vessels that are fishing offshore. We believe and I have talked to crewmen on some of these vessels fishing offshore from Connecticut, Rhode Island, and Massachusetts, that there is a continuous sin being committed out there as far as mutilating lobsters, cooking lobsters, scrubbing egg-bearing lobsters, and this has got to stop. This is probably hurting the industry more than anything else, I think.

We also believe that there should be a closed season. I believe that from January 1 to April 30 or April 1, the waters offshore and inshore,

all the waters of the territorial United States should be closed to fishing for northern lobsters.

I also believe there should be a limit on lobster lines for inshore lobstermen all over the coast, all up and down the coast. Some States have already done this. Right now, anybody that wishes to get into the lobster business if it's good this year can purchase a license for a few dollars and get into it while it's good and when the industry has expired or it's bad, he can just get out and go into the business he was in before. After this business goes, you know, we can't be compensated for any of this, you know. After the season is over if we have a poor season, we can't collect unemployment. We work for about 25 weeks of the year and as of right now, we are in competition with everybody on the coast. I believe the limits of permits should be put into effect.

Now, yesterday we heard some talk about the Government compensating fishermen for lost gear. The gentleman from a big corporation sat up here and he made some statements that would make tears come to your eyes, you know. Well, if he can afford to lose \$700,000 in the course of a year and still go back the following year, mister, he can't be in too sad shape; and if they are going to start compensating fishermen for the lost gear, let's start at the top of the list. Long before Prelude Corp. began losing gear to the Russians, we have lost thousands of dollars of gear to our own Navy right here in Connecticut; so if they are going to start compensating, let's get who lost what a long time ago.

Now, on the subject of licenses, do you know, Mr. Chaimran, that being a neighboring State, you know, with Rhode Island that we cannot purchase a license to fish in the waters of Rhode Island? And yet they stand here and ask the whole country to protect their lobster industry and that's where the biggest part of the industry is, in Rhode Island.

In New York, they issue us a license, a nonresident license that is limited. We can fish anywhere within the waters of the State of New York except next door within 3 miles of our borders. The best lobster grounds they keep for themselves. Many times this has been brought up to our State officials and we tell our conservation people about it and they do nothing about it although Rhode Island fishes in our waters. They catch menhaden in our waters; we issue them licenses to fish in our waters, but yet we try to get licenses from them and they won't give them. We have been arrested for fishing within three-tenths of a mile of the borders of Rhode Island—I have, and I've had my gear confiscated.

Now, I guess that's about it. I think I got most of it off my chest.

You got any questions, maybe I can answer?

MR. CLARK. I am glad that you were one of the witnesses this morning. I saw you here yesterday and I was glad, and I am glad that you came because you are speaking as not a large, large industry; you are speaking now as a small owner of—

MR. RENDEIRO. That's right.

MR. CLARK (continuing). Fishing boats. How many fishing boats do you have?

MR. RENDEIRO. We number in the thousands, you know. We are not big businessmen. There is a lot of us. There is many of us.

MR. CLARK. Mr. Steele, have you any questions?

MR. STEELE. I would like to ask about your contact with the Coast Guard. Are you satisfied with the service? Are you and your colleagues satisfied with the service you get from the Coast Guard?

MR. RENDEIRO. Mr. Steele, we have—we have nothing to do with the Coast—we don't fish where the Russians are giving us problems.

The only problem we see is that if the offshore—everybody says that the offshore lobster doesn't mingle with the inshore lobster.

Now, let me define "offshore" and "inshore." Now, what I consider inshore is a man that fishes along the beach, along the jetties and the breakwaters in the harbors and in the sound. I fish about 25 miles from here at sea in the Block Island area, Montauk-Block Island area, outside these areas so I am still within the territorial limits of the United States; yet the Russians fish outside of the areas in which I fish so they—I mean, we have no trouble with them dragging up our gear, anything like this, so we have no use for the Coast Guard.

MR. STEELE. How many people have left the fishing business in your area in the last few years? Are people leaving the business? How many less fishermen are there, for example?

MR. RENDEIRO. Well, in fishermen, I couldn't say but I venture to say in the past 20 years maybe 30 boats, you know; each boat at that time would employ about four men.

MR. STEELE. Are there any young people coming into the business?

MR. RENDEIRO. There are a few but the future isn't very good. The future isn't very good.

MR. STEELE. Would you encourage your son to get involved in fishing?

MR. RENDEIRO. No, I wouldn't; if I had a son, I would not encourage him to get involved in the fishing business. I don't think there is any future in it left. I don't think so. I think it's all washed up. And another thing, everybody is afraid. Everybody talks about this 200-mile limit, you know. I think the main reason we are never going to get it is because the military doesn't want it; that's the main reason and I don't think the tuna fish industry wants it or the shrimp industry wants it and they outnumber us by far. We are a very small minority. Now, I have some—

MR. CLARK. How old is your boat?

MR. RENDEIRO. My boat? Is 3 years old.

MR. CLARK. Three years old. Then you must have started 3 years ago. Three years ago, it was a pretty good industry.

MR. RENDEIRO. Let me tell you this, tell you this, Mr. Chairman. About 18 years ago, I was in the dragging business. I began as a dragger as a young man because my father was in it and it was good then. You know, we made a living at it. You ain't never going to get rich at it because you can't make a good living at it. There were a multitude of problems that we had about 10 years ago when the Russians came here. We had a very good hake fishery here. Point Judith had a booming industry. Long Island had a booming industry in the hake business, and it wasn't long after the Russians came here that that business completely depleted; it's gone. It's no longer here, and after that when we began in the yellowtail fishery exclusively dealers in Massachusetts made it so hard for the small man that we just couldn't compete. We had to get out of it. We were pushed completely out of New Bedford and other ports completely.

Mr. CLARK. Thank you very much, Joe. I am glad you appeared as a witness this morning.

Mr. RENDEIRO. Thank you.

Mr. CLARK. Our next witness will be introduced by the Honorable Congressman Steele.

Mr. STEELE. Our next witness this morning is John Chafee, the distinguished former Governor of Rhode Island and former Secretary of the Navy, Mr. Chafee.

#### STATEMENT OF JOHN CHAFEE, FORMER GOVERNOR OF RHODE ISLAND

Mr. CHAFEE. Thank you very much, Mr. Chairman. Mr. Chairman, Congressman Steele, I first want to express my appreciation for your giving me the opportunity to testify here this morning and, secondly, I would like to express my appreciation and appreciation of all Rhode Islanders involved in the fishing industry for your taking the time and trouble in coming here on a weekend to conduct this testimony because I think it shows your interest, the interest of your subcommittee and I am confident that you will carry it back to the full committee, your concern about this serious problem that, of course, has been touched on by many witnesses before me.

Now, I have submitted to you a prepared statement but I think since you have covered several of the important points—I believe there has been a good deal of evidence already on the importance of the fishing industry to the area, the massive presence of foreign fishing fleets as testified by the pictures here, the dramatic decline in U.S. catches and the decline in the species; in other words, the availability of the fish in large measure due to the sophisticated techniques of these foreign fleets.

Now, the great problem, it seems to me, is that unless something is done soon, the species will be so depleted that there won't be any fish left for anyone, as one of our previous—as one of your questions brought out, Mr. Chairman, to a prior witness; so it seems to me, we are confronted with a dilemma in the United States and particularly in this area, and that is how long do we or any nation stand by and watch great natural resources off our shores be ruined by those who come from far away, from as far away as Bulgaria and then they will move on leaving the supply exhausted and leaving us who live here who depend on this, our men who depend on this resource with only but the wreckage.

Now, as you know, Mr. Chairman, I am sure it has been pointed out, we have some international agreements already, primarily, of course, the ICNAF, but, of course, some nations don't belong to it, principally East Germany.

The enforcement procedures are difficult; for instance, you can't go below deck as undoubtedly has been pointed out and so there is disillusionment on the part of U.S. fishermen with the international agreements and there was considerable effort—not effort, but considerable feeling last year in June, last June that the United States should get out of ICNAF agreements; so, what do we do? It seems to me the overriding problem is that we've got to do something and do it quickly or the resource will be gone.

Now, there has been considerable discussion about the Law of the Sea Conference in 1973, but I think all who are associated with that or have given it close attention are concerned that it might not even be held in 1973 and, as you pointed out, Mr. Chairman, if it is held in 1973, then it will be well into 1974 and 1975 before anything happens; so I have a proposal here, Mr. Chairman, that I submit for your consideration, the consideration of your committee.

First, I believe as Congressman Steele, I believe, has pointed out in his statement previously that the Coast Guard assets for the area should be increased; in other words, better policing for—under the present agreement; secondly, because the Geneva Conference, the international Law of the Sea Conference, is in the future I think we ought to enter a bilateral agreement with Canada. They have the same problems and the same concerns that we do and that the two nations set up a joint action policy committee consisting of government, Federal Government representatives, Congressmen who are from the areas concerned, and, of course, fishermen who are involved, and this joint action policy committee of the two nations which gives it an international flavor which I believe is necessary for these types of agreements would set a maximum sustainable yield by qualified marine biologists. They would establish controlled fishing zones and have restricted fishing calendars in these zones just like the open and closed hunting season that everybody here is so familiar with; that these certain areas be put off limits if it seemed necessary in order to bring back a species; that the foreign vessels and our own vessels be licensed so that we can control them; and that the foreign vessels would be subjected to the same rules as the United States and the Canadian vessels.

Now, what do you do about violators? Well, here, of course, is where you get into the difficult problem, and I acknowledge that I don't have any cure-all to it, but if we do have an international agreement as I mentioned between Canada and the United States this gives it a certain flavor, a prestige; that then we can report the violators to their embassies. We can call in the President; could invoke the Fisherman's Protective Act of 1967 for an embargo on foreign fishing vessels.

Now, as I say, Mr. Chairman, this isn't a cure-all and if the other nations don't, won't join, won't participate then we've got problems, but we've got so many problems now, my feeling is let's try something.

Now, the critic of this plan or of any plan that comes before you will say it might not work. My answer is, the present situation isn't working so let's try something else.

Thank you very much, Mr. Chairman. I'll be glad to answer any questions. [Applause.]

Mr. CLARK. Thank you very much, Governor. We do appreciate you taking the time to come here today and I am going to ask Mr. Steele to start the questioning of you.

Mr. STEELE. Mr. Chafee, I want to thank you for that fine statement. I am well aware of your deep interest in this problem and I am particularly interested to ask you, particularly in view of what the last witness said, to begin with, what part does the Navy play, if any, in protecting or being involved in any way with our fishermen and with the fishing situation off the coast?

Mr. CHAFEE. We are not involved at all, Mr. Steele, unless called upon in a specific instance, but to my knowledge the entire time I was there, the Navy was never called into play for any of these problems. This is a Coast Guard problem. Obviously we work closely with the Coast Guard whenever requested because they are a very competent organization. I think probably they need more assets to be able to really patrol this problem out here. They have a limited number of men and people and aircraft and ships so I—it isn't a natural thing for the Navy to do. First place, it isn't assigned to us as a job, and we are so committed now with these deployments in the Mediterranean-North Atlantic exercises, in the Western Pacific, that in all fairness, I just don't think the Navy either has the assets or the people who materially assist at the present time, nor are their assets geared to this type of thing. In other words, to have a great expensive destroyer over there with all that equipment—220 men on it—just isn't the most economical way of doing it, I don't think.

Mr. STEELE. One of the previous witnesses expressed doubt that the Defense Department, the Navy, the State Department would tolerate any extension of the limit. Do you feel that's true? Would there be strong opposition from the Navy to even a temporary expansion of the fishing limit?

Mr. CHAFEE. Well, you know, Mr. Steele, that the Navy takes the long view of the ramifications elsewhere in the world. They are very concerned about international straits. They are concerned that if you extend to 200 miles for, say, a conservation policy that immediately everything falls under the—everything could be regulated that goes through it; for instance, a nuclear submarine might be subject to regulations from a conservation point of view since it might pump over some radioactive wastes; so the answer is yes, the Navy has been opposed to the extension.

Mr. STEELE. When you talk about controlled fishing zones, making certain areas off limit, et cetera, you are talking about extending the limit even if it's in certain seasons or it's in certain shifting areas; nevertheless, the basis of your proposal would be an effective extension of the limits where and when necessary, is that correct?

Mr. CHAFEE. That's right, Mr. Chairman, Mr. Steele. On the basis—I wouldn't do it on the basis of a flat 200-mile limit; I would do it on the basis of the species, but obviously we can't go too far out. But I think that any agreement that we enter into, anybody who views it must realize that it's for conservation purposes and that it must be recognized that the regulations that are set forth are accepted by all knowledgeable marine biologists; that even though you might be a Russian or Bulgarian, if you are a competent marine biologist, you would acknowledge that for the preservation of the species, this has to be done, so I think that's the key thing. I am looking at this from a conservation point of view just so there will be some fish for whoever is capable of getting there.

Mr. STEELE. Thank you.

Mr. CLARK. Thank you very much. I have one more question, I was going to ask you about the idea of extending the limits, but Congressman Steele has already done it. How about the idea of extending the limits to cover the Continental Shelf?

Mr. CHAFFEE. Well, again, you get into these problems of our Continental Shelf might extend out *x* miles, but the other fellow's Continental Shelf goes out much further or doesn't at all, as, of course, off the west coast of Peru and South America; so it seems to me that the way we have to approach this thing is on the preservation of the fish and I was listening to the earlier testimony with the greatest of interest and whereas it's important, it seems to me, Mr. Chairman and Congressman Steele, it's important that our fishermen have better equipment and all that; if there is no fish there, all the good equipment isn't going to do any good, and it seems to me that our primary focus must be on seeing that somehow this wonderful resource isn't just eliminated while we wait for the law of the sea or whatever comes along in the future.

Mr. STEELE. Do you envision your proposal requiring legislative action or could it be done by Executive order?

Mr. CHAFFEE. I think it would have to have legislative action, Congressman Steele. Now, whether it would fall into the terms of requiring senatorial approval of the treaty, I just don't know, but it seems to me that we would have to have some kind of basis for the Congress. The Congress would have to set up some kind of basis for our negotiations to operate with the Canadians.

Again, let me say the key point is let's try.

Thank you very much.

Mr. CLARK. Thank you very much, Governor.

We are going to do something a little bit different here this morning. We have Mr. Murphy in the audience who yesterday had to fly over the Russian trawler fleet and, Mr. Murphy, if you would, we would like to have you tell us about your flight since we are not going to be able to make the overflight this afternoon because of the weather conditions. We would like to have you kind of relate the story as to what you saw yesterday, Mr. Murphy.

#### STATEMENT OF JAMES MURPHY, PILOT, JAMESTOWN, R.I.

Mr. MURPHY. My name is James Murphy. I am stationed out in Jamestown, R.I., serving Rhode Island, Connecticut. Yesterday's flight—first of all, we had a limitation with the aircraft. We used a charter-type aircraft. The aircraft did not have radar so we had to depend strictly on vision and the visibility out there was limited. We did encounter one large concentration of foreign vessels which consisted mainly of East and West German vessels, Polish, Rumanian, six Japanese, one Bulgarian, and four Soviet vessels. As far as the fishing activity, they were fishing mainly on herring and there were very small catches.

I say this aircraft we used yesterday was not the best type for this type of patrol as far as determining species, and so forth, but there were small catches on some tankers.

Mr. CLARK. How many vessels were there altogether approximately?

Mr. MURPHY. Fifty-five.

Mr. CLARK. Fifty-five. Mr. Steele, have you questions?

Mr. STEELE. How far off the coast was this concentration, exactly where was it?

Mr. MURPHY. Approximately 60 miles east of Chatham.

Mr. STEELE. Sixty miles?

Mr. MURPHY. Due east of Chatham, Mass.

Mr. STEELE. Now, we have heard a great deal of testimony about the Soviets and other fleets coming in over our 12-mile fishing limit at night and then our boats, as they got out, see them leaving early in the morning. Is this a common occurrence, a common practice, by the foreign fishing fleets?

Mr. MURPHY. I really can't say for sure because I am not really aware of that. Our flights, our Coast Guard surveillance flights, originate out of Otis Air Base; usually depart somewhere around 8 o'clock in the morning; flight ranges between 6 and 7½ hours depending on fuel.

Mr. CLARK. Do you ever start at 5 o'clock in the morning and maybe catch them with their pants down?

Mr. MURPHY. I myself have not; no, sir. If I may go on, as of the middle of August, we have started chartering aircraft, smaller type aircraft, for our local flights, and presently I am chartering the aircraft out of New London, Conn., which gives me a little more versatility as far as hours and when to go; it is at my discretion. I think as we develop this charter flight along with the Coast Guard, I think we are going to improve our method.

Mr. STEELE. Where would the boats be this morning, would you expect?

Mr. MURPHY. About in the same position from there to the northeast along Georges Banks; yesterday's flight due to the limitation of the aircraft, we couldn't go out too far. There was a problem with fuel.

Mr. STEELE. How many times have you spotted, or have you had confirmed information of foreign vessels being within our 12-mile limit in the last 12 months?

Mr. MURPHY. I have none.

Mr. STEELE. None.

Mr. MURPHY. None. I am only speaking from my field station, sir.

Mr. STEELE. What does that indicate? Does that indicate they are not doing it very much or we don't have very good surveillance practices or what?

Mr. MURPHY. Well, the patrol of the 12-mile zone is mainly, you know, by the Coast Guard. I think we would have to wait, have one of the men from the Coast Guard answer this as far as how they conduct their 12-mile patrol.

Mr. STEELE. Do you think we need more equipment to improve our surveillance? Do we need more aircraft? You are chartering more aircraft, you say, now?

Mr. MURPHY. This charter flight originated for the patrol of the yellowtail area, yellowtail flounder. We have a quota on it. I think there is always room for improvement, yes. I think we are doing the best with what we have at the present time.

Mr. STEELE. You go out at 8 o'clock. Is that the stated time you go out, 8 o'clock, when the weather is good?

Mr. MURPHY. Yes. Everything depends on the weather; sometimes we don't go out until 1, 2 in the afternoon depending on the weather. It's been the procedure since I have been with the agency that we normally take our flight 8, 8:15.

Mr. STEELE. Could you assume that the foreign fishing fleets expect to see you at a certain hour?

Mr. MURPHY. Well, this question was asked me not too long ago: Can the foreign element anticipate our patrols? No. Honestly, I think as far as the Coast Guard patrols, yes. First, we have weather and second the location where we are flying from. We take off out of Otis. As soon as we pass over the first foreign concentration, they have radio communication—of course, the others are going to know about it; so between the weather and the communications, yes, they can anticipate our patrols, as far as the Coast Guard; as far as the charter, no.

Mr. STEELE. What's your feeling? This is a very difficult question but I can't help asking it. You go out there every other day or so and you see these ships off our coast. Don't you feel rather frustrated?

Mr. MURPHY. As an individual, yes.

Mr. STEELE. As an individual.

Mr. MURPHY. Yes.

Mr. CLARK. How many of these countries that we were talking about—now, this is for the record—have this same kind of a 12-mile limit for fishing off the coasts? Do they all have it?

Mr. MURPHY. I am not sure. I would say the majority of the nations represented here, yes.

Mr. CLARK. They observe the 12-mile limit in their own areas off the coast of their own countries?

Mr. MURPHY. I feel that the majority of them do, yes.

Mr. CLARK. Is that right, Mr. Norris?

Mr. NORRIS. Yes, sir.

Mr. CLARK. Thank you very much, and thank you, too, Mr. Murphy, for coming here this morning.

Now, I would like to have Mr. Dykstra, Mr. O'Rourke, and Mr. Norris, and also you, Mr. Murphy, if you will, sit up there as an extraordinary panel. We are not doing this to put anybody on the spot, but we do want to finish up this very extraordinary problem that we have and extraordinary hearing, my extraordinary panel, and we picked these gentlemen because I think they are very much aware of the problems in this vicinity, and, of course, they are a different pick and a different breed than just one person. There are four of them. They are all in a different area; so if anyone in the audience has any question to ask the gentlemen, if they will direct the question to the committee here, then we will ask which one wants to answer the question. The members of the press may also ask questions if they want to.

Mr. STEELE. I just would like to add, I think this is a unique opportunity and I know there are many, many questions. A lot of people have been waiting for the opportunity to ask tough questions. We hope you will do that. We don't have quite as large a group here as we did yesterday, but nonetheless, I know there are some of you with questions. If you will just be recognized by the chairman, he will recognize you and we will go ahead. Yes, if you will stand and give your name and who you represent.

Mr. ALLEN. Richard Allen, from the Atlantic Offshore Fish and Lobster Association. There was concern expressed yesterday about confidence that fishermen have in government and specifically in the National Marine Fisheries Service, and I am wondering with the experience that we had with the yellowtail, is there any reason why fishermen

should be confident that the National Marine Fisheries Service has the lobster situation under control, or is there the possibility that something will be sprung on us with the lobster that indicates that we have already gone way too far and drastic measures will have to be taken to bring us back to the line?

Mr. CLARK. Mr. Norris, is that in your field?

Mr. NORRIS. I would be happy to comment on it, Mr. Chairman. Mr. Allen is referring to an unfortunate incident which I alluded to yesterday in my testimony where in 1969, the Soviets took 20,000 metric tons of flounders, and our surveillance people did not observe these on the decks of the foreign vessels or didn't observe very many, and usually our surveillance efforts do do this and are pretty accurate, we think. This was unfortunate, and we were embarrassed about it and we made no bones about that. Mr. Allen, I am sure, is thinking that maybe the same thing is happening in the offshore lobster fishery. I am not going to categorically say there is not a direct fishery for lobster, but I don't believe there is personally. Our surveillance people have not seen any quantities of lobsters. Now, we know some have been taken incidentally, but to the best of my ability, I do not think there is a substantial fisheries for lobsters by foreign nations except the Canadians, of course.

Mr. CLARK. Mr. Murphy, would you like to direct an answer to that too with respect to your surveillance?

Mr. MURPHY. Well, from the air surveillance, of course, detecting lobsters on deck is difficult. We drop down to approximately 100 to 200 feet above the vessel. We have a limited time over it to observe what's on deck and what are the activities. As far as the boardings this past month is the only one I can relate to. There was an indication of an incidental catch of lobsters on some of the Soviet vessels but not significant.

Mr. CHAMPLIN. My name is Jim Champlin. I represent the lobster department, Point Judith. I can make a suggestion since we have talked about the Navy and about the Coast Guard working together. Would it be at all possible to get some of the high-powered camera equipment that they use in surveillance, espionage surveillance, whatever they call it, to take pictures from 200 feet to determine what's on the ground, to take pictures from a shorter distance on ships to determine what's on deck and more readily, I mean.

Mr. CLARK. No. 1, I think yesterday we were bringing out the fact that more equipment was needed for our Coast Guard and also the marine inspection group, and so I think your answer, as far as I am concerned, is a yes, that we should have perhaps better equipment to do this, but Mr. Norris, will you answer in your capacity?

Mr. NORRIS. I would be glad to, Mr. Chairman. We do have pretty sophisticated camera equipment now, but we are always trying to look into better equipment. We looked into the satellite business. It was discussed yesterday and we haven't been too successful in this as yet; maybe Mr. Murphy would like to add something to that.

Mr. MURPHY. On each one of these flights that take place usually has its own camera that is issued through the agency. We are in the process now of improving this as far as we just received new cameras and we are waiting now for better lenses for them. As I say, within the near future, we are definitely improving in this one aspect of it.

Mr. CLARK. Mr. Dykstra, have you anything to add to that in your area of the cooperatives? Do you believe that there is insufficient equipment to handle this to check on the trawlers that are not there?

Mr. DYKSTRA. Well, sir; the only answer that I could give you on that is that when ask the National Fisheries Service, "What did you see on deck?", I think they give you the answer such as they have given you here to some of these things—are pretty hard to detect; it's difficult for us to tell which species of fish, and so on. Now, certainly, there is equipment in existence which could detect these things. Apparently the military does have such equipment. We would welcome any improved equipment that the National Fisheries Service could get and use to help to identify what it is they are seeing on the decks of these vessels.

Mr. CLARK. Mr. O'Rourke, can you comment on that?

Mr. O'ROURKE. The only comment I would like to make is not directly related to cameras, but it seems a shame we have to constantly go through a formal surveillance of taking pictures to determine what is taking place. I would say offhand that in fairness to the industry that all of the information that is compiled regrettably is not effective in the sense of still protecting our situation. This is going on for years. I think the National Marine Fisheries Service does a splendid job, but it still does not help us, and I think the cameras are excellent, but it still does not help us. I think whatever action could take place, maybe we could eliminate the cameras and put us in the fish business would be extremely helpful.

Mr. CLARK. Thank you very much. Any other questions? Yes, sir.

Mr. MARSH. My name is Hank Marsh. I am president of the Environmental Ecological Laboratory of Mystic, and I am concerned with Long Island Sound and the tributaries thereof, and I would like to ask the panel what they think in terms of fish management to the effect of pollution as Jacques Cousteau has argued in Long Island Sound, in particular. He says it is dead because of pollution, oil pollution, chemical pollution, copper, chromium, mercury, all the various other elements. I foresee the pollution ending up as sort of the death of the fish industry unless work is done in that area.

Mr. CLARK. Would anyone care to comment on that?

Mr. NORRIS. I would be glad to comment.

Mr. CLARK. Thank you, Mr. Norris.

Mr. NORRIS. We are very much concerned about Long Island Sound. I am not personally an expert in this area. I am not too familiar with it, but our agency is extremely active in the Long Island Sound area on two fronts: one, through our Milford, Conn., laboratory which is a shellfish laboratory. We do a great deal of work in Long Island Sound; also, through the New England River Basin Commission where we are very active in the Long Island Sound study under the aegis of that commission. The gentleman is correct, there are serious pollution problems in Long Island Sound and we are not doing all we can working with the Environmental Protection Agency which you understand is the enforcement agency, the Federal enforcement agency. We have no enforcement authority. We are making detailed studies of Long Island Sound and working through EPA, hopefully will help the situation, but there is a very serious situation in Long Island Sound.

Mr. CLARK. Anyone else have anything to comment on?

Mr. O'ROURKE. I would like to comment not on Long Island Sound but a subject was brought up which I think is of vital interest—

Mr. CLARK. Can you hear that back there?

Mr. O'ROURKE (continuing). Namely, we talk fishing but we also must concern ourselves with oil and taking of aggregates because of lack of supplies of sand and gravel and the need for it. I happen to be a chairman of the New England Fisheries and Conservation Committee which was formed back in 1966. The main purpose is to communicate with all areas; namely, the oil people, the Government people, and so on, concerning the possibility of utilizing Georges Banks as an oil field area. We are deeply concerned about that.

Now, we begin to learn that the need for aggregate is getting rather pressing and there is a project known now as NOMES and they are talking about extracting so many million pounds of aggregate in an area which is a fishing ground on a testing basis. We cannot help but think that this is another situation we must police; so, even though we worry about the foreign fleets, we have other worries.

Mr. CLARK. Anyone else? Mr. Dykstra, do you have anything to comment on?

Mr. DYKSTRA. I would only say that pollution is of extreme concern to fisheries, has been and we have some very difficult problems with it. However, I am sure that you gentlemen are very much aware of the movement in this area as far as pollution abatement in environment goes. I think the Congress is practically overwhelmed with concern for this type of thing so that I would say to the gentleman that I think the concern with the environment and with pollution at the present time is probably adequate.

Mr. CLARK. Mr. Murphy, since you did do some overflights, do you see any additional pollution contamination from these ships? Do they go overboard in dumping their refuse and their oil, cleaning their oil tanks?

Mr. MURPHY. Yes. There is always whenever you come into a concentration of vessels whether Soviet or any other foreign nation, even some of our own, there is always a certain amount of waste being dumped overboard including oil, so forth.

Mr. CLARK. Thank you very much. Any other questions?

Mr. COFFEE. My name is Bert Coffee. I am with the International Fishery. I would like to ask Mr. Dykstra his opinion of the Icelandic situation in which the 50-mile jurisdiction was made.

Mr. O'ROURKE. I would defer to Mr. Dykstra on that just because he is a fisherman.

Mr. DYKSTRA. Well, Bert, I don't know how to answer to say what my opinion of it is. Actually, you know, I think very well I have been trying to work in concert with the rest of the fishermen around the United States to find the solution to extended jurisdiction. However, when a country such as Iceland unilaterally extends its jurisdiction, certainly the fishermen off New England applaud and I can't help but do so with them. How effective it will be is, of course, a question. They are trying to enforce it. The World Court has ruled against them and they are not admitting that the World Court has jurisdiction.

I have the statement with me of the Ambassador when he made a statement in the United Nations about this extension and I think the arguments are very good. I think the Icelandic people need to protect

their fisheries. It is almost 100 percent of their economy so that I would say it's a necessary action for them. I would hope they could make it stick.

They pointed out that many other countries around the world are doing this sort of thing, extending jurisdiction for one reason or another and made the statement that this is the new approach to fisheries jurisdiction as compared with the obsolete approach of complete freedom of fishing outside of 12 miles.

Mr. COFFEE. Does this lessen to any extent the chance of the Law of the Sea Conference being successful?

Mr. DYKSTRA. There are those who take the position that it has. I think—I don't think it really is very important when Iceland extends its jurisdiction. I think it would be considered very much more important if a major power takes unilateral action than if some of the smaller powers. You notice those who have been extending jurisdiction unilaterally mostly are not major powers.

Mr. STEELE. Excuse me. Canada would certainly fit into the category of a major power.

Mr. DYKSTRA. Well, we will have to—maybe I could defer to some of the Government people in explaining exactly what action Canada has taken, but the action that Canada has taken has not been just to go many miles out to sea and claim unilateral jurisdiction in that area and enforce it. It has been closing certain estuaries and abatements that they have considered more or less their waters for a long time.

Mr. STEELE. Is there someone who could explain this? We haven't gotten very far on this subject in 2 days. That will be fine, Mr. Norris—exactly what the Canadians have done and what they are likely to do, what they are planning to do and talking about doing.

Mr. NORRIS. Yes, Congressman Steele. I don't know all the answers about the Canadians, what the Canadians have done, but I can help a little bit, I think. The Canadian Minister of Fisheries has authority far greater than anyone in our executive branch in our Government: He can close and open seasons; he can control Canadian nationals far greater than we have any control over our U.S. fishermen and what they have done both on the east coast and on the west coast of British Columbia, closed certain areas like the Gulf of St. Lawrence, Bay of Fundy, to most foreign nationals, United States being the exception in some of these cases. We had reciprocal agreements with Canada on this. Mr. Dykstra is correct. They have not taken unilateral action to go far at sea as I think some of us indicated.

Mr. STEELE. Have they shut some of their waters beyond 12 miles to foreign fishing vessels?

Mr. NORRIS. To my knowledge, they have not, unless you call the Gulf of St. Lawrence, and I don't recall the dimension of the Gulf of St. Lawrence, but it's a very large body of water which I think they consider Canadian water. They have also done something in the archipelagoes in the north, far north, and here again I am not too sure of my facts, but I think, I think it should be made clear that they have not gone 200 miles to sea or anything like that.

Mr. STEELE. No. I don't think anyone thought they had.

Mr. CLARK. Jim, do you have another question?

Mr. CHAMPLIN. I have a letter here, a short letter. It's in reference to taking of lobsters, females, by foreign fleets, reshipping them in this country.

Mr. CLARK. Could you talk a little louder?

Mr. CHAMPLIN. Yes. This is a letter from the Marine Fisheries in Long Island. It says, "I am sorry I was unable to get you the samples of Holland North American tails. When I went to purchase them the second time they had been sold at a discount. Because they were loaded with eggs, there was no regular market in New York. This dealer had better than 6,000 pounds. From the information I received, there were better than 120,000 pounds packed. I consider this criminal. From the figures I have this represents"—and he goes on to multiply out the number of eggs. He comes up with in the area of 22,500,000 eggs that were destroyed through this one incident.

Now, we heard testimony to the effect the Japanese yesterday had taken the equivalent of 6 million pounds of lobsters which is equivalent to our total offshore production in 1968. I know this is not significant in tonnage compared to herring or hake and whatever else that the National Marine Fisheries keeps track of. I think it's significant enough in dollar value to indicate that the Russians and the Japanese and Spanish fleets are already in the lobster business, not as everyone seems to feel that they will go into it or are going into it. I believe they already are in it, and I would like to—I would like Mr. Norris to comment and see if some of the situations could be investigated. There are foreign imports being landed in our country. I don't know if they come under the foreign—under the National Marine Fisheries Service or not.

Mr. CLARK. Mr. NORRIS.

Mr. NORRIS. Yes. Mr. Chairman, we are aware of the shipment of lobster tails which Mr. Champlin mentions, and they came from Holland into Boston, I believe. We have been unable to find where they came from. They certainly didn't—they certainly were not caught by Dutch vessels, and we are very much concerned about it. I can't recall the precise details on this, but our office was deeply involved in the investigation of this, and, as I recall, there hasn't been anything definitive as to the actual source of those tails.

Mr. CLARK. We are going to have to stop questioning.

Mr. CHAMPLIN. Just one second.

Mr. CLARK. All right.

Mr. CHAMPLIN. Are you also aware of the tons of lobster tails coming into the Jersey shore? Has any investigation been made in these areas?

Mr. NORRIS. I am not aware of what you are referring to, Jim, I don't think.

Mr. CHAMPLIN. Mutilated lobsters.

Mr. NORRIS. You say tons of lobster tails coming into New Jersey?

Mr. CHAMPLIN. Yes.

Mr. NORRIS. From where?

Mr. CHAMPLIN. From offshore.

A VOICE. I think from our own fishermen.

Mr. CHAMPLIN. Yes.

Mr. NORRIS. Oh, I see, from U.S. fishermen.

Mr. CHAMPLIN. From our own fishermen.

Mr. NORRIS. Mr. Chairman, in this connection, I wonder if you would allow me to make a brief statement addressing myself to remarks made yesterday and today. May I have about 2 or 3 minutes?

Mr. CLARK. I'll give you 3 minutes, sir.

Mr. NORRIS. I was very much impressed with the testimony of Mr. Abbott and Joe Rendeiro this morning, and I have to address myself to those and also Mr. Champlin's remarks. We in the National Marine Fisheries Service in cooperation with the 11 States that have a lobster fishery, have a new program which we call the State Federal fisheries management, and we are developing a lobster management plan which we hope if successful will do exactly some of the things that all three of these gentlemen are talking about; for example, a uniform minimum size; to prohibit, have uniform State laws prohibiting the landing of burried lobsters, mutilated lobsters, parts of lobsters and so forth. Now, all we are doing here is geared to the declaration of the lobster as a creature of the shelf. Of course, we cannot do all these things unless that determination is made, and as we said yesterday, we are hopeful it may be done in some future date, but I want these people to know that the Service is working with the 11 States, and all the 11 States have met with us on a number of occasions, and we are having industry meetings, and we are trying to have uniform regulations which I think is what Mr. Abbott and Joe were talking about in their testimony. This is a new program which is going on all around the country, but the first fishery that we are dealing with is the lobster fishery both in-shore and offshore, and we are optimistic that it will do a great deal. I don't mean to say it is going to solve all the problems, but it will do a great deal for better management of the lobster resource.

Mr. STEELE. When might we expect those standards to be set, within 6 months?

Mr. NORRIS. Our progress to date has been along this line. Up to August, we had two meetings with 11 States, both the technical people and the administrators of the 11 States. We are now as rapidly as possible having industry meetings and several of the States are proposing to go to their legislatures where that is necessary to get these laws amended, and I would guess we are talking in terms of the next year or so to show some progress.

Now, all of these things are not going to be accomplished within 2 or 3 years because when you have 11 State legislatures to deal with in addition to getting the lobster declared a creature of the shelf, it's a very complicated problem, but we are encouraged by the progress that we are making. Thank you.

Mr. RENDEIRO. I would like to ask Mr. Norris a question. Why is it that these laws take so long to implement? By the time they are put into effect, we have nothing to guard. Why does it take so long?

Mr. CLARK. Well, the laws, of course, do take a long time because they have to go through your legislature. You know who your legislature, your State senators are, and, of course, in Congress, it is the same way. They have hearings such as we are having today to try to get background so that they know when they are ready to—

Mr. RENDEIRO. Mr. Chairman—

Mr. CLARK. Wait just a moment—while they are trying to get some background, so that when they do get some law that is worth anything, that it will be worth something when it's passed, but I agree with you; it does seem like a long time; it looks like you are spinning your wheels all the time.

Mr. RENDEIRO. It's fine to say we should, you know, conserve, but let's conserve while there is something to conserve. After there is nothing to conserve, what good are the laws?

Mr. CLARK. Mr. Rendeiro, that's why I am here today and that's why Mr. Steele is here.

Mr. RENDEIRO. I would like to know how long would we wait if foreign countries came and started drilling wells off the 12-mile limit. How long would we wait to see before they struck oil?

A VOICE. They would never strike.

Mr. RENDEIRO. How long would we wait until they go back home with their tankers full of oil?

Mr. CLARK. Of course, that's beside the point.

Mr. RENDEIRO. No, it isn't beside the point, Mr. Chairman. This is what everybody is getting away from.

Mr. CLARK. This is fishing. We are having a fish hearing; we are not having an oil industry hearing. Mr. Abbott.

Mr. ABBOTT. May I direct a question to Mr. Norris? Don't you think it is absolutely essential with the production from the Maritimes, from St. Pierre, the Magdalens down that there be an international agreement as regards Canada and the United States rather than just together with the United States?

Mr. CLARK. Yes.

Mr. NORRIS. I didn't respond to his question. I was waiting for the Chair to recognize me.

Mr. CLARK. Go ahead.

Mr. NORRIS. Mr. Abbott, I think you are right. In fact, about 2 weeks ago, I had a meeting with the New Brunswick officials on this very subject. They are extremely interested in what we are trying to do because, as you may know, in some of the Maritimes, in some of the fishery zones there, they have size limits considerably less than some of ours, and most of their lobsters are shipped into Boston and they are very much interested in any change from the legal—minimum legal size; so, certainly, we will be dealing with the Maritimes, but as yet, we haven't gone very deeply into this; it's a good point.

Mr. CLARK. The last question off the floor.

Mrs. KOSS. Yes, sir. My name is Laura Koss. I am just retired from military service. I have been in and out of Halifax, Canada, from 1962 right up to 1969 and every time I have been in and out of there, I've seen all kinds of Russian trawlers. You talk about Canada and their agreements. They have something going; that's an open port for Russians. They got something there. I don't see why they are going to push the Russians off their coast while they've got an open port for them.

Mr. CLARK. There is a question over here. I'll take one more question.

Mr. GARRITY. My name is Tom Garrity. I work for the Providence Journal. Mr. Norris, Mr. Champlin just mentioned a specific incident in which there would be—

Mr. CLARK. Could you speak a little louder?

Mr. GARRITY. How specifically does your agency express its concern? In other words, what specific investigative action do you take?

Mr. NORRIS. Well, let me answer that question in two ways. He was referring first to the lobster tails that were shipped in from Holland. This is primarily a customs problem and the customs—the U.S. Bureau of Customs. We were involved to the extent of trying to locate whether the tails were actually caught but not the importation of them. The second thing he mentioned was the lobster tail coming into

New Jersey. This is the type of thing that, while I don't know the precise details on it, we will be deeply involved in an interstate Federal plan we are talking about and some of the things that will come out of this working with the State of New Jersey and the other States which would prohibit this type of thing.

Now, the State of New Jersey would be involved here more than we would be. We have no direct jurisdiction over those Jersey fishermen, whereas the State does through their landing laws, although New Jersey does not have very complete lobster laws and they are now in the process of rewriting their entire code as it affects lobsters.

Mr. CLARK. A final question from Congressman Steele.

Mr. STEELE. Mr. NORRIS, I think that one thing that is very clear from these hearings during these 2 days is that we cannot wait for the Law of the Sea Conference to resolve this problem. Now, you, as Regional Director of the National Marine Fisheries Service, do you agree with that? Do you agree we can't wait for the Law of the Sea Conference and we have to take action before 1974 which is essentially the earliest possible date where we can get an agreement as it appears?

Mr. NORRIS. Congressman Steele, we discussed this yesterday and I probably am going to have to give you the same answer I gave you yesterday but since my testimony yesterday morning, three of the leaders of the New England industry, three people extremely knowledgeable: Howard Nickerson, Dick Allen, and Jacob Dykstra, have told you and your committee about what I told you yesterday that the fishery, fishing industry throughout the United States has met recently. They are in complete agreement, I think. I wasn't at the meeting but from what I hear, they were in just about complete agreement that it is best to follow the species approach looking toward the Law of the Sea Conference and following that until such time as—

Mr. STEELE. What bothers me—follow the species approach looking forward to the Law of the Sea Conference—I am ready to follow the species approach, and I think most of our witnesses would be, but the key clause in your sentence is “looking forward to this conference.” Are we going to wait for this conference before the United States, U.S. fishermen, see any action? Is that basically the position of the Service, the State Department?

Mr. NORRIS. My answer is no to that. I will recount what I said yesterday in my earlier testimony. I think even though ICNAF is a very unpopular term with many New England fishermen, as I pointed out yesterday, I am optimistic that we have made some progress in ICNAF, that we now have the national catch quota allocation which I think is a step in the right direction; it is a better tool than we had before.

While it might not solve our problems, it is the only tool that I see available to me as a Federal administrator in this part of the country.

Mr. STEELE. You are satisfied to go to the ICNAF, Law of the Sea Conference route?

Mr. NORRIS. I am not completely satisfied, sir; but it is the best thing I have. I have seen tools as a Government executive given to me to work with. It is the best tool I have at the present time. I do not have the authority to declare extended jurisdiction.

Mr. STEELE. I realize that. What if the Congress were to give you additional tools, could you use some additional tools?

Mr. NORRIS. Certainly. Certainly.

Mr. CLARK. Thank you very much—

Mr. STEELE. Thank you.

Mr. CLARK (continuing). And we appreciate it.

#### STATEMENT OF JOHN BINDLOSS

Mr. BINDLOSS. Mr. Chairman, my name is John Bindloss from Stonington. So long as the State legislatures have been mentioned, I would like to ask to have this considered. In the process of your negotiations would it not be wise to pass some sort of State legislation which would prohibit commerce, interstate commerce on lobsters under the suggested or the rule measurement? We have, I am sure, a great deal of illegal sale of lobsters. I refer to my experience with the Atlantic States Marine Fisheries Commission. Even Pennsylvania who has no fishery of any kind in salt water very nicely adopted the resolution which all of Rhode Island has adopted and they prohibit transportation in their State as well of lobsters under the three and three-sixteenths and I would like to have it considered by your committee.

Mr. CLARK. Thank you very much. For those interested, we are still trying to have our overflight in the morning; that's for the press, any others that are interested.

And we now will adjourn the meeting. I do appreciate everyone's interest and concern in this industry.

I want to thank the panel for coming up. We didn't want to put anyone on the spot. I think you have added greatly to this hearing. The meeting is adjourned.

(Whereupon, at 12:37 p.m., the hearing was concluded.)





